

ISO 20022

Card Payments Exchanges - Terminal Management - Maintenance 2025 - 2026

Message Definition Report - Part 2

Approved by the Cards and Related Retail Financial Services SEG
on 26 January 2026

This document provides details of the Message Definitions for Card Payments Exchanges - Terminal Management -
Maintenance 2025 - 2026.

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1 Message Set Overview

Introduction

This document describes the Card Payments Exchanges - Terminal Management message set. It includes the new version of the MessageDefinitions that have been added as part of the maintenance cycle 2025-2026 (See MCR #276) and approved by the Cards and Related Retail Financial Services Standards Evaluation Group on 26 January 2026.

1.1 List of MessageDefinitions

The following table lists all MessageDefinitions described in this book.

MessageDefinition	Definition
catm.001.001.15 StatusReportV15	The StatusReport message is sent by a POI to inform the master terminal manager (MTM) or the terminal manager (TM) about the status of the acceptor system including the identification of the POI, its components and their installed versions.
catm.002.001.14 ManagementPlanReplacementV14	The ManagementPlanReplacement message is sent by a terminal manager to a POI to set maintenance actions to be performed.
catm.003.001.15 AcceptorConfigurationUpdateV15	The AcceptorConfigurationUpdate message is sent by a TM to a POI to update configurations.
catm.004.001.05 TerminalManagementRejectionV05	The TerminalManagementRejection message is sent by the terminal manager to reject a message request sent by an acceptor, to indicate that the received message could not be processed.
catm.005.001.12 MaintenanceDelegationRequestV12	The MaintenanceDelegationRequest message is sent by a terminal manager to the master terminal manager to request delegation of maintenance functions or maintenance operation on the terminal estate managed by the master terminal manager.
catm.006.001.08 MaintenanceDelegationResponseV08	The MaintenanceDelegationResponse message is sent by the master terminal manager to a terminal manager to provide the outcome of a maintenance delegation request.
catm.007.001.08 CertificateManagementRequestV08	The CertificateManagementRequest message is sent by a POI terminal or any intermediary entity either to a terminal manager acting as a certificate authority for managing X.509 certificate of a public key owned by the initiating party, or for requesting the inclusion or the removal of the POI to a white list of the terminal manager.
catm.008.001.07 CertificateManagementResponseV07	The CertificateManagementResponse is sent by a terminal manager in response to a CertificateManagementRequest to provide the outcome of the requested service.

2 catm.001.001.15 StatusReportV15

2.1 MessageDefinition Functionality

The StatusReport message is sent by a POI to inform the master terminal manager (MTM) or the terminal manager (TM) about the status of the acceptor system including the identification of the POI, its components and their installed versions.

Outline

The StatusReportV15 MessageDefinition is composed of 3 MessageBuildingBlocks:

A. Header

Set of characteristics related to the transfer of the status report.

B. StatusReport

Status of the point of interaction (POI), its components and their installed versions.

C. SecurityTrailer

Trailer of the message containing a MAC or a digital signature.

2.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <StsRpt>	[1..1]			
	Header <Hdr>	[1..1]			8
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		8
	FormatVersion <FrmtVrsn>	[1..1]	Text		8
	ExchangeIdentification <XchgId>	[1..1]	Quantity		9
	CreationDateTime <CreDtTm>	[1..1]	DateTime		9
	InitiatingParty <InitgPty>	[1..1]	±		9
	RecipientParty <RcptPty>	[0..1]	±		9
	Traceability <Tracblt>	[0..*]	±		10
	StatusReport <StsRpt>	[1..1]			10
	POIIdentification <POIID>	[1..1]	±		11
	InitiatingTrigger <InitgTrggr>	[0..1]			12
	TriggerSource <TrggrSrc>	[1..1]	CodeSet		12
	SourceIdentification <SrcId>	[1..1]	Text		13
	TriggerType <TrggrTp>	[1..1]	CodeSet		13
	AdditionalInformation <AddtlInf>	[0..1]	Text		13
	TerminalManagerIdentification <TermnlMgrId>	[1..1]	±		13
	DataSet <DataSet>	[1..1]			14
	Identification <Id>	[1..1]	±		15
	SequenceCounter <SeqCntr>	[0..1]	Text		15
	LastSequence <LastSeq>	[0..1]	Indicator		15
	Content <Cntt>	[1..1]			15
	POICapabilities <POICpblties>	[0..1]	±		16
	POIComponent <POICmpnt>	[0..*]	±		17
	POIGroupIdentification <POIGrpld>	[0..*]	Text		19
	AttendanceContext <AtndncCntxt>	[0..1]	CodeSet		19
	POIDateTime <POIDtTm>	[1..1]	DateTime		20
	DataSetRequired <DataSetReqrd>	[0..*]			20
	Identification <Id>	[1..1]	±		20
	POIChallenge <POIChllng>	[0..1]	Binary		20

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	TMChallenge <TMChllng>	[0..1]	Binary		21
	SessionKey <SsnKey>	[0..1]	±		21
	DelegationProof <DlgtProof>	[0..1]	Binary		22
	ProtectedDelegationProof <PrtctdDlgtProof>	[0..1]	±		23
	Event <Evt>	[0..*]	±		23
	Errors <Errs>	[0..*]	Text		23
	SecurityTrailer <SctyTrlr>	[0..1]	±		23

2.3 Constraints

C1 ActiveCurrency

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

C2 ActiveOrHistoricCurrency

The Currency Code must be registered, or have already been registered. Valid active or historic currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and may be or not be withdrawn on the day the message containing the Currency is exchanged.

C3 AnyBIC

Only a valid Business identifier code is allowed. Business identifier codes for financial or non-financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consists of eight (8) or eleven (11) contiguous characters.

C4 Country

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

C5 IBAN

A valid IBAN consists of all three of the following components: Country Code, check digits and BBAN.

C6 IdentificationAndProxyGuideline

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

C7 IdentificationOrProxyPresenceRule

Identification must be present or Proxy must be present. Both may be present.

C8 OneElementPresenceRule

At least one of these subelements must be present.

C9 OneElementPresenceRule

At least one of these subelements must be present.

C10 OneElementPresenceRule

At least one of these subelements must be present.

C11 SupplementaryDataRule

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

C12 ValidationByTable

Must be a valid terrestrial language.

2.4 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

2.4.1 Header <Hdr>

Presence: [1..1]

Definition: Set of characteristics related to the transfer of the status report.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		8
	FormatVersion <FrmtVrsn>	[1..1]	Text		8
	ExchangeIdentification <XchgId>	[1..1]	Quantity		9
	CreationDateTime <CreDtTm>	[1..1]	DateTime		9
	InitiatingParty <InitgPty>	[1..1]	±		9
	RecipientParty <RcptPty>	[0..1]	±		9
	Traceability <Tracblt>	[0..*]	±		10

2.4.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

2.4.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: "Max6Text" on page 589

2.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: "Number" on page 582

2.4.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: "ISODateTime" on page 581

2.4.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "GenericIdentification176" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

2.4.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwrdr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		313

2.4.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "[Traceability8](#)" on page 439 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		439
	ProtocolName <PrtcolNm>	[0..1]	Text		440
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		440
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		440
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		440

2.4.2 StatusReport <StsRpt>

Presence: [1..1]

Definition: Status of the point of interaction (POI), its components and their installed versions.

StatusReport <StsRpt> contains the following **StatusReport15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIIdentification <POIID>	[1..1]	±		11
	InitiatingTrigger <InitgTrggr>	[0..1]			12
	TriggerSource <TrggrSrc>	[1..1]	CodeSet		12
	SourceIdentification <SrcId>	[1..1]	Text		13
	TriggerType <TrggrTp>	[1..1]	CodeSet		13
	AdditionalInformation <AddtlInf>	[0..1]	Text		13
	TerminalManagerIdentification <TermnlMgrId>	[1..1]	±		13
	DataSet <DataSet>	[1..1]			14
	Identification <Id>	[1..1]	±		15
	SequenceCounter <SeqCntr>	[0..1]	Text		15
	LastSequence <LastSeq>	[0..1]	Indicator		15
	Content <Cntt>	[1..1]			15
	POICapabilities <POICpblties>	[0..1]	±		16
	POIComponent <POICmpnt>	[0..*]	±		17
	POIGroupIdentification <POIGrpId>	[0..*]	Text		19
	AttendanceContext <AtndncCntxt>	[0..1]	CodeSet		19
	POIDateTime <POIDtTm>	[1..1]	DateTime		20
	DataSetRequired <DataSetReqrd>	[0..*]			20
	Identification <Id>	[1..1]	±		20
	POIChallenge <POIChllng>	[0..1]	Binary		20
	TMChallenge <TMChllng>	[0..1]	Binary		21
	SessionKey <SsnKey>	[0..1]	±		21
	DelegationProof <DlgtNProof>	[0..1]	Binary		22
	ProtectedDelegationProof <PrctcdDlgtNProof>	[0..1]	±		23
	Event <Evt>	[0..*]	±		23
	Errors <Errs>	[0..*]	Text		23

2.4.2.1 POIIdentification <POIID>

Presence: [1..1]

Definition: Identification of the point of interaction for terminal management.

POIIdentification <POIID> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

2.4.2.2 InitiatingTrigger <InitgTrggr>

Presence: [0..1]

Definition: Identification of the requestor.

InitiatingTrigger <InitgTrggr> contains the following **TriggerInformation2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TriggerSource <TrggrSrc>	[1..1]	CodeSet		12
	SourceIdentification <SrcId>	[1..1]	Text		13
	TriggerType <TrggrTp>	[1..1]	CodeSet		13
	AdditionalInformation <AddtlInf>	[0..1]	Text		13

2.4.2.2.1 TriggerSource <TrggrSrc>

Presence: [1..1]

Definition: Actor who trigger the request.

Datatype: "[PartyType5Code](#)" on page 561

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACQR	Acquirer	Entity acquiring card transactions.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

2.4.2.2.2 SourceIdentification <SrcId>

Presence: [1..1]

Definition: Identification of the trigger source.

Datatype: "Max35Text" on page 587

2.4.2.2.3 TriggerType <TrggrTp>

Presence: [1..1]

Definition: Identification of the type of the call.

Datatype: "ExchangePolicy2Code" on page 549

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

2.4.2.2.4 AdditionalInformation <AddtlInf>

Presence: [0..1]

Definition: Additional information related to request.

Datatype: "Max70Text" on page 589

2.4.2.3 TerminalManagerIdentification <TermnIMgrId>

Presence: [1..1]

Definition: Identification of the terminal management system (TMS) to contact for the maintenance.

TerminalManagerIdentification <TermnlMgrId> contains the following elements (see "GenericIdentification176" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

2.4.2.4 DataSet <DataSet>

Presence: [1..1]

Definition: Data related to a status report of a point of interaction (POI).

DataSet <DataSet> contains the following **StatusReportDataSetRequest7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		15
	SequenceCounter <SeqCntr>	[0..1]	Text		15
	LastSequence <LastSeq>	[0..1]	Indicator		15
	Content <Cntt>	[1..1]			15
	POICapabilities <POICpblties>	[0..1]	±		16
	POIComponent <POICmpnt>	[0..*]	±		17
	POIGroupIdentification <POIGrpld>	[0..*]	Text		19
	AttendanceContext <AtndncCntxt>	[0..1]	CodeSet		19
	POIDateTime <POIDtTm>	[1..1]	DateTime		20
	DataSetRequired <DataSetReqrd>	[0..*]			20
	Identification <Id>	[1..1]	±		20
	POIChallenge <POIChllng>	[0..1]	Binary		20
	TMChallenge <TMChllng>	[0..1]	Binary		21
	SessionKey <SsnKey>	[0..1]	±		21
	DelegationProof <DlgtnProof>	[0..1]	Binary		22
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		23
	Event <Evt>	[0..*]	±		23
	Errors <Errs>	[0..*]	Text		23

2.4.2.4.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the data set containing the status report.

Identification <Id> contains the following elements (see "[DataSetIdentification11](#)" on page 314 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		314
	Type <Tp>	[1..1]	CodeSet		314
	Version <Vrsn>	[0..1]	Text		316
	CreationDateTime <CreDtTm>	[0..1]	DateTime		316

2.4.2.4.2 SequenceCounter <SeqCntr>

Presence: [0..1]

Definition: Counter to identify a single data set within the whole transfer.

Datatype: "[Max9NumericText](#)" on page 590

2.4.2.4.3 LastSequence <LastSeq>

Presence: [0..1]

Definition: Indication of the last sequence in case of split messages.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

2.4.2.4.4 Content <Cntt>

Presence: [1..1]

Definition: Content of the status report.

Content <Cntt> contains the following **StatusReportContent15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POICapabilities <POICpblties>	[0..1]	±		16
	POIComponent <POICmpnt>	[0..*]	±		17
	POIGroupIdentification <POIGrpld>	[0..*]	Text		19
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		19
	POIDateTime <POIDtTm>	[1..1]	DateTime		20
	DataSetRequired <DataSetReqrd>	[0..*]			20
	Identification <Id>	[1..1]	±		20
	POIChallenge <POIChllng>	[0..1]	Binary		20
	TMChallenge <TMChllng>	[0..1]	Binary		21
	SessionKey <SsnKey>	[0..1]	±		21
	DelegationProof <DlgtnProof>	[0..1]	Binary		22
	ProtectedDelegationProof <PrtctdDlgtnProof>	[0..1]	±		23
	Event <Evt>	[0..*]	±		23
	Errors <Errs>	[0..*]	Text		23

2.4.2.4.4.1 POICapabilities <POICpblties>

Presence: [0..1]

Definition: Capabilities of the POI (Point Of Interaction) performing the status report.

POICapabilities <POICpblties> contains the following elements (see
"PointOfInteractionCapabilities11" on page 414 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardReadingCapabilities <CardRdngCpblties>	[0..*]	CodeSet		415
	CardholderVerificationCapabilities <CrdhldrVrfctnCpblties>	[0..*]	CodeSet		416
	PINLengthCapabilities <PINLnghCpblties>	[0..1]	Quantity		416
	ApprovalCodeLength <ApprvlCdLngh>	[0..1]	Quantity		416
	MaxScriptLength <MxScrptLngh>	[0..1]	Quantity		417
	CardCaptureCapable <CardCaptrCpbl>	[0..1]	Indicator		417
	OnLineCapabilities <OnLineCpblties>	[0..1]	CodeSet		417
	MessageCapabilities <MsgCpblties>	[0..*]			417
	Destination <Dstn>	[1..*]	CodeSet		417
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		418
	NumberOfLines <NbOfLines>	[0..1]	Quantity		418
	LineWidth <LineWidth>	[0..1]	Quantity		418
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C14	418

2.4.2.4.4.2 POIComponent <POICmpnt>

Presence: [0..*]

Definition: Data related to a component of the POI (Point Of Interaction) performing the status report.

POIComponent <POICmpnt> contains the following elements (see "PointOfInteractionComponent18" on page 337 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		339
	SubTypeInfoInformation <SubTpInf>	[0..1]	Text		340
	Identification <Id>	[1..1]			341
	ItemNumber <ItmNb>	[0..1]	Text		341
	ProviderIdentification <PrvdrlId>	[0..1]	Text		341
	Identification <Id>	[0..1]	Text		341
	SerialNumber <SrlNb>	[0..1]	Text		341
	Status <Sts>	[0..1]			341
	VersionNumber <VrsnNb>	[0..1]	Text		342
	Status <Sts>	[0..1]	CodeSet		342
	ExpiryDate <XpryDt>	[0..1]	Date		342
	StandardCompliance <StdCmplc>	[0..*]			342
	Identification <Id>	[1..1]	Text		342
	Version <Vrsn>	[1..1]	Text		343
	Issuer <Issr>	[1..1]	Text		343
	Characteristics <Chrtcs>	[0..1]			343
	Memory <Mmry>	[0..*]			344
	Identification <Id>	[1..1]	Text		345
	TotalSize <TtlSz>	[1..1]	Quantity		345
	FreeSize <FreeSz>	[1..1]	Quantity		345
	Unit <Unit>	[1..1]	CodeSet		345
	Communication <Com>	[0..*]			345
	CommunicationType <ComTp>	[1..1]	CodeSet		346
	RemoteParty <RmotPty>	[1..*]	CodeSet		347
	Active <Actv>	[1..1]	Indicator		347
	Parameters <Params>	[0..1]	±		347
	PhysicalInterface <PhysIntrfc>	[0..1]			348
	InterfaceName <IntrfcNm>	[1..1]	Text		348
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		348
	UserName <UsrNm>	[0..1]	Text		349

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AccessCode <AccsCd>	[0..1]	Binary		349
	SecurityProfile <SctyPrfl>	[0..1]	Text		349
	AdditionalParameters <AddtlParams>	[0..1]	Binary		349
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		350
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		350
	SecurityElement <SctyElmt>	[0..*]	±		350
	Assessment <Assmnt>	[0..*]			351
	Type <Tp>	[1..1]	CodeSet		352
	Assigner <Assgnr>	[1..*]	Text		352
	DeliveryDate <DlvryDt>	[0..1]	DateTime		352
	ExpirationDate <XprtnDt>	[0..1]	DateTime		352
	Number <Nb>	[1..1]	Text		352
	Package <Packg>	[0..*]			353
	PackageIdentification <PackgId>	[0..1]	±		353
	PackageLength <PackgLngh>	[0..1]	Quantity		353
	OffsetStart <OffsetStart>	[0..1]	Quantity		353
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		354
	PackageBlock <PackgBlck>	[0..*]			354
	Identification <Id>	[1..1]	Text		354
	Value <Val>	[0..1]	Binary		354
	ProtectedValue <PrctcdVal>	[0..1]	±		354
	Type <Tp>	[0..1]	Text		355
	ProbeValue <PrbVal>	[0..1]	Binary		355

2.4.2.4.4.3 POIGroupIdentification <POIGrpId>

Presence: [0..*]

Definition: Identifier assigned to a set of POI terminals performing some categories of transactions.

Datatype: "Max35Text" on page 587

2.4.2.4.4.4 AttendanceContext <AttndncCntxt>

Presence: [0..1]

Definition: Human attendance at the POI (Point Of Interaction) location during transactions.

Datatype: "AttendanceContext1Code" on page 534

CodeName	Name	Definition
ATTD	Attended	Attended payment, with an attendant.
SATT	SemiAttended	Semi-attended, including self checkout. An attendant supervises several payment, and could be called to help the cardholder.
UATT	Unattended	Unattended payment, no attendant present.

2.4.2.4.4.5 POIDateTime <POIDtTm>

Presence: [1..1]

Definition: System date time of the point of interaction (POI) sending the status report.

Datatype: "ISODateTime" on page 581

2.4.2.4.4.6 DataSetRequired <DataSetReqrd>

Presence: [0..*]

Definition: Request the terminal management system to answer with the identified data set.

DataSetRequired <DataSetReqrd> contains the following **DataSetRequest7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		20
	POIChallenge <POIChllng>	[0..1]	Binary		20
	TMChallenge <TMChllng>	[0..1]	Binary		21
	SessionKey <SsnKey>	[0..1]	±		21
	DelegationProof <DlgtmProof>	[0..1]	Binary		22
	ProtectedDelegationProof <PrctcdDlgtmProof>	[0..1]	±		23

2.4.2.4.4.6.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the required data set.

Identification <Id> contains the following elements (see "DataSetIdentification11" on page 314 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		314
	Type <Tp>	[1..1]	CodeSet		314
	Version <Vrsn>	[0..1]	Text		316
	CreationDateTime <CreDtTm>	[0..1]	DateTime		316

2.4.2.4.4.6.2 POIChallenge <POIChllng>

Presence: [0..1]

Definition: Point of interaction challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 522

2.4.2.4.4.6.3 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 522

2.4.2.4.4.6.4 SessionKey <SsnKey>

Presence: [0..1]

Definition: Temporary encryption key that the host will use for protecting keys to download.

SessionKey <SsnKey> contains the following elements (see "[CryptographicKey19](#)" on page 472 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		473
	KeyIdentification <KeyId>	[0..1]	Text		473
	AdditionalIdentification <AddtlId>	[0..1]	Binary		474
	Name <Nm>	[0..1]	Text		474
	SecurityProfile <SctyPrfl>	[0..1]	Text		474
	ItemNumber <ItmNb>	[0..1]	Text		474
	SequenceNumber <SeqNb>	[0..1]	Quantity		474
	Version <Vrsn>	[0..1]	Text		474
	KeyVersion <KeyVrsn>	[0..1]	Text		474
	Type <Tp>	[0..1]	CodeSet		475
	Function <Fctn>	[0..*]	CodeSet		476
	ActivationDate <ActvtnDt>	[0..1]	DateTime		476
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		476
	KeyValue <KeyVal>	[0..1]	±		477
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			477
	Identification <Id>	[1..1]	Text		477
	Type <Tp>	[1..1]	CodeSet		477
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		478
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		478
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			478
	Name <Nm>	[1..1]	Text		478
	Value <Val>	[0..1]	Text		479
	DerivationAlgorithmIdentifier <DerivtnAlgoIdr>	[0..1]	Text		479
	AlgorithmIdentifier <AlgoIdr>	[0..1]	Text		479

2.4.2.4.4.6.5 DelegationProof <DlgnProof>

Presence: [0..1]

Definition: Proof of delegation to be validated by the terminal manager receiving a status report from a new POI.

Datatype: "[Max5000Binary](#)" on page 523

2.4.2.4.4.6 ProtectedDelegationProof <PrtctdDlgnProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgnProof> contains the following elements (see "ContentInformationType39" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

2.4.2.4.4.7 Event <Evt>

Presence: [0..*]

Definition: Result of an individual terminal management action by the point of interaction.

Event <Evt> contains the following elements (see "TMSEvent13" on page 432 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TimeStamp <TmStmp>	[1..1]	DateTime		432
	Result <Rslt>	[1..1]	CodeSet		432
	ActionIdentification <ActnId>	[1..1]			433
	ActionType <ActnTp>	[1..1]	CodeSet		434
	DataSetIdentification <DataSetId>	[0..1]	±		434
	AdditionalErrorInformation <AddtlErrInf>	[0..1]	Text		435
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	Text		435
	DeviceResponse <DvcRspn>	[0..1]	±		435

2.4.2.4.4.8 Errors <Errs>

Presence: [0..*]

Definition: Error log of the point of interaction since the last status report.

Datatype: "Max140Text" on page 585

2.4.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "[ContentInformationType38](#)" on [page 493](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		493
	AuthenticatedData <AuthntcdData>	[0..1]	±		494
	SignedData <SgndData>	[0..1]	±		494

3 catm.002.001.14 ManagementPlanReplacementV14

3.1 MessageDefinition Functionality

The ManagementPlanReplacement message is sent by a terminal manager to a POI to set maintenance actions to be performed.

Outline

The ManagementPlanReplacementV14 MessageDefinition is composed of 3 MessageBuildingBlocks:

A. Header

Set of characteristics related to the transfer of the management plan.

B. ManagementPlan

Sequence of terminal maintenance actions to be performed by a point of interaction (POI).

C. SecurityTrailer

Trailer of the message containing a MAC or a digital signature.

3.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <MgmtPlanRplcmnt>	[1..1]			
	Header <Hdr>	[1..1]			28
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		28
	FormatVersion <FrmtVrsn>	[1..1]	Text		29
	ExchangeIdentification <XchgId>	[1..1]	Quantity		29
	CreationDateTime <CreDtTm>	[1..1]	DateTime		29
	InitiatingParty <InitgPty>	[1..1]	±		29
	RecipientParty <RcptPty>	[0..1]	±		29
	Traceability <Tracblt>	[0..*]	±		30
	ManagementPlan <MgmtPlan>	[1..1]			30
	POIdentification <POId>	[0..1]	±		32
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		32
	DataSet <DataSet>	[1..1]			32
	Identification <Id>	[1..1]	±		34
	SequenceCounter <SeqCntr>	[0..1]	Text		34
	LastSequence <LastSeq>	[0..1]	Indicator		34
	Content <Cntt>	[0..1]			34
	TMChallenge <TMChllng>	[0..1]	Binary		35
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		35
	Action <Actn>	[1..*]			36
	Type <Tp>	[1..1]	CodeSet		36
	RemoteAccess <RmotAccs>	[0..1]	±		37
	Key <Key>	[0..*]	±		37
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		38
	TMSProtocol <TMSPrtcol>	[0..1]	Text		39
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		39
	DataSetIdentification <DataSetId>	[0..1]	±		39
	ComponentType <CmpntTp>	[0..*]	CodeSet		39
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		41
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		41

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	DelegationProof <DlgnProof>	[0..1]	Binary		41
	ProtectedDelegationProof <PrctdDlgnProof>	[0..1]	±		41
	Trigger <Trgr>	[1..1]	CodeSet		41
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		42
	ReTry <ReTry>	[0..1]	±		42
	TimeCondition <TmCond>	[0..1]	±		42
	TMChallenge <TMChllng>	[0..1]	Binary		43
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		43
	ErrorAction <ErrActn>	[0..*]	±		43
	AdditionalInformation <AddtlInf>	[0..*]	Binary		43
	MessageItem <Msgltn>	[0..*]	±		43
	DeviceRequest <DvcReq>	[0..1]	±		43
	SecurityTrailer <SctyTrlr>	[0..1]	±		48

3.3 Constraints

C1 ActiveCurrency

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

C2 ActiveOrHistoricCurrency

The Currency Code must be registered, or have already been registered. Valid active or historic currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and may be or not be withdrawn on the day the message containing the Currency is exchanged.

C3 AnyBIC

Only a valid Business identifier code is allowed. Business identifier codes for financial or non-financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consists of eight (8) or eleven (11) contiguous characters.

C4 Country

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

C5 IBAN

A valid IBAN consists of all three of the following components: Country Code, check digits and BBAN.

C6 IdentificationAndProxyGuideline

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

C7 IdentificationOrProxyPresenceRule

Identification must be present or Proxy must be present. Both may be present.

C8 OneElementPresenceRule

At least one of these subelements must be present.

C9 OneElementPresenceRule

At least one of these subelements must be present.

C10 OneElementPresenceRule

At least one of these subelements must be present.

C11 SupplementaryDataRule

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

C12 ValidationByTable

Must be a valid terrestrial language.

3.4 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

3.4.1 Header <Hdr>

Presence: [1..1]

Definition: Set of characteristics related to the transfer of the management plan.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		28
	FormatVersion <FrmtVrsn>	[1..1]	Text		29
	ExchangeIdentification <XchgId>	[1..1]	Quantity		29
	CreationDateTime <CreDtTm>	[1..1]	DateTime		29
	InitiatingParty <InitgPty>	[1..1]	±		29
	RecipientParty <RcptPty>	[0..1]	±		29
	Traceability <Tracblt>	[0..*]	±		30

3.4.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

3.4.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 589

3.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 582

3.4.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODateTime"](#) on page 581

3.4.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see ["GenericIdentification176"](#) on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

3.4.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwr>	[1..1]	Text		313

3.4.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "[Traceability8](#)" on page 439 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		439
	ProtocolName <PrtcolNm>	[0..1]	Text		440
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		440
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		440
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		440

3.4.2 ManagementPlan <MgmtPlan>

Presence: [1..1]

Definition: Sequence of terminal maintenance actions to be performed by a point of interaction (POI).

ManagementPlan <MgmtPlan> contains the following **ManagementPlan14** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIIdentification <POIID>	[0..1]	±		32
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		32
	DataSet <DataSet>	[1..1]			32
	Identification <Id>	[1..1]	±		34
	SequenceCounter <SeqCntr>	[0..1]	Text		34
	LastSequence <LastSeq>	[0..1]	Indicator		34
	Content <Cntt>	[0..1]			34
	TMChallenge <TMChllng>	[0..1]	Binary		35
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		35
	Action <Actn>	[1..*]			36
	Type <Tp>	[1..1]	CodeSet		36
	RemoteAccess <RmotAccs>	[0..1]	±		37
	Key <Key>	[0..*]	±		37
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		38
	TMSProtocol <TMSPrtcol>	[0..1]	Text		39
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		39
	DataSetIdentification <DataSetId>	[0..1]	±		39
	ComponentType <CmpntTp>	[0..*]	CodeSet		39
	DelegationScopelIdentification <DlgtNScpld>	[0..1]	Text		41
	DelegationScopeDefinition <DlgtNScpDef>	[0..1]	Binary		41
	DelegationProof <DlgtNProof>	[0..1]	Binary		41
	ProtectedDelegationProof <PrtctdDlgtNProof>	[0..1]	±		41
	Trigger <Trggr>	[1..1]	CodeSet		41
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		42
	ReTry <ReTry>	[0..1]	±		42
	TimeCondition <TmCond>	[0..1]	±		42
	TMChallenge <TMChllng>	[0..1]	Binary		43
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		43
	ErrorAction <ErrActn>	[0..*]	±		43
	AdditionalInformation <AddtlInf>	[0..*]	Binary		43
	MessageItem <Msgltn>	[0..*]	±		43

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceRequest <DvcReq>	[0..1]	±		43

3.4.2.1 POIIdentification <POIId>

Presence: [0..1]

Definition: Identification of the point of interaction (POI) for terminal management.

POIIdentification <POIId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

3.4.2.2 TerminalManagerIdentification <TermnlMgrId>

Presence: [1..1]

Definition: Identification of the terminal management system (TMS) sending the management plan.

TerminalManagerIdentification <TermnlMgrId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

3.4.2.3 DataSet <DataSet>

Presence: [1..1]

Definition: Data set related to the sequence of actions to be performed by a point of interaction (POI).

DataSet <DataSet> contains the following **TerminalManagementDataSet35** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		34
	SequenceCounter <SeqCntr>	[0..1]	Text		34
	LastSequence <LastSeq>	[0..1]	Indicator		34
	Content <Cntt>	[0..1]			34
	TMChallenge <TMChllng>	[0..1]	Binary		35
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		35
	Action <Actn>	[1..*]			36
	Type <Tp>	[1..1]	CodeSet		36
	RemoteAccess <RmotAccs>	[0..1]	±		37
	Key <Key>	[0..*]	±		37
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		38
	TMSProtocol <TMSPrtcol>	[0..1]	Text		39
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		39
	DataSetIdentification <DataSetId>	[0..1]	±		39
	ComponentType <CmpntTp>	[0..*]	CodeSet		39
	DelegationScopeIdentification <DlgtNScpld>	[0..1]	Text		41
	DelegationScopeDefinition <DlgtNScpDef>	[0..1]	Binary		41
	DelegationProof <DlgtNProof>	[0..1]	Binary		41
	ProtectedDelegationProof <PrctcdDlgtNProof>	[0..1]	±		41
	Trigger <Trggr>	[1..1]	CodeSet		41
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		42
	ReTry <ReTry>	[0..1]	±		42
	TimeCondition <TmCond>	[0..1]	±		42
	TMChallenge <TMChllng>	[0..1]	Binary		43
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		43
	ErrorAction <ErrActn>	[0..*]	±		43
	AdditionalInformation <AddtlInf>	[0..*]	Binary		43
	MessageItem <Msgltn>	[0..*]	±		43
	DeviceRequest <DvcReq>	[0..1]	±		43

3.4.2.3.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the data set containing the management plan.

Identification <Id> contains the following elements (see "[DataSetIdentification11](#)" on page 314 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		314
	Type <Tp>	[1..1]	CodeSet		314
	Version <Vrsn>	[0..1]	Text		316
	CreationDateTime <CreDtTm>	[0..1]	DateTime		316

3.4.2.3.2 SequenceCounter <SeqCntr>

Presence: [0..1]

Definition: Counter to identify a single data set within the whole transfer.

Datatype: "[Max9NumericText](#)" on page 590

3.4.2.3.3 LastSequence <LastSeq>

Presence: [0..1]

Definition: Indication of the last sequence in case of split messages.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

3.4.2.3.4 Content <Cntt>

Presence: [0..1]

Definition: Content of the management plan.

Content <Cntt> contains the following **ManagementPlanContent14** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMChallenge <TMChllng>	[0..1]	Binary		35
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		35
	Action <Actn>	[1..*]			36
	Type <Tp>	[1..1]	CodeSet		36
	RemoteAccess <RmotAccs>	[0..1]	±		37
	Key <Key>	[0..*]	±		37
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		38
	TMSProtocol <TMSPrtcol>	[0..1]	Text		39
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		39
	DataSetIdentification <DataSetId>	[0..1]	±		39
	ComponentType <CmpntTp>	[0..*]	CodeSet		39
	DelegationScopeIdentification <DlgtnScpld>	[0..1]	Text		41
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		41
	DelegationProof <DlgtnProof>	[0..1]	Binary		41
	ProtectedDelegationProof <PrtctdDlgtnProof>	[0..1]	±		41
	Trigger <Trggr>	[1..1]	CodeSet		41
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		42
	ReTry <ReTry>	[0..1]	±		42
	TimeCondition <TmCond>	[0..1]	±		42
	TMChallenge <TMChllng>	[0..1]	Binary		43
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		43
	ErrorAction <ErrActn>	[0..*]	±		43
	AdditionalInformation <AddtlInf>	[0..*]	Binary		43
	MessageItem <Msgltn>	[0..*]	±		43
	DeviceRequest <DvcReq>	[0..1]	±		43

3.4.2.3.4.1 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 522

3.4.2.3.4.2 KeyEnciphermentCertificate <KeyNcphrmntCert>

Presence: [0..*]

Definition: Certificate chain of an asymmetric encryption keys for the encryption of temporary transport key of the key to inject.

Datatype: "Max10KBinary" on page 522

3.4.2.3.4.3 Action <Actn>

Presence: [1..*]

Definition: Terminal management action to be performed by the point of interaction (POI).

Action <Actn> contains the following **TMSAction14** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		36
	RemoteAccess <RmotAccs>	[0..1]	±		37
	Key <Key>	[0..*]	±		37
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		38
	TMSProtocol <TMSPrtcol>	[0..1]	Text		39
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		39
	DataSetIdentification <DataSetId>	[0..1]	±		39
	ComponentType <CmpntTp>	[0..*]	CodeSet		39
	DelegationScopelIdentification <DlgtnScpld>	[0..1]	Text		41
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		41
	DelegationProof <DlgtnProof>	[0..1]	Binary		41
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		41
	Trigger <Trggr>	[1..1]	CodeSet		41
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		42
	ReTry <ReTry>	[0..1]	±		42
	TimeCondition <TmCond>	[0..1]	±		42
	TMChallenge <TMChllng>	[0..1]	Binary		43
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		43
	ErrorAction <ErrActn>	[0..*]	±		43
	AdditionalInformation <AddtlInf>	[0..*]	Binary		43
	MessageItem <Msgltn>	[0..*]	±		43
	DeviceRequest <DvcReq>	[0..1]	±		43

3.4.2.3.4.3.1 Type <Tp>

Presence: [1..1]

Definition: Types of action to be performed by a point of interaction (POI).

Datatype: "TerminalManagementAction5Code" on page 576

CodeName	Name	Definition
DCTV	Deactivate	Request to deactivate the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
DWNL	Download	Request to download the element identified inside the message exchange.
INST	Install	Request to install the element identified inside the message exchange.
RSTR	Restart	Request to restart the element identified inside the message exchange.
UPLD	Upload	Request to upload the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.
BIND	Bind	Request sent to a POI to bind with a server.
RBND	Rebind	Request sent to a POI to rebind with a server.
UBND	Unbind	Request sent to a POI to unbind with a server.
ACTV	Activate	Request to activate the element identified inside the message exchange.
DEVR	DeviceRequest	Request to execute a device request.

3.4.2.3.4.3.2 RemoteAccess <RmotAccs>

Presence: [0..1]

Definition: Host access information.

RemoteAccess <RmotAccs> contains the following elements (see "NetworkParameters7" on page 441 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <CIntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

3.4.2.3.4.3.3 Key <Key>

Presence: [0..*]

Definition: Cryptographic key used to communicate with the host.

Key <Key> contains the following elements (see "CryptographicKey19" on page 472 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		473
	KeyIdentification <KeyId>	[0..1]	Text		473
	AdditionalIdentification <AddtlId>	[0..1]	Binary		474
	Name <Nm>	[0..1]	Text		474
	SecurityProfile <SctyPrfl>	[0..1]	Text		474
	ItemNumber <ItmNb>	[0..1]	Text		474
	SequenceNumber <SeqNb>	[0..1]	Quantity		474
	Version <Vrsn>	[0..1]	Text		474
	KeyVersion <KeyVrsn>	[0..1]	Text		474
	Type <Tp>	[0..1]	CodeSet		475
	Function <Fctn>	[0..*]	CodeSet		476
	ActivationDate <ActvtnDt>	[0..1]	DateTime		476
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		476
	KeyValue <KeyVal>	[0..1]	±		477
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			477
	Identification <Id>	[1..1]	Text		477
	Type <Tp>	[1..1]	CodeSet		477
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		478
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		478
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			478
	Name <Nm>	[1..1]	Text		478
	Value <Val>	[0..1]	Text		479
	DerivationAlgorithmIdentifier <DerivtnAlgoldr>	[0..1]	Text		479
	AlgorithmIdentifier <Algoldr>	[0..1]	Text		479

3.4.2.3.4.3.4 TerminalManagerIdentification <TermnlMgrId>

Presence: [0..1]

Definition: Identification of the master terminal manager or the terminal manager with which the POI has to perform the action.

TerminalManagerIdentification <TermnlMgrId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

3.4.2.3.4.3.5 TMSProtocol <TMSPrtcol>

Presence: [0..1]

Definition: TMS protocol to use for performing the maintenance action.

Datatype: "[Max35Text](#)" on page 587

3.4.2.3.4.3.6 TMSProtocolVersion <TMSPrtcolVrsn>

Presence: [0..1]

Definition: Version of the TMS protocol to use to perform the maintenance action.

Datatype: "[Max35Text](#)" on page 587

3.4.2.3.4.3.7 DataSetIdentification <DataSetId>

Presence: [0..1]

Definition: Data set on which the action has to be performed.

DataSetIdentification <DataSetId> contains the following elements (see "[DataSetIdentification11](#)" on page 314 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		314
	Type <Tp>	[1..1]	CodeSet		314
	Version <Vrsn>	[0..1]	Text		316
	CreationDateTime <CreDtTm>	[0..1]	DateTime		316

3.4.2.3.4.3.8 ComponentType <CmpntTp>

Presence: [0..*]

Definition: Type of POI components to send in a status report.

Datatype: "[DataSetCategory20Code](#)" on page 547

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.

CodeName	Name	Definition
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
TXCP	BatchCapture	Batch upload of transaction data (data capture of a group of transactions).
AKCP	CaptureResponse	Batch download response for the batch capture of transactions.
DLGT	DelegationData	Data needed to create a terminal management sub-domain.
MGTP	ManagementPlan	Configuration of management plan in the point of interaction.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
STRP	StatusReport	Report of software configuration and parameter status.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
VDPR	VendorParameters	Point of interaction parameters defined by the manufacturer for instance the PIN verification capabilities.
PARA	Parameters	Any combination of configuration parameters for the point of interaction (POI).
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
LOGF	LogFile	Any repository used for recording log traces.
CMRQ	CertificateManagementRequest	Trigger for CertificateManagementRequest.
MDFL	MediaFile	Media file managed by an application of the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
PROB	Probe	Probe used to monitor a feature on the POI.

3.4.2.3.4.3.9 DelegationScopeIdentification <DlgtScpId>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 587

3.4.2.3.4.3.10 DelegationScopeDefinition <DlgtScpDef>

Presence: [0..1]

Definition: This element contains all information relevant to the DelegationScopeIdentification. The format of this element is out of scope of this definition.

Datatype: "Max3000Binary" on page 523

3.4.2.3.4.3.11 DelegationProof <DlgtProof>

Presence: [0..1]

Definition: Contains the necessary information to secure the management of the Delegation. The format of this element is out of scope of this definition.

Datatype: "Max5000Binary" on page 523

3.4.2.3.4.3.12 ProtectedDelegationProof <PrtctdDlgtProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgtProof> contains the following elements (see "ContentInformationType39" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

3.4.2.3.4.3.13 Trigger <Trggr>

Presence: [1..1]

Definition: Event on which the action has to be activated by the point of interaction (POI).

Datatype: "TerminalManagementActionTrigger1Code" on page 577

CodeName	Name	Definition
DATE	DateTime	Date and time trigger the terminal management action.
HOST	HostEvent	Acquirer triggers the terminal management action.
MANU	Manual	Acceptor triggers the terminal management action.

CodeName	Name	Definition
SALE	SaleEvent	Sale system triggers the terminal management action.

3.4.2.3.4.3.14 AdditionalProcess <AddtlPrc>

Presence: [0..*]

Definition: Additional process to perform before starting or after completing the action by the point of interaction (POI).

Datatype: "TerminalManagementAdditionalProcess1Code" on page 577

CodeName	Name	Definition
MANC	ManualConfirmation	Manual confirmation of the merchant before the terminal management action.
RCNC	Reconciliation	Acquirer reconciliation to be performed before the terminal management action.
RSRT	RestartSystem	Restart the system after performing the terminal management action.

3.4.2.3.4.3.15 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of the action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 517 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		517
	MaximumNumber <MaxNb>	[0..1]	Quantity		518
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		518

3.4.2.3.4.3.16 TimeCondition <TmCond>

Presence: [0..1]

Definition: Date and time the action has to be performed.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming5" on page 515 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WaitingTime <WtgTm>	[0..1]	Text		515
	StartTime <StartTm>	[0..1]	DateTime		515
	EndTime <EndTm>	[0..1]	DateTime		516
	Period <Prd>	[0..1]	Text		516
	MaximumNumber <MaxNb>	[0..1]	Quantity		516
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		516

3.4.2.3.4.3.17 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 522

3.4.2.3.4.3.18 KeyEnciphermentCertificate <KeyNcphrmntCert>

Presence: [0..*]

Definition: Certificate chain for the encryption of temporary transport key of the key to inject.

Datatype: "Max10KBinary" on page 522

3.4.2.3.4.3.19 ErrorAction <ErrActn>

Presence: [0..*]

Definition: Action to perform in case of error on the related action in progress.

ErrorAction <ErrActn> contains the following elements (see "ErrorAction5" on page 430 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionResult <ActnRslt>	[1..*]	CodeSet		431
	ActionToProcess <ActnToPrc>	[1..1]	CodeSet		432

3.4.2.3.4.3.20 AdditionalInformation <AddtlInf>

Presence: [0..*]

Definition: Additional information about the maintenance action.

Datatype: "Max3000Binary" on page 523

3.4.2.3.4.3.21 MessageItem <Msgltn>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <Msgltn> contains the following elements (see "MessageItemCondition2" on page 429 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		429
	Condition <Cond>	[1..1]	CodeSet		429
	Value <Val>	[0..*]	Text		430

3.4.2.3.4.3.22 DeviceRequest <DvcReq>

Presence: [0..1]

Definition: Information related to a device request of the POI.

DeviceRequest <DvcReq> contains the following elements (see "DeviceRequest9" on page 143 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±	C9	148
	Context <Cntxt>	[0..1]		C10	154
	PaymentContext <PmtCntxt>	[0..1]			157
	CardPresent <CardPres>	[0..1]	Indicator		157
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		157
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		158
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		158
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		158
	TransactionChannel <TxChanl>	[0..1]	CodeSet		158
	BusinessArea <BizArea>	[0..1]	CodeSet		159
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		159
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	159
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		160
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		160
	SupportedOption <SpprtOptn>	[0..*]	CodeSet		161
	SaleContext <SaleCntxt>	[0..1]			161
	SaleIdentification <SaleId>	[0..1]	Text		162
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		162
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		163
	CashierIdentification <CshrId>	[0..1]	Text		163
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	163
	ShiftNumber <ShftNb>	[0..1]	Text		163
	CustomerOrderRequestFlag <CstmrOrdrrReqFlg>	[0..1]	Indicator		163
	PurchaseOrderNumber <PurchsOrdrrNb>	[0..1]	Text		163
	InvoiceNumber <InvNb>	[0..1]	Text		163
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		164
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			164
	CommonName <CmonNm>	[1..1]	Text		164
	Address <Adr>	[0..1]	Text		164
	CountryCode <CtryCd>	[1..1]	CodeSet		164

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		164
	RegisteredIdentifier <RegldId>	[1..1]	Text		164
	SplitPayment <Spltpmt>	[0..1]	Indicator		165
	RemainingAmount <RmngAmt>	[0..1]	Amount		165
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		165
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		165
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		165
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		166
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		166
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	166
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		167
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		167
	SystemToNotify <SysToNtfy>	[0..1]	Text		167
	Debtor <Dbtr>	[0..1]	±		168
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	169
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		169
	Creditor <Cdtr>	[0..1]	±		169
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	170
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		171
	DirectDebitContext <DrctDbtCntxt>	[0..1]			171
	Debtor <Dbtr>	[0..1]	±		172
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	173
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		174
	Creditor <Cdtr>	[0..1]	±		174
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	175
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		176
	MandateRelatedInformation <MndtRltdInf>	[1..1]			176
	MandateIdentification <MndtId>	[1..1]	Text		177
	DateOfSignature <DtOfSgntr>	[0..1]	Date		177
	MandateImage <MndtImg>	[0..1]	Binary		177
	ProtectedMandateImage <PrctcdMndtImg>	[0..1]	±		177

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ServiceContent <SvcCntt>	[1..1]	CodeSet		177
	DisplayRequest <DispReq>	[0..1]			178
	DisplayOutput <DispOutpt>	[1..*]	±		178
	InputRequest <InptReq>	[0..1]			179
	DisplayOutput <DispOutpt>	[0..1]	±		180
	InputData <InptData>	[1..1]			181
	DeviceType <DvcTp>	[1..1]	CodeSet		182
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		182
	InputCommand <InptCmd>	[1..1]	CodeSet		183
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		184
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		184
	InputText <InptTxt>	[0..1]	±		184
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		185
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		185
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		185
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		186
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		186
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		186
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		186
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		186
	PrintRequest <PrtReq>	[0..1]			187
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		187
	ResponseMode <RspnMd>	[1..1]	CodeSet		187
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		188
	RequiredSignatureFlag <ReqrdSgntrFlg>	[0..1]	Indicator		188
	OutputContent <OutptCntt>	[1..1]	±		188
	PlayResourceRequest <PlayRsrcReq>	[0..1]			189
	ResponseMode <RspnMd>	[0..1]	CodeSet		190
	ResourceAction <RsrcActn>	[1..1]	CodeSet		190
	SoundVolume <SoundVol>	[0..1]	Rate		190
	DisplayResolution <DispRsltn>	[0..1]	Text		190

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Resource <Rsrc>	[0..1]			190
	ResourceType <RsrcTp>	[1..1]	CodeSet		191
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		191
	Language <Lang>	[0..1]	CodeSet	C14	191
	ResourceReference <RsrcRef>	[0..1]	Text		191
	TimingSlot <TmgSlot>	[0..1]	CodeSet		192
	SecureInputRequest <ScrInptReq>	[0..1]			192
	PINRequestType <PINReqTp>	[1..1]	CodeSet		192
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		193
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		193
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		193
	CardholderPIN <CrhdldrPIN>	[0..1]			193
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		193
	PINFormat <PINFrmt>	[1..1]	CodeSet		194
	AdditionalInput <AddtlInpt>	[0..1]	Text		194
	InitialisationCardReaderRequest <InitlstnCardRdrReq>	[0..1]			194
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		195
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		195
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		196
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		196
	DisplayOutput <DispOutpt>	[0..1]	±		196
	CardReaderAPDURequest <CardRdrAPDUReq>	[0..1]			197
	Class <Clss>	[1..1]	Binary		197
	Instruction <Instr>	[1..1]	Binary		197
	Parameter1 <Param1>	[1..1]	Binary		197
	Parameter2 <Param2>	[1..1]	Binary		197
	Data <Data>	[0..1]	Binary		197
	ExpectedLength <XpctdLngh>	[0..1]	Binary		197
	PowerOffCardReaderRequest <PwrOffCardRdrReq>	[0..1]			198
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		198
	DisplayOutput <DispOutpt>	[0..1]	±		198

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TransmissionRequest <TrnsmssnReq>	[0..1]			199
	DestinationAddress <DstnAdr>	[1..1]	±		199
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		200
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		200
	MessageToSend <MsgToSnd>	[1..1]	Binary		200
	InputNotification <InptNtfctn>	[0..1]			200
	ExchangeIdentification <XchglId>	[1..1]	Text		200
	OutputContent <OutptCntt>	[1..1]	±		201
	SupplementaryData <SplmtryData>	[0..*]	±	C13	201

3.4.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "[ContentInformationType38](#)" on page 493 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		493
	AuthenticatedData <AuthntcdData>	[0..1]	±		494
	SignedData <SgndData>	[0..1]	±		494

4 catm.003.001.15 AcceptorConfigurationUpdateV15

4.1 MessageDefinition Functionality

The AcceptorConfigurationUpdate message is sent by a TM to a POI to update configurations.

Outline

The AcceptorConfigurationUpdateV15 MessageDefinition is composed of 3 MessageBuildingBlocks:

A. Header

Set of characteristics related to the transfer of the acceptor parameters.

B. AcceptorConfiguration

Acceptor configuration to be downloaded from the terminal management system.

C. SecurityTrailer

Trailer of the message containing a MAC or a digital signature.

4.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <AccptrCfgrnUpd>	[1..1]			
	Header <Hdr>	[1..1]			51
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		51
	FormatVersion <FrmtVrsn>	[1..1]	Text		51
	ExchangeIdentification <XchgId>	[1..1]	Quantity		52
	CreationDateTime <CreDtTm>	[1..1]	DateTime		52
	InitiatingParty <InitgPty>	[1..1]	±		52
	RecipientParty <RcptPty>	[0..1]	±		52
	Traceability <Tracblt>	[0..*]	±		53
	AcceptorConfiguration <AccptrCfgrn>	[1..1]			53
	TerminalManagerIdentification <TermnlMgrId>	[1..1]	±		54
	POIGroupIdentification <POIGrpId>	[0..*]	Text		55
	DataSet <DataSet>	[1..*]			55
	Identification <Id>	[1..1]	±		56
	SequenceCounter <SeqCntr>	[0..1]	Text		56
	LastSequence <LastSeq>	[0..1]	Indicator		57
	POIIdentification <POIID>	[0..*]	±		57
	ConfigurationScope <CfgrnScp>	[0..1]	CodeSet		57
	Content <Cntt>	[1..1]		C1	57
	ReplaceConfiguration <RplcCfgrn>	[0..1]	Indicator		58
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		58
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		59
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		62
	MerchantParameters <MrchntParams>	[0..*]	±		62
	TerminalParameters <TermnlParams>	[0..*]	±		63
	ApplicationParameters <ApplParams>	[0..*]	±		64
	HostCommunicationParameters <HstComParams>	[0..*]	±		65
	SecurityParameters <SctyParams>	[0..*]	±		66
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		66
	TerminalPackage <TermnlPackg>	[0..*]	±		67

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	SecurityTrailer <SctyTrlr>	[0..1]	±		68

4.3 Constraints

C1 OneElementPresenceRule

At least one of these subelements must be present.

4.4 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

4.4.1 Header <Hdr>

Presence: [1..1]

Definition: Set of characteristics related to the transfer of the acceptor parameters.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		51
	FormatVersion <FrmtVrsn>	[1..1]	Text		51
	ExchangeIdentification <XchgId>	[1..1]	Quantity		52
	CreationDateTime <CreDtTm>	[1..1]	DateTime		52
	InitiatingParty <InitgPty>	[1..1]	±		52
	RecipientParty <RcptPty>	[0..1]	±		52
	Traceability <Tracblt>	[0..*]	±		53

4.4.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

4.4.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 589

4.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: "Number" on page 582

4.4.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: "ISODateTime" on page 581

4.4.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "GenericIdentification176" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

4.4.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwr>	[1..1]	Text		313

4.4.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "[Traceability8](#)" on page 439 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		439
	ProtocolName <PrtcolNm>	[0..1]	Text		440
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		440
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		440
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		440

4.4.2 AcceptorConfiguration <AccptrCfgtn>

Presence: [1..1]

Definition: Acceptor configuration to be downloaded from the terminal management system.

AcceptorConfiguration <AcptrCfgtn> contains the following **AcceptorConfiguration15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		54
	POIGroupIdentification <POIGrpld>	[0..*]	Text		55
	DataSet <DataSet>	[1..*]			55
	Identification <Id>	[1..1]	±		56
	SequenceCounter <SeqCntr>	[0..1]	Text		56
	LastSequence <LastSeq>	[0..1]	Indicator		57
	POIIdentification <POIID>	[0..*]	±		57
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		57
	Content <Cntt>	[1..1]		C1	57
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		58
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		58
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		59
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		62
	MerchantParameters <MrchntParams>	[0..*]	±		62
	TerminalParameters <TermnlParams>	[0..*]	±		63
	ApplicationParameters <ApplParams>	[0..*]	±		64
	HostCommunicationParameters <HstComParams>	[0..*]	±		65
	SecurityParameters <SctyParams>	[0..*]	±		66
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		66
	TerminalPackage <TermnlPackg>	[0..*]	±		67

4.4.2.1 TerminalManagerIdentification <TermnlMgrld>

Presence: [1..1]

Definition: Identification of the terminal management system (TMS) sending the acceptor parameters.

TerminalManagerIdentification <TermnlMgrId> contains the following elements (see
"GenericIdentification176" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

4.4.2.2 POIGroupIdentification <POIGrpId>

Presence: [0..*]

Definition: Identifier assigned to a set of POI terminals performing some categories of transactions.

Datatype: "Max35Text" on page 587

4.4.2.3 DataSet <DataSet>

Presence: [1..*]

Definition: Data set containing the acceptor parameters of a point of interaction (POI).

DataSet <DataSet> contains the following **AcceptorConfigurationDataSet7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		56
	SequenceCounter <SeqCntr>	[0..1]	Text		56
	LastSequence <LastSeq>	[0..1]	Indicator		57
	POIIdentification <POIID>	[0..*]	±		57
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		57
	Content <Cntt>	[1..1]		C1	57
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		58
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		58
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		59
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		62
	MerchantParameters <MrchntParams>	[0..*]	±		62
	TerminalParameters <TermnlParams>	[0..*]	±		63
	ApplicationParameters <ApplParams>	[0..*]	±		64
	HostCommunicationParameters <HstComParams>	[0..*]	±		65
	SecurityParameters <SctyParams>	[0..*]	±		66
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		66
	TerminalPackage <TermnlPackg>	[0..*]	±		67

4.4.2.3.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the data set transferred.

Identification <Id> contains the following elements (see "[DataSetIdentification11](#)" on page 314 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		314
	Type <Tp>	[1..1]	CodeSet		314
	Version <Vrsn>	[0..1]	Text		316
	CreationDateTime <CreDtTm>	[0..1]	DateTime		316

4.4.2.3.2 SequenceCounter <SeqCntr>

Presence: [0..1]

Definition: Counter to identify a single data set within the whole transfer.

Datatype: "Max9NumericText" on page 590

4.4.2.3.3 LastSequence <LastSeq>

Presence: [0..1]

Definition: Indication of the last sequence in case of split messages.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

4.4.2.3.4 POIIdentification <POIID>

Presence: [0..*]

Definition: Identification of the point of interactions involved by the configuration data set.

POIIdentification <POIID> contains the following elements (see "GenericIdentification176" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

4.4.2.3.5 ConfigurationScope <CfgtnScp>

Presence: [0..1]

Definition: Scope of the configuration contained in the data set.

Datatype: "PartyType15Code" on page 559

CodeName	Name	Definition
PGRP	POIGroup	Configuration to apply to a subset of the whole POI system.
PSYS	POISystem	Configuration to apply to the whole POI system.
PSNG	SinglePOI	Configuration to apply to a single POI terminal.

4.4.2.3.6 Content <Cntt>

Presence: [1..1]

Definition: Content of the acceptor parameters.

Impacted by: C1 "OneElementPresenceRule"

Content <Cntt> contains the following **AcceptorConfigurationContent15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ReplaceConfiguration <RplcCfgrn>	[0..1]	Indicator		58
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		58
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		59
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		62
	MerchantParameters <MrchntParams>	[0..*]	±		62
	TerminalParameters <TermnlParams>	[0..*]	±		63
	ApplicationParameters <ApplParams>	[0..*]	±		64
	HostCommunicationParameters <HstComParams>	[0..*]	±		65
	SecurityParameters <SctyParams>	[0..*]	±		66
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		66
	TerminalPackage <TermnlPackg>	[0..*]	±		67

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

4.4.2.3.6.1 ReplaceConfiguration <RplcCfgrn>

Presence: [0..1]

Definition: True if the whole configuration related to the terminal manager has to be replaced by the configuration included in the message content.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

4.4.2.3.6.2 TMSProtocolParameters <TMSPrtcolParams>

Presence: [0..*]

Definition: Configuration parameters of the TMS protocol between a POI and a terminal manager.

TMSProtocolParameters <TMSPrtcolParams> contains the following elements (see
"TMSProtocolParameters8" on page 293 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		294
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		294
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		295
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		295
	Version <Vrsn>	[1..1]	Text		296
	ApplicationIdentification <ApplId>	[0..*]	Text		296
	HostIdentification <HstId>	[1..1]	Text		296
	POIIdentification <POIId>	[0..1]	Text		296
	InitiatingPartyIdentification <InitgPtyId>	[0..1]	Text		296
	RecipientPartyIdentification <RcptPtyId>	[0..1]	Text		296
	FileTransfer <FileTrf>	[0..1]	Indicator		296
	MessageItem <MsgItm>	[0..*]	±		296
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		297

4.4.2.3.6.3 AcquirerProtocolParameters <AcqrrPrtcolParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to an acquirer protocol.

AcquirerProtocolParameters <AcqrrPrtcolParams> contains the following elements (see
"AcquirerProtocolParameters18" on page 252 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		255
	AcquirerIdentification <Acqrrld>	[1..*]	±		255
	Version <Vrsn>	[1..1]	Text		255
	ApplicationIdentification <Applld>	[0..*]	Text		255
	Host <Hst>	[0..*]			256
	HostIdentification <Hstld>	[1..1]	Text		256
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		256
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		257
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		257
	OnLineTransaction <OnLineTx>	[0..1]			257
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		258
	BatchTransfer <BtchTrf>	[0..1]			258
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		259
	MaximumNumber <MaxNb>	[0..1]	Quantity		259
	MaximumAmount <MaxAmt>	[0..1]	Amount		260
	ReTry <ReTry>	[0..1]	±		260
	TimeCondition <TmCond>	[0..1]	±		260
	CompletionExchange <CmpltnXchg>	[0..1]			260
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		261
	MaximumNumber <MaxNb>	[0..1]	Quantity		261
	MaximumAmount <MaxAmt>	[0..1]	Amount		262
	ReTry <ReTry>	[0..1]	±		262
	TimeCondition <TmCond>	[0..1]	±		262
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		262
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		262
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		263
	OffLineTransaction <OffLineTx>	[0..1]			263
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		264
	BatchTransfer <BtchTrf>	[0..1]			264
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		265

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaximumNumber <MaxNb>	[0..1]	Quantity		265
	MaximumAmount <MaxAmt>	[0..1]	Amount		266
	ReTry <ReTry>	[0..1]	±		266
	TimeCondition <TmCond>	[0..1]	±		266
	CompletionExchange <CmpltnXchg>	[0..1]			266
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		267
	MaximumNumber <MaxNb>	[0..1]	Quantity		267
	MaximumAmount <MaxAmt>	[0..1]	Amount		268
	ReTry <ReTry>	[0..1]	±		268
	TimeCondition <TmCond>	[0..1]	±		268
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		268
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		268
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		269
	ReconciliationExchange <RcncltnXchg>	[0..1]			269
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		269
	MaximumNumber <MaxNb>	[0..1]	Quantity		270
	MaximumAmount <MaxAmt>	[0..1]	Amount		270
	ReTry <ReTry>	[0..1]	±		270
	TimeCondition <TmCond>	[0..1]	±		270
	ReconciliationByAcquirer <RcncltnByAcqrr>	[0..1]	Indicator		271
	TotalsPerCurrency <TtlsPerCcy>	[0..1]	Indicator		271
	SplitTotals <SplTtls>	[0..1]	Indicator		271
	SplitTotalCriteria <SplTtlCrit>	[0..*]	CodeSet		271
	CompletionAdviceMandated <CmpltnAdvcMndtd>	[0..1]	Indicator		272
	AmountQualifierForReservation <AmtQlfrForRsvatn>	[0..*]	CodeSet		272
	ReconciliationError <RcncltnErr>	[0..1]	Indicator		272
	CardDataVerification <CardDataVrfctn>	[0..1]	Indicator		273
	NotifyOffLineCancellation <NtfyOffLineCxl>	[0..1]	Indicator		273
	BatchTransferContent <BtchTrfCntt>	[0..*]	CodeSet		273
	FileTransferBatch <FileTrfBtch>	[0..1]	Indicator		273
	BatchDigitalSignature <BtchDgtlSgntr>	[0..1]	Indicator		274

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageItem <MsgItm>	[0..*]	±		274
	ProtectCardData <PrctCardData>	[1..1]	Indicator		274
	PrivateCardData <PrvtCardData>	[0..1]	Indicator		274
	MandatorySecurityTrailer <MndtrySctyTrlr>	[0..1]	Indicator		275

4.4.2.3.6.4 ServiceProviderParameters <SvcPrvdrParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to a service provider.

ServiceProviderParameters <SvcPrvdrParams> contains the following elements (see "ServiceProviderParameters5" on page 275 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		275
	ServiceProviderIdentification <SvcPrvdrId>	[1..*]	±		275
	Version <Vrsn>	[1..1]	Text		276
	ApplicationIdentification <ApplId>	[0..*]	Text		276
	Host <Hst>	[0..*]			276
	HostIdentification <HstId>	[1..1]	Text		276
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		276
	ProtocolVersion <PrctlVrsn>	[0..1]	Text		277
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		277
	NonFinancialActionSupported <NonFinActnSpprtd>	[0..*]	CodeSet		277

4.4.2.3.6.5 MerchantParameters <MrchntParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to the merchant.

MerchantParameters <MrchntParams> contains the following elements (see
"MerchantConfigurationParameters6" on page 291 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		292
	MerchantIdentification <MrchntId>	[0..1]	Text		292
	Version <Vrsn>	[0..1]	Text		292
	ParameterFormatIdentifier <ParamFrmtIdr>	[0..1]	Text		292
	Proxy <Prxy>	[0..1]	±		293
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		293
	OffsetStart <OffsetStart>	[0..1]	Quantity		293
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		293
	OtherParameters <OthrParams>	[0..1]	Binary		293

4.4.2.3.6.6 TerminalParameters <TermnlParams>

Presence: [0..*]

Definition: Manufacturer configuration parameters of the point of interaction.

TerminalParameters <TermnlParams> contains the following elements (see
"PaymentTerminalParameters8" on page 303 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		303
	VendorIdentification <Vndrld>	[0..1]	Text		303
	Version <Vrsn>	[0..1]	Text		304
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		304
	ClockSynchronisation <ClckSynctn>	[0..1]			304
	POITimeZone <POITmZone>	[1..1]	Text		304
	SynchronisationServer <SynctnSvr>	[0..*]	±		304
	Delay <Dely>	[0..1]	Time		305
	TimeZoneLine <TmZoneLine>	[0..*]	Text		305
	LocalDateTime <LclDtTm>	[0..*]			305
	FromDateTime <FrDtTm>	[0..1]	DateTime		305
	ToDateTime <ToDtTm>	[0..1]	DateTime		306
	UTCOffset <UTCOffset>	[1..1]	Quantity		306
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		306
	OffsetStart <OffsetStart>	[0..1]	Quantity		306
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		306
	OtherParameters <OthrParams>	[0..1]	Binary		306

4.4.2.3.6.7 ApplicationParameters <ApplParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to a payment application of the point of interaction.

ApplicationParameters <ApplParams> contains the following elements (see
"ApplicationParameters13" on page 289 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		290
	ApplicationIdentification <ApplId>	[1..1]	Text		290
	Version <Vrsn>	[0..1]	Text		290
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		290
	ParametersLength <ParamsLngth>	[0..1]	Quantity		291
	OffsetStart <OffsetStart>	[0..1]	Quantity		291
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		291
	Parameters <Params>	[0..*]	Binary		291
	EncryptedParameters <NcrptdParams>	[0..1]	±		291

4.4.2.3.6.8 HostCommunicationParameters <HstComParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to the communication with an acquirer host or a terminal manager host.

HostCommunicationParameters <HstComParams> contains the following elements (see
"HostCommunicationParameter8" on page 278 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		279
	HostIdentification <HstId>	[1..1]	Text		279
	Address <Adr>	[0..1]	±		279
	Key <Key>	[0..*]	±		279
	NetworkServiceProvider <NtwkSvcPrvdr>	[0..1]	±		280
	PhysicalInterface <PhysIntrfc>	[0..1]			281
	InterfaceName <IntrfcNm>	[1..1]	Text		281
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		281
	UserName <UsrNm>	[0..1]	Text		282
	AccessCode <AccsCd>	[0..1]	Binary		282
	SecurityProfile <SctyPrfl>	[0..1]	Text		282
	AdditionalParameters <AddtlParams>	[0..1]	Binary		282
	ExchangeMode <XchgMd>	[0..1]	CodeSet		283
	EncodingMode <NcodgMd>	[0..1]	CodeSet		283

4.4.2.3.6.9 SecurityParameters <SctyParams>

Presence: [0..*]

Definition: Point of interaction parameters related to the security of software application and application protocol.

SecurityParameters <SctyParams> contains the following elements (see "[SecurityParameters17](#)" on page 301 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		301
	Version <Vrsn>	[1..1]	Text		301
	POIChallenge <POIChllng>	[0..1]	Binary		301
	TMChallenge <TMChllng>	[0..1]	Binary		301
	SecurityElement <SctyElmt>	[0..*]	±		302

4.4.2.3.6.10 SaleToPOIParameters <SaleToPOIParams>

Presence: [0..*]

Definition: Parameters dedicated to protocols between a sale system and the POI.

SaleToPOIParameters <SaleToPOIParams> contains the following elements (see
"SaleToPOIProtocolParameter4" on page 283 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		284
	MerchantIdentification <MrchntId>	[0..1]			284
	CommonName <CmonNm>	[1..1]	Text		285
	Address <Adr>	[0..1]	Text		285
	CountryCode <CtryCd>	[1..1]	CodeSet		285
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		285
	RegisteredIdentifier <RegIdr>	[1..1]	Text		285
	Version <Vrsn>	[1..1]	Text		285
	HostIdentification <HstId>	[1..1]	Text		286
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		286
	MerchantPOIIdentification <MrchntPOId>	[0..1]	Text		286
	SaleIdentification <SaleId>	[0..1]	Text		286
	AllowedSaleMessage <AllwdSaleMsg>	[0..*]	CodeSet		286
	AllowedPOIMessage <AllwdPOIMsg>	[0..*]	CodeSet		287
	AllowedPOIService <AllwdPOISvc>	[0..*]	CodeSet		288
	AllowedSaleDevice <AllwdSaleDvc>	[0..*]	CodeSet		289
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		289

4.4.2.3.6.11 TerminalPackage <TermnlPackg>

Presence: [0..*]

Definition: Group of software packages to transfer to a group of POIComponent of the POI System.

TerminalPackage <TermnlPackg> contains the following elements (see "TerminalPackageType5" on page 297 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIComponentIdentification <POICmpntId>	[0..*]			297
	ItemNumber <itmNb>	[0..1]	Text		298
	ProviderIdentification <PrvdrId>	[0..1]	Text		298
	Identification <Id>	[0..1]	Text		298
	SerialNumber <SrlNb>	[0..1]	Text		298
	Package <Packg>	[1..*]			298
	PackageIdentification <PackgId>	[0..1]	±		299
	PackageLength <PackgLngh>	[0..1]	Quantity		299
	OffsetStart <OffsetStart>	[0..1]	Quantity		299
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		299
	PackageBlock <PackgBlck>	[0..*]			300
	Identification <Id>	[1..1]	Text		300
	Value <Val>	[0..1]	Binary		300
	ProtectedValue <PrtctdVal>	[0..1]	±		300
	Type <Tp>	[0..1]	Text		301

4.4.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "ContentInformationType38" on page 493 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		493
	AuthenticatedData <AuthntcdData>	[0..1]	±		494
	SignedData <SgndData>	[0..1]	±		494

5 catm.004.001.05 TerminalManagementRejectionV05

5.1 MessageDefinition Functionality

The TerminalManagementRejection message is sent by the terminal manager to reject a message request sent by an acceptor, to indicate that the received message could not be processed.

Outline

The TerminalManagementRejectionV05 MessageDefinition is composed of 2 MessageBuildingBlocks:

- A. Header
Rejection message management information.
- B. Reject
Information related to the reject.

5.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <TermnlMgmtRjctn>	[1..1]			
	Header <Hdr>	[1..1]			70
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		70
	FormatVersion <FrmtVrsn>	[1..1]	Text		70
	ExchangeIdentification <XchgId>	[1..1]	Quantity		70
	CreationDateTime <CreDtTm>	[1..1]	DateTime		70
	InitiatingParty <InitgPty>	[1..1]	±		70
	RecipientParty <RcptPty>	[0..1]	±		71
	Traceability <Tracblt>	[0..*]	±		71
	Reject <Rjct>	[1..1]			72
	RejectReason <RjctRsn>	[1..1]	CodeSet		72
	AdditionalInformation <AddtlInf>	[0..1]	Text		73
	MessageInError <MsgInErr>	[0..1]	Binary		73

5.3 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

5.3.1 Header <Hdr>

Presence: [1..1]

Definition: Rejection message management information.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		70
	FormatVersion <FrmtVrsn>	[1..1]	Text		70
	Exchangeldentification <Xchgld>	[1..1]	Quantity		70
	CreationDateTime <CreDtTm>	[1..1]	DateTime		70
	InitiatingParty <InitgPty>	[1..1]	±		70
	RecipientParty <RcptPty>	[0..1]	±		71
	Traceability <Tracblt>	[0..*]	±		71

5.3.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

5.3.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 589

5.3.1.3 Exchangeldentification <Xchgld>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 582

5.3.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODatetime"](#) on page 581

5.3.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

5.3.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwrdr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		313

5.3.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "Traceability8" on page 439 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		439
	ProtocolName <PrtcolNm>	[0..1]	Text		440
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		440
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		440
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		440

5.3.2 Reject <Rjct>

Presence: [1..1]

Definition: Information related to the reject.

Reject <Rjct> contains the following **AcceptorRejection3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RejectReason <RjctRsn>	[1..1]	CodeSet		72
	AdditionalInformation <AddtlInf>	[0..1]	Text		73
	MessageInError <MsgInErr>	[0..1]	Binary		73

5.3.2.1 RejectReason <RjctRsn>

Presence: [1..1]

Definition: Reject reason of the request or the advice.

Datatype: "RejectReason2Code" on page 566

CodeName	Name	Definition
UNPR	UnableToProcess	Not possible to process the message, for instance the security module is unavailable, the hardware is unavailable, or there is a problem of resource.
IMSG	InvalidMessage	Invalid envelope of the message.
PARS	ParsingError	Invalid message: At least one of the data element or data structure is not present, the format, or the content of one data element or one data structure is not correct.
SECU	Security	Security error (for example an invalid key or an incorrect MAC value).
INTP	InitiatingParty	Invalid identification data for the sender.
RCPD	RecipientParty	Invalid identification data for the the receiver.
VERS	ProtocolVersion	Version of the protocol couldn't be supported by the recipient.

CodeName	Name	Definition
MSGT	MessageType	Type of message the recipient receives is unknow or unsupported.

5.3.2.2 AdditionalInformation <AddtlInf>

Presence: [0..1]

Definition: Additional information related to the reject of the exchange.

Datatype: "Max500Text" on page 588

5.3.2.3 MessageInError <MsgInErr>

Presence: [0..1]

Definition: Original request that caused the recipient party to reject it.

Datatype: "Max100KBinary" on page 522

6 catm.005.001.12 MaintenanceDelegationRequestV12

6.1 MessageDefinition Functionality

The MaintenanceDelegationRequest message is sent by a terminal manager to the master terminal manager to request delegation of maintenance functions or maintenance operation on the terminal estate managed by the master terminal manager.

Outline

The MaintenanceDelegationRequestV12 MessageDefinition is composed of 3 MessageBuildingBlocks:

- A. Header
Information related to the protocol management.
- B. MaintenanceDelegationRequest
Information related to the request of maintenance delegations.
- C. SecurityTrailer
Trailer of the message containing a MAC or a digital signature.

6.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <MntncDlgnReq>	[1..1]			
	Header <Hdr>	[0..1]			77
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		78
	FormatVersion <FrmtVrsn>	[1..1]	Text		78
	ExchangeIdentification <XchgId>	[1..1]	Quantity		78
	CreationDateTime <CreDtTm>	[1..1]	DateTime		78
	InitiatingParty <InitgPty>	[1..1]	±		78
	RecipientParty <RcptPty>	[0..1]	±		79
	Traceability <Tracblt>	[0..*]	±		79
	MaintenanceDelegationRequest <MntncDlgnReq>	[1..1]			80
	TMIIdentification <TMId>	[1..1]	±		82
	MasterTMIIdentification <MstrTMId>	[0..1]	±		82
	TMDDateTime <TMDtTm>	[1..1]	DateTime		82
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		83
	RequestedDelegation <ReqdDlgn>	[1..*]			83
	DelegationType <DlgnTp>	[1..1]	CodeSet		84
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		85
	PartialDelegation <PrtlDlgn>	[0..1]	Indicator		86
	POISubset <POISubset>	[0..*]	Text		86
	DelegatedAction <DlgtActn>	[0..1]	±	C8	86
	DelegationScopeIdentification <DlgnScpld>	[0..1]	Text		88
	DelegationScopeDefinition <DlgnScpDef>	[0..1]	Binary		88
	Certificate <Cert>	[0..*]	Binary		88
	POIIdentificationAssociation <POIIdAssocn>	[0..*]	±		88
	SymmetricKey <SmmtrcKey>	[0..*]	±		88
	ParameterDataSet <ParamDataSet>	[0..1]			89
	Identification <Id>	[1..1]	±		90
	SequenceCounter <SeqCntr>	[0..1]	Text		90
	LastSequence <LastSeq>	[0..1]	Indicator		91
	POIIdentification <POIId>	[0..*]	±		91

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	ConfigurationScope <CfgrScp>	[0..1]	CodeSet		91
	Content <Cntt>	[1..1]		C12	91
	ReplaceConfiguration <RplcCfgr>	[0..1]	Indicator		92
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		92
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		93
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		96
	MerchantParameters <MrchntParams>	[0..*]	±		96
	TerminalParameters <TermnlParams>	[0..*]	±		97
	ApplicationParameters <ApplParams>	[0..*]	±		98
	HostCommunicationParameters <HstComParams>	[0..*]	±		99
	SecurityParameters <SctyParams>	[0..*]	±		100
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		100
	TerminalPackage <TermnlPackg>	[0..*]	±		101
	SecurityTrailer <SctyTrlr>	[1..1]	±		102

6.3 Constraints

C1 ActiveCurrency

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

C2 ActiveOrHistoricCurrency

The Currency Code must be registered, or have already been registered. Valid active or historic currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and may be or not be withdrawn on the day the message containing the Currency is exchanged.

C3 AnyBIC

Only a valid Business identifier code is allowed. Business identifier codes for financial or non-financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consists of eight (8) or eleven (11) contiguous characters.

C4 Country

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

C5 IBAN

A valid IBAN consists of all three of the following components: Country Code, check digits and BBAN.

C6 IdentificationAndProxyGuideline

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

C7 IdentificationOrProxyPresenceRule

Identification must be present or Proxy must be present. Both may be present.

C8 OneElementPresenceRule

At least one of these subelements must be present.

C9 OneElementPresenceRule

At least one of these subelements must be present.

C10 OneElementPresenceRule

At least one of these subelements must be present.

C11 OneElementPresenceRule

At least one of these subelements must be present.

C12 OneElementPresenceRule

At least one of these subelements must be present.

C13 SupplementaryDataRule

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

C14 ValidationByTable

Must be a valid terrestrial language.

6.4 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

6.4.1 Header <Hdr>

Presence: [0..1]

Definition: Information related to the protocol management.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		78
	FormatVersion <FrmtVrsn>	[1..1]	Text		78
	ExchangeIdentification <XchgId>	[1..1]	Quantity		78
	CreationDateTime <CreDtTm>	[1..1]	DateTime		78
	InitiatingParty <InitgPty>	[1..1]	±		78
	RecipientParty <RcptPty>	[0..1]	±		79
	Traceability <Tracblt>	[0..*]	±		79

6.4.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

6.4.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 589

6.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 582

6.4.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODateTime"](#) on page 581

6.4.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

6.4.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwrdr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		313

6.4.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "Traceability8" on page 439 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		439
	ProtocolName <PrtcolNm>	[0..1]	Text		440
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		440
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		440
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		440

6.4.2 MaintenanceDelegationRequest <MntncDlgtNReq>

Presence: [1..1]

Definition: Information related to the request of maintenance delegations.

MaintenanceDelegationRequest <MntncDlgtReq> contains the following
MaintenanceDelegationRequest12 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMIdentification <TMId>	[1..1]	±		82
	MasterTMIdentification <MstrTMId>	[0..1]	±		82
	TMDateTime <TMDtTm>	[1..1]	DateTime		82
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		83
	RequestedDelegation <ReqdDlgt>	[1..*]			83
	DelegationType <DlgtTp>	[1..1]	CodeSet		84
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		85
	PartialDelegation <PrtlDlgt>	[0..1]	Indicator		86
	POISubset <POISubset>	[0..*]	Text		86
	DelegatedAction <DlgtActn>	[0..1]	±	C8	86
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		88
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		88
	Certificate <Cert>	[0..*]	Binary		88
	POIIdentificationAssociation <POIIdAssoctn>	[0..*]	±		88
	SymmetricKey <SmmtrcKey>	[0..*]	±		88
	ParameterDataSet <ParamDataSet>	[0..1]			89
	Identification <Id>	[1..1]	±		90
	SequenceCounter <SeqCntr>	[0..1]	Text		90
	LastSequence <LastSeq>	[0..1]	Indicator		91
	POIIdentification <POIId>	[0..*]	±		91
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		91
	Content <Cntt>	[1..1]		C12	91
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		92
	TMSProtocolParameters <TMSPrtolParams>	[0..*]	±		92
	AcquirerProtocolParameters <AcqrrPrtolParams>	[0..*]	±		93
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		96
	MerchantParameters <MrchntParams>	[0..*]	±		96
	TerminalParameters <TermnlParams>	[0..*]	±		97
	ApplicationParameters <ApplParams>	[0..*]	±		98
	HostCommunicationParameters <HstComParams>	[0..*]	±		99

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SecurityParameters <SctyParams>	[0..*]	±		100
	SaleToPOIPParameters <SaleToPOIPParams>	[0..*]	±		100
	TerminalPackage <TermnlPackg>	[0..*]	±		101

6.4.2.1 TMIdentification <TMId>

Presence: [1..1]

Definition: Terminal manager identification.

TMIdentification <TMId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

6.4.2.2 MasterTMIdentification <MstrTMId>

Presence: [0..1]

Definition: Master terminal manager identification.

MasterTMIdentification <MstrTMId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

6.4.2.3 TMDateTime <TMDtTm>

Presence: [1..1]

Definition: Date and Time of the TMS.

Datatype: "[ISODatetime](#)" on page 581

6.4.2.4 TMChallengeValue <TMChllngVal>

Presence: [1..1]

Definition: Challenge value sends by the POI to be received back in a message response.

Datatype: "Max140Binary" on page 522

6.4.2.5 RequestedDelegation <ReqdDlgttn>

Presence: [1..*]

Definition: Information on the delegation of a maintenance action.

RequestedDelegation <ReqdDlgn> contains the following **MaintenanceDelegation20** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DelegationType <DlgnTp>	[1..1]	CodeSet		84
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		85
	PartialDelegation <PrtlDlgn>	[0..1]	Indicator		86
	POISubset <POISubset>	[0..*]	Text		86
	DelegatedAction <DlgtActn>	[0..1]	±	C8	86
	DelegationScopeIdentification <DlgnScpld>	[0..1]	Text		88
	DelegationScopeDefinition <DlgnScpDef>	[0..1]	Binary		88
	Certificate <Cert>	[0..*]	Binary		88
	POIIdentificationAssociation <POIIdAssocn>	[0..*]	±		88
	SymmetricKey <SmmtrcKey>	[0..*]	±		88
	ParameterDataSet <ParamDataSet>	[0..1]			89
	Identification <Id>	[1..1]	±		90
	SequenceCounter <SeqCntr>	[0..1]	Text		90
	LastSequence <LastSeq>	[0..1]	Indicator		91
	POIIdentification <POIId>	[0..*]	±		91
	ConfigurationScope <CfgrtnScp>	[0..1]	CodeSet		91
	Content <Cntt>	[1..1]		C12	91
	ReplaceConfiguration <RplcCfgrtn>	[0..1]	Indicator		92
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		92
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		93
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		96
	MerchantParameters <MrchntParams>	[0..*]	±		96
	TerminalParameters <TermnlParams>	[0..*]	±		97
	ApplicationParameters <ApplParams>	[0..*]	±		98
	HostCommunicationParameters <HstComParams>	[0..*]	±		99
	SecurityParameters <SctyParams>	[0..*]	±		100
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		100
	TerminalPackage <TermnlPackg>	[0..*]	±		101

6.4.2.5.1 DelegationType <DlgnTp>

Presence: [1..1]

Definition: Type of delegation action.

Datatype: "TerminalManagementAction3Code" on page 575

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

6.4.2.5.2 MaintenanceService <MntncSvc>

Presence: [1..*]

Definition: Maintenance service to be delegated.

Datatype: "DataSetCategory19Code" on page 546

CodeName	Name	Definition
ACQP	AcquirerProtocolParameters	Configuration parameters of the payment acquirer protocol.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
APSB	ApplicationParametersSubsetCreation	Creation of a subset of the configuration parameters of an application.
KDWL	KeyDownload	Download of cryptographic keys with the related information.
KMGH	KeyManagement	Activate, deactivate or revoke loaded cryptographic keys.
RPRT	Reporting	Reporting on activity, status and error of a point of interaction.
SWPK	SoftwareModule	Software module.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
SACP	SaleComponent	Component of the Sale system.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
LOGF	LogFile	Any repository used for recording log traces.
RPFL	ReportFile	Report file generated by the POI.

CodeName	Name	Definition
CONF	ConfigurationFile	Configuration file relevant for the POI.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
TPKG	TerminalPackages	Package (e.g. software library) related to a POIComponent or the POI System.

6.4.2.5.3 PartialDelegation <PrtlDlgtN>

Presence: [0..1]

Definition: Flag to indicate that the delegated maintenance must be performed on a subset of the terminal estate.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

6.4.2.5.4 POISubset <POISubset>

Presence: [0..*]

Definition: Subset of the terminal estate for the delegated actions, for instance for pilot or key deactivation). The subset may be expressed as a list of POI or terminal estate subset identifier.

Datatype: ["Max35Text" on page 587](#)

6.4.2.5.5 DelegatedAction <DlgtDActN>

Presence: [0..1]

Definition: Information for the MTM to build or include delegated actions in the management plan of the POI.

Impacted by: [C8 "OneElementPresenceRule"](#)

DelegatedAction <DlgtActn> contains the following elements (see "[MaintenanceDelegateAction11](#)" on page 316 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PeriodicAction <PrdcActn>	[0..1]	Indicator		318
	TMRemoteAccess <TMRemoteAccs>	[0..1]	±		318
	TMSProtocol <TMSPrtcol>	[0..1]	Text		318
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		318
	DataSetIdentification <DataSetId>	[0..1]	±		319
	ReTry <ReTry>	[0..1]	±		319
	AdditionalInformation <AddtlInf>	[0..*]	Binary		319
	Action <Actn>	[0..*]			319
	Type <Tp>	[1..1]	CodeSet		320
	RemoteAccess <RmotAccs>	[0..1]	±		321
	Key <Key>	[0..*]	±		321
	TerminalManagerIdentification <TermnlMgrId>	[0..1]	±		322
	TMSProtocol <TMSPrtcol>	[0..1]	Text		323
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		323
	DataSetIdentification <DataSetId>	[0..1]	±		323
	ComponentType <CmpntTp>	[0..*]	CodeSet		323
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		325
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		325
	DelegationProof <DlgtProof>	[0..1]	Binary		325
	ProtectedDelegationProof <PrtctdDlgtProof>	[0..1]	±		325
	Trigger <Trggr>	[1..1]	CodeSet		325
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		326
	ReTry <ReTry>	[0..1]	±		326
	TimeCondition <TmCond>	[0..1]	±		326
	TMChallenge <TMChllng>	[0..1]	Binary		327
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		327
	ErrorAction <ErrActn>	[0..*]	±		327
	AdditionalInformation <AddtlInf>	[0..*]	Binary		327
	MessageItem <Msgltn>	[0..*]	±		327
	DeviceRequest <DvcReq>	[0..1]	±		327

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

6.4.2.5.6 DelegationScopeIdentification <DlgnScpId>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 587

6.4.2.5.7 DelegationScopeDefinition <DlgnScpDef>

Presence: [0..1]

Definition: This element contains all information relevant to the DelegationScopeIdentification. The format of this element is out of scope of this definition.

Datatype: "Max3000Binary" on page 523

6.4.2.5.8 Certificate <Cert>

Presence: [0..*]

Definition: Certificate path of the terminal manager.

Datatype: "Max10KBinary" on page 522

6.4.2.5.9 POIIdentificationAssociation <POIIdAssoctn>

Presence: [0..*]

Definition: Association of the TM identifier and the MTM identifier of a POI.

POIIdentificationAssociation <POIIdAssoctn> contains the following elements (see "MaintenanceIdentificationAssociation1" on page 430 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MasterTMIdentification <MstrTMId>	[1..1]	Text		430
	TMIdentification <TMId>	[1..1]	Text		430

6.4.2.5.10 SymmetricKey <SmmtrcKey>

Presence: [0..*]

Definition: Identification of the key to manage or to download.

SymmetricKey <SmmtrcKey> contains the following elements (see "CryptographicKey19" on page 472 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		473
	KeyIdentification <KeyId>	[0..1]	Text		473
	AdditionalIdentification <AddtlId>	[0..1]	Binary		474
	Name <Nm>	[0..1]	Text		474
	SecurityProfile <SctyPrfl>	[0..1]	Text		474
	ItemNumber <ItmNb>	[0..1]	Text		474
	SequenceNumber <SeqNb>	[0..1]	Quantity		474
	Version <Vrsn>	[0..1]	Text		474
	KeyVersion <KeyVrsn>	[0..1]	Text		474
	Type <Tp>	[0..1]	CodeSet		475
	Function <Fctn>	[0..*]	CodeSet		476
	ActivationDate <ActvtnDt>	[0..1]	DateTime		476
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		476
	KeyValue <KeyVal>	[0..1]	±		477
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			477
	Identification <Id>	[1..1]	Text		477
	Type <Tp>	[1..1]	CodeSet		477
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		478
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		478
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			478
	Name <Nm>	[1..1]	Text		478
	Value <Val>	[0..1]	Text		479
	DerivationAlgorithmIdentifier <DerivtnAlgoldr>	[0..1]	Text		479
	AlgorithmIdentifier <Algoldr>	[0..1]	Text		479

6.4.2.5.11 ParameterDataSet <ParamDataSet>

Presence: [0..1]

Definition: Configuration parameters of the terminal manager to be sent by the MTM.

ParameterDataSet <ParamDataSet> contains the following **AcceptorConfigurationDataSet7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		90
	SequenceCounter <SeqCntr>	[0..1]	Text		90
	LastSequence <LastSeq>	[0..1]	Indicator		91
	POIIdentification <POIID>	[0..*]	±		91
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		91
	Content <Cntt>	[1..1]		C12	91
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		92
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		92
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		93
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		96
	MerchantParameters <MrchntParams>	[0..*]	±		96
	TerminalParameters <TermnlParams>	[0..*]	±		97
	ApplicationParameters <ApplParams>	[0..*]	±		98
	HostCommunicationParameters <HstComParams>	[0..*]	±		99
	SecurityParameters <SctyParams>	[0..*]	±		100
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		100
	TerminalPackage <TermnlPackg>	[0..*]	±		101

6.4.2.5.11.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the data set transferred.

Identification <Id> contains the following elements (see "[DataSetIdentification11](#)" on page 314 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		314
	Type <Tp>	[1..1]	CodeSet		314
	Version <Vrsn>	[0..1]	Text		316
	CreationDateTime <CreDtTm>	[0..1]	DateTime		316

6.4.2.5.11.2 SequenceCounter <SeqCntr>

Presence: [0..1]

Definition: Counter to identify a single data set within the whole transfer.

Datatype: "Max9NumericText" on page 590

6.4.2.5.11.3 LastSequence <LastSeq>

Presence: [0..1]

Definition: Indication of the last sequence in case of split messages.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

6.4.2.5.11.4 POIIdentification <POIID>

Presence: [0..*]

Definition: Identification of the point of interactions involved by the configuration data set.

POIIdentification <POIID> contains the following elements (see "GenericIdentification176" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

6.4.2.5.11.5 ConfigurationScope <CfgtnScp>

Presence: [0..1]

Definition: Scope of the configuration contained in the data set.

Datatype: "PartyType15Code" on page 559

CodeName	Name	Definition
PGRP	POIGroup	Configuration to apply to a subset of the whole POI system.
PSYS	POISystem	Configuration to apply to the whole POI system.
PSNG	SinglePOI	Configuration to apply to a single POI terminal.

6.4.2.5.11.6 Content <Cntt>

Presence: [1..1]

Definition: Content of the acceptor parameters.

Impacted by: C12 "OneElementPresenceRule"

Content <Cntt> contains the following **AcceptorConfigurationContent15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ReplaceConfiguration <RplcCfgrn>	[0..1]	Indicator		92
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		92
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		93
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		96
	MerchantParameters <MrchntParams>	[0..*]	±		96
	TerminalParameters <TermnlParams>	[0..*]	±		97
	ApplicationParameters <ApplParams>	[0..*]	±		98
	HostCommunicationParameters <HstComParams>	[0..*]	±		99
	SecurityParameters <SctyParams>	[0..*]	±		100
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		100
	TerminalPackage <TermnlPackg>	[0..*]	±		101

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

6.4.2.5.11.6.1 ReplaceConfiguration <RplcCfgrn>

Presence: [0..1]

Definition: True if the whole configuration related to the terminal manager has to be replaced by the configuration included in the message content.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

6.4.2.5.11.6.2 TMSProtocolParameters <TMSPrtcolParams>

Presence: [0..*]

Definition: Configuration parameters of the TMS protocol between a POI and a terminal manager.

TMSProtocolParameters <TMSPrtcolParams> contains the following elements (see
"TMSProtocolParameters8" on page 293 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		294
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		294
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		295
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		295
	Version <Vrsn>	[1..1]	Text		296
	ApplicationIdentification <ApplId>	[0..*]	Text		296
	HostIdentification <HstId>	[1..1]	Text		296
	POIIdentification <POIId>	[0..1]	Text		296
	InitiatingPartyIdentification <InitgPtyId>	[0..1]	Text		296
	RecipientPartyIdentification <RcptPtyId>	[0..1]	Text		296
	FileTransfer <FileTrf>	[0..1]	Indicator		296
	MessageItem <MsgItm>	[0..*]	±		296
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		297

6.4.2.5.11.6.3 AcquirerProtocolParameters <AcqrrPrtcolParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to an acquirer protocol.

AcquirerProtocolParameters <AcqrrPrtcolParams> contains the following elements (see
"AcquirerProtocolParameters18" on page 252 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		255
	AcquirerIdentification <Acqrrld>	[1..*]	±		255
	Version <Vrsn>	[1..1]	Text		255
	ApplicationIdentification <Applld>	[0..*]	Text		255
	Host <Hst>	[0..*]			256
	HostIdentification <Hstld>	[1..1]	Text		256
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		256
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		257
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		257
	OnLineTransaction <OnLineTx>	[0..1]			257
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		258
	BatchTransfer <BtchTrf>	[0..1]			258
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		259
	MaximumNumber <MaxNb>	[0..1]	Quantity		259
	MaximumAmount <MaxAmt>	[0..1]	Amount		260
	ReTry <ReTry>	[0..1]	±		260
	TimeCondition <TmCond>	[0..1]	±		260
	CompletionExchange <CmpltnXchg>	[0..1]			260
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		261
	MaximumNumber <MaxNb>	[0..1]	Quantity		261
	MaximumAmount <MaxAmt>	[0..1]	Amount		262
	ReTry <ReTry>	[0..1]	±		262
	TimeCondition <TmCond>	[0..1]	±		262
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		262
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		262
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		263
	OffLineTransaction <OffLineTx>	[0..1]			263
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		264
	BatchTransfer <BtchTrf>	[0..1]			264
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		265

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaximumNumber <MaxNb>	[0..1]	Quantity		265
	MaximumAmount <MaxAmt>	[0..1]	Amount		266
	ReTry <ReTry>	[0..1]	±		266
	TimeCondition <TmCond>	[0..1]	±		266
	CompletionExchange <CmpltnXchg>	[0..1]			266
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		267
	MaximumNumber <MaxNb>	[0..1]	Quantity		267
	MaximumAmount <MaxAmt>	[0..1]	Amount		268
	ReTry <ReTry>	[0..1]	±		268
	TimeCondition <TmCond>	[0..1]	±		268
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		268
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		268
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		269
	ReconciliationExchange <RcncltnXchg>	[0..1]			269
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		269
	MaximumNumber <MaxNb>	[0..1]	Quantity		270
	MaximumAmount <MaxAmt>	[0..1]	Amount		270
	ReTry <ReTry>	[0..1]	±		270
	TimeCondition <TmCond>	[0..1]	±		270
	ReconciliationByAcquirer <RcncltnByAcqrr>	[0..1]	Indicator		271
	TotalsPerCurrency <TtlsPerCcy>	[0..1]	Indicator		271
	SplitTotals <SplTtls>	[0..1]	Indicator		271
	SplitTotalCriteria <SplTtlCrit>	[0..*]	CodeSet		271
	CompletionAdviceMandated <CmpltnAdvcmndtd>	[0..1]	Indicator		272
	AmountQualifierForReservation <AmtQlfrForRsvatn>	[0..*]	CodeSet		272
	ReconciliationError <RcncltnErr>	[0..1]	Indicator		272
	CardDataVerification <CardDataVrfctn>	[0..1]	Indicator		273
	NotifyOffLineCancellation <NtfyOffLineCxl>	[0..1]	Indicator		273
	BatchTransferContent <BtchTrfCntt>	[0..*]	CodeSet		273
	FileTransferBatch <FileTrfBtch>	[0..1]	Indicator		273
	BatchDigitalSignature <BtchDgtlSgntr>	[0..1]	Indicator		274

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageItem <MsgItm>	[0..*]	±		274
	ProtectCardData <PrctCardData>	[1..1]	Indicator		274
	PrivateCardData <PrvtCardData>	[0..1]	Indicator		274
	MandatorySecurityTrailer <MndtrySctyTrlr>	[0..1]	Indicator		275

6.4.2.5.11.6.4 ServiceProviderParameters <SvcPrvdrParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to a service provider.

ServiceProviderParameters <SvcPrvdrParams> contains the following elements (see "ServiceProviderParameters5" on page 275 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		275
	ServiceProviderIdentification <SvcPrvdrId>	[1..*]	±		275
	Version <Vrsn>	[1..1]	Text		276
	ApplicationIdentification <ApplId>	[0..*]	Text		276
	Host <Hst>	[0..*]			276
	HostIdentification <HstId>	[1..1]	Text		276
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		276
	ProtocolVersion <PrctlVrsn>	[0..1]	Text		277
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		277
	NonFinancialActionSupported <NonFinActnSpprtd>	[0..*]	CodeSet		277

6.4.2.5.11.6.5 MerchantParameters <MrchntParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to the merchant.

MerchantParameters <MrchntParams> contains the following elements (see
"MerchantConfigurationParameters6" on page 291 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		292
	MerchantIdentification <MrchntId>	[0..1]	Text		292
	Version <Vrsn>	[0..1]	Text		292
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		292
	Proxy <Prxy>	[0..1]	±		293
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		293
	OffsetStart <OffsetStart>	[0..1]	Quantity		293
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		293
	OtherParameters <OthrParams>	[0..1]	Binary		293

6.4.2.5.11.6.6 TerminalParameters <TermnlParams>

Presence: [0..*]

Definition: Manufacturer configuration parameters of the point of interaction.

TerminalParameters <TermnlParams> contains the following elements (see
"PaymentTerminalParameters8" on page 303 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		303
	VendorIdentification <VndrId>	[0..1]	Text		303
	Version <Vrsn>	[0..1]	Text		304
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		304
	ClockSynchronisation <ClckSynctn>	[0..1]			304
	POITimeZone <POITmZone>	[1..1]	Text		304
	SynchronisationServer <SynctnSvr>	[0..*]	±		304
	Delay <Dely>	[0..1]	Time		305
	TimeZoneLine <TmZoneLine>	[0..*]	Text		305
	LocalDateTime <LclDtTm>	[0..*]			305
	FromDateTime <FrDtTm>	[0..1]	DateTime		305
	ToDateTime <ToDtTm>	[0..1]	DateTime		306
	UTCOffset <UTCOffset>	[1..1]	Quantity		306
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		306
	OffsetStart <OffsetStart>	[0..1]	Quantity		306
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		306
	OtherParameters <OthrParams>	[0..1]	Binary		306

6.4.2.5.11.6.7 ApplicationParameters <ApplParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to a payment application of the point of interaction.

ApplicationParameters <ApplParams> contains the following elements (see
"ApplicationParameters13" on page 289 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		290
	ApplicationIdentification <ApplId>	[1..1]	Text		290
	Version <Vrsn>	[0..1]	Text		290
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		290
	ParametersLength <ParamsLngh>	[0..1]	Quantity		291
	OffsetStart <OffsetStart>	[0..1]	Quantity		291
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		291
	Parameters <Params>	[0..*]	Binary		291
	EncryptedParameters <NcrptdParams>	[0..1]	±		291

6.4.2.5.11.6.8 HostCommunicationParameters <HstComParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to the communication with an acquirer host or a terminal manager host.

HostCommunicationParameters <HstComParams> contains the following elements (see
"HostCommunicationParameter8" on page 278 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		279
	HostIdentification <HstId>	[1..1]	Text		279
	Address <Adr>	[0..1]	±		279
	Key <Key>	[0..*]	±		279
	NetworkServiceProvider <NtwkSvcPrvdr>	[0..1]	±		280
	PhysicalInterface <PhysIntrfc>	[0..1]			281
	InterfaceName <IntrfcNm>	[1..1]	Text		281
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		281
	UserName <UsrNm>	[0..1]	Text		282
	AccessCode <AccsCd>	[0..1]	Binary		282
	SecurityProfile <SctyPrfl>	[0..1]	Text		282
	AdditionalParameters <AddtlParams>	[0..1]	Binary		282
	ExchangeMode <XchgMd>	[0..1]	CodeSet		283
	EncodingMode <NcodgMd>	[0..1]	CodeSet		283

6.4.2.5.11.6.9 SecurityParameters <SctyParams>

Presence: [0..*]

Definition: Point of interaction parameters related to the security of software application and application protocol.

SecurityParameters <SctyParams> contains the following elements (see "[SecurityParameters17](#)" on page 301 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		301
	Version <Vrsn>	[1..1]	Text		301
	POIChallenge <POIChllng>	[0..1]	Binary		301
	TMChallenge <TMChllng>	[0..1]	Binary		301
	SecurityElement <SctyElmt>	[0..*]	±		302

6.4.2.5.11.6.10 SaleToPOIParameters <SaleToPOIParams>

Presence: [0..*]

Definition: Parameters dedicated to protocols between a sale system and the POI.

SaleToPOIParameters <SaleToPOIParams> contains the following elements (see "SaleToPOIProtocolParameter4" on page 283 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		284
	MerchantIdentification <MrchntId>	[0..1]			284
	CommonName <CmonNm>	[1..1]	Text		285
	Address <Adr>	[0..1]	Text		285
	CountryCode <CtryCd>	[1..1]	CodeSet		285
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		285
	RegisteredIdentifier <RegIdr>	[1..1]	Text		285
	Version <Vrsn>	[1..1]	Text		285
	HostIdentification <HstId>	[1..1]	Text		286
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		286
	MerchantPOIIdentification <MrchntPOId>	[0..1]	Text		286
	SaleIdentification <SaleId>	[0..1]	Text		286
	AllowedSaleMessage <AllwdSaleMsg>	[0..*]	CodeSet		286
	AllowedPOIMessage <AllwdPOIMsg>	[0..*]	CodeSet		287
	AllowedPOIService <AllwdPOISvc>	[0..*]	CodeSet		288
	AllowedSaleDevice <AllwdSaleDvc>	[0..*]	CodeSet		289
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		289

6.4.2.5.11.6.11 TerminalPackage <TermnlPackg>

Presence: [0..*]

Definition: Group of software packages to transfer to a group of POIComponent of the POI System.

TerminalPackage <TermnlPackg> contains the following elements (see "TerminalPackageType5" on page 297 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIComponentIdentification <POICmpntId>	[0..*]			297
	ItemNumber <itmNb>	[0..1]	Text		298
	ProviderIdentification <PrvdrId>	[0..1]	Text		298
	Identification <Id>	[0..1]	Text		298
	SerialNumber <SrlNb>	[0..1]	Text		298
	Package <Packg>	[1..*]			298
	PackageIdentification <PackgId>	[0..1]	±		299
	PackageLength <PackgLngh>	[0..1]	Quantity		299
	OffsetStart <OffsetStart>	[0..1]	Quantity		299
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		299
	PackageBlock <PackgBlck>	[0..*]			300
	Identification <Id>	[1..1]	Text		300
	Value <Val>	[0..1]	Binary		300
	ProtectedValue <PrtctdVal>	[0..1]	±		300
	Type <Tp>	[0..1]	Text		301

6.4.3 SecurityTrailer <SctyTrlr>

Presence: [1..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "ContentInformationType38" on page 493 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		493
	AuthenticatedData <AuthntcdData>	[0..1]	±		494
	SignedData <SgndData>	[0..1]	±		494

7 catm.006.001.08 MaintenanceDelegationResponseV08

7.1 MessageDefinition Functionality

The MaintenanceDelegationResponse message is sent by the master terminal manager to a terminal manager to provide the outcome of a maintenance delegation request.

Outline

The MaintenanceDelegationResponseV08 MessageDefinition is composed of 3 MessageBuildingBlocks:

- A. Header
Maintenance delegation response message management information.
- B. MaintenanceDelegationResponse
Information related to the request of maintenance delegations.
- C. SecurityTrailer
Trailer of the message containing a MAC or a digital signature.

7.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <MntncDlgtRspn>	[1..1]			
	Header <Hdr>	[1..1]			105
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		105
	FormatVersion <FrmtVrsn>	[1..1]	Text		105
	ExchangeIdentification <XchgId>	[1..1]	Quantity		105
	CreationDateTime <CreDtTm>	[1..1]	DateTime		105
	InitiatingParty <InitgPty>	[1..1]	±		105
	RecipientParty <RcptPty>	[0..1]	±		106
	Traceability <Tracblt>	[0..*]	±		106
	MaintenanceDelegationResponse <MntncDlgtRspn>	[1..1]			107
	TMIdentification <TMId>	[1..1]	±		107
	MasterTMIdentification <MstrTMId>	[0..1]	±		108
	TMDateTime <TMDtTm>	[1..1]	DateTime		108
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		108
	DelegationResponse <DlgtRspn>	[1..*]			108
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		109
	Response <Rspn>	[1..1]	CodeSet		110
	ResponseReason <RspnRsn>	[0..1]	Text		110
	DelegationType <DlgtTp>	[1..1]	CodeSet		110
	POISubset <POISubset>	[0..*]	Text		110
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		111
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		111
	DelegationProof <DlgtProof>	[0..1]	Binary		111
	ProtectedDelegationProof <PrtctdDlgtProof>	[0..1]	±		111
	POIIdentificationAssociation <POIIdAssocn>	[0..*]	±		111
	SecurityTrailer <SctyTrlr>	[0..1]	±		112

7.3 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

7.3.1 Header <Hdr>

Presence: [1..1]

Definition: Maintenance delegation response message management information.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		105
	FormatVersion <FrmtVrsn>	[1..1]	Text		105
	Exchangeldentification <Xchgld>	[1..1]	Quantity		105
	CreationDateTime <CreDtTm>	[1..1]	DateTime		105
	InitiatingParty <InitgPty>	[1..1]	±		105
	RecipientParty <RcptPty>	[0..1]	±		106
	Traceability <Tracblt>	[0..*]	±		106

7.3.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

7.3.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 589

7.3.1.3 Exchangeldentification <Xchgld>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 582

7.3.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODatetime"](#) on page 581

7.3.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

7.3.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwr>	[1..1]	Text		313

7.3.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "Traceability8" on page 439 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		439
	ProtocolName <PrtcolNm>	[0..1]	Text		440
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		440
	TraceDateTimeln <TracDtTmln>	[1..1]	DateTime		440
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		440

7.3.2 MaintenanceDelegationResponse <MntncDlgtRspn>

Presence: [1..1]

Definition: Information related to the request of maintenance delegations.

MaintenanceDelegationResponse <MntncDlgtRspn> contains the following **MaintenanceDelegationResponse8** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMIdentification <TMId>	[1..1]	±		107
	MasterTMIdentification <MstrTMId>	[0..1]	±		108
	TMDatetime <TMDtTm>	[1..1]	DateTime		108
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		108
	DelegationResponse <DlgtRspn>	[1..*]			108
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		109
	Response <Rspn>	[1..1]	CodeSet		110
	ResponseReason <RspnRsn>	[0..1]	Text		110
	DelegationType <DlgtTp>	[1..1]	CodeSet		110
	POISubset <POISubset>	[0..*]	Text		110
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		111
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		111
	DelegationProof <DlgtProof>	[0..1]	Binary		111
	ProtectedDelegationProof <PrtctdDlgtProof>	[0..1]	±		111
	POIIdentificationAssociation <POIIdAssocn>	[0..*]	±		111

7.3.2.1 TMIdentification <TMId>

Presence: [1..1]

Definition: Terminal manager identification.

TMIdentification <TMId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

7.3.2.2 MasterTMIdentification <MstrTMId>

Presence: [0..1]

Definition: Master terminal manager identification.

MasterTMIdentification <MstrTMId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

7.3.2.3 TMDateTime <TMDtTm>

Presence: [1..1]

Definition: Date and Time of the TMS.

Datatype: "[ISODatetime](#)" on page 581

7.3.2.4 TMChallengeValue <TMChllngVal>

Presence: [1..1]

Definition: Challenge value sends by the POI to be received back in a message response.

Datatype: "[Max140Binary](#)" on page 522

7.3.2.5 DelegationResponse <DlgtRspn>

Presence: [1..*]

Definition: Information on the delegation of a maintenance action.

DelegationResponse <DlgtnRspn> contains the following **MaintenanceDelegation17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		109
	Response <Rspn>	[1..1]	CodeSet		110
	ResponseReason <RspnRsn>	[0..1]	Text		110
	DelegationType <DlgtnTp>	[1..1]	CodeSet		110
	POISubset <POISubset>	[0..*]	Text		110
	DelegationScopeIdentification <DlgtnScpld>	[0..1]	Text		111
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		111
	DelegationProof <DlgtnProof>	[0..1]	Binary		111
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		111
	POIIdentificationAssociation <POIIdAssocn>	[0..*]	±		111

7.3.2.5.1 MaintenanceService <MntncSvc>

Presence: [1..*]

Definition: Maintenance service to be delegated.

Datatype: "DataSetCategory19Code" on page 546

CodeName	Name	Definition
ACQP	AcquirerProtocolParameters	Configuration parameters of the payment acquirer protocol.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
APSB	ApplicationParametersSubsetCreation	Creation of a subset of the configuration parameters of an application.
KDWL	KeyDownload	Download of cryptographic keys with the related information.
KMGT	KeyManagement	Activate, deactivate or revoke loaded cryptographic keys.
RPRT	Reporting	Reporting on activity, status and error of a point of interaction.
SWPK	SoftwareModule	Software module.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
CRTF	CertificateParameters	Certificate provided by a terminal manager.

CodeName	Name	Definition
SACP	SaleComponent	Component of the Sale system.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
LOGF	LogFile	Any repository used for recording log traces.
RPFL	ReportFile	Report file generated by the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
TPKG	TerminalPackages	Package (e.g. software library) related to a POIComponent or the POI System.

7.3.2.5.2 Response <Rspn>

Presence: [1..1]

Definition: Response of the MTM to the delegation of the maintenance service.

Datatype: "Response2Code" on page 568

CodeName	Name	Definition
APPR	Approved	Service has been successfully provided.
DECL	Declined	Service is declined.

7.3.2.5.3 ResponseReason <RspnRsn>

Presence: [0..1]

Definition: Reason of the response of the MTM.

Datatype: "Max35Text" on page 587

7.3.2.5.4 DelegationType <DlgtTp>

Presence: [1..1]

Definition: Type of delegation action.

Datatype: "TerminalManagementAction3Code" on page 575

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

7.3.2.5.5 POISubset <POISubset>

Presence: [0..*]

Definition: Subset of the terminal estate for the delegated actions, for instance for pilot or key deactivation). The subset may be expressed as a list of POI or terminal estate subset identifier.

Datatype: "Max35Text" on page 587

7.3.2.5.6 DelegationScopelIdentification <DlgtNScpld>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 587

7.3.2.5.7 DelegationScopeDefinition <DlgtNScpDef>

Presence: [0..1]

Definition: This element contains all information relevant to the DelegationScopelIdentification. The format of this element is out of scope of this definition.

Datatype: "Max3000Binary" on page 523

7.3.2.5.8 DelegationProof <DlgtNProof>

Presence: [0..1]

Definition: Contains the necessary information to secure the management of the Delegation. The format of this element is out of scope of this definition.

Datatype: "Max5000Binary" on page 523

7.3.2.5.9 ProtectedDelegationProof <PrtctdDlgtNProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgtNProof> contains the following elements (see "ContentInformationType39" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

7.3.2.5.10 POIIdentificationAssociation <POIIdAssoctn>

Presence: [0..*]

Definition: Association of the TM identifier and the MTM identifier of a POI.

POIIdentificationAssociation <POIIdAssoctn> contains the following elements (see "MaintenanceIdentificationAssociation1" on page 430 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MasterTMIdentification <MstrTMId>	[1..1]	Text		430
	TMIdentification <TMId>	[1..1]	Text		430

7.3.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "[ContentInformationType38](#)" on [page 493](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		493
	AuthenticatedData <AuthntcdData>	[0..1]	±		494
	SignedData <SgndData>	[0..1]	±		494

8 catm.007.001.08 CertificateManagementRequestV08

8.1 MessageDefinition Functionality

The CertificateManagementRequest message is sent by a POI terminal or any intermediary entity either to a terminal manager acting as a certificate authority for managing X.509 certificate of a public key owned by the initiating party, or for requesting the inclusion or the removal of the POI to a white list of the terminal manager.

Outline

The CertificateManagementRequestV08 MessageDefinition is composed of 3 MessageBuildingBlocks:

- A. Header
Information related to the protocol management.
- B. CertificateManagementRequest
Information related to the request of certificate management.
- C. SecurityTrailer
Trailer of the message containing a MAC or a digital signature.

8.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <CertMgmtReq>	[1..1]			
	Header <Hdr>	[1..1]			115
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		115
	FormatVersion <FrmtVrsn>	[1..1]	Text		115
	ExchangeIdentification <XchgId>	[1..1]	Quantity		115
	CreationDateTime <CreDtTm>	[1..1]	DateTime		115
	InitiatingParty <InitgPty>	[1..1]	±		115
	RecipientParty <RcptPty>	[0..1]	±		116
	Traceability <Tracblt>	[0..*]	±		116
	CertificateManagementRequest <CertMgmtReq>	[1..1]			117
	POIIdentification <POIID>	[1..1]	±		117
	TMIIdentification <TMId>	[0..1]	±		118
	CertificateService <CertSvc>	[1..1]	CodeSet		118
	SecurityDomain <SctyDomn>	[0..1]	Text		119
	KeyFunction <KeyFctn>	[0..*]	CodeSet		119
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		119
	POIDateTime <POIDtTm>	[1..1]	DateTime		120
	BinaryCertificationRequest <BinryCertfctnReq>	[0..1]	Text		120
	CertificationRequest <CertfctnReq>	[0..1]	±		120
	ClientCertificate <CIntCert>	[0..1]	Binary		121
	WhiteListIdentification <WhtListId>	[0..1]			121
	ManufacturerIdentifier <ManfctrIdr>	[1..1]	Text		122
	Model <Mdl>	[1..1]	Text		122
	SerialNumber <SrlNb>	[1..1]	Text		122
	SecurityTrailer <SctyTrlr>	[0..1]	±		122

8.3 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

8.3.1 Header <Hdr>

Presence: [1..1]

Definition: Information related to the protocol management.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		115
	FormatVersion <FrmtVrsn>	[1..1]	Text		115
	ExchangeIdentification <Xchgld>	[1..1]	Quantity		115
	CreationDateTime <CreDtTm>	[1..1]	DateTime		115
	InitiatingParty <InitgPty>	[1..1]	±		115
	RecipientParty <RcptPty>	[0..1]	±		116
	Traceability <Tracblt>	[0..*]	±		116

8.3.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

8.3.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 589

8.3.1.3 ExchangeIdentification <Xchgld>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 582

8.3.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODatetime"](#) on page 581

8.3.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

8.3.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwr>	[1..1]	Text		313

8.3.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "Traceability8" on page 439 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		439
	ProtocolName <PrtcolNm>	[0..1]	Text		440
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		440
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		440
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		440

8.3.2 CertificateManagementRequest <CertMgmtReq>

Presence: [1..1]

Definition: Information related to the request of certificate management.

CertificateManagementRequest <CertMgmtReq> contains the following **CertificateManagementRequest4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIIdentification <POIID>	[1..1]	±		117
	TMIIdentification <TMId>	[0..1]	±		118
	CertificateService <CertSvc>	[1..1]	CodeSet		118
	SecurityDomain <SctyDomn>	[0..1]	Text		119
	KeyFunction <KeyFctn>	[0..*]	CodeSet		119
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		119
	POIDateTime <POIDtTm>	[1..1]	DateTime		120
	BinaryCertificationRequest <BinryCertfctnReq>	[0..1]	Text		120
	CertificationRequest <CertfctnReq>	[0..1]	±		120
	ClientCertificate <CIntCert>	[0..1]	Binary		121
	WhiteListIdIdentification <WhtListId>	[0..1]			121
	ManufacturerIdentifier <Manfctrldr>	[1..1]	Text		122
	Model <Mdl>	[1..1]	Text		122
	SerialNumber <SrlNb>	[1..1]	Text		122

8.3.2.1 POIIdentification <POIID>

Presence: [1..1]

Definition: Identification of the terminal or system using the certificate management service.

POIIdentification <POIID> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

8.3.2.2 TMIdentification <TMId>

Presence: [0..1]

Definition: Identification of the TM or the MTM providing the Certificate Authority service.

TMIdentification <TMId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

8.3.2.3 CertificateService <CertSvc>

Presence: [1..1]

Definition: Requested certificate management service.

Datatype: "[CardPaymentServiceType10Code](#)" on page 542

CodeName	Name	Definition
CRTC	CreateCertificate	Creation of an X.509 certificate with the public key and the information of the owner of the asymmetric key provided by the requestor.
CRTR	RenewCerificate	Renewal of an X.509 certificate, protected by the certificate to renew.
CRTK	RevokeCertificate	Revocation of an active X.509 certificate.
WLSR	RemoveWhiteList	Remove a POI from the white list of the terminal manager.
WLSA	AddWhiteList	Add a POI in the white list of the terminal manager.

8.3.2.4 SecurityDomain <SctyDomn>

Presence: [0..1]

Definition: Identification of the client and server public key infrastructures containing the certificate. In addition, it may identify specific requirements of the customer.

Datatype: "Max70Text" on page 589

8.3.2.5 KeyFunction <KeyFctn>

Presence: [0..*]

Definition: Identifies type of function that could be used with the Key.

Datatype: "KeyUsage1Code" on page 553

CodeName	Name	Definition
ENCR	Encryption	Key may encrypt.
DCPT	Decryption	Key may decrypt.
DENC	DataEncryption	Key may encrypt data.
DDEC	DataDecryption	Key may decrypt data.
TRNI	TranslateInput	Key may encrypt information before translation.
TRNX	TranslateOutput	Key may encrypt information after translation.
MACG	MessageAuthenticationCodeGeneration	Key may generate message authentication codes (MAC).
MACV	MessageAuthenticationCodeVerification	Key may verify message authentication codes (MAC).
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).
PIND	PINDecryption	Key may decrypt personal identification numbers (PIN).
PINV	PINVerification	Key may verify personal identification numbers (PIN).
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

8.3.2.6 POIChallengeValue <POIChllngVal>

Presence: [1..1]

Definition: Challenge value sends by the POI to be received back in a message response.

Datatype: "Max140Binary" on page 522

8.3.2.7 POIDateTime <POIDtTm>

Presence: [1..1]

Definition: Date and Time of the POI.

Datatype: "ISODatetime" on page 581

8.3.2.8 BinaryCertificationRequest <BinryCertfctnReq>

Presence: [0..1]

Definition: PKCS#10 (Public Key Certificate Standard 10) certification request coded in base64 ASN.1/DER (Abstract Syntax Notation 1, Distinguished Encoding Rules) or PEM (Privacy Enhanced Message) format.

Datatype: "Max20000Text" on page 586

8.3.2.9 CertificationRequest <CertfctnReq>

Presence: [0..1]

Definition: Certification request PKCS#10 (Public Key Certificate Standard 10) for creation or renewal of an X.509 certificate.

CertificationRequest <CertfctnReq> contains the following elements (see "SignedData9" on page 501 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		501
	DigestAlgorithm <DgstAlgo>	[0..*]	±		501
	EncapsulatedContent <NcpsltdCntt>	[0..1]	±		502
	Certificate <Cert>	[0..*]	Binary		502
	Signer <Sgnr>	[0..*]			502
	Version <Vrsn>	[0..1]	Quantity		503
	SignerIdentification <SgnrId>	[0..1]			503
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			504
	Issuer <Issr>	[1..1]			504
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			504
	AttributeType <AttrTp>	[1..1]	CodeSet		505
	AttributeValue <AttrVal>	[1..1]	Text		505
	SerialNumber <SrlNb>	[1..1]	Binary		505
Or}	SubjectKeyIdentifier <SbjtKeyIdr>	[1..1]	Binary		505
	DigestAlgorithm <DgstAlgo>	[1..1]	±		505
	SignedAttributes <SgndAttrbts>	[0..*]			506
	Name <Nm>	[1..1]	Text		506
	Value <Val>	[0..1]	Text		506
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		506
	Signature <Sgntr>	[1..1]	Binary		507

8.3.2.10 ClientCertificate <CIntCert>

Presence: [0..1]

Definition: Created certificate. The certificate is ASN.1/DER encoded, for renewal or revocation of certificate.

Datatype: "Max10KBinary" on page 522

8.3.2.11 WhiteListIdentification <WhtListId>

Presence: [0..1]

Definition: Identification of the white list element, for white list addition or removal.

WhiteListIdentification <WhtListId> contains the following **PointOfInteraction6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ManufacturerIdentifier <Manfctrldr>	[1..1]	Text		122
	Model <Mdl>	[1..1]	Text		122
	SerialNumber <SrlNb>	[1..1]	Text		122

8.3.2.11.1 ManufacturerIdentifier <Manfctrldr>

Presence: [1..1]

Definition: Identifier of the terminal manufacturer.

Datatype: "Max35Text" on page 587

8.3.2.11.2 Model <Mdl>

Presence: [1..1]

Definition: Identifier of the terminal model.

Datatype: "Max35Text" on page 587

8.3.2.11.3 SerialNumber <SrlNb>

Presence: [1..1]

Definition: Serial number of the terminal manufacturer.

Datatype: "Max35Text" on page 587

8.3.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "ContentInformationType38" on page 493 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		493
	AuthenticatedData <AuthntcdData>	[0..1]	±		494
	SignedData <SgndData>	[0..1]	±		494

9 catm.008.001.07 CertificateManagementResponseV07

9.1 MessageDefinition Functionality

The CertificateManagementResponse is sent by a terminal manager in response to a CertificateManagementRequest to provide the outcome of the requested service.

Outline

The CertificateManagementResponseV07 MessageDefinition is composed of 3 MessageBuildingBlocks:

- A. Header
 - Information related to the protocol management.
- B. CertificateManagementResponse
 - Information related to the result of the certificate management request.
- C. SecurityTrailer
 - Trailer of the message containing a MAC or a digital signature.

9.2 Structure

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Message root <Document> <CertMgmtRspn>	[1..1]			
	Header <Hdr>	[1..1]			124
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		125
	FormatVersion <FrmtVrsn>	[1..1]	Text		125
	ExchangeIdentification <XchgId>	[1..1]	Quantity		125
	CreationDateTime <CreDtTm>	[1..1]	DateTime		125
	InitiatingParty <InitgPty>	[1..1]	±		125
	RecipientParty <RcptPty>	[0..1]	±		126
	Traceability <Tracblt>	[0..*]	±		126
	CertificateManagementResponse <CertMgmtRspn>	[1..1]			127
	POIIdentification <POIID>	[1..1]	±		127
	TMIdentification <TMId>	[0..1]	±		128
	CertificateService <CertSvc>	[1..1]	CodeSet		128
	Result <Rslt>	[1..1]			129
	Response <Rspn>	[1..1]	CodeSet		129
	ResponseDetail <RspnDtl>	[0..1]	CodeSet		129
	AdditionalResponse <AddtlRspn>	[0..1]	Text		129
	SecurityProfile <SctyPrfl>	[0..1]	Text		129
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		129
	TMSDateTime <TMSDtTm>	[1..1]	DateTime		130
	ClientCertificate <ClnCert>	[0..1]	Binary		130
	ClientCertificatePath <ClnCertPth>	[0..*]	Binary		130
	ServerCertificatePath <SvrCertPth>	[0..*]	Binary		130
	SecurityTrailer <SctyTrlr>	[0..1]	±		130

9.3 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

9.3.1 Header <Hdr>

Presence: [1..1]

Definition: Information related to the protocol management.

Header <Hdr> contains the following **TMSHeader1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		125
	FormatVersion <FrmtVrsn>	[1..1]	Text		125
	ExchangeIdentification <XchgId>	[1..1]	Quantity		125
	CreationDateTime <CreDtTm>	[1..1]	DateTime		125
	InitiatingParty <InitgPty>	[1..1]	±		125
	RecipientParty <RcptPty>	[0..1]	±		126
	Traceability <Tracblt>	[0..*]	±		126

9.3.1.1 DownloadTransfer <DwnldTrf>

Presence: [1..1]

Definition: Indicates if the file transfer is a download or an upload.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

9.3.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text" on page 589](#)

9.3.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number" on page 582](#)

9.3.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

Definition: Date and time at which the file or message was created.

Datatype: ["ISODatetime" on page 581](#)

9.3.1.5 InitiatingParty <InitgPty>

Presence: [1..1]

Definition: Unique identification of the partner that has initiated the exchange.

InitiatingParty <InitgPty> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

9.3.1.6 RecipientParty <RcptPty>

Presence: [0..1]

Definition: Unique identification of the partner that is the recipient of the exchange.

RecipientParty <RcptPty> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwrdr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		313

9.3.1.7 Traceability <Tracblt>

Presence: [0..*]

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Traceability <Tracblt> contains the following elements (see "Traceability8" on page 439 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		439
	ProtocolName <PrtcolNm>	[0..1]	Text		440
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		440
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		440
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		440

9.3.2 CertificateManagementResponse <CertMgmtRspn>

Presence: [1..1]

Definition: Information related to the result of the certificate management request.

CertificateManagementResponse <CertMgmtRspn> contains the following **CertificateManagementResponse3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIIdentification <POIID>	[1..1]	±		127
	TMIIdentification <TMId>	[0..1]	±		128
	CertificateService <CertSvc>	[1..1]	CodeSet		128
	Result <Rslt>	[1..1]			129
	Response <Rspn>	[1..1]	CodeSet		129
	ResponseDetail <RspnDtl>	[0..1]	CodeSet		129
	AdditionalResponse <AddtlRspn>	[0..1]	Text		129
	SecurityProfile <SctyPrfl>	[0..1]	Text		129
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		129
	TMSDateTime <TMSDtTm>	[1..1]	DateTime		130
	ClientCertificate <CIntCert>	[0..1]	Binary		130
	ClientCertificatePath <CIntCertPth>	[0..*]	Binary		130
	ServerCertificatePath <SvrCertPth>	[0..*]	Binary		130

9.3.2.1 POIIdentification <POIID>

Presence: [1..1]

Definition: Identification of the terminal or system using the certificate management service.

POIIdentification <POIID> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

9.3.2.2 TMIdentification <TMId>

Presence: [0..1]

Definition: Identification of the TM or the MTM providing the Certificate Authority service.

TMIdentification <TMId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

9.3.2.3 CertificateService <CertSvc>

Presence: [1..1]

Definition: Requested certificate management service.

Datatype: "[CardPaymentServiceType10Code](#)" on page 542

CodeName	Name	Definition
CRTC	CreateCertificate	Creation of an X.509 certificate with the public key and the information of the owner of the asymmetric key provided by the requestor.
CRTR	RenewCerificate	Renewal of an X.509 certificate, protected by the certificate to renew.
CRTK	RevokeCertificate	Revocation of an active X.509 certificate.
WLSR	RemoveWhiteList	Remove a POI from the white list of the terminal manager.
WLSA	AddWhiteList	Add a POI in the white list of the terminal manager.

9.3.2.4 Result <Rslt>

Presence: [1..1]

Definition: Outcome of the certificate service processing.

Result <Rslt> contains the following **ResponseType6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		129
	ResponseDetail <RspnDtl>	[0..1]	CodeSet		129
	AdditionalResponse <AddtlRspn>	[0..1]	Text		129

9.3.2.4.1 Response <Rspn>

Presence: [1..1]

Definition: Response of the terminal manager.

Datatype: "Response2Code" on page 568

CodeName	Name	Definition
APPR	Approved	Service has been successfully provided.
DECL	Declined	Service is declined.

9.3.2.4.2 ResponseDetail <RspnDtl>

Presence: [0..1]

Definition: Detail of the response.

Datatype: "ResultDetail3Code" on page 568

CodeName	Name	Definition
CRTU	UnknownCertificate	The certificate is unknown.
SVSU	UnsupportedService	Requested service not supported.

9.3.2.4.3 AdditionalResponse <AddtlRspn>

Presence: [0..1]

Definition: Additional information on the response for further examination.

Datatype: "Max140Text" on page 585

9.3.2.5 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the security profile, for creation, renewal or revocation of certificate.

Datatype: "Max35Text" on page 587

9.3.2.6 POIChallengeValue <POIChllngVal>

Presence: [1..1]

Definition: Challenge value sends by the POI to be received back in a message response.

Datatype: "Max140Binary" on page 522

9.3.2.7 TMSDateTime <TMSDtTm>

Presence: [1..1]

Definition: Date and Time of the TMS.

Datatype: "ISODateTime" on page 581

9.3.2.8 ClientCertificate <CIntCert>

Presence: [0..1]

Definition: Created or renewed certificate. The certificate is ASN.1/DER encoded.

Datatype: "Max3000Binary" on page 523

9.3.2.9 ClientCertificatePath <CIntCertPth>

Presence: [0..*]

Definition: Certificate of the client certificate path, from the CA (Certificate Authority) certificate, to the root certificate, for renewal or revocation of certificate.

Datatype: "Max10KBinary" on page 522

9.3.2.10 ServerCertificatePath <SvrCertPth>

Presence: [0..*]

Definition: Certificate of the server certificate path, from the CA (Certificate Authority) certificate, to the root certificate, for renewal or revocation of certificate.

Datatype: "Max10KBinary" on page 522

9.3.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

Definition: Trailer of the message containing a MAC or a digital signature.

SecurityTrailer <SctyTrlr> contains the following elements (see "ContentInformationType38" on page 493 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		493
	AuthenticatedData <AuthntcdData>	[0..1]	±		494
	SignedData <SgndData>	[0..1]	±		494

10 Message Items Types

10.1 MessageComponents

10.1.1 Account

10.1.1.1 CashAccount40

Definition: Provides the details to identify an account.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		131
	Type <Tp>	[0..1]	±		131
	Currency <Ccy>	[0..1]	CodeSet	C2	132
	Name <Nm>	[0..1]	Text		132
	Proxy <Prxy>	[0..1]	±		132

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
/Identification Must be present
Or /Proxy Must be present

10.1.1.1.1 Identification <Id>

Presence: [0..1]

Definition: Unique and unambiguous identification for the account between the account owner and the account servicer.

Identification <Id> contains one of the following elements (see "[AccountIdentification4Choice](#)" on [page 135](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IBAN <IBAN>	[1..1]	IdentifierSet	C5	135
Or}	Other <Othr>	[1..1]	±		136

10.1.1.1.2 Type <Tp>

Presence: [0..1]

Definition: Specifies the nature, or use of the account.

Type <Tp> contains one of the following elements (see "[CashAccountType2Choice](#)" on page 134 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		134
Or}	Proprietary <Prtry>	[1..1]	Text		134

10.1.1.1.3 Currency <Ccy>

Presence: [0..1]

Definition: Identification of the currency in which the account is held.

Usage: Currency should only be used in case one and the same account number covers several currencies

and the initiating party needs to identify which currency needs to be used for settlement on the account.

Impacted by: [C2 "ActiveOrHistoricCurrency"](#)

Datatype: ["ActiveOrHistoricCurrencyCode"](#) on page 524

Constraints

- **ActiveOrHistoricCurrency**

The Currency Code must be registered, or have already been registered. Valid active or historic currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and may be or not be withdrawn on the day the message containing the Currency is exchanged.

10.1.1.1.4 Name <Nm>

Presence: [0..1]

Definition: Name of the account, as assigned by the account servicing institution, in agreement with the account owner in order to provide an additional means of identification of the account.

Usage: The account name is different from the account owner name. The account name is used in certain user communities to provide a means of identifying the account, in addition to the account owner's identity and the account number.

Datatype: ["Max70Text"](#) on page 589

10.1.1.1.5 Proxy <Prxy>

Presence: [0..1]

Definition: Specifies an alternate assumed name for the identification of the account.

Proxy <Prxy> contains the following elements (see "[ProxyAccountIdentification1](#)" on page 133 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[0..1]			133
{Or	Code <Cd>	[1..1]	CodeSet		133
Or}	Proprietary <Prtry>	[1..1]	Text		133
	Identification <Id>	[1..1]	Text		133

10.1.1.2 ProxyAccountIdentification1

Definition: Information related to a proxy identification of the account.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[0..1]			133
{Or	Code <Cd>	[1..1]	CodeSet		133
Or}	Proprietary <Prtry>	[1..1]	Text		133
	Identification <Id>	[1..1]	Text		133

10.1.1.2.1 Type <Tp>

Presence: [0..1]

Definition: Type of the proxy identification.

Type <Tp> contains one of the following **ProxyAccountType1Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		133
Or}	Proprietary <Prtry>	[1..1]	Text		133

10.1.1.2.1.1 Code <Cd>

Presence: [1..1]

Definition: Name of the identification scheme, in a coded form as published in an external list.

Datatype: "[ExternalProxyAccountType1Code](#)" on page 551

10.1.1.2.1.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Name of the identification scheme, in a free text form.

Datatype: "[Max35Text](#)" on page 587

10.1.1.2.2 Identification <Id>

Presence: [1..1]

Definition: Identification used to indicate the account identification under another specified name.

Datatype: "Max2048Text" on page 586

10.1.1.3 CashAccountType2Choice

Definition: Nature or use of the account.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		134
Or}	Proprietary <Prtry>	[1..1]	Text		134

10.1.1.3.1 Code <Cd>

Presence: [1..1]

Definition: Account type, in a coded form.

Datatype: "ExternalCashAccountType1Code" on page 550

10.1.1.3.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Nature or use of the account in a proprietary form.

Datatype: "Max35Text" on page 587

10.1.1.4 GenericAccountIdentification1

Definition: Information related to a generic account identification.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		134
	SchemeName <SchmeNm>	[0..1]			134
{Or	Code <Cd>	[1..1]	CodeSet		135
Or}	Proprietary <Prtry>	[1..1]	Text		135
	Issuer <Issr>	[0..1]	Text		135

10.1.1.4.1 Identification <Id>

Presence: [1..1]

Definition: Identification assigned by an institution.

Datatype: "Max34Text" on page 587

10.1.1.4.2 SchemeName <SchmeNm>

Presence: [0..1]

Definition: Name of the identification scheme.

SchemeName <SchmeNm> contains one of the following **AccountSchemeName1Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		135
Or}	Proprietary <Prtry>	[1..1]	Text		135

10.1.1.4.2.1 Code <Cd>

Presence: [1..1]

Definition: Name of the identification scheme, in a coded form as published in an external list.

Datatype: "ExternalAccountIdentification1Code" on page 550

10.1.1.4.2.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Name of the identification scheme, in a free text form.

Datatype: "Max35Text" on page 587

10.1.1.4.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 587

10.1.2 Account Identification

10.1.2.1 AccountIdentification4Choice

Definition: Specifies the unique identification of an account as assigned by the account servicer.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IBAN <IBAN>	[1..1]	IdentifierSet	C5	135
Or}	Other <Othr>	[1..1]	±		136

10.1.2.1.1 IBAN <IBAN>

Presence: [1..1]

Definition: International Bank Account Number (IBAN) - identifier used internationally by financial institutions to uniquely identify the account of a customer. Further specifications of the format and content of the IBAN can be found in the standard ISO 13616 "Banking and related financial services - International Bank Account Number (IBAN)" version 1997-10-01, or later revisions.

Impacted by: C5 "IBAN"

Datatype: "IBAN2007Identifier" on page 581

Constraints

• IBAN

A valid IBAN consists of all three of the following components: Country Code, check digits and BBAN.

10.1.2.1.2 Other <Othr>

Presence: [1..1]

Definition: Unique identification of an account, as assigned by the account servicer, using an identification scheme.

Other <Othr> contains the following elements (see "[GenericAccountIdentification1](#)" on page 134 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		134
	SchemeName <SchmeNm>	[0..1]			134
{Or	Code <Cd>	[1..1]	CodeSet		135
Or}	Proprietary <Prtry>	[1..1]	Text		135
	Issuer <Issr>	[0..1]	Text		135

10.1.3 Acquirer

10.1.3.1 Acquirer10

Definition: Acquirer involved in the card payment.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		136
	ParametersVersion <ParamsVrsn>	[0..1]	Text		137

10.1.3.1.1 Identification <Id>

Presence: [0..1]

Definition: Identification of the acquirer (for example the bank identification number BIN).

Identification <Id> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwrdr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		313

10.1.3.1.2 ParametersVersion <ParamsVrsn>

Presence: [0..1]

Definition: Version of the payment acquirer parameters of the POI.

Datatype: "[Max256Text](#)" on page 586

10.1.3.2 KEK9

Definition: Key encryption key (KEK), using previously distributed symmetric key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		138
	KEKIdentification <KEKId>	[1..1]	±		138
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			138
	Algorithm <Algo>	[1..1]	CodeSet		139
	Parameter <Param>	[0..1]			141
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		141
	InitialisationVector <InitlStnVctr>	[0..1]	Binary		142
	BytePadding <BPddg>	[0..1]	CodeSet		142
	EncryptedKey <NcrptdKey>	[0..1]	Binary		142

10.1.3.2.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 582

10.1.3.2.2 KEKIdentification <KEKId>

Presence: [1..1]

Definition: Identification of the key encryption key (KEK).

KEKIdentification <KEKId> contains the following elements (see "[KEKIdentifier7](#)" on page 142 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		142
	KeyVersion <KeyVrsn>	[1..1]	Text		143
	SequenceNumber <SeqNb>	[0..1]	Quantity		143
	DerivationIdentification <DerivtnId>	[0..1]	Binary		143

10.1.3.2.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

Definition: Algorithm to encrypt the key encryption key (KEK).

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following **AlgorithmIdentification32** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		139
	Parameter <Param>	[0..1]			141
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		141
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		142
	BytePadding <BPddg>	[0..1]	CodeSet		142

10.1.3.2.3.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the algorithm.

Datatype: "Algorithm28Code" on page 528

CodeName	Name	Definition
EA2C	AES128CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DC	DES112CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with double length key (112 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) algorithm, as specified in ANSI X9.24-2009 Annex A.
UKPT	UKPT	UKPT (Unique Key Per Transaction) or Master Session Key key encryption - (ASN.1 Object Identifier: id-ukpt-wrap).
UKA2	UKPTwithAES192	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9C	AES192CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA5C	AES256CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption

CodeName	Name	Definition
		with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
DA12	AESDUKPT128ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A, With key length of 128 bits.
DA19	AESDUKPT192ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 192 bits.
DA25	AESDUKPT256ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 256 bits.
N108	Nist800-108KeyDerivation	Key Derivation according to the Special Publication from the NIST entitled 800-108.
EA5R	AES256CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9R	AES192CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA2R	AES128CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DR	DES112CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with double length key (112 Bit) as defined in FIPS SP 800-38a.
E36C	DES168CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with triple length key (168 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
E36R	DES168CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with triple length key (168 Bit) as defined in FIPS SP 800-38a.
SD5C	SDE056CBC	The DEPRECATED Simple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with simple length key (56 Bit) as defined in FIPS

CodeName	Name	Definition
		PUB 81 - (ASN.1 Object Identifier: des-cbc).
UKA1	UKPTwithAES128	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
UKA3	UKPTwithAES256	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
SM4C	SM4CBC	ShangMi 4 enciphering method used in CBC mode.
SM4R	SM4CTR	ShangMi 4 enciphering method used in CTR mode.

10.1.3.2.3.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the encryption algorithm.

Parameter <Param> contains the following **Parameter12** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		141
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		142
	BytePadding <BPddg>	[0..1]	CodeSet		142

10.1.3.2.3.2.1 EncryptionFormat <NcrptnFrmt>

Presence: [0..1]

Definition: Format of data before encryption, if the format is not plaintext or implicit.

Datatype: "EncryptionFormat2Code" on page 548

CodeName	Name	Definition
TR31	TR31	Format of a cryptographic key specified by the ANSI X9 TR-31 standard.
TR34	TR34	Format of a cryptographic key specified by the ANSI X9 TR-34 standard.
I238	ISO20038KeyWrap	Format of a cryptographic key specified by the ISO20038 standard.

10.1.3.2.3.2.2 InitialisationVector <InitlstnVctr>

Presence: [0..1]

Definition: Initialisation vector of a cipher block chaining (CBC) mode encryption.

Datatype: "Max500Binary" on page 524

10.1.3.2.3.2.3 BytePadding <BPddg>

Presence: [0..1]

Definition: Byte padding for a cypher block chaining mode encryption, if the padding is not implicit.

Datatype: "BytePadding1Code" on page 539

CodeName	Name	Definition
LNGT	LengthPadding	Message to encrypt is completed by a byte value containing the total number of added bytes.
NUL8	Null80Padding	Message to encrypt is completed by one bit of value 1, followed by null bits until the encryption block length is reached.
NULG	NullLengthPadding	Message to encrypt is completed by null byte values, the last byte containing the total number of added bytes.
NULL	NullPadding	Message to encrypt is completed by null bytes.
RAND	RandomPadding	Message to encrypt is completed by random value, the last byte containing the total number of added bytes.

10.1.3.2.4 EncryptedKey <NcrptdKey>

Presence: [0..1]

Definition: Encrypted key encryption key (KEK).

Datatype: "Max500Binary" on page 524

10.1.3.3 KEKIdentifier7

Definition: Identification of a key encryption key (KEK), using previously distributed symmetric key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		142
	KeyVersion <KeyVrsn>	[1..1]	Text		143
	SequenceNumber <SeqNb>	[0..1]	Quantity		143
	DerivationIdentification <DerivtnId>	[0..1]	Binary		143

10.1.3.3.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: "Max140Text" on page 585

10.1.3.3.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 585

10.1.3.3.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 582

10.1.3.3.4 DerivationIdentification <DerivtnId>

Presence: [0..1]

Definition: Identification used for derivation of a unique key from a master key provided for the data protection.

Datatype: "Max500Binary" on page 524

10.1.4 Action

10.1.4.1 DeviceRequest9

Definition: Specifies the environment, the context and the services to be used with a device request message.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±	C9	148
	Context <Cntxt>	[0..1]		C10	154
	PaymentContext <PmtCntxt>	[0..1]			157
	CardPresent <CardPres>	[0..1]	Indicator		157
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		157
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		158
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		158
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		158
	TransactionChannel <TxChanl>	[0..1]	CodeSet		158
	BusinessArea <BizArea>	[0..1]	CodeSet		159
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		159
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	159
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		160
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		160
	SupportedOption <SpprtOptn>	[0..*]	CodeSet		161
	SaleContext <SaleCntxt>	[0..1]			161
	SaleIdentification <SaleId>	[0..1]	Text		162
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		162
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		163
	CashierIdentification <CshrId>	[0..1]	Text		163
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	163
	ShiftNumber <ShftNb>	[0..1]	Text		163
	CustomerOrderRequestFlag <CstmrOrdReqFlg>	[0..1]	Indicator		163
	PurchaseOrderNumber <PurchsOrdNb>	[0..1]	Text		163
	InvoiceNumber <InvNb>	[0..1]	Text		163
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		164
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			164
	CommonName <CmonNm>	[1..1]	Text		164
	Address <Adr>	[0..1]	Text		164
	CountryCode <CtryCd>	[1..1]	CodeSet		164
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		164

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RegisteredIdentifier <RegdIdr>	[1..1]	Text		164
	SplitPayment <SpltPmt>	[0..1]	Indicator		165
	RemainingAmount <RmngAmt>	[0..1]	Amount		165
	ForceOnlineFlag <ForceOnInFlg>	[0..1]	Indicator		165
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		165
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		165
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		166
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		166
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	166
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		167
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		167
	SystemToNotify <SysToNtfy>	[0..1]	Text		167
	Debtor <Dbtr>	[0..1]	±		168
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	169
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		169
	Creditor <Cdtr>	[0..1]	±		169
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	170
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		171
	DirectDebitContext <DrctDbtCntxt>	[0..1]			171
	Debtor <Dbtr>	[0..1]	±		172
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	173
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		174
	Creditor <Cdtr>	[0..1]	±		174
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	175
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		176
	MandateRelatedInformation <MndtRltdInf>	[1..1]			176
	MandateIdentification <MndtId>	[1..1]	Text		177
	DateOfSignature <DtOfSgntr>	[0..1]	Date		177
	MandateImage <MndtImg>	[0..1]	Binary		177
	ProtectedMandateImage <PrctcdMndtImg>	[0..1]	±		177
	ServiceContent <SvcCntt>	[1..1]	CodeSet		177

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DisplayRequest <DispReq>	[0..1]			178
	DisplayOutput <DispOutpt>	[1..*]	±		178
	InputRequest <InptReq>	[0..1]			179
	DisplayOutput <DispOutpt>	[0..1]	±		180
	InputData <InptData>	[1..1]			181
	DeviceType <DvcTp>	[1..1]	CodeSet		182
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		182
	InputCommand <InptCmd>	[1..1]	CodeSet		183
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		184
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		184
	InputText <InptTxt>	[0..1]	±		184
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		185
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		185
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		185
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		186
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		186
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		186
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		186
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		186
	PrintRequest <PrtReq>	[0..1]			187
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		187
	ResponseMode <RspnMd>	[1..1]	CodeSet		187
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		188
	RequiredSignatureFlag <ReqrdSgntrFlg>	[0..1]	Indicator		188
	OutputContent <OutptCntt>	[1..1]	±		188
	PlayResourceRequest <PlayRsrcReq>	[0..1]			189
	ResponseMode <RspnMd>	[0..1]	CodeSet		190
	ResourceAction <RsrcActn>	[1..1]	CodeSet		190
	SoundVolume <SoundVol>	[0..1]	Rate		190
	DisplayResolution <DispRsltn>	[0..1]	Text		190
	Resource <Rsrc>	[0..1]			190

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ResourceType <RsrcTp>	[1..1]	CodeSet		191
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		191
	Language <Lang>	[0..1]	CodeSet	C14	191
	ResourceReference <RsrcRef>	[0..1]	Text		191
	TimingSlot <TmgSlot>	[0..1]	CodeSet		192
	SecureInputRequest <ScrInptReq>	[0..1]			192
	PINRequestType <PINReqTp>	[1..1]	CodeSet		192
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		193
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		193
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		193
	CardholderPIN <CrhdlrPIN>	[0..1]			193
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		193
	PINFormat <PINFrmt>	[1..1]	CodeSet		194
	AdditionalInput <AddtlInpt>	[0..1]	Text		194
	InitialisationCardReaderRequest <InitlstrCardRdrReq>	[0..1]			194
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		195
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		195
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		196
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		196
	DisplayOutput <DispOutpt>	[0..1]	±		196
	CardReaderAPDURequest <CardRdrAPDUReq>	[0..1]			197
	Class <Cls>	[1..1]	Binary		197
	Instruction <Instr>	[1..1]	Binary		197
	Parameter1 <Param1>	[1..1]	Binary		197
	Parameter2 <Param2>	[1..1]	Binary		197
	Data <Data>	[0..1]	Binary		197
	ExpectedLength <XpctdLngh>	[0..1]	Binary		197
	PowerOffCardReaderRequest <PwrOffCardRdrReq>	[0..1]			198
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		198
	DisplayOutput <DispOutpt>	[0..1]	±		198
	TransmissionRequest <TrnsmssnReq>	[0..1]			199

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DestinationAddress <DstnAdr>	[1..1]	±		199
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		200
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		200
	MessageToSend <MsgToSnd>	[1..1]	Binary		200
	InputNotification <InptNtfctn>	[0..1]			200
	ExchangeIdentification <XchgId>	[1..1]	Text		200
	OutputContent <OutptCntt>	[1..1]	±		201
	SupplementaryData <SplmtryData>	[0..*]	±	C13	201

10.1.4.1.1 Environment <Envt>

Presence: [0..1]

Definition: Environment of the transaction.

Impacted by: C9 "OneElementPresenceRule"

Environment <Envt> contains the following elements (see "[CardPaymentEnvironment82](#)" on page 356 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Acquirer <Acqrr>	[0..1]	±		362
	ServiceProvider <SvcPrvdr>	[0..1]	±		363
	Merchant <Mrchnt>	[0..1]			363
	Identification <Id>	[0..1]			363
	Identification <Id>	[1..1]	Text		364
	Type <Tp>	[0..1]	CodeSet		364
	Issuer <Issr>	[0..1]	CodeSet		364
	ShortName <ShrtNm>	[0..1]	Text		365
	CommonName <CmonNm>	[0..1]	Text		365
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		365
	LocationAndContact <LctnAndCtct>	[0..1]	±		365
	SchemeData <SchmeData>	[0..1]	Text		366
	POI <POI>	[0..1]			366
	Identification <Id>	[1..1]	±		366
	SystemName <SysNm>	[0..1]	Text		367
	GroupIdentification <Grpld>	[0..1]	Text		367
	Capabilities <Cpblties>	[0..1]	±		367
	TimeZone <TmZone>	[0..1]	Text		368
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		368
	Component <Cmpnt>	[0..*]	±		369
	Card <Card>	[0..1]			371
	ProtectedCardData <PrtctdCardData>	[0..1]	±		372
	PrivateCardData <PrvtCardData>	[0..1]	Binary		373
	PlainCardData <PlainCardData>	[0..1]			373
	PAN <PAN>	[1..1]	Text		373
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		373
	EffectiveDate <FctvDt>	[0..1]	Text		373
	ExpiryDate <XpryDt>	[0..1]	Text		374
	ServiceCode <SvcCd>	[0..1]	Text		374
	Track1 <Trck1>	[0..1]	Text		374

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Track2 <Trck2>	[0..1]	Text		374
	Track3 <Trck3>	[0..1]	Text		374
	CardholderName <CrdhldrNm>	[0..1]	Text		374
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		374
	MaskedPAN <MskdPAN>	[0..1]	Text		375
	IssuerBIN <IssrBIN>	[0..1]	Text		375
	CardCountryCode <CardCtryCd>	[0..1]	Text		375
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		375
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		375
	CardBrand <CardBrnd>	[0..1]	Text		375
	CardProductType <CardPdctTp>	[0..1]	CodeSet		375
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		376
	InternationalCard <IntrnlCard>	[0..1]	Indicator		376
	AllowedProduct <AllwdPdct>	[0..*]	Text		376
	ServiceOption <SvcOptn>	[0..1]	Text		376
	AdditionalCardData <AddtlCardData>	[0..1]	Text		376
	Check <Chck>	[0..1]			376
	BankIdentification <Bkld>	[0..1]	Text		377
	AccountNumber <AcctNb>	[0..1]	Text		377
	CheckNumber <ChckNb>	[0..1]	Text		377
	CheckCardNumber <ChckCardNb>	[0..1]	Text		377
	CheckTrackData2 <ChckTrckData2>	[0..1]			377
	TrackNumber <TrckNb>	[0..1]	Quantity		378
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		378
	TrackValue <TrckVal>	[1..1]	Text		378
	CheckType <ChckTp>	[0..1]	CodeSet		378
	Country <Ctry>	[0..1]	Text		379
	StoredValueAccount <StordValAcct>	[0..*]			379
	AccountType <AcctTp>	[0..1]	CodeSet		379
	IdentificationType <IdTp>	[0..1]	CodeSet		380
	Identification <Id>	[0..1]	Text		380

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Brand <Brnd>	[0..1]	Text		381
	Provider <Prvdr>	[0..1]	Text		381
	OwnerName <OwnrNm>	[0..1]	Text		381
	ExpiryDate <XpryDt>	[0..1]	Text		381
	EntryMode <NtryMd>	[0..1]	CodeSet		381
	Currency <Ccy>	[0..1]	CodeSet	C1	382
	Balance <Bal>	[0..1]	Amount		382
	LoyaltyAccount <LltyAcct>	[0..*]	±		382
	CustomerDevice <CstmrDvc>	[0..1]	±		383
	Wallet <Wlt>	[0..1]	±		383
	PaymentToken <PmtTkn>	[0..1]	±		383
	MerchantToken <MrchntTkn>	[0..1]	±		384
	Cardholder <Crhdldr>	[0..1]			384
	Identification <Id>	[0..1]			388
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		388
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		388
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		389
	DriverIdentification <DrvrId>	[0..1]	Text		389
	CustomerNumber <CstmrNb>	[0..1]	Text		389
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		389
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		389
	PassportNumber <PsptNb>	[0..1]	Text		389
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		389
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		389
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		390
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		390
	JobNumber <JobNb>	[0..1]	Text		390
	Department <Dept>	[0..1]	Text		390
	EmailAddress <EmailAdr>	[0..1]	Text		390
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			390
	BirthDate <BirthDt>	[1..1]	Date		390

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		391
	CityOfBirth <CityOfBirth>	[1..1]	Text		391
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	391
	Other <Othr>	[0..*]	±		391
	Name <Nm>	[0..1]	Text		391
	Language <Lang>	[0..1]	CodeSet	C14	391
	BillingAddress <BlgAdr>	[0..1]	±		392
	ShippingAddress <ShppgAdr>	[0..1]	±		392
	TripNumber <TripNb>	[0..1]	Text		393
	Vehicle <Vhcl>	[0..1]	±		393
	Authentication <Authntcn>	[0..*]			394
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		396
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		397
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		398
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		398
	CardholderOnLinePIN <CrdhldrOnLinePIN>	[0..1]			398
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		398
	PINFormat <PINFrmt>	[1..1]	CodeSet		399
	AdditionalInput <AddtlInpt>	[0..1]	Text		399
	CardholderIdentification <CrdhldrId>	[0..1]			399
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		400
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		400
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		400
	DriverIdentification <DrvrId>	[0..1]	Text		401
	CustomerNumber <CstmrNb>	[0..1]	Text		401
	SocialSecurityNumber <ScI SctyNb>	[0..1]	Text		401
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		401
	PassportNumber <PsptNb>	[0..1]	Text		401
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		401
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		401
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		401

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		402
	JobNumber <JobNb>	[0..1]	Text		402
	Department <Dept>	[0..1]	Text		402
	EmailAddress <EmailAdr>	[0..1]	Text		402
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			402
	BirthDate <BirthDt>	[1..1]	Date		402
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		402
	CityOfBirth <CityOfBirth>	[1..1]	Text		403
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	403
	Other <Othr>	[0..*]	±		403
	AddressVerification <AdrVrfctn>	[0..1]			403
	AddressDigits <AdrDgts>	[0..1]	Text		403
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		404
	AuthenticationType <AuthntcnTp>	[0..1]	Text		404
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		404
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		404
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			404
	Identification <Id>	[1..1]	Text		405
	Value <Val>	[0..1]	Binary		405
	ProtectedValue <PrtctdVal>	[0..1]	±		405
	Type <Tp>	[0..1]	Text		405
	TransactionVerificationResult <TxVrfctnRslt>	[0..*]			405
	Method <Mtd>	[1..1]	CodeSet		406
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		407
	Result <Rslt>	[0..1]	CodeSet		407
	AdditionalResult <AddtlRslt>	[0..1]	Text		407
	PersonalData <PrsnlData>	[0..1]	Text		408
	MobileData <MobData>	[0..*]			408
	MobileCountryCode <MobCtryCd>	[0..1]	Text		408
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		408
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		409

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Geolocation <Glctn>	[0..1]			409
	GeographicCoordinates <GeogcCordints>	[0..1]			409
	Latitude <Lat>	[1..1]	Text		409
	Longitude <Long>	[1..1]	Text		409
	UTMCoordinates <UTMCordints>	[0..1]			410
	UTMZone <UTMZone>	[1..1]	Text		410
	UTMEastward <UTMEstwr>	[1..1]	Text		410
	UTMNorthward <UTMNrthwr>	[1..1]	Text		410
	SensitiveMobileData <SnstvMobData>	[0..1]			410
	MSISDN <MSISDN>	[1..1]	Text		411
	IMSI <IMSI>	[0..1]	Text		411
	IMEI <IMEI>	[0..1]	Text		411
	ProtectedMobileData <PrctcdMobData>	[0..1]	±		411
	ProtectedCardholderData <PrctcdCrdhldrData>	[0..1]	±		411
	SaleEnvironment <SaleEnv>	[0..1]			412
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		412
	Currency <Ccy>	[0..1]	CodeSet	C1	413
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		413
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		413
	MinimumSplitAmount <MinSpltAmt>	[0..1]	Amount		414
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		414
	LoyaltyHandling <LltyHdlg>	[0..1]	CodeSet		414

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.1.2 Context <Cntxt>

Presence: [0..1]

Definition: Context in which the transaction is performed (payment and sale).

Impacted by: C10 "OneElementPresenceRule"

Context <Cntxt> contains the following **PaymentContext30** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentContext <PmtCntxt>	[0..1]			157
	CardPresent <CardPres>	[0..1]	Indicator		157
	CardholderPresent <CrhdldrPres>	[0..1]	Indicator		157
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		158
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		158
	TransactionEnvironment <TxEnvnt>	[0..1]	CodeSet		158
	TransactionChannel <TxChanl>	[0..1]	CodeSet		158
	BusinessArea <BizArea>	[0..1]	CodeSet		159
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		159
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	159
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		160
	FallbackIndicator <FlfbckInd>	[0..1]	CodeSet		160
	SupportedOption <SpptdOptn>	[0..*]	CodeSet		161
	SaleContext <SaleCntxt>	[0..1]			161
	SaleIdentification <SaleId>	[0..1]	Text		162
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		162
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		163
	CashierIdentification <CshrlId>	[0..1]	Text		163
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	163
	ShiftNumber <ShftNb>	[0..1]	Text		163
	CustomerOrderRequestFlag <CstmrOrdrReqFlg>	[0..1]	Indicator		163
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		163
	InvoiceNumber <InvNb>	[0..1]	Text		163
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		164
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			164
	CommonName <CmonNm>	[1..1]	Text		164
	Address <Adr>	[0..1]	Text		164
	CountryCode <CtryCd>	[1..1]	CodeSet		164
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		164
	RegisteredIdentifier <RegdIdr>	[1..1]	Text		164
	SplitPayment <Spltpmt>	[0..1]	Indicator		165

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RemainingAmount <RmngAmt>	[0..1]	Amount		165
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		165
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		165
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		165
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		166
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		166
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	166
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		167
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		167
	SystemToNotify <SysToNtfy>	[0..1]	Text		167
	Debtor <Dbtr>	[0..1]	±		168
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	169
	ProtectedDebtorAccount <PrtctdDbtrAcct>	[0..1]	±		169
	Creditor <Cdtr>	[0..1]	±		169
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	170
	ProtectedCreditorAccount <PrtctdCdtrAcct>	[0..1]	±		171
	DirectDebitContext <DrctDbtCntxt>	[0..1]			171
	Debtor <Dbtr>	[0..1]	±		172
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	173
	ProtectedDebtorAccount <PrtctdDbtrAcct>	[0..1]	±		174
	Creditor <Cdtr>	[0..1]	±		174
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	175
	ProtectedCreditorAccount <PrtctdCdtrAcct>	[0..1]	±		176
	MandateRelatedInformation <MndtRltdInf>	[1..1]			176
	MandateIdentification <MndtId>	[1..1]	Text		177
	DateOfSignature <DtOfSgntr>	[0..1]	Date		177
	MandateImage <MndtImg>	[0..1]	Binary		177
	ProtectedMandateImage <PrtctdMndtImg>	[0..1]	±		177

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.1.2.1 PaymentContext <PmtCntxt>

Presence: [0..1]

Definition: Context of the card payment transaction.

PaymentContext <PmtCntxt> contains the following **PaymentContext29** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardPresent <CardPres>	[0..1]	Indicator		157
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		157
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		158
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		158
	TransactionEnvironment <TxEnvnt>	[0..1]	CodeSet		158
	TransactionChannel <TxChanl>	[0..1]	CodeSet		158
	BusinessArea <BizArea>	[0..1]	CodeSet		159
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		159
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	159
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		160
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		160
	SupportedOption <SpptdOptn>	[0..*]	CodeSet		161

10.1.4.1.2.1.1 CardPresent <CardPres>

Presence: [0..1]

Definition: Indicates whether the transaction has been initiated by a card physically present or not.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.1.2 CardholderPresent <CrdhldrPres>

Presence: [0..1]

Definition: Indicates whether the transaction has been initiated in presence of the cardholder or not.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.1.3 OnLineContext <OnLineCntxt>

Presence: [0..1]

Definition: On-line or off-line context of the transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.1.4 AttendanceContext <AttdncCntxt>

Presence: [0..1]

Definition: Human attendance at the POI (Point Of Interaction) location during the transaction.

Datatype: "AttendanceContext1Code" on page 534

CodeName	Name	Definition
ATTD	Attended	Attended payment, with an attendant.
SATT	SemiAttended	Semi-attended, including self checkout. An attendant supervises several payment, and could be called to help the cardholder.
UATT	Unattended	Unattended payment, no attendant present.

10.1.4.1.2.1.5 TransactionEnvironment <TxEnvnt>

Presence: [0..1]

Definition: Indicates the environment of the transaction.

Datatype: "TransactionEnvironment1Code" on page 579

CodeName	Name	Definition
MERC	Merchant	Merchant environment.
PRIV	Private	Private environment.
PUBL	Public	Public environment.

10.1.4.1.2.1.6 TransactionChannel <TxChanl>

Presence: [0..1]

Definition: Identifies the type of the communication channels used by the cardholder to the acceptor system.

Datatype: "TransactionChannel5Code" on page 579

CodeName	Name	Definition
MAIL	MailOrder	Mail order.
TLPH	TelephoneOrder	Telephone order.
ECOM	ElectronicCommerce	Electronic commerce.
TVPY	TelevisionPayment	Payment on television.

CodeName	Name	Definition
SECM	SecuredElectronicCommerce	Electronic commerce with cardholder authentication.
MOBL	MobilePayment	Payment performed through a cardholder mobile device.
MPOS	MobilePOS	Payment performed through a merchant mobile device.

10.1.4.1.2.1.7 BusinessArea <BizArea>

Presence: [0..1]

Definition: Defines the business context of this transaction that could imply specific scheme rules.

Datatype: "BusinessArea2Code" on page 538

CodeName	Name	Definition
AIBD	ArtificialIntelligenceBasedDecision	The payment is initiated by an artificial intelligence based decision.
PPAY	PlainPayment	The card is used to perform a plain payment.
TKNF	TransitKnownFare	The card is used in a Transit business case where the fare amount is known when the transaction is initiated.
EOPT	EnergyOpenPayment	Indicates when the card is used in an energy business case where the amount could not be assessed when the transaction is initiated.
TOPT	TransitOpenPayment	Indicates when the card is used in a transit business case where the fare amount is not known when the transaction is initiated.

10.1.4.1.2.1.8 AttendantMessageCapable <AttdntMsgCpbl>

Presence: [0..1]

Definition: Indicates whether a message can be sent or not on an attendant display (attendant display present or not).

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.1.9 AttendantLanguage <AttdntLang>

Presence: [0..1]

Definition: Language used to display messages to the attendant.

Reference ISO 639-1 (alpha-2) et ISO 639-2 (alpha-3).

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 554

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.4.1.2.1.10 CardDataEntryMode <CardDataNtryMd>

Presence: [0..1]

Definition: Entry mode of the card data.

Datatype: "CardDataReading8Code" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.1.2.1.11 FallbackIndicator <FlbckInd>

Presence: [0..1]

Definition: Indicator of a card entry mode fallback.

Datatype: "CardFallback1Code" on page 541

CodeName	Name	Definition
FFLB	FallbackAfterFailure	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal failed.
SFLB	FallbackAfterSuccess	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal was successful.

CodeName	Name	Definition
NFLB	NoFallback	No card fall-back during the transaction in progress.

10.1.4.1.2.1.12 SupportedOption <SpprtdOptn>

Presence: [0..*]

Definition: Payment options the card acceptor can support.

Datatype: "SupportedPaymentOption2Code" on page 575

CodeName	Name	Definition
PART	PartialApproval	The entity supports a partial approval of the payment transaction.
MSRV	PaymentApprovalOnly	The entity supports the approval of the payment service along with the decline of additional requested services (as cash-back).
INSI	IssuerInstalment	The sender support IssuerInstalment proposals to the Cardholder.
PINQ	PINRequest	The sender is able to support Single Tap transaction.

10.1.4.1.2.2 SaleContext <SaleCntxt>

Presence: [0..1]

Definition: Context of the sale involving the card payment transaction.

SaleContext <SaleCntxt> contains the following **SaleContext4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SaleIdentification <SaleId>	[0..1]	Text		162
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		162
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		163
	CashierIdentification <CshrId>	[0..1]	Text		163
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	163
	ShiftNumber <ShiftNb>	[0..1]	Text		163
	CustomerOrderRequestFlag <CstmrOrdrrReqFlg>	[0..1]	Indicator		163
	PurchaseOrderNumber <PurchsOrdrrNb>	[0..1]	Text		163
	InvoiceNumber <InvNb>	[0..1]	Text		163
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		164
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			164
	CommonName <CmonNm>	[1..1]	Text		164
	Address <Adr>	[0..1]	Text		164
	CountryCode <CtryCd>	[1..1]	CodeSet		164
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		164
	RegisteredIdentifier <RegdIdr>	[1..1]	Text		164
	SplitPayment <Spltpmt>	[0..1]	Indicator		165
	RemainingAmount <RmngAmt>	[0..1]	Amount		165
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		165
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		165
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		165
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		166
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		166

10.1.4.1.2.2.1 SaleIdentification <SaleId>

Presence: [0..1]

Definition: Identification of the sale terminal (electronic cash register or point of sale terminal) or the sale system.

Datatype: "Max35Text" on page 587

10.1.4.1.2.2.2 SaleReferenceNumber <SaleRefNb>

Presence: [0..1]

Definition: Identify a sale transaction assigned by the sale system.

Datatype: "Max35Text" on page 587

10.1.4.1.2.2.3 SaleReconciliationIdentification <SaleRcncltnId>

Presence: [0..1]

Definition: Identifier of the reconciliation between the Sale system and the POI system.

Datatype: "Max35Text" on page 587

10.1.4.1.2.2.4 CashierIdentification <CshrlId>

Presence: [0..1]

Definition: Identification of the cashier who carried out the transaction.

Datatype: "Max35Text" on page 587

10.1.4.1.2.2.5 CashierLanguage <CshrLang>

Presence: [0..*]

Definition: Languages used by the cashier.

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 554

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.4.1.2.2.6 ShiftNumber <ShftNb>

Presence: [0..1]

Definition: Identifies the shift of the cashier.

Datatype: "Max2NumericText" on page 586

10.1.4.1.2.2.7 CustomerOrderRequestFlag <CstmrOrdRReqFlg>

Presence: [0..1]

Definition: Flag indicating that list of CustomerOrders should be returned in response.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.2.8 PurchaseOrderNumber <PurchsOrdRNb>

Presence: [0..1]

Definition: Identification of the purchase order.

Datatype: "Max35Text" on page 587

10.1.4.1.2.2.9 InvoiceNumber <InvNb>

Presence: [0..1]

Definition: Identification of the invoice.

Datatype: "Max35Text" on page 587

10.1.4.1.2.2.10 DeliveryNoteNumber <DlvryNoteNb>

Presence: [0..1]

Definition: Identification allocated by the sale system and given to the customer.

Datatype: "Max35Text" on page 587

10.1.4.1.2.2.11 SponsoredMerchant <SpnsrdMrchnt>

Presence: [0..*]

Definition: Merchant using the payment services of a payment facilitator, acting as a card acceptor.

SponsoredMerchant <SpnsrdMrchnt> contains the following **Organisation26** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CommonName <CmonNm>	[1..1]	Text		164
	Address <Adr>	[0..1]	Text		164
	CountryCode <CtryCd>	[1..1]	CodeSet		164
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		164
	RegisteredIdentifier <Regldlr>	[1..1]	Text		164

10.1.4.1.2.2.11.1 CommonName <CmonNm>

Presence: [1..1]

Definition: Name of the merchant.

Datatype: "Max70Text" on page 589

10.1.4.1.2.2.11.2 Address <Adr>

Presence: [0..1]

Definition: Location of the merchant.

Datatype: "Max140Text" on page 585

10.1.4.1.2.2.11.3 CountryCode <CtryCd>

Presence: [1..1]

Definition: Country of the merchant.

Datatype: "ISO3NumericCountryCode" on page 553

10.1.4.1.2.2.11.4 MerchantCategoryCode <MrchntCtgyCd>

Presence: [1..1]

Definition: Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.

Datatype: "Min3Max4Text" on page 590

10.1.4.1.2.2.11.5 RegisteredIdentifier <Regldlr>

Presence: [1..1]

Definition: Identifier of the sponsored merchant assigned by the payment facilitator of their acquirer.

Datatype: "Max35Text" on page 587

10.1.4.1.2.2.12 SplitPayment <SpltPmt>

Presence: [0..1]

Definition: True if the payment transaction is a partial payment of the sale transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.2.13 RemainingAmount <RmngAmt>

Presence: [0..1]

Definition: Remaining amount to complete the sale transaction, if a partial payment has been completed for the sale transaction.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.4.1.2.2.14 ForceOnlineFlag <ForceOnlnFlg>

Presence: [0..1]

Definition: Indicates if the Cashier requires POI forces online access to the Acquirer.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.2.15 ReuseCardDataFlag <ReuseCardDataFlg>

Presence: [0..1]

Definition: Indicates if the card data has to be taken from a previous transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.2.16 AllowedEntryMode <AllwdNtryMd>

Presence: [0..*]

Definition: Type of card data reading.

Datatype: "CardDataReading8Code" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.

CodeName	Name	Definition
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.1.2.2.17 SaleTokenScope <SaleTknScp>

Presence: [0..1]

Definition: Scope of the token that identifies the payment mean of the customer.

Datatype: "SaleTokenScope1Code" on page 574

CodeName	Name	Definition
MULT	MultipleUse	The token is generated to recognise a customer for a longer period.
SNGL	SingleUse	The token is generated to recognise a customer during the lifetime of a transaction.

10.1.4.1.2.2.18 AdditionalSaleData <AddtlSaleData>

Presence: [0..1]

Definition: Additional information associated with the sale transaction.

Datatype: "Max70Text" on page 589

10.1.4.1.2.3 CreditTransferContext <CdtTrfCntxt>

Presence: [0..1]

Definition: Context of the credit transfer transaction.

Impacted by: C11 "OneElementPresenceRule"

CreditTransferContext <CdtTrfCntxt> contains the following **CreditTransferContext1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		167
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		167
	SystemToNotify <SysToNtfy>	[0..1]	Text		167
	Debtor <Dbtr>	[0..1]	±		168
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	169
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		169
	Creditor <Cdtr>	[0..1]	±		169
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	170
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		171

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.1.2.3.1 AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>

Presence: [0..1]

Definition: Indicator that specifies if a notification is expected after a credit transfer request.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.3.2 WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>

Presence: [0..1]

Definition: Indicator from the sale system to the accepting system to wait for notification before stating that the payment is done.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.2.3.3 SystemToNotify <SysToNtfy>

Presence: [0..1]

Definition: Reference of the system that should receive the notification of credit transfer.

Datatype: "Max1025Text" on page 584

10.1.4.1.2.3.4 Debtor <Dbtr>

Presence: [0..1]

Definition: Information related to the payer.

Debtor <Dbtr> contains the following elements (see "PartyIdentification272" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		444
	PostalAddress <PstlAdr>	[0..1]	±		445
	Identification <Id>	[0..1]			445
{Or	OrganisationIdentification <OrgId>	[1..1]			446
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer <Issr>	[0..1]	Text		448
Or}	PrivateIdentification <PrvtId>	[1..1]			448
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer <Issr>	[0..1]	Text		451
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	451
	ContactDetails <CtctDtls>	[0..1]	±		451

10.1.4.1.2.3.5 DebtorAccount <DbtrAcct>

Presence: [0..1]

Definition: Information related to the payer's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

DebtorAccount <DbtrAcct> contains the following elements (see "CashAccount40" on page 131 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		131
	Type <Tp>	[0..1]	±		131
	Currency <Ccy>	[0..1]	CodeSet	C2	132
	Name <Nm>	[0..1]	Text		132
	Proxy <Prxy>	[0..1]	±		132

Constraints

- IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.1.2.3.6 ProtectedDebtorAccount <PrtctdDbtrAcct>

Presence: [0..1]

Definition: Secured information related to the debtor's account.

ProtectedDebtorAccount <PrtctdDbtrAcct> contains the following elements (see "ContentInformationType39" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <Dgstddata>	[0..1]	±		500

10.1.4.1.2.3.7 Creditor <Cdtr>

Presence: [0..1]

Definition: Information related to the payee.

Creditor <Cdtr> contains the following elements (see "PartyIdentification272" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		444
	PostalAddress <PstlAdr>	[0..1]	±		445
	Identification <Id>	[0..1]			445
{Or	OrganisationIdentification <OrgId>	[1..1]			446
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer <Issr>	[0..1]	Text		448
Or}	PrivateIdentification <PrvtId>	[1..1]			448
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer <Issr>	[0..1]	Text		451
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	451
	ContactDetails <CtctDtls>	[0..1]	±		451

10.1.4.1.2.3.8 CreditorAccount <CdtrAcct>

Presence: [0..1]

Definition: Information related to the payee's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

CreditorAccount <CdtrAcct> contains the following elements (see "[CashAccount40](#)" on page 131 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		131
	Type <Tp>	[0..1]	±		131
	Currency <Ccy>	[0..1]	CodeSet	C2	132
	Name <Nm>	[0..1]	Text		132
	Proxy <Prxy>	[0..1]	±		132

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.1.2.3.9 ProtectedCreditorAccount <PrtctdCdtrAcct>

Presence: [0..1]

Definition: Secured information related to the creditor's account.

ProtectedCreditorAccount <PrtctdCdtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <Dgstddata>	[0..1]	±		500

10.1.4.1.2.4 DirectDebitContext <DrctDbtCntxt>

Presence: [0..1]

Definition: Context of the direct debit transaction.

DirectDebitContext <DrctDbtCntxt> contains the following **DirectDebitContext1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Debtor <Dbtr>	[0..1]	±		172
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	173
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		174
	Creditor <Cdtr>	[0..1]	±		174
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	175
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		176
	MandateRelatedInformation <MndtRltdInf>	[1..1]			176
	MandateIdentification <MndtId>	[1..1]	Text		177
	DateOfSignature <DtOfSgntr>	[0..1]	Date		177
	MandateImage <MndtImg>	[0..1]	Binary		177
	ProtectedMandateImage <PrctcdMndtImg>	[0..1]	±		177

10.1.4.1.2.4.1 Debtor <Dbtr>

Presence: [0..1]

Definition: Information related to the debtor.

Debtor <Dbtr> contains the following elements (see "PartyIdentification272" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		444
	PostalAddress <PstlAdr>	[0..1]	±		445
	Identification <Id>	[0..1]			445
{Or	OrganisationIdentification <OrgId>	[1..1]			446
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer </Issr>	[0..1]	Text		448
Or}	PrivateIdentification <PrvtId>	[1..1]			448
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer </Issr>	[0..1]	Text		451
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	451
	ContactDetails <CtctDtls>	[0..1]	±		451

10.1.4.1.2.4.2 DebtorAccount <DbtrAcct>

Presence: [0..1]

Definition: Information related to the debtor's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

DebtorAccount <DbtrAcct> contains the following elements (see "[CashAccount40](#)" on page 131 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		131
	Type <Tp>	[0..1]	±		131
	Currency <Ccy>	[0..1]	CodeSet	C2	132
	Name <Nm>	[0..1]	Text		132
	Proxy <Prxy>	[0..1]	±		132

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.1.2.4.3 ProtectedDebtorAccount <PrtctdDbtrAcct>

Presence: [0..1]

Definition: Secured information related to the debtor's account.

ProtectedDebtorAccount <PrtctdDbtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.4.1.2.4.4 Creditor <Cdtr>

Presence: [0..1]

Definition: Information related to the creditor.

Creditor <Cdtr> contains the following elements (see "PartyIdentification272" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		444
	PostalAddress <PstlAdr>	[0..1]	±		445
	Identification <Id>	[0..1]			445
{Or	OrganisationIdentification <OrgId>	[1..1]			446
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer </Issr>	[0..1]	Text		448
Or}	PrivateIdentification <PrvtId>	[1..1]			448
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer </Issr>	[0..1]	Text		451
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	451
	ContactDetails <CtctDtls>	[0..1]	±		451

10.1.4.1.2.4.5 CreditorAccount <CdtrAcct>

Presence: [0..1]

Definition: Information related to the creditor's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

CreditorAccount <CdtrAcct> contains the following elements (see "[CashAccount40](#)" on page 131 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		131
	Type <Tp>	[0..1]	±		131
	Currency <Ccy>	[0..1]	CodeSet	C2	132
	Name <Nm>	[0..1]	Text		132
	Proxy <Prxy>	[0..1]	±		132

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.1.2.4.6 ProtectedCreditorAccount <PrtctdCdtrAcct>

Presence: [0..1]

Definition: Secured information related to the creditor's account.

ProtectedCreditorAccount <PrtctdCdtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.4.1.2.4.7 MandateRelatedInformation <MndtRltdInf>

Presence: [1..1]

Definition: Provides further details of the mandate signed between the creditor and the debtor.

MandateRelatedInformation <MndtRltdInf> contains the following **MandateRelatedInformation17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MandateIdentification <MndtId>	[1..1]	Text		177
	DateOfSignature <DtOfSgntr>	[0..1]	Date		177
	MandateImage <MndtImg>	[0..1]	Binary		177
	ProtectedMandateImage <PrctcdMndtImg>	[0..1]	±		177

10.1.4.1.2.4.7.1 MandateIdentification <MndtId>

Presence: [1..1]

Definition: Unique identification, as assigned by the creditor, to unambiguously identify the mandate.

Datatype: "Max35Text" on page 587

10.1.4.1.2.4.7.2 DateOfSignature <DtOfSgntr>

Presence: [0..1]

Definition: Date on which the direct debit mandate has been signed by the debtor.

Datatype: "ISODate" on page 580

10.1.4.1.2.4.7.3 MandateImage <MndtImg>

Presence: [0..1]

Definition: Image of scanned signed mandate.

Datatype: "Max2MBBinary" on page 523

10.1.4.1.2.4.7.4 ProtectedMandateImage <PrctcdMndtImg>

Presence: [0..1]

Definition: Secured image of scanned signed mandate.

ProtectedMandateImage <PrctcdMndtImg> contains the following elements (see "ContentInformationType39" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.4.1.3 ServiceContent <SvcCntt>

Presence: [1..1]

Definition: Define the type of service requested.

Datatype: "RetailerService8Code" on page 571

CodeName	Name	Definition
DDYQ	DeviceDisplayRequest	One System requests the other to display a message for cashier or customer.
DINQ	DeviceInputRequest	One system requests to the other System to get data input.
DPRQ	DevicePrintRequest	One system requests to the other System to print data.
DSOQ	DevicePlaySoundRequest	One system requests to the Other System to play a sound.
DSIQ	DeviceSecureInputRequest	One system requests to the Other System to securely get data input (e.g. for PIN).
DCIQ	DeviceInitialisationCardReaderRequest	Service to send parameters to use when card reader initializes a new communication with the card.
DCAQ	DeviceSendApplicationProtocolDataUnitCardReaderRequest	A service to send commands to a card.
DCPQ	DevicePowerOffCardReaderRequest	The Sale system requests to the POI System to power off the card reader.
DCOQ	DeviceTransmissionMessageRequest	The Sale system requests to the POI System to transmit a message (for instance to a mobile server).
DINO	DeviceInputNotification	One system sends a notification to the POI System to update a input request.

10.1.4.1.4 DisplayRequest <DispReq>

Presence: [0..1]

Definition: Content of the Display Request message.

DisplayRequest <DispReq> contains the following **DeviceDisplayRequest7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DisplayOutput <DispOutpt>	[1..*]	±		178

10.1.4.1.4.1 DisplayOutput <DispOutpt>

Presence: [1..*]

Definition: Message to be displayed.

DisplayOutput <DispOutput> contains the following elements (see "ActionMessage12" on page 332 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		332
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		333
	Format <Frmt>	[0..1]	CodeSet		334
	MessageContent <MsgCntt>	[0..1]	Text		334
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		334
	OutputBarcode <OutptBrcd>	[0..1]			334
	BarcodeType <BrcdTp>	[1..1]	CodeSet		335
	BarcodeValue <BrcdVal>	[0..1]	Text		335
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		335
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		336
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		336
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		336
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		336
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		336

10.1.4.1.5 InputRequest <InptReq>

Presence: [0..1]

Definition: Content of the Input Request message.

InputRequest <InptReq> contains the following **DeviceInputRequest7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DisplayOutput <DispOutpt>	[0..1]	±		180
	InputData <InptData>	[1..1]			181
	DeviceType <DvcTp>	[1..1]	CodeSet		182
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		182
	InputCommand <InptCmd>	[1..1]	CodeSet		183
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		184
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		184
	InputText <InptTxt>	[0..1]	±		184
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		185
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		185
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		185
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		186
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		186
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		186
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		186
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		186

10.1.4.1.5.1 DisplayOutput <DispOutpt>

Presence: [0..1]

Definition: Information to display before input.

DisplayOutput <DispOutput> contains the following elements (see "ActionMessage12" on page 332 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		332
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		333
	Format <Frmt>	[0..1]	CodeSet		334
	MessageContent <MsgCntt>	[0..1]	Text		334
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		334
	OutputBarcode <OutptBrcd>	[0..1]			334
	BarcodeType <BrcdTp>	[1..1]	CodeSet		335
	BarcodeValue <BrcdVal>	[0..1]	Text		335
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		335
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		336
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		336
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		336
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		336
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		336

10.1.4.1.5.2 InputData <InptData>

Presence: [1..1]

Definition: Information related to an Input request.

InputData <InptData> contains the following **InputData7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		182
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		182
	InputCommand <InptCmd>	[1..1]	CodeSet		183
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		184
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		184
	InputText <InptTxt>	[0..1]	±		184
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		185
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		185
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		185
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		186
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		186
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		186
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		186
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		186

10.1.4.1.5.2.1 DeviceType <DvcTp>

Presence: [1..1]

Definition: Type of logical device located on a Sale Terminal or a POI Terminal.

Datatype: "SaleCapabilities2Code" on page 573

CodeName	Name	Definition
CHIN	CashierInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element). The output device attached to this input device is the CashierDisplay device.
CUIN	CustomerInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element).

10.1.4.1.5.2.2 InformationQualifier <InfQlfr>

Presence: [1..1]

Definition: Qualification of the information to output to the logical device.

Datatype: "InformationQualify1Code" on page 551

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.1.4.1.5.2.3 InputCommand <InptCmd>

Presence: [1..1]

Definition: Type of requested input.

Datatype: "InputCommand1Code" on page 552

CodeName	Name	Definition
DCSG	DecimalString	Wait for a string of digit characters with a decimal point, the length range could be specified.
DGSG	DigitString	Wait for a string of digit characters.
GAKY	GetAnyKey	Wait for a key pressed on the Terminal, to be able to read the message displayed on the Terminal.
GCNF	GetConfirmation	Wait for a confirmation Yes (Y) or No (N) on the Sale System. Wait for a confirmation (Valid or Cancel button) on

CodeName	Name	Definition
		the POI Terminal. The result of the command is a Boolean: True or False.
GFKY	GetFunctionKey	Wait for a function key pressed on the Terminal: From POI, Valid, Clear, Correct, Generic Function key number. From Sale, Generic Function key.
GMNE	GetMenuEntry	To choose an entry among a list of entries (all of them are not necessary selectable). The OutputFormat has to be MenuEntry.
PSWD	Password	Request to enter a password with masked characters while typing the password.
SITE	SiteManager	Wait for a confirmation Yes (Y) or No (N) of the Site Manager on the Sale System.
TXSG	TextString	Wait for a string of alphanumeric characters.
HTML	XHTMLText	Wait for a XHTML data.
SIGN	Signature	Request to wait for signature.

10.1.4.1.5.2.4 NotifyCardInputFlag <NtfyCardInptFlg>

Presence: [1..1]

Definition: Flag of notification of card to be entered in the POI card reader.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.5 MaximumInputTime <MaxInptTm>

Presence: [0..1]

Definition: Maximum input time in seconds.

Datatype: ["Number" on page 582](#)

10.1.4.1.5.2.6 InputText <InptTxt>

Presence: [0..1]

Definition: Text value set for an input command.

InputText <InptTxt> contains the following elements (see ["ActionMessage12" on page 332](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		332
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		333
	Format <Frmt>	[0..1]	CodeSet		334
	MessageContent <MsgCntt>	[0..1]	Text		334
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		334
	OutputBarcode <OutptBrcd>	[0..1]			334
	BarcodeType <BrcdTp>	[1..1]	CodeSet		335
	BarcodeValue <BrcdVal>	[0..1]	Text		335
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		335
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		336
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		336
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		336
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		336
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		336

10.1.4.1.5.2.7 ImmediateResponseFlag <ImdtRspnFlg>

Presence: [0..1]

Definition: Flag to request Immediate response without waiting for the completion of the command.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.8 WaitUserValidationFlag <WaitUsrVldtnFlg>

Presence: [0..1]

Definition: Flag to confirm by the user the entered characters, when the maximum allowed length is reached.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.9 BeepKeyFlag <BeepKeyFlg>

Presence: [0..1]

Definition: Flag to indicate that when the user press a key, a beep has to be generated.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.10 GlobalCorrectionFlag <GblCrrctnFlg>

Presence: [0..1]

Definition: Flag to correct all characters (True) or just the last one (False).

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.11 DisableCancelFlag <DsblCclFlg>

Presence: [0..1]

Definition: Flag to deactivate the "Cancel" function key.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.12 DisableCorrectFlag <DsblCrrctFlg>

Presence: [0..1]

Definition: Flag to deactivate the "Correct" function key.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.13 DisableValidFlag <DsblVldFlg>

Presence: [0..1]

Definition: Flag to disable the "Valid" function key.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.5.2.14 MenuBackFlag <MenuBckFlg>

Presence: [0..1]

Definition: Flag to enable the "Back" function key to go the upper level.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.6 PrintRequest <PrtReq>

Presence: [0..1]

Definition: Content of the Print Request message.

PrintRequest <PrtReq> contains the following **DevicePrintRequest7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		187
	ResponseMode <RspnMd>	[1..1]	CodeSet		187
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		188
	RequiredSignatureFlag <ReqrdSgntFlg>	[0..1]	Indicator		188
	OutputContent <OutptCntt>	[1..1]	±		188

10.1.4.1.6.1 DocumentQualifier <DocQlfr>

Presence: [1..1]

Definition: Qualifies the type of document.

Datatype: "DocumentType7Code" on page 548

CodeName	Name	Definition
JNRL	Journal	When the POI or the Sale System wants to store a message on the journal printer or electronic journal of the Sale Terminal (it is sometimes a Sale Logging/Journal Printer).
CRCP	CustomerReceipt	When the Sale System requires the POI system to print the Customer receipt.
HRCP	CashierReceipt	When the Sale system print the Cashier copy of the Payment receipt.
SRCP	SaleReceipt	When the Sale System requires the POI system to print the Sale receipt.
RPIN	RelatedPaymentInstruction	Document is a linked payment instruction to which the current payment instruction is related, for example, in a cover scenario.
VCHR	Voucher	Document is an electronic payment document.

10.1.4.1.6.2 ResponseMode <RspnMd>

Presence: [1..1]

Definition: Type of awaited response (none, immediate, after printing, after sound).

Datatype: "ResponseMode2Code" on page 568

CodeName	Name	Definition
SEND	EndOfPlay	The Response is required at the end of play.

CodeName	Name	Definition
IMMD	Immediate	The Message Response is immediate, after taking into account the request.
NREQ	NotRequired	The Message Response is not required, except in case of error.
PEND	PrintEnd	The Print Response is required at the end of print.

10.1.4.1.6.3 IntegratedPrintFlag <IntgrtdPrtFlg>

Presence: [0..1]

Definition: Flag that the print is integrated to other prints.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.6.4 RequiredSignatureFlag <ReqrdSgntrFlg>

Presence: [0..1]

Definition: Flag to require a physical signature by the Customer.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.6.5 OutputContent <OutptCntt>

Presence: [1..1]

Definition: Content of the message to print.

OutputContent <OutptCntt> contains the following elements (see "ActionMessage12" on page 332 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		332
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		333
	Format <Frmt>	[0..1]	CodeSet		334
	MessageContent <MsgCntt>	[0..1]	Text		334
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		334
	OutputBarcode <OutptBrcd>	[0..1]			334
	BarcodeType <BrcdTp>	[1..1]	CodeSet		335
	BarcodeValue <BrcdVal>	[0..1]	Text		335
	QRCodeBinaryValue <QRcdBinryVal>	[0..1]	Binary		335
	QRCodeVersion <QRcdVrsn>	[0..1]	Text		336
	QRCodeEncodingMode <QRcdNcodgMd>	[0..1]	CodeSet		336
	QRCodeErrorCorrection <QRcdErrCrrctn>	[0..1]	CodeSet		336
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		336
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		336

10.1.4.1.7 PlayResourceRequest <PlayRsrcReq>

Presence: [0..1]

Definition: Content of the Resource Request message.

PlayResourceRequest <PlayRsrcReq> contains the following **DevicePlayResourceRequest1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ResponseMode <RspnMd>	[0..1]	CodeSet		190
	ResourceAction <RsrcActn>	[1..1]	CodeSet		190
	SoundVolume <SoundVol>	[0..1]	Rate		190
	DisplayResolution <DispRsln>	[0..1]	Text		190
	Resource <Rsrc>	[0..1]			190
	ResourceType <RsrcTp>	[1..1]	CodeSet		191
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		191
	Language <Lang>	[0..1]	CodeSet	C14	191
	ResourceReference <RsrcRef>	[0..1]	Text		191
	TimingSlot <TmgSlot>	[0..1]	CodeSet		192

10.1.4.1.7.1 ResponseMode <RspnMd>

Presence: [0..1]

Definition: Message response awaited by the initiator of the Request.

Datatype: "ResponseMode2Code" on page 568

CodeName	Name	Definition
SEND	EndOfPlay	The Response is required at the end of play.
IMMD	Immediate	The Message Response is immediate, after taking into account the request.
NREQ	NotRequired	The Message Response is not required, except in case of error.
PEND	PrintEnd	The Print Response is required at the end of print.

10.1.4.1.7.2 ResourceAction <RsrcActn>

Presence: [1..1]

Definition: Requested Action: Start to play a media resource, Stop to play a media resource, Set the default volume.

Datatype: "ResourceAction1Code" on page 567

CodeName	Name	Definition
PAUS	Pause	Pause the media resource in progress as specified in the message.
STAS	Play	Start the media resource as specified in the message.
LOOP	PlayInLoop	Play in a loop the media resource as specified in the message.
RESU	Resume	Resume the progress of the media resource as specified in the message.
DVOL	SetDefaultVolume	Set the default volume of sounds.
STOS	Stop	Stop the media resource in progress.

10.1.4.1.7.3 SoundVolume <SoundVol>

Presence: [0..1]

Definition: Volume of a sound, either in a percentage of the maximum volume, or 0 to mute.

Datatype: "PercentageRate" on page 583

10.1.4.1.7.4 DisplayResolution <DispRsln>

Presence: [0..1]

Definition: Resolution to use.

Datatype: "Max35Text" on page 587

10.1.4.1.7.5 Resource <Rsrc>

Presence: [0..1]

Definition: Identification of the resource to use.

Resource <Rsrc> contains the following **ResourceContent1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ResourceType <RsrcTp>	[1..1]	CodeSet		191
	ResourceFormat <RsrcFmt>	[0..1]	CodeSet		191
	Language <Lang>	[0..1]	CodeSet	C14	191
	ResourceReference <RsrcRef>	[0..1]	Text		191

10.1.4.1.7.5.1 ResourceType <RsrcTp>

Presence: [1..1]

Definition: Type of media resource.

Datatype: "ResourceType1Code" on page 567

CodeName	Name	Definition
TEXT	TextToSpeech	Voice synthesis.
URLI	UniformResourceIdentifier	String of characters that unambiguously identifies a particular resource.

10.1.4.1.7.5.2 ResourceFormat <RsrcFmt>

Presence: [0..1]

Definition: Format of the media resource;

Datatype: "SoundFormat1Code" on page 574

CodeName	Name	Definition
MSGR	MessageRef	Reference of a preloaded text to play.
SNDR	SoundRef	Preloaded sound File.
TEXT	Text	Text to play.

10.1.4.1.7.5.3 Language <Lang>

Presence: [0..1]

Definition: Language of the media resource.

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 554

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.4.1.7.5.4 ResourceReference <RsrcRef>

Presence: [0..1]

Definition: Reference of a media resource.

Datatype: "Max1025Text" on page 584

10.1.4.1.7.6 TimingSlot <TmgSlot>

Presence: [0..1]

Definition: Identification of the moment to manage the media resource.

Datatype: "ProcessingPosition2Code" on page 565

CodeName	Name	Definition
AFTE	After	Specifies that the transaction/instruction is to be executed after the linked transaction/instruction.
WITH	With	Specifies that the transaction/instruction is to be executed with the linked transaction/instruction.
BEFO	Before	Specifies that the transaction/instruction is to be executed before the linked transaction/instruction.
INFO	Information	Specifies that the transactions/ instructions are linked for information purposes only.

10.1.4.1.8 SecureInputRequest <ScrInptReq>

Presence: [0..1]

Definition: Request a secure input for a PIN.

SecureInputRequest <ScrInptReq> contains the following **DeviceSecureInputRequest6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PINRequestType <PINReqTp>	[1..1]	CodeSet		192
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		193
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		193
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		193
	CardholderPIN <CrdhldrPIN>	[0..1]			193
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		193
	PINFormat <PINFrmt>	[1..1]	CodeSet		194
	AdditionalInput <AddtlInpt>	[0..1]	Text		194

10.1.4.1.8.1 PINRequestType <PINReqTp>

Presence: [1..1]

Definition: Type of PIN Service.

Datatype: "PINRequestType1Code" on page 562

CodeName	Name	Definition
PIAE	PINAcquisitionEncryption	The cardholder enters the PIN, the POI enciphers the PIN Block and provides it as a result to the Sale System.
PIAV	PINAcquisitionVerification	The Cardholder enters the PIN and the POI verifies it.
PIVO	PINVerifyOnly	The Sale System send a previous keyed PIN and the POI verifies it.

10.1.4.1.8.2 PINVerificationMethod <PINVrfctnMtd>

Presence: [0..1]

Definition: Identify the PIN verification method and keys.

Datatype: "Max35Text" on page 587

10.1.4.1.8.3 MaximumWaitingTime <MaxWtgTm>

Presence: [0..1]

Definition: Maximum time to wait for the request processing in seconds.

Datatype: "Number" on page 582

10.1.4.1.8.4 BeepKeyFlag <BeepKeyFlg>

Presence: [0..1]

Definition: Indicates, when the user press a key, if a beep has to be generated.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.8.5 CardholderPIN <CrdhldrPIN>

Presence: [0..1]

Definition: Enciphered PIN and related information.

CardholderPIN <CrdhldrPIN> contains the following **OnLinePIN11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		193
	PINFormat <PINFrmt>	[1..1]	CodeSet		194
	AdditionalInput <AddtlInpt>	[0..1]	Text		194

10.1.4.1.8.5.1 EncryptedPINBlock <NcrptdPINBlck>

Presence: [1..1]

Definition: Encrypted PIN (Personal Identification Number).

EncryptedPINBlock <NcrptdPINBlck> contains the following elements (see
"ContentInformationType40" on page 511 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		511
	EnvelopedData <EnvlpdData>	[1..1]	±		512

10.1.4.1.8.5.2 PINFormat <PINFrmt>

Presence: [1..1]

Definition: PIN (Personal Identification Number) format before encryption.

Datatype: "PINFormat3Code" on page 562

CodeName	Name	Definition
ISO0	ISO0	PIN diversified with the card account number, conforming to the standard ISO 9564-2.
ISO1	ISO1	PIN completed with random padding characters, conforming to the standard ISO 9564-2.
ISO2	ISO2	PIN without diversification characters, conforming to the standard ISO 9564-2.
ISO3	ISO3	PIN diversified with the card account number and random characters, conforming to the standard ISO 9564-2.
ISO4	ISO4	PIN format used with AES encryption, conforming to the new ISO SC2 format.
ISO5	ISO5	Alternative PIN format used with AES encryption, conforming to the new ISO SC2 format.

10.1.4.1.8.5.3 AdditionalInput <AddtlInpt>

Presence: [0..1]

Definition: Additional information required to verify the PIN (Personal Identification Number).

Datatype: "Max35Text" on page 587

10.1.4.1.9 InitialisationCardReaderRequest <InitlstnCardRdrReq>

Presence: [0..1]

Definition: A service to send parameters to Card Reader to initialize a new communication with a card.

InitialisationCardReaderRequest <InitlStnCardRdrReq> contains the following
DeviceInitialisationCardReaderRequest7 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		195
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		195
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		196
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		196
	DisplayOutput <DispOutpt>	[0..1]	±		196

10.1.4.1.9.1 WarmResetFlag <WarmRstFlg>

Presence: [0..1]

Definition: Flag to request a warm reset on a chip.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.9.2 ForceEntryMode <ForceNtryMd>

Presence: [0..*]

Definition: Payment instrument entry mode requested by the Sale System.

Datatype: ["CardDataReading8Code" on page 540](#)

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.

CodeName	Name	Definition
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.1.9.3 LeaveCardFlag <LeavCardFlg>

Presence: [0..1]

Definition: Flag to indicate the POI System to keep the card in the reader for a smart card.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.1.9.4 MaximumWaitingTime <MaxWtgTm>

Presence: [0..1]

Definition: Maximum time in seconds that the POI has to wait for a card response.

Datatype: ["Number" on page 582](#)

10.1.4.1.9.5 DisplayOutput <DispOutpt>

Presence: [0..1]

Definition: Information to display.

DisplayOutput <DispOutpt> contains the following elements (see ["ActionMessage12" on page 332](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstrn>	[1..1]	CodeSet		332
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		333
	Format <Frmt>	[0..1]	CodeSet		334
	MessageContent <MsgCntt>	[0..1]	Text		334
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		334
	OutputBarcode <OutptBrcd>	[0..1]			334
	BarcodeType <BrcdTp>	[1..1]	CodeSet		335
	BarcodeValue <BrcdVal>	[0..1]	Text		335
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		335
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		336
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		336
	QRCodeErrorCorrection <QRCDErrCrctn>	[0..1]	CodeSet		336
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		336
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		336

10.1.4.1.10 CardReaderAPDURequest <CardRdrAPDUReq>

Presence: [0..1]

Definition: Content of the APDU (Application Protocol Data Unit) to send to the Card.

CardReaderAPDURequest <CardRdrAPDUReq> contains the following
DeviceSendApplicationProtocolDataUnitCardReaderRequest1 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Class <Class>	[1..1]	Binary		197
	Instruction <Instr>	[1..1]	Binary		197
	Parameter1 <Param1>	[1..1]	Binary		197
	Parameter2 <Param2>	[1..1]	Binary		197
	Data <Data>	[0..1]	Binary		197
	ExpectedLength <XpctdLngh>	[0..1]	Binary		197

10.1.4.1.10.1 Class <Class>

Presence: [1..1]

Definition: Class field of the Application Protocol Data Unit command (CLA).

Datatype: "Min1Max256Binary" on page 524

10.1.4.1.10.2 Instruction <Instr>

Presence: [1..1]

Definition: Instruction field of the Application Protocol Data Unit command (INS).

Datatype: "Min1Max256Binary" on page 524

10.1.4.1.10.3 Parameter1 <Param1>

Presence: [1..1]

Definition: Parameter 1 field of the Application Protocol Data Unit command

Datatype: "Min1Max256Binary" on page 524

10.1.4.1.10.4 Parameter2 <Param2>

Presence: [1..1]

Definition: Parameter 2 field of the Application Protocol Data Unit command

Datatype: "Min1Max256Binary" on page 524

10.1.4.1.10.5 Data <Data>

Presence: [0..1]

Definition: Data field of the Application Protocol Data Unit command to send including the length.

Datatype: "Min1Max256Binary" on page 524

10.1.4.1.10.6 ExpectedLength <XpctdLngh>

Presence: [0..1]

Definition: Expected length of the data field of the Application Protocol Data Unit response to the command.

Datatype: "Min1Max256Binary" on page 524

10.1.4.1.11 PowerOffCardReaderRequest <PwrOffCardRdrReq>

Presence: [0..1]

Definition: Content of the Power Off Card Reader Request message.

PowerOffCardReaderRequest <PwrOffCardRdrReq> contains the following **DevicePoweroffCardReaderRequest7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		198
	DisplayOutput <DispOutpt>	[0..1]	±		198

10.1.4.1.11.1 PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>

Presence: [0..1]

Definition: Maximum time to wait for the request processing in seconds.

Datatype: "Number" on page 582

10.1.4.1.11.2 DisplayOutput <DispOutpt>

Presence: [0..1]

Definition: Optional message before Power-Off.

DisplayOutput <DispOutput> contains the following elements (see "ActionMessage12" on page 332 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		332
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		333
	Format <Frmt>	[0..1]	CodeSet		334
	MessageContent <MsgCntt>	[0..1]	Text		334
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		334
	OutputBarcode <OutptBrcd>	[0..1]			334
	BarcodeType <BrcdTp>	[1..1]	CodeSet		335
	BarcodeValue <BrcdVal>	[0..1]	Text		335
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		335
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		336
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		336
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		336
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		336
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		336

10.1.4.1.12 TransmissionRequest <TrnsmssnReq>

Presence: [0..1]

Definition: Content of the Request message to transmit.

TransmissionRequest <TrnsmssnReq> contains the following **DeviceTransmitMessageRequest2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DestinationAddress <DstnAdr>	[1..1]	±		199
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		200
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		200
	MessageToSend <MsgToSnd>	[1..1]	Binary		200

10.1.4.1.12.1 DestinationAddress <DstnAdr>

Presence: [1..1]

Definition: Transport address.

DestinationAddress <DstnAdr> contains the following elements (see ["NetworkParameters7"](#) on page 441 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <CIntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

10.1.4.1.12.2 MaximumTransmissionTime <MaxTrnsmssnTm>

Presence: [1..1]

Definition: Maximum time in seconds of transmission.

Datatype: ["Number"](#) on page 582

10.1.4.1.12.3 MaximumWaitingTime <MaxWtgTm>

Presence: [0..1]

Definition: Defines the timeout to receive an answer.

Datatype: ["Number"](#) on page 582

10.1.4.1.12.4 MessageToSend <MsgToSnd>

Presence: [1..1]

Definition: Content of the message to be transmitted.

Datatype: ["Max100KBinary"](#) on page 522

10.1.4.1.13 InputNotification <InptNtfctn>

Presence: [0..1]

Definition: Content of the Input notification message.

InputNotification <InptNtfctn> contains the following **DeviceInputNotification7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangeIdentification <XchgId>	[1..1]	Text		200
	OutputContent <OutptCntt>	[1..1]	±		201

10.1.4.1.13.1 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Message main identifier.

Datatype: ["Max35Text"](#) on page 587

10.1.4.1.13.2 OutputContent <OutptCntt>

Presence: [1..1]

Definition: Updated content of the message to display before input.

OutputContent <OutptCntt> contains the following elements (see "[ActionMessage12](#)" on page 332 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstrn>	[1..1]	CodeSet		332
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		333
	Format <Frmt>	[0..1]	CodeSet		334
	MessageContent <MsgCntt>	[0..1]	Text		334
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		334
	OutputBarcode <OutptBrcd>	[0..1]			334
	BarcodeType <BrcdTp>	[1..1]	CodeSet		335
	BarcodeValue <BrcdVal>	[0..1]	Text		335
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		335
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		336
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		336
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		336
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		336
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		336

10.1.4.1.14 SupplementaryData <SplmtryData>

Presence: [0..*]

Definition: Additional information incorporated as an extension to the message.

Impacted by: C13 "[SupplementaryDataRule](#)"

SupplementaryData <SplmtryData> contains the following elements (see "[SupplementaryData1](#)" on page 428 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PlaceAndName <PlcAndNm>	[0..1]	Text		429
	Envelope <Envlp>	[1..1]	(External Schema)		429

Constraints

- **SupplementaryDataRule**

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

10.1.4.2 DeviceResponse9

Definition: Provides the response of a previous device request.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±	C9	206
	Context <Cntxt>	[0..1]		C10	212
	PaymentContext <PmtCntxt>	[0..1]			215
	CardPresent <CardPres>	[0..1]	Indicator		215
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		215
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		216
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		216
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		216
	TransactionChannel <TxChanl>	[0..1]	CodeSet		216
	BusinessArea <BizArea>	[0..1]	CodeSet		217
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		217
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	217
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		218
	FallbackIndicator <FlbkInd>	[0..1]	CodeSet		218
	SupportedOption <SpptdOptn>	[0..*]	CodeSet		219
	SaleContext <SaleCntxt>	[0..1]			219
	SaleIdentification <SaleId>	[0..1]	Text		220
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		220
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		221
	CashierIdentification <CshrId>	[0..1]	Text		221
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	221
	ShiftNumber <ShftNb>	[0..1]	Text		221
	CustomerOrderRequestFlag <CstmrOrdReqFlg>	[0..1]	Indicator		221
	PurchaseOrderNumber <PurchsOrdNb>	[0..1]	Text		221
	InvoiceNumber <InvNb>	[0..1]	Text		221
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		222
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			222
	CommonName <CmonNm>	[1..1]	Text		222
	Address <Adr>	[0..1]	Text		222
	CountryCode <CtryCd>	[1..1]	CodeSet		222
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		222

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RegisteredIdentifier <RegdIdr>	[1..1]	Text		222
	SplitPayment <SpltPmt>	[0..1]	Indicator		223
	RemainingAmount <RmngAmt>	[0..1]	Amount		223
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		223
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		223
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		223
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		224
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		224
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	224
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		225
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		225
	SystemToNotify <SysToNtfy>	[0..1]	Text		225
	Debtor <Dbtr>	[0..1]	±		226
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	227
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		227
	Creditor <Cdtr>	[0..1]	±		227
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	228
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		229
	DirectDebitContext <DrctDbtCntxt>	[0..1]			229
	Debtor <Dbtr>	[0..1]	±		230
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	231
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		232
	Creditor <Cdtr>	[0..1]	±		232
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	233
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		234
	MandateRelatedInformation <MndtRltdInf>	[1..1]			234
	MandateIdentification <MndtId>	[1..1]	Text		235
	DateOfSignature <DtOfSgntr>	[0..1]	Date		235
	MandateImage <MndtImg>	[0..1]	Binary		235
	ProtectedMandateImage <PrctcdMndtImg>	[0..1]	±		235
	ServiceContent <SvcCntt>	[1..1]	CodeSet		235

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DisplayResponse <DispRspn>	[0..1]			236
	OutputResult <OutptRslt>	[1..*]			236
	DeviceType <DvcTp>	[1..1]	CodeSet		237
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		237
	Response <Rspn>	[1..1]	±		238
	InputResponse <InptRspn>	[0..1]			238
	OutputResult <OutptRslt>	[0..1]			239
	DeviceType <DvcTp>	[1..1]	CodeSet		239
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		240
	Response <Rspn>	[1..1]	±		241
	InputResult <InptRslt>	[1..1]			241
	DeviceType <DvcTp>	[1..1]	CodeSet		241
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		242
	InputResultData <InptRsltData>	[1..1]			242
	InputCommand <InptCmd>	[1..1]	CodeSet		243
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		244
	FunctionKey <FctnKey>	[0..1]	Quantity		244
	InputMessage <InptMsg>	[0..1]	Text		244
	Password <Pwd>	[0..1]	±		244
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			245
	ImageFormat <ImgFrmt>	[1..1]	Text		245
	ImageData <ImgData>	[0..1]	Binary		245
	ImageReference <ImgRef>	[0..1]	Text		245
	AdditionalInformation <AddtlInf>	[0..1]	Text		245
	PrintResponse <PrtRspn>	[0..1]			245
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		245
	SecureInputResponse <ScrInptRspn>	[0..1]			246
	CardholderPIN <CrhdldrPIN>	[0..1]			246
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		247
	PINFormat <PINFrmt>	[1..1]	CodeSet		247
	AdditionalInput <AddtlInpt>	[0..1]	Text		247

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InitialisationCardReaderResponse <InitlStnCardRdrRspn>	[0..1]			247
	CardEntryMode <CardNtryMd>	[0..1]	CodeSet		248
	ICCRResetData <ICCRstData>	[0..1]			248
	ATRValue <ATRVAl>	[0..1]	Binary		249
	CardStatus <CardSts>	[0..1]	Binary		249
	AdditionalInformation <AddtlInf>	[0..1]	Binary		249
	CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn>	[0..1]			249
	Data <Data>	[0..1]	Binary		249
	CardStatus <CardSts>	[1..1]	Binary		249
	TransmissionResponse <TrnsmssnRspn>	[0..1]			250
	ReceivedMessage <RcvdMsg>	[0..1]	Binary		250
	Response <Rspn>	[1..1]	±		250
	SupplementaryData <SplmtryData>	[0..*]	±	C13	250

10.1.4.2.1 Environment <Envt>

Presence: [0..1]

Definition: Environment of the transaction.

Impacted by: C9 "OneElementPresenceRule"

Environment <Envt> contains the following elements (see "[CardPaymentEnvironment82](#)" on page 356 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Acquirer <Acqrr>	[0..1]	±		362
	ServiceProvider <SvcPrvdr>	[0..1]	±		363
	Merchant <Mrchnt>	[0..1]			363
	Identification <Id>	[0..1]			363
	Identification <Id>	[1..1]	Text		364
	Type <Tp>	[0..1]	CodeSet		364
	Issuer <Issr>	[0..1]	CodeSet		364
	ShortName <ShrtNm>	[0..1]	Text		365
	CommonName <CmonNm>	[0..1]	Text		365
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		365
	LocationAndContact <LctnAndCtct>	[0..1]	±		365
	SchemeData <SchmeData>	[0..1]	Text		366
	POI <POI>	[0..1]			366
	Identification <Id>	[1..1]	±		366
	SystemName <SysNm>	[0..1]	Text		367
	GroupIdentification <Grpld>	[0..1]	Text		367
	Capabilities <Cpblties>	[0..1]	±		367
	TimeZone <TmZone>	[0..1]	Text		368
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		368
	Component <Cmpnt>	[0..*]	±		369
	Card <Card>	[0..1]			371
	ProtectedCardData <PrtctdCardData>	[0..1]	±		372
	PrivateCardData <PrvtCardData>	[0..1]	Binary		373
	PlainCardData <PlainCardData>	[0..1]			373
	PAN <PAN>	[1..1]	Text		373
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		373
	EffectiveDate <FctvDt>	[0..1]	Text		373
	ExpiryDate <XpryDt>	[0..1]	Text		374
	ServiceCode <SvcCd>	[0..1]	Text		374
	Track1 <Trck1>	[0..1]	Text		374

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Track2 <Trck2>	[0..1]	Text		374
	Track3 <Trck3>	[0..1]	Text		374
	CardholderName <CrdhldrNm>	[0..1]	Text		374
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		374
	MaskedPAN <MskdPAN>	[0..1]	Text		375
	IssuerBIN <IssrBIN>	[0..1]	Text		375
	CardCountryCode <CardCtryCd>	[0..1]	Text		375
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		375
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		375
	CardBrand <CardBrnd>	[0..1]	Text		375
	CardProductType <CardPdctTp>	[0..1]	CodeSet		375
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		376
	InternationalCard <IntrnlCard>	[0..1]	Indicator		376
	AllowedProduct <AllwdPdct>	[0..*]	Text		376
	ServiceOption <SvcOptn>	[0..1]	Text		376
	AdditionalCardData <AddtlCardData>	[0..1]	Text		376
	Check <Chck>	[0..1]			376
	BankIdentification <Bkld>	[0..1]	Text		377
	AccountNumber <AcctNb>	[0..1]	Text		377
	CheckNumber <ChckNb>	[0..1]	Text		377
	CheckCardNumber <ChckCardNb>	[0..1]	Text		377
	CheckTrackData2 <ChckTrckData2>	[0..1]			377
	TrackNumber <TrckNb>	[0..1]	Quantity		378
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		378
	TrackValue <TrckVal>	[1..1]	Text		378
	CheckType <ChckTp>	[0..1]	CodeSet		378
	Country <Ctry>	[0..1]	Text		379
	StoredValueAccount <StordValAcct>	[0..*]			379
	AccountType <AcctTp>	[0..1]	CodeSet		379
	IdentificationType <IdTp>	[0..1]	CodeSet		380
	Identification <Id>	[0..1]	Text		380

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Brand <Brnd>	[0..1]	Text		381
	Provider <Prvdr>	[0..1]	Text		381
	OwnerName <OwnrNm>	[0..1]	Text		381
	ExpiryDate <XpryDt>	[0..1]	Text		381
	EntryMode <NtryMd>	[0..1]	CodeSet		381
	Currency <Ccy>	[0..1]	CodeSet	C1	382
	Balance <Bal>	[0..1]	Amount		382
	LoyaltyAccount <LltyAcct>	[0..*]	±		382
	CustomerDevice <CstmrDvc>	[0..1]	±		383
	Wallet <Wlt>	[0..1]	±		383
	PaymentToken <PmtTkn>	[0..1]	±		383
	MerchantToken <MrchntTkn>	[0..1]	±		384
	Cardholder <Crhdldr>	[0..1]			384
	Identification <Id>	[0..1]			388
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		388
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		388
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		389
	DriverIdentification <DrvrId>	[0..1]	Text		389
	CustomerNumber <CstmrNb>	[0..1]	Text		389
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		389
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		389
	PassportNumber <PsptNb>	[0..1]	Text		389
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		389
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		389
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		390
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		390
	JobNumber <JobNb>	[0..1]	Text		390
	Department <Dept>	[0..1]	Text		390
	EmailAddress <EmailAdr>	[0..1]	Text		390
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			390
	BirthDate <BirthDt>	[1..1]	Date		390

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		391
	CityOfBirth <CityOfBirth>	[1..1]	Text		391
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	391
	Other <Othr>	[0..*]	±		391
	Name <Nm>	[0..1]	Text		391
	Language <Lang>	[0..1]	CodeSet	C14	391
	BillingAddress <BlgAdr>	[0..1]	±		392
	ShippingAddress <ShppgAdr>	[0..1]	±		392
	TripNumber <TripNb>	[0..1]	Text		393
	Vehicle <Vhcl>	[0..1]	±		393
	Authentication <Authntcn>	[0..*]			394
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		396
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		397
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		398
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		398
	CardholderOnLinePIN <CrdhldrOnLinePIN>	[0..1]			398
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		398
	PINFormat <PINFrmt>	[1..1]	CodeSet		399
	AdditionalInput <AddtlInpt>	[0..1]	Text		399
	CardholderIdentification <CrdhldrId>	[0..1]			399
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		400
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		400
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		400
	DriverIdentification <DrvrId>	[0..1]	Text		401
	CustomerNumber <CstmrNb>	[0..1]	Text		401
	SocialSecurityNumber <ScI SctyNb>	[0..1]	Text		401
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		401
	PassportNumber <PsptNb>	[0..1]	Text		401
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		401
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		401
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		401

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		402
	JobNumber <JobNb>	[0..1]	Text		402
	Department <Dept>	[0..1]	Text		402
	EmailAddress <EmailAdr>	[0..1]	Text		402
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			402
	BirthDate <BirthDt>	[1..1]	Date		402
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		402
	CityOfBirth <CityOfBirth>	[1..1]	Text		403
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	403
	Other <Othr>	[0..*]	±		403
	AddressVerification <AdrVrfctn>	[0..1]			403
	AddressDigits <AdrDgts>	[0..1]	Text		403
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		404
	AuthenticationType <AuthntcnTp>	[0..1]	Text		404
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		404
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		404
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			404
	Identification <Id>	[1..1]	Text		405
	Value <Val>	[0..1]	Binary		405
	ProtectedValue <PrtctdVal>	[0..1]	±		405
	Type <Tp>	[0..1]	Text		405
	TransactionVerificationResult <TxVrfctnRslt>	[0..*]			405
	Method <Mtd>	[1..1]	CodeSet		406
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		407
	Result <Rslt>	[0..1]	CodeSet		407
	AdditionalResult <AddtlRslt>	[0..1]	Text		407
	PersonalData <PrsnlData>	[0..1]	Text		408
	MobileData <MobData>	[0..*]			408
	MobileCountryCode <MobCtryCd>	[0..1]	Text		408
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		408
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		409

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Geolocation <Glctn>	[0..1]			409
	GeographicCoordinates <GeogcCordints>	[0..1]			409
	Latitude <Lat>	[1..1]	Text		409
	Longitude <Long>	[1..1]	Text		409
	UTMCoordinates <UTMCordints>	[0..1]			410
	UTMZone <UTMZone>	[1..1]	Text		410
	UTMEastward <UTMEstwr>	[1..1]	Text		410
	UTMNorthward <UTMNrthwr>	[1..1]	Text		410
	SensitiveMobileData <SnstvMobData>	[0..1]			410
	MSISDN <MSISDN>	[1..1]	Text		411
	IMSI <IMSI>	[0..1]	Text		411
	IMEI <IMEI>	[0..1]	Text		411
	ProtectedMobileData <PrctcdMobData>	[0..1]	±		411
	ProtectedCardholderData <PrctcdCrdhldrData>	[0..1]	±		411
	SaleEnvironment <SaleEnv>	[0..1]			412
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		412
	Currency <Ccy>	[0..1]	CodeSet	C1	413
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		413
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		413
	MinimumSplitAmount <MinSpltAmt>	[0..1]	Amount		414
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		414
	LoyaltyHandling <LltyHdlg>	[0..1]	CodeSet		414

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.2.2 Context <Cntxt>

Presence: [0..1]

Definition: Context in which the transaction is performed (payment and sale).

Impacted by: C10 "OneElementPresenceRule"

Context <Cntxt> contains the following **PaymentContext30** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentContext <PmtCntxt>	[0..1]			215
	CardPresent <CardPres>	[0..1]	Indicator		215
	CardholderPresent <CrhdldrPres>	[0..1]	Indicator		215
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		216
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		216
	TransactionEnvironment <TxEnvnt>	[0..1]	CodeSet		216
	TransactionChannel <TxChanl>	[0..1]	CodeSet		216
	BusinessArea <BizArea>	[0..1]	CodeSet		217
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		217
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	217
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		218
	FallbackIndicator <FlfbckInd>	[0..1]	CodeSet		218
	SupportedOption <SpprtOptn>	[0..*]	CodeSet		219
	SaleContext <SaleCntxt>	[0..1]			219
	SaleIdentification <SaleId>	[0..1]	Text		220
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		220
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		221
	CashierIdentification <CshrlId>	[0..1]	Text		221
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	221
	ShiftNumber <ShftNb>	[0..1]	Text		221
	CustomerOrderRequestFlag <CstmrOrdrReqFlg>	[0..1]	Indicator		221
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		221
	InvoiceNumber <InvNb>	[0..1]	Text		221
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		222
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			222
	CommonName <CmonNm>	[1..1]	Text		222
	Address <Adr>	[0..1]	Text		222
	CountryCode <CtryCd>	[1..1]	CodeSet		222
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		222
	RegisteredIdentifier <RegdIdr>	[1..1]	Text		222
	SplitPayment <Spltpmt>	[0..1]	Indicator		223

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RemainingAmount <RmngAmt>	[0..1]	Amount		223
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		223
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		223
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		223
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		224
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		224
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	224
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		225
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		225
	SystemToNotify <SysToNtfy>	[0..1]	Text		225
	Debtor <Dbtr>	[0..1]	±		226
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	227
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		227
	Creditor <Cdtr>	[0..1]	±		227
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	228
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		229
	DirectDebitContext <DrctDbtCntxt>	[0..1]			229
	Debtor <Dbtr>	[0..1]	±		230
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	231
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		232
	Creditor <Cdtr>	[0..1]	±		232
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	233
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		234
	MandateRelatedInformation <MndtRltdInf>	[1..1]			234
	MandateIdentification <MndtId>	[1..1]	Text		235
	DateOfSignature <DtOfSgntr>	[0..1]	Date		235
	MandateImage <MndtImg>	[0..1]	Binary		235
	ProtectedMandateImage <PrctcdMndtImg>	[0..1]	±		235

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.2.2.1 PaymentContext <PmtCntxt>

Presence: [0..1]

Definition: Context of the card payment transaction.

PaymentContext <PmtCntxt> contains the following **PaymentContext29** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardPresent <CardPres>	[0..1]	Indicator		215
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		215
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		216
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		216
	TransactionEnvironment <TxEnv<	[0..1]	CodeSet		216
	TransactionChannel <TxChanl>	[0..1]	CodeSet		216
	BusinessArea <BizArea>	[0..1]	CodeSet		217
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		217
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	217
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		218
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		218
	SupportedOption <SpptdOptn>	[0..*]	CodeSet		219

10.1.4.2.2.1.1 CardPresent <CardPres>

Presence: [0..1]

Definition: Indicates whether the transaction has been initiated by a card physically present or not.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.1.2 CardholderPresent <CrdhldrPres>

Presence: [0..1]

Definition: Indicates whether the transaction has been initiated in presence of the cardholder or not.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.1.3 OnLineContext <OnLineCntxt>

Presence: [0..1]

Definition: On-line or off-line context of the transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.1.4 AttendanceContext <AttndncCntxt>

Presence: [0..1]

Definition: Human attendance at the POI (Point Of Interaction) location during the transaction.

Datatype: "AttendanceContext1Code" on page 534

CodeName	Name	Definition
ATTD	Attended	Attended payment, with an attendant.
SATT	SemiAttended	Semi-attended, including self checkout. An attendant supervises several payment, and could be called to help the cardholder.
UATT	Unattended	Unattended payment, no attendant present.

10.1.4.2.2.1.5 TransactionEnvironment <TxEnvnt>

Presence: [0..1]

Definition: Indicates the environment of the transaction.

Datatype: "TransactionEnvironment1Code" on page 579

CodeName	Name	Definition
MERC	Merchant	Merchant environment.
PRIV	Private	Private environment.
PUBL	Public	Public environment.

10.1.4.2.2.1.6 TransactionChannel <TxChanl>

Presence: [0..1]

Definition: Identifies the type of the communication channels used by the cardholder to the acceptor system.

Datatype: "TransactionChannel5Code" on page 579

CodeName	Name	Definition
MAIL	MailOrder	Mail order.
TLPH	TelephoneOrder	Telephone order.
ECOM	ElectronicCommerce	Electronic commerce.
TVPY	TelevisionPayment	Payment on television.

CodeName	Name	Definition
SECM	SecuredElectronicCommerce	Electronic commerce with cardholder authentication.
MOBL	MobilePayment	Payment performed through a cardholder mobile device.
MPOS	MobilePOS	Payment performed through a merchant mobile device.

10.1.4.2.2.1.7 BusinessArea <BizArea>

Presence: [0..1]

Definition: Defines the business context of this transaction that could imply specific scheme rules.

Datatype: "BusinessArea2Code" on page 538

CodeName	Name	Definition
AIBD	ArtificialIntelligenceBasedDecision	The payment is initiated by an artificial intelligence based decision.
PPAY	PlainPayment	The card is used to perform a plain payment.
TKNF	TransitKnownFare	The card is used in a Transit business case where the fare amount is known when the transaction is initiated.
EOPT	EnergyOpenPayment	Indicates when the card is used in an energy business case where the amount could not be assessed when the transaction is initiated.
TOPT	TransitOpenPayment	Indicates when the card is used in a transit business case where the fare amount is not known when the transaction is initiated.

10.1.4.2.2.1.8 AttendantMessageCapable <AttdntMsgCpbl>

Presence: [0..1]

Definition: Indicates whether a message can be sent or not on an attendant display (attendant display present or not).

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.1.9 AttendantLanguage <AttdntLang>

Presence: [0..1]

Definition: Language used to display messages to the attendant.

Reference ISO 639-1 (alpha-2) et ISO 639-2 (alpha-3).

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 554

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.4.2.2.1.10 CardDataEntryMode <CardDataNtryMd>

Presence: [0..1]

Definition: Entry mode of the card data.

Datatype: "CardDataReading8Code" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.2.2.1.11 FallbackIndicator <FlbckInd>

Presence: [0..1]

Definition: Indicator of a card entry mode fallback.

Datatype: "CardFallback1Code" on page 541

CodeName	Name	Definition
FFLB	FallbackAfterFailure	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal failed.
SFLB	FallbackAfterSuccess	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal was successful.

CodeName	Name	Definition
NFLB	NoFallback	No card fall-back during the transaction in progress.

10.1.4.2.2.1.12 SupportedOption <SpprtdOptn>

Presence: [0..*]

Definition: Payment options the card acceptor can support.

Datatype: "SupportedPaymentOption2Code" on page 575

CodeName	Name	Definition
PART	PartialApproval	The entity supports a partial approval of the payment transaction.
MSRV	PaymentApprovalOnly	The entity supports the approval of the payment service along with the decline of additional requested services (as cash-back).
INSI	IssuerInstalment	The sender support IssuerInstalment proposals to the Cardholder.
PINQ	PINRequest	The sender is able to support Single Tap transaction.

10.1.4.2.2.2 SaleContext <SaleCntxt>

Presence: [0..1]

Definition: Context of the sale involving the card payment transaction.

SaleContext <SaleCntxt> contains the following **SaleContext4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SaleIdentification <SaleId>	[0..1]	Text		220
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		220
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		221
	CashierIdentification <CshrId>	[0..1]	Text		221
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	221
	ShiftNumber <ShiftNb>	[0..1]	Text		221
	CustomerOrderRequestFlag <CstmrOrdrrReqFlg>	[0..1]	Indicator		221
	PurchaseOrderNumber <PurchsOrdrrNb>	[0..1]	Text		221
	InvoiceNumber <InvNb>	[0..1]	Text		221
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		222
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			222
	CommonName <CmonNm>	[1..1]	Text		222
	Address <Adr>	[0..1]	Text		222
	CountryCode <CtryCd>	[1..1]	CodeSet		222
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		222
	RegisteredIdentifier <Regdldr>	[1..1]	Text		222
	SplitPayment <Spltpmt>	[0..1]	Indicator		223
	RemainingAmount <RmngAmt>	[0..1]	Amount		223
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		223
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		223
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		223
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		224
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		224

10.1.4.2.2.2.1 SaleIdentification <SaleId>

Presence: [0..1]

Definition: Identification of the sale terminal (electronic cash register or point of sale terminal) or the sale system.

Datatype: "Max35Text" on page 587

10.1.4.2.2.2.2 SaleReferenceNumber <SaleRefNb>

Presence: [0..1]

Definition: Identify a sale transaction assigned by the sale system.

Datatype: "Max35Text" on page 587

10.1.4.2.2.2.3 SaleReconciliationIdentification <SaleRcncltnId>

Presence: [0..1]

Definition: Identifier of the reconciliation between the Sale system and the POI system.

Datatype: "Max35Text" on page 587

10.1.4.2.2.2.4 CashierIdentification <CshrlId>

Presence: [0..1]

Definition: Identification of the cashier who carried out the transaction.

Datatype: "Max35Text" on page 587

10.1.4.2.2.2.5 CashierLanguage <CshrLang>

Presence: [0..*]

Definition: Languages used by the cashier.

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 554

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.4.2.2.2.6 ShiftNumber <ShftNb>

Presence: [0..1]

Definition: Identifies the shift of the cashier.

Datatype: "Max2NumericText" on page 586

10.1.4.2.2.2.7 CustomerOrderRequestFlag <CstmrOrdRReqFlg>

Presence: [0..1]

Definition: Flag indicating that list of CustomerOrders should be returned in response.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.2.8 PurchaseOrderNumber <PurchsOrdRNb>

Presence: [0..1]

Definition: Identification of the purchase order.

Datatype: "Max35Text" on page 587

10.1.4.2.2.2.9 InvoiceNumber <InvNb>

Presence: [0..1]

Definition: Identification of the invoice.

Datatype: "Max35Text" on page 587

10.1.4.2.2.2.10 DeliveryNoteNumber <DlvryNoteNb>

Presence: [0..1]

Definition: Identification allocated by the sale system and given to the customer.

Datatype: "Max35Text" on page 587

10.1.4.2.2.2.11 SponsoredMerchant <SpnsrdMrchnt>

Presence: [0..*]

Definition: Merchant using the payment services of a payment facilitator, acting as a card acceptor.

SponsoredMerchant <SpnsrdMrchnt> contains the following **Organisation26** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CommonName <CmonNm>	[1..1]	Text		222
	Address <Adr>	[0..1]	Text		222
	CountryCode <CtryCd>	[1..1]	CodeSet		222
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		222
	RegisteredIdentifier <Regldlr>	[1..1]	Text		222

10.1.4.2.2.2.11.1 CommonName <CmonNm>

Presence: [1..1]

Definition: Name of the merchant.

Datatype: "Max70Text" on page 589

10.1.4.2.2.2.11.2 Address <Adr>

Presence: [0..1]

Definition: Location of the merchant.

Datatype: "Max140Text" on page 585

10.1.4.2.2.2.11.3 CountryCode <CtryCd>

Presence: [1..1]

Definition: Country of the merchant.

Datatype: "ISO3NumericCountryCode" on page 553

10.1.4.2.2.2.11.4 MerchantCategoryCode <MrchntCtgyCd>

Presence: [1..1]

Definition: Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.

Datatype: "Min3Max4Text" on page 590

10.1.4.2.2.2.11.5 RegisteredIdentifier <Regldlr>

Presence: [1..1]

Definition: Identifier of the sponsored merchant assigned by the payment facilitator of their acquirer.

Datatype: "Max35Text" on page 587

10.1.4.2.2.2.12 SplitPayment <SpltPmt>

Presence: [0..1]

Definition: True if the payment transaction is a partial payment of the sale transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.2.13 RemainingAmount <RmngAmt>

Presence: [0..1]

Definition: Remaining amount to complete the sale transaction, if a partial payment has been completed for the sale transaction.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.4.2.2.2.14 ForceOnlineFlag <ForceOnlnFlg>

Presence: [0..1]

Definition: Indicates if the Cashier requires POI forces online access to the Acquirer.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.2.15 ReuseCardDataFlag <ReuseCardDataFlg>

Presence: [0..1]

Definition: Indicates if the card data has to be taken from a previous transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.2.16 AllowedEntryMode <AllwdNtryMd>

Presence: [0..*]

Definition: Type of card data reading.

Datatype: "CardDataReading8Code" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.

CodeName	Name	Definition
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.2.2.17 SaleTokenScope <SaleTknScp>

Presence: [0..1]

Definition: Scope of the token that identifies the payment mean of the customer.

Datatype: "SaleTokenScope1Code" on page 574

CodeName	Name	Definition
MULT	MultipleUse	The token is generated to recognise a customer for a longer period.
SNGL	SingleUse	The token is generated to recognise a customer during the lifetime of a transaction.

10.1.4.2.2.18 AdditionalSaleData <AddtlSaleData>

Presence: [0..1]

Definition: Additional information associated with the sale transaction.

Datatype: "Max70Text" on page 589

10.1.4.2.2.3 CreditTransferContext <CdtTrfCntxt>

Presence: [0..1]

Definition: Context of the credit transfer transaction.

Impacted by: C11 "OneElementPresenceRule"

CreditTransferContext <CdtTrfCntxt> contains the following **CreditTransferContext1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		225
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		225
	SystemToNotify <SysToNtfy>	[0..1]	Text		225
	Debtor <Dbtr>	[0..1]	±		226
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	227
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		227
	Creditor <Cdtr>	[0..1]	±		227
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	228
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		229

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.4.2.2.3.1 AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>

Presence: [0..1]

Definition: Indicator that specifies if a notification is expected after a credit transfer request.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.3.2 WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>

Presence: [0..1]

Definition: Indicator from the sale system to the accepting system to wait for notification before stating that the payment is done.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.2.3.3 SystemToNotify <SysToNtfy>

Presence: [0..1]

Definition: Reference of the system that should receive the notification of credit transfer.

Datatype: "Max1025Text" on page 584

10.1.4.2.2.3.4 Debtor <Dbtr>

Presence: [0..1]

Definition: Information related to the payer.

Debtor <Dbtr> contains the following elements (see "PartyIdentification272" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		444
	PostalAddress <PstlAdr>	[0..1]	±		445
	Identification <Id>	[0..1]			445
{Or	OrganisationIdentification <OrgId>	[1..1]			446
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer <Issr>	[0..1]	Text		448
Or}	PrivateIdentification <PrvtId>	[1..1]			448
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer <Issr>	[0..1]	Text		451
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	451
	ContactDetails <CtctDtls>	[0..1]	±		451

10.1.4.2.2.3.5 DebtorAccount <DbtrAcct>

Presence: [0..1]

Definition: Information related to the payer's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

DebtorAccount <DbtrAcct> contains the following elements (see "CashAccount40" on page 131 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		131
	Type <Tp>	[0..1]	±		131
	Currency <Ccy>	[0..1]	CodeSet	C2	132
	Name <Nm>	[0..1]	Text		132
	Proxy <Prxy>	[0..1]	±		132

Constraints

- IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.2.2.3.6 ProtectedDebtorAccount <PrtctdDbtrAcct>

Presence: [0..1]

Definition: Secured information related to the debtor's account.

ProtectedDebtorAccount <PrtctdDbtrAcct> contains the following elements (see "ContentInformationType39" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.4.2.2.3.7 Creditor <Cdtr>

Presence: [0..1]

Definition: Information related to the payee.

Creditor <Cdtr> contains the following elements (see "PartyIdentification272" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		444
	PostalAddress <PstlAdr>	[0..1]	±		445
	Identification <Id>	[0..1]			445
{Or	OrganisationIdentification <OrgId>	[1..1]			446
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer <Issr>	[0..1]	Text		448
Or}	PrivateIdentification <PrvtId>	[1..1]			448
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer <Issr>	[0..1]	Text		451
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	451
	ContactDetails <CtctDtls>	[0..1]	±		451

10.1.4.2.2.3.8 CreditorAccount <CdtrAcct>

Presence: [0..1]

Definition: Information related to the payee's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

CreditorAccount <CdtrAcct> contains the following elements (see "[CashAccount40](#)" on page 131 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		131
	Type <Tp>	[0..1]	±		131
	Currency <Ccy>	[0..1]	CodeSet	C2	132
	Name <Nm>	[0..1]	Text		132
	Proxy <Prxy>	[0..1]	±		132

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.2.2.3.9 ProtectedCreditorAccount <PrtctdCdtrAcct>

Presence: [0..1]

Definition: Secured information related to the creditor's account.

ProtectedCreditorAccount <PrtctdCdtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.4.2.2.4 DirectDebitContext <DrctDbtCntxt>

Presence: [0..1]

Definition: Context of the direct debit transaction.

DirectDebitContext <DrctDbtCntxt> contains the following **DirectDebitContext1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Debtor <Dbtr>	[0..1]	±		230
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	231
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		232
	Creditor <Cdtr>	[0..1]	±		232
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	233
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		234
	MandateRelatedInformation <MndtRltdInf>	[1..1]			234
	MandateIdentification <MndtId>	[1..1]	Text		235
	DateOfSignature <DtOfSgntr>	[0..1]	Date		235
	MandateImage <MndtImg>	[0..1]	Binary		235
	ProtectedMandateImage <PrctcdMndtImg>	[0..1]	±		235

10.1.4.2.2.4.1 Debtor <Dbtr>

Presence: [0..1]

Definition: Information related to the debtor.

Debtor <Dbtr> contains the following elements (see "PartyIdentification272" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		444
	PostalAddress <PstlAdr>	[0..1]	±		445
	Identification <Id>	[0..1]			445
{Or	OrganisationIdentification <OrgId>	[1..1]			446
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer </Issr>	[0..1]	Text		448
Or}	PrivateIdentification <PrvtId>	[1..1]			448
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer </Issr>	[0..1]	Text		451
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	451
	ContactDetails <CtctDtls>	[0..1]	±		451

10.1.4.2.2.4.2 DebtorAccount <DbtrAcct>

Presence: [0..1]

Definition: Information related to the debtor's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

DebtorAccount <DbtrAcct> contains the following elements (see "[CashAccount40](#)" on page 131 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		131
	Type <Tp>	[0..1]	±		131
	Currency <Ccy>	[0..1]	CodeSet	C2	132
	Name <Nm>	[0..1]	Text		132
	Proxy <Prxy>	[0..1]	±		132

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.2.2.4.3 ProtectedDebtorAccount <PrtctdDbtrAcct>

Presence: [0..1]

Definition: Secured information related to the debtor's account.

ProtectedDebtorAccount <PrtctdDbtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.4.2.2.4.4 Creditor <Cdtr>

Presence: [0..1]

Definition: Information related to the creditor.

Creditor <Cdtr> contains the following elements (see "PartyIdentification272" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		444
	PostalAddress <PstlAdr>	[0..1]	±		445
	Identification <Id>	[0..1]			445
{Or	OrganisationIdentification <OrgId>	[1..1]			446
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer <Issr>	[0..1]	Text		448
Or}	PrivateIdentification <PrvtId>	[1..1]			448
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer <Issr>	[0..1]	Text		451
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	451
	ContactDetails <CtctDtls>	[0..1]	±		451

10.1.4.2.2.4.5 CreditorAccount <CdtrAcct>

Presence: [0..1]

Definition: Information related to the creditor's account.

Impacted by: C7 "IdentificationOrProxyPresenceRule", C6 "IdentificationAndProxyGuideline"

CreditorAccount <CdtrAcct> contains the following elements (see "[CashAccount40](#)" on page 131 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		131
	Type <Tp>	[0..1]	±		131
	Currency <Ccy>	[0..1]	CodeSet	C2	132
	Name <Nm>	[0..1]	Text		132
	Proxy <Prxy>	[0..1]	±		132

Constraints

- **IdentificationAndProxyGuideline**

If the account identification is not defined through a conventional identification such as an email address or a mobile number, then the proxy element should be used for the identification of the account.

- **IdentificationOrProxyPresenceRule**

Identification must be present or Proxy must be present. Both may be present.

Following Must be True
 /Identification Must be present
 Or /Proxy Must be present

10.1.4.2.2.4.6 ProtectedCreditorAccount <PrtctdCdtrAcct>

Presence: [0..1]

Definition: Secured information related to the creditor's account.

ProtectedCreditorAccount <PrtctdCdtrAcct> contains the following elements (see "[ContentInformationType39](#)" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.4.2.2.4.7 MandateRelatedInformation <MndtRltdInf>

Presence: [1..1]

Definition: Provides further details of the mandate signed between the creditor and the debtor.

MandateRelatedInformation <MndtRltdInf> contains the following **MandateRelatedInformation17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MandateIdentification <MndtId>	[1..1]	Text		235
	DateOfSignature <DtOfSgntr>	[0..1]	Date		235
	MandateImage <MndtImg>	[0..1]	Binary		235
	ProtectedMandateImage <PrctcdMndtImg>	[0..1]	±		235

10.1.4.2.2.4.7.1 MandateIdentification <MndtId>

Presence: [1..1]

Definition: Unique identification, as assigned by the creditor, to unambiguously identify the mandate.

Datatype: "Max35Text" on page 587

10.1.4.2.2.4.7.2 DateOfSignature <DtOfSgntr>

Presence: [0..1]

Definition: Date on which the direct debit mandate has been signed by the debtor.

Datatype: "ISODate" on page 580

10.1.4.2.2.4.7.3 MandateImage <MndtImg>

Presence: [0..1]

Definition: Image of scanned signed mandate.

Datatype: "Max2MBBinary" on page 523

10.1.4.2.2.4.7.4 ProtectedMandateImage <PrctcdMndtImg>

Presence: [0..1]

Definition: Secured image of scanned signed mandate.

ProtectedMandateImage <PrctcdMndtImg> contains the following elements (see "ContentInformationType39" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.4.2.3 ServiceContent <SvcCntt>

Presence: [1..1]

Definition: Define the type of service answered.

Datatype: "RetailerService9Code" on page 572

CodeName	Name	Definition
DDYP	DeviceDisplayResponse	One system responds to the other system for a display request.
DINP	DeviceInputResponse	One system responds to the other System for a input request.
DPRP	DevicePrintResponse	One system responds to the other System for a print request.
DSOP	DevicePlaySoundResponse	One system responds to the other System for a play sound request.
DSIP	DeviceSecureInputResponse	One system responds to the other System for secure data input.
DCIP	DeviceInitialisationCardReaderResponse	The POI system responds to the Sale System for a card reader initialisation.
DCAP	DeviceSendApplicationProtocolDataUnitCardReaderResponse	The POI system responds to the Sale System for a card reader Application Protocol Data Unit sending.
DCPP	DevicePowerOffCardRequestResponse	The POI system responds to the Sale System for a card reader power off.
DCOP	DeviceTransmissionMessageResponse	The POI system responds to the Sale System after a message transmission.

10.1.4.2.4 DisplayResponse <DispRspn>

Presence: [0..1]

Definition: Content of the Display Response message.

DisplayResponse <DispRspn> contains the following **DeviceDisplayResponse3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	OutputResult <OutptRslt>	[1..*]			236
	DeviceType <DvcTp>	[1..1]	CodeSet		237
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		237
	Response <Rspn>	[1..1]	±		238

10.1.4.2.4.1 OutputResult <OutptRslt>

Presence: [1..*]

Definition: Give result for display request.

OutputResult <OutptRslt> contains the following **OutputResult3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		237
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		237
	Response <Rspn>	[1..1]	±		238

10.1.4.2.4.1.1 DeviceType <DvcTp>

Presence: [1..1]

Definition: Logical device located on a Sale Terminal or a POI Terminal, in term of class of information to output.

Datatype: "UserInterface9Code" on page 580

CodeName	Name	Definition
CDSP	CardholderDisplay	Cardholder display or interface.
CRCP	CardholderReceipt	Cardholder receipt.
MDSP	MerchantDisplay	Merchant display or interface.
MRCP	MerchantReceipt	Merchant receipt.
CRDO	OtherCardholderInterface	Other interface of the cardholder, for instance e-mail or smartphone message.
CSTM	CustomerStatement	Cardholder bank statement.

10.1.4.2.4.1.2 InformationQualifier <InfQlfr>

Presence: [1..1]

Definition: Qualification of the information to sent to an output logical device.

Datatype: "InformationQualify1Code" on page 551

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI

CodeName	Name	Definition
		could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.1.4.2.4.1.3 Response <Rspn>

Presence: [1..1]

Definition: Gives response for each peripheral.

Response <Rspn> contains the following elements (see "[ResponseType11](#)" on page 422 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		422
	ResponseReason <RspnRsn>	[0..1]	CodeSet		423
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		424

10.1.4.2.5 InputResponse <InptRspn>

Presence: [0..1]

Definition: Content of the Input Response message.

InputResponse <InptRspn> contains the following **DeviceInputResponse7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	OutputResult <OutptRslt>	[0..1]			239
	DeviceType <DvcTp>	[1..1]	CodeSet		239
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		240
	Response <Rspn>	[1..1]	±		241
	InputResult <InptRslt>	[1..1]			241
	DeviceType <DvcTp>	[1..1]	CodeSet		241
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		242
	InputResultData <InptRsltData>	[1..1]			242
	InputCommand <InptCmd>	[1..1]	CodeSet		243
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		244
	FunctionKey <FctnKey>	[0..1]	Quantity		244
	InputMessage <InptMsg>	[0..1]	Text		244
	Password <Pwd>	[0..1]	±		244
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			245
	ImageFormat <ImgFrmt>	[1..1]	Text		245
	ImageData <ImgData>	[0..1]	Binary		245
	ImageReference <ImgRef>	[0..1]	Text		245
	AdditionalInformation <AddtlInf>	[0..1]	Text		245

10.1.4.2.5.1 OutputResult <OutptRslt>

Presence: [0..1]

Definition: Result of display request.

OutputResult <OutptRslt> contains the following **OutputResult3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		239
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		240
	Response <Rspn>	[1..1]	±		241

10.1.4.2.5.1.1 DeviceType <DvcTp>

Presence: [1..1]

Definition: Logical device located on a Sale Terminal or a POI Terminal, in term of class of information to output.

Datatype: "UserInterface9Code" on page 580

CodeName	Name	Definition
CDSP	CardholderDisplay	Cardholder display or interface.
CRCP	CardholderReceipt	Cardholder receipt.
MDSP	MerchantDisplay	Merchant display or interface.
MRCP	MerchantReceipt	Merchant receipt.
CRDO	OtherCardholderInterface	Other interface of the cardholder, for instance e-mail or smartphone message.
CSTM	CustomerStatement	Cardholder bank statement.

10.1.4.2.5.1.2 InformationQualifier <InfQlfr>

Presence: [1..1]

Definition: Qualification of the information to sent to an output logical device.

Datatype: "InformationQualify1Code" on page 551

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.1.4.2.5.1.3 Response <Rspn>

Presence: [1..1]

Definition: Gives response for each peripheral.

Response <Rspn> contains the following elements (see "ResponseType11" on page 422 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		422
	ResponseReason <RspnRsn>	[0..1]	CodeSet		423
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		424

10.1.4.2.5.2 InputResult <InptRslt>

Presence: [1..1]

Definition: Result of input request.

InputResult <InptRslt> contains the following **InputResult6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		241
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		242
	InputResultData <InptRsltData>	[1..1]			242
	InputCommand <InptCmd>	[1..1]	CodeSet		243
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		244
	FunctionKey <FctnKey>	[0..1]	Quantity		244
	InputMessage <InptMsg>	[0..1]	Text		244
	Password <Pwd>	[0..1]	±		244
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			245
	ImageFormat <ImgFrmt>	[1..1]	Text		245
	ImageData <ImgData>	[0..1]	Binary		245
	ImageReference <ImgRef>	[0..1]	Text		245
	AdditionalInformation <AddtlInf>	[0..1]	Text		245

10.1.4.2.5.2.1 DeviceType <DvcTp>

Presence: [1..1]

Definition: Type of Input device.

Datatype: "SaleCapabilities2Code" on page 573

CodeName	Name	Definition
CHIN	CashierInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI

CodeName	Name	Definition
		System (InputCommand data element). The output device attached to this input device is the CashierDisplay device.
CUIN	CustomerInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element).

10.1.4.2.5.2.2 InformationQualifier <InfQlfr>

Presence: [1..1]

Definition: Qualifies the type of given information.

Datatype: "InformationQualify1Code" on page 551

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.1.4.2.5.2.3 InputResultData <InptRsItData>

Presence: [1..1]

Definition: Data resulting of input after POI or Sale processing.

InputResultData <InptRsltData> contains the following **InputResultData6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InputCommand <InptCmd>	[1..1]	CodeSet		243
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		244
	FunctionKey <FctnKey>	[0..1]	Quantity		244
	InputMessage <InptMsg>	[0..1]	Text		244
	Password <Pwd>	[0..1]	±		244
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			245
	ImageFormat <ImgFrmt>	[1..1]	Text		245
	ImageData <ImgData>	[0..1]	Binary		245
	ImageReference <ImgRef>	[0..1]	Text		245
	AdditionalInformation <AddtlInf>	[0..1]	Text		245

10.1.4.2.5.2.3.1 InputCommand <InptCmd>

Presence: [1..1]

Definition: Type of processed input.

Datatype: "InputCommand1Code" on page 552

CodeName	Name	Definition
DCSG	DecimalString	Wait for a string of digit characters with a decimal point, the length range could be specified.
DGSG	DigitString	Wait for a string of digit characters.
GAKY	GetAnyKey	Wait for a key pressed on the Terminal, to be able to read the message displayed on the Terminal.
GCNF	GetConfirmation	Wait for a confirmation Yes (Y) or No (N) on the Sale System. Wait for a confirmation (Valid or Cancel button) on the POI Terminal. The result of the command is a Boolean: True or False.
GFKY	GetFunctionKey	Wait for a function key pressed on the Terminal: From POI, Valid, Clear, Correct, Generic Function key number. From Sale, Generic Function key.
GMNE	GetMenuEntry	To choose an entry among a list of entries (all of them are not necessary selectable). The OutputFormat has to be MenuEntry.
PSWD	Password	Request to enter a password with masked characters while typing the password.

CodeName	Name	Definition
SITE	SiteManager	Wait for a confirmation Yes (Y) or No (N) of the Site Manager on the Sale System.
TXSG	TextString	Wait for a string of alphanumeric characters.
HTML	XHTMLText	Wait for a XHTML data.
SIGN	Signature	Request to wait for signature.

10.1.4.2.5.2.3.2 ConfirmedFlag <ConfdFlg>

Presence: [0..1]

Definition: Flag of notification of card to be entered in the POI card reader.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.4.2.5.2.3.3 FunctionKey <FctnKey>

Presence: [0..1]

Definition: Specifies the number of the function key which is typed by the Customer on the POI system or the Cashier on the Sale System.

Datatype: ["Number" on page 582](#)

10.1.4.2.5.2.3.4 InputMessage <InptMsg>

Presence: [0..1]

Definition: Specifies the input text and data given by the POI or the Sale System.

Datatype: ["Max20000Text" on page 586](#)

10.1.4.2.5.2.3.5 Password <Pwd>

Presence: [0..1]

Definition: An enciphered password typed by the Customer on the POI system or the Cashier on the Sale system.

Password <Pwd> contains the following elements (see ["ContentInformationType39" on page 496](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.4.2.5.2.3.6 ImageCapturedSignature <ImgCaptrdSgnt>

Presence: [0..1]

Definition: Numeric value of a handwritten signature.

ImageCapturedSignature <ImgCaptrdSgnt> contains the following **CapturedSignature1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ImageFormat <ImgFrmt>	[1..1]	Text		245
	ImageData <ImgData>	[0..1]	Binary		245
	ImageReference <ImgRef>	[0..1]	Text		245
	AdditionalInformation <AddtlInf>	[0..1]	Text		245

10.1.4.2.5.2.3.6.1 ImageFormat <ImgFrmt>

Presence: [1..1]

Definition: Format of the image.

Datatype: "Max35Text" on page 587

10.1.4.2.5.2.3.6.2 ImageData <ImgData>

Presence: [0..1]

Definition: Data of the image.

Datatype: "Max2MBBinary" on page 523

10.1.4.2.5.2.3.6.3 ImageReference <ImgRef>

Presence: [0..1]

Definition: URL or name of the image.

Datatype: "Max500Text" on page 588

10.1.4.2.5.2.3.6.4 AdditionalInformation <AddtlInf>

Presence: [0..1]

Definition: Additional information for the image.

Datatype: "Max140Text" on page 585

10.1.4.2.6 PrintResponse <PrtRspn>

Presence: [0..1]

Definition: Content of the Print Response message.

PrintResponse <PrtRspn> contains the following **DevicePrintResponse1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		245

10.1.4.2.6.1 DocumentQualifier <DocQlfr>

Presence: [1..1]

Definition: Qualification of the document printed to the Cashier or the Customer.

Datatype: "DocumentType7Code" on page 548

CodeName	Name	Definition
JNRL	Journal	When the POI or the Sale System wants to store a message on the journal printer or electronic journal of the Sale Terminal (it is sometimes a Sale Logging/Journal Printer).
CRCP	CustomerReceipt	When the Sale System requires the POI system to print the Customer receipt.
HRCP	CashierReceipt	When the Sale system print the Cashier copy of the Payment receipt.
SRCP	SaleReceipt	When the Sale System requires the POI system to print the Sale receipt.
RPIN	RelatedPaymentInstruction	Document is a linked payment instruction to which the current payment instruction is related, for example, in a cover scenario.
VCHR	Voucher	Document is an electronic payment document.

10.1.4.2.7 SecureInputResponse <ScrInptRspn>

Presence: [0..1]

Definition: Response to a secure input request.

SecureInputResponse <ScrInptRspn> contains the following **DeviceSecureInputResponse6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardholderPIN <CrdhldrPIN>	[0..1]			246
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		247
	PINFormat <PINFrmt>	[1..1]	CodeSet		247
	AdditionalInput <AddtlInpt>	[0..1]	Text		247

10.1.4.2.7.1 CardholderPIN <CrdhldrPIN>

Presence: [0..1]

Definition: Cardholder PIN data when needed.

CardholderPIN <CrdhldrPIN> contains the following **OnLinePIN11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		247
	PINFormat <PINFrmt>	[1..1]	CodeSet		247
	AdditionalInput <AddtlInpt>	[0..1]	Text		247

10.1.4.2.7.1.1 EncryptedPINBlock <NcrptdPINBlck>

Presence: [1..1]

Definition: Encrypted PIN (Personal Identification Number).

EncryptedPINBlock <NcrptdPINBlck> contains the following elements (see "ContentInformationType40" on page 511 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		511
	EnvelopedData <EnvlpdData>	[1..1]	±		512

10.1.4.2.7.1.2 PINFormat <PINFrmt>

Presence: [1..1]

Definition: PIN (Personal Identification Number) format before encryption.

Datatype: "PINFormat3Code" on page 562

CodeName	Name	Definition
ISO0	ISO0	PIN diversified with the card account number, conforming to the standard ISO 9564-2.
ISO1	ISO1	PIN completed with random padding characters, conforming to the standard ISO 9564-2.
ISO2	ISO2	PIN without diversification characters, conforming to the standard ISO 9564-2.
ISO3	ISO3	PIN diversified with the card account number and random characters, conforming to the standard ISO 9564-2.
ISO4	ISO4	PIN format used with AES encryption, conforming to the new ISO SC2 format.
ISO5	ISO5	Alternative PIN format used with AES encryption, conforming to the new ISO SC2 format.

10.1.4.2.7.1.3 AdditionalInput <AddtlInpt>

Presence: [0..1]

Definition: Additional information required to verify the PIN (Personal Identification Number).

Datatype: "Max35Text" on page 587

10.1.4.2.8 InitialisationCardReaderResponse <InitlStnCardRdrRspn>

Presence: [0..1]

Definition: Content received after a card initialisation.

InitialisationCardReaderResponse <InitlStnCardRdrRspn> contains the following
DeviceInitialisationCardReaderResponse2 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardEntryMode <CardNtryMd>	[0..1]	CodeSet		248
	ICCRResetData <ICCRstData>	[0..1]			248
	ATRValue <ATRVa/>	[0..1]	Binary		249
	CardStatus <CardSts>	[0..1]	Binary		249
	AdditionalInformation <AddtlInf>	[0..1]	Binary		249

10.1.4.2.8.1 CardEntryMode <CardNtryMd>

Presence: [0..1]

Definition: Payment instrument entry mode requested by the Sale System.

Datatype: "CardDataReading8Code" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.4.2.8.2 ICCResetData <ICCRstData>

Presence: [0..1]

Definition: Data of a Chip Card related to the reset of the chip.

ICCRstData <ICCRstData> contains the following **ICCRstData1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ATRValue <ATRVa>	[0..1]	Binary		249
	CardStatus <CardSts>	[0..1]	Binary		249

10.1.4.2.8.2.1 ATRValue <ATRVa>

Presence: [0..1]

Definition: Value of the Answer To Reset of a chip card.

Datatype: "Max140Binary" on page 522

10.1.4.2.8.2.2 CardStatus <CardSts>

Presence: [0..1]

Definition: Status of a smartcard response to a command (SW1-SW2).

Datatype: "Max35Binary" on page 523

10.1.4.2.8.3 AdditionalInformation <AddtlInf>

Presence: [0..1]

Definition: Additional information about the Device Initialisation Card Reader Response.

Datatype: "Max10000Binary" on page 522

10.1.4.2.9 CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn>

Presence: [0..1]

Definition: Content of the Card Reader APDU (Application Protocol Data Unit) response message.

CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn> contains the following **DeviceSendApplicationProtocolDataUnitCardReaderResponse1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Data <Data>	[0..1]	Binary		249
	CardStatus <CardSts>	[1..1]	Binary		249

10.1.4.2.9.1 Data <Data>

Presence: [0..1]

Definition: Class field of the Application Protocol Data Unit command (CLA).

Datatype: "Min1Max256Binary" on page 524

10.1.4.2.9.2 CardStatus <CardSts>

Presence: [1..1]

Definition: Status of a smartcard response to a command (SW1-SW2). Reference: ISO 7816-4.

Datatype: "Min1Max256Binary" on page 524

10.1.4.2.10 TransmissionResponse <TrnsmssnRspn>

Presence: [0..1]

Definition: Content of the Transmit Response message.

TransmissionResponse <TrnsmssnRspn> contains the following
DeviceTransmitMessageResponse1 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ReceivedMessage <RcvdMsg>	[0..1]	Binary		250

10.1.4.2.10.1 ReceivedMessage <RcvdMsg>

Presence: [0..1]

Definition: Content of a transmitted message.

Datatype: "Max100KBinary" on page 522

10.1.4.2.11 Response <Rspn>

Presence: [1..1]

Definition: Result of the processing of the request.

Response <Rspn> contains the following elements (see "ResponseType11" on page 422 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		422
	ResponseReason <RspnRsn>	[0..1]	CodeSet		423
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		424

10.1.4.2.12 SupplementaryData <SplmtryData>

Presence: [0..*]

Definition: Additional information incorporated as an extension to the message.

Impacted by: C13 "SupplementaryDataRule"

SupplementaryData <SplmtryData> contains the following elements (see "SupplementaryData1" on page 428 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PlaceAndName <PlcAndNm>	[0..1]	Text		429
	Envelope <Envlp>	[1..1]	(External Schema)		429

Constraints

- **SupplementaryDataRule**

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

10.1.5 Address

10.1.5.1 CommunicationAddress9

Definition: Communication information.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PostalAddress <PstlAdr>	[0..1]	±		251
	Email <Email>	[0..1]	Text		251
	URLAddress <URLAdr>	[0..1]	Text		252
	Phone <Phne>	[0..1]	Text		252
	CustomerService <CstmrSvc>	[0..1]	Text		252
	AdditionalContactInformation <AddtlCtctInf>	[0..1]	Text		252

10.1.5.1.1 PostalAddress <PstlAdr>

Presence: [0..1]

Definition: Postal address of the entity.

PostalAddress <PstlAdr> contains the following elements (see "[PostalAddress22](#)" on page 459 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		460
	Department <Dept>	[0..1]	Text		460
	SubDepartment <SubDept>	[0..1]	Text		460
	AddressLine <AdrLine>	[0..2]	Text		460
	StreetName <StrtNm>	[0..1]	Text		461
	BuildingNumber <BldgNb>	[0..1]	Text		461
	PostCode <PstCd>	[0..1]	Text		461
	TownName <TwnNm>	[0..1]	Text		461
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		461
	CountryCode <CtryCd>	[0..1]	Text		461

10.1.5.1.2 Email <Email>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 586

10.1.5.1.3 URLAddress <URLAdr>

Presence: [0..1]

Definition: Address for the Universal Resource Locator (URL), for example used over the www (HTTP) service.

Datatype: "Max256Text" on page 586

10.1.5.1.4 Phone <Phne>

Presence: [0..1]

Definition: Collection of information that identifies a phone number, as defined by telecom services.

Datatype: "PhoneNumber" on page 591

10.1.5.1.5 CustomerService <CstmrSvc>

Presence: [0..1]

Definition: Phone number of the customer service.

Datatype: "PhoneNumber" on page 591

10.1.5.1.6 AdditionalContactInformation <AddtlCtctInf>

Presence: [0..1]

Definition: Additional information used to facilitate contact with the card acceptor, for instance sales agent name, dispute manager name.

Datatype: "Max256Text" on page 586

10.1.6 Configuration

10.1.6.1 AcquirerProtocolParameters18

Definition: Acceptor parameters dedicated to the acquirer protocol.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		255
	AcquirerIdentification <Acqrrld>	[1..*]	±		255
	Version <Vrsn>	[1..1]	Text		255
	ApplicationIdentification <Applld>	[0..*]	Text		255
	Host <Hst>	[0..*]			256
	HostIdentification <Hstld>	[1..1]	Text		256
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		256
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		257
	ExternallyTypeSupported <XtrnlyTpSpptd>	[0..*]	Text		257
	OnLineTransaction <OnLineTx>	[0..1]			257
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		258
	BatchTransfer <BtchTrf>	[0..1]			258
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		259
	MaximumNumber <MaxNb>	[0..1]	Quantity		259
	MaximumAmount <MaxAmt>	[0..1]	Amount		260
	ReTry <ReTry>	[0..1]	±		260
	TimeCondition <TmCond>	[0..1]	±		260
	CompletionExchange <CmpltnXchg>	[0..1]			260
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		261
	MaximumNumber <MaxNb>	[0..1]	Quantity		261
	MaximumAmount <MaxAmt>	[0..1]	Amount		262
	ReTry <ReTry>	[0..1]	±		262
	TimeCondition <TmCond>	[0..1]	±		262
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		262
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		262
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		263
	OffLineTransaction <OffLineTx>	[0..1]			263
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		264
	BatchTransfer <BtchTrf>	[0..1]			264
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		265
	MaximumNumber <MaxNb>	[0..1]	Quantity		265

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaximumAmount <MaxAmt>	[0..1]	Amount		266
	ReTry <ReTry>	[0..1]	±		266
	TimeCondition <TmCond>	[0..1]	±		266
	CompletionExchange <CmpltnXchg>	[0..1]			266
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		267
	MaximumNumber <MaxNb>	[0..1]	Quantity		267
	MaximumAmount <MaxAmt>	[0..1]	Amount		268
	ReTry <ReTry>	[0..1]	±		268
	TimeCondition <TmCond>	[0..1]	±		268
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		268
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		268
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		269
	ReconciliationExchange <RcncltnXchg>	[0..1]			269
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		269
	MaximumNumber <MaxNb>	[0..1]	Quantity		270
	MaximumAmount <MaxAmt>	[0..1]	Amount		270
	ReTry <ReTry>	[0..1]	±		270
	TimeCondition <TmCond>	[0..1]	±		270
	ReconciliationByAcquirer <RcncltnByAcqrr>	[0..1]	Indicator		271
	TotalsPerCurrency <TtlsPerCcy>	[0..1]	Indicator		271
	SplitTotals <SplTtls>	[0..1]	Indicator		271
	SplitTotalCriteria <SplTtlCrit>	[0..*]	CodeSet		271
	CompletionAdviceMandated <CmpltnAdvcmndtd>	[0..1]	Indicator		272
	AmountQualifierForReservation <AmtQlfrForRsvatn>	[0..*]	CodeSet		272
	ReconciliationError <RcncltnErr>	[0..1]	Indicator		272
	CardDataVerification <CardDataVrfctn>	[0..1]	Indicator		273
	NotifyOffLineCancellation <NtfyOffLineCxl>	[0..1]	Indicator		273
	BatchTransferContent <BtchTrfCntt>	[0..*]	CodeSet		273
	FileTransferBatch <FileTrfBtch>	[0..1]	Indicator		273
	BatchDigitalSignature <BtchDgtlSgntr>	[0..1]	Indicator		274
	MessageItem <Msgltn>	[0..*]	±		274

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProtectCardData <PrtctCardData>	[1..1]	Indicator		274
	PrivateCardData <PrvtCardData>	[0..1]	Indicator		274
	MandatorySecurityTrailer <MndtrySctyTrlr>	[0..1]	Indicator		275

10.1.6.1.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 575

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.1.2 AcquirerIdentification <Acqrrld>

Presence: [1..*]

Definition: Identification of the acquirer using this protocol.

AcquirerIdentification <Acqrrld> contains the following elements (see "GenericIdentification176" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

10.1.6.1.3 Version <Vrsn>

Presence: [1..1]

Definition: Version of the acquirer protocol parameters.

Datatype: "Max256Text" on page 586

10.1.6.1.4 ApplicationIdentification <Applld>

Presence: [0..*]

Definition: Identification of the payment application, user of the acquirer protocol.

Datatype: "Max35Text" on page 587

10.1.6.1.5 Host <Hst>

Presence: [0..*]

Definition: Acquirer host configuration.

Host <Hst> contains the following **AcquirerHostConfiguration11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	HostIdentification <HstId>	[1..1]	Text		256
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		256
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		257
	ExternallyTypeSupported <XtrnlyTpSprrtd>	[0..*]	Text		257

10.1.6.1.5.1 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of a host.

Datatype: "Max35Text" on page 587

10.1.6.1.5.2 MessageToSend <MsgToSnd>

Presence: [0..*]

Definition: Types of message to sent to this host.

Datatype: "MessageFunction47Code" on page 556

CodeName	Name	Definition
FAUQ	FinancialAuthorisationRequest	Request for authorisation with financial capture.
CCAQ	CancellationRequest	Request for cancellation.
CMPV	CompletionAdvice	Advice for completion without financial capture.
DGNP	DiagnosticRequest	Request for diagnostic.
RCLQ	ReconciliationRequest	Request for reconciliation.
CCAV	CancellationAdvice	Advice for cancellation.
BTCH	BatchTransfer	Transfer the financial data as a collection of transaction.
FRVA	FinancialReversalAdvice	Advice for reversal with financial capture.
AUTQ	AuthorisationRequest	The initiator requests an authorisation without financial impact to complete the transaction.
FCMV	FinancialCompletionAdvice	Advice for completion with financial capture.
DCCQ	CurrencyConversionRequest	Request for dynamic currency conversion.
RVRA	ReversalAdvice	Advice for reversal without financial capture.

CodeName	Name	Definition
DCAV	CurrencyConversionAdvice	Advice for dynamic currency conversion.
TRNA	TransactionAdvice	Advise of the transaction's processing.
NFRQ	NonFinancialRequest	Initiator of the message requests additional information to the receiver.
TRPQ	TransactionReportRequest	Request to receive of a report of transaction from the issuer to the receiver.
ATAF	AcceptorToAcquirerBatchFileExchange	Concatenation of multiple exchanges in one file.

10.1.6.1.5.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Uniquely identifies the protocol name and version to use when using these parameters.

Datatype: "Max8Text" on page 589

10.1.6.1.5.4 ExternallyTypeSupported <XtrnlyTpSpprtd>

Presence: [0..*]

Definition: List of types that the receiver supports and that the sender could use as type of an ExternallyDefinedData message component.

Datatype: "Max1025Text" on page 584

10.1.6.1.6 OnLineTransaction <OnLineTx>

Presence: [0..1]

Definition: Acquirer protocol parameters of transactions performing an online authorisation.

OnLineTransaction <OnLineTx> contains the following **AcquirerProtocolExchangeBehavior2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		258
	BatchTransfer <BtchTrf>	[0..1]			258
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		259
	MaximumNumber <MaxNb>	[0..1]	Quantity		259
	MaximumAmount <MaxAmt>	[0..1]	Amount		260
	ReTry <ReTry>	[0..1]	±		260
	TimeCondition <TmCond>	[0..1]	±		260
	CompletionExchange <CmpltnXchg>	[0..1]			260
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		261
	MaximumNumber <MaxNb>	[0..1]	Quantity		261
	MaximumAmount <MaxAmt>	[0..1]	Amount		262
	ReTry <ReTry>	[0..1]	±		262
	TimeCondition <TmCond>	[0..1]	±		262
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		262
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		262
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		263

10.1.6.1.6.1 FinancialCapture <FinCaptr>

Presence: [1..1]

Definition: Mode for the financial capture of the transaction by the acquirer.

Datatype: "FinancialCapture1Code" on page 551

CodeName	Name	Definition
AUTH	Authorisation	Financial capture of the transaction is performed by the acquirer during the authorisation exchange.
COMP	Completion	Financial capture of the transaction is performed by the acquirer during the completion exchange.
BTCH	Batch	Financial capture of the transaction is performed by the acquirer at the reception of a batch transfer.

10.1.6.1.6.2 BatchTransfer <BtchTrf>

Presence: [0..1]

Definition: Configuration of the batch transfers.

BatchTransfer <BtchTrf> contains the following **ExchangeConfiguration9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		259
	MaximumNumber <MaxNb>	[0..1]	Quantity		259
	MaximumAmount <MaxAmt>	[0..1]	Amount		260
	ReTry <ReTry>	[0..1]	±		260
	TimeCondition <TmCond>	[0..1]	±		260

10.1.6.1.6.2.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 549

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.1.6.1.6.2.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 582

10.1.6.1.6.2.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.6.1.6.2.4 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of an action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 517 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		517
	MaximumNumber <MaxNb>	[0..1]	Quantity		518
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		518

10.1.6.1.6.2.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 516 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		517
	EndTime <EndTm>	[0..1]	DateTime		517
	Period <Prd>	[0..1]	Text		517
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		517

10.1.6.1.6.3 CompletionExchange <CmpltnXchg>

Presence: [0..1]

Definition: Configuration parameters of completion exchanges.

CompletionExchange <CmpltnXchg> contains the following **ExchangeConfiguration10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		261
	MaximumNumber <MaxNb>	[0..1]	Quantity		261
	MaximumAmount <MaxAmt>	[0..1]	Amount		262
	ReTry <ReTry>	[0..1]	±		262
	TimeCondition <TmCond>	[0..1]	±		262
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		262
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		262

10.1.6.1.6.3.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 549

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.1.6.1.6.3.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 582

10.1.6.1.6.3.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.6.1.6.3.4 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of an action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 517 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		517
	MaximumNumber <MaxNb>	[0..1]	Quantity		518
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		518

10.1.6.1.6.3.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 516 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		517
	EndTime <EndTm>	[0..1]	DateTime		517
	Period <Prd>	[0..1]	Text		517
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		517

10.1.6.1.6.3.6 ExchangeFailed <XchgFaild>

Presence: [0..1]

Definition: Failed transaction must be exchanged.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.6.3.7 ExchangeDeclined <XchgDclnd>

Presence: [0..1]

Definition: Indicates that declined transaction must be exchanged.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.6.4 CancellationExchange <CxlXchg>

Presence: [0..1]

Definition: Configuration of the cancellation exchanges.

Datatype: "CancellationProcess2Code" on page 539

CodeName	Name	Definition
ADVC	Advice	Card payment transaction may be cancelled by an advice only before closure of the reconciliation period or before the capture by batch.
NALW	NotAllowed	Card payment transaction cannot be cancelled by the acquirer.
REQU	Request	Card payment transaction may also be cancelled after the closure of the reconciliation period or after the capture by batch. In this case a cancellation request exchange is required.
APPL	ApplicationLevel	Cancellation of the Card payment transaction is defined by the payment application.

10.1.6.1.7 OffLineTransaction <OffLineTx>

Presence: [0..1]

Definition: Acquirer protocol parameters of transactions performing an offline authorisation.

OffLineTransaction <OffLineTx> contains the following **AcquirerProtocolExchangeBehavior2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		264
	BatchTransfer <BtchTrf>	[0..1]			264
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		265
	MaximumNumber <MaxNb>	[0..1]	Quantity		265
	MaximumAmount <MaxAmt>	[0..1]	Amount		266
	ReTry <ReTry>	[0..1]	±		266
	TimeCondition <TmCond>	[0..1]	±		266
	CompletionExchange <CmpltnXchg>	[0..1]			266
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		267
	MaximumNumber <MaxNb>	[0..1]	Quantity		267
	MaximumAmount <MaxAmt>	[0..1]	Amount		268
	ReTry <ReTry>	[0..1]	±		268
	TimeCondition <TmCond>	[0..1]	±		268
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		268
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		268
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		269

10.1.6.1.7.1 FinancialCapture <FinCaptr>

Presence: [1..1]

Definition: Mode for the financial capture of the transaction by the acquirer.

Datatype: "FinancialCapture1Code" on page 551

CodeName	Name	Definition
AUTH	Authorisation	Financial capture of the transaction is performed by the acquirer during the authorisation exchange.
COMP	Completion	Financial capture of the transaction is performed by the acquirer during the completion exchange.
BTCH	Batch	Financial capture of the transaction is performed by the acquirer at the reception of a batch transfer.

10.1.6.1.7.2 BatchTransfer <BtchTrf>

Presence: [0..1]

Definition: Configuration of the batch transfers.

BatchTransfer <BtchTrf> contains the following **ExchangeConfiguration9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		265
	MaximumNumber <MaxNb>	[0..1]	Quantity		265
	MaximumAmount <MaxAmt>	[0..1]	Amount		266
	ReTry <ReTry>	[0..1]	±		266
	TimeCondition <TmCond>	[0..1]	±		266

10.1.6.1.7.2.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 549

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.1.6.1.7.2.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 582

10.1.6.1.7.2.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.6.1.7.2.4 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of an action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 517 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		517
	MaximumNumber <MaxNb>	[0..1]	Quantity		518
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		518

10.1.6.1.7.2.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 516 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		517
	EndTime <EndTm>	[0..1]	DateTime		517
	Period <Prd>	[0..1]	Text		517
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		517

10.1.6.1.7.3 CompletionExchange <CmpltnXchg>

Presence: [0..1]

Definition: Configuration parameters of completion exchanges.

CompletionExchange <CmpltnXchg> contains the following **ExchangeConfiguration10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		267
	MaximumNumber <MaxNb>	[0..1]	Quantity		267
	MaximumAmount <MaxAmt>	[0..1]	Amount		268
	ReTry <ReTry>	[0..1]	±		268
	TimeCondition <TmCond>	[0..1]	±		268
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		268
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		268

10.1.6.1.7.3.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 549

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.1.6.1.7.3.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 582

10.1.6.1.7.3.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.6.1.7.3.4 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of an action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 517 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		517
	MaximumNumber <MaxNb>	[0..1]	Quantity		518
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		518

10.1.6.1.7.3.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 516 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		517
	EndTime <EndTm>	[0..1]	DateTime		517
	Period <Prd>	[0..1]	Text		517
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		517

10.1.6.1.7.3.6 ExchangeFailed <XchgFaild>

Presence: [0..1]

Definition: Failed transaction must be exchanged.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.7.3.7 ExchangeDeclined <XchgDclnd>

Presence: [0..1]

Definition: Indicates that declined transaction must be exchanged.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.7.4 CancellationExchange <CxlXchg>

Presence: [0..1]

Definition: Configuration of the cancellation exchanges.

Datatype: "CancellationProcess2Code" on page 539

CodeName	Name	Definition
ADVC	Advice	Card payment transaction may be cancelled by an advice only before closure of the reconciliation period or before the capture by batch.
NALW	NotAllowed	Card payment transaction cannot be cancelled by the acquirer.
REQU	Request	Card payment transaction may also be cancelled after the closure of the reconciliation period or after the capture by batch. In this case a cancellation request exchange is required.
APPL	ApplicationLevel	Cancellation of the Card payment transaction is defined by the payment application.

10.1.6.1.8 ReconciliationExchange <RcncltnXchg>

Presence: [0..1]

Definition: Configuration parameters of reconciliation exchanges.

ReconciliationExchange <RcncltnXchg> contains the following **ExchangeConfiguration9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		269
	MaximumNumber <MaxNb>	[0..1]	Quantity		270
	MaximumAmount <MaxAmt>	[0..1]	Amount		270
	ReTry <ReTry>	[0..1]	±		270
	TimeCondition <TmCond>	[0..1]	±		270

10.1.6.1.8.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 549

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.

CodeName	Name	Definition
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.1.6.1.8.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 582

10.1.6.1.8.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.6.1.8.4 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of an action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 517 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		517
	MaximumNumber <MaxNb>	[0..1]	Quantity		518
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		518

10.1.6.1.8.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see ["ProcessTiming6"](#) on page 516 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		517
	EndTime <EndTm>	[0..1]	DateTime		517
	Period <Prd>	[0..1]	Text		517
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		517

10.1.6.1.9 ReconciliationByAcquirer <RcncltnByAcqrr>

Presence: [0..1]

Definition: Indicates the reconciliation period is assigned by the acquirer instead of the acceptor.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.10 TotalsPerCurrency <TtlsPerCcy>

Presence: [0..1]

Definition: Indicates the reconciliation total amounts are computed per currency.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.11 SplitTotals <SplTtIs>

Presence: [0..1]

Definition: Indicates that totals in reconciliation or batch must be split.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.12 SplitTotalCriteria <SplTtlCrit>

Presence: [0..*]

Definition: List of criterion to use when totals in reconciliation or batch must be split.

Datatype: ["ReconciliationCriteria1Code"](#) on page 566

CodeName	Name	Definition
BRND	CardBrand	The set is defined by transactions made with cards belonging to the same brand.
PROF	CardProductProfile	The set is defined by transactions made with cards sharing the same CardProductProfile.
GRUP	PoiGroup	The set is defined by transactions processed by POIs identified with the same POIGroup.

10.1.6.1.13 CompletionAdviceMandated <CmpltnAdvcmndtd>

Presence: [0..1]

Definition: To notify that the acquirer expect to receive a completion advice after each update of reservation.

The default value is True.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.14 AmountQualifierForReservation <AmtQlfrForRsvatn>

Presence: [0..*]

Definition: Identification of available amount qualifier for a reservation.

Datatype: "TypeOfAmount8Code" on page 579

CodeName	Name	Definition
ACTL	Actual	Actual amount.
ESTM	Estimated	Estimated amount (the final amount could be above or below).
MAXI	Maximum	Maximum amount (the final amount must be less or equal).
DFLT	Default	Default amount.
RPLT	Replacement	Replacement amount.
INCR	Incremental	Incremental amount for reservation.
DECR	Decremental	Decremental amount for reservation.
RESD	Reserved	Reserved or updated reserved amount for reservation.

10.1.6.1.15 ReconciliationError <RcncltnErr>

Presence: [0..1]

Definition: After an error in a totals of the Reconciliation, the POI sends transactions in error in the BatchTransfer messages.

The default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.16 CardDataVerification <CardDataVrfctn>

Presence: [0..1]

Definition: Indicates whether the POI must send card data (protected or plain card data) in the AcceptorCompletionAdvice message following an authorisation exchange.

The default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.17 NotifyOffLineCancellation <NtfyOffLineCxl>

Presence: [0..1]

Definition: Send a cancellation advice for offline transactions not yet captured.

The default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.18 BatchTransferContent <BtchTrfCntt>

Presence: [0..*]

Definition: Types of transaction to include in the batch.

Datatype: ["BatchTransactionType1Code" on page 538](#)

CodeName	Name	Definition
DTCT	DebitCredit	Debit and credit transactions.
CNCL	Cancellation	Cancellation of a previous transaction.
FAIL	Failed	Failed transactions.
DCLN	Declined	Declined transactions.

10.1.6.1.19 FileTransferBatch <FileTrfBtch>

Presence: [0..1]

Definition: BatchTransfer are exchanged per file transfer protocol rather than per message.

The default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.20 BatchDigitalSignature <BtchDgtlSgntr>

Presence: [0..1]

Definition: BatchTransfer are authenticated by digital signature rather than a MAC (Message Authentication Code).

The default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.21 MessageItem <Msgltn>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <Msgltn> contains the following elements (see ["MessageItemCondition2" on page 429](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		429
	Condition <Cond>	[1..1]	CodeSet		429
	Value <Val>	[0..*]	Text		430

10.1.6.1.22 ProtectCardData <PrtctCardData>

Presence: [1..1]

Definition: Indicator to require protection of sensitive card data in messages.

Usage: When absent, default value is True.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.23 PrivateCardData <PrvtCardData>

Presence: [0..1]

Definition: Indicator to require a private protection of sensitive card data in messages.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.1.24 MandatorySecurityTrailer <MndtrySctyTrlr>

Presence: [0..1]

Definition: A security trailer is mandatory in the messages.

Usage: When absent, default value is True.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.2 ServiceProviderParameters5

Definition: Service provider parameters of the point of interaction (POI).

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		275
	ServiceProviderIdentification <SvcPrvdrlId>	[1..*]	±		275
	Version <Vrsn>	[1..1]	Text		276
	ApplicationIdentification <ApplId>	[0..*]	Text		276
	Host <Hst>	[0..*]			276
	HostIdentification <HstId>	[1..1]	Text		276
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		276
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		277
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		277
	NonFinancialActionSupported <NonFinActnSpprtd>	[0..*]	CodeSet		277

10.1.6.2.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 575

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.2.2 ServiceProviderIdentification <SvcPrvdrlId>

Presence: [1..*]

Definition: Identification of the service provider.

ServiceProviderIdentification <SvcPrvdrId> contains the following elements (see
"GenericIdentification176" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

10.1.6.2.3 Version <Vrsn>

Presence: [1..1]

Definition: Version of the service provider parameters.

Datatype: "Max256Text" on page 586

10.1.6.2.4 ApplicationIdentification <ApplId>

Presence: [0..*]

Definition: Identification of payment application relevant for this service provider.

Datatype: "Max35Text" on page 587

10.1.6.2.5 Host <Hst>

Presence: [0..*]

Definition: Service provider host configuration.

Host <Hst> contains the following **AcquirerHostConfiguration11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	HostIdentification <HstId>	[1..1]	Text		276
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		276
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		277
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		277

10.1.6.2.5.1 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of a host.

Datatype: "Max35Text" on page 587

10.1.6.2.5.2 MessageToSend <MsgToSnd>

Presence: [0..*]

Definition: Types of message to sent to this host.

Datatype: "MessageFunction47Code" on page 556

CodeName	Name	Definition
FAUQ	FinancialAuthorisationRequest	Request for authorisation with financial capture.
CCAQ	CancellationRequest	Request for cancellation.
CMPV	CompletionAdvice	Advice for completion without financial capture.
DGNP	DiagnosticRequest	Request for diagnostic.
RCLQ	ReconciliationRequest	Request for reconciliation.
CCAV	CancellationAdvice	Advice for cancellation.
BTCH	BatchTransfer	Transfer the financial data as a collection of transaction.
FRVA	FinancialReversalAdvice	Advice for reversal with financial capture.
AUTQ	AuthorisationRequest	The initiator requests an authorisation without financial impact to complete the transaction.
FCMV	FinancialCompletionAdvice	Advice for completion with financial capture.
DCCQ	CurrencyConversionRequest	Request for dynamic currency conversion.
RVRA	ReversalAdvice	Advice for reversal without financial capture.
DCAV	CurrencyConversionAdvice	Advice for dynamic currency conversion.
TRNA	TransactionAdvice	Advise of the transaction's processing.
NFRQ	NonFinancialRequest	Initiator of the message requests additional information to the receiver.
TRPQ	TransactionReportRequest	Request to receive of a report of transaction from the issuer to the receiver.
ATAF	AcceptorToAcquirerBatchFileExchange	Concatenation of multiple exchanges in one file.

10.1.6.2.5.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Uniquely identifies the protocol name and version to use when using these parameters.

Datatype: "Max8Text" on page 589

10.1.6.2.5.4 ExternallyTypeSupported <XtrnlyTpSpprtd>

Presence: [0..*]

Definition: List of types that the receiver supports and that the sender could use as type of an ExternallyDefinedData message component.

Datatype: "Max1025Text" on page 584

10.1.6.2.6 NonFinancialActionSupported <NonFinActnSpprtd>

Presence: [0..*]

Definition: Identification of non financial action supported by the Service Provider.

Datatype: "NonFinancialRequestType2Code" on page 558

CodeName	Name	Definition
ACQR	AcquirerSelection	According to several parameters of a transaction, an Intermediary Agent helps an Acceptor to identify the more relevant Acquirer to process the transaction.
PARQ	ParRequest	The Intermediary Agent or Acquirer provides the PaymentAccountReference to use to process the transaction.
RISK	RiskManagement	The Intermediary Agent or Acquirer helps the Acceptor to assess the risk management of the transaction.
TOKN	TokenRequest	The Intermediary Agent or Acquirer provides the token to use to process the transaction.
ADDR	AdditionalRequest	Indicates a request which implies to receive additional information.
INSM	InstalmentPlanRequest	Request to receive acquirer instalment plans.

10.1.6.3 HostCommunicationParameter8

Definition: Configuration parameters to communicate with a host.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		279
	HostIdentification <Hstld>	[1..1]	Text		279
	Address <Adr>	[0..1]	±		279
	Key <Key>	[0..*]	±		279
	NetworkServiceProvider <NtwkSvcPrvdr>	[0..1]	±		280
	PhysicalInterface <PhysIntrfc>	[0..1]			281
	InterfaceName <IntrfcNm>	[1..1]	Text		281
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		281
	UserName <UsrNm>	[0..1]	Text		282
	AccessCode <AccsCd>	[0..1]	Binary		282
	SecurityProfile <SctyPrfl>	[0..1]	Text		282
	AdditionalParameters <AddtlParams>	[0..1]	Binary		282
	ExchangeMode <XchgMd>	[0..1]	CodeSet		283
	EncodingMode <NcodgMd>	[0..1]	CodeSet		283

10.1.6.3.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: ["TerminalManagementAction3Code" on page 575](#)

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.3.2 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of the host.

Datatype: ["Max35Text" on page 587](#)

10.1.6.3.3 Address <Adr>

Presence: [0..1]

Definition: Network parameters of the host.

Address <Adr> contains the following elements (see ["NetworkParameters7" on page 441](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <ClntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

10.1.6.3.4 Key <Key>

Presence: [0..*]

Definition: Cryptographic key used to communicate with the host.

Key <Key> contains the following elements (see "CryptographicKey19" on page 472 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		473
	KeyIdentification <KeyId>	[0..1]	Text		473
	AdditionalIdentification <AddtlId>	[0..1]	Binary		474
	Name <Nm>	[0..1]	Text		474
	SecurityProfile <SctyPrfl>	[0..1]	Text		474
	ItemNumber <ItmNb>	[0..1]	Text		474
	SequenceNumber <SeqNb>	[0..1]	Quantity		474
	Version <Vrsn>	[0..1]	Text		474
	KeyVersion <KeyVrsn>	[0..1]	Text		474
	Type <Tp>	[0..1]	CodeSet		475
	Function <Fctn>	[0..*]	CodeSet		476
	ActivationDate <ActvtnDt>	[0..1]	DateTime		476
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		476
	KeyValue <KeyVal>	[0..1]	±		477
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			477
	Identification <Id>	[1..1]	Text		477
	Type <Tp>	[1..1]	CodeSet		477
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		478
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		478
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			478
	Name <Nm>	[1..1]	Text		478
	Value <Val>	[0..1]	Text		479
	DerivationAlgorithmIdentifier <DerivtnAlgoIdr>	[0..1]	Text		479
	AlgorithmIdentifier <AlgoIdr>	[0..1]	Text		479

10.1.6.3.5 NetworkServiceProvider <NtwkSvcPrvdr>

Presence: [0..1]

Definition: Access information to reach an intermediate network service provider.

NetworkServiceProvider <NtwkSvcPrvdr> contains the following elements (see "NetworkParameters7" on page 441 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <CIntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

10.1.6.3.6 PhysicalInterface <PhysIntrfc>

Presence: [0..1]

Definition: Physical Interface where the host is connect Type of exchange supported by the host.ed.

PhysicalInterface <PhysIntrfc> contains the following **PhysicalInterfaceParameter1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InterfaceName <IntrfcNm>	[1..1]	Text		281
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		281
	UserName <UsrNm>	[0..1]	Text		282
	AccessCode <AccsCd>	[0..1]	Binary		282
	SecurityProfile <SctyPrfl>	[0..1]	Text		282
	AdditionalParameters <AddtlParams>	[0..1]	Binary		282

10.1.6.3.6.1 InterfaceName <IntrfcNm>

Presence: [1..1]

Definition: Identification of the interface.

Datatype: "Max35Text" on page 587

10.1.6.3.6.2 InterfaceType <IntrfcTp>

Presence: [0..1]

Definition: Identification of the physical link layer.

Datatype: "POICommunicationType2Code" on page 562

CodeName	Name	Definition
BLTH	Bluetooth	Communication with a host using Bluetooth.
ETHR	Ethernet	Ethernet port to communicate.

CodeName	Name	Definition
GPRS	GPRS	Communication with a host using GPRS.
GSMF	GSM	Communication with a host using GSM.
PSTN	PSTN	Communication with a host using Public Switching Telephone Network.
RS23	RS232	Serial port to communicate.
USBD	USBDevice	Communication with a USB stick or any USB device.
USBH	USBHost	Communication with a host from an USB port.
WIFI	Wifi	Wifi communication with another component.
WT2G	WirelessTechnology2G	Includes all communication technologies which can be qualified as being part of the 2G technology (e.g EDGE or PDC).
WT3G	WirelessTechnology3G	Includes all communication technologies which can be qualified as being part of the 3G technology.
WT4G	WirelessTechnology4G	Includes all communication technologies which can be qualified as being part of the 4G technology.
WT5G	WirelessTechnology5G	Includes all communication technologies which can be qualified as being part of the 5G technology.

10.1.6.3.6.3 UserName <UsrNm>

Presence: [0..1]

Definition: Optional user name to provide to use this interface.

Datatype: "Max35Text" on page 587

10.1.6.3.6.4 AccessCode <AccsCd>

Presence: [0..1]

Definition: Optional access code to provide to use this interface.

Datatype: "Max35Binary" on page 523

10.1.6.3.6.5 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the optional security profile to use with this interface.

Datatype: "Max35Text" on page 587

10.1.6.3.6.6 AdditionalParameters <AddtlParams>

Presence: [0..1]

Definition: Any other parameters relevant for this interface.

Datatype: "Max2KBinary" on page 523

10.1.6.3.7 ExchangeMode <XchgMd>

Presence: [0..1]

Definition: Type of exchange supported by the host.

Datatype: "CAPEExchangeMode1Code" on page 540

CodeName	Name	Definition
APIE	ExchangeByAPI	With this protocol, the communication is done through calls to API.
MSGE	ExchangeByMessage	With this protocol, the communication is done through message exchanges.

10.1.6.3.8 EncodingMode <NcodgMd>

Presence: [0..1]

Definition: Type of encoding mode used by the exchange mode supported by the host.

Datatype: "CAPEEncodingMode1Code" on page 539

CodeName	Name	Definition
XMLE	XMLEncoding	Data exchanged with the protocol between both parties are encoded in XML.
JSON	JSONEncoding	Data exchanged with the protocol between both parties are encoded in JSON.

10.1.6.4 SaleToPOIProtocolParameter4

Definition: Configuration parameters to communicate with a sale system.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		284
	MerchantIdentification <MrchntId>	[0..1]			284
	CommonName <CmonNm>	[1..1]	Text		285
	Address <Adr>	[0..1]	Text		285
	CountryCode <CtryCd>	[1..1]	CodeSet		285
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		285
	RegisteredIdentifier <RegIdlr>	[1..1]	Text		285
	Version <Vrsn>	[1..1]	Text		285
	HostIdentification <HstId>	[1..1]	Text		286
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		286
	MerchantPOIIdentification <MrchntPOId>	[0..1]	Text		286
	SaleIdentification <SaleId>	[0..1]	Text		286
	AllowedSaleMessage <AllwdSaleMsg>	[0..*]	CodeSet		286
	AllowedPOIMessage <AllwdPOIMsg>	[0..*]	CodeSet		287
	AllowedPOIService <AllwdPOISvc>	[0..*]	CodeSet		288
	AllowedSaleDevice <AllwdSaleDvc>	[0..*]	CodeSet		289
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		289

10.1.6.4.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 575

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.4.2 MerchantIdentification <MrchntId>

Presence: [0..1]

Definition: Identification of the merchant.

MerchantIdentification <MrchntId> contains the following **Organisation26** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CommonName <CmonNm>	[1..1]	Text		285
	Address <Adr>	[0..1]	Text		285
	CountryCode <CtryCd>	[1..1]	CodeSet		285
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		285
	RegisteredIdentifier <RegIdIdr>	[1..1]	Text		285

10.1.6.4.2.1 CommonName <CmonNm>

Presence: [1..1]

Definition: Name of the merchant.

Datatype: "Max70Text" on page 589

10.1.6.4.2.2 Address <Adr>

Presence: [0..1]

Definition: Location of the merchant.

Datatype: "Max140Text" on page 585

10.1.6.4.2.3 CountryCode <CtryCd>

Presence: [1..1]

Definition: Country of the merchant.

Datatype: "ISO3NumericCountryCode" on page 553

10.1.6.4.2.4 MerchantCategoryCode <MrchntCtgyCd>

Presence: [1..1]

Definition: Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction.

Datatype: "Min3Max4Text" on page 590

10.1.6.4.2.5 RegisteredIdentifier <RegIdIdr>

Presence: [1..1]

Definition: Identifier of the sponsored merchant assigned by the payment facilitator of their acquirer.

Datatype: "Max35Text" on page 587

10.1.6.4.3 Version <Vrsn>

Presence: [1..1]

Definition: Version of the parameters.

Datatype: "Max256Text" on page 586

10.1.6.4.4 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification used to retrieve HostCommunicationParameters.

Datatype: "Max35Text" on page 587

10.1.6.4.5 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Uniquely identifies the protocol version to use when using these parameters.

Datatype: "Max8Text" on page 589

10.1.6.4.6 MerchantPOIIdentification <MrchntPOId>

Presence: [0..1]

Definition: Identification of the POI during communication with sale system.

Datatype: "Max35Text" on page 587

10.1.6.4.7 SaleIdentification <SaleId>

Presence: [0..1]

Definition: Identification of the SaleSystem connected to the POI.

Datatype: "Max35Text" on page 587

10.1.6.4.8 AllowedSaleMessage <AllwdSaleMsg>

Presence: [0..*]

Definition: Identify a message that a Sale system could send to the POI system.

Datatype: "RetailerMessage1Code" on page 569

CodeName	Name	Definition
SSAB	Abort	Abort the current process or the last request.
SAAQ	AdminRequest	To select and start customised administrative services provided by the POI, using a "menu" for an interactive or software interface, initiated by the Sale system.
SAAP	AdminResponse	Response to the Admin request.
SDDR	DeviceRequest	Request one or several functions of the device, from user Interface or payment peripherals on the POI system or on the Sale system. Functions can be Display, Input, Print, play sound, Card reader capabilities or Transmit a message.
SDDP	DeviceResponse	Response to a Device request.
SSEN	EventNotification	Notify the other party of an event that occurs on its side.
SSMQ	MessageStatusRequest	Request the status of a previous message for which the Sale system has no response.

CodeName	Name	Definition
SSMR	MessageStatusResponse	Response to a Message Status request.
SSRJ	Rejection	Reject a previous received message, for technical or functional reasons.
SARQ	ReportRequest	To request, by the Sale System, a report on a list of transactions on the POI system, or the status of a transaction.
SARP	ReportResponse	Response to a Report request.
SFRP	SaleFinancialReconciliationResponse	Response to a Reconciliation Request.
SFRQ	SaleFinancialReconciliationRequest	Request a reconciliation (different types) between Sale System and POI System.
SFSQ	SaleFinancialServiceRequest	Request a financial service like payment, reversal, loyalty, Balance Inquiry, etc.
SFSP	SaleFinancialServiceResponse	Response to a financial service request.
SASQ	SessionManagementRequest	Request the management of a session: login, logout and diagnosis services. Initiated by the Sale system.
SASP	SessionManagementResponse	Response to a session management request to initiate/terminate a session.

10.1.6.4.9 AllowedPOIMessage <AllwdPOIMsg>

Presence: [0..*]

Definition: Identify a message that a POI system could send to the Sale system.

Datatype: "RetailerMessage1Code" on page 569

CodeName	Name	Definition
SSAB	Abort	Abort the current process or the last request.
SAAQ	AdminRequest	To select and start customised administrative services provided by the POI, using a "menu" for an interactive or software interface, initiated by the Sale system.
SAAP	AdminResponse	Response to the Admin request.
SDDR	DeviceRequest	Request one or several functions of the device, from user Interface or payment peripherals on the POI system or on the Sale system. Functions can be Display, Input, Print, play sound, Card reader capabilities or Transmit a message.
SDDP	DeviceResponse	Response to a Device request.
SSEN	EventNotification	Notify the other party of an event that occurs on its side.
SSMQ	MessageStatusRequest	Request the status of a previous message for which the Sale system has no response.
SSMR	MessageStatusResponse	Response to a Message Status request.

CodeName	Name	Definition
SSRJ	Rejection	Reject a previous received message, for technical or functional reasons.
SARQ	ReportRequest	To request, by the Sale System, a report on a list of transactions on the POI system, or the status of a transaction.
SARP	ReportResponse	Response to a Report request.
SFRP	SaleFinancialReconciliationResponse	Response to a Reconciliation Request.
SFRQ	SaleFinancialReconciliationRequest	Request a reconciliation (different types) between Sale System and POI System.
SFSQ	SaleFinancialServiceRequest	Request a financial service like payment, reversal, loyalty, Balance Inquiry, etc.
SFSP	SaleFinancialServiceResponse	Response to a financial service request.
SASQ	SessionManagementRequest	Request the management of a session: login, logout and diagnosis services. Initiated by the Sale system.
SASP	SessionManagementResponse	Response to a session management request to initiate/terminate a session.

10.1.6.4.10 AllowedPOIService <AllwdPOISvc>

Presence: [0..*]

Definition: Identify a service that a POI system could support to the Sale system.

Datatype: "RetailerService2Code" on page 571

CodeName	Name	Definition
FSPQ	FinancialPaymentRequest	The Sale System requests to the POI System to perform a payment(Purchase/Refund/PWCB/MOTO Payment/...).
FSRQ	FinancialReversalRequest	The Sale System requests to the POI System to perform a reversal partial or complete to cancel a former payment service.
FSIQ	FinancialBalanceInquiryRequest	The Sale System requests to the POI System to perform balance inquiry on the main account.
FSBQ	FinancialBatchRequest	The Batch message pair is used to request or get the result of transactions (payment, loyalty and reversal) performed without connection to the Sale system (Payment delivery).
FSLQ	FinancialLoyaltyRequest	The Sale System requests to the POI System a loyalty service like loading or redeem.
FSVQ	FinancialStoredValueRequest	The Sale System requests to the POI System to manage a stored value card or account (eg. Load, Payment, Reimbursement).
FSEQ	FinancialEnableServiceRequest	The Sale System requests to the POI System to enable a service on its side.

CodeName	Name	Definition
FSAQ	FinancialCardAcquisitionRequest	The Sale System requests to the POI System to handle a card data acquisition on the card reader.
FSCQ	FinancialReconciliationRequest	The Sale System request to the POI System different kinds of transaction reconciliation.

10.1.6.4.11 AllowedSaleDevice <AllwdSaleDvc>

Presence: [0..*]

Definition: Identify a device request that a Sale system could ask to the POI system.

Datatype: "RetailerService8Code" on page 571

CodeName	Name	Definition
DDYQ	DeviceDisplayRequest	One System requests the other to display a message for cashier or customer.
DINQ	DeviceInputRequest	One system requests to the other System to get data input.
DPRQ	DevicePrintRequest	One system requests to the other System to print data.
DSOQ	DevicePlaySoundRequest	One system requests to the Other System to play a sound.
DSIQ	DeviceSecureInputRequest	One system requests to the Other System to securely get data input (e.g. for PIN).
DCIQ	DeviceInitialisationCardReaderRequest	Service to send parameters to use when card reader initializes a new communication with the card.
DCAQ	DeviceSendApplicationProtocolDataUnitCardReaderRequest	A service to send commands to a card.
DCPQ	DevicePowerOffCardReaderRequest	The Sale system requests to the POI System to power off the card reader.
DCOQ	DeviceTransmissionMessageRequest	The Sale system requests to the POI System to transmit a message (for instance to a mobile server).
DINO	DeviceInputNotification	One system sends a notification to the POI System to update a input request.

10.1.6.4.12 ExternallyTypeSupported <XtrnlyTpSpprtd>

Presence: [0..*]

Definition: List of types that the receiver supports and that the sender could use as type of an ExternallyDefinedData message component.

Datatype: "Max1025Text" on page 584

10.1.6.5 ApplicationParameters13

Definition: Acceptor parameters dedicated to a payment application of the point of interaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		290
	ApplicationIdentification <ApplId>	[1..1]	Text		290
	Version <Vrsn>	[0..1]	Text		290
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		290
	ParametersLength <ParamsLngh>	[0..1]	Quantity		291
	OffsetStart <OffsetStart>	[0..1]	Quantity		291
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		291
	Parameters <Params>	[0..*]	Binary		291
	EncryptedParameters <NcrptdParams>	[0..1]	±		291

10.1.6.5.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 575

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.5.2 ApplicationIdentification <ApplId>

Presence: [1..1]

Definition: Identification of the payment application.

Datatype: "Max35Text" on page 587

10.1.6.5.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the payment application configuration parameters.

Datatype: "Max256Text" on page 586

10.1.6.5.4 ParameterFormatIdentifier <ParamFrmtldr>

Presence: [0..1]

Definition: Version of the parameters' format.

Datatype: "Max8Text" on page 589

10.1.6.5.5 ParametersLength <ParamsLngh>

Presence: [0..1]

Definition: Full length of parameters.

Datatype: "PositiveNumber" on page 583

10.1.6.5.6 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of this Block, beginning with 0, in the full parameters.

Datatype: "PositiveNumber" on page 583

10.1.6.5.7 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of this Block in the full parameters.

Datatype: "PositiveNumber" on page 583

10.1.6.5.8 Parameters <Params>

Presence: [0..*]

Definition: Configuration parameters used by the related payment application.

Datatype: "Max100KBinary" on page 522

10.1.6.5.9 EncryptedParameters <NcrptdParams>

Presence: [0..1]

Definition: Sensitive parameters (sequence of parameters including the envelope) encrypted with a cryptographic key.

EncryptedParameters <NcrptdParams> contains the following elements (see "ContentInformationType40" on page 511 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		511
	EnvelopedData <EnvlpdData>	[1..1]	±		512

10.1.6.6 MerchantConfigurationParameters6

Definition: Acceptor parameters dedicated to the merchant.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		292
	MerchantIdentification <Mrchntld>	[0..1]	Text		292
	Version <Vrsn>	[0..1]	Text		292
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		292
	Proxy <Prxy>	[0..1]	±		293
	OtherParametersLength <OthrParamsLngth>	[0..1]	Quantity		293
	OffsetStart <OffsetStart>	[0..1]	Quantity		293
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		293
	OtherParameters <OthrParams>	[0..1]	Binary		293

10.1.6.6.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 575

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.6.2 MerchantIdentification <Mrchntld>

Presence: [0..1]

Definition: Identification of the merchant for the MTM, if the POI manages several merchants.

Datatype: "Max35Text" on page 587

10.1.6.6.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the merchant parameters.

Datatype: "Max256Text" on page 586

10.1.6.6.4 ParameterFormatIdentifier <ParamFrmtldr>

Presence: [0..1]

Definition: Version of the parameters' format.

Datatype: "Max8Text" on page 589

10.1.6.6.5 Proxy <Prxy>

Presence: [0..1]

Definition: Local proxy configuration.

Proxy <Prxy> contains the following elements (see "[NetworkParameters8](#)" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		443
	Access <Accs>	[1..1]	±		443

10.1.6.6.6 OtherParametersLength <OthrParamsLngth>

Presence: [0..1]

Definition: Full length of other parameters.

Datatype: "[PositiveNumber](#)" on page 583

10.1.6.6.7 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of this Block, beginning with 0, in the full other parameters.

Datatype: "[PositiveNumber](#)" on page 583

10.1.6.6.8 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of this Block in the full other parameters.

Datatype: "[PositiveNumber](#)" on page 583

10.1.6.6.9 OtherParameters <OthrParams>

Presence: [0..1]

Definition: Other merchant parameters.

Datatype: "[Max10000Binary](#)" on page 522

10.1.6.7 TMSProtocolParameters8

Definition: Configuration parameters of the TMS protocol between a POI and a terminal manager.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		294
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		294
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		295
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		295
	Version <Vrsn>	[1..1]	Text		296
	ApplicationIdentification <Applld>	[0..*]	Text		296
	HostIdentification <Hstld>	[1..1]	Text		296
	POIIdentification <POIld>	[0..1]	Text		296
	InitiatingPartyIdentification <InitgPtyld>	[0..1]	Text		296
	RecipientPartyIdentification <RcptPtyld>	[0..1]	Text		296
	FileTransfer <FileTrf>	[0..1]	Indicator		296
	MessageItem <Msgltm>	[0..*]	±		296
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		297

10.1.6.7.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 575

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.7.2 TerminalManagerIdentification <TermnlMgrld>

Presence: [1..1]

Definition: Identification of the master terminal manager or the terminal manager.

TerminalManagerIdentification <TermnlMgrId> contains the following elements (see
"GenericIdentification176" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

10.1.6.7.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Uniquely identifies the protocol name and version to use when using these parameters.

Datatype: "Max8Text" on page 589

10.1.6.7.4 MaintenanceService <MntncSvc>

Presence: [1..*]

Definition: Maintenance services provided by the terminal manager.

Datatype: "DataSetCategory10Code" on page 545

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
MTMG	MasterTerminalManager	The terminal manager is the master.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
MTOR	Monitoring	Monitoring of the terminal estate.
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.

10.1.6.7.5 Version <Vrsn>

Presence: [1..1]

Definition: Version of the TMS protocol parameters.

Datatype: "Max256Text" on page 586

10.1.6.7.6 ApplicationIdentification <ApplId>

Presence: [0..*]

Definition: Identification of applications which may be managed by the TM, partially or globally.

Datatype: "Max35Text" on page 587

10.1.6.7.7 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of the terminal manager host.

Datatype: "Max35Text" on page 587

10.1.6.7.8 POIIdentification <POIId>

Presence: [0..1]

Definition: New identification of the POI for the terminal manager.

Datatype: "Max35Text" on page 587

10.1.6.7.9 InitiatingPartyIdentification <InitgPtyId>

Presence: [0..1]

Definition: New identification of the initiating party to set in TMS messages with this terminal manager.

Datatype: "Max35Text" on page 587

10.1.6.7.10 RecipientPartyIdentification <RcptPtyId>

Presence: [0..1]

Definition: New identification of the recipient party to set in TMS messages with this terminal manager.

Datatype: "Max35Text" on page 587

10.1.6.7.11 FileTransfer <FileTrf>

Presence: [0..1]

Definition: Configuration parameters are exchanged per file transfer protocol rather than per message.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.6.7.12 MessageItem <MsgItm>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <Msgltm> contains the following elements (see "MessageItemCondition2" on page 429 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		429
	Condition <Cond>	[1..1]	CodeSet		429
	Value <Val>	[0..*]	Text		430

10.1.6.7.13 ExternallyTypeSupported <XtrnlyTpSpprtd>

Presence: [0..*]

Definition: List of types that the receiver supports and that the sender could use as type of an ExternallyDefinedData message component.

Datatype: "Max1025Text" on page 584

10.1.6.8 TerminalPackageType5

Definition: Group of software packages related to a group of POIComponent of the POI System.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIComponentIdentification <POICmpntId>	[0..*]			297
	ItemNumber <ItmNb>	[0..1]	Text		298
	ProviderIdentification <PrvdrlId>	[0..1]	Text		298
	Identification <Id>	[0..1]	Text		298
	SerialNumber <SrlNb>	[0..1]	Text		298
	Package <Packg>	[1..*]			298
	PackageIdentification <PackgId>	[0..1]	±		299
	PackageLength <PackgLngh>	[0..1]	Quantity		299
	OffsetStart <OffsetStart>	[0..1]	Quantity		299
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		299
	PackageBlock <PackgBlck>	[0..*]			300
	Identification <Id>	[1..1]	Text		300
	Value <Val>	[0..1]	Binary		300
	ProtectedValue <PrtctdVal>	[0..1]	±		300
	Type <Tp>	[0..1]	Text		301

10.1.6.8.1 POIComponentIdentification <POICmpntId>

Presence: [0..*]

Definition: Identification of the POI (Point Of Interaction) component.

POIComponentIdentification <POICmpntId> contains the following
PointOfInteractionComponentIdentification2 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemNumber <ItmNb>	[0..1]	Text		298
	ProviderIdentification <PrvdrId>	[0..1]	Text		298
	Identification <Id>	[0..1]	Text		298
	SerialNumber <SrINb>	[0..1]	Text		298

10.1.6.8.1.1 ItemNumber <ItmNb>

Presence: [0..1]

Definition: Hierarchical identification of a hardware component inside all the hardware component of the POI. It is composed of all item numbers of the upper level components, separated by the '.' character, ended by the item number of the current component.

Datatype: "Max35Text" on page 587

10.1.6.8.1.2 ProviderIdentification <PrvdrId>

Presence: [0..1]

Definition: Identifies the provider of the software, hardware or parameters of the POI component.

Datatype: "Max35Text" on page 587

10.1.6.8.1.3 Identification <Id>

Presence: [0..1]

Definition: Identification of the POI component assigned by its provider.

Datatype: "Max256Text" on page 586

10.1.6.8.1.4 SerialNumber <SrINb>

Presence: [0..1]

Definition: Serial number identifying an occurrence of an hardware component.

Datatype: "Max256Text" on page 586

10.1.6.8.2 Package <Packg>

Presence: [1..*]

Definition: Chunk of a software package.

Package <Packg> contains the following **PackageType5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PackageIdentification <PackgId>	[0..1]	±		299
	PackageLength <PackgLngh>	[0..1]	Quantity		299
	OffsetStart <OffsetStart>	[0..1]	Quantity		299
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		299
	PackageBlock <PackgBlck>	[0..*]			300
	Identification <Id>	[1..1]	Text		300
	Value <Val>	[0..1]	Binary		300
	ProtectedValue <PrtctdVal>	[0..1]	±		300
	Type <Tp>	[0..1]	Text		301

10.1.6.8.2.1 PackageIdentification <PackgId>

Presence: [0..1]

Definition: Identification of the software packages of which the chunk belongs.

PackageIdentification <PackgId> contains the following elements (see "[GenericIdentification176](#)" on [page 307](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

10.1.6.8.2.2 PackageLength <PackgLngh>

Presence: [0..1]

Definition: Full length of software package identified through PackageIdentification.

Datatype: "[PositiveNumber](#)" on [page 583](#)

10.1.6.8.2.3 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of the first following PackageBlock, beginning with 0, in the full software package identified through PackageIdentification.

Datatype: "[PositiveNumber](#)" on [page 583](#)

10.1.6.8.2.4 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of the last following PackageBlock in the full software package identified through PackageIdentification.

Datatype: "PositiveNumber" on page 583

10.1.6.8.2.5 PackageBlock <PackgBlck>

Presence: [0..*]

Definition: Consecutive slices of the full software package identified through PackageIdentification starting with first slice at the place identified with OffsetStart and ending with the last slice at the previous place identified with OffsetEnd.

PackageBlock <PackgBlck> contains the following **ExternallyDefinedData5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		300
	Value <Val>	[0..1]	Binary		300
	ProtectedValue <PrctcdVal>	[0..1]	±		300
	Type <Tp>	[0..1]	Text		301

10.1.6.8.2.5.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the set of data to exchange.

Datatype: "Max1025Text" on page 584

10.1.6.8.2.5.2 Value <Val>

Presence: [0..1]

Definition: Data to exchange according to an external standard.

Datatype: "Max100KBinary" on page 522

10.1.6.8.2.5.3 ProtectedValue <PrctcdVal>

Presence: [0..1]

Definition: Protection of the values to exchange.

ProtectedValue <PrctcdVal> contains the following elements (see "ContentInformationType39" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.6.8.2.5.4 Type <Tp>

Presence: [0..1]

Definition: Identification of the standard used to encode the values to exchange.

Datatype: "Max1025Text" on page 584

10.1.6.9 SecurityParameters17

Definition: Parameters related to the security of software application and application protocol.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		301
	Version <Vrsn>	[1..1]	Text		301
	POIChallenge <POIChllng>	[0..1]	Binary		301
	TMChallenge <TMChllng>	[0..1]	Binary		301
	SecurityElement <SctyElmt>	[0..*]	±		302

10.1.6.9.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 575

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.9.2 Version <Vrsn>

Presence: [1..1]

Definition: Version of the security parameters.

Datatype: "Max256Text" on page 586

10.1.6.9.3 POIChallenge <POIChllng>

Presence: [0..1]

Definition: Point of interaction challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 522

10.1.6.9.4 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 522

10.1.6.9.5 SecurityElement <SctyElmt>

Presence: [0..*]

Definition: Key to inject in the point of interaction, protected by the temporary key previously sent.

SecurityElement <SctyElmt> contains the following elements (see "CryptographicKey19" on page 472 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		473
	KeyIdentification <KeyId>	[0..1]	Text		473
	AdditionalIdentification <AddtlId>	[0..1]	Binary		474
	Name <Nm>	[0..1]	Text		474
	SecurityProfile <SctyPrfl>	[0..1]	Text		474
	ItemNumber <ItmNb>	[0..1]	Text		474
	SequenceNumber <SeqNb>	[0..1]	Quantity		474
	Version <Vrsn>	[0..1]	Text		474
	KeyVersion <KeyVrsn>	[0..1]	Text		474
	Type <Tp>	[0..1]	CodeSet		475
	Function <Fctn>	[0..*]	CodeSet		476
	ActivationDate <ActvtnDt>	[0..1]	DateTime		476
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		476
	KeyValue <KeyVal>	[0..1]	±		477
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			477
	Identification <Id>	[1..1]	Text		477
	Type <Tp>	[1..1]	CodeSet		477
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		478
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		478
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			478
	Name <Nm>	[1..1]	Text		478
	Value <Val>	[0..1]	Text		479
	DerivationAlgorithmIdentifier <DerivtnAlgoldr>	[0..1]	Text		479
	AlgorithmIdentifier <Algoldr>	[0..1]	Text		479

10.1.6.10 PaymentTerminalParameters8

Definition: Manufacturer configuration parameters of the point of interaction (POI).

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		303
	VendorIdentification <VndrId>	[0..1]	Text		303
	Version <Vrsn>	[0..1]	Text		304
	ParameterFormatIdentifier <ParamFrmtIdr>	[0..1]	Text		304
	ClockSynchronisation <ClckSynctn>	[0..1]			304
	POITimeZone <POITmZone>	[1..1]	Text		304
	SynchronisationServer <SynctnSvr>	[0..*]	±		304
	Delay <Dely>	[0..1]	Time		305
	TimeZoneLine <TmZoneLine>	[0..*]	Text		305
	LocalDateTime <LclDtTm>	[0..*]			305
	FromDateTime <FrDtTm>	[0..1]	DateTime		305
	ToDateTime <ToDtTm>	[0..1]	DateTime		306
	UTCOffset <UTCOffset>	[1..1]	Quantity		306
	OtherParametersLength <OthrParamsLngth>	[0..1]	Quantity		306
	OffsetStart <OffsetStart>	[0..1]	Quantity		306
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		306
	OtherParameters <OthrParams>	[0..1]	Binary		306

10.1.6.10.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 575

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.6.10.2 VendorIdentification <VndrId>

Presence: [0..1]

Definition: Identification of the vendor for the MTM, if the POI manages various subsets of terminal parameters.

Datatype: "Max35Text" on page 587

10.1.6.10.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the terminal parameters.

Datatype: "Max256Text" on page 586

10.1.6.10.4 ParameterFormatIdentifier <ParamFrmtldr>

Presence: [0..1]

Definition: Version of the parameters' format.

Datatype: "Max8Text" on page 589

10.1.6.10.5 ClockSynchronisation <ClckSynctn>

Presence: [0..1]

Definition: Parameters to synchronise the real time clock of the POI (Point Of Interaction).

ClockSynchronisation <ClckSynctn> contains the following **ClockSynchronisation3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POITimeZone <POITmZone>	[1..1]	Text		304
	SynchronisationServer <SynctnSvr>	[0..*]	±		304
	Delay <Dely>	[0..1]	Time		305

10.1.6.10.5.1 POITimeZone <POITmZone>

Presence: [1..1]

Definition: Name of the time zone where is located the POI (Point Of Interaction), as defined by the IANA (Internet Assigned Number Authority) time zone data base.

Datatype: "Max70Text" on page 589

10.1.6.10.5.2 SynchronisationServer <SynctnSvr>

Presence: [0..*]

Definition: Parameters to contact a time server.

SynchronisationServer <SynctnSvr> contains the following elements (see "[NetworkParameters7](#)" on page 441 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <CIntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

10.1.6.10.5.3 Delay <Dely>

Presence: [0..1]

Definition: Delay between two contacts of the server.

Datatype: "[ISOTime](#)" on page 591

10.1.6.10.6 TimeZoneLine <TmZoneLine>

Presence: [0..*]

Definition: Time zone line to update in the time zone data base subset stored in the POI (Point Of Interaction). The format of the line is conform to the IANA (Internet Assigned Number Authority) time zone data base.

Datatype: "[Max70Text](#)" on page 589

10.1.6.10.7 LocalDateTime <LcIDtTm>

Presence: [0..*]

Definition: Local time offset to UTC (Coordinated Universal Time).

LocalDateTime <LcIDtTm> contains the following **LocalDateTime1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	FromDateTime <FrDtTm>	[0..1]	DateTime		305
	ToDateTime <ToDtTm>	[0..1]	DateTime		306
	UTCOffset <UTCOffset>	[1..1]	Quantity		306

10.1.6.10.7.1 FromDateTime <FrDtTm>

Presence: [0..1]

Definition: Date time of the beginning of the period (inclusive).

Datatype: "[ISODateTime](#)" on page 581

10.1.6.10.7.2 ToDateTime <ToDtTm>

Presence: [0..1]

Definition: Date time of the end of the period (exclusive).

Datatype: "ISODateTime" on page 581

10.1.6.10.7.3 UTCOffset <UTCOffset>

Presence: [1..1]

Definition: UTC offset in minutes, of the local time during the period. For instance, 120 for Central European Time, -720 for Central Standard Time (North America).

Datatype: "Number" on page 582

10.1.6.10.8 OtherParametersLength <OthrParamsLngth>

Presence: [0..1]

Definition: Full length of other parameters.

Datatype: "PositiveNumber" on page 583

10.1.6.10.9 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of this Block, beginning with 0, in the full other parameters.

Datatype: "PositiveNumber" on page 583

10.1.6.10.10 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of this Block in the full other parameters.

Datatype: "PositiveNumber" on page 583

10.1.6.10.11 OtherParameters <OthrParams>

Presence: [0..1]

Definition: Others manufacturer configuration parameters of the point of interaction.

Datatype: "Max10000Binary" on page 522

10.1.7 Customer Device

10.1.7.1 CustomerDevice3

Definition: Device used by the customer to perform the payment.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		307
	Type <Tp>	[0..1]	Text		307
	Provider <Prvdr>	[0..1]	Text		307

10.1.7.1.1 Identification <Id>

Presence: [0..1]

Definition: Identifier of the component.

Datatype: "Max35Text" on page 587

10.1.7.1.2 Type <Tp>

Presence: [0..1]

Definition: Type of component.

Datatype: "Max70Text" on page 589

10.1.7.1.3 Provider <Prvdr>

Presence: [0..1]

Definition: Provider of the component.

Datatype: "Max35Text" on page 587

10.1.8 Identification Information

10.1.8.1 GenericIdentification176

Definition: Identification of an entity.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

10.1.8.1.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the entity.

Datatype: "Max35Text" on page 587

10.1.8.1.2 Type <Tp>

Presence: [0..1]

Definition: Type of identified entity.

Datatype: "PartyType33Code" on page 559

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.

CodeName	Name	Definition
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TAXH	TaxAuthority	Tax authority.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.1.8.1.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).

Datatype: "PartyType33Code" on page 559

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TAXH	TaxAuthority	Tax authority.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.1.8.1.4 Country <Ctry>

Presence: [0..1]

Definition: Country of the entity (ISO 3166-1 alpha-2 or alpha-3).

Datatype: "Min2Max3AlphaText" on page 590

10.1.8.1.5 ShortName <ShrtNm>

Presence: [0..1]

Definition: Name of the entity.

Datatype: "Max35Text" on page 587

10.1.8.2 GenericIdentification177

Definition: Identification of an entity.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwrdr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		313

10.1.8.2.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the entity.

Datatype: "Max35Text" on page 587

10.1.8.2.2 Type <Tp>

Presence: [0..1]

Definition: Type of identified entity.

Datatype: "PartyType33Code" on page 559

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TAXH	TaxAuthority	Tax authority.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.1.8.2.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).

Datatype: "PartyType33Code" on page 559

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TAXH	TaxAuthority	Tax authority.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.1.8.2.4 Country <Ctry>

Presence: [0..1]

Definition: Country of the entity (ISO 3166-1 alpha-2 or alpha-3).

Datatype: "Min2Max3AlphaText" on page 590

10.1.8.2.5 ShortName <ShrtNm>

Presence: [0..1]

Definition: Name of the entity.

Datatype: "Max35Text" on page 587

10.1.8.2.6 RemoteAccess <RmotAccs>

Presence: [0..1]

Definition: Access information to reach the target host.

RemoteAccess <RmotAccs> contains the following elements (see "NetworkParameters7" on page 441 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <CIntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

10.1.8.2.7 Geolocation <Glctn>

Presence: [0..1]

Definition: Location of the entity.

Geolocation <Glctn> contains the following **Geolocation1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwrdr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		313

10.1.8.2.7.1 GeographicCoordinates <GeogcCordints>

Presence: [0..1]

Definition: Geographic location specified by geographic coordinates.

GeographicCoordinates <GeogcCordints> contains the following **GeolocationGeographicCoordinates1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312

10.1.8.2.7.1.1 Latitude <Lat>

Presence: [1..1]

Definition: Angular distance of a location on the earth south or north of the equator.

The latitude is measured in degrees, minutes and seconds, following by "N" for the north and "S" for the south of the equator. For example: 48°51'29" N the Eiffel Tower latitude.

Datatype: "Max35Text" on page 587

10.1.8.2.7.1.2 Longitude <Long>

Presence: [1..1]

Definition: Angular measurement of the distance of a location on the earth east or west of the Greenwich observatory.

The longitude is measured in degrees, minutes and seconds, following by "E" for the east and "W" for the west. For example: 23°27'30" E.

Datatype: "Max35Text" on page 587

10.1.8.2.7.2 UTMCoordinates <UTMCordints>

Presence: [0..1]

Definition: Geographic location specified by UTM coordinates.

UTMCoordinates <UTMCordints> contains the following **GeolocationUTMCoordinates1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwrdr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		313

10.1.8.2.7.2.1 UTMZone <UTMZone>

Presence: [1..1]

Definition: UTM grid zone combination of the longitude zone (1 to 60) and the latitude band (C to X, excluding I and O).

Datatype: "Max35Text" on page 587

10.1.8.2.7.2.2 UTMEastward <UTMEstwr>

Presence: [1..1]

Definition: X-coordinate of the Universal Transverse Mercator
coordinate system.

Datatype: "Max35Text" on page 587

10.1.8.2.7.2.3 UTMNorthward <UTMNrthwr>

Presence: [1..1]

Definition: Y-coordinate of the Universal Transverse Mercator
coordinate system.

Datatype: "Max35Text" on page 587

10.1.8.3 GenericIdentification4

Definition: Information related to an identification, eg, party identification or account identification.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		313
	IdentificationType <IdTp>	[1..1]	Text		313

10.1.8.3.1 Identification <Id>

Presence: [1..1]

Definition: Identifier issued to a person for which no specific identifier has been defined.

Datatype: "Max35Text" on page 587

10.1.8.3.2 IdentificationType <IdTp>

Presence: [1..1]

Definition: Specifies the nature of the identifier.

Usage: IdentificationType is used to specify what kind of identifier is used. It should be used in case the identifier is different from the identifiers listed in the pre-defined identifier list.

Datatype: "Max35Text" on page 587

10.1.8.4 GenericIdentification30

Definition: Information related to an identification, for example, party identification or account identification.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Issuer <Issr>	[1..1]	Text		314
	SchemeName <SchmeNm>	[0..1]	Text		314

10.1.8.4.1 Identification <Id>

Presence: [1..1]

Definition: Proprietary information, often a code, issued by the data source scheme issuer.

Datatype: "Exact4AlphaNumericText" on page 584

10.1.8.4.2 Issuer <Issr>

Presence: [1..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 587

10.1.8.4.3 SchemeName <SchmeNm>

Presence: [0..1]

Definition: Short textual description of the scheme.

Datatype: "Max35Text" on page 587

10.1.9 Miscellaneous

10.1.9.1 DataSetIdentification11

Definition: Identification of a data set.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		314
	Type <Tp>	[1..1]	CodeSet		314
	Version <Vrsn>	[0..1]	Text		316
	CreationDateTime <CreDtTm>	[0..1]	DateTime		316

10.1.9.1.1 Name <Nm>

Presence: [0..1]

Definition: Name of the data set.

Datatype: "Max256Text" on page 586

10.1.9.1.2 Type <Tp>

Presence: [1..1]

Definition: Category of data set.

Datatype: "DataSetCategory20Code" on page 547

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.

CodeName	Name	Definition
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
TXCP	BatchCapture	Batch upload of transaction data (data capture of a group of transactions).
AKCP	CaptureResponse	Batch download response for the batch capture of transactions.
DLGT	DelegationData	Data needed to create a terminal management sub-domain.
MGTP	ManagementPlan	Configuration of management plan in the point of interaction.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
STRP	StatusReport	Report of software configuration and parameter status.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
VDPR	VendorParameters	Point of interaction parameters defined by the manufacturer for instance the PIN verification capabilities.
PARA	Parameters	Any combination of configuration parameters for the point of interaction (POI).
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
LOGF	LogFile	Any repository used for recording log traces.
CMRQ	CertificateManagementRequest	Trigger for CertificateManagementRequest.
MDFL	MediaFile	Media file managed by an application of the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
PROB	Probe	Probe used to monitor a feature on the POI.

10.1.9.1.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data set.

Datatype: "Max256Text" on page 586

10.1.9.1.4 CreationDateTime <CreDtTm>

Presence: [0..1]

Definition: Date and time of creation of the data set.

Datatype: "ISODatetime" on page 581

10.1.9.2 MaintenanceDelegateAction11

Definition: Information for the MTM to build or include delegated actions in the management plan of the POI.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PeriodicAction <PrdcActn>	[0..1]	Indicator		318
	TMRemoteAccess <TMRemoteAccs>	[0..1]	±		318
	TMSProtocol <TMSPrtcol>	[0..1]	Text		318
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		318
	DataSetIdentification <DataSetId>	[0..1]	±		319
	ReTry <ReTry>	[0..1]	±		319
	AdditionalInformation <AddtlInf>	[0..*]	Binary		319
	Action <Actn>	[0..*]			319
	Type <Tp>	[1..1]	CodeSet		320
	RemoteAccess <RmotAccs>	[0..1]	±		321
	Key <Key>	[0..*]	±		321
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		322
	TMSProtocol <TMSPrtcol>	[0..1]	Text		323
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		323
	DataSetIdentification <DataSetId>	[0..1]	±		323
	ComponentType <CmpntTp>	[0..*]	CodeSet		323
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		325
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		325
	DelegationProof <DlgtProof>	[0..1]	Binary		325
	ProtectedDelegationProof <PrctdDlgtProof>	[0..1]	±		325
	Trigger <Trgr>	[1..1]	CodeSet		325
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		326
	ReTry <ReTry>	[0..1]	±		326
	TimeCondition <TmCond>	[0..1]	±		326
	TMChallenge <TMChllng>	[0..1]	Binary		327
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		327
	ErrorAction <ErrActn>	[0..*]	±		327
	AdditionalInformation <AddtlInf>	[0..*]	Binary		327
	MessageItem <Msgltn>	[0..*]	±		327
	DeviceRequest <DvcReq>	[0..1]	±		327

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.9.2.1 PeriodicAction <PrdcActn>

Presence: [0..1]

Definition: Flag to indicate that the delegated actions have to be included in a periodic sequence of actions.

Usage: When absent, default value is False.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 582](#)):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.9.2.2 TMRemoteAccess <TMRmotAccs>

Presence: [0..1]

Definition: Network address and parameters of the terminal manager host which will perform the delegated actions.

TMRemoteAccess <TMRmotAccs> contains the following elements (see ["NetworkParameters7" on page 441](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <ClntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

10.1.9.2.3 TMSProtocol <TMSPrtcol>

Presence: [0..1]

Definition: TMS protocol to use to perform the maintenance action.

Datatype: ["Max35Text" on page 587](#)

10.1.9.2.4 TMSProtocolVersion <TMSPrtcolVrsn>

Presence: [0..1]

Definition: Version of the TMS protocol to use to perform the maintenance action.

Datatype: ["Max35Text" on page 587](#)

10.1.9.2.5 DataSetIdentification <DataSetId>

Presence: [0..1]

Definition: Data set on which the delegated action has to be performed.

DataSetIdentification <DataSetId> contains the following elements (see "[DataSetIdentification11](#)" on page 314 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		314
	Type <Tp>	[1..1]	CodeSet		314
	Version <Vrsn>	[0..1]	Text		316
	CreationDateTime <CreDtTm>	[0..1]	DateTime		316

10.1.9.2.6 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process when activation of the action fails.

ReTry <ReTry> contains the following elements (see "[ProcessRetry3](#)" on page 517 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		517
	MaximumNumber <MaxNb>	[0..1]	Quantity		518
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		518

10.1.9.2.7 AdditionalInformation <AddtlInf>

Presence: [0..*]

Definition: Additional information to include in the maintenance action.

Datatype: "[Max3000Binary](#)" on page 523

10.1.9.2.8 Action <Actn>

Presence: [0..*]

Definition: Sequence of action to include in the next MTM management plan.

Action <Actn> contains the following **TMSAction14** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		320
	RemoteAccess <RmotAccs>	[0..1]	±		321
	Key <Key>	[0..*]	±		321
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		322
	TMSProtocol <TMSPrtcol>	[0..1]	Text		323
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		323
	DataSetIdentification <DataSetId>	[0..1]	±		323
	ComponentType <CmpntTp>	[0..*]	CodeSet		323
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		325
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		325
	DelegationProof <DlgtProof>	[0..1]	Binary		325
	ProtectedDelegationProof <PrtctdDlgtProof>	[0..1]	±		325
	Trigger <Trggr>	[1..1]	CodeSet		325
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		326
	ReTry <ReTry>	[0..1]	±		326
	TimeCondition <TmCond>	[0..1]	±		326
	TMChallenge <TMChllng>	[0..1]	Binary		327
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		327
	ErrorAction <ErrActn>	[0..*]	±		327
	AdditionalInformation <AddtlInf>	[0..*]	Binary		327
	MessageItem <Msgltn>	[0..*]	±		327
	DeviceRequest <DvcReq>	[0..1]	±		327

10.1.9.2.8.1 Type <Tp>

Presence: [1..1]

Definition: Types of action to be performed by a point of interaction (POI).

Datatype: "TerminalManagementAction5Code" on page 576

CodeName	Name	Definition
DCTV	Deactivate	Request to deactivate the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.

CodeName	Name	Definition
DWNL	Download	Request to download the element identified inside the message exchange.
INST	Install	Request to install the element identified inside the message exchange.
RSTR	Restart	Request to restart the element identified inside the message exchange.
UPLD	Upload	Request to upload the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.
BIND	Bind	Request sent to a POI to bind with a server.
RBND	Rebind	Request sent to a POI to rebind with a server.
UBND	Unbind	Request sent to a POI to unbind with a server.
ACTV	Activate	Request to activate the element identified inside the message exchange.
DEVR	DeviceRequest	Request to execute a device request.

10.1.9.2.8.2 RemoteAccess <RmotAccs>

Presence: [0..1]

Definition: Host access information.

RemoteAccess <RmotAccs> contains the following elements (see "[NetworkParameters7](#)" on page 441 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <ClntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

10.1.9.2.8.3 Key <Key>

Presence: [0..*]

Definition: Cryptographic key used to communicate with the host.

Key <Key> contains the following elements (see "CryptographicKey19" on page 472 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		473
	KeyIdentification <KeyId>	[0..1]	Text		473
	AdditionalIdentification <AddtlId>	[0..1]	Binary		474
	Name <Nm>	[0..1]	Text		474
	SecurityProfile <SctyPrfl>	[0..1]	Text		474
	ItemNumber <itmNb>	[0..1]	Text		474
	SequenceNumber <SeqNb>	[0..1]	Quantity		474
	Version <Vrsn>	[0..1]	Text		474
	KeyVersion <KeyVrsn>	[0..1]	Text		474
	Type <Tp>	[0..1]	CodeSet		475
	Function <Fctn>	[0..*]	CodeSet		476
	ActivationDate <ActvtnDt>	[0..1]	DateTime		476
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		476
	KeyValue <KeyVal>	[0..1]	±		477
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			477
	Identification <Id>	[1..1]	Text		477
	Type <Tp>	[1..1]	CodeSet		477
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		478
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		478
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			478
	Name <Nm>	[1..1]	Text		478
	Value <Val>	[0..1]	Text		479
	DerivationAlgorithmIdentifier <DerivtnAlgoIdr>	[0..1]	Text		479
	AlgorithmIdentifier <AlgoIdr>	[0..1]	Text		479

10.1.9.2.8.4 TerminalManagerIdentification <TermnlMgrId>

Presence: [0..1]

Definition: Identification of the master terminal manager or the terminal manager with which the POI has to perform the action.

TerminalManagerIdentification <TermnlMgrId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

10.1.9.2.8.5 TMSProtocol <TMSPrtcol>

Presence: [0..1]

Definition: TMS protocol to use for performing the maintenance action.

Datatype: "[Max35Text](#)" on page 587

10.1.9.2.8.6 TMSProtocolVersion <TMSPrtcolVrsn>

Presence: [0..1]

Definition: Version of the TMS protocol to use to perform the maintenance action.

Datatype: "[Max35Text](#)" on page 587

10.1.9.2.8.7 DataSetIdentification <DataSetId>

Presence: [0..1]

Definition: Data set on which the action has to be performed.

DataSetIdentification <DataSetId> contains the following elements (see "[DataSetIdentification11](#)" on page 314 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		314
	Type <Tp>	[1..1]	CodeSet		314
	Version <Vrsn>	[0..1]	Text		316
	CreationDateTime <CreDtTm>	[0..1]	DateTime		316

10.1.9.2.8.8 ComponentType <CmpntTp>

Presence: [0..*]

Definition: Type of POI components to send in a status report.

Datatype: "[DataSetCategory20Code](#)" on page 547

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.

CodeName	Name	Definition
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
TXCP	BatchCapture	Batch upload of transaction data (data capture of a group of transactions).
AKCP	CaptureResponse	Batch download response for the batch capture of transactions.
DLGT	DelegationData	Data needed to create a terminal management sub-domain.
MGTP	ManagementPlan	Configuration of management plan in the point of interaction.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
STRP	StatusReport	Report of software configuration and parameter status.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
VDPR	VendorParameters	Point of interaction parameters defined by the manufacturer for instance the PIN verification capabilities.
PARA	Parameters	Any combination of configuration parameters for the point of interaction (POI).
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
LOGF	LogFile	Any repository used for recording log traces.
CMRQ	CertificateManagementRequest	Trigger for CertificateManagementRequest.
MDFL	MediaFile	Media file managed by an application of the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
PROB	Probe	Probe used to monitor a feature on the POI.

10.1.9.2.8.9 DelegationScopelIdentification <DlgnScpld>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 587

10.1.9.2.8.10 DelegationScopeDefinition <DlgnScpDef>

Presence: [0..1]

Definition: This element contains all information relevant to the DelegationScopelIdentification. The format of this element is out of scope of this definition.

Datatype: "Max3000Binary" on page 523

10.1.9.2.8.11 DelegationProof <DlgnProof>

Presence: [0..1]

Definition: Contains the necessary information to secure the management of the Delegation. The format of this element is out of scope of this definition.

Datatype: "Max5000Binary" on page 523

10.1.9.2.8.12 ProtectedDelegationProof <PrtctdDlgnProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgnProof> contains the following elements (see "ContentInformationType39" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.9.2.8.13 Trigger <Trggr>

Presence: [1..1]

Definition: Event on which the action has to be activated by the point of interaction (POI).

Datatype: "TerminalManagementActionTrigger1Code" on page 577

CodeName	Name	Definition
DATE	DateTime	Date and time trigger the terminal management action.
HOST	HostEvent	Acquirer triggers the terminal management action.
MANU	Manual	Acceptor triggers the terminal management action.

CodeName	Name	Definition
SALE	SaleEvent	Sale system triggers the terminal management action.

10.1.9.2.8.14 AdditionalProcess <AddtlPrc>

Presence: [0..*]

Definition: Additional process to perform before starting or after completing the action by the point of interaction (POI).

Datatype: "TerminalManagementAdditionalProcess1Code" on page 577

CodeName	Name	Definition
MANC	ManualConfirmation	Manual confirmation of the merchant before the terminal management action.
RCNC	Reconciliation	Acquirer reconciliation to be performed before the terminal management action.
RSRT	RestartSystem	Restart the system after performing the terminal management action.

10.1.9.2.8.15 ReTry <ReTry>

Presence: [0..1]

Definition: Definition of retry process if activation of the action fails.

ReTry <ReTry> contains the following elements (see "ProcessRetry3" on page 517 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		517
	MaximumNumber <MaxNb>	[0..1]	Quantity		518
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		518

10.1.9.2.8.16 TimeCondition <TmCond>

Presence: [0..1]

Definition: Date and time the action has to be performed.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming5" on page 515 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WaitingTime <WtgTm>	[0..1]	Text		515
	StartTime <StartTm>	[0..1]	DateTime		515
	EndTime <EndTm>	[0..1]	DateTime		516
	Period <Prd>	[0..1]	Text		516
	MaximumNumber <MaxNb>	[0..1]	Quantity		516
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		516

10.1.9.2.8.17 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 522

10.1.9.2.8.18 KeyEnciphermentCertificate <KeyNcphrmntCert>

Presence: [0..*]

Definition: Certificate chain for the encryption of temporary transport key of the key to inject.

Datatype: "Max10KBinary" on page 522

10.1.9.2.8.19 ErrorAction <ErrActn>

Presence: [0..*]

Definition: Action to perform in case of error on the related action in progress.

ErrorAction <ErrActn> contains the following elements (see "ErrorAction5" on page 430 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionResult <ActnRslt>	[1..*]	CodeSet		431
	ActionToProcess <ActnToPrc>	[1..1]	CodeSet		432

10.1.9.2.8.20 AdditionalInformation <AddtlInf>

Presence: [0..*]

Definition: Additional information about the maintenance action.

Datatype: "Max3000Binary" on page 523

10.1.9.2.8.21 MessageItem <Msgltn>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <Msgltn> contains the following elements (see "MessageItemCondition2" on page 429 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		429
	Condition <Cond>	[1..1]	CodeSet		429
	Value <Val>	[0..*]	Text		430

10.1.9.2.8.22 DeviceRequest <DvcReq>

Presence: [0..1]

Definition: Information related to a device request of the POI.

DeviceRequest <DvcReq> contains the following elements (see "DeviceRequest9" on page 143 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±	C9	148
	Context <Cntxt>	[0..1]		C10	154
	PaymentContext <PmtCntxt>	[0..1]			157
	CardPresent <CardPres>	[0..1]	Indicator		157
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		157
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		158
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		158
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		158
	TransactionChannel <TxChanl>	[0..1]	CodeSet		158
	BusinessArea <BizArea>	[0..1]	CodeSet		159
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		159
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	159
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		160
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		160
	SupportedOption <SpprtOptn>	[0..*]	CodeSet		161
	SaleContext <SaleCntxt>	[0..1]			161
	SaleIdentification <SaleId>	[0..1]	Text		162
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		162
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		163
	CashierIdentification <CshrlId>	[0..1]	Text		163
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	163
	ShiftNumber <ShftNb>	[0..1]	Text		163
	CustomerOrderRequestFlag <CstmrOrdrrReqFlg>	[0..1]	Indicator		163
	PurchaseOrderNumber <PurchsOrdrrNb>	[0..1]	Text		163
	InvoiceNumber <InvNb>	[0..1]	Text		163
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		164
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			164
	CommonName <CmonNm>	[1..1]	Text		164
	Address <Adr>	[0..1]	Text		164
	CountryCode <CtryCd>	[1..1]	CodeSet		164

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		164
	RegisteredIdentifier <RegldId>	[1..1]	Text		164
	SplitPayment <SpltPmt>	[0..1]	Indicator		165
	RemainingAmount <RmngAmt>	[0..1]	Amount		165
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		165
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		165
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		165
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		166
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		166
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	166
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		167
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		167
	SystemToNotify <SysToNtfy>	[0..1]	Text		167
	Debtor <Dbtr>	[0..1]	±		168
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	169
	ProtectedDebtorAccount <PrctdDbtrAcct>	[0..1]	±		169
	Creditor <Cdtr>	[0..1]	±		169
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	170
	ProtectedCreditorAccount <PrctdCdtrAcct>	[0..1]	±		171
	DirectDebitContext <DrctDbtCntxt>	[0..1]			171
	Debtor <Dbtr>	[0..1]	±		172
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	173
	ProtectedDebtorAccount <PrctdDbtrAcct>	[0..1]	±		174
	Creditor <Cdtr>	[0..1]	±		174
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	175
	ProtectedCreditorAccount <PrctdCdtrAcct>	[0..1]	±		176
	MandateRelatedInformation <MndtRltdInf>	[1..1]			176
	MandateIdentification <MndtId>	[1..1]	Text		177
	DateOfSignature <DtOfSgntr>	[0..1]	Date		177
	MandateImage <MndtImg>	[0..1]	Binary		177
	ProtectedMandateImage <PrctdMndtImg>	[0..1]	±		177

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ServiceContent <SvcCntt>	[1..1]	CodeSet		177
	DisplayRequest <DispReq>	[0..1]			178
	DisplayOutput <DispOutpt>	[1..*]	±		178
	InputRequest <InptReq>	[0..1]			179
	DisplayOutput <DispOutpt>	[0..1]	±		180
	InputData <InptData>	[1..1]			181
	DeviceType <DvcTp>	[1..1]	CodeSet		182
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		182
	InputCommand <InptCmd>	[1..1]	CodeSet		183
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		184
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		184
	InputText <InptTxt>	[0..1]	±		184
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		185
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		185
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		185
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		186
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		186
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		186
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		186
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		186
	PrintRequest <PrtReq>	[0..1]			187
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		187
	ResponseMode <RspnMd>	[1..1]	CodeSet		187
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		188
	RequiredSignatureFlag <ReqrdSgntrFlg>	[0..1]	Indicator		188
	OutputContent <OutptCntt>	[1..1]	±		188
	PlayResourceRequest <PlayRsrcReq>	[0..1]			189
	ResponseMode <RspnMd>	[0..1]	CodeSet		190
	ResourceAction <RsrcActn>	[1..1]	CodeSet		190
	SoundVolume <SoundVol>	[0..1]	Rate		190
	DisplayResolution <DispRsltn>	[0..1]	Text		190

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Resource <Rsrc>	[0..1]			190
	ResourceType <RsrcTp>	[1..1]	CodeSet		191
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		191
	Language <Lang>	[0..1]	CodeSet	C14	191
	ResourceReference <RsrcRef>	[0..1]	Text		191
	TimingSlot <TmgSlot>	[0..1]	CodeSet		192
	SecureInputRequest <ScrInptReq>	[0..1]			192
	PINRequestType <PINReqTp>	[1..1]	CodeSet		192
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		193
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		193
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		193
	CardholderPIN <CrhdldrPIN>	[0..1]			193
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		193
	PINFormat <PINFrmt>	[1..1]	CodeSet		194
	AdditionalInput <AddtlInpt>	[0..1]	Text		194
	InitialisationCardReaderRequest <InitlstnCardRdrReq>	[0..1]			194
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		195
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		195
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		196
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		196
	DisplayOutput <DispOutpt>	[0..1]	±		196
	CardReaderAPDUREquest <CardRdrAPDUREq>	[0..1]			197
	Class <Clss>	[1..1]	Binary		197
	Instruction <Instr>	[1..1]	Binary		197
	Parameter1 <Param1>	[1..1]	Binary		197
	Parameter2 <Param2>	[1..1]	Binary		197
	Data <Data>	[0..1]	Binary		197
	ExpectedLength <XpctdLngth>	[0..1]	Binary		197
	PowerOffCardReaderRequest <PwrOffCardRdrReq>	[0..1]			198
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		198
	DisplayOutput <DispOutpt>	[0..1]	±		198

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TransmissionRequest <TrnsmssnReq>	[0..1]			199
	DestinationAddress <DstnAdr>	[1..1]	±		199
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		200
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		200
	MessageToSend <MsgToSnd>	[1..1]	Binary		200
	InputNotification <InptNtfctn>	[0..1]			200
	ExchangeIdentification <XchgId>	[1..1]	Text		200
	OutputContent <OutptCntt>	[1..1]	±		201
	SupplementaryData <SplmtryData>	[0..*]	±	C13	201

10.1.9.3 ActionMessage12

Definition: Information to display, print or store.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		332
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		333
	Format <Frmt>	[0..1]	CodeSet		334
	MessageContent <MsgCntt>	[0..1]	Text		334
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		334
	OutputBarcode <OutptBrcd>	[0..1]			334
	BarcodeType <BrcdTp>	[1..1]	CodeSet		335
	BarcodeValue <BrcdVal>	[0..1]	Text		335
	QRCodeBinaryValue <QRcdBinryVal>	[0..1]	Binary		335
	QRCodeVersion <QRcdVrsn>	[0..1]	Text		336
	QRCodeEncodingMode <QRcdNcodgMd>	[0..1]	CodeSet		336
	QRCodeErrorCorrection <QRcdErrCrctn>	[0..1]	CodeSet		336
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		336
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		336

10.1.9.3.1 MessageDestination <MsgDstn>

Presence: [1..1]

Definition: Destination of the message.

Datatype: "UserInterface9Code" on page 580

CodeName	Name	Definition
CDSP	CardholderDisplay	Cardholder display or interface.
CRCP	CardholderReceipt	Cardholder receipt.
MDSP	MerchantDisplay	Merchant display or interface.
MRCP	MerchantReceipt	Merchant receipt.
CRDO	OtherCardholderInterface	Other interface of the cardholder, for instance e-mail or smartphone message.
CSTM	CustomerStatement	Cardholder bank statement.

10.1.9.3.2 InformationQualifier <InfQlfr>

Presence: [0..1]

Definition: Qualification of the information to sent to an output logical device.

Datatype: "InformationQualify1Code" on page 551

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.1.9.3.3 Format <Frmt>

Presence: [0..1]

Definition: Message format.

Datatype: "OutputFormat3Code" on page 559

CodeName	Name	Definition
BARC	Barcode	Barcode to output in several possible format.
MENT	MenuEntry	A text to display as a menu before requesting an input.
MREF	MessageReference	Predefined configured messages, identified by a reference.
SREF	ScreenReference	Screen to display identified by a reference.
TEXT	SimpleText	Text without format attributes.
HTML	XHTML	XHTML document which includes a subset of the XHTML output tag.

10.1.9.3.4 MessageContent <MsgCntt>

Presence: [0..1]

Definition: Content or reference of the message.

Datatype: "Max20000Text" on page 586

10.1.9.3.5 MessageContentSignature <MsgCnttSgntr>

Presence: [0..1]

Definition: Digital signature of the message.

MessageContentSignature <MsgCnttSgntr> contains the following elements (see "ContentInformationType38" on page 493 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		493
	AuthenticatedData <AuthntcdData>	[0..1]	±		494
	SignedData <SgndData>	[0..1]	±		494

10.1.9.3.6 OutputBarcode <OutptBrcd>

Presence: [0..1]

Definition: Content of message displayed or printed as Barcode.

OutputBarcode <OutptBrcd> contains the following **OutputBarcode2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BarcodeType <BrcdTp>	[1..1]	CodeSet		335
	BarcodeValue <BrcdVal>	[0..1]	Text		335
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		335
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		336
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		336
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		336

10.1.9.3.6.1 BarcodeType <BrcdTp>

Presence: [1..1]

Definition: Type of Barcode coding.

Datatype: "BarcodeType1Code" on page 537

CodeName	Name	Definition
COQR	BarcodeEncodedAs2DQRCode	Barcode encoded according to the 2Dimensions Quick Response Code Standard.
C128	BarcodeEncodedAsCode128	Barcode encoded according to the Code 128 standard.
C025	BarcodeEncodedAsCode25	Barcode encoded according to the Code 25 standard.
C039	BarcodeEncodedAsCode39	Barcode encoded according to the Code 39 standard.
EA13	BarcodeEncodedAsEA13	Barcode encoded according to the EAN13 standard.
EAN8	BarcodeEncodedAsEAN8	Barcode encoded according to the EAN8 standard.
P417	BarcodeEncodedAsPDF417	Barcode encoded according to the PDF417 standard.
UPCA	BarcodeEncodedAsUPCA	Barcode encoded according to the UPCA standard.

10.1.9.3.6.2 BarcodeValue <BrcdVal>

Presence: [0..1]

Definition: Value with a Barcode coding.

Datatype: "Max8000Text" on page 589

10.1.9.3.6.3 QRCodeBinaryValue <QRCDBinryVal>

Presence: [0..1]

Definition: Use for binary and Kanji Quick Response Code.

Datatype: "Max3000Binary" on page 523

10.1.9.3.6.4 QRCodeVersion <QRCDVrsn>

Presence: [0..1]

Definition: Version of the Quick Response Code.

Datatype: "Max16Text" on page 585

10.1.9.3.6.5 QRCodeEncodingMode <QRCDNcodgMd>

Presence: [0..1]

Definition: Encoding Mode of Quick Response Code.

Datatype: "QRCodeEncodingMode1Code" on page 566

CodeName	Name	Definition
ALFA	Alphanumeric	Alphanumeric value provided in Barcode field.
BINA	Binary	Binary value provided in Quick Response Code Binary Value.
KANJ	Kanji	Kanji value provided in Quick Response Code Binary Value.
NUME	Numeric	Numeric value provided in Barcode field.

10.1.9.3.6.6 QRCodeErrorCorrection <QRCDErrCrrctn>

Presence: [0..1]

Definition: Error Correction mode of Quick Response Code.

Datatype: "QRCodeErrorCorrection1Code" on page 566

CodeName	Name	Definition
M015	ErrorCorrection15Percent	Reed-Solomon error correction 15%
Q025	ErrorCorrection25Percent	Reed-Solomon error correction 25%
H030	ErrorCorrection30Percent	Reed-Solomon error correction 30%
L007	ErrorCorrection7Percent	Reed-Solomon error correction 7%

10.1.9.3.7 ResponseRequiredFlag <RspnReqrdFlg>

Presence: [0..1]

Definition: Flag to request a message response.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.9.3.8 MinimumDisplayTime <MinDispTm>

Presence: [0..1]

Definition: Number of seconds the message has to be displayed.

Datatype: "Number" on page 582

10.1.9.4 PointOfInteractionComponent18

Definition: Data related to a component of the POI (Point Of Interaction) performing the transaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		339
	SubTypeInfoInformation <SubTpInf>	[0..1]	Text		340
	Identification <Id>	[1..1]			341
	ItemNumber <ItmNb>	[0..1]	Text		341
	ProviderIdentification <PrvdrlId>	[0..1]	Text		341
	Identification <Id>	[0..1]	Text		341
	SerialNumber <SrlNb>	[0..1]	Text		341
	Status <Sts>	[0..1]			341
	VersionNumber <VrsnNb>	[0..1]	Text		342
	Status <Sts>	[0..1]	CodeSet		342
	ExpiryDate <XpryDt>	[0..1]	Date		342
	StandardCompliance <StdCmplc>	[0..*]			342
	Identification <Id>	[1..1]	Text		342
	Version <Vrsn>	[1..1]	Text		343
	Issuer <Issr>	[1..1]	Text		343
	Characteristics <Chrtcs>	[0..1]			343
	Memory <Mmry>	[0..*]			344
	Identification <Id>	[1..1]	Text		345
	TotalSize <TtlSz>	[1..1]	Quantity		345
	FreeSize <FreeSz>	[1..1]	Quantity		345
	Unit <Unit>	[1..1]	CodeSet		345
	Communication <Com>	[0..*]			345
	CommunicationType <ComTp>	[1..1]	CodeSet		346
	RemoteParty <RmotPty>	[1..*]	CodeSet		347
	Active <Actv>	[1..1]	Indicator		347
	Parameters <Params>	[0..1]	±		347
	PhysicalInterface <PhysIntrfc>	[0..1]			348
	InterfaceName <IntrfcNm>	[1..1]	Text		348
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		348
	UserName <UsrNm>	[0..1]	Text		349
	AccessCode <AccsCd>	[0..1]	Binary		349

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SecurityProfile <SctyPrfl>	[0..1]	Text		349
	AdditionalParameters <AddtlParams>	[0..1]	Binary		349
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		350
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		350
	SecurityElement <SctyElmt>	[0..*]	±		350
	Assessment <Assmnt>	[0..*]			351
	Type <Tp>	[1..1]	CodeSet		352
	Assigner <Assgnr>	[1..*]	Text		352
	DeliveryDate <DlvryDt>	[0..1]	DateTime		352
	ExpirationDate <XprtnDt>	[0..1]	DateTime		352
	Number <Nb>	[1..1]	Text		352
	Package <Packg>	[0..*]			353
	PackageIdentification <PackgId>	[0..1]	±		353
	PackageLength <PackgLngh>	[0..1]	Quantity		353
	OffsetStart <OffsetStart>	[0..1]	Quantity		353
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		354
	PackageBlock <PackgBlck>	[0..*]			354
	Identification <Id>	[1..1]	Text		354
	Value <Val>	[0..1]	Binary		354
	ProtectedValue <PrctcdVal>	[0..1]	±		354
	Type <Tp>	[0..1]	Text		355
	ProbeValue <PrbVal>	[0..1]	Binary		355

10.1.9.4.1 Type <Tp>

Presence: [1..1]

Definition: Type of component belonging to a POI (Point Of Interaction) Terminal.

Datatype: "POIComponentType7Code" on page 564

CodeName	Name	Definition
AQPP	AcquirerProtocolParameters	Parameters for acquirer interface of the point of interaction, including acquirer host configuration parameters.
APPR	ApplicationParameters	Parameters of a payment application running on the point of interaction.
TLPR	TerminalParameters	Manufacturer configuration parameters of the point of interaction.

CodeName	Name	Definition
SCPR	SecurityParameters	Security parameters of the point of interaction.
SERV	Server	Payment server of a point of interaction system.
TERM	Terminal	Payment terminal point of interaction.
DVCE	Device	Device sub-component of a component of the point of interaction.
SECM	SecureModule	Security module.
APLI	PaymentApplication	Payment application software.
EMVK	EMVKernel	EMV application kernel (EMV is the chip card specifications initially defined by Eurocard, Mastercard and Visa).
EMVO	EMVLevel1	EMV physical interface (EMV is the chip card specifications initially defined by Eurocard, Mastercard and Visa).
MDWR	Middleware	Software module of the point of interaction.
DRVR	Driver	Driver module of the point of interaction.
OPST	OperatingSystem	Software that manages hardware to provide common services to the applications.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
CRTF	CertificateParameters	Certificate provided by a terminal manager.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
SACP	SaleComponent	Component of the Sale system.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
LOGF	LogFile	Any repository used for recording log traces.
MDFL	MediaFile	Media file managed by an application of the POI.
SOFT	Soft	Payment or other software application.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
PROB	Probe	Probe used to monitor a feature on the POI.

10.1.9.4.2 SubTypeInformation <SubTpInf>

Presence: [0..1]

Definition: Additional information regarding the type of the component.

Datatype: "Max70Text" on page 589

10.1.9.4.3 Identification <Id>

Presence: [1..1]

Definition: Identification of the POI (Point Of Interaction) component.

Identification <Id> contains the following **PointOfInteractionComponentIdentification2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemNumber <ItmNb>	[0..1]	Text		341
	ProviderIdentification <PrvdrId>	[0..1]	Text		341
	Identification <Id>	[0..1]	Text		341
	SerialNumber <SrlNb>	[0..1]	Text		341

10.1.9.4.3.1 ItemNumber <ItmNb>

Presence: [0..1]

Definition: Hierarchical identification of a hardware component inside all the hardware component of the POI. It is composed of all item numbers of the upper level components, separated by the '.' character, ended by the item number of the current component.

Datatype: "Max35Text" on page 587

10.1.9.4.3.2 ProviderIdentification <PrvdrId>

Presence: [0..1]

Definition: Identifies the provider of the software, hardware or parameters of the POI component.

Datatype: "Max35Text" on page 587

10.1.9.4.3.3 Identification <Id>

Presence: [0..1]

Definition: Identification of the POI component assigned by its provider.

Datatype: "Max256Text" on page 586

10.1.9.4.3.4 SerialNumber <SrlNb>

Presence: [0..1]

Definition: Serial number identifying an occurrence of an hardware component.

Datatype: "Max256Text" on page 586

10.1.9.4.4 Status <Sts>

Presence: [0..1]

Definition: Status of the POI (Point Of Interaction) component.

Status <Sts> contains the following **PointOfInteractionComponentStatus3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	VersionNumber <VrsnNb>	[0..1]	Text		342
	Status <Sts>	[0..1]	CodeSet		342
	ExpiryDate <XpryDt>	[0..1]	Date		342

10.1.9.4.4.1 VersionNumber <VrsnNb>

Presence: [0..1]

Definition: Current version of the component that might include the release number.

Datatype: "Max256Text" on page 586

10.1.9.4.4.2 Status <Sts>

Presence: [0..1]

Definition: Current status of the component.

Datatype: "POIComponentStatus1Code" on page 563

CodeName	Name	Definition
WAIT	WaitingActivation	Component not yet activated.
OUTD	OutOfOrder	Component not working properly.
OPER	InOperation	Component activated and in operation.
DACT	Deactivated	Component has been deactivated.

10.1.9.4.4.3 ExpiryDate <XpryDt>

Presence: [0..1]

Definition: Expiration date of the component.

Datatype: "ISODate" on page 580

10.1.9.4.5 StandardCompliance <StdCmplc>

Presence: [0..*]

Definition: Identification of the standard for which the component complies with.

StandardCompliance <StdCmplc> contains the following **GenericIdentification48** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		342
	Version <Vrsn>	[1..1]	Text		343
	Issuer <Issr>	[1..1]	Text		343

10.1.9.4.5.1 Identification <Id>

Presence: [1..1]

Definition: Proprietary information, often a code, issued by the data source scheme issuer.

Datatype: "Max35Text" on page 587

10.1.9.4.5.2 Version <Vrsn>

Presence: [1..1]

Definition: Version of the identification.

Datatype: "Max35Text" on page 587

10.1.9.4.5.3 Issuer <Issr>

Presence: [1..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 587

10.1.9.4.6 Characteristics <Chrtcs>

Presence: [0..1]

Definition: Characteristics of a POI (Point Of Interaction) component.

Characteristics <Chrtcs> contains the following **PointOfInteractionComponentCharacteristics11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Memory <Mmry>	[0..*]			344
	Identification <Id>	[1..1]	Text		345
	TotalSize <TtlSz>	[1..1]	Quantity		345
	FreeSize <FreeSz>	[1..1]	Quantity		345
	Unit <Unit>	[1..1]	CodeSet		345
	Communication <Com>	[0..*]			345
	CommunicationType <ComTp>	[1..1]	CodeSet		346
	RemoteParty <RmotPty>	[1..*]	CodeSet		347
	Active <Actv>	[1..1]	Indicator		347
	Parameters <Params>	[0..1]	±		347
	PhysicalInterface <PhysIntrfc>	[0..1]			348
	InterfaceName <IntrfcNm>	[1..1]	Text		348
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		348
	UserName <UsrNm>	[0..1]	Text		349
	AccessCode <AccsCd>	[0..1]	Binary		349
	SecurityProfile <SctyPrfl>	[0..1]	Text		349
	AdditionalParameters <AddtlParams>	[0..1]	Binary		349
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		350
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		350
	SecurityElement <SctyElmt>	[0..*]	±		350

10.1.9.4.6.1 Memory <Mmry>

Presence: [0..*]

Definition: Memory characteristics of the component.

Memory <Mmry> contains the following **MemoryCharacteristics1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		345
	TotalSize <TtlSz>	[1..1]	Quantity		345
	FreeSize <FreeSz>	[1..1]	Quantity		345
	Unit <Unit>	[1..1]	CodeSet		345

10.1.9.4.6.1.1 Identification <Id>

Presence: [1..1]

Definition: Identification or name of the memory.

Datatype: "Max35Text" on page 587

10.1.9.4.6.1.2 TotalSize <TtlSz>

Presence: [1..1]

Definition: Total size of the memory unit.

Datatype: "DecimalNumber" on page 582

10.1.9.4.6.1.3 FreeSize <FreeSz>

Presence: [1..1]

Definition: Total size of the available memory.

Datatype: "DecimalNumber" on page 582

10.1.9.4.6.1.4 Unit <Unit>

Presence: [1..1]

Definition: Memory unit of the sizes.

Datatype: "MemoryUnit1Code" on page 555

CodeName	Name	Definition
BYTE	Byte	Byte.
EXAB	ExaByte	Exa byte.
GIGA	GigaByte	Giga byte.
KILO	KiloByte	Kilo byte.
MEGA	MegaByte	Mega byte.
PETA	PetaByte	Peta byte.
TERA	TeraByte	Tera byte.

10.1.9.4.6.2 Communication <Com>

Presence: [0..*]

Definition: Low level communication of the hardware or software component toward another component or an external entity.

Communication <Com> contains the following **CommunicationCharacteristics5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CommunicationType <ComTp>	[1..1]	CodeSet		346
	RemoteParty <RmotPty>	[1..*]	CodeSet		347
	Active <Actv>	[1..1]	Indicator		347
	Parameters <Params>	[0..1]	±		347
	PhysicalInterface <PhysIntrfc>	[0..1]			348
	InterfaceName <IntrfcNm>	[1..1]	Text		348
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		348
	UserName <UsrNm>	[0..1]	Text		349
	AccessCode <AccsCd>	[0..1]	Binary		349
	SecurityProfile <SctyPrfl>	[0..1]	Text		349
	AdditionalParameters <AddtlParams>	[0..1]	Binary		349

10.1.9.4.6.2.1 CommunicationType <ComTp>

Presence: [1..1]

Definition: Type of low level communication.

Datatype: "POICommunicationType2Code" on page 562

CodeName	Name	Definition
BLTH	Bluetooth	Communication with a host using Bluetooth.
ETHR	Ethernet	Ethernet port to communicate.
GPRS	GPRS	Communication with a host using GPRS.
GSMF	GSM	Communication with a host using GSM.
PSTN	PSTN	Communication with a host using Public Switching Telephone Network.
RS23	RS232	Serial port to communicate.
USBD	USBDevice	Communication with a USB stick or any USB device.
USBH	USBHost	Communication with a host from an USB port.
WIFI	Wifi	Wifi communication with another component.
WT2G	WirelessTechnology2G	Includes all communication technologies which can be qualified as being part of the 2G technology (e.g EDGE or PDC).
WT3G	WirelessTechnology3G	Includes all communication technologies which can be qualified as being part of the 3G technology.

CodeName	Name	Definition
WT4G	WirelessTechnology4G	Includes all communication technologies which can be qualified as being part of the 4G technology.
WT5G	WirelessTechnology5G	Includes all communication technologies which can be qualified as being part of the 5G technology.

10.1.9.4.6.2.2 RemoteParty <RmotPty>

Presence: [1..*]

Definition: Entity that communicate with the current component, using this communication device.

Datatype: "PartyType7Code" on page 561

CodeName	Name	Definition
ACQR	Acquirer	Entity acquiring card transactions.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
PCPT	POIComponent	Party component of a POI system or POI terminal (Point of Interaction).
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.
SALE	SaleSystem	Party selling goods and services.

10.1.9.4.6.2.3 Active <Actv>

Presence: [1..1]

Definition: Communication hardware is activated.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.9.4.6.2.4 Parameters <Params>

Presence: [0..1]

Definition: Network parameters of the communication link.

Parameters <Params> contains the following elements (see "[NetworkParameters7](#)" on page 441 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <CIntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

10.1.9.4.6.2.5 PhysicalInterface <PhysIntrfc>

Presence: [0..1]

Definition: Physical Interface used by the communication link.

PhysicalInterface <PhysIntrfc> contains the following **PhysicalInterfaceParameter1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InterfaceName <IntrfcNm>	[1..1]	Text		348
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		348
	UserName <UsrNm>	[0..1]	Text		349
	AccessCode <AccsCd>	[0..1]	Binary		349
	SecurityProfile <SctyPrfl>	[0..1]	Text		349
	AdditionalParameters <AddtlParams>	[0..1]	Binary		349

10.1.9.4.6.2.5.1 InterfaceName <IntrfcNm>

Presence: [1..1]

Definition: Identification of the interface.

Datatype: "[Max35Text](#)" on page 587

10.1.9.4.6.2.5.2 InterfaceType <IntrfcTp>

Presence: [0..1]

Definition: Identification of the physical link layer.

Datatype: "[POICommunicationType2Code](#)" on page 562

CodeName	Name	Definition
BLTH	Bluetooth	Communication with a host using Bluetooth.
ETHR	Ethernet	Ethernet port to communicate.

CodeName	Name	Definition
GPRS	GPRS	Communication with a host using GPRS.
GSMF	GSM	Communication with a host using GSM.
PSTN	PSTN	Communication with a host using Public Switching Telephone Network.
RS23	RS232	Serial port to communicate.
USBD	USBDevice	Communication with a USB stick or any USB device.
USBH	USBHost	Communication with a host from an USB port.
WIFI	Wifi	Wifi communication with another component.
WT2G	WirelessTechnology2G	Includes all communication technologies which can be qualified as being part of the 2G technology (e.g EDGE or PDC).
WT3G	WirelessTechnology3G	Includes all communication technologies which can be qualified as being part of the 3G technology.
WT4G	WirelessTechnology4G	Includes all communication technologies which can be qualified as being part of the 4G technology.
WT5G	WirelessTechnology5G	Includes all communication technologies which can be qualified as being part of the 5G technology.

10.1.9.4.6.2.5.3 UserName <UsrNm>

Presence: [0..1]

Definition: Optional user name to provide to use this interface.

Datatype: "Max35Text" on page 587

10.1.9.4.6.2.5.4 AccessCode <AccsCd>

Presence: [0..1]

Definition: Optional access code to provide to use this interface.

Datatype: "Max35Binary" on page 523

10.1.9.4.6.2.5.5 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the optional security profile to use with this interface.

Datatype: "Max35Text" on page 587

10.1.9.4.6.2.5.6 AdditionalParameters <AddtlParams>

Presence: [0..1]

Definition: Any other parameters relevant for this interface.

Datatype: "Max2KBinary" on page 523

10.1.9.4.6.3 SecurityAccessModules <SctyAccsMdls>

Presence: [0..1]

Definition: Number of security access modules (SAM).

Datatype: "Number" on page 582

10.1.9.4.6.4 SubscriberIdentityModules <SbcbriDntyMdls>

Presence: [0..1]

Definition: Number of subscriber identity modules (SIM).

Datatype: "Number" on page 582

10.1.9.4.6.5 SecurityElement <SctyElmt>

Presence: [0..*]

Definition: Security characteristics of the component.

SecurityElement <SctyElmt> contains the following elements (see "CryptographicKey19" on page 472 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		473
	KeyIdentification <KeyId>	[0..1]	Text		473
	AdditionalIdentification <AddtlId>	[0..1]	Binary		474
	Name <Nm>	[0..1]	Text		474
	SecurityProfile <SctyPrfl>	[0..1]	Text		474
	ItemNumber <ItmNb>	[0..1]	Text		474
	SequenceNumber <SeqNb>	[0..1]	Quantity		474
	Version <Vrsn>	[0..1]	Text		474
	KeyVersion <KeyVrsn>	[0..1]	Text		474
	Type <Tp>	[0..1]	CodeSet		475
	Function <Fctn>	[0..*]	CodeSet		476
	ActivationDate <ActvtnDt>	[0..1]	DateTime		476
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		476
	KeyValue <KeyVal>	[0..1]	±		477
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			477
	Identification <Id>	[1..1]	Text		477
	Type <Tp>	[1..1]	CodeSet		477
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		478
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		478
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			478
	Name <Nm>	[1..1]	Text		478
	Value <Val>	[0..1]	Text		479
	DerivationAlgorithmIdentifier <DerivtnAlgoldr>	[0..1]	Text		479
	AlgorithmIdentifier <Algoldr>	[0..1]	Text		479

10.1.9.4.7 Assessment <Assmnt>

Presence: [0..*]

Definition: Assessments for the component of the point of interaction.

Assessment <Assmnt> contains the following **PointOfInteractionComponentAssessment1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		352
	Assigner <Assgnr>	[1..*]	Text		352
	DeliveryDate <DlvryDt>	[0..1]	DateTime		352
	ExpirationDate <XprtnDt>	[0..1]	DateTime		352
	Number <Nb>	[1..1]	Text		352

10.1.9.4.7.1 Type <Tp>

Presence: [1..1]

Definition: Type of assessment of the component.

Datatype: "POIComponentAssessment1Code" on page 563

CodeName	Name	Definition
APPL	Approval	Approval number delivered by an approval centre.
CERT	Certification	Certification number delivered by a certification body.
EVAL	Evaluation	Evaluation by a lab or a tool.

10.1.9.4.7.2 Assigner <Assgnr>

Presence: [1..*]

Definition: Body which has delivered the assessment.

Datatype: "Max35Text" on page 587

10.1.9.4.7.3 DeliveryDate <DlvryDt>

Presence: [0..1]

Definition: Date when the assessment has been delivered.

Datatype: "ISODateTime" on page 581

10.1.9.4.7.4 ExpirationDate <XprtnDt>

Presence: [0..1]

Definition: Date when the assessment will expire.

Datatype: "ISODateTime" on page 581

10.1.9.4.7.5 Number <Nb>

Presence: [1..1]

Definition: Unique assessment number for the component.

Datatype: "Max35Text" on page 587

10.1.9.4.8 Package <Packg>

Presence: [0..*]

Definition: Chunk of a software package.

Package <Packg> contains the following **PackageType5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Packageldentification <PackgId>	[0..1]	±		353
	PackageLength <PackgLngh>	[0..1]	Quantity		353
	OffsetStart <OffsetStart>	[0..1]	Quantity		353
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		354
	PackageBlock <PackgBlck>	[0..*]			354
	Identification <Id>	[1..1]	Text		354
	Value <Val>	[0..1]	Binary		354
	ProtectedValue <PrctcdVal>	[0..1]	±		354
	Type <Tp>	[0..1]	Text		355

10.1.9.4.8.1 Packageldentification <PackgId>

Presence: [0..1]

Definition: Identification of the software packages of which the chunk belongs.

Packageldentification <PackgId> contains the following elements (see "[GenericIdentification176](#)" on page 307 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		307
	Type <Tp>	[0..1]	CodeSet		307
	Issuer <Issr>	[0..1]	CodeSet		308
	Country <Ctry>	[0..1]	Text		309
	ShortName <ShrtNm>	[0..1]	Text		309

10.1.9.4.8.2 PackageLength <PackgLngh>

Presence: [0..1]

Definition: Full length of software package identified through Packageldentification.

Datatype: "[PositiveNumber](#)" on page 583

10.1.9.4.8.3 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of the first following PackageBlock, beginning with 0, in the full software package identified through Packageldentification.

Datatype: "PositiveNumber" on page 583

10.1.9.4.8.4 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of the last following PackageBlock in the full software package identified through PackageIdentification.

Datatype: "PositiveNumber" on page 583

10.1.9.4.8.5 PackageBlock <PackgBlck>

Presence: [0..*]

Definition: Consecutive slices of the full software package identified through PackageIdentification starting with first slice at the place identified with OffsetStart and ending with the last slice at the previous place identified with OffsetEnd.

PackageBlock <PackgBlck> contains the following **ExternallyDefinedData5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		354
	Value <Val>	[0..1]	Binary		354
	ProtectedValue <PrctcdVal>	[0..1]	±		354
	Type <Tp>	[0..1]	Text		355

10.1.9.4.8.5.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the set of data to exchange.

Datatype: "Max1025Text" on page 584

10.1.9.4.8.5.2 Value <Val>

Presence: [0..1]

Definition: Data to exchange according to an external standard.

Datatype: "Max100KBinary" on page 522

10.1.9.4.8.5.3 ProtectedValue <PrctcdVal>

Presence: [0..1]

Definition: Protection of the values to exchange.

ProtectedValue <PrctcdVal> contains the following elements (see "[ContentInformationType39](#)" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.9.4.8.5.4 Type <Tp>

Presence: [0..1]

Definition: Identification of the standard used to encode the values to exchange.

Datatype: "[Max1025Text](#)" on page 584

10.1.9.4.9 ProbeValue <PrbVal>

Presence: [0..1]

Definition: Provides the value recorded by this probe.

Datatype: "[Max35Binary](#)" on page 523

10.1.9.5 Vehicle2

Definition: Additional information related to a vehicle.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[0..1]	Text		355
	EntryMode <NtryMd>	[0..1]	CodeSet		355
	Data <Data>	[1..1]	Text		356

10.1.9.5.1 Type <Tp>

Presence: [0..1]

Definition: Type of information related to the vehicle.

Datatype: "[Max35Text](#)" on page 587

10.1.9.5.2 EntryMode <NtryMd>

Presence: [0..1]

Definition: Entry mode of the information.

Datatype: "[CardDataReading5Code](#)" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).

CodeName	Name	Definition
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

10.1.9.5.3 Data <Data>

Presence: [1..1]

Definition: Information related to the vehicle.

Datatype: "Max35Text" on page 587

10.1.9.6 CardPaymentEnvironment82

Definition: Environment of the transaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Acquirer <Acqrr>	[0..1]	±		362
	ServiceProvider <SvcPrvdr>	[0..1]	±		363
	Merchant <Mrchnt>	[0..1]			363
	Identification <Id>	[0..1]			363
	Identification <Id>	[1..1]	Text		364
	Type <Tp>	[0..1]	CodeSet		364
	Issuer <Issr>	[0..1]	CodeSet		364
	ShortName <ShrtNm>	[0..1]	Text		365
	CommonName <CmonNm>	[0..1]	Text		365
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		365
	LocationAndContact <LctnAndCtct>	[0..1]	±		365
	SchemeData <SchmeData>	[0..1]	Text		366
	POI <POI>	[0..1]			366
	Identification <Id>	[1..1]	±		366
	SystemName <SysNm>	[0..1]	Text		367
	GroupIdentification <Grpld>	[0..1]	Text		367
	Capabilities <Cpblties>	[0..1]	±		367
	TimeZone <TmZone>	[0..1]	Text		368
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		368
	Component <Cmpnt>	[0..*]	±		369
	Card <Card>	[0..1]			371
	ProtectedCardData <PrtctdCardData>	[0..1]	±		372
	PrivateCardData <PrvtCardData>	[0..1]	Binary		373
	PlainCardData <PlainCardData>	[0..1]			373
	PAN <PAN>	[1..1]	Text		373
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		373
	EffectiveDate <FctvDt>	[0..1]	Text		373
	ExpiryDate <XpryDt>	[0..1]	Text		374
	ServiceCode <SvcCd>	[0..1]	Text		374
	Track1 <Trck1>	[0..1]	Text		374
	Track2 <Trck2>	[0..1]	Text		374

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Track3 <Trck3>	[0..1]	Text		374
	CardholderName <CrhdldrNm>	[0..1]	Text		374
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		374
	MaskedPAN <MskdPAN>	[0..1]	Text		375
	IssuerBIN <IssrBIN>	[0..1]	Text		375
	CardCountryCode <CardCtryCd>	[0..1]	Text		375
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		375
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		375
	CardBrand <CardBrnd>	[0..1]	Text		375
	CardProductType <CardPdctTp>	[0..1]	CodeSet		375
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		376
	InternationalCard <IntrnlCard>	[0..1]	Indicator		376
	AllowedProduct <AllwdPdct>	[0..*]	Text		376
	ServiceOption <SvcOptn>	[0..1]	Text		376
	AdditionalCardData <AddtlCardData>	[0..1]	Text		376
	Check <Chck>	[0..1]			376
	BankIdentification <Bkld>	[0..1]	Text		377
	AccountNumber <AcctNb>	[0..1]	Text		377
	CheckNumber <ChckNb>	[0..1]	Text		377
	CheckCardNumber <ChckCardNb>	[0..1]	Text		377
	CheckTrackData2 <ChckTrckData2>	[0..1]			377
	TrackNumber <TrckNb>	[0..1]	Quantity		378
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		378
	TrackValue <TrckVal>	[1..1]	Text		378
	CheckType <ChckTp>	[0..1]	CodeSet		378
	Country <Ctry>	[0..1]	Text		379
	StoredValueAccount <StordValAcct>	[0..*]			379
	AccountType <AcctTp>	[0..1]	CodeSet		379
	IdentificationType <IdTp>	[0..1]	CodeSet		380
	Identification <Id>	[0..1]	Text		380
	Brand <Brnd>	[0..1]	Text		381

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Provider <Prvdr>	[0..1]	Text		381
	OwnerName <OwnrNm>	[0..1]	Text		381
	ExpiryDate <XpryDt>	[0..1]	Text		381
	EntryMode <NtryMd>	[0..1]	CodeSet		381
	Currency <Ccy>	[0..1]	CodeSet	C1	382
	Balance <Bal>	[0..1]	Amount		382
	LoyaltyAccount <LtyAcct>	[0..*]	±		382
	CustomerDevice <CstmrDvc>	[0..1]	±		383
	Wallet <Wlt>	[0..1]	±		383
	PaymentToken <PmtTkn>	[0..1]	±		383
	MerchantToken <MrchntTkn>	[0..1]	±		384
	Cardholder <Crhldr>	[0..1]			384
	Identification <Id>	[0..1]			388
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		388
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		388
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		389
	DriverIdentification <DrvrId>	[0..1]	Text		389
	CustomerNumber <CstmrNb>	[0..1]	Text		389
	SocialSecurityNumber <SclSctyNb>	[0..1]	Text		389
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		389
	PassportNumber <PsptNb>	[0..1]	Text		389
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		389
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		389
	EmployerIdentificationNumber <MplyrldNb>	[0..1]	Text		390
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		390
	JobNumber <JobNb>	[0..1]	Text		390
	Department <Dept>	[0..1]	Text		390
	EmailAddress <EmailAdr>	[0..1]	Text		390
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			390
	BirthDate <BirthDt>	[1..1]	Date		390
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		391

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CityOfBirth <CityOfBirth>	[1..1]	Text		391
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	391
	Other <Othr>	[0..*]	±		391
	Name <Nm>	[0..1]	Text		391
	Language <Lang>	[0..1]	CodeSet	C14	391
	BillingAddress <BllgAdr>	[0..1]	±		392
	ShippingAddress <ShppgAdr>	[0..1]	±		392
	TripNumber <TripNb>	[0..1]	Text		393
	Vehicle <Vhcl>	[0..1]	±		393
	Authentication <Authntcn>	[0..*]			394
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		396
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		397
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		398
	ProtectedAuthenticationValue <PrtctdAuthntcnVal>	[0..1]	±		398
	CardholderOnLinePIN <CrdhldrOnLinePIN>	[0..1]			398
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		398
	PINFormat <PINFrmt>	[1..1]	CodeSet		399
	AdditionalInput <AddtlInpt>	[0..1]	Text		399
	CardholderIdentification <CrdhldrId>	[0..1]			399
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		400
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		400
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		400
	DriverIdentification <DrvrId>	[0..1]	Text		401
	CustomerNumber <CstmrNb>	[0..1]	Text		401
	SocialSecurityNumber <ScIScTyNb>	[0..1]	Text		401
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		401
	PassportNumber <PsptNb>	[0..1]	Text		401
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		401
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		401
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		401
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		402

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	JobNumber <JobNb>	[0..1]	Text		402
	Department <Dept>	[0..1]	Text		402
	EmailAddress <EmailAdr>	[0..1]	Text		402
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			402
	BirthDate <BirthDt>	[1..1]	Date		402
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		402
	CityOfBirth <CityOfBirth>	[1..1]	Text		403
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	403
	Other <Othr>	[0..*]	±		403
	AddressVerification <AdrVrfctn>	[0..1]			403
	AddressDigits <AdrDgts>	[0..1]	Text		403
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		404
	AuthenticationType <AuthntcnTp>	[0..1]	Text		404
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		404
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		404
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			404
	Identification <Id>	[1..1]	Text		405
	Value <Val>	[0..1]	Binary		405
	ProtectedValue <PrctcdVal>	[0..1]	±		405
	Type <Tp>	[0..1]	Text		405
	TransactionVerificationResult <TxVrfctnRslt>	[0..*]			405
	Method <Mtd>	[1..1]	CodeSet		406
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		407
	Result <Rslt>	[0..1]	CodeSet		407
	AdditionalResult <AddtlRslt>	[0..1]	Text		407
	PersonalData <PrsnlData>	[0..1]	Text		408
	MobileData <MobData>	[0..*]			408
	MobileCountryCode <MobCtryCd>	[0..1]	Text		408
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		408
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		409
	Geolocation <Glctn>	[0..1]			409

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	GeographicCoordinates <GeogcCordints>	[0..1]			409
	Latitude <Lat>	[1..1]	Text		409
	Longitude <Long>	[1..1]	Text		409
	UTMCoordinates <UTMCordints>	[0..1]			410
	UTMZone <UTMZone>	[1..1]	Text		410
	UTMEastward <UTMEstwr>	[1..1]	Text		410
	UTMNorthward <UTMNrthwr>	[1..1]	Text		410
	SensitiveMobileData <SnstvMobData>	[0..1]			410
	MSISDN <MSISDN>	[1..1]	Text		411
	IMSI <IMSI>	[0..1]	Text		411
	IMEI <IMEI>	[0..1]	Text		411
	ProtectedMobileData <PrtctdMobData>	[0..1]	±		411
	ProtectedCardholderData <PrtctdCrhldrData>	[0..1]	±		411
	SaleEnvironment <SaleEnv>	[0..1]			412
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		412
	Currency <Ccy>	[0..1]	CodeSet	C1	413
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		413
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		413
	MinimumSplitAmount <MinSpltAmt>	[0..1]	Amount		414
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		414
	LoyaltyHandling <LltyHdlg>	[0..1]	CodeSet		414

Constraints

- **OneElementPresenceRule**

At least one of these subelements must be present.

10.1.9.6.1 Acquirer <Acqrr>

Presence: [0..1]

Definition: Acquirer involved in the card payment.

Acquirer <Acqrr> contains the following elements (see "Acquirer10" on page 136 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		136
	ParametersVersion <ParamsVrsn>	[0..1]	Text		137

10.1.9.6.2 ServiceProvider <SvcPrvdr>

Presence: [0..1]

Definition: Third party agent which provides services.

ServiceProvider <SvcPrvdr> contains the following elements (see "Acquirer10" on page 136 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		136
	ParametersVersion <ParamsVrsn>	[0..1]	Text		137

10.1.9.6.3 Merchant <Mrchnt>

Presence: [0..1]

Definition: Merchant performing the card payment transaction.

Usage: In some cases, merchant and acceptor may be regarded as the same entity.

Merchant <Mrchnt> contains the following **Organisation45** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]			363
	Identification <Id>	[1..1]	Text		364
	Type <Tp>	[0..1]	CodeSet		364
	Issuer <Issr>	[0..1]	CodeSet		364
	ShortName <ShrtNm>	[0..1]	Text		365
	CommonName <CmonNm>	[0..1]	Text		365
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		365
	LocationAndContact <LctnAndCtct>	[0..1]	±		365
	SchemeData <SchmeData>	[0..1]	Text		366

10.1.9.6.3.1 Identification <Id>

Presence: [0..1]

Definition: Identification of the merchant.

Identification <Id> contains the following **GenericIdentification192** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		364
	Type <Tp>	[0..1]	CodeSet		364
	Issuer <Issr>	[0..1]	CodeSet		364
	ShortName <ShrtNm>	[0..1]	Text		365

10.1.9.6.3.1.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the entity.

Datatype: "Max35Text" on page 587

10.1.9.6.3.1.2 Type <Tp>

Presence: [0..1]

Definition: Type of identified entity.

Datatype: "PartyType35Code" on page 560

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MKTP	Marketplace	Marketplace providing payment acceptance services on behalf of a merchant.
PFAC	PaymentFacilitator	Payment facilitator providing payment acceptance services on behalf of a merchant.

10.1.9.6.3.1.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).

Datatype: "PartyType4Code" on page 560

CodeName	Name	Definition
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.

CodeName	Name	Definition
TAXH	TaxAuthority	Tax authority.

10.1.9.6.3.1.4 ShortName <ShrtNm>

Presence: [0..1]

Definition: Name of the entity.

Datatype: "Max35Text" on page 587

10.1.9.6.3.2 CommonName <CmonNm>

Presence: [0..1]

Definition: Name of the merchant as appearing on the receipt.

Datatype: "Max70Text" on page 589

10.1.9.6.3.3 LocationCategory <LctnCtgy>

Presence: [0..1]

Definition: Location category of the place where the merchant actually performed the transaction.

Datatype: "LocationCategory4Code" on page 554

CodeName	Name	Definition
ABRD	Aboard	Aboard is used when the sale is done in a vehicle (e.g a bus, train, ship, airplane, taxi, etc).
NMDC	Nomadic	Nomadic is used when the merchant is traveling to different locations (e.g fair or sport events, home delivery, food truck).
FIXD	PhysicalShop	Fixed location, for example in a shop.
VIRT	VirtualShop	Virtual Shop is used for any ecommerce solution.

10.1.9.6.3.4 LocationAndContact <LctnAndCtct>

Presence: [0..1]

Definition: Location and contact information of the merchant performing the transaction.

LocationAndContact <LctnAndCtct> contains the following elements (see "[CommunicationAddress9](#)" on page 251 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PostalAddress <PstlAdr>	[0..1]	±		251
	Email <Email>	[0..1]	Text		251
	URLAddress <URLAdr>	[0..1]	Text		252
	Phone <Phne>	[0..1]	Text		252
	CustomerService <CstmrSvc>	[0..1]	Text		252
	AdditionalContactInformation <AddtlCtctInf>	[0..1]	Text		252

10.1.9.6.3.5 SchemeData <SchmeData>

Presence: [0..1]

Definition: Additional merchant data required by a card scheme.

Datatype: "[Max140Text](#)" on page 585

10.1.9.6.4 POI <POI>

Presence: [0..1]

Definition: Point of interaction (POI) performing the transaction.

POI <POI> contains the following **PointOfInteraction16** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		366
	SystemName <SysNm>	[0..1]	Text		367
	GroupIdentification <Grpld>	[0..1]	Text		367
	Capabilities <Cpblties>	[0..1]	±		367
	TimeZone <TmZone>	[0..1]	Text		368
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		368
	Component <Cmpnt>	[0..*]	±		369

10.1.9.6.4.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the POI (Point Of Interaction) for the acquirer or its agent.

Identification <Id> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwrdr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		313

10.1.9.6.4.2 SystemName <SysNm>

Presence: [0..1]

Definition: Common name assigned by the acquirer to the POI (Point Of Interaction) system.

Datatype: "[Max70Text](#)" on page 589

10.1.9.6.4.3 GroupIdentification <GrpId>

Presence: [0..1]

Definition: Identifier assigned by the merchant identifying a set of POI (Point Of Interaction) terminals performing some categories of transactions.

Datatype: "[Max35Text](#)" on page 587

10.1.9.6.4.4 Capabilities <Cpblties>

Presence: [0..1]

Definition: Capabilities of the POI (Point Of Interaction) performing the transaction.

Capabilities <Cpblties> contains the following elements (see "PointOfInteractionCapabilities11" on page 414 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardReadingCapabilities <CardRdngCpblties>	[0..*]	CodeSet		415
	CardholderVerificationCapabilities <CrdhldrVrfctnCpblties>	[0..*]	CodeSet		416
	PINLengthCapabilities <PINLnghCpblties>	[0..1]	Quantity		416
	ApprovalCodeLength <ApprvlCdLngh>	[0..1]	Quantity		416
	MaxScriptLength <MxScrptLngh>	[0..1]	Quantity		417
	CardCaptureCapable <CardCaptrCpbl>	[0..1]	Indicator		417
	OnLineCapabilities <OnLineCpblties>	[0..1]	CodeSet		417
	MessageCapabilities <MsgCpblties>	[0..*]			417
	Destination <Dstn>	[1..*]	CodeSet		417
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		418
	NumberOfLines <NbOfLines>	[0..1]	Quantity		418
	LineWidth <LineWidth>	[0..1]	Quantity		418
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C14	418

10.1.9.6.4.5 TimeZone <TmZone>

Presence: [0..1]

Definition: Time zone name as defined by IANA (Internet Assigned Numbers Authority) in the time zone data base. America/Chicago or Europe/Paris are examples of time zone names.

Datatype: "Max70Text" on page 589

10.1.9.6.4.6 TerminalIntegration <TermnlIntgtn>

Presence: [0..1]

Definition: Indicates the type of integration of the POI terminal in the sale environment.

Datatype: "LocationCategory3Code" on page 554

CodeName	Name	Definition
INDR	Indoor	Indoor terminal.
IPMP	InsidePump	Terminal incorporated in the pump dispensing petrol.
MPOI	MultiplePOITerminal	Multiple terminals linked to a unique sale terminal.
MPMP	MultiplePump	Outdoor terminal serving several petrol pumps.
MSLE	MultipleSaleTerminal	Terminal serving multiple sale terminals.
SSLE	SingleSaleTerminal	Terminal linked to a unique sale terminal.

CodeName	Name	Definition
VNDG	VendingMachine	Terminal integrated in a vending machine.

10.1.9.6.4.7 Component <Cmpnt>

Presence: [0..*]

Definition: Data related to a component of the POI (Point Of Interaction) performing the transaction.

Component <Cmpnt> contains the following elements (see ["PointOfInteractionComponent18"](#) on page 337 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		339
	SubTypeInfoInformation <SubTpInf>	[0..1]	Text		340
	Identification <Id>	[1..1]			341
	ItemNumber <ItmNb>	[0..1]	Text		341
	ProviderIdentification <PrvdrlId>	[0..1]	Text		341
	Identification <Id>	[0..1]	Text		341
	SerialNumber <SrlNb>	[0..1]	Text		341
	Status <Sts>	[0..1]			341
	VersionNumber <VrsnNb>	[0..1]	Text		342
	Status <Sts>	[0..1]	CodeSet		342
	ExpiryDate <XpryDt>	[0..1]	Date		342
	StandardCompliance <StdCmplc>	[0..*]			342
	Identification <Id>	[1..1]	Text		342
	Version <Vrsn>	[1..1]	Text		343
	Issuer <Issr>	[1..1]	Text		343
	Characteristics <Chrtcs>	[0..1]			343
	Memory <Mmry>	[0..*]			344
	Identification <Id>	[1..1]	Text		345
	TotalSize <TtlSz>	[1..1]	Quantity		345
	FreeSize <FreeSz>	[1..1]	Quantity		345
	Unit <Unit>	[1..1]	CodeSet		345
	Communication <Com>	[0..*]			345
	CommunicationType <ComTp>	[1..1]	CodeSet		346
	RemoteParty <RmotPty>	[1..*]	CodeSet		347
	Active <Actv>	[1..1]	Indicator		347
	Parameters <Params>	[0..1]	±		347
	PhysicalInterface <PhysIntrfc>	[0..1]			348
	InterfaceName <IntrfcNm>	[1..1]	Text		348
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		348
	UserName <UsrNm>	[0..1]	Text		349

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AccessCode <AccsCd>	[0..1]	Binary		349
	SecurityProfile <SctyPrfl>	[0..1]	Text		349
	AdditionalParameters <AddtlParams>	[0..1]	Binary		349
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		350
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		350
	SecurityElement <SctyElmt>	[0..*]	±		350
	Assessment <Assmnt>	[0..*]			351
	Type <Tp>	[1..1]	CodeSet		352
	Assigner <Assgnr>	[1..*]	Text		352
	DeliveryDate <DlvryDt>	[0..1]	DateTime		352
	ExpirationDate <XprtnDt>	[0..1]	DateTime		352
	Number <Nb>	[1..1]	Text		352
	Package <Packg>	[0..*]			353
	PackageIdentification <PackgId>	[0..1]	±		353
	PackageLength <PackgLngh>	[0..1]	Quantity		353
	OffsetStart <OffsetStart>	[0..1]	Quantity		353
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		354
	PackageBlock <PackgBlck>	[0..*]			354
	Identification <Id>	[1..1]	Text		354
	Value <Val>	[0..1]	Binary		354
	ProtectedValue <PrctcdVal>	[0..1]	±		354
	Type <Tp>	[0..1]	Text		355
	ProbeValue <PrbVal>	[0..1]	Binary		355

10.1.9.6.5 Card <Card>

Presence: [0..1]

Definition: Payment card performing the transaction.

Card <Card> contains the following **PaymentCard35** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProtectedCardData <PrtctdCardData>	[0..1]	±		372
	PrivateCardData <PrvtCardData>	[0..1]	Binary		373
	PlainCardData <PlainCardData>	[0..1]			373
	PAN <PAN>	[1..1]	Text		373
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		373
	EffectiveDate <FctvDt>	[0..1]	Text		373
	ExpiryDate <XpryDt>	[0..1]	Text		374
	ServiceCode <SvcCd>	[0..1]	Text		374
	Track1 <Trck1>	[0..1]	Text		374
	Track2 <Trck2>	[0..1]	Text		374
	Track3 <Trck3>	[0..1]	Text		374
	CardholderName <CrdhldrNm>	[0..1]	Text		374
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		374
	MaskedPAN <MskdPAN>	[0..1]	Text		375
	IssuerBIN <IssrBIN>	[0..1]	Text		375
	CardCountryCode <CardCtryCd>	[0..1]	Text		375
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		375
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		375
	CardBrand <CardBrnd>	[0..1]	Text		375
	CardProductType <CardPdctTp>	[0..1]	CodeSet		375
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		376
	InternationalCard <IntrnlCard>	[0..1]	Indicator		376
	AllowedProduct <AllwdPdct>	[0..*]	Text		376
	ServiceOption <SvcOptn>	[0..1]	Text		376
	AdditionalCardData <AddtlCardData>	[0..1]	Text		376

10.1.9.6.5.1 ProtectedCardData <PrtctdCardData>

Presence: [0..1]

Definition: Replacement of the message element PlainCardData by a digital envelope using a cryptographic key.

ProtectedCardData <PrtctdCardData> contains the following elements (see
"ContentInformationType40" on page 511 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		511
	EnvelopedData <EnvlpdData>	[1..1]	±		512

10.1.9.6.5.2 PrivateCardData <PrvtCardData>

Presence: [0..1]

Definition: Replacement of the message element PlainCardData by a private envelope.

Datatype: "Max100KBinary" on page 522

10.1.9.6.5.3 PlainCardData <PlainCardData>

Presence: [0..1]

Definition: Sensitive data associated with the card performing the transaction.

PlainCardData <PlainCardData> contains the following **PlainCardData22** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PAN <PAN>	[1..1]	Text		373
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		373
	EffectiveDate <FctvDt>	[0..1]	Text		373
	ExpiryDate <XpryDt>	[0..1]	Text		374
	ServiceCode <SvcCd>	[0..1]	Text		374
	Track1 <Trck1>	[0..1]	Text		374
	Track2 <Trck2>	[0..1]	Text		374
	Track3 <Trck3>	[0..1]	Text		374
	CardholderName <CrdhldrNm>	[0..1]	Text		374

10.1.9.6.5.3.1 PAN <PAN>

Presence: [1..1]

Definition: Primary Account Number (PAN) of the card, or surrogate of the PAN by a payment token.

Datatype: "Min8Max28NumericText" on page 590

10.1.9.6.5.3.2 CardSequenceNumber <CardSeqNb>

Presence: [0..1]

Definition: Identify a card or a payment token inside a set of cards with the same PAN or token.

Datatype: "Min2Max3NumericText" on page 590

10.1.9.6.5.3.3 EffectiveDate <FctvDt>

Presence: [0..1]

Definition: Date from which the card can be used, expressed either in the YYYY-MM format, or in the YYYY-MM-DD format.

Datatype: "Max10Text" on page 584

10.1.9.6.5.3.4 ExpiryDate <XpryDt>

Presence: [0..1]

Definition: Expiry date of the card or the payment token expressed either in the YYYY-MM format, or in the YYYY-MM-DD format.

Datatype: "Max10Text" on page 584

10.1.9.6.5.3.5 ServiceCode <SvcCd>

Presence: [0..1]

Definition: Services attached to the card, as defined in ISO 7813.

Datatype: "Exact3NumericText" on page 583

10.1.9.6.5.3.6 Track1 <Trck1>

Presence: [0..1]

Definition: ISO track 1 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The format is conform to ISO 7813, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max76Text" on page 589

10.1.9.6.5.3.7 Track2 <Trck2>

Presence: [0..1]

Definition: ISO track 2 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The content is conform to ISO 7813, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max37Text" on page 587

10.1.9.6.5.3.8 Track3 <Trck3>

Presence: [0..1]

Definition: ISO track 3 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The content is conform to ISO 4909, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max104Text" on page 584

10.1.9.6.5.3.9 CardholderName <CrdrHldrNm>

Presence: [0..1]

Definition: Name of the cardholder stored on the card.

Datatype: "Max45Text" on page 588

10.1.9.6.5.4 PaymentAccountReference <PmtAcctRef>

Presence: [0..1]

Definition: Unique reference to the card, used by both merchants and acquirers to link tokenized and non-tokenized transactions associated to the same underlying card.

Datatype: "Max70Text" on page 589

10.1.9.6.5.5 MaskedPAN <MskdPAN>

Presence: [0..1]

Definition: Masked PAN to be printed on payment receipts or displayed to the cardholder. Masked digits may be absent or replaced by another character as '*'.
Datatype: "Max30Text" on page 586

10.1.9.6.5.6 IssuerBIN <IssrBIN>

Presence: [0..1]

Definition: Bank identifier number of the issuer for routing purpose.

Datatype: "Max15NumericText" on page 585

10.1.9.6.5.7 CardCountryCode <CardCtryCd>

Presence: [0..1]

Definition: Country code assigned to the card by the card issuer.

Datatype: "Max3Text" on page 588

10.1.9.6.5.8 CardCurrencyCode <CardCcyCd>

Presence: [0..1]

Definition: Currency code of the card issuer (ISO 4217 numeric code).

Datatype: "Exact3AlphaNumericText" on page 583

10.1.9.6.5.9 CardProductProfile <CardPdctPrfl>

Presence: [0..1]

Definition: Defines a category of cards related to the acceptance processing rules defined by the acquirer.

Datatype: "Max35Text" on page 587

10.1.9.6.5.10 CardBrand <CardBrnd>

Presence: [0..1]

Definition: Brand name of the card.

Datatype: "Max35Text" on page 587

10.1.9.6.5.11 CardProductType <CardPdctTp>

Presence: [0..1]

Definition: Type of card product.

Datatype: "CardProductType1Code" on page 543

CodeName	Name	Definition
COMM	CommercialCard	Cards issued as a means of business expenditure, for instance business card or corporate card. The user could be a company, an individual for business

CodeName	Name	Definition
		expenses or a self employed for business purposes.
CONS	ConsumerCard	Cards issued as a means of personal expenditure. The user is always an individual.

10.1.9.6.5.12 CardProductSubType <CardPdctSubTp>

Presence: [0..1]

Definition: Additional information to identify CardProduct.

Datatype: "Max35Text" on page 587

10.1.9.6.5.13 InternationalCard <IntrnlCard>

Presence: [0..1]

Definition: True if the card may be used abroad.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.9.6.5.14 AllowedProduct <AllwdPdct>

Presence: [0..*]

Definition: Product that can be purchased with the card.

Datatype: "Max70Text" on page 589

10.1.9.6.5.15 ServiceOption <SvcOptn>

Presence: [0..1]

Definition: Options to the service provided by the card.

Datatype: "Max35Text" on page 587

10.1.9.6.5.16 AdditionalCardData <AddtlCardData>

Presence: [0..1]

Definition: Additional card issuer specific data.

Datatype: "Max70Text" on page 589

10.1.9.6.6 Check <Chck>

Presence: [0..1]

Definition: Check Payment instrument.

Check <Chck> contains the following **Check1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BankIdentification <Bkld>	[0..1]	Text		377
	AccountNumber <AcctNb>	[0..1]	Text		377
	CheckNumber <ChckNb>	[0..1]	Text		377
	CheckCardNumber <ChckCardNb>	[0..1]	Text		377
	CheckTrackData2 <ChckTrckData2>	[0..1]			377
	TrackNumber <TrckNb>	[0..1]	Quantity		378
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		378
	TrackValue <TrckVal>	[1..1]	Text		378
	CheckType <ChckTp>	[0..1]	CodeSet		378
	Country <Ctry>	[0..1]	Text		379

10.1.9.6.6.1 BankIdentification <Bkld>

Presence: [0..1]

Definition: Identification of the institution (bank) issuing the check.

Datatype: "Max35Text" on page 587

10.1.9.6.6.2 AccountNumber <AcctNb>

Presence: [0..1]

Definition: Identification of the account linked to the check.

Datatype: "Max35Text" on page 587

10.1.9.6.6.3 CheckNumber <ChckNb>

Presence: [0..1]

Definition: Identification of the check.

Datatype: "Max35Text" on page 587

10.1.9.6.6.4 CheckCardNumber <ChckCardNb>

Presence: [0..1]

Definition: Check guarantee card number.

The human readable number from the Check Guarantee Card that is presented during the check tendering process.

Datatype: "Max35Text" on page 587

10.1.9.6.6.5 CheckTrackData2 <ChckTrckData2>

Presence: [0..1]

Definition: Track Data of the check to digitally identify the data.

CheckTrackData2 <ChckTrckData2> contains the following **TrackData2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TrackNumber <TrckNb>	[0..1]	Quantity		378
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		378
	TrackValue <TrckVal>	[1..1]	Text		378

10.1.9.6.6.5.1 TrackNumber <TrckNb>

Presence: [0..1]

Definition: Track number of the card.

Datatype: "Number" on page 582

10.1.9.6.6.5.2 TrackFormat <TrckFrmt>

Presence: [0..1]

Definition: Card or check track format.

Datatype: "TrackFormat1Code" on page 578

CodeName	Name	Definition
AAMV	AAMVFormat	American driver license.
CMC7	CMC7CheckFormat	Magnetic Ink Character Recognition, using the CMC-7 font - ISO 1004 Line at the bottom of a check containing the bank account and the check number.
E13B	E13BCheckFormat	Magnetic Ink Character Recognition, using the E-13B font) Line at the bottom of a check containing the bank account and the check number.
ISOF	ISOFormat	ISO card track format - ISO 7813 - ISO 4909.
JIS1	JISIFormat	Japanese track format I.
JIS2	JISIIFormat	Japanese track format II.

10.1.9.6.6.5.3 TrackValue <TrckVal>

Presence: [1..1]

Definition: Card track content or equivalent.

Datatype: "Max140Text" on page 585

10.1.9.6.6.6 CheckType <ChckTp>

Presence: [0..1]

Definition: Type of the check (personal or professional).

Datatype: "CheckType1Code" on page 543

CodeName	Name	Definition
BANK	BankCheck	The check is guaranteed by a bank.

CodeName	Name	Definition
BUSI	BusinessCheck	The check belongs to a Company or a professional entity.
GOVC	GovernmentCheck	Check issued by Government.
PAYR	PayrollCheck	Check issued by a company for the employees.
PERS	PersonalCheck	The check belongs to an individual.

10.1.9.6.6.7 Country <Ctry>

Presence: [0..1]

Definition: Country of the check.

Datatype: "Max3Text" on page 588

10.1.9.6.7 StoredValueAccount <StordValAcct>

Presence: [0..*]

Definition: Store value account payment instrument.

StoredValueAccount <StordValAcct> contains the following **StoredValueAccount2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AccountType <AcctTp>	[0..1]	CodeSet		379
	IdentificationType <IdTp>	[0..1]	CodeSet		380
	Identification <Id>	[0..1]	Text		380
	Brand <Brnd>	[0..1]	Text		381
	Provider <Prvdr>	[0..1]	Text		381
	OwnerName <OwnrNm>	[0..1]	Text		381
	ExpiryDate <XpryDt>	[0..1]	Text		381
	EntryMode <NtryMd>	[0..1]	CodeSet		381
	Currency <Ccy>	[0..1]	CodeSet	C1	382
	Balance <Bal>	[0..1]	Amount		382

10.1.9.6.7.1 AccountType <AcctTp>

Presence: [0..1]

Definition: Type of stored value account.

Datatype: "StoredValueAccountType1Code" on page 574

CodeName	Name	Definition
BNKA	BankPrepaidAccount	Prepaid account managed by a financial institution for low income customers.
CWVC	CarwashVoucher	Car wash specific account.

CodeName	Name	Definition
CPYA	CompanyPrepaidAccount	Specific prepaid account for companies or professionals expenses.
ELMY	ElectronicMoneyAccount	Account supporting e-money issued by an electronic money issuer.
GIFT	GiftCard	Payment mean issued by retailers or banks as a substitute to a non-monetary gift. Usually, this Stored Value item is used only once.
GCER	GiftCertificate	Certificate to be given to a customer. Usually one shot voucher.
MLVC	MealVoucher	Meal and check voucher for restaurants.
OLVC	OnlineVoucher	Voucher that can be used online once or in several times.
MERC	MerchantAccount	Prepaid account open with a merchant or big retailers.
OTHR	OtherPrepaidAccount	Other non listed stored value instrument.
PHON	PhoneCard	Stored value instrument used to pay telephone services (e.g. card or identifier).
CARD	SmartCardTag	Stored value account hold on the chip of a smart card.
TRVL	Travel	Travel prepaid account.

10.1.9.6.7.2 IdentificationType <IdTp>

Presence: [0..1]

Definition: Type of identification for this Stored Value Account.

Datatype: "CardIdentificationType1Code" on page 542

CodeName	Name	Definition
ACCT	AccountNumber	Account identification.
BARC	BarCode	Bar-code with a specific form of identification.
ISO2	ISOTrack2	ISO Track 2 including identification.
PHON	PhoneNumber	A phone number identifies the account on which the phone card is assigned.
CPAN	PrimaryAccountNumber	Standard card identification (card number).
PRIV	PrivativeNumbering	An identification set by a privative application.
UUID	UniversalUniqueIdentification	A Universal Unique Identification code is set for identification.

10.1.9.6.7.3 Identification <Id>

Presence: [0..1]

Definition: Identification of Stored Value Account.

Datatype: "Max35Text" on page 587

10.1.9.6.7.4 Brand <Brnd>

Presence: [0..1]

Definition: Brand to which belong the account.

Datatype: "Max35Text" on page 587

10.1.9.6.7.5 Provider <Prvdr>

Presence: [0..1]

Definition: Provider of the Stored Value Account.

Datatype: "Max35Text" on page 587

10.1.9.6.7.6 OwnerName <OwnrNm>

Presence: [0..1]

Definition: Owner name of an account.

Datatype: "Max45Text" on page 588

10.1.9.6.7.7 ExpiryDate <XpryDt>

Presence: [0..1]

Definition: Expiry date of the account of card.

Datatype: "Max10Text" on page 584

10.1.9.6.7.8 EntryMode <NtryMd>

Presence: [0..1]

Definition: Standard or last entry mode to access the Stored Value account or card.

Datatype: "CardDataReading8Code" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

CodeName	Name	Definition
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.9.6.7.9 Currency <Ccy>

Presence: [0..1]

Definition: Currency of the Stored Value account.

Impacted by: C1 "ActiveCurrency"

Datatype: "ActiveCurrencyCode" on page 524

Constraints

- **ActiveCurrency**

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

10.1.9.6.7.10 Balance <Bal>

Presence: [0..1]

Definition: Current balance of the Stored Value account.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.9.6.8 LoyaltyAccount <LtyAcct>

Presence: [0..*]

Definition: Store value account associated to the payment.

LoyaltyAccount <LtyAcct> contains the following elements (see "[LoyaltyAccount3](#)" on page 419 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	LoyaltyIdentification <LtyId>	[1..1]	Text		419
	EntryMode <NtryMd>	[0..1]	CodeSet		419
	IdentificationType <IdTp>	[0..1]	CodeSet		420
	Brand <Brnd>	[0..1]	Text		420
	Provider <Prvdr>	[0..1]	Text		420
	OwnerName <OwnrNm>	[0..1]	Text		420
	Unit <Unit>	[0..1]	CodeSet		421
	Currency <Ccy>	[0..1]	CodeSet	C1	421
	Balance <Bal>	[0..1]	Amount		421

10.1.9.6.9 CustomerDevice <CstmrDvc>

Presence: [0..1]

Definition: Device used by the customer to perform the payment transaction.

CustomerDevice <CstmrDvc> contains the following elements (see "[CustomerDevice3](#)" on page 306 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		307
	Type <Tp>	[0..1]	Text		307
	Provider <Prvdr>	[0..1]	Text		307

10.1.9.6.10 Wallet <Wllt>

Presence: [0..1]

Definition: Container for tenders used by the customer to perform the payment transaction.

Wallet <Wllt> contains the following elements (see "[CustomerDevice3](#)" on page 306 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		307
	Type <Tp>	[0..1]	Text		307
	Provider <Prvdr>	[0..1]	Text		307

10.1.9.6.11 PaymentToken <PmtTkn>

Presence: [0..1]

Definition: Payment token information.

PaymentToken <PmtTkn> contains the following elements (see "Token1" on page 518 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentToken <PmtTkn>	[0..1]	Text		518
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		519
	TokenRequestorIdentification <TknRqstrld>	[0..1]	Text		519
	TokenAssuranceData <TknAssrncData>	[0..1]	Text		519
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		519
	TokenInitiatedIndicator <TknInittldInd>	[0..1]	Indicator		519

10.1.9.6.12 MerchantToken <MrchntTkn>

Presence: [0..1]

Definition: Merchant token information.

MerchantToken <MrchntTkn> contains the following elements (see "MerchantToken2" on page 519 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Token <Tkn>	[0..1]	Text		520
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		520
	TokenCharacteristic <TknChrtc>	[0..*]	Text		520
	TokenRequestor <TknRqstr>	[0..1]			520
	ProviderIdentification <Prvdrlld>	[1..1]	Text		520
	RequestorIdentification <Rqstrld>	[1..1]	Text		521
	TokenAssuranceLevel <TknAssrncLvl>	[0..1]	Quantity		521
	TokenAssuranceData <TknAssrncData>	[0..1]	Binary		521
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		521
	TokenInitiatedIndicator <TknInittldInd>	[0..1]	Indicator		521

10.1.9.6.13 Cardholder <Crdhldr>

Presence: [0..1]

Definition: Cardholder involved in the card payment.

Cardholder <Crhdldr> contains the following **Cardholder21** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]			388
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		388
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		388
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		389
	DriverIdentification <DrvrId>	[0..1]	Text		389
	CustomerNumber <CstmrNb>	[0..1]	Text		389
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		389
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		389
	PassportNumber <PsptNb>	[0..1]	Text		389
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		389
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		389
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		390
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		390
	JobNumber <JobNb>	[0..1]	Text		390
	Department <Dept>	[0..1]	Text		390
	EmailAddress <EmailAdr>	[0..1]	Text		390
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			390
	BirthDate <BirthDt>	[1..1]	Date		390
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		391
	CityOfBirth <CityOfBirth>	[1..1]	Text		391
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	391
	Other <Othr>	[0..*]	±		391
	Name <Nm>	[0..1]	Text		391
	Language <Lang>	[0..1]	CodeSet	C14	391
	BillingAddress <BllgAdr>	[0..1]	±		392
	ShippingAddress <ShppgAdr>	[0..1]	±		392
	TripNumber <TripNb>	[0..1]	Text		393
	Vehicle <Vhcl>	[0..1]	±		393
	Authentication <Authntcn>	[0..*]			394
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		396
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		397

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		398
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		398
	CardholderOnLinePIN <CrhdldrOnLinePIN>	[0..1]			398
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		398
	PINFormat <PINFrmt>	[1..1]	CodeSet		399
	AdditionalInput <AddtlInpt>	[0..1]	Text		399
	CardholderIdentification <CrhdldrId>	[0..1]			399
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		400
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		400
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		400
	DriverIdentification <DrvrId>	[0..1]	Text		401
	CustomerNumber <CstmrNb>	[0..1]	Text		401
	SocialSecurityNumber <ScIScItyNb>	[0..1]	Text		401
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		401
	PassportNumber <PsptNb>	[0..1]	Text		401
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		401
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		401
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		401
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		402
	JobNumber <JobNb>	[0..1]	Text		402
	Department <Dept>	[0..1]	Text		402
	EmailAddress <EmailAdr>	[0..1]	Text		402
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			402
	BirthDate <BirthDt>	[1..1]	Date		402
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		402
	CityOfBirth <CityOfBirth>	[1..1]	Text		403
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	403
	Other <Othr>	[0..*]	±		403
	AddressVerification <AdrVrfctn>	[0..1]			403
	AddressDigits <AdrDgts>	[0..1]	Text		403
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		404

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationType <AuthntcnTp>	[0..1]	Text		404
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		404
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		404
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			404
	Identification <Id>	[1..1]	Text		405
	Value <Val>	[0..1]	Binary		405
	ProtectedValue <PrctcdVal>	[0..1]	±		405
	Type <Tp>	[0..1]	Text		405
	TransactionVerificationResult <TxVrfctnRslt>	[0..*]			405
	Method <Mtd>	[1..1]	CodeSet		406
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		407
	Result <Rslt>	[0..1]	CodeSet		407
	AdditionalResult <AddtlRslt>	[0..1]	Text		407
	PersonalData <PrsnlData>	[0..1]	Text		408
	MobileData <MobData>	[0..*]			408
	MobileCountryCode <MobCtryCd>	[0..1]	Text		408
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		408
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		409
	Geolocation <Glctn>	[0..1]			409
	GeographicCoordinates <GeogcCordints>	[0..1]			409
	Latitude <Lat>	[1..1]	Text		409
	Longitude <Long>	[1..1]	Text		409
	UTMCoordinates <UTMCordints>	[0..1]			410
	UTMZone <UTMZone>	[1..1]	Text		410
	UTMEastward <UTMEstwr>	[1..1]	Text		410
	UTMNorthward <UTMNrthwr>	[1..1]	Text		410
	SensitiveMobileData <SnstvMobData>	[0..1]			410
	MSISDN <MSISDN>	[1..1]	Text		411
	IMSI <IMSI>	[0..1]	Text		411
	IMEI <IMEI>	[0..1]	Text		411
	ProtectedMobileData <PrctcdMobData>	[0..1]	±		411

10.1.9.6.13.1 Identification <Id>

Presence: [0..1]

Definition: Identification of the cardholder involved in a transaction.

Identification <Id> contains the following **PersonIdentification15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		388
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		388
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		389
	DriverIdentification <DrvrId>	[0..1]	Text		389
	CustomerNumber <CstmrNb>	[0..1]	Text		389
	SocialSecurityNumber <ScIscTyNb>	[0..1]	Text		389
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		389
	PassportNumber <PsptNb>	[0..1]	Text		389
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		389
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		389
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		390
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		390
	JobNumber <JobNb>	[0..1]	Text		390
	Department <Dept>	[0..1]	Text		390
	EmailAddress <EmailAdr>	[0..1]	Text		390
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			390
	BirthDate <BirthDt>	[1..1]	Date		390
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		391
	CityOfBirth <CityOfBirth>	[1..1]	Text		391
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	391
	Other <Othr>	[0..*]	±		391

10.1.9.6.13.1.1 DriverLicenseNumber <DrvrLicNb>

Presence: [0..1]

Definition: Number assigned by a license authority to a driver's license.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.2 DriverLicenseLocation <DrvrLicLctn>

Presence: [0..1]

Definition: Country, state or province, issuer of the driver license.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.3 DriverLicenseName <DrvrLicNm>

Presence: [0..1]

Definition: Name or title of the driver license.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.4 DriverIdentification <DrvrId>

Presence: [0..1]

Definition: Identification of the driver in the fleet of vehicle.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.5 CustomerNumber <CstmrNb>

Presence: [0..1]

Definition: Number assigned by an agent to identify its customer.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.6 SocialSecurityNumber <SciSctyNb>

Presence: [0..1]

Definition: Number assigned by a social security agency.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.7 AlienRegistrationNumber <AlnRegnNb>

Presence: [0..1]

Definition: Number assigned by a government agency to identify foreign nationals.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.8 PassportNumber <PsptNb>

Presence: [0..1]

Definition: Number assigned by a passport authority to a passport.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.9 TaxIdentificationNumber <TaxIdNb>

Presence: [0..1]

Definition: Number assigned by a tax authority to an entity.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.10 IdentityCardNumber <IdntyCardNb>

Presence: [0..1]

Definition: Number assigned by a national authority to an identity card.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.11 EmployerIdentificationNumber <MplyrIdNb>

Presence: [0..1]

Definition: Number assigned to an employer by a registration authority.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.12 EmployeeIdentificationNumber <MplyeIdNb>

Presence: [0..1]

Definition: Number assigned to an employee by a employer.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.13 JobNumber <JobNb>

Presence: [0..1]

Definition: Identification of the job.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.14 Department <Dept>

Presence: [0..1]

Definition: Identification of the department.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.15 EmailAddress <EmailAdr>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 586

10.1.9.6.13.1.16 DateAndPlaceOfBirth <DtAndPlcOfBirth>

Presence: [0..1]

Definition: Date and place of birth of a person.

DateAndPlaceOfBirth <DtAndPlcOfBirth> contains the following **DateAndPlaceOfBirth1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BirthDate <BirthDt>	[1..1]	Date		390
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		391
	CityOfBirth <CityOfBirth>	[1..1]	Text		391
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	391

10.1.9.6.13.1.16.1 BirthDate <BirthDt>

Presence: [1..1]

Definition: Date on which a person is born.

Datatype: "ISODate" on page 580

10.1.9.6.13.1.16.2 ProvinceOfBirth <PrvcOfBirth>

Presence: [0..1]

Definition: Province where a person was born.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.16.3 CityOfBirth <CityOfBirth>

Presence: [1..1]

Definition: City where a person was born.

Datatype: "Max35Text" on page 587

10.1.9.6.13.1.16.4 CountryOfBirth <CtryOfBirth>

Presence: [1..1]

Definition: Country where a person was born.

Impacted by: C4 "Country"

Datatype: "CountryCode" on page 544

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.1.9.6.13.1.17 Other <Othr>

Presence: [0..*]

Definition: Unique identification of a person, as assigned by an institution, using an identification scheme.

Other <Othr> contains the following elements (see "GenericIdentification4" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		313
	IdentificationType <IdTp>	[1..1]	Text		313

10.1.9.6.13.2 Name <Nm>

Presence: [0..1]

Definition: Cardholder name associated with the card.

Datatype: "Max45Text" on page 588

10.1.9.6.13.3 Language <Lang>

Presence: [0..1]

Definition: Language selected for the cardholder interface during the transaction.

Reference ISO 639-1 (alpha-2) et ISO 639-2 (alpha-3).

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 554

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.9.6.13.4 BillingAddress <BllgAdr>

Presence: [0..1]

Definition: Postal address of the owner of the payment card.

BillingAddress <BllgAdr> contains the following elements (see "PostalAddress22" on page 459 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		460
	Department <Dept>	[0..1]	Text		460
	SubDepartment <SubDept>	[0..1]	Text		460
	AddressLine <AdrLine>	[0..2]	Text		460
	StreetName <StrtNm>	[0..1]	Text		461
	BuildingNumber <BldgNb>	[0..1]	Text		461
	PostCode <PstCd>	[0..1]	Text		461
	TownName <TwnNm>	[0..1]	Text		461
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		461
	CountryCode <CtryCd>	[0..1]	Text		461

10.1.9.6.13.5 ShippingAddress <ShppgAdr>

Presence: [0..1]

Definition: Postal address for delivery of goods or services.

ShippingAddress <ShppgAdr> contains the following elements (see "PostalAddress22" on page 459 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		460
	Department <Dept>	[0..1]	Text		460
	SubDepartment <SubDept>	[0..1]	Text		460
	AddressLine <AdrLine>	[0..2]	Text		460
	StreetName <StrtNm>	[0..1]	Text		461
	BuildingNumber <BldgNb>	[0..1]	Text		461
	PostCode <PstCd>	[0..1]	Text		461
	TownName <TwnNm>	[0..1]	Text		461
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		461
	CountryCode <CtryCd>	[0..1]	Text		461

10.1.9.6.13.6 TripNumber <TripNb>

Presence: [0..1]

Definition: Identification of the trip.

Datatype: "Max35Text" on page 587

10.1.9.6.13.7 Vehicle <Vhcl>

Presence: [0..1]

Definition: Information related to the vehicle used for the transaction.

Vehicle <Vhcl> contains the following elements (see "Vehicle1" on page 424 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	VehicleNumber <VhclNb>	[0..1]	Text		424
	TrailerNumber <TrlrNb>	[0..1]	Text		425
	VehicleTag <VhclTag>	[0..1]	Text		425
	VehicleTagEntryMode <VhclTagNtryMd>	[0..1]	CodeSet		425
	UnitNumber <UnitNb>	[0..1]	Text		425
	ReplacementCar <RplcmntCar>	[0..1]	Indicator		425
	Odometer <Odmtr>	[0..1]	Quantity		426
	Hubometer <Hbmtr>	[0..1]	Quantity		426
	TrailerHours <TrlrHrs>	[0..1]	Text		426
	ReferHours <RefrHrs>	[0..1]	Text		426
	Maintenanceldentification <Mntncld>	[0..1]	Text		426
	DriverOrVehicleCard <DrvrOrVhclCard>	[0..1]			426
	PAN <PAN>	[0..1]	Text		427
	Track1 <Trck1>	[0..1]	Text		427
	Track2 <Trck2>	[0..1]	Text		427
	Track3 <Trck3>	[0..1]	Text		427
	AdditionalCardData <AddtlCardData>	[0..*]	Text		427
	EntryMode <NtryMd>	[0..1]	CodeSet		427
	AdditionalVehicleData <AddtlVhclData>	[0..*]	±		428

10.1.9.6.13.8 Authentication <Authntcn>

Presence: [0..*]

Definition: Method and data intended to be used for this transaction to authenticate the cardholder and its card.

Authentication <Authntcn> contains the following **CardholderAuthentication17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		396
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		397
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		398
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		398
	CardholderOnLinePIN <CrdhldrOnLinePIN>	[0..1]			398
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		398
	PINFormat <PINFrmt>	[1..1]	CodeSet		399
	AdditionalInput <AddtlInpt>	[0..1]	Text		399
	CardholderIdentification <CrdhldrId>	[0..1]			399
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		400
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		400
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		400
	DriverIdentification <DrvrId>	[0..1]	Text		401
	CustomerNumber <CstmrNb>	[0..1]	Text		401
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		401
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		401
	PassportNumber <PsptNb>	[0..1]	Text		401
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		401
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		401
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		401
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		402
	JobNumber <JobNb>	[0..1]	Text		402
	Department <Dept>	[0..1]	Text		402
	EmailAddress <EmailAdr>	[0..1]	Text		402
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			402
	BirthDate <BirthDt>	[1..1]	Date		402
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		402
	CityOfBirth <CityOfBirth>	[1..1]	Text		403
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	403
	Other <Othr>	[0..*]	±		403
	AddressVerification <AdrVrfctn>	[0..1]			403

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressDigits <AdrDgts>	[0..1]	Text		403
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		404
	AuthenticationType <AuthntcnTp>	[0..1]	Text		404
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		404
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		404
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			404
	Identification <Id>	[1..1]	Text		405
	Value <Val>	[0..1]	Binary		405
	ProtectedValue <PrctcdVal>	[0..1]	±		405
	Type <Tp>	[0..1]	Text		405

10.1.9.6.13.8.1 AuthenticationMethod <AuthntcnMtd>

Presence: [0..1]

Definition: Method and data intended to be used for this transaction to authenticate the cardholder or its card.

Datatype: "AuthenticationMethod8Code" on page 536

CodeName	Name	Definition
TOKA	AuthenticationToken	A token is used to verify an already performed authentication.
ADDB	BillingAddressVerification	Cardholder billing address verification.
BYPS	Bypass	Authentication bypassed by the merchant.
BIOM	Biometry	Biometric authentication of the cardholder.
CDHI	CardholderIdentificationData	Cardholder data provided for verification, for instance social security number, driver license number, passport number.
CRYP	CryptogramVerification	Verification of a cryptogram generated by a chip card or another device, for instance ARQC (Authorisation Request Cryptogram).
CSCV	CSCVerification	Verification of Card Security Code.
MANU	ManualVerification	Manual verification, for example passport or drivers license.
MERC	MerchantAuthentication	Merchant-related authentication.
MOBL	Mobile	Customer mobile device.
FPIN	OfflinePIN	Off-line PIN authentication (Personal Identification Number).
NPIN	OnLinePIN	On-line PIN authentication (Personal Identification Number).

CodeName	Name	Definition
OTHR	Other	Other customer authentication.
PPSG	PaperSignature	Handwritten paper signature.
PSVE	PassiveAuthentication	Authentication based on statistical cardholder behaviour.
PSWD	Password	Authentication by a password.
TOKP	PaymentToken	Verification or authentication related to the use of a payment token, for instance the validation of the authorised use of a token.
SCRT	SecureCertificate	Electronic commerce transaction secured with the X.509 certificate of a customer.
SCNL	SecuredChannel	Channel-encrypted transaction.
CSEC	SecureElectronicCommerce	Authentication performed during a secure electronic commerce transaction.
SNCT	SecureNoCertificate	Secure electronic transaction without cardholder certificate.
ADDS	ShippingAddressVerification	Cardholder shipping address verification.
CPSG	SignatureCapture	Electronic signature capture (handwritten signature).
TOKN	TokenAuthentication	Cryptogram generated by the token requestor or a customer device to validate the authorised use of a token.
UKNW	UnknownMethod	Authentication method is performed unknown.

10.1.9.6.13.8.2 AuthenticationExemption <AuthntcnXmptn>

Presence: [0..1]

Definition: If Strong Customer Authentication is not mandated to process the transaction, this message element must identify the reason of exemption.

Datatype: "Exemption1Code" on page 549

CodeName	Name	Definition
LOWA	LowAmountExemption	Transaction's amount is low and could be processed without strong customer authentication.
MINT	MerchantInitiatedTransaction	Transaction is initiated by the Card Acceptor.
RECP	RecurringPayment	Transaction is one of a series of recurring payment.
SCPE	SecureCorporatePaymentExemption	Transaction is a secure corporate payment.
SCAD	StrongCustomerAuthenticationDelegation	Card Acceptor is a strong customer authentication delegate.

CodeName	Name	Definition
TRAE	TransactionRiskAnalysisExemption	According to the transaction risk analysis the strong customer authentication is not mandated.
PKGE	TransportFareOrParkingFeeUnattendedPaymentExemption	Payment is processed in a environment where strong customer authentication is inappropriate.
TMBE	TrustedMerchantBeneficiaryExemption	Cardholder has enrolled the Card Acceptor in the exemption list of strong customer authentication.

10.1.9.6.13.8.3 AuthenticationValue <AuthntcnVal>

Presence: [0..1]

Definition: Value used to authenticate the cardholder.

Datatype: "Max5000Binary" on page 523

10.1.9.6.13.8.4 ProtectedAuthenticationValue <PrctcdAuthntcnVal>

Presence: [0..1]

Definition: Protection of the authentication value.

ProtectedAuthenticationValue <PrctcdAuthntcnVal> contains the following elements (see "ContentInformationType40" on page 511 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		511
	EnvelopedData <EnvlpdData>	[1..1]	±		512

10.1.9.6.13.8.5 CardholderOnLinePIN <CrdhldrOnLinePIN>

Presence: [0..1]

Definition: Encrypted personal identification number (PIN) and related information.

CardholderOnLinePIN <CrdhldrOnLinePIN> contains the following **OnLinePIN11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		398
	PINFormat <PINFrmt>	[1..1]	CodeSet		399
	AdditionalInput <AddtlInpt>	[0..1]	Text		399

10.1.9.6.13.8.5.1 EncryptedPINBlock <NcrptdPINBlck>

Presence: [1..1]

Definition: Encrypted PIN (Personal Identification Number).

EncryptedPINBlock <NcrptdPINBlck> contains the following elements (see
"ContentInformationType40" on page 511 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		511
	EnvelopedData <EnvlpdData>	[1..1]	±		512

10.1.9.6.13.8.5.2 PINFormat <PINFrmt>

Presence: [1..1]

Definition: PIN (Personal Identification Number) format before encryption.

Datatype: "PINFormat3Code" on page 562

CodeName	Name	Definition
ISO0	ISO0	PIN diversified with the card account number, conforming to the standard ISO 9564-2.
ISO1	ISO1	PIN completed with random padding characters, conforming to the standard ISO 9564-2.
ISO2	ISO2	PIN without diversification characters, conforming to the standard ISO 9564-2.
ISO3	ISO3	PIN diversified with the card account number and random characters, conforming to the standard ISO 9564-2.
ISO4	ISO4	PIN format used with AES encryption, conforming to the new ISO SC2 format.
ISO5	ISO5	Alternative PIN format used with AES encryption, conforming to the new ISO SC2 format.

10.1.9.6.13.8.5.3 AdditionalInput <AddtlInpt>

Presence: [0..1]

Definition: Additional information required to verify the PIN (Personal Identification Number).

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6 CardholderIdentification <CrhdldrId>

Presence: [0..1]

Definition: Identification of the cardholder to verify.

CardholderIdentification <CrhdIdrId> contains the following **PersonIdentification15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		400
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		400
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		400
	DriverIdentification <DrvrId>	[0..1]	Text		401
	CustomerNumber <CstmrNb>	[0..1]	Text		401
	SocialSecurityNumber <ScIScItyNb>	[0..1]	Text		401
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		401
	PassportNumber <PsptNb>	[0..1]	Text		401
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		401
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		401
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		401
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		402
	JobNumber <JobNb>	[0..1]	Text		402
	Department <Dept>	[0..1]	Text		402
	EmailAddress <EmailAdr>	[0..1]	Text		402
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			402
	BirthDate <BirthDt>	[1..1]	Date		402
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		402
	CityOfBirth <CityOfBirth>	[1..1]	Text		403
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	403
	Other <Othr>	[0..*]	±		403

10.1.9.6.13.8.6.1 DriverLicenseNumber <DrvrLicNb>

Presence: [0..1]

Definition: Number assigned by a license authority to a driver's license.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.2 DriverLicenseLocation <DrvrLicLctn>

Presence: [0..1]

Definition: Country, state or province, issuer of the driver license.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.3 DriverLicenseName <DrvrLicNm>

Presence: [0..1]

Definition: Name or title of the driver license.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.4 DriverIdentification <DrvrlId>

Presence: [0..1]

Definition: Identification of the driver in the fleet of vehicle.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.5 CustomerNumber <CstmrNb>

Presence: [0..1]

Definition: Number assigned by an agent to identify its customer.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.6 SocialSecurityNumber <SciSctyNb>

Presence: [0..1]

Definition: Number assigned by a social security agency.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.7 AlienRegistrationNumber <AlnRegnNb>

Presence: [0..1]

Definition: Number assigned by a government agency to identify foreign nationals.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.8 PassportNumber <PsptNb>

Presence: [0..1]

Definition: Number assigned by a passport authority to a passport.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.9 TaxIdentificationNumber <TaxIdNb>

Presence: [0..1]

Definition: Number assigned by a tax authority to an entity.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.10 IdentityCardNumber <IdntyCardNb>

Presence: [0..1]

Definition: Number assigned by a national authority to an identity card.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.11 EmployerIdentificationNumber <MplyrIdNb>

Presence: [0..1]

Definition: Number assigned to an employer by a registration authority.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.12 EmployeeIdentificationNumber <MplyeeldNb>

Presence: [0..1]

Definition: Number assigned to an employee by a employer.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.13 JobNumber <JobNb>

Presence: [0..1]

Definition: Identification of the job.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.14 Department <Dept>

Presence: [0..1]

Definition: Identification of the department.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.15 EmailAddress <EmailAdr>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 586

10.1.9.6.13.8.6.16 DateAndPlaceOfBirth <DtAndPlcOfBirth>

Presence: [0..1]

Definition: Date and place of birth of a person.

DateAndPlaceOfBirth <DtAndPlcOfBirth> contains the following **DateAndPlaceOfBirth1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BirthDate <BirthDt>	[1..1]	Date		402
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		402
	CityOfBirth <CityOfBirth>	[1..1]	Text		403
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	403

10.1.9.6.13.8.6.16.1 BirthDate <BirthDt>

Presence: [1..1]

Definition: Date on which a person is born.

Datatype: "ISODate" on page 580

10.1.9.6.13.8.6.16.2 ProvinceOfBirth <PrvcOfBirth>

Presence: [0..1]

Definition: Province where a person was born.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.16.3 CityOfBirth <CityOfBirth>

Presence: [1..1]

Definition: City where a person was born.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.6.16.4 CountryOfBirth <CtrOfBirth>

Presence: [1..1]

Definition: Country where a person was born.

Impacted by: C4 "Country"

Datatype: "CountryCode" on page 544

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.1.9.6.13.8.6.17 Other <Othr>

Presence: [0..*]

Definition: Unique identification of a person, as assigned by an institution, using an identification scheme.

Other <Othr> contains the following elements (see "GenericIdentification4" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		313
	IdentificationType <IdTp>	[1..1]	Text		313

10.1.9.6.13.8.7 AddressVerification <AdrVrfctn>

Presence: [0..1]

Definition: Numeric characters of the cardholder's billing or shipping address for verification.

AddressVerification <AdrVrfctn> contains the following **AddressVerification1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressDigits <AdrDgts>	[0..1]	Text		403
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		404

10.1.9.6.13.8.7.1 AddressDigits <AdrDgts>

Presence: [0..1]

Definition: Numeric characters from the cardholder's address excluding the postal code (that is street number).

Datatype: "Max5NumericText" on page 588

10.1.9.6.13.8.7.2 PostalCodeDigits <PstlCdDgts>

Presence: [0..1]

Definition: Numeric characters from the cardholder's postal code.

Datatype: "Max5NumericText" on page 588

10.1.9.6.13.8.8 AuthenticationType <AuthntcnTp>

Presence: [0..1]

Definition: Type of authentication for a given method - e.g. three-domain authentication, scheme-proprietary authentication, etc.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.9 AuthenticationLevel <AuthntcnLvl>

Presence: [0..1]

Definition: Level of authentication for a given type - e.g. value assigned by scheme rules or by bilateral agreements.

Datatype: "Max35Text" on page 587

10.1.9.6.13.8.10 AuthenticationResult <AuthntcnRslt>

Presence: [0..1]

Definition: Result of authentication.

Datatype: "AuthenticationResult1Code" on page 537

CodeName	Name	Definition
DENY	Denial	The authentication didn't succeed.
MRCH	MerchantNotEnroled	Merchant not enrolled in the authentication programme.
CARD	NonParticipation	The card does not participate in the authentication programme.
AUTH	UnableToAuthenticate	The authentication couldn't be carried out.
CRPT	WithCryptogram	Authentication succeeded with a cryptogram.
UCRP	WithoutCryptogram	Authentication succeeded without a cryptogram.

10.1.9.6.13.8.11 AuthenticationAdditionalInformation <AuthntcnAddtlInf>

Presence: [0..1]

Definition: Additional information related to the result of the authentication.

AuthenticationAdditionalInformation <AuthntcnAddtlInf> contains the following
ExternallyDefinedData5 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		405
	Value <Val>	[0..1]	Binary		405
	ProtectedValue <PrctcdVal>	[0..1]	±		405
	Type <Tp>	[0..1]	Text		405

10.1.9.6.13.8.11.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the set of data to exchange.

Datatype: "Max1025Text" on page 584

10.1.9.6.13.8.11.2 Value <Val>

Presence: [0..1]

Definition: Data to exchange according to an external standard.

Datatype: "Max100KBinary" on page 522

10.1.9.6.13.8.11.3 ProtectedValue <PrctcdVal>

Presence: [0..1]

Definition: Protection of the values to exchange.

ProtectedValue <PrctcdVal> contains the following elements (see "ContentInformationType39" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.9.6.13.8.11.4 Type <Tp>

Presence: [0..1]

Definition: Identification of the standard used to encode the values to exchange.

Datatype: "Max1025Text" on page 584

10.1.9.6.13.9 TransactionVerificationResult <TxVrfctnRslt>

Presence: [0..*]

Definition: Result of performed verifications for the transaction.

TransactionVerificationResult <TxVrfctnRsIt> contains the following
TransactionVerificationResult4 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Method <Mtd>	[1..1]	CodeSet		406
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		407
	Result <RsIt>	[0..1]	CodeSet		407
	AdditionalResult <AddtlRsIt>	[0..1]	Text		407

10.1.9.6.13.9.1 Method <Mtd>

Presence: [1..1]

Definition: Method of verification that has been performed.

Datatype: "AuthenticationMethod6Code" on page 535

CodeName	Name	Definition
NPIN	OnLinePIN	On-line PIN authentication (Personal Identification Number).
PPSG	PaperSignature	Handwritten paper signature.
PSWD	Password	Authentication by a password.
SCRT	SecureCertificate	Electronic commerce transaction secured with the X.509 certificate of a customer.
SCNL	SecuredChannel	Channel-encrypted transaction.
SNCT	SecureNoCertificate	Secure electronic transaction without cardholder certificate.
CPSG	SignatureCapture	Electronic signature capture (handwritten signature).
ADDB	BillingAddressVerification	Cardholder billing address verification.
BIOM	Biometry	Biometric authentication of the cardholder.
CDHI	CardholderIdentificationData	Cardholder data provided for verification, for instance social security number, driver license number, passport number.
CRYP	CryptogramVerification	Verification of a cryptogram generated by a chip card or another device, for instance ARQC (Authorisation Request Cryptogram).
CSCV	CSCVerification	Verification of Card Security Code.
PSVE	PassiveAuthentication	Authentication based on statistical cardholder behaviour.
CSEC	SecureElectronicCommerce	Authentication performed during a secure electronic commerce transaction.
ADDS	ShippingAddressVerification	Cardholder shipping address verification.
MANU	ManualVerification	Manual verification, for example passport or drivers license.

CodeName	Name	Definition
FPIN	OfflinePIN	Off-line PIN authentication (Personal Identification Number).
TOKP	PaymentToken	Verification or authentication related to the use of a payment token, for instance the validation of the authorised use of a token.

10.1.9.6.13.9.2 VerificationEntity <VrfctnNtty>

Presence: [0..1]

Definition: Entity or device that has performed the verification.

Datatype: "AuthenticationEntity2Code" on page 535

CodeName	Name	Definition
ICCD	ICC	Application in the chip card (Integrated Circuit Card), for instance an offline PIN verification.
AGNT	AuthorisedAgent	Authorisation agent of the issuer.
MERC	Merchant	Merchant (for example signature verification by the attendant).
ACQR	Acquirer	Acquirer of the transaction.
ISSR	Issuer	Card issuer.
TRML	Terminal	Secure application in the terminal.

10.1.9.6.13.9.3 Result <RsIt>

Presence: [0..1]

Definition: Result of the verification.

Datatype: "Verification1Code" on page 580

CodeName	Name	Definition
FAIL	Failed	Verification failed.
MISS	Missing	Information required to perform the verification was missing.
NOVF	NotPerformed	Verification has not been performed.
PART	PartialMatch	Verification was partially successful.
SUCC	Successful	Verification was successful.
ERRR	TechnicalError	Device or entity to perform the verification was unavailable.

10.1.9.6.13.9.4 AdditionalResult <AddtlRsIt>

Presence: [0..1]

Definition: Additional result of the verification.

Datatype: "Max500Text" on page 588

10.1.9.6.13.10 PersonalData <PrsnlData>

Presence: [0..1]

Definition: Identifies personal data related to the cardholder.

Datatype: "Max70Text" on page 589

10.1.9.6.13.11 MobileData <MobData>

Presence: [0..*]

Definition: Data related to the mobile of stakeholder.

MobileData <MobData> contains the following **MobileData6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MobileCountryCode <MobCtryCd>	[0..1]	Text		408
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		408
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		409
	Geolocation <Glctn>	[0..1]			409
	GeographicCoordinates <GeogcCordints>	[0..1]			409
	Latitude <Lat>	[1..1]	Text		409
	Longitude <Long>	[1..1]	Text		409
	UTMCoordinates <UTMCordints>	[0..1]			410
	UTMZone <UTMZone>	[1..1]	Text		410
	UTMEastward <UTMEstwrdr>	[1..1]	Text		410
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		410
	SensitiveMobileData <SnstvlMobData>	[0..1]			410
	MSISDN <MSISDN>	[1..1]	Text		411
	IMSI <IMSI>	[0..1]	Text		411
	IMEI <IMEI>	[0..1]	Text		411
	ProtectedMobileData <PrtctdMobData>	[0..1]	±		411

10.1.9.6.13.11.1 MobileCountryCode <MobCtryCd>

Presence: [0..1]

Definition: Identifies the country of a mobile phone operator.

Datatype: "Min2Max3AlphaText" on page 590

10.1.9.6.13.11.2 MobileNetworkCode <MobNtwkCd>

Presence: [0..1]

Definition: Identifies the mobile phone operator inside a country.

Datatype: "Min2Max3NumericText" on page 590

10.1.9.6.13.11.3 MobileMaskedMSISDN <MobMskdMSISDN>

Presence: [0..1]

Definition: Masked Mobile Subscriber Integrated Service Digital Network.

Datatype: "Max35Text" on page 587

10.1.9.6.13.11.4 Geolocation <Glctn>

Presence: [0..1]

Definition: Geographic location specified by geographic or UTM coordinates.

Geolocation <Glctn> contains the following **Geolocation1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	GeographicCoordinates <GeogcCordints>	[0..1]			409
	Latitude <Lat>	[1..1]	Text		409
	Longitude <Long>	[1..1]	Text		409
	UTMCoordinates <UTMCordints>	[0..1]			410
	UTMZone <UTMZone>	[1..1]	Text		410
	UTMEastward <UTMEstwrdr>	[1..1]	Text		410
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		410

10.1.9.6.13.11.4.1 GeographicCoordinates <GeogcCordints>

Presence: [0..1]

Definition: Geographic location specified by geographic coordinates.

GeographicCoordinates <GeogcCordints> contains the following **GeolocationGeographicCoordinates1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Latitude <Lat>	[1..1]	Text		409
	Longitude <Long>	[1..1]	Text		409

10.1.9.6.13.11.4.1.1 Latitude <Lat>

Presence: [1..1]

Definition: Angular distance of a location on the earth south or north of the equator.

The latitude is measured in degrees, minutes and seconds, following by "N" for the north and "S" for the south of the equator. For example: 48°51'29" N the Eiffel Tower latitude.

Datatype: "Max35Text" on page 587

10.1.9.6.13.11.4.1.2 Longitude <Long>

Presence: [1..1]

Definition: Angular measurement of the distance of a location on the earth east or west of the Greenwich observatory.

The longitude is measured in degrees, minutes and seconds, following by "E" for the east and "W" for the west. For example: 23°27'30" E.

Datatype: "Max35Text" on page 587

10.1.9.6.13.11.4.2 UTMCoordinates <UTMCordints>

Presence: [0..1]

Definition: Geographic location specified by UTM coordinates.

UTMCoordinates <UTMCordints> contains the following **GeolocationUTMCoordinates1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	UTMZone <UTMZone>	[1..1]	Text		410
	UTMEastward <UTMEstwr>	[1..1]	Text		410
	UTMNorthward <UTMNrthwr>	[1..1]	Text		410

10.1.9.6.13.11.4.2.1 UTMZone <UTMZone>

Presence: [1..1]

Definition: UTM grid zone combination of the longitude zone (1 to 60) and the latitude band (C to X, excluding I and O).

Datatype: "Max35Text" on page 587

10.1.9.6.13.11.4.2.2 UTMEastward <UTMEstwr>

Presence: [1..1]

Definition: X-coordinate of the Universal Transverse Mercator coordinate system.

Datatype: "Max35Text" on page 587

10.1.9.6.13.11.4.2.3 UTMNorthward <UTMNrthwr>

Presence: [1..1]

Definition: Y-coordinate of the Universal Transverse Mercator coordinate system.

Datatype: "Max35Text" on page 587

10.1.9.6.13.11.5 SensitiveMobileData <SnstvMobData>

Presence: [0..1]

Definition: Sensitive information related to the mobile phone.

SensitiveMobileData <SnstvMobData> contains the following **SensitiveMobileData1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MSISDN <MSISDN>	[1..1]	Text		411
	IMSI <IMSI>	[0..1]	Text		411
	IMEI <IMEI>	[0..1]	Text		411

10.1.9.6.13.11.5.1 MSISDN <MSISDN>

Presence: [1..1]

Definition: identifies the mobile - Mobile Subscriber Integrated Service Digital Network (The SIM identifier).

Datatype: "Max35NumericText" on page 587

10.1.9.6.13.11.5.2 IMSI <IMSI>

Presence: [0..1]

Definition: International Mobile Subscriber Identity is a unique number associated with the mobile phone user, containing the Mobile Country Code (MCC), the Mobile Network Code (MNC), and the Mobile Identification Number (MSIN).

Datatype: "Max35NumericText" on page 587

10.1.9.6.13.11.5.3 IMEI <IMEI>

Presence: [0..1]

Definition: International Mobile Equipment Identity is a number usually unique to identify a mobile phone.

Datatype: "Max35NumericText" on page 587

10.1.9.6.13.11.6 ProtectedMobileData <PrtctdMobData>

Presence: [0..1]

Definition: Sensitive information related to the mobile phone, protected by CMS.

ProtectedMobileData <PrtctdMobData> contains the following elements (see "ContentInformationType40" on page 511 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		511
	EnvelopedData <EnvlpdData>	[1..1]	±		512

10.1.9.6.14 ProtectedCardholderData <PrtctdCrhdlrData>

Presence: [0..1]

Definition: Replacement of the message element Cardholder by a digital envelope using a cryptographic key.

ProtectedCardholderData <PrctcdCrhdldrData> contains the following elements (see
"ContentInformationType40" on page 511 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		511
	EnvelopedData <EnvlpdData>	[1..1]	±		512

10.1.9.6.15 SaleEnvironment <SaleEnv>

Presence: [0..1]

Definition: Sale Retailer Environment for this message.

SaleEnvironment <SaleEnv> contains the following **RetailerSaleEnvironment2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		412
	Currency <Ccy>	[0..1]	CodeSet	C1	413
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		413
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		413
	MinimumSplitAmount <MinSpltAmt>	[0..1]	Amount		414
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		414
	LoyaltyHandling <LtyHdlg>	[0..1]	CodeSet		414

10.1.9.6.15.1 SaleCapabilities <SaleCpblties>

Presence: [0..*]

Definition: Capabilities of the Sale system.

Datatype: "SaleCapabilities1Code" on page 573

CodeName	Name	Definition
CHDI	CashierDisplay	Standard Cashier display interface (to ask question, or to show information).
CHER	CashierError	To display to the Cashier information related to an error situation occurring on the POI.
CHIN	CashierInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element). The output device attached to this input device is the CashierDisplay device.
CHST	CashierStatus	To display to the Cashier a new state on which the POI is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.

CodeName	Name	Definition
CUDI	CustomerDisplay	Standard Customer display interface used by the POI System to ask question, or to show information to the Customer inside a Service dialogue.
CUAS	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
CUER	CustomerError	To display to the Customer information is related to an error situation occurring on the Sale Terminal during a Sale transaction.
CUIN	CustomerInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element).
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
PRDC	PrinterDocument	When the POI System wants to print specific document (check, dynamic currency conversion ...).
PRRP	PrinterReceipt	Printer for the Payment receipt.
PRVC	PrinterVoucher	Coupons, voucher or special ticket generated by the POI and to be printed.

10.1.9.6.15.2 Currency <Ccy>

Presence: [0..1]

Definition: Default currency associated with the sale system.

Impacted by: C1 "ActiveCurrency"

Datatype: "ActiveCurrencyCode" on page 524

Constraints

- **ActiveCurrency**

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

10.1.9.6.15.3 MinimumAmountToDeliver <MinAmtToDlvr>

Presence: [0..1]

Definition: Minimum amount the Sale System is allowed to deliver for this payment.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.9.6.15.4 MaximumCashBackAmount <MaxCshBckAmt>

Presence: [0..1]

Definition: Maximum amount which could be requested for cash-back.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.9.6.15.5 MinimumSplitAmount <MinSpltAmt>

Presence: [0..1]

Definition: Minimum amount to split a sale transaction.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.9.6.15.6 DebitPreferredFlag <DbtPrefrdFlg>

Presence: [0..1]

Definition: Flag if preferred type of payment is a debit transaction.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.9.6.15.7 LoyaltyHandling <LltyHdlg>

Presence: [0..1]

Definition: Way of Loyalty handling.

Datatype: "LoyaltyHandling1Code" on page 555

CodeName	Name	Definition
ALLO	Allowed	The loyalty is accepted, but the POI has not to require or ask a loyalty card. The loyalty is involved by the payment card (e.g. an hybrid or linked card).
DENY	Forbidden	No loyalty card to read and loyalty transaction to process. Any attempt to enter a pure loyalty card is rejected.
PRCS	Processed	The loyalty transaction is already processed, no loyalty card or loyalty transaction to process.
PROP	Proposed	The loyalty is accepted, and the POI has to ask a loyalty card. If the Customer does not enter a loyalty card, no loyalty transaction is realised.
REQU	Required	The loyalty is required, and the POI refuses the processing of the message request if the cardholder does not enter a loyalty card.

10.1.9.7 PointOfInteractionCapabilities11

Definition: Capabilities of the POI (Point Of Interaction) performing the transaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardReadingCapabilities <CardRdngCpblties>	[0..*]	CodeSet		415
	CardholderVerificationCapabilities <CrdhldrVrfctnCpblties>	[0..*]	CodeSet		416
	PINLengthCapabilities <PINLnghCpblties>	[0..1]	Quantity		416
	ApprovalCodeLength <ApprvlCdLngh>	[0..1]	Quantity		416
	MaxScriptLength <MxScrptLngh>	[0..1]	Quantity		417
	CardCaptureCapable <CardCaptrCpbl>	[0..1]	Indicator		417
	OnLineCapabilities <OnLineCpblties>	[0..1]	CodeSet		417
	MessageCapabilities <MsgCpblties>	[0..*]			417
	Destination <Dstn>	[1..*]	CodeSet		417
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		418
	NumberOfLines <NbOfLines>	[0..1]	Quantity		418
	LineWidth <LineWidth>	[0..1]	Quantity		418
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C14	418

10.1.9.7.1 CardReadingCapabilities <CardRdngCpblties>

Presence: [0..*]

Definition: Card reading capabilities of the POI (Point Of Interaction) performing the transaction.

Datatype: "CardDataReading8Code" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.

CodeName	Name	Definition
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.9.7.2 CardholderVerificationCapabilities <CrdhldrVrfctnCpblties>

Presence: [0..*]

Definition: Cardholder verification capabilities of the POI (Point Of Interaction) performing the transaction.

Datatype: "CardholderVerificationCapability4Code" on page 541

CodeName	Name	Definition
APKI	AccountDigitalSignature	Account based digital signature.
CHDT	CardholderData	Cardholder authentication data.
MNSG	ManualSignature	Manual signature verification.
MNVR	ManualVerification	Other manual verification, for example passport or drivers license.
FBIG	OfflineBiographics	Offline biographics.
FBIO	OfflineBiometrics	Offline biometrics.
FDSG	OfflineDigitalSignature	Offline digital signature analysis.
FCPN	OfflinePINClear	Offline PIN in clear (Personal Identification Number).
FEPN	OfflinePINEncrypted	Offline PIN encrypted (Personal Identification Number).
NPIN	OnLinePIN	Online PIN (Personal Identification Number).
PKIS	PKISignature	PKI (Public Key Infrastructure) based digital signature.
SCEC	SecureElectronicCommerce	Three domain secure (three domain secure authentication of the cardholder).
NBIO	OnLineBiometrics	Online biometrics.
NOVF	NoCapabilities	No cardholder verification capability.
OTHR	Other	Other cardholder verification capabilities.

10.1.9.7.3 PINLengthCapabilities <PINLnghCpblties>

Presence: [0..1]

Definition: Maximum number of digits the POI is able to accept when the cardholder enters its PIN.

Datatype: "PositiveNumber" on page 583

10.1.9.7.4 ApprovalCodeLength <ApprvlCdLngh>

Presence: [0..1]

Definition: Maximum number of characters of the approval code the POI is able to manage.

Datatype: "PositiveNumber" on page 583

10.1.9.7.5 MaxScriptLength <MxScrpLngth>

Presence: [0..1]

Definition: Maximum data length in bytes that a card issuer can return to the ICC at the terminal.

Datatype: "PositiveNumber" on page 583

10.1.9.7.6 CardCaptureCapable <CardCaptrCpbl>

Presence: [0..1]

Definition: True if the POI is able to capture card.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.9.7.7 OnLineCapabilities <OnLineCpblties>

Presence: [0..1]

Definition: On-line and off-line capabilities of the POI (Point Of Interaction).

Datatype: "OnLineCapability1Code" on page 558

CodeName	Name	Definition
OFLN	OffLine	Off-line only capable.
ONLN	OnLine	On-line only capable.
SMON	SemiOffLine	Off-line capable with possible on-line requests to the acquirer.

10.1.9.7.8 MessageCapabilities <MsgCpblties>

Presence: [0..*]

Definition: Capabilities of the terminal to display or print message to the cardholder and the merchant.

MessageCapabilities <MsgCpblties> contains the following **DisplayCapabilities7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Destination <Dstn>	[1..*]	CodeSet		417
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		418
	NumberOfLines <NbOfLines>	[0..1]	Quantity		418
	LineWidth <LineWidth>	[0..1]	Quantity		418
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C14	418

10.1.9.7.8.1 Destination <Dstn>

Presence: [1..*]

Definition: Destination of the message to present.

Datatype: "UserInterface9Code" on page 580

CodeName	Name	Definition
CDSP	CardholderDisplay	Cardholder display or interface.
CRCP	CardholderReceipt	Cardholder receipt.
MDSP	MerchantDisplay	Merchant display or interface.
MRCP	MerchantReceipt	Merchant receipt.
CRDO	OtherCardholderInterface	Other interface of the cardholder, for instance e-mail or smartphone message.
CSTM	CustomerStatement	Cardholder bank statement.

10.1.9.7.8.2 AvailableFormat <AvlblFrmt>

Presence: [0..*]

Definition: Available message format.

Datatype: "OutputFormat1Code" on page 558

CodeName	Name	Definition
MREF	MessageReference	Predefined configured messages, identified by a reference.
TEXT	SimpleText	Text without format attributes.
HTML	XHTML	XHTML document which includes a subset of the XHTML output tag.

10.1.9.7.8.3 NumberOfLines <NbOfLines>

Presence: [0..1]

Definition: Number of lines of the display.

Datatype: "Number" on page 582

10.1.9.7.8.4 LineWidth <LineWidth>

Presence: [0..1]

Definition: Number of columns of the display or printer.

Datatype: "Number" on page 582

10.1.9.7.8.5 AvailableLanguage <AvlblLang>

Presence: [0..*]

Definition: Available language for the message. Reference ISO 639-1 (alpha-2) et ISO 639-2 (alpha-3).

Impacted by: C14 "ValidationByTable"

Datatype: "LanguageCode" on page 554

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.9.8 LoyaltyAccount3

Definition: Loyalty Account description.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	LoyaltyIdentification <Ltyld>	[1..1]	Text		419
	EntryMode <NtryMd>	[0..1]	CodeSet		419
	IdentificationType <IdTp>	[0..1]	CodeSet		420
	Brand <Brnd>	[0..1]	Text		420
	Provider <Prvdr>	[0..1]	Text		420
	OwnerName <OwnrNm>	[0..1]	Text		420
	Unit <Unit>	[0..1]	CodeSet		421
	Currency <Ccy>	[0..1]	CodeSet	C1	421
	Balance <Bal>	[0..1]	Amount		421

10.1.9.8.1 LoyaltyIdentification <Ltyld>

Presence: [1..1]

Definition: Identification of Loyalty Account.

Datatype: "Max35Text" on page 587

10.1.9.8.2 EntryMode <NtryMd>

Presence: [0..1]

Definition: Standard or last entry mode to access the Loyalty account or card.

Datatype: "CardDataReading8Code" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.

CodeName	Name	Definition
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.1.9.8.3 IdentificationType <IdTp>

Presence: [0..1]

Definition: Type of identification for this Loyalty Account.

Datatype: "CardIdentificationType1Code" on page 542

CodeName	Name	Definition
ACCT	AccountNumber	Account identification.
BARC	BarCode	Bar-code with a specific form of identification.
ISO2	ISOTrack2	ISO Track 2 including identification.
PHON	PhoneNumber	A phone number identifies the account on which the phone card is assigned.
CPAN	PrimaryAccountNumber	Standard card identification (card number).
PRIV	PrivativeNumbering	An identification set by a privative application.
UUID	UniversalUniqueIdentification	A Universal Unique Identification code is set for identification.

10.1.9.8.4 Brand <Brnd>

Presence: [0..1]

Definition: Brand to which belong the account.

Datatype: "Max35Text" on page 587

10.1.9.8.5 Provider <Prvdr>

Presence: [0..1]

Definition: Provider of the Loyalty Account.

Datatype: "Max35Text" on page 587

10.1.9.8.6 OwnerName <OwnrNm>

Presence: [0..1]

Definition: Owner name of an account.

Datatype: "Max45Text" on page 588

10.1.9.8.7 Unit <Unit>

Presence: [0..1]

Definition: Unit of a Loyalty Account (Point or Currency).

Datatype: "AmountUnit1Code" on page 534

CodeName	Name	Definition
MONE	Monetary	The amount is expressed in a monetary value in a currency.
POIN	Point	The amount is expressed in point.

10.1.9.8.8 Currency <Ccy>

Presence: [0..1]

Definition: Currency of a Loyalty Account if any.

Impacted by: C1 "ActiveCurrency"

Datatype: "ActiveCurrencyCode" on page 524

Constraints

- **ActiveCurrency**

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

10.1.9.8.9 Balance <Bal>

Presence: [0..1]

Definition: Balance of a Loyalty Account.

Datatype: "ImpliedCurrencyAndAmount" on page 521

10.1.9.9 EncapsulatedContent3

Definition: Data to authenticate.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		421
	Content <Cntt>	[0..1]	Binary		422

10.1.9.9.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data which have been authenticated.

Datatype: "ContentType2Code" on page 543

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.1.9.9.2 Content <Cntt>

Presence: [0..1]

Definition: Actual data to authenticate.

Datatype: "Max100KBinary" on page 522

10.1.9.10 ResponseType11

Definition: Response of a requested service.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		422
	ResponseReason <RspnRsn>	[0..1]	CodeSet		423
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		424

10.1.9.10.1 Response <Rspn>

Presence: [1..1]

Definition: Result of the requested transaction.

Datatype: "Response11Code" on page 568

CodeName	Name	Definition
WARN	Warning	An additional Response Code, mainly a functional one, should be considered to identify the outcome of the request.
FAIL	Failure	Processing of the request fails for various reasons. Some further processing according to the type of requested service, the context of the process, and some additional precision about the failure notified in the ErrorCondition data element.
SUCC	Success	Processing OK. Information related to the result of the processing is contained in other parts of the response message.

10.1.9.10.2 ResponseReason <RspnRsn>

Presence: [0..1]

Definition: Detail of the response.

Datatype: "RetailerResultDetail1Code" on page 570

CodeName	Name	Definition
ABRT	Aborted	The Initiator of the request has sent an Abort message request, which was accepted and processed.
BUSY	Busy	The system is busy, try later.
CANC	Cancel	The user has aborted the transaction on the PED keyboard, for instance during PIN entering.
DEVO	DeviceOut	Device out of order.
WPIN	WrongPIN	The user has entered the PIN on the PED keyboard and the verification fails.
NHOS	UnreachableHost	Acquirer or any host is unreachable or has not answered to an online request, so is considered as temporary unavailable. Depending on the Sale context, the request could be repeated (to be compared with "Refusal").
UNVS	UnavailableService	The service is not available (not implemented, not configured, protocol version too old...).
UNVD	UnavailableDevice	The hardware is not available (absent, not configured...).
REFU	Refusal	The transaction is refused by the host or by the local rules associated to the card or the POI.
PAYR	PaymentRestriction	Some sale items are not payable by the card proposed by the Customer.
TNFD	NotFound	The transaction is not found (e.g. for a reversal or a repeat).
NALW	NotAllowed	A service request is sent during a Service dialogue. A combination of services not possible to provide. During the DeviceInitialisationCardReader message processing, the user has entered a card which has to be protected by the POI, and cannot be processed with this device request from the external, and then the Sale System.
LOUT	LoggedOut	Not logged in.
IVCA	InvalidCard	The card entered by the Customer cannot be processed by the POI because this card is not configured in the system.
ICAR	InsertedCard	If the Input Device request a NotifyCardInputFlag and the Customer enters a card in the card reader without answers to the Input command, the POI

CodeName	Name	Definition
		abort the Input command processing, and answer a dedicated ErrorCondition value in the Input response message.
WIPG	InProgress	The transaction is still in progress and then the command cannot be processed.

10.1.9.10.3 AdditionalResponseInformation <AddtlRspnInf>

Presence: [0..1]

Definition: Additional information to be logged for further examination.

Datatype: "Max140Text" on page 585

10.1.9.11 Vehicle1

Definition: Information related to a vehicle used during a transaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	VehicleNumber <VhclNb>	[0..1]	Text		424
	TrailerNumber <TrlrNb>	[0..1]	Text		425
	VehicleTag <VhclTag>	[0..1]	Text		425
	VehicleTagEntryMode <VhclTagNtryMd>	[0..1]	CodeSet		425
	UnitNumber <UnitNb>	[0..1]	Text		425
	ReplacementCar <RplcmntCar>	[0..1]	Indicator		425
	Odometer <Odmtr>	[0..1]	Quantity		426
	Hubometer <Hbmtr>	[0..1]	Quantity		426
	TrailerHours <TrlrHrs>	[0..1]	Text		426
	ReferHours <RefrHrs>	[0..1]	Text		426
	MaintenancIdentification <Mntncld>	[0..1]	Text		426
	DriverOrVehicleCard <DrvrOrVhclCard>	[0..1]			426
	PAN <PAN>	[0..1]	Text		427
	Track1 <Trck1>	[0..1]	Text		427
	Track2 <Trck2>	[0..1]	Text		427
	Track3 <Trck3>	[0..1]	Text		427
	AdditionalCardData <AddtlCardData>	[0..*]	Text		427
	EntryMode <NtryMd>	[0..1]	CodeSet		427
	AdditionalVehicleData <AddtlVhclData>	[0..*]	±		428

10.1.9.11.1 VehicleNumber <VhclNb>

Presence: [0..1]

Definition: Number assigned to the vehicle for identification.

Datatype: "Max35NumericText" on page 587

10.1.9.11.2 TrailerNumber <TrlrNb>

Presence: [0..1]

Definition: Number assigned to the vehicle trailer for identification.

Datatype: "Max35NumericText" on page 587

10.1.9.11.3 VehicleTag <VhclTag>

Presence: [0..1]

Definition: Registration tag of the vehicle.

Datatype: "Max35Text" on page 587

10.1.9.11.4 VehicleTagEntryMode <VhclTagNtryMd>

Presence: [0..1]

Definition: Entry mode of the registration tag.

Datatype: "CardDataReading5Code" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

10.1.9.11.5 UnitNumber <UnitNb>

Presence: [0..1]

Definition: Identification of the vehicle in the fleet.

Datatype: "Max35NumericText" on page 587

10.1.9.11.6 ReplacementCar <RplcmntCar>

Presence: [0..1]

Definition: True if the car is a replacement car.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.9.11.7 Odometer <Odmtr>

Presence: [0..1]

Definition: Odometer reading value indicating the distance travelled by the vehicle.

Datatype: ["DecimalNumber"](#) on page 582

10.1.9.11.8 Hubometer <Hbmtr>

Presence: [0..1]

Definition: Hubometer reading value indicating the distance travelled by the trailer.

Datatype: ["DecimalNumber"](#) on page 582

10.1.9.11.9 TrailerHours <TrlrHrs>

Presence: [0..1]

Definition: Number of hours the trailer has been in operation.

Datatype: ["Max35Text"](#) on page 587

10.1.9.11.10 ReferHours <RefrHrs>

Presence: [0..1]

Definition: Number of hours the refer unit has been in operation.

Datatype: ["Max35Text"](#) on page 587

10.1.9.11.11 Maintenanceldentification <Mntncld>

Presence: [0..1]

Definition: Identification assigned to the vehicle related to maintenance.

Datatype: ["Max35Text"](#) on page 587

10.1.9.11.12 DriverOrVehicleCard <DrvrOrVhclCard>

Presence: [0..1]

Definition: Second card presented for the payment transaction.

DriverOrVehicleCard <DrvrOrVhclCard> contains the following **PlainCardData17** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PAN <PAN>	[0..1]	Text		427
	Track1 <Trck1>	[0..1]	Text		427
	Track2 <Trck2>	[0..1]	Text		427
	Track3 <Trck3>	[0..1]	Text		427
	AdditionalCardData <AddtlCardData>	[0..*]	Text		427
	EntryMode <NtryMd>	[0..1]	CodeSet		427

10.1.9.11.12.1 PAN <PAN>

Presence: [0..1]

Definition: Primary Account Number (PAN) of the card.

Datatype: "Min8Max28NumericText" on page 590

10.1.9.11.12.2 Track1 <Trck1>

Presence: [0..1]

Definition: ISO track 1 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The format is conform to ISO 7813, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max76Text" on page 589

10.1.9.11.12.3 Track2 <Trck2>

Presence: [0..1]

Definition: ISO track 2 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The content is conform to ISO 7813, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max37Text" on page 587

10.1.9.11.12.4 Track3 <Trck3>

Presence: [0..1]

Definition: ISO track 3 issued from the magnetic stripe card or from the ICC if the magnetic stripe was not read. The content is conform to ISO 4909, removing beginning and ending sentinels and longitudinal redundancy check characters.

Datatype: "Max104Text" on page 584

10.1.9.11.12.5 AdditionalCardData <AddtlCardData>

Presence: [0..*]

Definition: Additional card issuer specific data.

Datatype: "Max35Text" on page 587

10.1.9.11.12.6 EntryMode <NtryMd>

Presence: [0..1]

Definition: Entry mode of the card.

Datatype: "CardDataReading5Code" on page 540

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

10.1.9.11.13 AdditionalVehicleData <AddtlVhclData>

Presence: [0..*]

Definition: Additional information related to the vehicle.

AdditionalVehicleData <AddtlVhclData> contains the following elements (see "Vehicle2" on page 355 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[0..1]	Text		355
	EntryMode <NtryMd>	[0..1]	CodeSet		355
	Data <Data>	[1..1]	Text		356

10.1.9.12 SupplementaryData1

Definition: Additional information that can not be captured in the structured fields and/or any other specific block.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PlaceAndName <PlcAndNm>	[0..1]	Text		429
	Envelope <Envlp>	[1..1]	(External Schema)		429

Constraints

- **SupplementaryDataRule**

This component may not be used without the explicit approval of a SEG and submission to the RA of ISO 20022 compliant structure(s) to be used in the Envelope element.

10.1.9.12.1 PlaceAndName <PlcAndNm>

Presence: [0..1]

Definition: Unambiguous reference to the location where the supplementary data must be inserted in the message instance.

In the case of XML, this is expressed by a valid XPath.

Datatype: "Max350Text" on page 587

10.1.9.12.2 Envelope <Envlp>

Presence: [1..1]

Definition: Technical element wrapping the supplementary data.

Type: (External Schema)

Technical component that contains the validated supplementary data information. This technical envelope allows to segregate the supplementary data information from any other information.

10.1.9.13 MessageItemCondition2

Definition: Presence condition of a message item.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		429
	Condition <Cond>	[1..1]	CodeSet		429
	Value <Val>	[0..*]	Text		430

10.1.9.13.1 ItemIdentification <ItmId>

Presence: [1..1]

Definition: Unique identification of the message and the message item.

Datatype: "Max140Text" on page 585

10.1.9.13.2 Condition <Cond>

Presence: [1..1]

Definition: Condition of presence of the message item.

Datatype: "MessageItemCondition2Code" on page 556

CodeName	Name	Definition
MNDT	Mandatory	Message item must be present.
CFVL	ConfiguredValue	Message item must be present with the configured value.

CodeName	Name	Definition
DFLT	DefaultValue	Message item has the configured value if the item is absent.
ALWV	AllowedValues	Message item must have one of the configured values.
IFAV	IfAvailable	Message item has to be present if available.
COPY	Copy	Message item is present if it was present in a previous related message with the same value.
UNSP	NotSupported	Message item is not supported and has to be absent.
LMNV	ListMinimumValues	Minimum set of values to use in messages.

10.1.9.13.3 Value <Val>

Presence: [0..*]

Definition: Value to be used for the message item.

Datatype: "Max140Text" on page 585

10.1.9.14 MaintenanceIdentificationAssociation1

Definition: Association of the TM identifier and the MTM identifier of an entity.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MasterTMIdentification <MstrTMId>	[1..1]	Text		430
	TMIdentification <TMId>	[1..1]	Text		430

10.1.9.14.1 MasterTMIdentification <MstrTMId>

Presence: [1..1]

Definition: Identifier for the master terminal manager.

Datatype: "Max35Text" on page 587

10.1.9.14.2 TMIdentification <TMId>

Presence: [1..1]

Definition: Identifier for the terminal manager requesting the delegation.

Datatype: "Max35Text" on page 587

10.1.10 Monitoring

10.1.10.1 ErrorAction5

Definition: Action to perform in case of error on the related action in progress.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionResult <ActnRsIt>	[1..*]	CodeSet		431
	ActionToProcess <ActnToPrc>	[1..1]	CodeSet		432

10.1.10.1.1 ActionResult <ActnRsIt>

Presence: [1..*]

Definition: List of error action result codes.

Datatype: "TerminalManagementActionResult5Code" on page 576

CodeName	Name	Definition
ACCD	AccessDenied	Access is denied while performing the action.
CNTE	ConnectionError	Problem to connect while performing the action.
FMTE	FormatError	Data transferred has a wrong format.
INVC	InvalidContent	Content of the data is invalid.
LENE	LengthError	Data transferred has a wrong length.
OVER	MemoryOverflow	Memory to store the date exceeded.
MISS	MissingFile	Data set to be maintained is missing.
NSUP	NotSupported	Action is not supported.
SIGE	SignatureError	Data transferred has a wrong digital signature.
WARN	SuccessWithWarning	Action was performed but some warnings arose.
SYNE	SyntaxError	Data transferred has a wrong syntax.
TIMO	Timeout	Timeout expired during the data transfer.
UKDT	UnknownData	Data set identification invalid.
UKRF	UnknownKeyReference	Cryptographic key reference used for the data signature is not valid.
INDP	InvalidDelegationProof	Delegation Proof transmitted by the delegated TMS is not the one expected.
IDMP	InvalidDelegationInManagementPlan	One action of the AcceptorManagementPlan refers to an update unauthorized by the delegation.
DPRU	DelegationParametersReceivedUnauthorized	The content analysis of the AcceptorConfigurationUpdate reveals unexpected parameters.
AERR	AnyError	This code value means all TerminalManagementActionResultCode except "Any Error" and "Unlisted Error".
CMER	CommunicationError	Error in communication once the connection has been established.

CodeName	Name	Definition
ULER	UnlistedError	Any error that is not defined by a code value inside the TerminalManagementActionResultCode.
SUCC	Success	Action was successfully performed.

10.1.10.1.2 ActionToProcess <ActnToPrc>

Presence: [1..1]

Definition: Action to be processed for the related errors.

Datatype: "TerminalManagementErrorAction2Code" on page 578

CodeName	Name	Definition
SDSR	SendStatusReport	Send a status report immediately.
STOP	StopSequence	Stop the current sequence of terminal management actions without any action, and do not notice the error with a status report.

10.1.10.2 TMSEvent13

Definition: Result of an individual terminal management action performed by the point of interaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TimeStamp <TmStmp>	[1..1]	DateTime		432
	Result <RsIt>	[1..1]	CodeSet		432
	ActionIdentification <ActnId>	[1..1]			433
	ActionType <ActnTp>	[1..1]	CodeSet		434
	DataSetIdentification <DataSetId>	[0..1]	±		434
	AdditionalErrorInformation <AddtlErrInf>	[0..1]	Text		435
	TerminalManagerIdentification <TermnlMgrId>	[0..1]	Text		435
	DeviceResponse <DvcRspn>	[0..1]	±		435

10.1.10.2.1 TimeStamp <TmStmp>

Presence: [1..1]

Definition: Date time of the terminal management action performed by the point of interaction.

Datatype: "ISODateTime" on page 581

10.1.10.2.2 Result <RsIt>

Presence: [1..1]

Definition: Final result of the processed terminal management action.

Datatype: "TerminalManagementActionResult5Code" on page 576

CodeName	Name	Definition
ACCD	AccessDenied	Access is denied while performing the action.
CNTE	ConnectionError	Problem to connect while performing the action.
FMTE	FormatError	Data transferred has a wrong format.
INVC	InvalidContent	Content of the data is invalid.
LENE	LengthError	Data transferred has a wrong length.
OVER	MemoryOverflow	Memory to store the date exceeded.
MISS	MissingFile	Data set to be maintained is missing.
NSUP	NotSupported	Action is not supported.
SIGE	SignatureError	Data transferred has a wrong digital signature.
WARN	SuccessWithWarning	Action was performed but some warnings arose.
SYNE	SyntaxError	Data transferred has a wrong syntax.
TIMO	Timeout	Timeout expired during the data transfer.
UKDT	UnknownData	Data set identification invalid.
UKRF	UnknownKeyReference	Cryptographic key reference used for the data signature is not valid.
INDP	InvalidDelegationProof	Delegation Proof transmitted by the delegated TMS is not the one expected.
IDMP	InvalidDelegationInManagementPlan	One action of the AcceptorManagementPlan refers to an update unauthorized by the delegation.
DPRU	DelegationParametersReceivedUnauthorized	The content analysis of the AcceptorConfigurationUpdate reveals unexpected parameters.
AERR	AnyError	This code value means all TerminalManagementActionCode except "Any Error" and "Unlisted Error".
CMER	CommunicationError	Error in communication once the connection has been established.
ULER	UnlistedError	Any error that is not defined by a code value inside the TerminalManagementActionCode.
SUCC	Success	Action was successfully performed.

10.1.10.2.3 ActionIdentification <ActnId>

Presence: [1..1]

Definition: Identification of the terminal management action performed by the point of interaction.

ActionIdentification <ActnId> contains the following **TMSActionIdentification10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		434
	DataSetIdentification <DataSetId>	[0..1]	±		434

10.1.10.2.3.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Types of terminal management action performed by a point of interaction.

Datatype: "TerminalManagementAction5Code" on page 576

CodeName	Name	Definition
DCTV	Deactivate	Request to deactivate the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
DWNL	Download	Request to download the element identified inside the message exchange.
INST	Install	Request to install the element identified inside the message exchange.
RSTR	Restart	Request to restart the element identified inside the message exchange.
UPLD	Upload	Request to upload the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.
BIND	Bind	Request sent to a POI to bind with a server.
RBND	Rebind	Request sent to a POI to rebind with a server.
UBND	Unbind	Request sent to a POI to unbind with a server.
ACTV	Activate	Request to activate the element identified inside the message exchange.
DEVR	DeviceRequest	Request to execute a device request.

10.1.10.2.3.2 DataSetIdentification <DataSetId>

Presence: [0..1]

Definition: Data set on which the action has been performed.

DataSetIdentification <DataSetId> contains the following elements (see "[DataSetIdentification11](#)" on page 314 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		314
	Type <Tp>	[1..1]	CodeSet		314
	Version <Vrsn>	[0..1]	Text		316
	CreationDateTime <CreDtTm>	[0..1]	DateTime		316

10.1.10.2.4 AdditionalErrorInformation <AddtlErrInf>

Presence: [0..1]

Definition: Additional information related to a failure.

Datatype: "[Max70Text](#)" on page 589

10.1.10.2.5 TerminalManagerIdentification <TermnlMgrId>

Presence: [0..1]

Definition: Identification of the terminal management system (TMS) used with the action.

Datatype: "[Max35Text](#)" on page 587

10.1.10.2.6 DeviceResponse <DvcRspn>

Presence: [0..1]

Definition: Response of a device request done previously.

DeviceResponse <DvcRspn> contains the following elements (see "DeviceResponse9" on page 202 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±	C9	206
	Context <Cntxt>	[0..1]		C10	212
	PaymentContext <PmtCntxt>	[0..1]			215
	CardPresent <CardPres>	[0..1]	Indicator		215
	CardholderPresent <CrdhldrPres>	[0..1]	Indicator		215
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		216
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		216
	TransactionEnvironment <TxEnvt>	[0..1]	CodeSet		216
	TransactionChannel <TxChanl>	[0..1]	CodeSet		216
	BusinessArea <BizArea>	[0..1]	CodeSet		217
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		217
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C14	217
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		218
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		218
	SupportedOption <SpprtOptn>	[0..*]	CodeSet		219
	SaleContext <SaleCntxt>	[0..1]			219
	SaleIdentification <SaleId>	[0..1]	Text		220
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		220
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		221
	CashierIdentification <CshrId>	[0..1]	Text		221
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C14	221
	ShiftNumber <ShftNb>	[0..1]	Text		221
	CustomerOrderRequestFlag <CstmrOrdrrReqFlg>	[0..1]	Indicator		221
	PurchaseOrderNumber <PurchsOrdrrNb>	[0..1]	Text		221
	InvoiceNumber <InvcNb>	[0..1]	Text		221
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		222
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			222
	CommonName <CmonNm>	[1..1]	Text		222
	Address <Adr>	[0..1]	Text		222
	CountryCode <CtryCd>	[1..1]	CodeSet		222

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		222
	RegisteredIdentifier <RegldId>	[1..1]	Text		222
	SplitPayment <SpltPmt>	[0..1]	Indicator		223
	RemainingAmount <RmngAmt>	[0..1]	Amount		223
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		223
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		223
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		223
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		224
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		224
	CreditTransferContext <CdtTrfCntxt>	[0..1]		C11	224
	AutomaticNotificationOfCashMovement <AutomtcNtfctnOfCshMvmnt>	[0..1]	Indicator		225
	WaitForNotificationBeforeEnding <WaitForNtfctnBfrEndg>	[0..1]	Indicator		225
	SystemToNotify <SysToNtfy>	[0..1]	Text		225
	Debtor <Dbtr>	[0..1]	±		226
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	227
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		227
	Creditor <Cdtr>	[0..1]	±		227
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	228
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		229
	DirectDebitContext <DrctDbtCntxt>	[0..1]			229
	Debtor <Dbtr>	[0..1]	±		230
	DebtorAccount <DbtrAcct>	[0..1]	±	C7, C6	231
	ProtectedDebtorAccount <PrctcdDbtrAcct>	[0..1]	±		232
	Creditor <Cdtr>	[0..1]	±		232
	CreditorAccount <CdtrAcct>	[0..1]	±	C7, C6	233
	ProtectedCreditorAccount <PrctcdCdtrAcct>	[0..1]	±		234
	MandateRelatedInformation <MndtRltdInf>	[1..1]			234
	MandateIdentification <MndtId>	[1..1]	Text		235
	DateOfSignature <DtOfSgntr>	[0..1]	Date		235
	MandateImage <MndtImg>	[0..1]	Binary		235
	ProtectedMandateImage <PrctcdMndtImg>	[0..1]	±		235

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ServiceContent <SvcCntt>	[1..1]	CodeSet		235
	DisplayResponse <DispRspn>	[0..1]			236
	OutputResult <OutptRslt>	[1..*]			236
	DeviceType <DvcTp>	[1..1]	CodeSet		237
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		237
	Response <Rspn>	[1..1]	±		238
	InputResponse <InptRspn>	[0..1]			238
	OutputResult <OutptRslt>	[0..1]			239
	DeviceType <DvcTp>	[1..1]	CodeSet		239
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		240
	Response <Rspn>	[1..1]	±		241
	InputResult <InptRslt>	[1..1]			241
	DeviceType <DvcTp>	[1..1]	CodeSet		241
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		242
	InputResultData <InptRsltData>	[1..1]			242
	InputCommand <InptCmd>	[1..1]	CodeSet		243
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		244
	FunctionKey <FctnKey>	[0..1]	Quantity		244
	InputMessage <InptMsg>	[0..1]	Text		244
	Password <Pwd>	[0..1]	±		244
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			245
	ImageFormat <ImgFrmt>	[1..1]	Text		245
	ImageData <ImgData>	[0..1]	Binary		245
	ImageReference <ImgRef>	[0..1]	Text		245
	AdditionalInformation <AddtlInf>	[0..1]	Text		245
	PrintResponse <PrtRspn>	[0..1]			245
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		245
	SecureInputResponse <ScrInptRspn>	[0..1]			246
	CardholderPIN <CrhdldrPIN>	[0..1]			246
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		247
	PINFormat <PINFrmt>	[1..1]	CodeSet		247

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AdditionalInput <AddtlInpt>	[0..1]	Text		247
	InitialisationCardReaderResponse <InitlStnCardRdrRspn>	[0..1]			247
	CardEntryMode <CardNtryMd>	[0..1]	CodeSet		248
	ICCRResetData <ICCRstData>	[0..1]			248
	ATRValue <ATRVa>	[0..1]	Binary		249
	CardStatus <CardSts>	[0..1]	Binary		249
	AdditionalInformation <AddtlInf>	[0..1]	Binary		249
	CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn>	[0..1]			249
	Data <Data>	[0..1]	Binary		249
	CardStatus <CardSts>	[1..1]	Binary		249
	TransmissionResponse <TrnsmssnRspn>	[0..1]			250
	ReceivedMessage <RcvdMsg>	[0..1]	Binary		250
	Response <Rspn>	[1..1]	±		250
	SupplementaryData <SplmtryData>	[0..*]	±	C13	250

10.1.10.3 Traceability8

Definition: Identification of partners involved in exchange from the merchant to the issuer, with the relative timestamp of their exchanges.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		439
	ProtocolName <PrtcolNm>	[0..1]	Text		440
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		440
	TraceDateTimeIn <TracDtTmln>	[1..1]	DateTime		440
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		440

10.1.10.3.1 RelayIdentification <RlayId>

Presence: [1..1]

Definition: Identification of a partner of a message exchange.

RelayIdentification <RlyId> contains the following elements (see "[GenericIdentification177](#)" on page 309 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		309
	Type <Tp>	[0..1]	CodeSet		309
	Issuer <Issr>	[0..1]	CodeSet		310
	Country <Ctry>	[0..1]	Text		311
	ShortName <ShrtNm>	[0..1]	Text		311
	RemoteAccess <RmotAccs>	[0..1]	±		311
	Geolocation <Glctn>	[0..1]			311
	GeographicCoordinates <GeogcCordints>	[0..1]			312
	Latitude <Lat>	[1..1]	Text		312
	Longitude <Long>	[1..1]	Text		312
	UTMCoordinates <UTMCordints>	[0..1]			312
	UTMZone <UTMZone>	[1..1]	Text		312
	UTMEastward <UTMEstwrdr>	[1..1]	Text		313
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		313

10.1.10.3.2 ProtocolName <PrtcolNm>

Presence: [0..1]

Definition: Name of the outgoing protocol used by the node.

Datatype: "[Max35Text](#)" on page 587

10.1.10.3.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Version of the protocol.

Datatype: "[Max6Text](#)" on page 589

10.1.10.3.4 TraceDateTimeln <TracDtTmln>

Presence: [1..1]

Definition: Date and time of incoming data exchange for relaying or processing.

Datatype: "[ISODateTime](#)" on page 581

10.1.10.3.5 TraceDateTimeOut <TracDtTmOut>

Presence: [1..1]

Definition: Date and time of the outgoing exchange for relaying or processing.

Datatype: "[ISODateTime](#)" on page 581

10.1.11 Network Access

10.1.11.1 NetworkParameters7

Definition: Parameters to communicate with a host.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <ClntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

10.1.11.1.1 Address <Adr>

Presence: [1..*]

Definition: Network addresses of the host.

Address <Adr> contains the following elements (see ["NetworkParameters9"](#) on page 442 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	NetworkType <NtwkTp>	[1..1]	CodeSet		442
	AddressValue <AdrVal>	[1..1]	Text		442

10.1.11.1.2 UserName <UsrNm>

Presence: [0..1]

Definition: User name identifying the client.

Datatype: ["Max35Text"](#) on page 587

10.1.11.1.3 AccessCode <AccsCd>

Presence: [0..1]

Definition: Password authenticating the client.

Datatype: ["Max35Binary"](#) on page 523

10.1.11.1.4 ServerCertificate <SvrCert>

Presence: [0..*]

Definition: X.509 Certificate required to authenticate the server.

Datatype: ["Max10KBinary"](#) on page 522

10.1.11.1.5 ServerCertificateIdentifier <SvrCertIdr>

Presence: [0..*]

Definition: Identification of the X.509 Certificates required to authenticate the server, for instance a digest of the certificate.

Datatype: "Max140Binary" on page 522

10.1.11.1.6 ClientCertificate <ClntCert>

Presence: [0..*]

Definition: X.509 Certificate required to authenticate the client.

Datatype: "Max10KBinary" on page 522

10.1.11.1.7 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the set of security elements to access the host.

Datatype: "Max35Text" on page 587

10.1.11.2 NetworkParameters9

Definition: Parameters to communicate with a host.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	NetworkType <NtwkTp>	[1..1]	CodeSet		442
	AddressValue <AdrVal>	[1..1]	Text		442

10.1.11.2.1 NetworkType <NtwkTp>

Presence: [1..1]

Definition: Type of communication network.

Datatype: "NetworkType1Code" on page 557

CodeName	Name	Definition
IPNW	InternetProtocol	Protocol of an IP network.
PSTN	PublicTelephone	Protocol of a Public Switched Telephone Network (PSTN).

10.1.11.2.2 AddressValue <AdrVal>

Presence: [1..1]

Definition: Value of the address. The value of an internet protocol address contains the IP address or the DNS (Domain Name Server) address, followed by the character ':' and the port number if the default port is not used. The value of a public telephone address contains the phone number with possible prefix and extensions.

Datatype: "Max500Text" on page 588

10.1.11.3 NetworkParameters8

Definition: Parameters to communicate with a host.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		443
	Access <Accs>	[1..1]	±		443

10.1.11.3.1 Type <Tp>

Presence: [1..1]

Definition: Type of proxy.

Datatype: "NetworkType2Code" on page 557

CodeName	Name	Definition
SCK5	Sock5	Sock5 proxy.
SCK4	Sock4	Sock4 proxy.
HTTP	HTTP	HTTP proxy.

10.1.11.3.2 Access <Accs>

Presence: [1..1]

Definition: Access information to the proxy.

Access <Accs> contains the following elements (see "NetworkParameters7" on page 441 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]	±		441
	UserName <UsrNm>	[0..1]	Text		441
	AccessCode <AccsCd>	[0..1]	Binary		441
	ServerCertificate <SvrCert>	[0..*]	Binary		441
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		442
	ClientCertificate <CIntCert>	[0..*]	Binary		442
	SecurityProfile <SctyPrfl>	[0..1]	Text		442

10.1.12 Party Identification

10.1.12.1 PartyIdentification272

Definition: Specifies the identification of a person or an organisation.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		444
	PostalAddress <PstlAdr>	[0..1]	±		445
	Identification <Id>	[0..1]			445
{Or	OrganisationIdentification <OrgId>	[1..1]			446
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer <Issr>	[0..1]	Text		448
Or}	PrivateIdentification <PrvtId>	[1..1]			448
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer <Issr>	[0..1]	Text		451
	CountryOfResidence <CtryOfRes>	[0..1]	CodeSet	C4	451
	ContactDetails <CtctDtls>	[0..1]	±		451

10.1.12.1.1 Name <Nm>

Presence: [0..1]

Definition: Name by which a party is known and which is usually used to identify that party.

Datatype: "Max140Text" on page 585

10.1.12.1.2 PostalAddress <PstlAdr>

Presence: [0..1]

Definition: Information that locates and identifies a specific address, as defined by postal services.

PostalAddress <PstlAdr> contains the following elements (see "PostalAddress27" on page 456 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		457
Or}	Proprietary <Prtry>	[1..1]	±		457
	CareOf <CareOf>	[0..1]	Text		457
	Department <Dept>	[0..1]	Text		457
	SubDepartment <SubDept>	[0..1]	Text		457
	StreetName <StrtNm>	[0..1]	Text		458
	BuildingNumber <BldgNb>	[0..1]	Text		458
	BuildingName <BldgNm>	[0..1]	Text		458
	Floor <Flr>	[0..1]	Text		458
	UnitNumber <UnitNb>	[0..1]	Text		458
	PostBox <PstBx>	[0..1]	Text		458
	Room <Room>	[0..1]	Text		458
	PostCode <PstCd>	[0..1]	Text		458
	TownName <TwnNm>	[0..1]	Text		459
	TownLocationName <TwnLctnNm>	[0..1]	Text		459
	DistrictName <DstrctNm>	[0..1]	Text		459
	CountrySubDivision <CtrySubDvsn>	[0..1]	Text		459
	Country <Ctry>	[0..1]	CodeSet	C4	459
	AddressLine <AdrLine>	[0..7]	Text		459

10.1.12.1.3 Identification <Id>

Presence: [0..1]

Definition: Unique and unambiguous identification of a party.

Identification <Id> contains one of the following **Party52Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	OrganisationIdentification <OrgId>	[1..1]			446
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer </Issr>	[0..1]	Text		448
Or}	PrivateIdentification <PrvtId>	[1..1]			448
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer </Issr>	[0..1]	Text		451

10.1.12.1.3.1 OrganisationIdentification <OrgId>

Presence: [1..1]

Definition: Unique and unambiguous way to identify an organisation.

OrganisationIdentification <OrgId> contains the following **OrganisationIdentification39** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AnyBIC <AnyBIC>	[0..1]	IdentifierSet	C3	447
	LEI <LEI>	[0..1]	IdentifierSet		447
	Other <Othr>	[0..*]			447
	Identification </Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer </Issr>	[0..1]	Text		448

10.1.12.1.3.1.1 AnyBIC <AnyBIC>

Presence: [0..1]

Definition: Business identification code of the organisation.

Impacted by: C3 "AnyBIC"

Datatype: "AnyBICDec2014Identifier" on page 581

Constraints

- **AnyBIC**

Only a valid Business identifier code is allowed. Business identifier codes for financial or non-financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consists of eight (8) or eleven (11) contiguous characters.

10.1.12.1.3.1.2 LEI <LEI>

Presence: [0..1]

Definition: Legal entity identification as an alternate identification for a party.

Datatype: "LEIIdentifier" on page 582

10.1.12.1.3.1.3 Other <Othr>

Presence: [0..*]

Definition: Unique identification of an organisation, as assigned by an institution, using an identification scheme.

Other <Othr> contains the following **GenericOrganisationIdentification3** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		448
	SchemeName <SchmeNm>	[0..1]			448
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448
	Issuer <Issr>	[0..1]	Text		448

10.1.12.1.3.1.3.1 Identification <Id>

Presence: [1..1]

Definition: Identification assigned by an institution.

Datatype: "Max256Text" on page 586

10.1.12.1.3.1.3.2 SchemeName <SchmeNm>

Presence: [0..1]

Definition: Name of the identification scheme.

SchemeName <SchmeNm> contains one of the following
OrganisationIdentificationSchemeName1Choice elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		448
Or}	Proprietary <Prtry>	[1..1]	Text		448

10.1.12.1.3.1.3.2.1 Code <Cd>

Presence: [1..1]

Definition: Name of the identification scheme, in a coded form as published in an external list.

Datatype: "ExternalOrganisationIdentification1Code" on page 550

10.1.12.1.3.1.3.2.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Name of the identification scheme, in a free text form.

Datatype: "Max35Text" on page 587

10.1.12.1.3.1.3.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 587

10.1.12.1.3.2 PrivateIdentification <PrvtId>

Presence: [1..1]

Definition: Unique and unambiguous identification of a person, for example a passport.

PrivateIdentification <PrvtId> contains the following **PersonIdentification18** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			449
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450
	Other <Othr>	[0..*]			450
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer <Issr>	[0..1]	Text		451

10.1.12.1.3.2.1 DateAndPlaceOfBirth <DtAndPlcOfBirth>

Presence: [0..1]

Definition: Date and place of birth of a person.

DateAndPlaceOfBirth <DtAndPlcOfBirth> contains the following **DateAndPlaceOfBirth1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	BirthDate <BirthDt>	[1..1]	Date		449
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		449
	CityOfBirth <CityOfBirth>	[1..1]	Text		450
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C4	450

10.1.12.1.3.2.1.1 BirthDate <BirthDt>

Presence: [1..1]

Definition: Date on which a person is born.

Datatype: "ISODate" on page 580

10.1.12.1.3.2.1.2 ProvinceOfBirth <PrvcOfBirth>

Presence: [0..1]

Definition: Province where a person was born.

Datatype: "Max35Text" on page 587

10.1.12.1.3.2.1.3 CityOfBirth <CityOfBirth>

Presence: [1..1]

Definition: City where a person was born.

Datatype: "Max35Text" on page 587

10.1.12.1.3.2.1.4 CountryOfBirth <CtryOfBirth>

Presence: [1..1]

Definition: Country where a person was born.

Impacted by: C4 "Country"

Datatype: "CountryCode" on page 544

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.1.12.1.3.2.2 Other <Othr>

Presence: [0..*]

Definition: Unique identification of a person, as assigned by an institution, using an identification scheme.

Other <Othr> contains the following **GenericPersonIdentification2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		450
	SchemeName <SchmeNm>	[0..1]			450
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451
	Issuer <Issr>	[0..1]	Text		451

10.1.12.1.3.2.2.1 Identification <Id>

Presence: [1..1]

Definition: Unique and unambiguous identification of a person.

Datatype: "Max256Text" on page 586

10.1.12.1.3.2.2.2 SchemeName <SchmeNm>

Presence: [0..1]

Definition: Name of the identification scheme.

SchemeName <SchmeNm> contains one of the following
PersonIdentificationSchemeName1Choice elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		451
Or}	Proprietary <Prtry>	[1..1]	Text		451

10.1.12.1.3.2.2.2.1 Code <Cd>

Presence: [1..1]

Definition: Name of the identification scheme, in a coded form as published in an external list.

Datatype: "ExternalPersonIdentification1Code" on page 551

10.1.12.1.3.2.2.2.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Name of the identification scheme, in a free text form.

Datatype: "Max35Text" on page 587

10.1.12.1.3.2.2.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 587

10.1.12.1.4 CountryOfResidence <CtryOfRes>

Presence: [0..1]

Definition: Country in which a person resides (the place of a person's home). In the case of a company, it is the country from which the affairs of that company are directed.

Impacted by: C4 "Country"

Datatype: "CountryCode" on page 544

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.1.12.1.5 ContactDetails <CtctDtls>

Presence: [0..1]

Definition: Set of elements used to indicate how to contact the party.

ContactDetails <CtctDtls> contains the following elements (see "Contact13" on page 452 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	NamePrefix <NmPrfx>	[0..1]	CodeSet		453
	Name <Nm>	[0..1]	Text		453
	PhoneNumber <PhneNb>	[0..1]	Text		453
	MobileNumber <MobNb>	[0..1]	Text		454
	FaxNumber <FaxNb>	[0..1]	Text		454
	URLAddress <URLAdr>	[0..1]	Text		454
	EmailAddress <EmailAdr>	[0..1]	Text		454
	EmailPurpose <EmailPurp>	[0..1]	Text		454
	JobTitle <JobTitl>	[0..1]	Text		454
	Responsibility <Rspnsblty>	[0..1]	Text		454
	Department <Dept>	[0..1]	Text		454
	Other <Othr>	[0..*]			455
	ChannelType <ChanlTp>	[1..1]	Text		455
	Identification <Id>	[0..1]	Text		455
	PreferredMethod <PrefrdMtd>	[0..1]	CodeSet		455

10.1.13 Person Identification

10.1.13.1 Contact13

Definition: Specifies the details of the contact person.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	NamePrefix <NmPrfx>	[0..1]	CodeSet		453
	Name <Nm>	[0..1]	Text		453
	PhoneNumber <PhneNb>	[0..1]	Text		453
	MobileNumber <MobNb>	[0..1]	Text		454
	FaxNumber <FaxNb>	[0..1]	Text		454
	URLAddress <URLAdr>	[0..1]	Text		454
	EmailAddress <EmailAdr>	[0..1]	Text		454
	EmailPurpose <EmailPurp>	[0..1]	Text		454
	JobTitle <JobTitl>	[0..1]	Text		454
	Responsibility <Rspnsblty>	[0..1]	Text		454
	Department <Dept>	[0..1]	Text		454
	Other <Othr>	[0..*]			455
	ChannelType <ChanlTp>	[1..1]	Text		455
	Identification <Id>	[0..1]	Text		455
	PreferredMethod <PrefrdMtd>	[0..1]	CodeSet		455

10.1.13.1.1 NamePrefix <NmPrfx>

Presence: [0..1]

Definition: Specifies the terms used to formally address a person.

Datatype: "NamePrefix2Code" on page 557

CodeName	Name	Definition
DOCT	Doctor	Title of the person is Doctor or Dr.
MADM	Madam	Title of the person is Madam.
MISS	Miss	Title of the person is Miss.
MIST	Mister	Title of the person is Mister or Mr.
MIKS	GenderNeutral	Title of the person is gender neutral (Mx).

10.1.13.1.2 Name <Nm>

Presence: [0..1]

Definition: Name by which a party is known and which is usually used to identify that party.

Datatype: "Max140Text" on page 585

10.1.13.1.3 PhoneNumber <PhneNb>

Presence: [0..1]

Definition: Collection of information that identifies a phone number, as defined by telecom services.

Datatype: "PhoneNumber" on page 591

10.1.13.1.4 MobileNumber <MobNb>

Presence: [0..1]

Definition: Collection of information that identifies a mobile phone number, as defined by telecom services.

Datatype: "PhoneNumber" on page 591

10.1.13.1.5 FaxNumber <FaxNb>

Presence: [0..1]

Definition: Collection of information that identifies a FAX number, as defined by telecom services.

Datatype: "PhoneNumber" on page 591

10.1.13.1.6 URLAddress <URLAdr>

Presence: [0..1]

Definition: Address for the Universal Resource Locator (URL), for example an address used over the www (HTTP) service.

Datatype: "Max2048Text" on page 586

10.1.13.1.7 EmailAddress <EmailAdr>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 586

10.1.13.1.8 EmailPurpose <EmailPurp>

Presence: [0..1]

Definition: Purpose for which an email address may be used.

Datatype: "Max35Text" on page 587

10.1.13.1.9 JobTitle <JobTitl>

Presence: [0..1]

Definition: Title of the function.

Datatype: "Max35Text" on page 587

10.1.13.1.10 Responsibility <Rspnsblty>

Presence: [0..1]

Definition: Role of a person in an organisation.

Datatype: "Max35Text" on page 587

10.1.13.1.11 Department <Dept>

Presence: [0..1]

Definition: Identification of a division of a large organisation or building.

Datatype: "Max70Text" on page 589

10.1.13.1.12 Other <Othr>

Presence: [0..*]

Definition: Contact details in another form.

Other <Othr> contains the following **OtherContact1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ChannelType <ChanTp>	[1..1]	Text		455
	Identification <Id>	[0..1]	Text		455

10.1.13.1.12.1 ChannelType <ChanTp>

Presence: [1..1]

Definition: Method used to contact the financial institution's contact for the specific tax region.

Datatype: "Max4Text" on page 588

10.1.13.1.12.2 Identification <Id>

Presence: [0..1]

Definition: Communication value such as phone number or email address.

Datatype: "Max128Text" on page 585

10.1.13.1.13 PreferredMethod <PrefrdMtd>

Presence: [0..1]

Definition: Preferred method used to reach the contact.

Datatype: "PreferredContactMethod2Code" on page 565

CodeName	Name	Definition
MAIL	Email	Preferred method used to reach the contact is per email.
FAXX	Fax	Preferred method used to reach the contact is per fax.
LETT	Letter	Preferred method used to reach the contact is per letter.
CELL	MobileOrCellPhone	Preferred method used to reach the contact is per mobile or cell phone.
ONLI	Online	Preferred method used to reach the contact is online.
PHON	Phone	Preferred method used to reach the contact is per phone.

10.1.14 Postal Address

10.1.14.1 PostalAddress27

Definition: Information that locates and identifies a specific address, as defined by postal services.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]			456
{Or	Code <Cd>	[1..1]	CodeSet		457
Or}	Proprietary <Prtry>	[1..1]	±		457
	CareOf <CareOf>	[0..1]	Text		457
	Department <Dept>	[0..1]	Text		457
	SubDepartment <SubDept>	[0..1]	Text		457
	StreetName <StrtNm>	[0..1]	Text		458
	BuildingNumber <BldgNb>	[0..1]	Text		458
	BuildingName <BldgNm>	[0..1]	Text		458
	Floor <Flr>	[0..1]	Text		458
	UnitNumber <UnitNb>	[0..1]	Text		458
	PostBox <PstBx>	[0..1]	Text		458
	Room <Room>	[0..1]	Text		458
	PostCode <PstCd>	[0..1]	Text		458
	TownName <TwnNm>	[0..1]	Text		459
	TownLocationName <TwnLctnNm>	[0..1]	Text		459
	DistrictName <DstrctNm>	[0..1]	Text		459
	CountrySubDivision <CtrySubDvsn>	[0..1]	Text		459
	Country <Ctry>	[0..1]	CodeSet	C4	459
	AddressLine <AdrLine>	[0..7]	Text		459

10.1.14.1.1 AddressType <AdrTp>

Presence: [0..1]

Definition: Identifies the nature of the postal address.

AddressType <AdrTp> contains one of the following **AddressType3Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	Code <Cd>	[1..1]	CodeSet		457
Or}	Proprietary <Prtry>	[1..1]	±		457

10.1.14.1.1.1 Code <Cd>

Presence: [1..1]

Definition: Type of address expressed as a code.

Datatype: "AddressType2Code" on page 525

CodeName	Name	Definition
ADDR	Postal	Address is the complete postal address.
PBOX	POBox	Address is a postal office (PO) box.
HOME	Residential	Address is the home address.
BIZZ	Business	Address is the business address.
MLTO	MailTo	Address is the address to which mail is sent.
DLVY	DeliveryTo	Address is the address to which delivery is to take place.

10.1.14.1.1.2 Proprietary <Prtry>

Presence: [1..1]

Definition: Type of address expressed as a proprietary code.

Proprietary <Prtry> contains the following elements (see "GenericIdentification30" on page 313 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		314
	Issuer <Issr>	[1..1]	Text		314
	SchemeName <SchmeNm>	[0..1]	Text		314

10.1.14.1.2 CareOf <CareOf>

Presence: [0..1]

Definition: Identifies an addressee that is accepting the correspondence for the intended recipient. Using care of ensures the correspondence reaches the right recipient rather than getting returned to the sender.

Datatype: "Max140Text" on page 585

10.1.14.1.3 Department <Dept>

Presence: [0..1]

Definition: Identification of a division of a large organisation or building.

Datatype: "Max70Text" on page 589

10.1.14.1.4 SubDepartment <SubDept>

Presence: [0..1]

Definition: Identification of a sub-division of a large organisation or building.

Datatype: "Max70Text" on page 589

10.1.14.1.5 StreetName <StrtNm>

Presence: [0..1]

Definition: Name of a street or thoroughfare.

Datatype: "Max140Text" on page 585

10.1.14.1.6 BuildingNumber <BldgNb>

Presence: [0..1]

Definition: Number that identifies the position of a building on a street.

Datatype: "Max16Text" on page 585

10.1.14.1.7 BuildingName <BldgNm>

Presence: [0..1]

Definition: Name of the building or house.

Datatype: "Max140Text" on page 585

10.1.14.1.8 Floor <Flr>

Presence: [0..1]

Definition: Floor or storey within a building.

Datatype: "Max70Text" on page 589

10.1.14.1.9 UnitNumber <UnitNb>

Presence: [0..1]

Definition: Identifies a flat or dwelling within the building.

Datatype: "Max16Text" on page 585

10.1.14.1.10 PostBox <PstBx>

Presence: [0..1]

Definition: Numbered box in a post office, assigned to a person or organisation, where letters are kept until called for.

Datatype: "Max16Text" on page 585

10.1.14.1.11 Room <Room>

Presence: [0..1]

Definition: Building room number.

Datatype: "Max70Text" on page 589

10.1.14.1.12 PostCode <PstCd>

Presence: [0..1]

Definition: Identifier consisting of a group of letters and/or numbers that is added to a postal address to assist the sorting of mail.

Datatype: "Max16Text" on page 585

10.1.14.1.13 **TownName <TwnNm>**

Presence: [0..1]

Definition: Name of a built-up area, with defined boundaries, and a local government.

Datatype: "Max140Text" on page 585

10.1.14.1.14 **TownLocationName <TwnLctnNm>**

Presence: [0..1]

Definition: Specific location name within the town.

Datatype: "Max140Text" on page 585

10.1.14.1.15 **DistrictName <DstrctNm>**

Presence: [0..1]

Definition: Identifies a subdivision within a country sub-division.

Datatype: "Max140Text" on page 585

10.1.14.1.16 **CountrySubDivision <CtrySubDvsn>**

Presence: [0..1]

Definition: Identifies a subdivision of a country such as state, region, county.

Datatype: "Max35Text" on page 587

10.1.14.1.17 **Country <Ctry>**

Presence: [0..1]

Definition: Nation with its own government.

Impacted by: C4 "Country"

Datatype: "CountryCode" on page 544

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.1.14.1.18 **AddressLine <AdrLine>**

Presence: [0..7]

Definition: Information that locates and identifies a specific address, as defined by postal services, presented in free format text.

Datatype: "Max70Text" on page 589

10.1.14.2 **PostalAddress22**

Definition: Information that locates and identifies a specific address, as defined by postal services.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		460
	Department <Dept>	[0..1]	Text		460
	SubDepartment <SubDept>	[0..1]	Text		460
	AddressLine <AdrLine>	[0..2]	Text		460
	StreetName <StrtNm>	[0..1]	Text		461
	BuildingNumber <BldgNb>	[0..1]	Text		461
	PostCode <PstCd>	[0..1]	Text		461
	TownName <TwnNm>	[0..1]	Text		461
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		461
	CountryCode <CtryCd>	[0..1]	Text		461

10.1.14.2.1 AddressType <AdrTp>

Presence: [0..1]

Definition: Identifies the nature of the postal address.

Datatype: "AddressType2Code" on page 525

CodeName	Name	Definition
ADDR	Postal	Address is the complete postal address.
PBOX	POBox	Address is a postal office (PO) box.
HOME	Residential	Address is the home address.
BIZZ	Business	Address is the business address.
MLTO	MailTo	Address is the address to which mail is sent.
DLVY	DeliveryTo	Address is the address to which delivery is to take place.

10.1.14.2.2 Department <Dept>

Presence: [0..1]

Definition: Identification of a division of a large organisation or building.

Datatype: "Max70Text" on page 589

10.1.14.2.3 SubDepartment <SubDept>

Presence: [0..1]

Definition: Identification of a sub-division of a large organisation or building.

Datatype: "Max70Text" on page 589

10.1.14.2.4 AddressLine <AdrLine>

Presence: [0..2]

Definition: Information that locates and identifies a specific address, as defined by postal services, presented in free format text.

Datatype: "Max70Text" on page 589

10.1.14.2.5 StreetName <StrtNm>

Presence: [0..1]

Definition: Name of a street or thoroughfare.

Datatype: "Max70Text" on page 589

10.1.14.2.6 BuildingNumber <BldgNb>

Presence: [0..1]

Definition: Number that identifies the position of a building on a street.

Datatype: "Max16Text" on page 585

10.1.14.2.7 PostCode <PstCd>

Presence: [0..1]

Definition: Identifier consisting of a group of letters and/or numbers that is added to a postal address to assist the sorting of mail.

Datatype: "Max16Text" on page 585

10.1.14.2.8 TownName <TwnNm>

Presence: [0..1]

Definition: Name of a built-up area, with defined boundaries, and a local government.

Datatype: "Max70Text" on page 589

10.1.14.2.9 CountrySubDivision <CtrySubDvsn>

Presence: [0..2]

Definition: Identifies a subdivision of a country such as state, region, county.

Datatype: "Max35Text" on page 587

10.1.14.2.10 CountryCode <CtryCd>

Presence: [0..1]

Definition: Nation with its own government.

Datatype: "Min2Max3AlphaText" on page 590

10.1.15 Secure Element

10.1.15.1 EnvelopedData1

Definition: Encrypted data with encryption key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		462
	OriginatorInformation <OrgtrlInf>	[0..1]			463
	Certificate <Cert>	[0..*]	Binary		463
	Recipient <Rcpt>	[1..*]			463
{Or	KeyTransport <KeyTrnsprt>	[1..1]			463
	Version <Vrsn>	[0..1]	Quantity		464
	RecipientIdentification <RcptId>	[1..1]			464
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			464
	Issuer <Issr>	[1..1]			465
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			465
	AttributeType <AttrTp>	[1..1]	CodeSet		465
	AttributeValue <AttrVal>	[1..1]	Text		466
	SerialNumber <SrlNb>	[1..1]	Binary		466
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		466
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		466
	EncryptedKey <NcrptdKey>	[1..1]	Binary		466
Or	KEK <KEK>	[1..1]	±		467
Or}	KeyIdentifier <Keyldr>	[1..1]	±		467
	EncryptedContent <NcrptdCntt>	[0..1]			467
	ContentType <CnttTp>	[1..1]	CodeSet		468
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]			468
	Algorithm <Algo>	[1..1]	CodeSet		469
	Parameter <Param>	[0..1]			471
	EncryptionFormat <NcrptnFmt>	[0..1]	CodeSet		471
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		472
	BytePadding <BPddg>	[0..1]	CodeSet		472
	EncryptedData <NcrptdData>	[1..1]	Binary		472

10.1.15.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 582

10.1.15.1.2 OriginatorInformation <OrgtrInf>

Presence: [0..1]

Definition: Provides certificates of the originator.

OriginatorInformation <OrgtrInf> contains the following **OriginatorInformation1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Certificate <Cert>	[0..*]	Binary		463

10.1.15.1.2.1 Certificate <Cert>

Presence: [0..*]

Definition: It may contain originator certificates associated with several different key management algorithms.

Datatype: "Max5000Binary" on page 523

10.1.15.1.3 Recipient <Rcpt>

Presence: [1..*]

Definition: Session key or identification of the protection key used by the recipient.

Recipient <Rcpt> contains one of the following **Recipient15Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	KeyTransport <KeyTrnsprt>	[1..1]			463
	Version <Vrsn>	[0..1]	Quantity		464
	RecipientIdentification <RcptId>	[1..1]			464
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			464
	Issuer <Issr>	[1..1]			465
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			465
	AttributeType <AttrTp>	[1..1]	CodeSet		465
	AttributeValue <AttrVal>	[1..1]	Text		466
	SerialNumber <SrlNb>	[1..1]	Binary		466
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		466
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		466
	EncryptedKey <NcrptdKey>	[1..1]	Binary		466
Or	KEK <KEK>	[1..1]	±		467
Or}	KeyIdentifier <Keyldr>	[1..1]	±		467

10.1.15.1.3.1 KeyTransport <KeyTrnsprt>

Presence: [1..1]

Definition: Encryption key using previously distributed asymmetric public key.

KeyTransport <KeyTrnsprt> contains the following **KeyTransport10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		464
	RecipientIdentification <Rcptld>	[1..1]			464
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			464
	Issuer <Issr>	[1..1]			465
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			465
	AttributeType <AttrTp>	[1..1]	CodeSet		465
	AttributeValue <AttrVal>	[1..1]	Text		466
	SerialNumber <SrlNb>	[1..1]	Binary		466
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		466
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		466
	EncryptedKey <NcrptdKey>	[1..1]	Binary		466

10.1.15.1.3.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 582

10.1.15.1.3.1.2 RecipientIdentification <Rcptld>

Presence: [1..1]

Definition: Identification of a cryptographic asymmetric key for the recipient.

RecipientIdentification <Rcptld> contains one of the following **Recipient13Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			464
	Issuer <Issr>	[1..1]			465
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			465
	AttributeType <AttrTp>	[1..1]	CodeSet		465
	AttributeValue <AttrVal>	[1..1]	Text		466
	SerialNumber <SrlNb>	[1..1]	Binary		466
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		466

10.1.15.1.3.1.2.1 IssuerAndSerialNumber <IssrAndSrlNb>

Presence: [1..1]

Definition: Certificate issuer name and serial number (see ITU X.509).

IssuerAndSerialNumber <IssrAndSrInb> contains the following **IssuerAndSerialNumber2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Issuer <Issr>	[1..1]			465
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			465
	AttributeType <AttrTp>	[1..1]	CodeSet		465
	AttributeValue <AttrVal>	[1..1]	Text		466
	SerialNumber <SrInb>	[1..1]	Binary		466

10.1.15.1.3.1.2.1.1 Issuer <Issr>

Presence: [1..1]

Definition: Certificate issuer name (see X.509).

Issuer <Issr> contains the following **CertificateIssuer1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			465
	AttributeType <AttrTp>	[1..1]	CodeSet		465
	AttributeValue <AttrVal>	[1..1]	Text		466

10.1.15.1.3.1.2.1.1.1 RelativeDistinguishedName <RltvDstngshdNm>

Presence: [1..*]

Definition: Relative distinguished name inside a X.509 certificate.

RelativeDistinguishedName <RltvDstngshdNm> contains the following **RelativeDistinguishedName1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AttributeType <AttrTp>	[1..1]	CodeSet		465
	AttributeValue <AttrVal>	[1..1]	Text		466

10.1.15.1.3.1.2.1.1.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 534

CodeName	Name	Definition
CNAT	CommonName	Common name of the attribute (ASN.1 Object Identifier: id-at-commonName).
LATT	Locality	Locality of the attribute (ASN.1 Object Identifier: id-at-localityName).

CodeName	Name	Definition
OATT	OrganisationName	Organization name of the attribute (ASN.1 Object Identifier: id-at-organizationName).
OUAT	OrganisationUnitName	Organization unit name of the attribute (ASN.1 Object Identifier: id-at-organizationalUnitName).
CATT	CountryName	Country name of the attribute (ASN.1 Object Identifier: id-at-countryName).

10.1.15.1.3.1.2.1.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 585

10.1.15.1.3.1.2.1.2 SerialNumber <SrINb>

Presence: [1..1]

Definition: Certificate serial number (see X.509).

Datatype: "Max500Binary" on page 524

10.1.15.1.3.1.2.2 SubjectKeyIdentifier <SbjtKeyldr>

Presence: [1..1]

Definition: Specifies the recipient's certificate by a key identifier.

Datatype: "Max140Binary" on page 522

10.1.15.1.3.1.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

Definition: Algorithm to encrypt the key encryption key (KEK).

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following elements (see "AlgorithmIdentification35" on page 484 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		484
	Parameter <Param>	[0..1]			484
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		485
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		485
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		486

10.1.15.1.3.1.4 EncryptedKey <NcrptdKey>

Presence: [1..1]

Definition: Encrypted key encryption key (KEK).

Datatype: "Max5000Binary" on page 523

10.1.15.1.3.2 KEK <KEK>

Presence: [1..1]

Definition: Key encryption key using previously distributed symmetric key.

KEK <KEK> contains the following elements (see "KEK9" on page 137 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		138
	KEKIdentification <KEKId>	[1..1]	±		138
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			138
	Algorithm <Algo>	[1..1]	CodeSet		139
	Parameter <Param>	[0..1]			141
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		141
	InitialisationVector <InitlStnVctr>	[0..1]	Binary		142
	BytePadding <BPddg>	[0..1]	CodeSet		142
	EncryptedKey <NcrptdKey>	[0..1]	Binary		142

10.1.15.1.3.3 KeyIdentifier <Keyldr>

Presence: [1..1]

Definition: Identification of a protection key without a session key, shared and previously exchanged between the initiator and the recipient.

KeyIdentifier <Keyldr> contains the following elements (see "KEKIdentifier7" on page 142 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		142
	KeyVersion <KeyVrsn>	[1..1]	Text		143
	SequenceNumber <SeqNb>	[0..1]	Quantity		143
	DerivationIdentification <DerivtnId>	[0..1]	Binary		143

10.1.15.1.4 EncryptedContent <NcrptdCntt>

Presence: [0..1]

Definition: Data protection by encryption (digital envelope), with an encryption key.

EncryptedContent <NcrptdCntt> contains the following **EncryptedContent7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		468
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]			468
	Algorithm <Algo>	[1..1]	CodeSet		469
	Parameter <Param>	[0..1]			471
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		471
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		472
	BytePadding <BPddg>	[0..1]	CodeSet		472
	EncryptedData <NcrptdData>	[1..1]	Binary		472

10.1.15.1.4.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data which have been encrypted.

Datatype: "ContentType2Code" on page 543

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.1.15.1.4.2 ContentEncryptionAlgorithm <CnttNcrptnAlgo>

Presence: [0..1]

Definition: Algorithm used to encrypt the data.

ContentEncryptionAlgorithm <CnntNcrptnAlgo> contains the following **AlgorithmIdentification32** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		469
	Parameter <Param>	[0..1]			471
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		471
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		472
	BytePadding <BPddg>	[0..1]	CodeSet		472

10.1.15.1.4.2.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the algorithm.

Datatype: "Algorithm28Code" on page 528

CodeName	Name	Definition
EA2C	AES128CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DC	DES112CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with double length key (112 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) algorithm, as specified in ANSI X9.24-2009 Annex A.
UKPT	UKPT	UKPT (Unique Key Per Transaction) or Master Session Key key encryption - (ASN.1 Object Identifier: id-ukpt-wrap).
UKA2	UKPTwithAES192	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9C	AES192CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA5C	AES256CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption

CodeName	Name	Definition
		with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
DA12	AESDUKPT128ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A, With key length of 128 bits.
DA19	AESDUKPT192ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 192 bits.
DA25	AESDUKPT256ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 256 bits.
N108	Nist800-108KeyDerivation	Key Derivation according to the Special Publication from the NIST entitled 800-108.
EA5R	AES256CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9R	AES192CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA2R	AES128CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DR	DES112CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with double length key (112 Bit) as defined in FIPS SP 800-38a.
E36C	DES168CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with triple length key (168 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
E36R	DES168CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with triple length key (168 Bit) as defined in FIPS SP 800-38a.
SD5C	SDE056CBC	The DEPRECATED Simple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with simple length key (56 Bit) as defined in FIPS

CodeName	Name	Definition
		PUB 81 - (ASN.1 Object Identifier: des-cbc).
UKA1	UKPTwithAES128	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
UKA3	UKPTwithAES256	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
SM4C	SM4CBC	ShangMi 4 enciphering method used in CBC mode.
SM4R	SM4CTR	ShangMi 4 enciphering method used in CTR mode.

10.1.15.1.4.2.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the encryption algorithm.

Parameter <Param> contains the following **Parameter12** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		471
	InitialisationVector <InitlStnVctr>	[0..1]	Binary		472
	BytePadding <BPddg>	[0..1]	CodeSet		472

10.1.15.1.4.2.2.1 EncryptionFormat <NcrptnFrmt>

Presence: [0..1]

Definition: Format of data before encryption, if the format is not plaintext or implicit.

Datatype: "EncryptionFormat2Code" on page 548

CodeName	Name	Definition
TR31	TR31	Format of a cryptographic key specified by the ANSI X9 TR-31 standard.
TR34	TR34	Format of a cryptographic key specified by the ANSI X9 TR-34 standard.
I238	ISO20038KeyWrap	Format of a cryptographic key specified by the ISO20038 standard.

10.1.15.1.4.2.2.2 InitialisationVector <InitlstnVctr>

Presence: [0..1]

Definition: Initialisation vector of a cipher block chaining (CBC) mode encryption.

Datatype: "Max500Binary" on page 524

10.1.15.1.4.2.2.3 BytePadding <BPddg>

Presence: [0..1]

Definition: Byte padding for a cypher block chaining mode encryption, if the padding is not implicit.

Datatype: "BytePadding1Code" on page 539

CodeName	Name	Definition
LNGT	LengthPadding	Message to encrypt is completed by a byte value containing the total number of added bytes.
NUL8	Null80Padding	Message to encrypt is completed by one bit of value 1, followed by null bits until the encryption block length is reached.
NULG	NullLengthPadding	Message to encrypt is completed by null byte values, the last byte containing the total number of added bytes.
NULL	NullPadding	Message to encrypt is completed by null bytes.
RAND	RandomPadding	Message to encrypt is completed by random value, the last byte containing the total number of added bytes.

10.1.15.1.4.3 EncryptedData <NcrptdData>

Presence: [1..1]

Definition: Encrypted data, result of the content encryption.

Datatype: "Max100KBinary" on page 522

10.1.15.2 CryptographicKey19

Definition: Cryptographic Key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		473
	KeyIdentification <KeyId>	[0..1]	Text		473
	AdditionalIdentification <AddtlId>	[0..1]	Binary		474
	Name <Nm>	[0..1]	Text		474
	SecurityProfile <SctyPrfl>	[0..1]	Text		474
	ItemNumber <ItmNb>	[0..1]	Text		474
	SequenceNumber <SeqNb>	[0..1]	Quantity		474
	Version <Vrsn>	[0..1]	Text		474
	KeyVersion <KeyVrsn>	[0..1]	Text		474
	Type <Tp>	[0..1]	CodeSet		475
	Function <Fctn>	[0..*]	CodeSet		476
	ActivationDate <ActvtnDt>	[0..1]	DateTime		476
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		476
	KeyValue <KeyVal>	[0..1]	±		477
	ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>	[0..*]			477
	Identification <Id>	[1..1]	Text		477
	Type <Tp>	[1..1]	CodeSet		477
	ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>	[0..*]	±		478
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		478
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			478
	Name <Nm>	[1..1]	Text		478
	Value <Val>	[0..1]	Text		479
	DerivationAlgorithmIdentifier <DerivtnAlgoIdr>	[0..1]	Text		479
	AlgorithmIdentifier <AlgoIdr>	[0..1]	Text		479

10.1.15.2.1 Identification <Id>

Presence: [0..1]

Definition: Name of the cryptographic key.

Datatype: "Max350Text" on page 587

10.1.15.2.2 KeyIdentification <KeyId>

Presence: [0..1]

Definition: Name of the cryptographic key.

Datatype: "Max350Text" on page 587

10.1.15.2.3 AdditionalIdentification <AddtId>

Presence: [0..1]

Definition: Additional identification of the key.

Usage

For derived unique key per transaction (DUKPT) keys, the key serial number (KSN) with the 21 bits of the transaction counter set to zero.

Datatype: "Max35Binary" on page 523

10.1.15.2.4 Name <Nm>

Presence: [0..1]

Definition: Name of the Cryptographic Element.

Datatype: "Max256Text" on page 586

10.1.15.2.5 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the set of security elements to which this element belongs.

Datatype: "Max35Text" on page 587

10.1.15.2.6 ItemNumber <ItmNb>

Presence: [0..1]

Definition: Hierarchical identification of a key inside all the key system. It is composed of all item numbers of the upper level components, separated by the '.' character, ended by the item number of the current component.

Datatype: "Max35Text" on page 587

10.1.15.2.7 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Sequence number of the cryptographic key.

Datatype: "Number" on page 582

10.1.15.2.8 Version <Vrsn>

Presence: [0..1]

Definition: Version of the cryptographic key.

Datatype: "Max256Text" on page 586

10.1.15.2.9 KeyVersion <KeyVrsn>

Presence: [0..1]

Definition: Version of the cryptographic key.

Datatype: "Max256Text" on page 586

10.1.15.2.10 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType5Code" on page 544

CodeName	Name	Definition
AES2	AES128	AES (Advanced Encryption Standard) 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE3	DES112	Data encryption standard key of 112 bits (without the parity bits).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) key, as specified in ANSI X9.24-2009 Annex A.
AES9	AES192	AES (Advanced Encryption Standard) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
AES5	AES256	AES (Advanced Encryption Standard) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE4	DES168	Data encryption standard key of 168 bits (without the parity bits).
UKA2	UKPTAES192	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
UKA6	UKPTAES256	UKPT (Unique Key Per Transaction). Encryption key using AES (Advanced Encryption Standard) with a 256 bits length key. FIPS 197 - 6 November 2001).
RSAC	RSA	Rivest, Shamir and Adleman.
ECCC	ECC	Elliptic-curve cryptography.
DKAE	DUKPTAES	DUKPT AES (Derived Unique Key Per Transaction) algorithm.
UKA8	UKPTAES128	UKPT (Unique Key Per Transaction). Encryption key using AES (Advanced Encryption Standard) with a 128 bits length key. FIPS 197 - 6 November 2001).

10.1.15.2.11 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 553

CodeName	Name	Definition
ENCR	Encryption	Key may encrypt.
DCPT	Decryption	Key may decrypt.
DENC	DataEncryption	Key may encrypt data.
DDEC	DataDecryption	Key may decrypt data.
TRNI	TranslateInput	Key may encrypt information before translation.
TRNX	TranslateOutput	Key may encrypt information after translation.
MACG	MessageAuthenticationCodeGeneration	Key may generate message authentication codes (MAC).
MACV	MessageAuthenticationCodeVerification	Key may verify message authentication codes (MAC).
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).
PIND	PINDecryption	Key may decrypt personal identification numbers (PIN).
PINV	PINVerification	Key may verify personal identification numbers (PIN).
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

10.1.15.2.12 ActivationDate <Actvtndt>

Presence: [0..1]

Definition: Date and time on which the key must be activated.

Datatype: "ISODateTime" on page 581

10.1.15.2.13 DeactivationDate <Deactvtndt>

Presence: [0..1]

Definition: Date and time on which the key must be deactivated.

Datatype: "ISODateTime" on page 581

10.1.15.2.14 KeyValue <KeyVal>

Presence: [0..1]

Definition: Encrypted cryptographic key.

KeyValue <KeyVal> contains the following elements (see "[ContentInformationType39](#)" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.15.2.15 ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs>

Presence: [0..*]

Definition: Identification of components which are allowed to access this cryptographic key.

ComponentWithAuthorisedAccess <CmpntWthAuthrsdAccs> contains the following **GenericIdentification186** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		477
	Type <Tp>	[1..1]	CodeSet		477

10.1.15.2.15.1 Identification <Id>

Presence: [1..1]

Definition: Identification of an element in the system.

Datatype: "[Max256Text](#)" on page 586

10.1.15.2.15.2 Type <Tp>

Presence: [1..1]

Definition: Type of actor in the system.

Datatype: "[PartyType7Code](#)" on page 561

CodeName	Name	Definition
ACQR	Acquirer	Entity acquiring card transactions.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
PCPT	POIComponent	Party component of a POI system or POI terminal (Point of Interaction).

CodeName	Name	Definition
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.
SALE	SaleSystem	Party selling goods and services.

10.1.15.2.16 ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs>

Presence: [0..*]

Definition: Protection of Identification of components which are allowed to access this cryptographic key.

ProtectedComponentWithAuthorisedAccess <PrtctdCmpntWthAuthrsdAccs> contains the following elements (see "[ContentInformationType39](#)" on page 496 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.15.2.17 KeyCheckValue <KeyChckVal>

Presence: [0..1]

Definition: Value for checking a cryptographic key security parameter.

Datatype: "[Max35Binary](#)" on page 523

10.1.15.2.18 AdditionalManagementInformation <AddtlMgmtInf>

Presence: [0..*]

Definition: Additional Information needed by the receiver to securely process the management of the security element.

AdditionalManagementInformation <AddtlMgmtInf> contains the following **GenericInformation1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[1..1]	Text		478
	Value <Val>	[0..1]	Text		479

10.1.15.2.18.1 Name <Nm>

Presence: [1..1]

Definition: Name of the generic information to exchange.

Datatype: "[Max70Text](#)" on page 589

10.1.15.2.18.2 Value <Val>

Presence: [0..1]

Definition: Value of the generic information to exchange.

Datatype: "Max140Text" on page 585

10.1.15.2.19 DerivationAlgorithmIdentifier <DerivtnAlgoIdr>

Presence: [0..1]

Definition: Identification of the derivation algorithm that must be used.

Datatype: "Max140Text" on page 585

10.1.15.2.20 AlgorithmIdentifier <AlgoIdr>

Presence: [0..1]

Definition: Identification of the algorithm and mode that must be used.

Datatype: "Max140Text" on page 585

10.1.15.3 AlgorithmIdentification33

Definition: Identification of a cryptographic algorithm and parameters for digital signatures.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		479
	Parameter <Param>	[0..1]			482
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		482
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		483
	SaltLength <SaltLngth>	[0..1]	Quantity		483
	TrailerField <TrlrFld>	[0..1]	Quantity		483
	OIDCurveName <OIDCrvNm>	[0..1]	Text		484

10.1.15.3.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the algorithm.

Datatype: "Algorithm29Code" on page 530

CodeName	Name	Definition
ERS2	SHA256WithRSA	Signature algorithms with RSA, using SHA-256 digest algorithm - (ASN.1 Object Identifier: sha256WithRSAEncryption).
ERS1	SHA1WithRSA	The DEPRECATED Signature algorithms with RSA (PKCS #1 version 2.1), using SHA-1 digest algorithm - (ASN.1 Object Identifier: sha1WithRSAEncryption).

CodeName	Name	Definition
RPSS	RSASSA-PSS	Signature algorithm with Appendix, Probabilistic Signature Scheme (PKCS #1 version 2.1), - (ASN.1 Object Identifier: id-RSASSA-PSS).
ERS3	SHA3-256WithRSA	Signature algorithms with RSA, using SHA3-256 digest algorithm. (ASN.1 Object Identifier: id-rsassa-pkcs1-v1-5-with-sha3-256).
ED32	EcdsaSha3-256	Elliptic Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
ED33	EcdsaSha3-384	Elliptic Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
ED35	EcdsaSha3-512	Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ED23	EcdsaSha384	Elliptic Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
ED25	EcdsaSha512	Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ES22	EcdsaSha256	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
ES32	EcdsaSha3-256	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
ES33	EcdsaSha3-384	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
ES35	EcdsaSha3-512	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ES23	EcdsaSha384	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
ES25	EcdsaSha512	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ED22	EcdsaSha256	Elliptic Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EF32	EcdsaSha3-256	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
EF22	EcdsaSha256	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.

CodeName	Name	Definition
EF33	EcfdsdaSha3-384	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
EF35	EcfdsdaSha3-512	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
EF23	EcfdsdaSha384	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
EO33	EcosdsaSha3-384	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
EF25	EcfdsdaSha512	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
EO32	EcosdaSha3-256	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
EO22	EcosdsaSha256	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EO35	EcosdsaSha3-512	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
EO23	EcosdsaSha384	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
EO25	EcosdsaSha512	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
DD22	EddsaSha256	Edward Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
DD32	EddsaSha3-256	Edward Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
DD33	EddsaSha3-384	Edward Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
DD35	EddsaSha3-512	Edward Curve Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
DD23	EddsaSha384	Edward Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
DD25	EddsaSha512	Edward Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
SM22	SM2Sha256	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.

CodeName	Name	Definition
SM33	SM2Sha3-384	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
SM32	SM2Sha3-256	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
SM35	SM2Sha3-512	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
SM23	SM2Sha384	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
SM25	SM2Sha512	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
S2S3	SM2SM3	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with ShangMi3 Digest Algorithm.

10.1.15.3.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters of the RSASSA-PSS digital signature algorithm (RSA signature algorithm with appendix: Probabilistic Signature Scheme).

Parameter <Param> contains the following **Parameter16** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		482
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		483
	SaltLength <SaltLngth>	[0..1]	Quantity		483
	TrailerField <TrlrFld>	[0..1]	Quantity		483
	OIDCurveName <OIDCrvNm>	[0..1]	Text		484

10.1.15.3.2.1 DigestAlgorithm <DgstAlgo>

Presence: [0..1]

Definition: Identification of the digest algorithm.

Datatype: "Algorithm26Code" on page 525

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).
HS38	SHA384	Message digest algorithm SHA-384 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha384).

CodeName	Name	Definition
HS51	SHA512	Message digest algorithm SHA-512 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha512).
HS01	SHA1	The DEPRECATED Message digest algorithm SHA-1 as defined in FIPS 180-1 - (ASN.1 Object Identifier: id-sha1).
SH31	SHA3-224	Message digest algorithm SHA3-224 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-224).
SH32	SHA3-256	Message digest algorithm SHA3-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-256).
SH33	SHA3-384	Message digest algorithm SHA3-384 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-384).
SH35	SHA3-512	Message digest algorithm SHA3-512 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-512).
SHK1	SHAKE128	Message digest algorithm SHAKE-128 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake128).
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).
SMS3	SM3	ShangMi 3 hash function as defined by ISO/IEC 10118-3:2018.

10.1.15.3.2.2 MaskGeneratorAlgorithm <MskGnrtrAlgo>

Presence: [0..1]

Definition: Mask generator function cryptographic algorithm and parameters.

MaskGeneratorAlgorithm <MskGnrtrAlgo> contains the following elements (see "AlgorithmIdentification34" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		514
	Parameter <Param>	[0..1]			514
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		514

10.1.15.3.2.3 SaltLength <SaltLngth>

Presence: [0..1]

Definition: Length of the salt to include in the signature.

Datatype: "Number" on page 582

10.1.15.3.2.4 TrailerField <TrlrFld>

Presence: [0..1]

10.1.15.4.2.1 EncryptionFormat <NcrptnFrmt>

Presence: [0..1]

Definition: Format of data before encryption, if the format is not plaintext or implicit.

Datatype: "EncryptionFormat2Code" on page 548

CodeName	Name	Definition
TR31	TR31	Format of a cryptographic key specified by the ANSI X9 TR-31 standard.
TR34	TR34	Format of a cryptographic key specified by the ANSI X9 TR-34 standard.
I238	ISO20038KeyWrap	Format of a cryptographic key specified by the ISO20038 standard.

10.1.15.4.2.2 DigestAlgorithm <DgstAlgo>

Presence: [0..1]

Definition: Identification of the digest algorithm.

Datatype: "Algorithm26Code" on page 525

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).
HS38	SHA384	Message digest algorithm SHA-384 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha384).
HS51	SHA512	Message digest algorithm SHA-512 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha512).
HS01	SHA1	The DEPRECATED Message digest algorithm SHA-1 as defined in FIPS 180-1 - (ASN.1 Object Identifier: id-sha1).
SH31	SHA3-224	Message digest algorithm SHA3-224 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-224).
SH32	SHA3-256	Message digest algorithm SHA3-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-256).
SH33	SHA3-384	Message digest algorithm SHA3-384 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-384).
SH35	SHA3-512	Message digest algorithm SHA3-512 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-512).
SHK1	SHAKE128	Message digest algorithm SHAKE-128 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake128).
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).

CodeName	Name	Definition
SMS3	SM3	ShangMi 3 hash function as defined by ISO/IEC 10118-3:2018.

10.1.15.4.2.3 MaskGeneratorAlgorithm <MskGnrtrAlgo>

Presence: [0..1]

Definition: Mask generator function cryptographic algorithm and parameters.

MaskGeneratorAlgorithm <MskGnrtrAlgo> contains the following elements (see "[AlgorithmIdentification34](#)" on page 513 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		514
	Parameter <Param>	[0..1]			514
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		514

10.1.15.5 AuthenticatedData10

Definition: Message authentication code (MAC), computed on the data to protect with an encryption key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		487
	Recipient <Rcpt>	[1..*]			487
{Or	KeyTransport <KeyTrnsprt>	[1..1]			488
	Version <Vrsn>	[0..1]	Quantity		489
	RecipientIdentification <RcptId>	[1..1]			489
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			489
	Issuer <Issr>	[1..1]			489
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			490
	AttributeType <AttrTp>	[1..1]	CodeSet		490
	AttributeValue <AttrVal>	[1..1]	Text		490
	SerialNumber <SrlNb>	[1..1]	Binary		490
Or}	SubjectKeyIdentifier <SbjtKeyIdr>	[1..1]	Binary		491
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		491
	EncryptedKey <NcrptdKey>	[1..1]	Binary		491
Or	KEK <KEK>	[1..1]	±		491
Or}	KeyIdentifier <KeyIdr>	[1..1]	±		492
	MACAlgorithm <MACAlgo>	[1..1]	±		492
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		493
	MAC <MAC>	[1..1]	Binary		493

10.1.15.5.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 582

10.1.15.5.2 Recipient <Rcpt>

Presence: [1..*]

Definition: Session key or protection key identification used by the recipient.

Recipient <Rcpt> contains one of the following **Recipient15Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	KeyTransport <KeyTrnsprt>	[1..1]			488
	Version <Vrsn>	[0..1]	Quantity		489
	RecipientIdentification <RcptId>	[1..1]			489
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			489
	Issuer <Issr>	[1..1]			489
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			490
	AttributeType <AttrTp>	[1..1]	CodeSet		490
	AttributeValue <AttrVal>	[1..1]	Text		490
	SerialNumber <SrlNb>	[1..1]	Binary		490
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		491
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		491
	EncryptedKey <NcrptdKey>	[1..1]	Binary		491
Or	KEK <KEK>	[1..1]	±		491
Or}	KeyIdentifier <Keyldr>	[1..1]	±		492

10.1.15.5.2.1 KeyTransport <KeyTrnsprt>

Presence: [1..1]

Definition: Encryption key using previously distributed asymmetric public key.

KeyTransport <KeyTrnsprt> contains the following **KeyTransport10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		489
	RecipientIdentification <RcptId>	[1..1]			489
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			489
	Issuer <Issr>	[1..1]			489
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			490
	AttributeType <AttrTp>	[1..1]	CodeSet		490
	AttributeValue <AttrVal>	[1..1]	Text		490
	SerialNumber <SrlNb>	[1..1]	Binary		490
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		491
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		491
	EncryptedKey <NcrptdKey>	[1..1]	Binary		491

10.1.15.5.2.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 582

10.1.15.5.2.1.2 RecipientIdentification <RcptId>

Presence: [1..1]

Definition: Identification of a cryptographic asymmetric key for the recipient.

RecipientIdentification <RcptId> contains one of the following **Recipient13Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			489
	Issuer <Issr>	[1..1]			489
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			490
	AttributeType <AttrTp>	[1..1]	CodeSet		490
	AttributeValue <AttrVal>	[1..1]	Text		490
	SerialNumber <SrlNb>	[1..1]	Binary		490
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		491

10.1.15.5.2.1.2.1 IssuerAndSerialNumber <IssrAndSrlNb>

Presence: [1..1]

Definition: Certificate issuer name and serial number (see ITU X.509).

IssuerAndSerialNumber <IssrAndSrlNb> contains the following **IssuerAndSerialNumber2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Issuer <Issr>	[1..1]			489
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			490
	AttributeType <AttrTp>	[1..1]	CodeSet		490
	AttributeValue <AttrVal>	[1..1]	Text		490
	SerialNumber <SrlNb>	[1..1]	Binary		490

10.1.15.5.2.1.2.1.1 Issuer <Issr>

Presence: [1..1]

Definition: Certificate issuer name (see X.509).

Issuer <Issr> contains the following **CertificateIssuer1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			490
	AttributeType <AttrTp>	[1..1]	CodeSet		490
	AttributeValue <AttrVal>	[1..1]	Text		490

10.1.15.5.2.1.2.1.1.1 RelativeDistinguishedName <RltvDstngshdNm>

Presence: [1..*]

Definition: Relative distinguished name inside a X.509 certificate.

RelativeDistinguishedName <RltvDstngshdNm> contains the following **RelativeDistinguishedName1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AttributeType <AttrTp>	[1..1]	CodeSet		490
	AttributeValue <AttrVal>	[1..1]	Text		490

10.1.15.5.2.1.2.1.1.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 534

CodeName	Name	Definition
CNAT	CommonName	Common name of the attribute (ASN.1 Object Identifier: id-at-commonName).
LATT	Locality	Locality of the attribute (ASN.1 Object Identifier: id-at-localityName).
OATT	OrganisationName	Organization name of the attribute (ASN.1 Object Identifier: id-at-organizationName).
OUAT	OrganisationUnitName	Organization unit name of the attribute (ASN.1 Object Identifier: id-at-organizationalUnitName).
CATT	CountryName	Country name of the attribute (ASN.1 Object Identifier: id-at-countryName).

10.1.15.5.2.1.2.1.1.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 585

10.1.15.5.2.1.2.1.2 SerialNumber <SrInb>

Presence: [1..1]

Definition: Certificate serial number (see X.509).

Datatype: "Max500Binary" on page 524

10.1.15.5.2.1.2.2 SubjectKeyIdentifier <SbjtKeyldr>

Presence: [1..1]

Definition: Specifies the recipient's certificate by a key identifier.

Datatype: "Max140Binary" on page 522

10.1.15.5.2.1.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

Definition: Algorithm to encrypt the key encryption key (KEK).

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following elements (see "AlgorithmIdentification35" on page 484 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		484
	Parameter <Param>	[0..1]			484
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		485
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		485
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		486

10.1.15.5.2.1.4 EncryptedKey <NcrptdKey>

Presence: [1..1]

Definition: Encrypted key encryption key (KEK).

Datatype: "Max5000Binary" on page 523

10.1.15.5.2.2 KEK <KEK>

Presence: [1..1]

Definition: Key encryption key using previously distributed symmetric key.

KEK <KEK> contains the following elements (see "[KEK9](#)" on page 137 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		138
	KEKIdentification <KEKId>	[1..1]	±		138
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]			138
	Algorithm <Algo>	[1..1]	CodeSet		139
	Parameter <Param>	[0..1]			141
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		141
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		142
	BytePadding <BPddg>	[0..1]	CodeSet		142
	EncryptedKey <NcrptdKey>	[0..1]	Binary		142

10.1.15.5.2.3 KeyIdentifier <KeyIdr>

Presence: [1..1]

Definition: Identification of a protection key without a session key, shared and previously exchanged between the initiator and the recipient.

KeyIdentifier <KeyIdr> contains the following elements (see "[KEKIdentifier7](#)" on page 142 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		142
	KeyVersion <KeyVrsn>	[1..1]	Text		143
	SequenceNumber <SeqNb>	[0..1]	Quantity		143
	DerivationIdentification <DerivtnId>	[0..1]	Binary		143

10.1.15.5.3 MACAlgorithm <MACAlgo>

Presence: [1..1]

Definition: Algorithm to compute message authentication code (MAC).

MACAlgorithm <MACAlgo> contains the following elements (see "[AlgorithmIdentification31](#)" on page 508 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		508
	Parameter <Param>	[0..1]			510
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		511
	BytePadding <BPddg>	[0..1]	CodeSet		511

10.1.15.5.4 EncapsulatedContent <NcpsltdCntt>

Presence: [1..1]

Definition: Data to authenticate.

EncapsulatedContent <NcpsltdCntt> contains the following elements (see "[EncapsulatedContent3](#)" on page 421 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		421
	Content <Cntt>	[0..1]	Binary		422

10.1.15.5.5 MAC <MAC>

Presence: [1..1]

Definition: Message authentication code value.

Datatype: "[Max140Binary](#)" on page 522

10.1.15.6 ContentInformationType38

Definition: General cryptographic message syntax (CMS) containing data. protected by a MAC or a digital signature.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		493
	AuthenticatedData <AuthntcdData>	[0..1]	±		494
	SignedData <SgndData>	[0..1]	±		494

10.1.15.6.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data protection.

Datatype: "[ContentType2Code](#)" on page 543

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.1.15.6.2 AuthenticatedData <AuthntcdData>

Presence: [0..1]

Definition: Data protection by a message authentication code (MAC).

AuthenticatedData <AuthntcdData> contains the following elements (see "[AuthenticatedData10](#)" on page 486 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		487
	Recipient <Rcpt>	[1..*]			487
{Or	KeyTransport <KeyTrnsprt>	[1..1]			488
	Version <Vrsn>	[0..1]	Quantity		489
	RecipientIdentification <RcptId>	[1..1]			489
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			489
	Issuer <Issr>	[1..1]			489
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			490
	AttributeType <AttrTp>	[1..1]	CodeSet		490
	AttributeValue <AttrVal>	[1..1]	Text		490
	SerialNumber <SrlNb>	[1..1]	Binary		490
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		491
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		491
	EncryptedKey <NcrptdKey>	[1..1]	Binary		491
Or	KEK <KEK>	[1..1]	±		491
Or}	KeyIdentifier <Keyldr>	[1..1]	±		492
	MACAlgorithm <MACAlgo>	[1..1]	±		492
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		493
	MAC <MAC>	[1..1]	Binary		493

10.1.15.6.3 SignedData <SgndData>

Presence: [0..1]

Definition: Data protected by a digital signatures.

SignedData <SgndData> contains the following elements (see "SignedData9" on page 501 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		501
	DigestAlgorithm <DgstAlgo>	[0..*]	±		501
	EncapsulatedContent <NcpsltdCntt>	[0..1]	±		502
	Certificate <Cert>	[0..*]	Binary		502
	Signer <Sgnr>	[0..*]			502
	Version <Vrsn>	[0..1]	Quantity		503
	SignerIdentification <SgnrId>	[0..1]			503
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			504
	Issuer <Issr>	[1..1]			504
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			504
	AttributeType <AttrTp>	[1..1]	CodeSet		505
	AttributeValue <AttrVal>	[1..1]	Text		505
	SerialNumber <SrlNb>	[1..1]	Binary		505
Or}	SubjectKeyIdentifier <SbjtKeyIdr>	[1..1]	Binary		505
	DigestAlgorithm <DgstAlgo>	[1..1]	±		505
	SignedAttributes <SgndAttrbts>	[0..*]			506
	Name <Nm>	[1..1]	Text		506
	Value <Val>	[0..1]	Text		506
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		506
	Signature <Sgntr>	[1..1]	Binary		507

10.1.15.7 DigestedData6

Definition: Digest computed on the identified data.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		495
	DigestAlgorithm <DgstAlgo>	[1..1]	±		496
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		496
	Digest <Dgst>	[1..1]	Binary		496

10.1.15.7.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 582

10.1.15.7.2 DigestAlgorithm <DgstAlgo>

Presence: [1..1]

Definition: Identification of the digest algorithm.

DigestAlgorithm <DgstAlgo> contains the following elements (see "AlgorithmIdentification36" on page 507 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		507

10.1.15.7.3 EncapsulatedContent <NcpsltdCntt>

Presence: [1..1]

Definition: Data on which the digest is computed.

EncapsulatedContent <NcpsltdCntt> contains the following elements (see "EncapsulatedContent3" on page 421 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		421
	Content <Cntt>	[0..1]	Binary		422

10.1.15.7.4 Digest <Dgst>

Presence: [1..1]

Definition: Result of data-digesting process.

Datatype: "Max140Binary" on page 522

10.1.15.8 ContentInformationType39

Definition: General cryptographic message syntax (CMS) containing protected data.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		496
	EnvelopedData <EnvlpdData>	[0..1]	±		497
	AuthenticatedData <AuthntcdData>	[0..1]	±		498
	SignedData <SgndData>	[0..1]	±		499
	DigestedData <DgstdData>	[0..1]	±		500

10.1.15.8.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data protection.

Datatype: "ContentType2Code" on page 543

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.1.15.8.2 EnvelopedData <EnvlpdData>

Presence: [0..1]

Definition: Data protection by encryption, with a session key.

EnvelopedData <EnvlpdData> contains the following elements (see "EnvelopedData11" on page 461 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		462
	OriginatorInformation <OrgtrlInf>	[0..1]			463
	Certificate <Cert>	[0..*]	Binary		463
	Recipient <Rcpt>	[1..*]			463
{Or	KeyTransport <KeyTrnsprt>	[1..1]			463
	Version <Vrsn>	[0..1]	Quantity		464
	RecipientIdentification <RcptId>	[1..1]			464
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			464
	Issuer <Issr>	[1..1]			465
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			465
	AttributeType <AttrTp>	[1..1]	CodeSet		465
	AttributeValue <AttrVal>	[1..1]	Text		466
	SerialNumber <SrlNb>	[1..1]	Binary		466
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		466
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		466
	EncryptedKey <NcrptdKey>	[1..1]	Binary		466
Or	KEK <KEK>	[1..1]	±		467
Or}	KeyIdentifier <Keyldr>	[1..1]	±		467
	EncryptedContent <NcrptdCntt>	[0..1]			467
	ContentType <CnttTp>	[1..1]	CodeSet		468
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]			468
	Algorithm <Algo>	[1..1]	CodeSet		469
	Parameter <Param>	[0..1]			471
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		471
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		472
	BytePadding <BPddg>	[0..1]	CodeSet		472
	EncryptedData <NcrptdData>	[1..1]	Binary		472

10.1.15.8.3 AuthenticatedData <AuthntcdData>

Presence: [0..1]

Definition: Data protection by a message authentication code (MAC).

AuthenticatedData <AuthntcdData> contains the following elements (see "AuthenticatedData10" on page 486 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		487
	Recipient <Rcpt>	[1..*]			487
{Or	KeyTransport <KeyTrnsprt>	[1..1]			488
	Version <Vrsn>	[0..1]	Quantity		489
	RecipientIdentification <RcptId>	[1..1]			489
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			489
	Issuer <Issr>	[1..1]			489
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			490
	AttributeType <AttrTp>	[1..1]	CodeSet		490
	AttributeValue <AttrVal>	[1..1]	Text		490
	SerialNumber <SrlNb>	[1..1]	Binary		490
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		491
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		491
	EncryptedKey <NcrptdKey>	[1..1]	Binary		491
Or	KEK <KEK>	[1..1]	±		491
Or}	KeyIdentifier <Keyldr>	[1..1]	±		492
	MACAlgorithm <MACAlgo>	[1..1]	±		492
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		493
	MAC <MAC>	[1..1]	Binary		493

10.1.15.8.4 SignedData <SgndData>

Presence: [0..1]

Definition: Data protected by a digital signatures.

SignedData <SgndData> contains the following elements (see "SignedData9" on page 501 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		501
	DigestAlgorithm <DgstAlgo>	[0..*]	±		501
	EncapsulatedContent <NcpsltdCntt>	[0..1]	±		502
	Certificate <Cert>	[0..*]	Binary		502
	Signer <Sgnr>	[0..*]			502
	Version <Vrsn>	[0..1]	Quantity		503
	SignerIdentification <SgnrId>	[0..1]			503
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			504
	Issuer <Issr>	[1..1]			504
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			504
	AttributeType <AttrTp>	[1..1]	CodeSet		505
	AttributeValue <AttrVal>	[1..1]	Text		505
	SerialNumber <SrlNb>	[1..1]	Binary		505
Or}	SubjectKeyIdentifier <SbjtKeyIdr>	[1..1]	Binary		505
	DigestAlgorithm <DgstAlgo>	[1..1]	±		505
	SignedAttributes <SgndAttrbts>	[0..*]			506
	Name <Nm>	[1..1]	Text		506
	Value <Val>	[0..1]	Text		506
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		506
	Signature <Sgntr>	[1..1]	Binary		507

10.1.15.8.5 DigestedData <DgstData>

Presence: [0..1]

Definition: Data protected by a digest.

DigestedData <DgstData> contains the following elements (see "DigestedData6" on page 495 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		495
	DigestAlgorithm <DgstAlgo>	[1..1]	±		496
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		496
	Digest <Dgst>	[1..1]	Binary		496

10.1.15.9 SignedData9

Definition: Digital signatures of data from one or several signers.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		501
	DigestAlgorithm <DgstAlgo>	[0..*]	±		501
	EncapsulatedContent <NcpsltdCntt>	[0..1]	±		502
	Certificate <Cert>	[0..*]	Binary		502
	Signer <Sgnr>	[0..*]			502
	Version <Vrsn>	[0..1]	Quantity		503
	SignerIdentification <SgnrId>	[0..1]			503
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			504
	Issuer <Issr>	[1..1]			504
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			504
	AttributeType <AttrTp>	[1..1]	CodeSet		505
	AttributeValue <AttrVal>	[1..1]	Text		505
	SerialNumber <SrlNb>	[1..1]	Binary		505
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		505
	DigestAlgorithm <DgstAlgo>	[1..1]	±		505
	SignedAttributes <SgndAttrbts>	[0..*]			506
	Name <Nm>	[1..1]	Text		506
	Value <Val>	[0..1]	Text		506
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		506
	Signature <Sgntr>	[1..1]	Binary		507

10.1.15.9.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 582

10.1.15.9.2 DigestAlgorithm <DgstAlgo>

Presence: [0..*]

Definition: Identification of digest algorithm applied before signature.

DigestAlgorithm <DgstAlgo> contains the following elements (see "[AlgorithmIdentification36](#)" on page 507 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		507

10.1.15.9.3 EncapsulatedContent <NcpsltdCntt>

Presence: [0..1]

Definition: Data to sign.

EncapsulatedContent <NcpsltdCntt> contains the following elements (see "[EncapsulatedContent3](#)" on page 421 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		421
	Content <Cntt>	[0..1]	Binary		422

10.1.15.9.4 Certificate <Cert>

Presence: [0..*]

Definition: Chain of X.509 certificates.

Datatype: "[Max5000Binary](#)" on page 523

10.1.15.9.5 Signer <Sgnr>

Presence: [0..*]

Definition: Digital signature and identification of a signer.

Signer <Sgnr> contains the following **Signer8** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		503
	SignerIdentification <SgnrId>	[0..1]			503
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			504
	Issuer <Issr>	[1..1]			504
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			504
	AttributeType <AttrTp>	[1..1]	CodeSet		505
	AttributeValue <AttrVal>	[1..1]	Text		505
	SerialNumber <SrlNb>	[1..1]	Binary		505
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		505
	DigestAlgorithm <DgstAlgo>	[1..1]	±		505
	SignedAttributes <SgndAttrbts>	[0..*]			506
	Name <Nm>	[1..1]	Text		506
	Value <Val>	[0..1]	Text		506
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		506
	Signature <Sgntr>	[1..1]	Binary		507

10.1.15.9.5.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the Cryptographic Message Syntax (CMS) data structure.

Datatype: "Number" on page 582

10.1.15.9.5.2 SignerIdentification <SgnrId>

Presence: [0..1]

Definition: Identification of the entity who has signed the data.

SignerIdentification <SgnrId> contains one of the following **Recipient13Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			504
	Issuer <Issr>	[1..1]			504
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			504
	AttributeType <AttrTp>	[1..1]	CodeSet		505
	AttributeValue <AttrVal>	[1..1]	Text		505
	SerialNumber <SrlNb>	[1..1]	Binary		505
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		505

10.1.15.9.5.2.1 IssuerAndSerialNumber <IssrAndSrlNb>

Presence: [1..1]

Definition: Certificate issuer name and serial number (see ITU X.509).

IssuerAndSerialNumber <IssrAndSrlNb> contains the following **IssuerAndSerialNumber2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Issuer <Issr>	[1..1]			504
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			504
	AttributeType <AttrTp>	[1..1]	CodeSet		505
	AttributeValue <AttrVal>	[1..1]	Text		505
	SerialNumber <SrlNb>	[1..1]	Binary		505

10.1.15.9.5.2.1.1 Issuer <Issr>

Presence: [1..1]

Definition: Certificate issuer name (see X.509).

Issuer <Issr> contains the following **CertificateIssuer1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			504
	AttributeType <AttrTp>	[1..1]	CodeSet		505
	AttributeValue <AttrVal>	[1..1]	Text		505

10.1.15.9.5.2.1.1.1 RelativeDistinguishedName <RltvDstngshdNm>

Presence: [1..*]

Definition: Relative distinguished name inside a X.509 certificate.

RelativeDistinguishedName <RltvDstngshdNm> contains the following
RelativeDistinguishedName1 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AttributeType <AttrTp>	[1..1]	CodeSet		505
	AttributeValue <AttrVal>	[1..1]	Text		505

10.1.15.9.5.2.1.1.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 534

CodeName	Name	Definition
CNAT	CommonName	Common name of the attribute (ASN.1 Object Identifier: id-at-commonName).
LATT	Locality	Locality of the attribute (ASN.1 Object Identifier: id-at-localityName).
OATT	OrganisationName	Organization name of the attribute (ASN.1 Object Identifier: id-at-organizationName).
OUAT	OrganisationUnitName	Organization unit name of the attribute (ASN.1 Object Identifier: id-at-organizationalUnitName).
CATT	CountryName	Country name of the attribute (ASN.1 Object Identifier: id-at-countryName).

10.1.15.9.5.2.1.1.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 585

10.1.15.9.5.2.1.2 SerialNumber <SrlNb>

Presence: [1..1]

Definition: Certificate serial number (see X.509).

Datatype: "Max500Binary" on page 524

10.1.15.9.5.2.2 SubjectKeyIdentifier <SbjtKeyldr>

Presence: [1..1]

Definition: Specifies the recipient's certificate by a key identifier.

Datatype: "Max140Binary" on page 522

10.1.15.9.5.3 DigestAlgorithm <DgstAlgo>

Presence: [1..1]

Definition: Identification of a digest algorithm to apply before signature.

DigestAlgorithm <DgstAlgo> contains the following elements (see "[AlgorithmIdentification36](#)" on page 507 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		507

10.1.15.9.5.4 SignedAttributes <SgndAttrbts>

Presence: [0..*]

Definition: Collection of attributes that are signed.

SignedAttributes <SgndAttrbts> contains the following **GenericInformation1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[1..1]	Text		506
	Value <Val>	[0..1]	Text		506

10.1.15.9.5.4.1 Name <Nm>

Presence: [1..1]

Definition: Name of the generic information to exchange.

Datatype: "[Max70Text](#)" on page 589

10.1.15.9.5.4.2 Value <Val>

Presence: [0..1]

Definition: Value of the generic information to exchange.

Datatype: "[Max140Text](#)" on page 585

10.1.15.9.5.5 SignatureAlgorithm <SgntrAlgo>

Presence: [1..1]

Definition: Cryptographic digital signature algorithm.

SignatureAlgorithm <SgntrAlgo> contains the following elements (see "[AlgorithmIdentification33](#)" on page 479 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		479
	Parameter <Param>	[0..1]			482
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		482
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		483
	SaltLength <SaltLngth>	[0..1]	Quantity		483
	TrailerField <TrlrFld>	[0..1]	Quantity		483
	OIDCurveName <OIDCrvNm>	[0..1]	Text		484

10.1.15.9.5.6 Signature <Sgntr>

Presence: [1..1]

Definition: Digital signature.

Datatype: "Max3000Binary" on page 523

10.1.15.10 AlgorithmIdentification36

Definition: Cryptographic algorithm and parameters of digests.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		507

10.1.15.10.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the digest algorithm.

Datatype: "Algorithm26Code" on page 525

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).
HS38	SHA384	Message digest algorithm SHA-384 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha384).
HS51	SHA512	Message digest algorithm SHA-512 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha512).
HS01	SHA1	The DEPRECATED Message digest algorithm SHA-1 as defined in FIPS 180-1 - (ASN.1 Object Identifier: id-sha1).
SH31	SHA3-224	Message digest algorithm SHA3-224 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-224).
SH32	SHA3-256	Message digest algorithm SHA3-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-256).
SH33	SHA3-384	Message digest algorithm SHA3-384 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-384).
SH35	SHA3-512	Message digest algorithm SHA3-512 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-512).
SHK1	SHAKE128	Message digest algorithm SHAKE-128 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake128).
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).

CodeName	Name	Definition
SMS3	SM3	ShangMi 3 hash function as defined by ISO/IEC 10118-3:2018.

10.1.15.11 AlgorithmIdentification31

Definition: Identification of a cryptographic algorithm and parameters for the MAC computation.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		508
	Parameter <Param>	[0..1]			510
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		511
	BytePadding <BPddg>	[0..1]	CodeSet		511

10.1.15.11.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the MAC algorithm.

Datatype: "Algorithm27Code" on page 526

CodeName	Name	Definition
MACC	RetailCBCMAC	Retail CBC (Chaining Block Cypher) MAC (Message Authentication Code) (cf. ISO 9807, ANSI X9.19) - (ASN.1 Object Identifier: id-retail-cbc-mac).
MCCS	RetailSHA256MAC	Retail-CBC-MAC with SHA-256 (Secure Hash standard) - (ASN.1 Object Identifier: id-retail-cbc-mac-sha-256).
CMA1	SHA256CMACwithAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-256 digest of the message.
MCC1	RetailSHA1MAC	The DEPRECATED Retail-CBC-MAC with SHA-1 (Secure Hash standard) - (ASN.1 Object Identifier: id-retail-cbc-mac-sha-1).
CMA9	SHA384CMACwithAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6,

CodeName	Name	Definition
		2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-384 digest of the message.
CMA5	SHA512CMACwithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-512 digest of the message.
CMA2	SHA256CMACWithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-256 digest of the message.
CM31	SHA3-256CMACWithAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA3-256 digest of the message.
CM32	SHA3-384CMACWithAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA3-384 digest of the message.
CM33	SHA3-512CMACWithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).

CodeName	Name	Definition
		The CMAC algorithm is computed on the SHA3-512 digest of the message.
MCS3	SHA3-256-3DESMAC	3DES CBC-MAC with SHA3-256 (SecureHash standard) and ISO/IEC9797-1 method 2 padding.
CCA1	CMACAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
CCA2	CMACAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
CCA3	CMACAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
S34C	SM3SM4CBC	ShangMi 4 enciphering method used in CBC mode coupled with ShangMi 3 hash function.
S34R	SM3SM4CTR	ShangMi 4 enciphering method used in CTR mode coupled with ShangMi 3 hash function.

10.1.15.11.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the MAC algorithm.

Parameter <Param> contains the following **Parameter7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InitialisationVector <InitIstnVctr>	[0..1]	Binary		511
	BytePadding <BPddg>	[0..1]	CodeSet		511

10.1.15.11.2.1 InitialisationVector <InitIstnVctr>

Presence: [0..1]

Definition: Initialisation vector of a cipher block chaining (CBC) mode encryption.

Datatype: "Max500Binary" on page 524

10.1.15.11.2.2 BytePadding <BPddg>

Presence: [0..1]

Definition: Byte padding for a cypher block chaining mode encryption, if the padding is not implicit.

Datatype: "BytePadding1Code" on page 539

CodeName	Name	Definition
LNGT	LengthPadding	Message to encrypt is completed by a byte value containing the total number of added bytes.
NUL8	Null80Padding	Message to encrypt is completed by one bit of value 1, followed by null bits until the encryption block length is reached.
NULG	NullLengthPadding	Message to encrypt is completed by null byte values, the last byte containing the total number of added bytes.
NULL	NullPadding	Message to encrypt is completed by null bytes.
RAND	RandomPadding	Message to encrypt is completed by random value, the last byte containing the total number of added bytes.

10.1.15.12 ContentInformationType40

Definition: General cryptographic message syntax (CMS) containing encrypted data.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		511
	EnvelopedData <EnvlpdData>	[1..1]	±		512

10.1.15.12.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data protection.

Datatype: "ContentType2Code" on page 543

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).

CodeName	Name	Definition
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.1.15.12.2 EnvelopedData <EnvlpdData>

Presence: [1..1]

Definition: Data protection by encryption or by a digital envelope, with an encryption key.

EnvelopedData <EnvlpdData> contains the following elements (see "EnvelopedData11" on page 461 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		462
	OriginatorInformation <OrgtrlInf>	[0..1]			463
	Certificate <Cert>	[0..*]	Binary		463
	Recipient <Rcpt>	[1..*]			463
{Or	KeyTransport <KeyTrnsprt>	[1..1]			463
	Version <Vrsn>	[0..1]	Quantity		464
	RecipientIdentification <RcptId>	[1..1]			464
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			464
	Issuer <Issr>	[1..1]			465
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			465
	AttributeType <AttrTp>	[1..1]	CodeSet		465
	AttributeValue <AttrVal>	[1..1]	Text		466
	SerialNumber <SrlNb>	[1..1]	Binary		466
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		466
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		466
	EncryptedKey <NcrptdKey>	[1..1]	Binary		466
Or	KEK <KEK>	[1..1]	±		467
Or}	KeyIdentifier <Keyldr>	[1..1]	±		467
	EncryptedContent <NcrptdCntt>	[0..1]			467
	ContentType <CnttTp>	[1..1]	CodeSet		468
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]			468
	Algorithm <Algo>	[1..1]	CodeSet		469
	Parameter <Param>	[0..1]			471
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		471
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		472
	BytePadding <BPddg>	[0..1]	CodeSet		472
	EncryptedData <NcrptdData>	[1..1]	Binary		472

10.1.15.13 AlgorithmIdentification34

Definition: Mask generator function cryptographic algorithm and parameters.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		514
	Parameter <Param>	[0..1]			514
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		514

10.1.15.13.1 Algorithm <Algo>

Presence: [1..1]

Definition: Mask generator function cryptographic algorithm.

Datatype: "Algorithm8Code" on page 533

CodeName	Name	Definition
MGF1	MGF1	Generator Function, used for RSA encryption and RSA igital signature (PKCS #1 version 2.1) - (ASN.1 Object Identifier: id-mgf1).

10.1.15.13.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the mask generator function cryptographic algorithm.

Parameter <Param> contains the following **Parameter18** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		514

10.1.15.13.2.1 DigestAlgorithm <DgstAlgo>

Presence: [0..1]

Definition: Digest algorithm used in the mask generator function.

Datatype: "Algorithm26Code" on page 525

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).
HS38	SHA384	Message digest algorithm SHA-384 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha384).
HS51	SHA512	Message digest algorithm SHA-512 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha512).
HS01	SHA1	The DEPRECATED Message digest algorithm SHA-1 as defined in FIPS 180-1 - (ASN.1 Object Identifier: id-sha1).

CodeName	Name	Definition
SH31	SHA3-224	Message digest algorithm SHA3-224 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-224).
SH32	SHA3-256	Message digest algorithm SHA3-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-256).
SH33	SHA3-384	Message digest algorithm SHA3-384 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-384).
SH35	SHA3-512	Message digest algorithm SHA3-512 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-512).
SHK1	SHAKE128	Message digest algorithm SHAKE-128 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake128).
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).
SMS3	SM3	ShangMi 3 hash function as defined by ISO/IEC 10118-3:2018.

10.1.16 Synchronisation

10.1.16.1 ProcessTiming5

Definition: Parameters defining the timing conditions to process an action.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WaitingTime <WtgTm>	[0..1]	Text		515
	StartTime <StartTm>	[0..1]	DateTime		515
	EndTime <EndTm>	[0..1]	DateTime		516
	Period <Prd>	[0..1]	Text		516
	MaximumNumber <MaxNb>	[0..1]	Quantity		516
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		516

10.1.16.1.1 WaitingTime <WtgTm>

Presence: [0..1]

Definition: Waiting time after the previous action in months, days, hours and minutes, leading zeros could be omitted.

Datatype: "Max9NumericText" on page 590

10.1.16.1.2 StartTime <StartTm>

Presence: [0..1]

Definition: Date and time to start the action.

Datatype: "ISODatetime" on page 581

10.1.16.1.3 EndTime <EndTm>

Presence: [0..1]

Definition: Date and time after which the action cannot be processed.

Datatype: "ISODatetime" on page 581

10.1.16.1.4 Period <Prd>

Presence: [0..1]

Definition: Period delay between cyclic action activation in months, days, hours and minutes, leading zeros could be omitted.

Datatype: "Max9NumericText" on page 590

10.1.16.1.5 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of cyclic calls.

Datatype: "Number" on page 582

10.1.16.1.6 UnitOfTime <UnitOfTm>

Presence: [0..1]

Definition: Identification of the minimum unit of time used by time configuration parameters.

Datatype: "TimeUnit1Code" on page 578

CodeName	Name	Definition
DAYC	CalendarDay	Time unit is calendar day.
HOUR	Hour	Time unit is hour.
MINU	Minute	Time unit is minute.
MNTH	Month	Time unit is month.
SECO	Second	Time unit is second.
WEEK	Week	Time unit is week.
YEAR	Year	Time unit is year.

10.1.16.2 ProcessTiming6

Definition: Parameters defining the timing conditions to process an action.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		517
	EndTime <EndTm>	[0..1]	DateTime		517
	Period <Prd>	[0..1]	Text		517
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		517

10.1.16.2.1 StartTime <StartTm>

Presence: [0..1]

Definition: Date and time to start the action.

Datatype: "ISODatetime" on page 581

10.1.16.2.2 EndTime <EndTm>

Presence: [0..1]

Definition: Date and time after which the action cannot be processed.

Datatype: "ISODatetime" on page 581

10.1.16.2.3 Period <Prd>

Presence: [0..1]

Definition: Period delay between cyclic action activation in months, days, hours and minutes, leading zeros could be omitted.

Datatype: "Max9NumericText" on page 590

10.1.16.2.4 UnitOfTime <UnitOfTm>

Presence: [0..1]

Definition: Identification of the minimum unit of time used by time configuration parameters.

Datatype: "TimeUnit1Code" on page 578

CodeName	Name	Definition
DAYC	CalendarDay	Time unit is calendar day.
HOUR	Hour	Time unit is hour.
MINU	Minute	Time unit is minute.
MNTH	Month	Time unit is month.
SECO	Second	Time unit is second.
WEEK	Week	Time unit is week.
YEAR	Year	Time unit is year.

10.1.16.3 ProcessRetry3

Definition: Definition of retry process if activation of an action fails.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		517
	MaximumNumber <MaxNb>	[0..1]	Quantity		518
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		518

10.1.16.3.1 Delay <Dely>

Presence: [1..1]

Definition: Time period to wait for a retry in months, days, hours and minutes, leading zeros could be omitted.

Datatype: "Max9NumericText" on page 590

10.1.16.3.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of retries.

Datatype: "Number" on page 582

10.1.16.3.3 UnitOfTime <UnitOfTm>

Presence: [0..1]

Definition: Identification of the minimum unit of time used by time configuration parameters.

Datatype: "TimeUnit1Code" on page 578

CodeName	Name	Definition
DAYC	CalendarDay	Time unit is calendar day.
HOUR	Hour	Time unit is hour.
MINU	Minute	Time unit is minute.
MNTH	Month	Time unit is month.
SECO	Second	Time unit is second.
WEEK	Week	Time unit is week.
YEAR	Year	Time unit is year.

10.1.17 Token

10.1.17.1 Token1

Definition: Unencrypted sensitive data of a token.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentToken <PmtTkn>	[0..1]	Text		518
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		519
	TokenRequestorIdentification <TknRqstrId>	[0..1]	Text		519
	TokenAssuranceData <TknAssrncData>	[0..1]	Text		519
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		519
	TokenInitiatedIndicator <TknInittId>	[0..1]	Indicator		519

10.1.17.1.1 PaymentToken <PmtTkn>

Presence: [0..1]

Definition: Surrogate value of the PAN.

Datatype: "Max19NumericText" on page 585

10.1.17.1.2 TokenExpiryDate <TknXpryDt>

Presence: [0..1]

Definition: Expiry date of the payment token.

ISO 8583 bit 14.

Datatype: "Exact4NumericText" on page 584

10.1.17.1.3 TokenRequestorIdentification <TknRqstrId>

Presence: [0..1]

Definition: Identification of a party requesting a token.

Datatype: "Max11NumericText" on page 584

10.1.17.1.4 TokenAssuranceData <TknAssrncData>

Presence: [0..1]

Definition: Supporting information for the Token Assurance Method.

Datatype: "Max140Text" on page 585

10.1.17.1.5 TokenAssuranceMethod <TknAssrncMtd>

Presence: [0..1]

Definition: Value that allows a Token Service Provider to indicate the identification and verification performed representing the binding of the payment token to the underlying PAN and cardholder.

Datatype: "Max2NumericText" on page 586

10.1.17.1.6 TokenInitiatedIndicator <TknInittdInd>

Presence: [0..1]

Definition: Original transaction was initiated by Token.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.1.17.2 MerchantToken2

Definition: Merchant token information.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Token <Tkn>	[0..1]	Text		520
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		520
	TokenCharacteristic <TknChrtc>	[0..*]	Text		520
	TokenRequestor <TknRqstr>	[0..1]			520
	ProviderIdentification <PrvdrId>	[1..1]	Text		520
	RequestorIdentification <RqstrId>	[1..1]	Text		521
	TokenAssuranceLevel <TknAssrncLvl>	[0..1]	Quantity		521
	TokenAssuranceData <TknAssrncData>	[0..1]	Binary		521
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		521
	TokenInitiatedIndicator <TknInittIdInd>	[0..1]	Indicator		521

10.1.17.2.1 Token <Tkn>

Presence: [0..1]

Definition: Surrogate value of the PAN.

Datatype: "Max35Text" on page 587

10.1.17.2.2 TokenExpiryDate <TknXpryDt>

Presence: [0..1]

Definition: Expiration date of the payment token that is generated by and maintained in the token vault.

Datatype: "Max10Text" on page 584

10.1.17.2.3 TokenCharacteristic <TknChrtc>

Presence: [0..*]

Definition: Additional payment token information.

Datatype: "Max35Text" on page 587

10.1.17.2.4 TokenRequestor <TknRqstr>

Presence: [0..1]

Definition: Identifier of a token provider requestor.

TokenRequestor <TknRqstr> contains the following **PaymentTokenIdentifiers1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProviderIdentification <PrvdrId>	[1..1]	Text		520
	RequestorIdentification <RqstrId>	[1..1]	Text		521

10.1.17.2.4.1 ProviderIdentification <PrvdrId>

Presence: [1..1]

Definition: Identifier of the token provider.

Datatype: "Max35Text" on page 587

10.1.17.2.4.2 RequestorIdentification <RqstrId>

Presence: [1..1]

Definition: Identifier of the token requestor.

Datatype: "Max35Text" on page 587

10.1.17.2.5 TokenAssuranceLevel <TknAssrncLvl>

Presence: [0..1]

Definition: Level of confidence resulting of the identification and authentication of the cardholder performed and the entity that performed it.

Datatype: "Number" on page 582

10.1.17.2.6 TokenAssuranceData <TknAssrncData>

Presence: [0..1]

Definition: Information about the identification and verification of the cardholder.

Datatype: "Max500Binary" on page 524

10.1.17.2.7 TokenAssuranceMethod <TknAssrncMtd>

Presence: [0..1]

Definition: Value that allows a Token Service Provider to indicate the identification and verification performed representing the binding of the payment token to the underlying PAN and cardholder.

Datatype: "Max2NumericText" on page 586

10.1.17.2.8 TokenInitiatedIndicator <TknInittIdInd>

Presence: [0..1]

Definition: Original transaction was initiated by Token.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 582):

- *Meaning When True:* True
- *Meaning When False:* False

10.2 Message Datatypes

10.2.1 Amount

10.2.1.1 ImpliedCurrencyAndAmount

Definition: Number of monetary units specified in a currency where the unit of currency is implied by the context and compliant with ISO 4217. The decimal separator is a dot.

Note: a zero amount is considered a positive amount.

Type: Amount

Format	
minInclusive	0
totalDigits	18
fractionDigits	5

10.2.2 Binary

10.2.2.1 Max10000Binary

Definition: Specifies a binary string with a maximum length of 10000 binary bytes.

Type: Binary

Format	
minLength	1
maxLength	10000

10.2.2.2 Max100KBinary

Definition: Binary data of 100K maximum.

Type: Binary

Format	
minLength	1
maxLength	102400

10.2.2.3 Max10KBinary

Definition: Binary data of 10K maximum.

Type: Binary

Format	
minLength	1
maxLength	10240

10.2.2.4 Max140Binary

Definition: Specifies a binary string with a maximum length of 140 binary bytes.

Type: Binary

Format	
minLength	1
maxLength	140

10.2.2.5 Max2KBinary

Definition: Binary data of 2K maximum.

Type: Binary

Format

minLength	1
maxLength	2048

10.2.2.6 Max2MBBinary

Definition: Binary data of 2MB maximum.

Type: Binary

Format

minLength	1
maxLength	2097152

10.2.2.7 Max3000Binary

Definition: Specifies a binary string with a maximum length of 3000 binary bytes.

Type: Binary

Format

minLength	1
maxLength	3000

10.2.2.8 Max35Binary

Definition: Specifies a binary string with a maximum length of 35 binary bytes.

Type: Binary

Format

minLength	1
maxLength	35

10.2.2.9 Max5000Binary

Definition: Specifies a binary string with a maximum length of 5000 binary bytes.

Type: Binary

Format

minLength	1
maxLength	5000

10.2.2.10 Max500Binary

Definition: Specifies a binary string with a maximum length of 500 binary bytes.

Type: Binary

Format

minLength	1
maxLength	500

10.2.2.11 Min1Max256Binary

Definition: Specifies a binary string with a minimum length of 1 byte, and a maximum length of 256 bytes.

Type: Binary

Format

minLength	1
maxLength	256

10.2.3 CodeSet

10.2.3.1 ActiveCurrencyCode

Definition: A code allocated to a currency by a Maintenance Agency under an international identification scheme as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".

Type: CodeSet

Format

pattern	[A-Z]{3,3}
---------	------------

Constraints

- **ActiveCurrency**

The currency code must be a valid active currency code, not yet withdrawn on the day the message containing the currency is exchanged. Valid active currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and are not yet withdrawn on the day the message containing the Currency is exchanged.

10.2.3.2 ActiveOrHistoricCurrencyCode

Definition: A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 "Codes for the representation of currencies and funds".

Type: CodeSet

Format

pattern	[A-Z]{3,3}
---------	------------

Constraints

- **ActiveOrHistoricCurrency**

The Currency Code must be registered, or have already been registered. Valid active or historic currency codes are registered with the ISO 4217 Maintenance Agency, consist of three (3) contiguous letters, and may be or not be withdrawn on the day the message containing the Currency is exchanged.

10.2.3.3 AddressType2Code

Definition: Specifies the type of address.

Type: CodeSet

CodeName	Name	Definition
ADDR	Postal	Address is the complete postal address.
PBOX	POBox	Address is a postal office (PO) box.
HOME	Residential	Address is the home address.
BIZZ	Business	Address is the business address.
MLTO	MailTo	Address is the address to which mail is sent.
DLVY	DeliveryTo	Address is the address to which delivery is to take place.

10.2.3.4 Algorithm26Code

Definition: Identification of a digest algorithm.

Type: CodeSet

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).
HS38	SHA384	Message digest algorithm SHA-384 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha384).
HS51	SHA512	Message digest algorithm SHA-512 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha512).
HS01	SHA1	The DEPRECATED Message digest algorithm SHA-1 as defined in FIPS 180-1 - (ASN.1 Object Identifier: id-sha1).
SH31	SHA3-224	Message digest algorithm SHA3-224 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-224).
SH32	SHA3-256	Message digest algorithm SHA3-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-256).
SH33	SHA3-384	Message digest algorithm SHA3-384 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-384).

CodeName	Name	Definition
SH35	SHA3-512	Message digest algorithm SHA3-512 as defined in FIPS 202 - (ASN.1 Object Identifier: id-sha3-512).
SHK1	SHAKE128	Message digest algorithm SHAKE-128 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake128).
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).
SMS3	SM3	ShangMi 3 hash function as defined by ISO/IEC 10118-3:2018.

10.2.3.5 Algorithm27Code

Definition: Cryptographic algorithms for the MAC (Message Authentication Code).

Type: CodeSet

CodeName	Name	Definition
MACC	RetailCBCMAC	Retail CBC (Chaining Block Cypher) MAC (Message Authentication Code) (cf. ISO 9807, ANSI X9.19) - (ASN.1 Object Identifier: id-retail-cbc-mac).
MCCS	RetailSHA256MAC	Retail-CBC-MAC with SHA-256 (Secure Hash standard) - (ASN.1 Object Identifier: id-retail-cbc-mac-sha-256).
CMA1	SHA256CMACwithAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-256 digest of the message.
MCC1	RetailSHA1MAC	The DEPRECATED Retail-CBC-MAC with SHA-1 (Secure Hash standard) - (ASN.1 Object Identifier: id-retail-cbc-mac-sha-1).
CMA9	SHA384CMACwithAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-384 digest of the message.
CMA5	SHA512CMACwithAES256	CMAC (Cipher based Message Authentication Code) defined by the

CodeName	Name	Definition
		National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-512 digest of the message.
CMA2	SHA256CMACWithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA-256 digest of the message.
CM31	SHA3-256CMACWithAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA3-256 digest of the message.
CM32	SHA3-384CMACWithAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA3-384 digest of the message.
CM33	SHA3-512CMACWithAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard). The CMAC algorithm is computed on the SHA3-512 digest of the message.

CodeName	Name	Definition
MCS3	SHA3-256-3DESMAC	3DES CBC-MAC with SHA3-256 (SecureHash standard) and ISO/IEC9797-1 method 2 padding.
CCA1	CMACAES128	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
CCA2	CMACAES192	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
CCA3	CMACAES256	CMAC (Cipher based Message Authentication Code) defined by the National Institute of Standards and Technology (NIST 800-38B - May 2005), using the block cipher Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
S34C	SM3SM4CBC	ShangMi 4 enciphering method used in CBC mode coupled with ShangMi 3 hash function.
S34R	SM3SM4CTR	ShangMi 4 enciphering method used in CTR mode coupled with ShangMi 3 hash function.

10.2.3.6 Algorithm28Code

Definition: Cryptographic algorithms for the protection of transported keys.

Type: CodeSet

CodeName	Name	Definition
EA2C	AES128CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DC	DES112CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with double length key (112 Bit) as

CodeName	Name	Definition
		defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) algorithm, as specified in ANSI X9.24-2009 Annex A.
UKPT	UKPT	UKPT (Unique Key Per Transaction) or Master Session Key key encryption - (ASN.1 Object Identifier: id-ukpt-wrap).
UKA2	UKPTwithAES192	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9C	AES192CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA5C	AES256CBC	AES (Advanced Encryption Standard) CBC (Chaining Block Cypher) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
DA12	AESDUKPT128ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A, With key length of 128 bits.
DA19	AESDUKPT192ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 192 bits.
DA25	AESDUKPT256ECB	AES DUKPT (Derived Unique Key Per Transaction) ECB algorithm, as specified in ANSI X9.24-3-2017 Annex A. With key length of 256 bits.
N108	Nist800-108KeyDerivation	Key Derivation according to the Special Publication from the NIST entitled 800-108.
EA5R	AES256CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA9R	AES192CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing

CodeName	Name	Definition
		Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EA2R	AES128CTR	AES (Advanced Encryption Standard) CTR (Counter) encryption with a 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
E3DR	DES112CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with double length key (112 Bit) as defined in FIPS SP 800-38a.
E36C	DES168CBC	Triple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with triple length key (168 Bit) as defined in FIPS PUB 46-3 - (ASN.1 Object Identifier: des-ede3-cbc).
E36R	DES168CTR	Triple DES (Data Encryption Standard) CTR (Counter) encryption with triple length key (168 Bit) as defined in FIPS SP 800-38a.
SD5C	SDE056CBC	The DEPRECATED Simple DES (Data Encryption Standard) CBC (Chaining Block Cypher) encryption with simple length key (56 Bit) as defined in FIPS PUB 81 - (ASN.1 Object Identifier: des-cbc).
UKA1	UKPTwithAES128	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 128 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
UKA3	UKPTwithAES256	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 256 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
SM4C	SM4CBC	ShangMi 4 enciphering method used in CBC mode.
SM4R	SM4CTR	ShangMi 4 enciphering method used in CTR mode.

10.2.3.7 Algorithm29Code

Definition: Cryptographic algorithms for digital signatures.

Type: CodeSet

CodeName	Name	Definition
ERS2	SHA256WithRSA	Signature algorithms with RSA, using SHA-256 digest algorithm - (ASN.1 Object Identifier: sha256WithRSAEncryption).
ERS1	SHA1WithRSA	The DEPRECATED Signature algorithms with RSA (PKCS #1 version 2.1), using SHA-1 digest algorithm - (ASN.1 Object Identifier: sha1WithRSAEncryption).
RPSS	RSASSA-PSS	Signature algorithm with Appendix, Probabilistic Signature Scheme (PKCS #1 version 2.1), - (ASN.1 Object Identifier: id-RSASSA-PSS).
ERS3	SHA3-256WithRSA	Signature algorithms with RSA, using SHA3-256 digest algorithm. (ASN.1 Object Identifier: id-rsassa-pkcs1-v1-5-with-sha3-256).
ED32	EcdsaSha3-256	Elliptic Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
ED33	EcdsaSha3-384	Elliptic Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
ED35	EcdsaSha3-512	Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ED23	EcdsaSha384	Elliptic Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
ED25	EcdsaSha512	Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ES22	EcdsaSha256	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
ES32	EcdsaSha3-256	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
ES33	EcdsaSha3-384	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
ES35	EcdsaSha3-512	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
ES23	EcdsaSha384	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
ES25	EcdsaSha512	Elliptic Curve Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.

CodeName	Name	Definition
ED22	EcdsaSha256	Elliptic Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EF32	EcdsaSha3-256	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
EF22	EcdsaSha256	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EF33	EcdsaSha3-384	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
EF35	EcdsaSha3-512	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
EF23	EcdsaSha384	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
EO33	EcdsaSha3-384	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
EF25	EcdsaSha512	Elliptic Curve Full Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
EO32	EcdsaSha3-256	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
EO22	EcdsaSha256	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
EO35	EcdsaSha3-512	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
EO23	EcdsaSha384	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
EO25	EcdsaSha512	Elliptic Curve Optimised Schnorr Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
DD22	EddsaSha256	Edward Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
DD32	EddsaSha3-256	Edward Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
DD33	EddsaSha3-384	Edward Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
DD35	EddsaSha3-512	Edward Curve Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.

CodeName	Name	Definition
DD23	EddsaSha384	Edward Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
DD25	EddsaSha512	Edward Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
SM22	SM2Sha256	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-256 Digest Algorithm.
SM33	SM2Sha3-384	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-384 Digest Algorithm.
SM32	SM2Sha3-256	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-256 Digest Algorithm.
SM35	SM2Sha3-512	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA3-512 Digest Algorithm.
SM23	SM2Sha384	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-384 Digest Algorithm.
SM25	SM2Sha512	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with SHA2-512 Digest Algorithm.
S2S3	SM2SM3	ShangMi2 Elliptic Curve Digital Signature Algorithm coupled with ShangMi3 Digest Algorithm.

10.2.3.8 Algorithm7Code

Definition: Asymmetric encryption algorithm of a transport key.

Type: CodeSet

CodeName	Name	Definition
ERSA	RSASignature	RSA signature algorithm - (ASN.1 Object Identifier: rsaSignature).
RSAO	RSAES-OAEP	RSA encryption scheme based on Optimal Asymmetric Encryption scheme (PKCS #1 version 2.1) - (ASN.1 Object Identifier: id-RSAES-OAEP).

10.2.3.9 Algorithm8Code

Definition: Mask generator functions of the RSAES-OAEP encryption algorithm (RSA Encryption Scheme: Optimal Asymmetric Encryption Padding).

Type: CodeSet

CodeName	Name	Definition
MGF1	MGF1	Generator Function, used for RSA encryption and RSA digital signature (PKCS #1 version 2.1) - (ASN.1 Object Identifier: id-mgf1).

10.2.3.10 AmountUnit1Code

Definition: Unit of a amount (for loyalty or account).

Type: CodeSet

CodeName	Name	Definition
MONE	Monetary	The amount is expressed in a monetary value in a currency.
POIN	Point	The amount is expressed in point.

10.2.3.11 AttendanceContext1Code

Definition: Human attendance at the POI location during the transaction.

Type: CodeSet

CodeName	Name	Definition
ATTD	Attended	Attended payment, with an attendant.
SATT	SemiAttended	Semi-attended, including self checkout. An attendant supervises several payment, and could be called to help the cardholder.
UATT	Unattended	Unattended payment, no attendant present.

10.2.3.12 AttributeType1Code

Definition: Type of attribute of a distinguished name (DN).

Type: CodeSet

CodeName	Name	Definition
CNAT	CommonName	Common name of the attribute (ASN.1 Object Identifier: id-at-commonName).
LATT	Locality	Locality of the attribute (ASN.1 Object Identifier: id-at-localityName).
OATT	OrganisationName	Organization name of the attribute (ASN.1 Object Identifier: id-at-organizationName).
OUAT	OrganisationUnitName	Organization unit name of the attribute (ASN.1 Object Identifier: id-at-organizationalUnitName).
CATT	CountryName	Country name of the attribute (ASN.1 Object Identifier: id-at-countryName).

10.2.3.13 AuthenticationEntity2Code

Definition: Entity or device that has performed the verification.

Type: CodeSet

CodeName	Name	Definition
ICCD	ICC	Application in the chip card (Integrated Circuit Card), for instance an offline PIN verification.
AGNT	AuthorisedAgent	Authorisation agent of the issuer.
MERC	Merchant	Merchant (for example signature verification by the attendant).
ACQR	Acquirer	Acquirer of the transaction.
ISSR	Issuer	Card issuer.
TRML	Terminal	Secure application in the terminal.

10.2.3.14 AuthenticationMethod6Code

Definition: Methods used to authenticate a person or a card.

Type: CodeSet

CodeName	Name	Definition
NPIN	OnLinePIN	On-line PIN authentication (Personal Identification Number).
PPSG	PaperSignature	Handwritten paper signature.
PSWD	Password	Authentication by a password.
SCRT	SecureCertificate	Electronic commerce transaction secured with the X.509 certificate of a customer.
SCNL	SecuredChannel	Channel-encrypted transaction.
SNCT	SecureNoCertificate	Secure electronic transaction without cardholder certificate.
CPSG	SignatureCapture	Electronic signature capture (handwritten signature).
ADDB	BillingAddressVerification	Cardholder billing address verification.
BIOM	Biometry	Biometric authentication of the cardholder.
CDHI	CardholderIdentificationData	Cardholder data provided for verification, for instance social security number, driver license number, passport number.
CRYP	CryptogramVerification	Verification of a cryptogram generated by a chip card or another device, for instance ARQC (Authorisation Request Cryptogram).
CSCV	CSCVerification	Verification of Card Security Code.
PSVE	PassiveAuthentication	Authentication based on statistical cardholder behaviour.

CodeName	Name	Definition
CSEC	SecureElectronicCommerce	Authentication performed during a secure electronic commerce transaction.
ADDS	ShippingAddressVerification	Cardholder shipping address verification.
MANU	ManualVerification	Manual verification, for example passport or drivers license.
FPIN	OfflinePIN	Off-line PIN authentication (Personal Identification Number).
TOKP	PaymentToken	Verification or authentication related to the use of a payment token, for instance the validation of the authorised use of a token.

10.2.3.15 AuthenticationMethod8Code

Definition: Method to authenticate the customer or its card.

Type: CodeSet

CodeName	Name	Definition
TOKA	AuthenticationToken	A token is used to verify an already performed authentication.
ADDB	BillingAddressVerification	Cardholder billing address verification.
BYPS	Bypass	Authentication bypassed by the merchant.
BIOM	Biometry	Biometric authentication of the cardholder.
CDHI	CardholderIdentificationData	Cardholder data provided for verification, for instance social security number, driver license number, passport number.
CRYP	CryptogramVerification	Verification of a cryptogram generated by a chip card or another device, for instance ARQC (Authorisation Request Cryptogram).
CSCV	CSCVerification	Verification of Card Security Code.
MANU	ManualVerification	Manual verification, for example passport or drivers license.
MERC	MerchantAuthentication	Merchant-related authentication.
MOBL	Mobile	Customer mobile device.
FPIN	OfflinePIN	Off-line PIN authentication (Personal Identification Number).
NPIN	OnLinePIN	On-line PIN authentication (Personal Identification Number).
OTHR	Other	Other customer authentication.
PPSG	PaperSignature	Handwritten paper signature.
PSVE	PassiveAuthentication	Authentication based on statistical cardholder behaviour.
PSWD	Password	Authentication by a password.

CodeName	Name	Definition
TOKP	PaymentToken	Verification or authentication related to the use of a payment token, for instance the validation of the authorised use of a token.
SCRT	SecureCertificate	Electronic commerce transaction secured with the X.509 certificate of a customer.
SCNL	SecuredChannel	Channel-encrypted transaction.
CSEC	SecureElectronicCommerce	Authentication performed during a secure electronic commerce transaction.
SNCT	SecureNoCertificate	Secure electronic transaction without cardholder certificate.
ADDS	ShippingAddressVerification	Cardholder shipping address verification.
CPSG	SignatureCapture	Electronic signature capture (handwritten signature).
TOKN	TokenAuthentication	Cryptogram generated by the token requestor or a customer device to validate the authorised use of a token.
UKNW	UnknownMethod	Authentication method is performed unknown.

10.2.3.16 AuthenticationResult1Code

Definition: Specifies the result of authentication done.

Type: CodeSet

CodeName	Name	Definition
DENY	Denial	The authentication didn't succeed.
MRCH	MerchantNotEnroled	Merchant not enrolled in the authentication programme.
CARD	NonParticipation	The card does not participate in the authentication programme.
AUTH	UnableToAuthenticate	The authentication couldn't be carried out.
CRPT	WithCryptogram	Authentication succeeded with a cryptogram.
UCRP	WithoutCryptogram	Authentication succeeded without a cryptogram.

10.2.3.17 BarcodeType1Code

Definition: Type of BarCode coding.

Type: CodeSet

CodeName	Name	Definition
COQR	BarcodeEncodedAs2DQRCode	Barcode encoded according to the 2Dimensions Quick Response Code Standard.

CodeName	Name	Definition
C128	BarcodeEncodedAsCode128	Barcode encoded according to the Code 128 standard.
C025	BarcodeEncodedAsCode25	Barcode encoded according to the Code 25 standard.
C039	BarcodeEncodedAsCode39	Barcode encoded according to the Code 39 standard.
EA13	BarcodeEncodedAsEA13	Barcode encoded according to the EAN13 standard.
EAN8	BarcodeEncodedAsEAN8	Barcode encoded according to the EAN8 standard.
P417	BarcodeEncodedAsPDF417	Barcode encoded according to the PDF417 standard.
UPCA	BarcodeEncodedAsUPCA	Barcode encoded according to the UPCA standard.

10.2.3.18 BatchTransactionType1Code

Definition: Type of transactions to include in a batch transfer.

Type: CodeSet

CodeName	Name	Definition
DTCT	DebitCredit	Debit and credit transactions.
CNCL	Cancellation	Cancellation of a previous transaction.
FAIL	Failed	Failed transactions.
DCLN	Declined	Declined transactions.

10.2.3.19 BusinessArea2Code

Definition: Specifies the business context of the transaction

Type: CodeSet

CodeName	Name	Definition
AIBD	ArtificialIntelligenceBasedDecision	The payment is initiated by an artificial intelligence based decision.
PPAY	PlainPayment	The card is used to perform a plain payment.
TKNF	TransitKnownFare	The card is used in a Transit business case where the fare amount is known when the transaction is initiated.
EOPT	EnergyOpenPayment	Indicates when the card is used in an energy business case where the amount could not be assessed when the transaction is initiated.
TOPT	TransitOpenPayment	Indicates when the card is used in a transit business case where the fare amount is not known when the transaction is initiated.

10.2.3.20 BytePadding1Code

Definition: Byte padding for a cypher block chaining mode encryption, if the padding is not implicit.

Type: CodeSet

CodeName	Name	Definition
LNGT	LengthPadding	Message to encrypt is completed by a byte value containing the total number of added bytes.
NUL8	Null80Padding	Message to encrypt is completed by one bit of value 1, followed by null bits until the encryption block length is reached.
NULG	NullLengthPadding	Message to encrypt is completed by null byte values, the last byte containing the total number of added bytes.
NULL	NullPadding	Message to encrypt is completed by null bytes.
RAND	RandomPadding	Message to encrypt is completed by random value, the last byte containing the total number of added bytes.

10.2.3.21 CancellationProcess2Code

Definition: Configuration of the exchanges to perform the cancellation of a payment transaction.

Type: CodeSet

CodeName	Name	Definition
ADVC	Advice	Card payment transaction may be cancelled by an advice only before closure of the reconciliation period or before the capture by batch.
NALW	NotAllowed	Card payment transaction cannot be cancelled by the acquirer.
REQU	Request	Card payment transaction may also be cancelled after the closure of the reconciliation period or after the capture by batch. In this case a cancellation request exchange is required.
APPL	ApplicationLevel	Cancellation of the Card payment transaction is defined by the payment application.

10.2.3.22 CAPEEncodingMode1Code

Definition: Mode of data encoding supported by exchanges.

Type: CodeSet

CodeName	Name	Definition
XMLE	XMLEncoding	Data exchanged with the protocol between both parties are encoded in XML.

CodeName	Name	Definition
JSON	JSONEncoding	Data exchanged with the protocol between both parties are encoded in JSON.

10.2.3.23 CAPEExchangeMode1Code

Definition: Type of exchange supported by a host.

Type: CodeSet

CodeName	Name	Definition
APIE	ExchangeByAPI	With this protocol, the communication is done through calls to API.
MSGE	ExchangeByMessage	With this protocol, the communication is done through message exchanges.

10.2.3.24 CardDataReading5Code

Definition: Type of reading of the card data.

Type: CodeSet

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

10.2.3.25 CardDataReading8Code

Definition: Type of reading of the card data.

Type: CodeSet

CodeName	Name	Definition
TAGC	Tag	Tag reading capabilities (RFID, etc.).
PHYS	Physical	Keyboard entry or OCR reading of embossing or printed data, either at time of transaction or after the event.

CodeName	Name	Definition
BRCD	BarCode	Bar code.
MGST	MagneticStripe	Magnetic stripe.
CICC	ICC	ICC (Integrated Circuit Card) with contact containing software applications conform to ISO 7816.
DFLE	AccountData	Account data on file.
CTLS	ProximityReader	Contactless proximity reader.
ECTL	EMVProximityReader	Contactless proximity reader, with application conform to the standard EMV (standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.
SICC	SynchronousIntegratedCircuitCard	Synchronous ICC - (Integrated Circuit Card) with contact.
UNKW	Unknown	Unknown card reading capability.
QRCD	QRCode	Quick response code.
OPTC	OpticalCode	Optical coded reading capabilities (e.g. barcode, QR code, etc.)

10.2.3.26 CardFallback1Code

Definition: Information about card entry mode fallback.

Type: CodeSet

CodeName	Name	Definition
FFLB	FallbackAfterFailure	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal failed.
SFLB	FallbackAfterSuccess	Card fall-back occurred during the transaction in progress. The previous transaction on the terminal was successful.
NFLB	NoFallback	No card fall-back during the transaction in progress.

10.2.3.27 CardholderVerificationCapability4Code

Definition: Cardholder verification capabilities by the terminal.

Type: CodeSet

CodeName	Name	Definition
APKI	AccountDigitalSignature	Account based digital signature.
CHDT	CardholderData	Cardholder authentication data.
MNSG	ManualSignature	Manual signature verification.
MNVR	ManualVerification	Other manual verification, for example passport or drivers license.

CodeName	Name	Definition
FBIG	OfflineBiographics	Offline biographics.
FBIO	OfflineBiometrics	Offline biometrics.
FDSG	OfflineDigitalSignature	Offline digital signature analysis.
FCPN	OfflinePINClear	Offline PIN in clear (Personal Identification Number).
FEPN	OfflinePINEncrypted	Offline PIN encrypted (Personal Identification Number).
NPIN	OnLinePIN	Online PIN (Personal Identification Number).
PKIS	PKISignature	PKI (Public Key Infrastructure) based digital signature.
SCEC	SecureElectronicCommerce	Three domain secure (three domain secure authentication of the cardholder).
NBIO	OnLineBiometrics	Online biometrics.
NOVF	NoCapabilities	No cardholder verification capability.
OTHR	Other	Other cardholder verification capabilities.

10.2.3.28 CardIdentificationType1Code

Definition: Type of account identification.

Type: CodeSet

CodeName	Name	Definition
ACCT	AccountNumber	Account identification.
BARC	BarCode	Bar-code with a specific form of identification.
ISO2	ISOTrack2	ISO Track 2 including identification.
PHON	PhoneNumber	A phone number identifies the account on which the phone card is assigned.
CPAN	PrimaryAccountNumber	Standard card identification (card number).
PRIV	PrivativeNumbering	An identification set by a privative application.
UUID	UniversalUniqueIdentification	A Universal Unique Identification code is set for identification.

10.2.3.29 CardPaymentServiceType10Code

Definition: Requested certificate management service.

Type: CodeSet

CodeName	Name	Definition
CRTC	CreateCertificate	Creation of an X.509 certificate with the public key and the information of the owner of the asymmetric key provided by the requestor.

CodeName	Name	Definition
CRTR	RenewCertificate	Renewal of an X.509 certificate, protected by the certificate to renew.
CRTK	RevokeCertificate	Revocation of an active X.509 certificate.
WLSR	RemoveWhiteList	Remove a POI from the white list of the terminal manager.
WLSA	AddWhiteList	Add a POI in the white list of the terminal manager.

10.2.3.30 CardProductType1Code

Definition: Type of card product.

Type: CodeSet

CodeName	Name	Definition
COMM	CommercialCard	Cards issued as a means of business expenditure, for instance business card or corporate card. The user could be a company, an individual for business expenses or a self employed for business purposes.
CONS	ConsumerCard	Cards issued as a means of personal expenditure. The user is always an individual.

10.2.3.31 CheckType1Code

Definition: Type of bank check.

Type: CodeSet

CodeName	Name	Definition
BANK	BankCheck	The check is guaranteed by a bank.
BUSI	BusinessCheck	The check belongs to a Company or a professional entity.
GOVC	GovernmentCheck	Check issued by Government.
PAYR	PayrollCheck	Check issued by a company for the employees.
PERS	PersonalCheck	The check belongs to an individual.

10.2.3.32 ContentType2Code

Definition: Identification of the type of a Cryptographic Message Syntax (CMS) data structure.

Type: CodeSet

CodeName	Name	Definition
DATA	PlainData	Generic, non cryptographic, or unqualified data content - (ASN.1 Object Identifier: id-data).
SIGN	SignedData	Digital signature - (ASN.1 Object Identifier: id-signedData).

CodeName	Name	Definition
EVLP	EnvelopedData	Encrypted data, with encryption key - (ASN.1 Object Identifier: id-envelopedData).
DGST	DigestedData	Message digest - (ASN.1 Object Identifier: id-digestedData).
AUTH	AuthenticatedData	MAC (Message Authentication Code), with encryption key - (ASN.1 Object Identifier: id-ct-authData).

10.2.3.33 CountryCode

Definition: Code to identify a country, a dependency, or another area of particular geopolitical interest, on the basis of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

Type: CodeSet

Format

pattern [A-Z]{2,2}

Constraints

- **Country**

The code is checked against the list of country names obtained from the United Nations (ISO 3166, Alpha-2 code).

10.2.3.34 CryptographicKeyType5Code

Definition: Codes for qualifying the type of cryptographic keys.

Type: CodeSet

CodeName	Name	Definition
AES2	AES128	AES (Advanced Encryption Standard) 128 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
EDE3	DES112	Data encryption standard key of 112 bits (without the parity bits).
DKP9	DUKPT2009	DUKPT (Derived Unique Key Per Transaction) key, as specified in ANSI X9.24-2009 Annex A.
AES9	AES192	AES (Advanced Encryption Standard) encryption with a 192 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
AES5	AES256	AES (Advanced Encryption Standard) encryption with a 256 bits cryptographic key as defined by the Federal Information Processing Standards (FIPS

CodeName	Name	Definition
		197 - November 6, 2001 - Advanced Encryption Standard).
EDE4	DES168	Data encryption standard key of 168 bits (without the parity bits).
UKA2	UKPTAES192	UKPT (Unique Key Per Transaction) or Master Session Key key encryption, using Advanced Encryption Standard with a 192 bits cryptographic key, approved by the Federal Information Processing Standards (FIPS 197 - November 6, 2001 - Advanced Encryption Standard).
UKA6	UKPTAES256	UKPT (Unique Key Per Transaction). Encryption key using AES (Advanced Encryption Standard) with a 256 bits length key. FIPS 197 - 6 November 2001).
RSAC	RSA	Rivest, Shamir and Adleman.
ECCC	ECC	Elliptic-curve cryptography.
DKAE	DUKPTAES	DUKPT AES (Derived Unique Key Per Transaction) algorithm.
UKA8	UKPTAES128	UKPT (Unique Key Per Transaction). Encryption key using AES (Advanced Encryption Standard) with a 128 bits length key. FIPS 197 - 6 November 2001).

10.2.3.35 DataSetCategory10Code

Definition: Maintenance services provided by a terminal manager.

Type: CodeSet

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
MTMG	MasterTerminalManager	The terminal manager is the master.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
MTOR	Monitoring	Monitoring of the terminal estate.
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.

CodeName	Name	Definition
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.

10.2.3.36 DataSetCategory19Code

Definition: Maintenance service to delegate.

Type: CodeSet

CodeName	Name	Definition
ACQP	AcquirerProtocolParameters	Configuration parameters of the payment acquirer protocol.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
APSB	ApplicationParametersSubsetCreation	Creation of a subset of the configuration parameters of an application.
KDWL	KeyDownload	Download of cryptographic keys with the related information.
KMGT	KeyManagement	Activate, deactivate or revoke loaded cryptographic keys.
RPRT	Reporting	Reporting on activity, status and error of a point of interaction.
SWPK	SoftwareModule	Software module.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
SACP	SaleComponent	Component of the Sale system.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
LOGF	LogFile	Any repository used for recording log traces.
RPFL	ReportFile	Report file generated by the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.

CodeName	Name	Definition
TPKG	TerminalPackages	Package (e.g. software library) related to a POIComponent or the POI System.

10.2.3.37 DataSetCategory20Code

Definition: Category of data set.

Type: CodeSet

CodeName	Name	Definition
AQPR	AcquirerParameters	Acquirer specific configuration parameters for the point of interaction (POI) system.
APPR	ApplicationParameters	Payment application specific configuration parameters for the point of interaction (POI) system.
TXCP	BatchCapture	Batch upload of transaction data (data capture of a group of transactions).
AKCP	CaptureResponse	Batch download response for the batch capture of transactions.
DLGT	DelegationData	Data needed to create a terminal management sub-domain.
MGTP	ManagementPlan	Configuration of management plan in the point of interaction.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
SCPR	SecurityParameters	Point of interaction parameters related to the security of software application and application protocol.
SWPK	SoftwareModule	Software module.
STRP	StatusReport	Report of software configuration and parameter status.
TRPR	TerminalParameters	Point of interaction parameters attached to the terminal as serial number or physical capabilities.
VDPR	VendorParameters	Point of interaction parameters defined by the manufacturer for instance the PIN verification capabilities.
PARA	Parameters	Any combination of configuration parameters for the point of interaction (POI).
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
CRTF	CertificateParameters	Certificate provided by a terminal manager.
LOGF	LogFile	Any repository used for recording log traces.
CMRQ	CertificateManagementRequest	Trigger for CertificateManagementRequest.

CodeName	Name	Definition
MDFL	MediaFile	Media file managed by an application of the POI.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
SPRP	ServiceProviderParameters	Service Provider specific parameters for the point of interaction (POI) system.
PROB	Probe	Probe used to monitor a feature on the POI.

10.2.3.38 DocumentType7Code

Definition: Specifies a type of financial or commercial document.

Type: CodeSet

CodeName	Name	Definition
JNRL	Journal	When the POI or the Sale System wants to store a message on the journal printer or electronic journal of the Sale Terminal (it is sometimes a Sale Logging/Journal Printer).
CRCP	CustomerReceipt	When the Sale System requires the POI system to print the Customer receipt.
HRCP	CashierReceipt	When the Sale system print the Cashier copy of the Payment receipt.
SRCP	SaleReceipt	When the Sale System requires the POI system to print the Sale receipt.
RPIN	RelatedPaymentInstruction	Document is a linked payment instruction to which the current payment instruction is related, for example, in a cover scenario.
VCHR	Voucher	Document is an electronic payment document.

10.2.3.39 EncryptionFormat2Code

Definition: Format of data before encryption, if the format is not plaintext or implicit.

Type: CodeSet

CodeName	Name	Definition
TR31	TR31	Format of a cryptographic key specified by the ANSI X9 TR-31 standard.
TR34	TR34	Format of a cryptographic key specified by the ANSI X9 TR-34 standard.
I238	ISO20038KeyWrap	Format of a cryptographic key specified by the ISO20038 standard.

10.2.3.40 ExchangePolicy2Code

Definition: Exchange policy between parties.

Type: CodeSet

CodeName	Name	Definition
ONDM	OnDemand	Exchange is performed if requested by the acquirer in a previous exchange, or at any time by the acceptor.
IMMD	Immediately	Exchange is performed just after the transaction completion.
ASAP	AsSoonAsPossible	As soon as the acquirer is contacted, for example with the next on-line transaction.
AGRP	AsGroup	Exchanges are performed after reaching a maximum number of transaction or time period.
NBLT	NumberLimit	Exchange is performed after reaching a number of transactions without exchanges with the acquirer.
TTLT	TotalLimit	Exchange is performed after reaching a cumulative amount of transactions without exchanges with the acquirer.
CYCL	Cyclic	Cyclic exchanges based on the related time conditions.
NONE	None	No exchange.
BLCK	Blocking	All pending process must be paused until exchange is exclusively performed just after the transaction completion.

10.2.3.41 Exemption1Code

Definition: Strong customer authentication exemption.

Type: CodeSet

CodeName	Name	Definition
LOWA	LowAmountExemption	Transaction's amount is low and could be processed without strong customer authentication.
MINT	MerchantInitiatedTransaction	Transaction is initiated by the Card Acceptor.
RECP	RecurringPayment	Transaction is one of a series of recurring payment.
SCPE	SecureCorporatePaymentExemption	Transaction is a secure corporate payment.
SCAD	StrongCustomerAuthenticationDelegation	Card Acceptor is a strong customer authentication delegate.
TRAE	TransactionRiskAnalysisExemption	According to the transaction risk analysis the strong customer authentication is not mandated.

CodeName	Name	Definition
PKGE	TransportFareOrParkingFeeUnattendedPaymentExemption	Payment is processed in a environment where strong customer authentication is inappropriate.
TMBE	TrustedMerchantBeneficiaryExemption	Cardholder has enrolled the Card Acceptor in the exemption list of strong customer authentication.

10.2.3.42 ExternalAccountIdentification1Code

Definition: Specifies the external account identification scheme name code in the format of character string with a maximum length of 4 characters.

The list of valid codes is an external code list published separately.

External code sets can be downloaded from www.iso20022.org.

Type: CodeSet

Format

minLength	1
maxLength	4

10.2.3.43 ExternalCashAccountType1Code

Definition: Specifies the nature, or use, of the cash account in the format of character string with a maximum length of 4 characters.

The list of valid codes is an external code list published separately.

External code sets can be downloaded from www.iso20022.org.

Type: CodeSet

Format

minLength	1
maxLength	4

10.2.3.44 ExternalOrganisationIdentification1Code

Definition: Specifies the external organisation identification scheme name code in the format of character string with a maximum length of 4 characters.

The list of valid codes is an external code list published separately.

External code sets can be downloaded from www.iso20022.org.

Type: CodeSet

Format

minLength	1
maxLength	4

10.2.3.45 ExternalPersonIdentification1Code

Definition: Specifies the external person identification scheme name code in the format of character string with a maximum length of 4 characters.

The list of valid codes is an external code list published separately.

External code sets can be downloaded from www.iso20022.org.

Type: CodeSet

Format

minLength	1
maxLength	4

10.2.3.46 ExternalProxyAccountType1Code

Definition: Specifies the external proxy account type code, as published in the proxy account type external code set.

External code sets can be downloaded from www.iso20022.org.

Type: CodeSet

Format

minLength	1
maxLength	4

10.2.3.47 FinancialCapture1Code

Definition: Mode for the financial capture of the transaction by the acquirer.

Type: CodeSet

CodeName	Name	Definition
AUTH	Authorisation	Financial capture of the transaction is performed by the acquirer during the authorisation exchange.
COMP	Completion	Financial capture of the transaction is performed by the acquirer during the completion exchange.
BTCH	Batch	Financial capture of the transaction is performed by the acquirer at the reception of a batch transfer.

10.2.3.48 InformationQualify1Code

Definition: Qualification of the information to sent to an output logical device, to display or print to the Cashier or the Customer.

Type: CodeSet

CodeName	Name	Definition
CUSA	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
DISP	Display	Standard display interface.
DOCT	Document	When the POI System wants to print specific document (check, dynamic currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	Information is related to an error situation occurring on the message sender.
INPT	Input	Answer to a question or information to be entered by the Cashier or the Customer, at the request of the POI Terminal or the Sale Terminal.
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
RCPT	Receipt	Where you print the Payment receipt that could be located on the Sale System or in some cases a restricted Sale ticket on the POI Terminal.
SOND	Sound	Standard sound interface.
STAT	Status	Information is a new state on which the message sender is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
VCHR	Voucher	Coupons, voucher or special ticket generated by the POI or the Sale System and to be printed.

10.2.3.49 InputCommand1Code

Definition: Type of requested input

Type: CodeSet

CodeName	Name	Definition
DCSG	DecimalString	Wait for a string of digit characters with a decimal point, the length range could be specified.
DGSG	DigitString	Wait for a string of digit characters.
GAKEY	GetAnyKey	Wait for a key pressed on the Terminal, to be able to read the message displayed on the Terminal.
GCNF	GetConfirmation	Wait for a confirmation Yes (Y) or No (N) on the Sale System. Wait for a confirmation (Valid or Cancel button) on the POI Terminal. The result of the command is a Boolean: True or False.

CodeName	Name	Definition
GFKY	GetFunctionKey	Wait for a function key pressed on the Terminal: From POI, Valid, Clear, Correct, Generic Function key number. From Sale, Generic Function key.
GMNE	GetMenuEntry	To choose an entry among a list of entries (all of them are not necessary selectable). The OutputFormat has to be MenuEntry.
PSWD	Password	Request to enter a password with masked characters while typing the password.
SITE	SiteManager	Wait for a confirmation Yes (Y) or No (N) of the Site Manager on the Sale System.
TXSG	TextString	Wait for a string of alphanumeric characters.
HTML	XHTMLText	Wait for a XHTML data.
SIGN	Signature	Request to wait for signature.

10.2.3.50 ISO3NumericCountryCode

Definition: Code to identify a country, a dependency, or another area of particular geopolitical interest, on the basis of country names obtained from the United Nations (ISO 3166, Numeric-3 code). The code is checked against the list of country names coded with three digit characters, defined in the standard.

Type: CodeSet

Format

pattern [0-9]{3,3}

10.2.3.51 KeyUsage1Code

Definition: Allowed usages of the key.

Type: CodeSet

CodeName	Name	Definition
ENCR	Encryption	Key may encrypt.
DCPT	Decryption	Key may decrypt.
DENC	DataEncryption	Key may encrypt data.
DDEC	DataDecryption	Key may decrypt data.
TRNI	TranslateInput	Key may encrypt information before translation.
TRNX	TranslateOutput	Key may encrypt information after translation.
MACG	MessageAuthenticationCodeGeneration	Key may generate message authentication codes (MAC).
MACV	MessageAuthenticationCodeVerification	Key may verify message authentication codes (MAC).

CodeName	Name	Definition
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).
PIND	PINDecryption	Key may decrypt personal identification numbers (PIN).
PINV	PINVerification	Key may verify personal identification numbers (PIN).
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

10.2.3.52 LanguageCode

Definition: Specifies a language.

Type: CodeSet

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.2.3.53 LocationCategory3Code

Definition: Indicates the type of integration of the POI terminal in the sale environment.

Type: CodeSet

CodeName	Name	Definition
INDR	Indoor	Indoor terminal.
IPMP	InsidePump	Terminal incorporated in the pump dispensing petrol.
MPOI	MultiplePOITerminal	Multiple terminals linked to a unique sale terminal.
MPMP	MultiplePump	Outdoor terminal serving several petrol pumps.
MSLE	MultipleSaleTerminal	Terminal serving multiple sale terminals.
SSLE	SingleSaleTerminal	Terminal linked to a unique sale terminal.
VNDG	VendingMachine	Terminal integrated in a vending machine.

10.2.3.54 LocationCategory4Code

Definition: Indicates the type of integration of the POI terminal in the sale environment.

Type: CodeSet

CodeName	Name	Definition
ABRD	Aboard	Aboard is used when the sale is done in a vehicle (e.g a bus, train, ship, airplane, taxi, etc).
NMDC	Nomadic	Nomadic is used when the merchant is traveling to different locations (e.g fair or sport events, home delivery, food truck).
FIXD	PhysicalShop	Fixed location, for example in a shop.
VIRT	VirtualShop	Virtual Shop is used for any ecommerce solution.

10.2.3.55 LoyaltyHandling1Code

Definition: Possible types of Loyalty processing.

Type: CodeSet

CodeName	Name	Definition
ALLO	Allowed	The loyalty is accepted, but the POI has not to require or ask a loyalty card. The loyalty is involved by the payment card (e.g. an hybrid or linked card).
DENY	Forbidden	No loyalty card to read and loyalty transaction to process. Any attempt to enter a pure loyalty card is rejected.
PRCS	Processed	The loyalty transaction is already processed, no loyalty card or loyalty transaction to process.
PROP	Proposed	The loyalty is accepted, and the POI has to ask a loyalty card. If the Customer does not enter a loyalty card, no loyalty transaction is realised.
REQU	Required	The loyalty is required, and the POI refuses the processing of the message request if the cardholder does not enter a loyalty card.

10.2.3.56 MemoryUnit1Code

Definition: Unit of the memory size.

Type: CodeSet

CodeName	Name	Definition
BYTE	Byte	Byte.
EXAB	ExaByte	Exa byte.
GIGA	GigaByte	Giga byte.
KILO	KiloByte	Kilo byte.
MEGA	MegaByte	Mega byte.
PETA	PetaByte	Peta byte.

CodeName	Name	Definition
TERA	TeraByte	Tera byte.

10.2.3.57 MessageFunction47Code

Definition: Type of message supporting a service.

Type: CodeSet

CodeName	Name	Definition
FAUQ	FinancialAuthorisationRequest	Request for authorisation with financial capture.
CCAQ	CancellationRequest	Request for cancellation.
CMPV	CompletionAdvice	Advice for completion without financial capture.
DGNP	DiagnosticRequest	Request for diagnostic.
RCLQ	ReconciliationRequest	Request for reconciliation.
CCAV	CancellationAdvice	Advice for cancellation.
BTCH	BatchTransfer	Transfer the financial data as a collection of transction.
FRVA	FinancialReversalAdvice	Advice for reversal with financial capture.
AUTQ	AuthorisationRequest	The initiator requests an authorisation without financial impact to complete the transaction.
FCMV	FinancialCompletionAdvice	Advice for completion with financial capture.
DCCQ	CurrencyConversionRequest	Request for dynamic currency conversion.
RVRA	ReversalAdvice	Advice for reversal without financial capture.
DCAV	CurrencyConversionAdvice	Advice for dynamic currency conversion.
TRNA	TransactionAdvice	Advise of the transaction's processing.
NFRQ	NonFinancialRequest	Initiator of the message requests additional information to the receiver.
TRPQ	TransactionReportRequest	Request to receive of a report of transaction from the issuer to the receiver.
ATAF	AcceptorToAcquirerBatchFileExchange	Concatenation of multiple exchanges in one file.

10.2.3.58 MessageItemCondition2Code

Definition: Rule to apply for the presence of a message item.

Type: CodeSet

CodeName	Name	Definition
MNDT	Mandatory	Message item must be present.

CodeName	Name	Definition
CFVL	ConfiguredValue	Message item must be present with the configured value.
DFLT	DefaultValue	Message item has the configured value if the item is absent.
ALWV	AllowedValues	Message item must have one of the configured values.
IFAV	IfAvailable	Message item has to be present if available.
COPY	Copy	Message item is present if it was present in a previous related message with the same value.
UNSP	NotSupported	Message item is not supported and has to be absent.
LMNV	ListMinimumValues	Minimum set of values to use in messages.

10.2.3.59 NamePrefix2Code

Definition: Specifies the terms used to formally address a person.

Type: CodeSet

CodeName	Name	Definition
DOCT	Doctor	Title of the person is Doctor or Dr.
MADM	Madam	Title of the person is Madam.
MISS	Miss	Title of the person is Miss.
MIST	Mister	Title of the person is Mister or Mr.
MIKS	GenderNeutral	Title of the person is gender neutral (Mx).

10.2.3.60 NetworkType1Code

Definition: Type of communication network.

Type: CodeSet

CodeName	Name	Definition
IPNW	InternetProtocol	Protocol of an IP network.
PSTN	PublicTelephone	Protocol of a Public Switched Telephone Network (PSTN).

10.2.3.61 NetworkType2Code

Definition: Type of proxy.

Type: CodeSet

CodeName	Name	Definition
SCK5	Sock5	Sock5 proxy.

CodeName	Name	Definition
SCK4	Sock4	Sock4 proxy.
HTTP	HTTP	HTTP proxy.

10.2.3.62 NonFinancialRequestType2Code

Definition: Type of non financial request that could be processed between an Acceptor and an Intermediary Agent or an Acquirer.

Type: CodeSet

CodeName	Name	Definition
ACQR	AcquirerSelection	According to several parameters of a transaction, an Intermediary Agent helps an Acceptor to identify the more relevant Acquirer to process the transaction.
PARQ	ParRequest	The Intermediary Agent or Acquirer provides the PaymentAccountReference to use to process the transaction.
RISK	RiskManagement	The Intermediary Agent or Acquirer helps the Acceptor to assess the risk management of the transaction.
TOKN	TokenRequest	The Intermediary Agent or Acquirer provides the token to use to process the transaction.
ADDR	AdditionalRequest	Indicates a request which implies to receive additional information.
INSM	InstalmentPlanRequest	Request to receive acquirer instalment plans.

10.2.3.63 OnLineCapability1Code

Definition: On-line and off-line capabilities of the POI (Point Of Interaction).

Type: CodeSet

CodeName	Name	Definition
OFLN	OffLine	Off-line only capable.
ONLN	OnLine	On-line only capable.
SMON	SemiOffLine	Off-line capable with possible on-line requests to the acquirer.

10.2.3.64 OutputFormat1Code

Definition: Message format.

Type: CodeSet

CodeName	Name	Definition
MREF	MessageReference	Predefined configured messages, identified by a reference.
TEXT	SimpleText	Text without format attributes.

CodeName	Name	Definition
HTML	XHTML	XHTML document which includes a subset of the XHTML output tag.

10.2.3.65 OutputFormat3Code

Definition: Type of output format.

Type: CodeSet

CodeName	Name	Definition
BARC	Barcode	Barcode to output in several possible format.
MENT	MenuEntry	A text to display as a menu before requesting an input.
MREF	MessageReference	Predefined configured messages, identified by a reference.
SREF	ScreenReference	Screen to display identified by a reference.
TEXT	SimpleText	Text without format attributes.
HTML	XHTML	XHTML document which includes a subset of the XHTML output tag.

10.2.3.66 PartyType15Code

Definition: Party involved by the data set.

Type: CodeSet

CodeName	Name	Definition
PGRP	POIGroup	Configuration to apply to a subset of the whole POI system.
PSYS	POISystem	Configuration to apply to the whole POI system.
PSNG	SinglePOI	Configuration to apply to a single POI terminal.

10.2.3.67 PartyType33Code

Definition: Identification of the type of entity involved in a transaction.

Type: CodeSet

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.

CodeName	Name	Definition
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TAXH	TaxAuthority	Tax authority.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.2.3.68 PartyType35Code

Definition: Identification of the type of entity involved in a transaction.

Type: CodeSet

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
DLIS	Delegatelssuer	Party to whom the card issuer delegates to authorise card payment transactions.
MKTP	Marketplace	Marketplace providing payment acceptance services on behalf of a merchant.
PFAC	PaymentFacilitator	Payment facilitator providing payment acceptance services on behalf of a merchant.

10.2.3.69 PartyType4Code

Definition: Entity assigning an identification (for example merchant, acceptor, acquirer, tax authority, etc.).

Type: CodeSet

CodeName	Name	Definition
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
ACQR	Acquirer	Entity acquiring card transactions.
CISS	CardIssuer	Party that issues cards.
TAXH	TaxAuthority	Tax authority.

10.2.3.70 PartyType5Code

Definition: Identification of the type of entity involved in a maintenance operation.

Type: CodeSet

CodeName	Name	Definition
OPOI	OriginatingPOI	Point Of Interaction initiating the card payment transaction.
ACCP	Acceptor	Card acceptor, party accepting the card and presenting transaction data to the acquirer.
MERC	Merchant	Merchant providing goods and service in the card payment transaction.
ACQR	Acquirer	Entity acquiring card transactions.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
MTMG	MasterTerminalManager	Responsible for the maintenance of a card payment acceptance terminal.
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.

10.2.3.71 PartyType7Code

Definition: Party that communicate with a POI component (Point of Interaction), using a communication device.

Type: CodeSet

CodeName	Name	Definition
ACQR	Acquirer	Entity acquiring card transactions.
ITAG	IntermediaryAgent	Party acting on behalf of other parties to process or forward data to other parties.
PCPT	POIComponent	Party component of a POI system or POI terminal (Point of Interaction).

CodeName	Name	Definition
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.
SALE	SaleSystem	Party selling goods and services.

10.2.3.72 PINFormat3Code

Definition: PIN (Personal Identification Number) format used before encryption.

Type: CodeSet

CodeName	Name	Definition
ISO0	ISO0	PIN diversified with the card account number, conforming to the standard ISO 9564-2.
ISO1	ISO1	PIN completed with random padding characters, conforming to the standard ISO 9564-2.
ISO2	ISO2	PIN without diversification characters, conforming to the standard ISO 9564-2.
ISO3	ISO3	PIN diversified with the card account number and random characters, conforming to the standard ISO 9564-2.
ISO4	ISO4	PIN format used with AES encryption, conforming to the new ISO SC2 format.
ISO5	ISO5	Alternative PIN format used with AES encryption, conforming to the new ISO SC2 format.

10.2.3.73 PINRequestType1Code

Definition: Type of PIN Service.

Type: CodeSet

CodeName	Name	Definition
PIAE	PINAcquisitionEncryption	The cardholder enters the PIN, the POI enciphers the PIN Block and provides it as a result to the Sale System.
PIAV	PINAcquisitionVerification	The Cardholder enters the PIN and the POI verifies it.
PIVO	PINVerifyOnly	The Sale System send a previous keyed PIN and the POI verifies it.

10.2.3.74 POICommunicationType2Code

Definition: Low level communication of the hardware or software component toward another component or an external entity.

Type: CodeSet

CodeName	Name	Definition
BLTH	Bluetooth	Communication with a host using Bluetooth.
ETHR	Ethernet	Ethernet port to communicate.
GPRS	GPRS	Communication with a host using GPRS.
GSMF	GSM	Communication with a host using GSM.
PSTN	PSTN	Communication with a host using Public Switching Telephone Network.
RS23	RS232	Serial port to communicate.
USBD	USBDevice	Communication with a USB stick or any USB device.
USBH	USBHost	Communication with a host from an USB port.
WIFI	Wifi	Wifi communication with another component.
WT2G	WirelessTechnology2G	Includes all communication technologies which can be qualified as being part of the 2G technology (e.g EDGE or PDC).
WT3G	WirelessTechnology3G	Includes all communication technologies which can be qualified as being part of the 3G technology.
WT4G	WirelessTechnology4G	Includes all communication technologies which can be qualified as being part of the 4G technology.
WT5G	WirelessTechnology5G	Includes all communication technologies which can be qualified as being part of the 5G technology.

10.2.3.75 POIComponentAssessment1Code

Definition: Type of assessment of a POI component (Point of Interaction).

Type: CodeSet

CodeName	Name	Definition
APPL	Approval	Approval number delivered by an approval centre.
CERT	Certification	Certification number delivered by a certification body.
EVAL	Evaluation	Evaluation by a lab or a tool.

10.2.3.76 POIComponentStatus1Code

Definition: Status of a component belonging to a POI Terminal (Point of Interaction).

Type: CodeSet

CodeName	Name	Definition
WAIT	WaitingActivation	Component not yet activated.

CodeName	Name	Definition
OUTD	OutOfOrder	Component not working properly.
OPER	InOperation	Component activated and in operation.
DACT	Deactivated	Component has been deactivated.

10.2.3.77 POIComponentType7Code

Definition: Type of component belonging to a POI (Point of Interaction) Terminal.

Type: CodeSet

CodeName	Name	Definition
AQPP	AcquirerProtocolParameters	Parameters for acquirer interface of the point of interaction, including acquirer host configuration parameters.
APPR	ApplicationParameters	Parameters of a payment application running on the point of interaction.
TLPR	TerminalParameters	Manufacturer configuration parameters of the point of interaction.
SCPR	SecurityParameters	Security parameters of the point of interaction.
SERV	Server	Payment server of a point of interaction system.
TERM	Terminal	Payment terminal point of interaction.
DVCE	Device	Device sub-component of a component of the point of interaction.
SECM	SecureModule	Security module.
APLI	PaymentApplication	Payment application software.
EMVK	EMVKernel	EMV application kernel (EMV is the chip card specifications initially defined by Eurocard, Mastercard and Visa).
EMVO	EMVLevel1	EMV physical interface (EMV is the chip card specifications initially defined by Eurocard, Mastercard and Visa).
MDWR	Middleware	Software module of the point of interaction.
DRVR	Driver	Driver module of the point of interaction.
OPST	OperatingSystem	Software that manages hardware to provide common services to the applications.
MRPR	MerchantParameters	Merchant configuration parameters for the point of interaction (POI).
CRTF	CertificateParameters	Certificate provided by a terminal manager.
TMSP	TMSProtocolParameters	Configuration parameters for the TMS protocol.
SACP	SaleComponent	Component of the Sale system.

CodeName	Name	Definition
SAPR	SaleToPOIProtocolParameters	Parameters related to the Sale to POI protocol.
LOGF	LogFile	Any repository used for recording log traces.
MDFL	MediaFile	Media file managed by an application of the POI.
SOFT	Soft	Payment or other software application.
CONF	ConfigurationFile	Configuration file relevant for the POI.
RPFL	ReportFile	Report file generated by the POI.
PROB	Probe	Probe used to monitor a feature on the POI.

10.2.3.78 PreferredContactMethod2Code

Definition: Preferred method used to reach the individual contact within an organisation.

Type: CodeSet

CodeName	Name	Definition
MAIL	Email	Preferred method used to reach the contact is per email.
FAXX	Fax	Preferred method used to reach the contact is per fax.
LETT	Letter	Preferred method used to reach the contact is per letter.
CELL	MobileOrCellPhone	Preferred method used to reach the contact is per mobile or cell phone.
ONLI	Online	Preferred method used to reach the contact is online.
PHON	Phone	Preferred method used to reach the contact is per phone.

10.2.3.79 ProcessingPosition2Code

Definition: Specifies the processing position.

Type: CodeSet

CodeName	Name	Definition
AFTE	After	Specifies that the transaction/instruction is to be executed after the linked transaction/instruction.
WITH	With	Specifies that the transaction/instruction is to be executed with the linked transaction/instruction.
BEFO	Before	Specifies that the transaction/instruction is to be executed before the linked transaction/instruction.

CodeName	Name	Definition
INFO	Information	Specifies that the transactions/ instructions are linked for information purposes only.

10.2.3.80 QRCodeEncodingMode1Code

Definition: Encoding Mode of Quick Response Code.

Type: CodeSet

CodeName	Name	Definition
ALFA	Alphanumeric	Alphanumeric value provided in Barcode field.
BINA	Binary	Binary value provided in Quick Response Code Binary Value.
KANJ	Kanji	Kanji value provided in Quick Response Code Binary Value.
NUME	Numeric	Numeric value provided in Barcode field.

10.2.3.81 QRCodeErrorCorrection1Code

Definition: Error Correction mode of Quick Response Code.

Type: CodeSet

CodeName	Name	Definition
M015	ErrorCorrection15Percent	Reed-Solomon error correction 15%
Q025	ErrorCorrection25Percent	Reed-Solomon error correction 25%
H030	ErrorCorrection30Percent	Reed-Solomon error correction 30%
L007	ErrorCorrection7Percent	Reed-Solomon error correction 7%

10.2.3.82 ReconciliationCriteria1Code

Definition: Available criterion to group transactions when a reconciliation is made.

Type: CodeSet

CodeName	Name	Definition
BRND	CardBrand	The set is defined by transactions made with cards belonging to the same brand.
PROF	CardProductProfile	The set is defined by transactions made with cards sharing the same CardProductProfile.
GRUP	PoiGroup	The set is defined by transactions processed by POIs identified with the same POIGroup.

10.2.3.83 RejectReason2Code

Definition: Reason of transmission of a rejection message in response to a request or an advice.

Type: CodeSet

CodeName	Name	Definition
UNPR	UnableToProcess	Not possible to process the message, for instance the security module is unavailable, the hardware is unavailable, or there is a problem of resource.
IMSG	InvalidMessage	Invalid envelope of the message.
PARS	ParsingError	Invalid message: At least one of the data element or data structure is not present, the format, or the content of one data element or one data structure is not correct.
SECU	Security	Security error (for example an invalid key or an incorrect MAC value).
INTP	InitiatingParty	Invalid identification data for the sender.
RCPD	RecipientParty	Invalid identification data for the the receiver.
VERS	ProtocolVersion	Version of the protocol couldn't be supported by the recipient.
MSGT	MessageType	Type of message the recipient receives is unknow or unsupported.

10.2.3.84 ResourceAction1Code

Definition: Type of action to perform on a media resource.

Type: CodeSet

CodeName	Name	Definition
PAUS	Pause	Pause the media resource in progress as specified in the message.
STAS	Play	Start the media resource as specified in the message.
LOOP	PlayInLoop	Play in a loop the media resource as specified in the message.
RESU	Resume	Resume the progress of the media resource as specified in the message.
DVOL	SetDefaultVolume	Set the default volume of sounds.
STOS	Stop	Stop the media resource in progress.

10.2.3.85 ResourceType1Code

Definition: Type of resource.

Type: CodeSet

CodeName	Name	Definition
TEXT	TextToSpeech	Voice synthesis.
URLI	UniformResourceIdentifier	String of characters that unambiguously identifies a particular resource.

10.2.3.86 Response11Code

Definition: Result of the processing of the message

Type: CodeSet

CodeName	Name	Definition
WARN	Warning	An additional Response Code, mainly a functional one, should be considered to identify the outcome of the request.
FAIL	Failure	Processing of the request fails for various reasons. Some further processing according to the type of requested service, the context of the process, and some additional precision about the failure notified in the ErrorCondition data element.
SUCC	Success	Processing OK. Information related to the result of the processing is contained in other parts of the response message.

10.2.3.87 Response2Code

Definition: Response to a request of service.

Type: CodeSet

CodeName	Name	Definition
APPR	Approved	Service has been successfully provided.
DECL	Declined	Service is declined.

10.2.3.88 ResponseMode2Code

Definition: Message response awaited by the initiator of the Request.

Type: CodeSet

CodeName	Name	Definition
SEND	EndOfPlay	The Response is required at the end of play.
IMMD	Immediate	The Message Response is immediate, after taking into account the request.
NREQ	NotRequired	The Message Response is not required, except in case of error.
PEND	PrintEnd	The Print Response is required at the end of print.

10.2.3.89 ResultDetail3Code

Definition: Detail of the response.

Type: CodeSet

CodeName	Name	Definition
CRTU	UnknownCertificate	The certificate is unknown.

CodeName	Name	Definition
SVSU	UnsupportedService	Requested service not supported.

10.2.3.90 RetailerMessage1Code

Definition: Identifies the type of process related to the message.

Type: CodeSet

CodeName	Name	Definition
SSAB	Abort	Abort the current process or the last request.
SAAQ	AdminRequest	To select and start customised administrative services provided by the POI, using a "menu" for an interactive or software interface, initiated by the Sale system.
SAAP	AdminResponse	Response to the Admin request.
SDDR	DeviceRequest	Request one or several functions of the device, from user Interface or payment peripherals on the POI system or on the Sale system. Functions can be Display, Input, Print, play sound, Card reader capabilities or Transmit a message.
SDDP	DeviceResponse	Response to a Device request.
SSEN	EventNotification	Notify the other party of an event that occurs on its side.
SSMQ	MessageStatusRequest	Request the status of a previous message for which the Sale system has no response.
SSMR	MessageStatusResponse	Response to a Message Status request.
SSRJ	Rejection	Reject a previous received message, for technical or functional reasons.
SARQ	ReportRequest	To request, by the Sale System, a report on a list of transactions on the POI system, or the status of a transaction.
SARP	ReportResponse	Response to a Report request.
SFRP	SaleFinancialReconciliationResponse	Response to a Reconciliation Request.
SFRQ	SaleFinancialReconciliationRequest	Request a reconciliation (different types) between Sale System and POI System.
SFSQ	SaleFinancialServiceRequest	Request a financial service like payment, reversal, loyalty, Balance Inquiry, etc.
SFSP	SaleFinancialServiceResponse	Response to a financial service request.
SASQ	SessionManagementRequest	Request the management of a session: login, logout and diagnosis services. Initiated by the Sale system.
SASP	SessionManagementResponse	Response to a session management request to initiate/terminate a session.

10.2.3.91 RetailerResultDetail1Code

Definition: Result of the processing of the message

Type: CodeSet

CodeName	Name	Definition
ABRT	Aborted	The Initiator of the request has sent an Abort message request, which was accepted and processed.
BUSY	Busy	The system is busy, try later.
CANC	Cancel	The user has aborted the transaction on the PED keyboard, for instance during PIN entering.
DEVO	DeviceOut	Device out of order.
WPIN	WrongPIN	The user has entered the PIN on the PED keyboard and the verification fails.
NHOS	UnreachableHost	Acquirer or any host is unreachable or has not answered to an online request, so is considered as temporary unavailable. Depending on the Sale context, the request could be repeated (to be compared with "Refusal").
UNVS	UnavailableService	The service is not available (not implemented, not configured, protocol version too old...).
UNVD	UnavailableDevice	The hardware is not available (absent, not configured...).
REFU	Refusal	The transaction is refused by the host or by the local rules associated to the card or the POI.
PAYR	PaymentRestriction	Some sale items are not payable by the card proposed by the Customer.
TNFD	NotFound	The transaction is not found (e.g. for a reversal or a repeat).
NALW	NotAllowed	A service request is sent during a Service dialogue. A combination of services not possible to provide. During the DeviceInitialisationCardReader message processing, the user has entered a card which has to be protected by the POI, and cannot be processed with this device request from the external, and then the Sale System.
LOUT	LoggedOut	Not logged in.
IVCA	InvalidCard	The card entered by the Customer cannot be processed by the POI because this card is not configured in the system.
ICAR	InsertedCard	If the Input Device request a NotifyCardInputFlag and the Customer enters a card in the card reader without answers to the Input command, the POI abort the Input command processing,

CodeName	Name	Definition
		and answer a dedicated ErrorCondition value in the Input response message.
WIPG	InProgress	The transaction is still in progress and then the command cannot be processed.

10.2.3.92 RetailerService2Code

Definition: List of specific services for ServiceRequest

Type: CodeSet

CodeName	Name	Definition
FSPQ	FinancialPaymentRequest	The Sale System requests to the POI System to perform a payment(Purchase/Refund/PWCB/MOTO Payment/...).
FSRQ	FinancialReversalRequest	The Sale System requests to the POI System to perform a reversal partial or complete to cancel a former payment service.
FSIQ	FinancialBalanceInquiryRequest	The Sale System requests to the POI System to perform balance inquiry on the main account.
FSBQ	FinancialBatchRequest	The Batch message pair is used to request or get the result of transactions (payment, loyalty and reversal) performed without connection to the Sale system (Payment delivery).
FSLQ	FinancialLoyaltyRequest	The Sale System requests to the POI System a loyalty service like loading or redeem.
FSVQ	FinancialStoredValueRequest	The Sale System requests to the POI System to manage a stored value card or account (eg. Load, Payment, Reimbursement).
FSEQ	FinancialEnableServiceRequest	The Sale System requests to the POI System to enable a service on its side.
FSAQ	FinancialCardAcquisitionRequest	The Sale System requests to the POI System to handle a card data acquisition on the card reader.
FSCQ	FinancialReconciliationRequest	The Sale System request to the POI System different kinds of transaction reconciliation.

10.2.3.93 RetailerService8Code

Definition: List of specific services for DeviceRequest.

Type: CodeSet

CodeName	Name	Definition
DDYQ	DeviceDisplayRequest	One System requests the other to display a message for cashier or customer.

CodeName	Name	Definition
DINQ	DeviceInputRequest	One system requests to the other System to get data input.
DPRQ	DevicePrintRequest	One system requests to the other System to print data.
DSOQ	DevicePlaySoundRequest	One system requests to the Other System to play a sound.
DSIQ	DeviceSecureInputRequest	One system requests to the Other System to securely get data input (e.g. for PIN).
DCIQ	DeviceInitialisationCardReaderRequest	Service to send parameters to use when card reader initializes a new communication with the card.
DCAQ	DeviceSendApplicationProtocolDataUnitCardReaderRequest	A service to send commands to a card.
DCPQ	DevicePowerOffCardReaderRequest	The Sale system requests to the POI System to power off the card reader.
DCOQ	DeviceTransmissionMessageRequest	The Sale system requests to the POI System to transmit a message (for instance to a mobile server).
DINO	DeviceInputNotification	One system sends a notification to the POI System to update a input request.

10.2.3.94 RetailerService9Code

Definition: List of specific services for DeviceResponse.

Type: CodeSet

CodeName	Name	Definition
DDYP	DeviceDisplayResponse	One system responds to the other system for a display request.
DINP	DeviceInputResponse	One system responds to the other System for a input request.
DPRP	DevicePrintResponse	One system responds to the other System for a print request.
DSOP	DevicePlaySoundResponse	One system responds to the other System for a play sound request.
DSIP	DeviceSecureInputResponse	One system responds to the other System for secure data input.
DCIP	DeviceInitialisationCardReaderResponse	The POI system responds to the Sale System for a card reader initialisation.
DCAP	DeviceSendApplicationProtocolDataUnitCardReaderResponse	The POI system responds to the Sale System for a card reader Application Protocol Data Unit sending.
DCPP	DevicePowerOffCardRequestResponse	The POI system responds to the Sale System for a card reader power off.
DCOP	DeviceTransmissionMessageResponse	The POI system responds to the Sale System after a message transmission.

10.2.3.95 SaleCapabilities1Code

Definition: Hardware capabilities of the Sale Terminal.

Type: CodeSet

CodeName	Name	Definition
CHDI	CashierDisplay	Standard Cashier display interface (to ask question, or to show information).
CHER	CashierError	To display to the Cashier information related to an error situation occurring on the POI.
CHIN	CashierInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element). The output device attached to this input device is the CashierDisplay device.
CHST	CashierStatus	To display to the Cashier a new state on which the POI is entering. For instance, during a payment, the POI could display to the Cashier that POI request an authorisation to the host acquirer.
CUDI	CustomerDisplay	Standard Customer display interface used by the POI System to ask question, or to show information to the Customer inside a Service dialogue.
CUAS	CustomerAssistance	Input of the Cardholder POI interface which can be entered by the Cashier to assist the Customer.
CUER	CustomerError	To display to the Customer information is related to an error situation occurring on the Sale Terminal during a Sale transaction.
CUIN	CustomerInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element).
POIR	POIReplication	Information displayed on the Cardholder POI interface, replicated on the Cashier interface.
PRDC	PrinterDocument	When the POI System wants to print specific document (check, dynamic currency conversion ...).
PRRP	PrinterReceipt	Printer for the Payment receipt.
PRVC	PrinterVoucher	Coupons, voucher or special ticket generated by the POI and to be printed.

10.2.3.96 SaleCapabilities2Code

Definition: Type of the Logical device located on a Sale Terminal or a POI Terminal, in term of class of information to output (display, print or store), or input (keyboard) for the Cashier

or the Customer.

Type: CodeSet

CodeName	Name	Definition
CHIN	CashierInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element). The output device attached to this input device is the CashierDisplay device.
CUIN	CustomerInput	Any kind of keyboard allowing all or part of the commands of the Input message request from the Sale System to the POI System (InputCommand data element).

10.2.3.97 SaleTokenScope1Code

Definition: Scope of the token that identifies the payment mean of the customer.

Type: CodeSet

CodeName	Name	Definition
MULT	MultipleUse	The token is generated to recognise a customer for a longer period.
SNGL	SingleUse	The token is generated to recognise a customer during the lifetime of a transaction.

10.2.3.98 SoundFormat1Code

Definition: Type of sound to play.

Type: CodeSet

CodeName	Name	Definition
MSGR	MessageRef	Reference of a preloaded text to play.
SNDR	SoundRef	Preloaded sound File.
TEXT	Text	Text to play.

10.2.3.99 StoredValueAccountType1Code

Definition: Type of stored value account.

Type: CodeSet

CodeName	Name	Definition
BNKA	BankPrepaidAccount	Prepaid account managed by a financial institution for low income customers.
CWVC	CarwashVoucher	Car wash specific account.
CPYA	CompanyPrepaidAccount	Specific prepaid account for companies or professionals expenses.
ELMY	ElectronicMoneyAccount	Account supporting e-money issued by an electronic money issuer.
GIFT	GiftCard	Payment mean issued by retailers or banks as a substitute to a non-monetary

CodeName	Name	Definition
		gift. Usually, this Stored Value item is used only once.
GCER	GiftCertificate	Certificate to be given to a customer. Usually one shot voucher.
MLVC	MealVoucher	Meal and check voucher for restaurants.
OLVC	OnlineVoucher	Voucher that can be used online once or in several times.
MERC	MerchantAccount	Prepaid account open with a merchant or big retailers.
OTHR	OtherPrepaidAccount	Other non listed stored value instrument.
PHON	PhoneCard	Stored value instrument used to pay telephone services (e.g. card or identifier).
CARD	SmartCardTag	Stored value account hold on the chip of a smart card.
TRVL	Travel	Travel prepaid account.

10.2.3.100 SupportedPaymentOption2Code

Definition: Specifies the options supported for a payment transaction.

Type: CodeSet

CodeName	Name	Definition
PART	PartialApproval	The entity supports a partial approval of the payment transaction.
MSRV	PaymentApprovalOnly	The entity supports the approval of the payment service along with the decline of additional requested services (as cash-back).
INSI	IssuerInstalment	The sender support IssuerInstalment proposals to the Cardholder.
PINQ	PINRequest	The sender is able to support Single Tap transaction.

10.2.3.101 TerminalManagementAction3Code

Definition: Type of action to perform.

Type: CodeSet

CodeName	Name	Definition
CREA	Create	Request to create or add the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.

10.2.3.102 TerminalManagementAction5Code

Definition: Types of terminal management action to be performed by a point of interaction.

Type: CodeSet

CodeName	Name	Definition
DCTV	Deactivate	Request to deactivate the element identified inside the message exchange.
DELT	Delete	Request to delete the element identified inside the message exchange.
DWNL	Download	Request to download the element identified inside the message exchange.
INST	Install	Request to install the element identified inside the message exchange.
RSTR	Restart	Request to restart the element identified inside the message exchange.
UPLD	Upload	Request to upload the element identified inside the message exchange.
UPDT	Update	Request to update the element identified inside the message exchange.
BIND	Bind	Request sent to a POI to bind with a server.
RBND	Rebind	Request sent to a POI to rebind with a server.
UBND	Unbind	Request sent to a POI to unbind with a server.
ACTV	Activate	Request to activate the element identified inside the message exchange.
DEVR	DeviceRequest	Request to execute a device request.

10.2.3.103 TerminalManagementActionResult5Code

Definition: Final result of the processed terminal management action.

Type: CodeSet

CodeName	Name	Definition
ACCD	AccessDenied	Access is denied while performing the action.
CNTE	ConnectionError	Problem to connect while performing the action.
FMTE	FormatError	Data transferred has a wrong format.
INVC	InvalidContent	Content of the data is invalid.
LENE	LengthError	Data transferred has a wrong length.
OVER	MemoryOverflow	Memory to store the date exceeded.
MISS	MissingFile	Data set to be maintained is missing.
NSUP	NotSupported	Action is not supported.

CodeName	Name	Definition
SIGE	SignatureError	Data transferred has a wrong digital signature.
WARN	SuccessWithWarning	Action was performed but some warnings arose.
SYNE	SyntaxError	Data transferred has a wrong syntax.
TIMO	Timeout	Timeout expired during the data transfer.
UKDT	UnknownData	Data set identification invalid.
UKRF	UnknownKeyReference	Cryptographic key reference used for the data signature is not valid.
INDP	InvalidDelegationProof	Delegation Proof transmitted by the delegated TMS is not the one expected.
IDMP	InvalidDelegationInManagementPlan	One action of the AcceptorManagementPlan refers to an update unauthorized by the delegation.
DPRU	DelegationParametersReceivedUnauthorized	The content analysis of the AcceptorConfigurationUpdate reveals unexpected parameters.
AERR	AnyError	This code value means all TerminalManagementActionResultCode except "Any Error" and "Unlisted Error".
CMER	CommunicationError	Error in communication once the connection has been established.
ULER	UnlistedError	Any error that is not defined by a code value inside the TerminalManagementActionResultCode.
SUCC	Success	Action was successfully performed.

10.2.3.104 TerminalManagementActionTrigger1Code

Definition: Event to start a terminal management action by the point of interaction (POI).

Type: CodeSet

CodeName	Name	Definition
DATE	DateTime	Date and time trigger the terminal management action.
HOST	HostEvent	Acquirer triggers the terminal management action.
MANU	Manual	Acceptor triggers the terminal management action.
SALE	SaleEvent	Sale system triggers the terminal management action.

10.2.3.105 TerminalManagementAdditionalProcess1Code

Definition: Additional process to perform before starting or after a terminal management action by the point of interaction (POI).

Type: CodeSet

CodeName	Name	Definition
MANC	ManualConfirmation	Manual confirmation of the merchant before the terminal management action.
RCNC	Reconciliation	Acquirer reconciliation to be performed before the terminal management action.
RSRT	RestartSystem	Restart the system after performing the terminal management action.

10.2.3.106 TerminalManagementErrorAction2Code

Definition: Action to perform in case of error during the maintenance action in progress.

Type: CodeSet

CodeName	Name	Definition
SDSR	SendStatusReport	Send a status report immediately.
STOP	StopSequence	Stop the current sequence of terminal management actions without any action, and do not notice the error with a status report.

10.2.3.107 TimeUnit1Code

Definition: Unit of time associated with the contract.

Type: CodeSet

CodeName	Name	Definition
DAYC	CalendarDay	Time unit is calendar day.
HOURL	Hour	Time unit is hour.
MINU	Minute	Time unit is minute.
MNTH	Month	Time unit is month.
SECO	Second	Time unit is second.
WEEK	Week	Time unit is week.
YEAR	Year	Time unit is year.

10.2.3.108 TrackFormat1Code

Definition: Use to identify format of a track on a card or other documents like checks.

Type: CodeSet

CodeName	Name	Definition
AAMV	AAMVFormat	American driver license.
CMC7	CMC7CheckFormat	Magnetic Ink Character Recognition, using the CMC-7 font - ISO 1004 Line at the bottom of a check containing the bank account and the check number.
E13B	E13BCheckFormat	Magnetic Ink Character Recognition, using the E-13B font) Line at the bottom

CodeName	Name	Definition
		of a check containing the bank account and the check number.
ISOF	ISOFormat	ISO card track format - ISO 7813 - ISO 4909.
JIS1	JISIFormat	Japanese track format I.
JIS2	JISIIFormat	Japanese track format II.

10.2.3.109 TransactionChannel5Code

Definition: Identifies the type of the communication channels used by the cardholder to the acceptor system.

Type: CodeSet

CodeName	Name	Definition
MAIL	MailOrder	Mail order.
TLPH	TelephoneOrder	Telephone order.
ECOM	ElectronicCommerce	Electronic commerce.
TVPY	TelevisionPayment	Payment on television.
SECM	SecuredElectronicCommerce	Electronic commerce with cardholder authentication.
MOBL	MobilePayment	Payment performed through a cardholder mobile device.
MPOS	MobilePOS	Payment performed through a merchant mobile device.

10.2.3.110 TransactionEnvironment1Code

Definition: Indicates the environment of the transaction.

Type: CodeSet

CodeName	Name	Definition
MERC	Merchant	Merchant environment.
PRIV	Private	Private environment.
PUBL	Public	Public environment.

10.2.3.111 TypeOfAmount8Code

Definition: Qualifies the amount associated with the transaction.

Type: CodeSet

CodeName	Name	Definition
ACTL	Actual	Actual amount.
ESTM	Estimated	Estimated amount (the final amount could be above or below).
MAXI	Maximum	Maximum amount (the final amount must be less or equal).

CodeName	Name	Definition
DFLT	Default	Default amount.
RPLT	Replacement	Replacement amount.
INCR	Incremental	Incremental amount for reservation.
DECR	Decremental	Decremental amount for reservation.
RESA	Reserved	Reserved or updated reserved amount for reservation.

10.2.3.112 UserInterface9Code

Definition: Destination of the message.

Type: CodeSet

CodeName	Name	Definition
CDSP	CardholderDisplay	Cardholder display or interface.
CRCP	CardholderReceipt	Cardholder receipt.
MDSP	MerchantDisplay	Merchant display or interface.
MRCP	MerchantReceipt	Merchant receipt.
CRDO	OtherCardholderInterface	Other interface of the cardholder, for instance e-mail or smartphone message.
CSTM	CustomerStatement	Cardholder bank statement.

10.2.3.113 Verification1Code

Definition: Result of the verification.

Type: CodeSet

CodeName	Name	Definition
FAIL	Failed	Verification failed.
MISS	Missing	Information required to perform the verification was missing.
NOVF	NotPerformed	Verification has not been performed.
PART	PartialMatch	Verification was partially successful.
SUCC	Successful	Verification was successful.
ERRR	TechnicalError	Device or entity to perform the verification was unavailable.

10.2.4 Date

10.2.4.1 ISODate

Definition: A particular point in the progression of time in a calendar year expressed in the YYYY-MM-DD format. This representation is defined in "XML Schema Part 2: Datatypes Second Edition - W3C Recommendation 28 October 2004" which is aligned with ISO 8601.

Type: Date

10.2.5 DateTime

10.2.5.1 ISODateTime

Definition: A particular point in the progression of time defined by a mandatory date and a mandatory time component, expressed in either UTC time format (YYYY-MM-DDThh:mm:ss.sssZ), local time with UTC offset format (YYYY-MM-DDThh:mm:ss.sss+/-hh:mm), or local time format (YYYY-MM-DDThh:mm:ss.sss). These representations are defined in "XML Schema Part 2: Datatypes Second Edition - W3C Recommendation 28 October 2004" which is aligned with ISO 8601.

Note on the time format:

1) beginning / end of calendar day

00:00:00 = the beginning of a calendar day

24:00:00 = the end of a calendar day

2) fractions of second in time format

Decimal fractions of seconds may be included. In this case, the involved parties shall agree on the maximum number of digits that are allowed.

Type: DateTime

10.2.6 IdentifierSet

10.2.6.1 AnyBICDec2014Identifier

Definition: Code allocated to a financial or non-financial institution by the ISO 9362 Registration Authority, as described in ISO 9362: 2014 - "Banking - Banking telecommunication messages - Business identifier code (BIC)".

Type: IdentifierSet

Identification scheme: SWIFT; AnyBICIdentifier

Format

pattern [A-Z0-9]{4,4}[A-Z]{2,2}[A-Z0-9]{2,2}([A-Z0-9]{3,3}){0,1}

Constraints

- AnyBIC

Only a valid Business identifier code is allowed. Business identifier codes for financial or non-financial institutions are registered and published by the ISO 9362 Registration Authority in the ISO directory of BICs, and consists of eight (8) or eleven (11) contiguous characters.

10.2.6.2 IBAN2007Identifier

Definition: The International Bank Account Number is a code used internationally by financial institutions to uniquely identify the account of a customer at a financial institution as described in the 2007 edition of the ISO 13616 standard "Banking and related financial services - International Bank Account Number (IBAN)" and replaced by the more recent edition of the standard.

Type: IdentifierSet

Identification scheme: National Banking Association; International Bank Account Number (ISO 13616)

Format

pattern [A-Z]{2,2}[0-9]{2,2}[a-zA-Z0-9]{1,30}

Constraints

- **IBAN**
A valid IBAN consists of all three of the following components: Country Code, check digits and BBAN.

10.2.6.3 LEIIdentifier

Definition: Legal Entity Identifier is a code allocated to a party as described in ISO 17442 "Financial Services - Legal Entity Identifier (LEI)".

Type: IdentifierSet

Identification scheme: Global LEI System; LEIIdentifier

Format

pattern [A-Z0-9]{18,18}[0-9]{2,2}

10.2.7 Indicator

10.2.7.1 TrueFalseIndicator

Definition: A flag indicating a True or False value.

Type: Indicator

Meaning When True: True

Meaning When False: False

10.2.8 Quantity

10.2.8.1 DecimalNumber

Definition: Number of objects represented as a decimal number, for example 0.75 or 45.6.

Type: Quantity

Format

totalDigits	18
fractionDigits	17

10.2.8.2 Number

Definition: Number of objects represented as an integer.

Type: Quantity

Format	
totalDigits	18
fractionDigits	0

10.2.8.3 PositiveNumber

Definition: Number of objects represented as a positive integer.
Type: Quantity

Format	
minInclusive	1
totalDigits	18
fractionDigits	0

10.2.9 Rate

10.2.9.1 PercentageRate

Definition: Rate expressed as a percentage, that is, in hundredths, for example, 0.7 is 7/10 of a percent, and 7.0 is 7%.
Type: Rate

Format	
totalDigits	11
fractionDigits	10
baseValue	100.0

10.2.10 Text

10.2.10.1 Exact3AlphaNumericText

Definition: Specifies an alphanumeric string with a length of exact 3 characters.
Type: Text

Format	
pattern	[a-zA-Z0-9]{3}

10.2.10.2 Exact3NumericText

Definition: Specifies a numeric string with an exact length of 3 digits.
Type: Text

Format	
pattern	[0-9]{3}

10.2.10.3 Exact4AlphaNumericText

Definition: Specifies an alphanumeric string with a length of 4 characters.

Type: Text

Format

pattern	[a-zA-Z0-9]{4}
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10.2.10.4 Exact4NumericText

Definition: Specifies a numeric string with an exact length of 4 digits.

Type: Text

Format

pattern	[0-9]{4}
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10.2.10.5 Max1025Text

Definition: Specifies a character string with a maximum length of 1025 characters.

Type: Text

Format

minLength	1
maxLength	1025

10.2.10.6 Max104Text

Definition: Specifies a character string with a maximum length of 104 characters.

Type: Text

Format

minLength	1
maxLength	104

10.2.10.7 Max10Text

Definition: Specifies a character string with a maximum length of 10 characters.

Type: Text

Format

minLength	1
maxLength	10

10.2.10.8 Max11NumericText

Definition: Specifies a numeric string with a maximum length of 11 digits.

Type: Text

Format

pattern	[0-9]{1,11}
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10.2.10.9 Max128Text

Definition: Specifies a character string with a maximum length of 128 characters.

Type: Text

Format

minLength	1
maxLength	128

10.2.10.10 Max140Text

Definition: Specifies a character string with a maximum length of 140 characters.

Type: Text

Format

minLength	1
maxLength	140

10.2.10.11 Max15NumericText

Definition: Specifies a numeric string with a maximum length of 15 digits.

Type: Text

Format

pattern	[0-9]{1,15}
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10.2.10.12 Max16Text

Definition: Specifies a character string with a maximum length of 16 characters.

Type: Text

Format

minLength	1
maxLength	16

10.2.10.13 Max19NumericText

Definition: Specifies a numeric string with a maximum length of 19 digits.

Type: Text

Format		
pattern		[0-9]{1,19}

10.2.10.14 Max20000Text

Definition: Specifies a character string with a maximum length of 20, 000 characters.
Type: Text

Format		
minLength		1
maxLength		20000

10.2.10.15 Max2048Text

Definition: Specifies a character string with a maximum length of 2048 characters.
Type: Text

Format		
minLength		1
maxLength		2048

10.2.10.16 Max256Text

Definition: Specifies a character string with a maximum length of 256 characters.
Type: Text

Format		
minLength		1
maxLength		256

10.2.10.17 Max2NumericText

Definition: Specifies a numeric string with a maximum length of 2 digits.
Type: Text

Format		
pattern		[0-9]{1,2}

10.2.10.18 Max30Text

Definition: Specifies a character string with a maximum length of 30 characters.
Type: Text

Format		
maxLength		30

10.2.10.19 Max34Text

Definition: Specifies a character string with a maximum length of 34 characters.

Type: Text

Format

minLength	1
maxLength	34

10.2.10.20 Max350Text

Definition: Specifies a character string with a maximum length of 350 characters.

Type: Text

Format

minLength	1
maxLength	350

10.2.10.21 Max35NumericText

Definition: Specifies a numeric string with a maximum length of 35 digits.

Type: Text

Format

pattern	[0-9]{1,35}
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10.2.10.22 Max35Text

Definition: Specifies a character string with a maximum length of 35 characters.

Type: Text

Format

minLength	1
maxLength	35

10.2.10.23 Max37Text

Definition: Specifies a character string with a maximum length of 37 characters.

Type: Text

Format

minLength	1
maxLength	37

10.2.10.24 Max3Text

Definition: Specifies a character string with a maximum length of 3 characters.

Type: Text

Format

minLength	1
maxLength	3

10.2.10.25 Max45Text

Definition: Specifies a character string with a maximum length of 45 characters.

Type: Text

Format

minLength	1
maxLength	45

10.2.10.26 Max4Text

Definition: Specifies a character string with a maximum length of 4 characters.

Type: Text

Format

minLength	1
maxLength	4

10.2.10.27 Max500Text

Definition: Specifies a character string with a maximum length of 500 characters.

Type: Text

Format

minLength	1
maxLength	500

10.2.10.28 Max5NumericText

Definition: Specifies a numeric string with a maximum length of 5 digits.

Type: Text

Format

pattern	[0-9]{1,5}
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10.2.10.29 Max6Text

Definition: Specifies a character string with a maximum length of 6 characters.

Type: Text

Format

minLength	1
maxLength	6

10.2.10.30 Max70Text

Definition: Specifies a character string with a maximum length of 70characters.

Type: Text

Format

minLength	1
maxLength	70

10.2.10.31 Max76Text

Definition: Specifies a character string with a maximum length of 76 characters.

Type: Text

Format

minLength	1
maxLength	76

10.2.10.32 Max8000Text

Definition: Specifies a character string with a maximum length of 8000 characters.

Type: Text

Format

minLength	1
maxLength	8000

10.2.10.33 Max8Text

Definition: Specifies a character string with a maximum length of 8 characters.

Type: Text

Format

minLength	1
maxLength	8

10.2.10.34 Max9NumericText

Definition: Specifies a numeric string with a maximum length of 9 digits.

Type: Text

Format

pattern	[0-9]{1,9}
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10.2.10.35 Min2Max3AlphaText

Definition: Specifies an alpha string with a minimum length of 2 characters and a maximum length of 3 characters.

Type: Text

Format

pattern	[a-zA-Z]{2,3}
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10.2.10.36 Min2Max3NumericText

Definition: Specifies a numeric string with a minimum length of 2 digits, and a maximum length of 3 digits.

Type: Text

Format

pattern	[0-9]{2,3}
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10.2.10.37 Min3Max4Text

Definition: Specifies a character string with a minimum length of 3 characters, and a maximum length of 4 characters.

Type: Text

Format

minLength	3
maxLength	4

10.2.10.38 Min8Max28NumericText

Definition: Specifies a numeric string with a minimum length of 8 digits, and a maximum length of 28 digits.

Type: Text

Format

pattern	[0-9]{8,28}
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10.2.10.39 PhoneNumber

Definition: The collection of information which identifies a specific phone or FAX number as defined by telecom services.

It consists of a "+" followed by the country code (from 1 to 3 characters) then a "-" and finally, any combination of numbers, "(", ")", "+ and "-" (up to 30 characters).

Type: Text

Format

pattern	\+[0-9]{1,3}-[0-9()+\-]{1,30}
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10.2.11 Time

10.2.11.1 ISOTime

Definition: A particular point in the progression of time in a calendar day expressed in either UTC time format (hh:mm:ss.sssZ), local time with UTC offset format (hh:mm:ss.sss+/-hh:mm), or local time format (hh:mm:ss.sss). These representations are defined in "XML Schema Part 2: Datatypes Second Edition - W3C Recommendation 28 October 2004" which is aligned with ISO 8601.

Note on the time format:

1) beginning / end of calendar day

00:00:00 = the beginning of a calendar day

24:00:00 = the end of a calendar day

2) fractions of second in time format

Decimal fractions of seconds may be included. In this case, the involved parties shall agree on the maximum number of digits that are allowed.

Type: Time