

ISO 20022

Card Payments Exchanges - Terminal Management - Maintenance 2022 - 2023

Message Definition Report - Part 2

Approved by the Cards and Related Retail Financial Services SEG
on 16 February 2023

This document provides details of the Message Definitions for Card Payments Exchanges - Terminal Management -
Maintenance 2022 - 2023.

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1 Message Set Overview

Introduction

This document describes the Card Payments Exchanges - Terminal Management set of messages that support card-related, terminal management services between a Terminal Management System TMS and a Point of Interaction POI system. It includes the new version of the card transaction MessageDefinitions that have been added as part of the maintenance cycle 2022/2023 (MCR #206) and approved by the Cards and Related Retail Financial Services Standards Evaluation Group on 16 February 2023 as ISO 20022 MessageDefinitions.

1.1 List of MessageDefinitions

The following table lists all MessageDefinitions described in this book.

MessageDefinition	Definition
catm.001.001.12 StatusReportV12	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.002.001.11 ManagementPlanReplacementV11	The ManagementPlanReplacement message is sent by a terminal manager to a POI to set maintenance actions to be performed.
catm.003.001.12 AcceptorConfigurationUpdateV12	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.005.001.09 MaintenanceDelegationRequestV09	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.006.001.07 MaintenanceDelegationResponseV07	The MaintenanceDelegationResponse message is sent by the master terminal manager to a terminal manager to provide the outcome of a maintenance delegation request.
catm.007.001.06 CertificateManagementRequestV06	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.008.001.06 CertificateManagementResponseV06	The CertificateManagementResponse is sent by a terminal manager in response to a CertificateManagementRequest to provide the outcome of the requested service.

2 catm.001.001.12 StatusReportV12

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 StatusReportV12 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]			7
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		8
	FormatVersion <FrmtVrsn>	[1..1]	Text		8
	ExchangeIdentification <XchgId>	[1..1]	Quantity		8
	CreationDateTime <CreDtTm>	[1..1]	DateTime		8
	InitiatingParty <InitgPty>	[1..1]	±		8
	RecipientParty <RcptPty>	[0..1]	±		9
	Traceability <Tracblt>	[0..*]	±		9
	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 <POICpbilities>	[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		21
	ProtectedDelegationProof <PrctcdDlgtProof>	[0..1]	±		21
	Event <Evt>	[0..*]	±		22
	Errors <Errs>	[0..*]	Text		24
	SecurityTrailer <SctyTrlr>	[0..1]	±		24

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 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.

C3 Country

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

C4 IBAN

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

C5 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.

C6 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		8
	CreationDateTime <CreDtTm>	[1..1]	DateTime		8
	InitiatingParty <InitgPty>	[1..1]	±		8
	RecipientParty <RcptPty>	[0..1]	±		9
	Traceability <Tracblt>	[0..*]	±		9

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 529):

- *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 535

2.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 530

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 528

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwrdr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		239

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 405 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		405
	ProtocolName <PrtcolNm>	[0..1]	Text		406
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		406
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		406
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		406

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 **StatusReport12** 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		21
	ProtectedDelegationProof <PrtctdDlgtNProof>	[0..1]	±		21
	Event <Evt>	[0..*]	±		22
	Errors <Errs>	[0..*]	Text		24

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 <SrclId>	[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 508

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 534

2.4.2.2.3 TriggerType <TrggrTp>

Presence: [1..1]

Definition: Identification of the type of the call.

Datatype: "ExchangePolicy2Code" on page 498

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 535

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 **StatusReportDataSetRequest4** 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		21
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		21
	Event <Evt>	[0..*]	±		22
	Errors <Errs>	[0..*]	Text		24

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 "[DataSetIdentification10](#)" on page 290 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		290
	Type <Tp>	[1..1]	CodeSet		290
	Version <Vrsn>	[0..1]	Text		292
	CreationDateTime <CreDtTm>	[0..1]	DateTime		292

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 536

2.4.2.4.3 LastSequence <LastSeq>

Presence: [0..1]

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

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 529):

- *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 **StatusReportContent12** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POICapabilities <POICpblties>	[0..1]	±		16
	POIComponent <POICmpnt>	[0..*]	±		17
	POIGroupIdentification <POIGrpId>	[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 <DlgtProof>	[0..1]	Binary		21
	ProtectedDelegationProof <PrtctdDlgtProof>	[0..1]	±		21
	Event <Evt>	[0..*]	±		22
	Errors <Errs>	[0..*]	Text		24

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 ["PointOfInteractionCapabilities9"](#) on page 394 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardReadingCapabilities <CardRdngCpblties>	[0..*]	CodeSet		394
	CardholderVerificationCapabilities <CrdhldrVrfctnCpblties>	[0..*]	CodeSet		395
	PINLengthCapabilities <PINLnghCpblties>	[0..1]	Quantity		396
	ApprovalCodeLength <ApprvlCdLngh>	[0..1]	Quantity		396
	MaxScriptLength <MxScrptLngh>	[0..1]	Quantity		396
	CardCaptureCapable <CardCaptrCpbl>	[0..1]	Indicator		396
	OnLineCapabilities <OnLineCpblties>	[0..1]	CodeSet		396
	MessageCapabilities <MsgCpblties>	[0..*]			397
	Destination <Dstn>	[1..*]	CodeSet		397
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		397
	NumberOfLines <NbOfLines>	[0..1]	Quantity		398
	LineWidth <LineWidth>	[0..1]	Quantity		398
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C6	398

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 "PointOfInteractionComponent14" on page 372 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		374
	SubTypeInfoInformation <SubTpInf>	[0..1]	Text		375
	Identification <Id>	[1..1]			376
	ItemNumber <ItmNb>	[0..1]	Text		376
	ProviderIdentification <PrvdrlId>	[0..1]	Text		376
	Identification <Id>	[0..1]	Text		376
	SerialNumber <SrlNb>	[0..1]	Text		376
	Status <Sts>	[0..1]			376
	VersionNumber <VrsnNb>	[0..1]	Text		377
	Status <Sts>	[0..1]	CodeSet		377
	ExpiryDate <XpryDt>	[0..1]	Date		377
	StandardCompliance <StdCmplc>	[0..*]			377
	Identification <Id>	[1..1]	Text		377
	Version <Vrsn>	[1..1]	Text		378
	Issuer <Issr>	[1..1]	Text		378
	Characteristics <Chrtcs>	[0..1]			378
	Memory <Mmry>	[0..*]			379
	Identification <Id>	[1..1]	Text		380
	TotalSize <TtlSz>	[1..1]	Quantity		380
	FreeSize <FreeSz>	[1..1]	Quantity		380
	Unit <Unit>	[1..1]	CodeSet		380
	Communication <Com>	[0..*]			380
	CommunicationType <ComTp>	[1..1]	CodeSet		381
	RemoteParty <RmotPty>	[1..*]	CodeSet		382
	Active <Actv>	[1..1]	Indicator		382
	Parameters <Params>	[0..1]	±		382
	PhysicalInterface <PhysIntrfc>	[0..1]			383
	InterfaceName <IntrfcNm>	[1..1]	Text		383
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		383
	UserName <UsrNm>	[0..1]	Text		384

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AccessCode <AccsCd>	[0..1]	Binary		384
	SecurityProfile <SctyPrfl>	[0..1]	Text		384
	AdditionalParameters <AddtlParams>	[0..1]	Binary		384
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		385
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		385
	SecurityElement <SctyElmt>	[0..*]	±		385
	Assessment <Assmnt>	[0..*]			385
	Type <Tp>	[1..1]	CodeSet		386
	Assigner <Assgnr>	[1..*]	Text		386
	DeliveryDate <DlrvyDt>	[0..1]	DateTime		386
	ExpirationDate <XprtnDt>	[0..1]	DateTime		386
	Number <Nb>	[1..1]	Text		386
	Package <Packg>	[0..*]			387
	PackageIdentification <PackgId>	[0..1]	±		387
	PackageLength <PackgLngh>	[0..1]	Quantity		387
	OffsetStart <OffsetStart>	[0..1]	Quantity		387
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		388
	PackageBlock <PackgBlck>	[0..*]			388
	Identification <Id>	[1..1]	Text		388
	Value <Val>	[0..1]	Binary		388
	ProtectedValue <PrctcdVal>	[0..1]	±		388
	Type <Tp>	[0..1]	Text		389

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 534

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 484

CodeName	Name	Definition
ATTD	Attended	Attended payment, with an attendant.

CodeName	Name	Definition
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 528

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 **DataSetRequest4** 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 <DlgtProof>	[0..1]	Binary		21
	ProtectedDelegationProof <PrctcdDlgtProof>	[0..1]	±		21

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 "DataSetIdentification10" on page 290 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		290
	Type <Tp>	[1..1]	CodeSet		290
	Version <Vrsn>	[0..1]	Text		292
	CreationDateTime <CreDtTm>	[0..1]	DateTime		292

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 474

2.4.2.4.4.6.3 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 474

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 "CryptographicKey17" on page 445 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		446
	AdditionalIdentification <AddtlId>	[0..1]	Binary		446
	Name <Nm>	[0..1]	Text		446
	SecurityProfile <SctyPrfl>	[0..1]	Text		447
	ItemNumber <ItmNb>	[0..1]	Text		447
	Version <Vrsn>	[1..1]	Text		447
	Type <Tp>	[0..1]	CodeSet		447
	Function <Fctn>	[0..*]	CodeSet		448
	ActivationDate <ActvtnDt>	[0..1]	DateTime		448
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		448
	KeyValue <KeyVal>	[0..1]	±		449
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		449
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			449
	Name <Nm>	[1..1]	Text		449
	Value <Val>	[0..1]	Text		449

2.4.2.4.4.6.5 DelegationProof <DlgtNProof>

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 475

2.4.2.4.4.6.6 ProtectedDelegationProof <PrctcdDlgtNProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgtNProof> contains the following elements (see
"ContentInformationType34" on page 438 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		439
	EnvelopedData <EnvlpdData>	[0..1]	±		439
	AuthenticatedData <AuthntcdData>	[0..1]	±		440
	SignedData <SgndData>	[0..1]	±		441
	DigestedData <DgstddData>	[0..1]	±		442

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 "TMSEvent10" on page 242 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TimeStamp <TmStmp>	[1..1]	DateTime		244
	Result <RsIt>	[1..1]	CodeSet		244
	ActionIdentification <ActnId>	[1..1]			245
	ActionType <ActnTp>	[1..1]	CodeSet		246
	DataSetIdentification <DataSetId>	[0..1]	±		246
	AdditionalErrorInformation <AddtlErrInf>	[0..1]	Text		247
	TerminalManagerIdentification <TermnlMgrId>	[0..1]	Text		247
	DeviceResponse <DvcRspn>	[0..1]			247
	Environment <Envt>	[0..1]	±		249
	Context <Cntxt>	[0..1]	±		255
	ServiceContent <SvcCntt>	[1..1]	CodeSet		258
	DisplayResponse <DispRspn>	[0..1]			258
	OutputResult <OutptRsIt>	[1..*]			258
	DeviceType <DvcTp>	[1..1]	CodeSet		259
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		259
	Response <Rspn>	[1..1]	±		260
	InputResponse <InptRspn>	[0..1]			260
	OutputResult <OutptRsIt>	[0..1]			261
	DeviceType <DvcTp>	[1..1]	CodeSet		261
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		262
	Response <Rspn>	[1..1]	±		263
	InputResult <InptRsIt>	[1..1]			263
	DeviceType <DvcTp>	[1..1]	CodeSet		263
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		264
	InputResultData <InptRsItData>	[1..1]			264
	InputCommand <InptCmd>	[1..1]	CodeSet		265
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		266
	FunctionKey <FctnKey>	[0..1]	Quantity		266
	InputMessage <InptMsg>	[0..1]	Text		266
	Password <Pwd>	[0..1]	±		266
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			267

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ImageFormat <ImgFrmt>	[1..1]	Text		267
	ImageData <ImgData>	[0..1]	Binary		267
	ImageReference <ImgRef>	[0..1]	Text		267
	AdditionalInformation <AddtlInf>	[0..1]	Text		267
	PrintResponse <PrtRspn>	[0..1]			267
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		267
	SecureInputResponse <ScrInptRspn>	[0..1]			268
	CardholderPIN <CrdrHldrPIN>	[0..1]			268
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		269
	PINFormat <PINFrmt>	[1..1]	CodeSet		269
	AdditionalInput <AddtlInpt>	[0..1]	Text		269
	InitialisationCardReaderResponse <InitlstnCardRdrRspn>	[0..1]			269
	CardEntryMode <CardNtryMd>	[0..1]	CodeSet		270
	ICCRResetData <ICCRstData>	[0..1]			270
	ATRValue <ATRVAl>	[0..1]	Binary		271
	CardStatus <CardSts>	[0..1]	Binary		271
	AdditionalInformation <AddtlInf>	[0..1]	Binary		271
	CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn>	[0..1]			271
	Data <Data>	[0..1]	Binary		271
	CardStatus <CardSts>	[1..1]	Binary		271
	TransmissionResponse <TrnsmssnRspn>	[0..1]			272
	ReceivedMessage <RcvdMsg>	[0..1]	Binary		272
	Response <Rspn>	[1..1]	±		272
	SupplementaryData <SplmtryData>	[0..*]	±	C5	272

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 532

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 "[ContentInformationType33](#)" on [page 443](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		443
	AuthenticatedData <AuthntcdData>	[0..1]	±		443
	SignedData <SgndData>	[0..1]	±		444

3 catm.002.001.11 ManagementPlanReplacementV11

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 ManagementPlanReplacementV11 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]			29
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		29
	FormatVersion <FrmtVrsn>	[1..1]	Text		29
	ExchangeIdentification <XchgId>	[1..1]	Quantity		30
	CreationDateTime <CreDtTm>	[1..1]	DateTime		30
	InitiatingParty <InitgPty>	[1..1]	±		30
	RecipientParty <RcptPty>	[0..1]	±		30
	Traceability <Tracblt>	[0..*]	±		31
	ManagementPlan <MgmtPlan>	[1..1]			31
	POIdentification <POId>	[0..1]	±		33
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		33
	DataSet <DataSet>	[1..1]			34
	Identification <Id>	[1..1]	±		36
	SequenceCounter <SeqCntr>	[0..1]	Text		36
	LastSequence <LastSeq>	[0..1]	Indicator		36
	Content <Cntt>	[0..1]			36
	TMChallenge <TMChllng>	[0..1]	Binary		38
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		38
	Action <Actn>	[1..*]			38
	Type <Tp>	[1..1]	CodeSet		39
	RemoteAccess <RmotAccs>	[0..1]	±		40
	Key <Key>	[0..*]			41
	KeyIdentification <KeyId>	[1..1]	Text		41
	KeyVersion <KeyVrsn>	[1..1]	Text		41
	SequenceNumber <SeqNb>	[0..1]	Quantity		41
	DerivationIdentification <DerivtnId>	[0..1]	Binary		41
	Type <Tp>	[0..1]	CodeSet		41
	Function <Fctn>	[0..*]	CodeSet		42
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		43

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	TMSProtocol <TMSPrctol>	[0..1]	Text		43
	TMSProtocolVersion <TMSPrctolVrsn>	[0..1]	Text		43
	DataSetIdentification <DataSetId>	[0..1]	±		43
	ComponentType <CmpntTp>	[0..*]	CodeSet		44
	DelegationScopeIdentification <DlgtScpId>	[0..1]	Text		45
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		45
	DelegationProof <DlgtProof>	[0..1]	Binary		45
	ProtectedDelegationProof <PrctdDlgtProof>	[0..1]	±		45
	Trigger <Trgr>	[1..1]	CodeSet		46
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		46
	ReTry <ReTry>	[0..1]	±		46
	TimeCondition <TmCond>	[0..1]	±		47
	TMChallenge <TMChllng>	[0..1]	Binary		47
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		47
	ErrorAction <ErrActn>	[0..*]	±		47
	AdditionalInformation <AddtlInf>	[0..*]	Binary		48
	MessageItem <Msgltn>	[0..*]	±		48
	DeviceRequest <DvcReq>	[0..1]	±		48
	SecurityTrailer <SctyTrlr>	[0..1]	±		51

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 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.

C3 Country

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

C4 IBAN

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

C5 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.

C6 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		29
	FormatVersion <FrmtVrsn>	[1..1]	Text		29
	ExchangeIdentification <XchgId>	[1..1]	Quantity		30
	CreationDateTime <CreDtTm>	[1..1]	DateTime		30
	InitiatingParty <InitgPty>	[1..1]	±		30
	RecipientParty <RcptPty>	[0..1]	±		30
	Traceability <Tracblt>	[0..*]	±		31

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 529):

- *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 535

3.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: "Number" on page 530

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 528

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

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 405 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		405
	ProtocolName <PrtcolNm>	[0..1]	Text		406
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		406
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		406
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		406

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 **ManagementPlan11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIIdentification <POIID>	[0..1]	±		33
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		33
	DataSet <DataSet>	[1..1]			34
	Identification <Id>	[1..1]	±		36
	SequenceCounter <SeqCntr>	[0..1]	Text		36
	LastSequence <LastSeq>	[0..1]	Indicator		36
	Content <Cntt>	[0..1]			36
	TMChallenge <TMChllng>	[0..1]	Binary		38
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		38
	Action <Actn>	[1..*]			38
	Type <Tp>	[1..1]	CodeSet		39
	RemoteAccess <RmotAccs>	[0..1]	±		40
	Key <Key>	[0..*]			41
	KeyIdentification <KeyId>	[1..1]	Text		41
	KeyVersion <KeyVrsn>	[1..1]	Text		41
	SequenceNumber <SeqNb>	[0..1]	Quantity		41
	DerivationIdentification <DerivtnId>	[0..1]	Binary		41
	Type <Tp>	[0..1]	CodeSet		41
	Function <Fctn>	[0..*]	CodeSet		42
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		43
	TMSProtocol <TMSPrtcol>	[0..1]	Text		43
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		43
	DataSetIdentification <DataSetId>	[0..1]	±		43
	ComponentType <CmpntTp>	[0..*]	CodeSet		44
	DelegationScopelIdentification <DlgtNScpld>	[0..1]	Text		45
	DelegationScopeDefinition <DlgtNScpDef>	[0..1]	Binary		45
	DelegationProof <DlgtNProof>	[0..1]	Binary		45
	ProtectedDelegationProof <PrtctdDlgtNProof>	[0..1]	±		45
	Trigger <Trggr>	[1..1]	CodeSet		46
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		46
	ReTry <ReTry>	[0..1]	±		46

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TimeCondition <TmCond>	[0..1]	±		47
	TMChallenge <TMChllng>	[0..1]	Binary		47
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		47
	ErrorAction <ErrActn>	[0..*]	±		47
	AdditionalInformation <AddtlInf>	[0..*]	Binary		48
	MessageItem <Msgltn>	[0..*]	±		48
	DeviceRequest <DvcReq>	[0..1]	±		48

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

3.4.2.2 TerminalManagerIdentification <TermnlMgrld>

Presence: [1..1]

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

TerminalManagerIdentification <TermnlMgrld> contains the following elements (see "GenericIdentification176" on page 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 **TerminalManagementDataSet32** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		36
	SequenceCounter <SeqCntr>	[0..1]	Text		36
	LastSequence <LastSeq>	[0..1]	Indicator		36
	Content <Cntt>	[0..1]			36
	TMChallenge <TMChllng>	[0..1]	Binary		38
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		38
	Action <Actn>	[1..*]			38
	Type <Tp>	[1..1]	CodeSet		39
	RemoteAccess <RmotAccs>	[0..1]	±		40
	Key <Key>	[0..*]			41
	KeyIdentification <KeyId>	[1..1]	Text		41
	KeyVersion <KeyVrsn>	[1..1]	Text		41
	SequenceNumber <SeqNb>	[0..1]	Quantity		41
	DerivationIdentification <DerivtnId>	[0..1]	Binary		41
	Type <Tp>	[0..1]	CodeSet		41
	Function <Fctn>	[0..*]	CodeSet		42
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		43
	TMSProtocol <TMSPrtcol>	[0..1]	Text		43
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		43
	DataSetIdentification <DataSetId>	[0..1]	±		43
	ComponentType <CmpntTp>	[0..*]	CodeSet		44
	DelegationScopeIdentification <DlgtNScpld>	[0..1]	Text		45
	DelegationScopeDefinition <DlgtNScpDef>	[0..1]	Binary		45
	DelegationProof <DlgtNProof>	[0..1]	Binary		45
	ProtectedDelegationProof <PrctcdDlgtNProof>	[0..1]	±		45
	Trigger <Trggr>	[1..1]	CodeSet		46
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		46
	ReTry <ReTry>	[0..1]	±		46
	TimeCondition <TmCond>	[0..1]	±		47
	TMChallenge <TMChllng>	[0..1]	Binary		47
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		47

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ErrorAction <ErrActn>	[0..*]	±		47
	AdditionalInformation <AddtlInf>	[0..*]	Binary		48
	MessageItem <MsgItm>	[0..*]	±		48
	DeviceRequest <DvcReq>	[0..1]	±		48

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 "[DataSetIdentification10](#)" on page 290 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		290
	Type <Tp>	[1..1]	CodeSet		290
	Version <Vrsn>	[0..1]	Text		292
	CreationDateTime <CreDtTm>	[0..1]	DateTime		292

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 536

3.4.2.3.3 LastSequence <LastSeq>

Presence: [0..1]

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

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 529):

- *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 **ManagementPlanContent11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMChallenge <TMChllng>	[0..1]	Binary		38
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		38
	Action <Actn>	[1..*]			38
	Type <Tp>	[1..1]	CodeSet		39
	RemoteAccess <RmotAccs>	[0..1]	±		40
	Key <Key>	[0..*]			41
	KeyIdentification <KeyId>	[1..1]	Text		41
	KeyVersion <KeyVrsn>	[1..1]	Text		41
	SequenceNumber <SeqNb>	[0..1]	Quantity		41
	DerivationIdentification <DerivtnId>	[0..1]	Binary		41
	Type <Tp>	[0..1]	CodeSet		41
	Function <Fctn>	[0..*]	CodeSet		42
	TerminalManagerIdentification <TermnlMgrId>	[0..1]	±		43
	TMSProtocol <TMSPrtcol>	[0..1]	Text		43
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		43
	DataSetIdentification <DataSetId>	[0..1]	±		43
	ComponentType <CmpntTp>	[0..*]	CodeSet		44
	DelegationScopeIdentification <DlgtNScpld>	[0..1]	Text		45
	DelegationScopeDefinition <DlgtNScpDef>	[0..1]	Binary		45
	DelegationProof <DlgtNProof>	[0..1]	Binary		45
	ProtectedDelegationProof <PrtctdDlgtNProof>	[0..1]	±		45
	Trigger <Trggr>	[1..1]	CodeSet		46
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		46
	ReTry <ReTry>	[0..1]	±		46
	TimeCondition <TmCond>	[0..1]	±		47
	TMChallenge <TMChllng>	[0..1]	Binary		47
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		47
	ErrorAction <ErrActn>	[0..*]	±		47
	AdditionalInformation <AddtlInf>	[0..*]	Binary		48
	MessageItem <Msgltn>	[0..*]	±		48
	DeviceRequest <DvcReq>	[0..1]	±		48

3.4.2.3.4.1 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 474

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 474

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 **TMSAction11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		39
	RemoteAccess <RmotAccs>	[0..1]	±		40
	Key <Key>	[0..*]			41
	KeyIdentification <KeyId>	[1..1]	Text		41
	KeyVersion <KeyVrsn>	[1..1]	Text		41
	SequenceNumber <SeqNb>	[0..1]	Quantity		41
	DerivationIdentification <DerivtnId>	[0..1]	Binary		41
	Type <Tp>	[0..1]	CodeSet		41
	Function <Fctn>	[0..*]	CodeSet		42
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		43
	TMSProtocol <TMSPrtcol>	[0..1]	Text		43
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		43
	DataSetIdentification <DataSetId>	[0..1]	±		43
	ComponentType <CmpntTp>	[0..*]	CodeSet		44
	DelegationScopeIdentification <DlgtNScpld>	[0..1]	Text		45
	DelegationScopeDefinition <DlgtNScpDef>	[0..1]	Binary		45
	DelegationProof <DlgtNProof>	[0..1]	Binary		45
	ProtectedDelegationProof <PrctcdDlgtNProof>	[0..1]	±		45
	Trigger <Trggr>	[1..1]	CodeSet		46
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		46
	ReTry <ReTry>	[0..1]	±		46
	TimeCondition <TmCond>	[0..1]	±		47
	TMChallenge <TMChllng>	[0..1]	Binary		47
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		47
	ErrorAction <ErrActn>	[0..*]	±		47
	AdditionalInformation <AddtlInf>	[0..*]	Binary		48
	MessageItem <Msgltn>	[0..*]	±		48
	DeviceRequest <DvcReq>	[0..1]	±		48

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 522

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 408 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		409
	ClientCertificate <CIntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

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 **KEKIdentifier5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		41
	KeyVersion <KeyVrsn>	[1..1]	Text		41
	SequenceNumber <SeqNb>	[0..1]	Quantity		41
	DerivationIdentification <DerivtnId>	[0..1]	Binary		41
	Type <Tp>	[0..1]	CodeSet		41
	Function <Fctn>	[0..*]	CodeSet		42

3.4.2.3.4.3.3.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: "Max140Text" on page 532

3.4.2.3.4.3.3.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 532

3.4.2.3.4.3.3.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 530

3.4.2.3.4.3.3.4 DerivationIdentification <DerivtnId>

Presence: [0..1]

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

Datatype: "Min5Max16Binary" on page 476

3.4.2.3.4.3.3.5 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType3Code" on page 494

CodeName	Name	Definition
AES2	AES128	AES (Advanced Encryption Standard) 128 bits cryptographic key as defined by

CodeName	Name	Definition
		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).

3.4.2.3.4.3.3.6 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 501

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	TranslatelInput	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).

CodeName	Name	Definition
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.

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 534

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 534

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 "DataSetIdentification10" on page 290 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		290
	Type <Tp>	[1..1]	CodeSet		290
	Version <Vrsn>	[0..1]	Text		292
	CreationDateTime <CreDtTm>	[0..1]	DateTime		292

3.4.2.3.4.3.8 ComponentType <CmpntTp>

Presence: [0..*]

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

Datatype: "DataSetCategory18Code" on page 496

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).

CodeName	Name	Definition
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.

3.4.2.3.4.3.9 DelegationScopelIdentification <DlgtScpld>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 534

3.4.2.3.4.3.10 DelegationScopeDefinition <DlgtScpDef>

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 474

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 475

3.4.2.3.4.3.12 ProtectedDelegationProof <PrtctdDlgtProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgtNProof> contains the following elements (see "ContentInformationType34" on page 438 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		439
	EnvelopedData <EnvlpdData>	[0..1]	±		439
	AuthenticatedData <AuthntcdData>	[0..1]	±		440
	SignedData <SgndData>	[0..1]	±		441
	DigestedData <DgstdData>	[0..1]	±		442

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 524

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.

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 524

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 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		467
	MaximumNumber <MaxNb>	[0..1]	Quantity		467
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		467

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 469 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WaitingTime <WtgTm>	[0..1]	Text		469
	StartTime <StartTm>	[0..1]	DateTime		469
	EndTime <EndTm>	[0..1]	DateTime		469
	Period <Prd>	[0..1]	Text		469
	MaximumNumber <MaxNb>	[0..1]	Quantity		469
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		469

3.4.2.3.4.3.17 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: ["Max140Binary"](#) on page 474

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 474

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 407 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionResult <ActnRslt>	[1..*]	CodeSet		407
	ActionToProcess <ActnToPrc>	[1..1]	CodeSet		408

3.4.2.3.4.3.20 AdditionalInformation <AddtlInf>

Presence: [0..*]

Definition: Additional information about the maintenance action.

Datatype: "Max3000Binary" on page 474

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 273 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		273
	Condition <Cond>	[1..1]	CodeSet		273
	Value <Val>	[0..*]	Text		273

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 "DeviceRequest6" on page 140 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±		143
	Context <Cntxt>	[0..1]	±		149
	ServiceContent <SvcCntt>	[1..1]	CodeSet		152
	DisplayRequest <DispReq>	[0..1]			152
	DisplayOutput <DispOutpt>	[1..*]	±		152
	InputRequest <InptReq>	[0..1]			153
	DisplayOutput <DispOutpt>	[0..1]	±		154
	InputData <InptData>	[1..1]			155
	DeviceType <DvcTp>	[1..1]	CodeSet		156
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		156
	InputCommand <InptCmd>	[1..1]	CodeSet		157
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		158
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		158
	InputText <InptTxt>	[0..1]	±		158
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		159
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		159
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		159
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		160
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		160
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		160
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		160
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		160
	PrintRequest <PrtReq>	[0..1]			161
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		161
	ResponseMode <RspnMd>	[1..1]	CodeSet		161
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		162
	RequiredSignatureFlag <ReqrdSgntrFlg>	[0..1]	Indicator		162
	OutputContent <OutptCntt>	[1..1]	±		162
	PlayResourceRequest <PlayRsrcReq>	[0..1]			163
	ResponseMode <RspnMd>	[0..1]	CodeSet		164

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ResourceAction <RsrcActn>	[1..1]	CodeSet		164
	SoundVolume <SoundVol>	[0..1]	Rate		164
	DisplayResolution <DispRsln>	[0..1]	Text		164
	Resource <Rsrc>	[0..1]			164
	ResourceType <RsrcTp>	[1..1]	CodeSet		165
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		165
	Language <Lang>	[0..1]	CodeSet	C6	165
	ResourceReference <RsrcRef>	[0..1]	Text		165
	TimingSlot <TmgSlot>	[0..1]	CodeSet		166
	SecureInputRequest <ScrInptReq>	[0..1]			166
	PINRequestType <PINReqTp>	[1..1]	CodeSet		166
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		167
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		167
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		167
	CardholderPIN <CrhdldrPIN>	[0..1]			167
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		167
	PINFormat <PINFrmt>	[1..1]	CodeSet		168
	AdditionalInput <AddtlInpt>	[0..1]	Text		168
	InitialisationCardReaderRequest <InitlstnCardRdrReq>	[0..1]			168
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		169
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		169
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		170
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		170
	DisplayOutput <DispOutpt>	[0..1]	±		170
	CardReaderAPDURequest <CardRdrAPDUReq>	[0..1]			171
	Class <Cls>	[1..1]	Binary		171
	Instruction <Instr>	[1..1]	Binary		171
	Parameter1 <Param1>	[1..1]	Binary		171
	Parameter2 <Param2>	[1..1]	Binary		171
	Data <Data>	[0..1]	Binary		171
	ExpectedLength <XpctdLngth>	[0..1]	Binary		171

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PowerOffCardReaderRequest <PwrOffCardRdrReq>	[0..1]			172
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		172
	DisplayOutput <DispOutpt>	[0..1]	±		172
	TransmissionRequest <TrnsmssnReq>	[0..1]			173
	DestinationAddress <DstnAdr>	[1..1]	±		173
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		174
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		174
	MessageToSend <MsgToSnd>	[1..1]	Binary		174
	InputNotification <InptNtfctn>	[0..1]			174
	ExchangeIdentification <XchgId>	[1..1]	Text		174
	OutputContent <OutptCntt>	[1..1]	±		175
	SupplementaryData <SplmtryData>	[0..*]	±	C5	175

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 "[ContentInformationType33](#)" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		443
	AuthenticatedData <AuthntcdData>	[0..1]	±		443
	SignedData <SgndData>	[0..1]	±		444

4 catm.003.001.12 AcceptorConfigurationUpdateV12

4.1 MessageDefinition Functionality

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

Outline

The AcceptorConfigurationUpdateV12 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]			54
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		54
	FormatVersion <FrmtVrsn>	[1..1]	Text		54
	ExchangeIdentification <XchgId>	[1..1]	Quantity		54
	CreationDateTime <CreDtTm>	[1..1]	DateTime		55
	InitiatingParty <InitgPty>	[1..1]	±		55
	RecipientParty <RcptPty>	[0..1]	±		55
	Traceability <Tracblt>	[0..*]	±		56
	AcceptorConfiguration <AccptrCfgrn>	[1..1]			56
	TerminalManagerIdentification <TermnlMgrId>	[1..1]	±		57
	POIGroupIdentification <POIGrpId>	[0..*]	Text		58
	DataSet <DataSet>	[1..*]			58
	Identification <Id>	[1..1]	±		59
	SequenceCounter <SeqCntr>	[0..1]	Text		59
	LastSequence <LastSeq>	[0..1]	Indicator		60
	POIIdentification <POIID>	[0..*]	±		60
	ConfigurationScope <CfgrnScp>	[0..1]	CodeSet		60
	Content <Cntt>	[1..1]			60
	ReplaceConfiguration <RplcCfgrn>	[0..1]	Indicator		61
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		61
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		62
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		65
	MerchantParameters <MrchntParams>	[0..*]	±		65
	TerminalParameters <TermnlParams>	[0..*]	±		66
	ApplicationParameters <ApplParams>	[0..*]	±		67
	HostCommunicationParameters <HstComParams>	[0..*]	±		68
	SecurityParameters <SctyParams>	[0..*]	±		69
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		70
	TerminalPackage <TermnlPackg>	[0..*]	±		70

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	SecurityTrailer <SctyTrlr>	[0..1]	±		71

4.3 Message Building Blocks

This chapter describes the MessageBuildingBlocks of this MessageDefinition.

4.3.1 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		54
	FormatVersion <FrmtVrsn>	[1..1]	Text		54
	ExchangeIdentification <Xchgld>	[1..1]	Quantity		54
	CreationDateTime <CreDtTm>	[1..1]	DateTime		55
	InitiatingParty <InitgPty>	[1..1]	±		55
	RecipientParty <RcptPty>	[0..1]	±		55
	Traceability <Tracblt>	[0..*]	±		56

4.3.1.1 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 529):

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

4.3.1.2 FormatVersion <FrmtVrsn>

Presence: [1..1]

Definition: Version of file format.

Datatype: ["Max6Text"](#) on page 535

4.3.1.3 ExchangeIdentification <Xchgld>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 530

4.3.1.4 CreationDateTime <CreDtTm>

Presence: [1..1]

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

Datatype: "ISODateTime" on page 528

4.3.1.5 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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

4.3.1.6 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 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

4.3.1.7 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 405 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		405
	ProtocolName <PrtcolNm>	[0..1]	Text		406
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		406
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		406
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		406

4.3.2 AcceptorConfiguration <AccptrCfgtn>

Presence: [1..1]

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

AcceptorConfiguration <AcptrCfgtn> contains the following **AcceptorConfiguration12** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		57
	POIGroupIdentification <POIGrpld>	[0..*]	Text		58
	DataSet <DataSet>	[1..*]			58
	Identification <Id>	[1..1]	±		59
	SequenceCounter <SeqCntr>	[0..1]	Text		59
	LastSequence <LastSeq>	[0..1]	Indicator		60
	POIIdentification <POIID>	[0..*]	±		60
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		60
	Content <Cntt>	[1..1]			60
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		61
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		61
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		62
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		65
	MerchantParameters <MrchntParams>	[0..*]	±		65
	TerminalParameters <TermnlParams>	[0..*]	±		66
	ApplicationParameters <ApplParams>	[0..*]	±		67
	HostCommunicationParameters <HstComParams>	[0..*]	±		68
	SecurityParameters <SctyParams>	[0..*]	±		69
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		70
	TerminalPackage <TermnlPackg>	[0..*]	±		70

4.3.2.1 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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

4.3.2.2 POIGroupIdentification <POIGrpId>

Presence: [0..*]

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

Datatype: "Max35Text" on page 534

4.3.2.3 DataSet <DataSet>

Presence: [1..*]

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

DataSet <DataSet> contains the following **AcceptorConfigurationDataSet4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		59
	SequenceCounter <SeqCntr>	[0..1]	Text		59
	LastSequence <LastSeq>	[0..1]	Indicator		60
	POIIdentification <POIID>	[0..*]	±		60
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		60
	Content <Cntt>	[1..1]			60
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		61
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		61
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		62
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		65
	MerchantParameters <MrchntParams>	[0..*]	±		65
	TerminalParameters <TermnlParams>	[0..*]	±		66
	ApplicationParameters <ApplParams>	[0..*]	±		67
	HostCommunicationParameters <HstComParams>	[0..*]	±		68
	SecurityParameters <SctyParams>	[0..*]	±		69
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		70
	TerminalPackage <TermnlPackg>	[0..*]	±		70

4.3.2.3.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the data set transferred.

Identification <Id> contains the following elements (see "[DataSetIdentification10](#)" on page 290 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		290
	Type <Tp>	[1..1]	CodeSet		290
	Version <Vrsn>	[0..1]	Text		292
	CreationDateTime <CreDtTm>	[0..1]	DateTime		292

4.3.2.3.2 SequenceCounter <SeqCntr>

Presence: [0..1]

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

Datatype: "Max9NumericText" on page 536

4.3.2.3.3 LastSequence <LastSeq>

Presence: [0..1]

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

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 529):

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

4.3.2.3.4 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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

4.3.2.3.5 ConfigurationScope <CfgtnScp>

Presence: [0..1]

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

Datatype: "PartyType15Code" on page 507

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.

4.3.2.3.6 Content <Cntt>

Presence: [1..1]

Definition: Content of the acceptor parameters.

Content <Cntt> contains the following **AcceptorConfigurationContent12** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ReplaceConfiguration <RplcCfgrn>	[0..1]	Indicator		61
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		61
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		62
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		65
	MerchantParameters <MrchntParams>	[0..*]	±		65
	TerminalParameters <TermnlParams>	[0..*]	±		66
	ApplicationParameters <ApplParams>	[0..*]	±		67
	HostCommunicationParameters <HstComParams>	[0..*]	±		68
	SecurityParameters <SctyParams>	[0..*]	±		69
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		70
	TerminalPackage <TermnlPackg>	[0..*]	±		70

4.3.2.3.6.1 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.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 529):

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

4.3.2.3.6.2 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 "TMSProtocolParameters7" on page 223 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		224
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		224
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		225
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		225
	Version <Vrsn>	[1..1]	Text		226
	ApplicationIdentification <Applld>	[0..*]	Text		226
	HostIdentification <Hstld>	[1..1]	Text		226
	POIIdentification <POIld>	[0..1]	Text		226
	InitiatingPartyIdentification <InitgPtyld>	[0..1]	Text		226
	RecipientPartyIdentification <RcptPtyld>	[0..1]	Text		226
	FileTransfer <FileTrf>	[0..1]	Indicator		226
	MessageItem <Msgltn>	[0..*]	±		226
	ExternallyTypeSupported <XtrnlyTpSprrtd>	[0..*]	Text		227

4.3.2.3.6.3 AcquirerProtocolParameters <AcqrrPrtcolParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to an acquirer protocol.

AcquirerProtocolParameters <AcqrrPrtcolParams> contains the following elements (see
"AcquirerProtocolParameters16" on page 201 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		204
	AcquirerIdentification <Acqrrld>	[1..*]	±		204
	Version <Vrsn>	[1..1]	Text		204
	ApplicationIdentification <Applld>	[0..*]	Text		204
	Host <Hst>	[0..*]			205
	HostIdentification <Hstld>	[1..1]	Text		205
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		205
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		206
	ExternallyTypeSupported <XtrnlyTpSpptd>	[0..*]	Text		206
	OnLineTransaction <OnLineTx>	[0..1]			206
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		207
	BatchTransfer <BtchTrf>	[0..1]			207
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		208
	MaximumNumber <MaxNb>	[0..1]	Quantity		208
	MaximumAmount <MaxAmt>	[0..1]	Amount		209
	ReTry <ReTry>	[0..1]	±		209
	TimeCondition <TmCond>	[0..1]	±		209
	CompletionExchange <CmpltnXchg>	[0..1]			209
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		210
	MaximumNumber <MaxNb>	[0..1]	Quantity		210
	MaximumAmount <MaxAmt>	[0..1]	Amount		211
	ReTry <ReTry>	[0..1]	±		211
	TimeCondition <TmCond>	[0..1]	±		211
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		211
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		211
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		212
	OffLineTransaction <OffLineTx>	[0..1]			212
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		213
	BatchTransfer <BtchTrf>	[0..1]			213
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		214

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaximumNumber <MaxNb>	[0..1]	Quantity		214
	MaximumAmount <MaxAmt>	[0..1]	Amount		215
	ReTry <ReTry>	[0..1]	±		215
	TimeCondition <TmCond>	[0..1]	±		215
	CompletionExchange <CmpltnXchg>	[0..1]			215
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		216
	MaximumNumber <MaxNb>	[0..1]	Quantity		216
	MaximumAmount <MaxAmt>	[0..1]	Amount		217
	ReTry <ReTry>	[0..1]	±		217
	TimeCondition <TmCond>	[0..1]	±		217
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		217
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		217
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		218
	ReconciliationExchange <RcncltnXchg>	[0..1]			218
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		218
	MaximumNumber <MaxNb>	[0..1]	Quantity		219
	MaximumAmount <MaxAmt>	[0..1]	Amount		219
	ReTry <ReTry>	[0..1]	±		219
	TimeCondition <TmCond>	[0..1]	±		219
	ReconciliationByAcquirer <RcncltnByAcqrr>	[0..1]	Indicator		220
	TotalsPerCurrency <TtlsPerCcy>	[0..1]	Indicator		220
	SplitTotals <SplTtls>	[0..1]	Indicator		220
	SplitTotalCriteria <SplTtlCrit>	[0..*]	CodeSet		220
	CompletionAdviceMandated <CmpltnAdvcMndtd>	[0..1]	Indicator		221
	AmountQualifierForReservation <AmtQlfrForRsvatn>	[0..*]	CodeSet		221
	ReconciliationError <RcncltnErr>	[0..1]	Indicator		221
	CardDataVerification <CardDataVrfctn>	[0..1]	Indicator		222
	NotifyOffLineCancellation <NtfyOffLineCxl>	[0..1]	Indicator		222
	BatchTransferContent <BtchTrfCntt>	[0..*]	CodeSet		222
	FileTransferBatch <FileTrfBtch>	[0..1]	Indicator		222
	BatchDigitalSignature <BtchDgtlSgntr>	[0..1]	Indicator		222

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageItem <MsgItm>	[0..*]	±		223
	ProtectCardData <PrctCardData>	[1..1]	Indicator		223
	PrivateCardData <PrvtCardData>	[0..1]	Indicator		223
	MandatorySecurityTrailer <MndtrySctyTrlr>	[0..1]	Indicator		223

4.3.2.3.6.4 ServiceProviderParameters <SvcPrvdrParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to a service provider.

ServiceProviderParameters <SvcPrvdrParams> contains the following elements (see "ServiceProviderParameters3" on page 198 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		198
	ServiceProviderIdentification <SvcPrvdrId>	[1..*]	±		199
	Version <Vrsn>	[1..1]	Text		199
	ApplicationIdentification <ApplId>	[0..*]	Text		199
	Host <Hst>	[0..*]			199
	HostIdentification <HstId>	[1..1]	Text		199
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		200
	ProtocolVersion <PrctlVrsn>	[0..1]	Text		200
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		200
	NonFinancialActionSupported <NonFinActnSpprtd>	[0..*]	CodeSet		201

4.3.2.3.6.5 MerchantParameters <MrchntParams>

Presence: [0..*]

Definition: Acceptor parameters dedicated to the merchant.

MerchantParameters <MrchntParams> contains the following elements (see
"MerchantConfigurationParameters6" on page 231 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		231
	MerchantIdentification <MrchntId>	[0..1]	Text		231
	Version <Vrsn>	[0..1]	Text		231
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		232
	Proxy <Prxy>	[0..1]			232
	Type <Tp>	[1..1]	CodeSet		232
	Access <Accs>	[1..1]	±		232
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		233
	OffsetStart <OffsetStart>	[0..1]	Quantity		233
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		233
	OtherParameters <OthrParams>	[0..1]	Binary		233

4.3.2.3.6.6 TerminalParameters <TermnlParams>

Presence: [0..*]

Definition: Manufacturer configuration parameters of the point of interaction.

TerminalParameters <TermnlParams> contains the following elements (see
"PaymentTerminalParameters8" on page 227 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		228
	VendorIdentification <VndrId>	[0..1]	Text		228
	Version <Vrsn>	[0..1]	Text		228
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		228
	ClockSynchronisation <ClckSynctn>	[0..1]			228
	POITimeZone <POITmZone>	[1..1]	Text		228
	SynchronisationServer <SynctnSvr>	[0..*]	±		229
	Delay <Dely>	[0..1]	Time		229
	TimeZoneLine <TmZoneLine>	[0..*]	Text		229
	LocalDateTime <LclDtTm>	[0..*]			229
	FromDateTime <FrDtTm>	[0..1]	DateTime		230
	ToDateTime <ToDtTm>	[0..1]	DateTime		230
	UTCOffset <UTCOffset>	[1..1]	Quantity		230
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		230
	OffsetStart <OffsetStart>	[0..1]	Quantity		230
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		230
	OtherParameters <OthrParams>	[0..1]	Binary		230

4.3.2.3.6.7 ApplicationParameters <ApplParams>

Presence: [0..*]

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

ApplicationParameters <ApplParams> contains the following elements (see
"ApplicationParameters12" on page 196 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		196
	ApplicationIdentification <ApplId>	[1..1]	Text		197
	Version <Vrsn>	[0..1]	Text		197
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		197
	ParametersLength <ParamsLngh>	[0..1]	Quantity		197
	OffsetStart <OffsetStart>	[0..1]	Quantity		197
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		197
	Parameters <Params>	[0..*]	Binary		197
	EncryptedParameters <NcrptdParams>	[0..1]	±		198

4.3.2.3.6.8 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 ["HostCommunicationParameter6"](#) on page 179 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		179
	HostIdentification <HstId>	[1..1]	Text		180
	Address <Adr>	[0..1]	±		180
	Key <Key>	[0..*]			180
	KeyIdentification <KeyId>	[1..1]	Text		181
	KeyVersion <KeyVrsn>	[1..1]	Text		181
	SequenceNumber <SeqNb>	[0..1]	Quantity		181
	DerivationIdentification <DerivtnId>	[0..1]	Binary		181
	Type <Tp>	[0..1]	CodeSet		181
	Function <Fctn>	[0..*]	CodeSet		182
	NetworkServiceProvider <NtwkSvcPrvdr>	[0..1]	±		183
	PhysicalInterface <PhysIntrfc>	[0..1]			183
	InterfaceName <IntrfcNm>	[1..1]	Text		184
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		184
	UserName <UsrNm>	[0..1]	Text		184
	AccessCode <AccsCd>	[0..1]	Binary		184
	SecurityProfile <SctyPrfl>	[0..1]	Text		185
	AdditionalParameters <AddtlParams>	[0..1]	Binary		185

4.3.2.3.6.9 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 ["SecurityParameters15"](#) on page 194 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		195
	Version <Vrsn>	[1..1]	Text		195
	POIChallenge <POIChllng>	[0..1]	Binary		195
	TMChallenge <TMChllng>	[0..1]	Binary		195
	SecurityElement <SctyElmt>	[0..*]	±		195

4.3.2.3.6.10 SaleToPOIParameters <SaleToPOIParams>

Presence: [0..*]

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

SaleToPOIParameters <SaleToPOIParams> contains the following elements (see "SaleToPOIProtocolParameter3" on page 189 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		189
	MerchantIdentification <MrchntId>	[0..1]			190
	CommonName <CmonNm>	[1..1]	Text		190
	Address <Adr>	[0..1]	Text		190
	CountryCode <CtryCd>	[1..1]	CodeSet		190
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		190
	RegisteredIdentifier <Regdldr>	[1..1]	Text		190
	Version <Vrsn>	[1..1]	Text		190
	HostIdentification <Hstld>	[1..1]	Text		191
	MerchantPOIIdentification <MrchntPOId>	[0..1]	Text		191
	SaleIdentification <SaleId>	[0..1]	Text		191
	AllowedSaleMessage <AllwdSaleMsg>	[0..*]	CodeSet		191
	AllowedPOIMessage <AllwdPOIMsg>	[0..*]	CodeSet		192
	AllowedPOIService <AllwdPOISvc>	[0..*]	CodeSet		193
	AllowedSaleDevice <AllwdSaleDvc>	[0..*]	CodeSet		194
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		194

4.3.2.3.6.11 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 "TerminalPackageType4" on page 185 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIComponentIdentification <POICmpntId>	[0..*]			185
	ItemNumber <itmNb>	[0..1]	Text		186
	ProviderIdentification <PrvdrlId>	[0..1]	Text		186
	Identification <Id>	[0..1]	Text		186
	SerialNumber <SrlNb>	[0..1]	Text		186
	Package <Packg>	[1..*]			186
	PackageIdentification <PackgId>	[0..1]	±		187
	PackageLength <PackgLngh>	[0..1]	Quantity		187
	OffsetStart <OffsetStart>	[0..1]	Quantity		187
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		187
	PackageBlock <PackgBlck>	[0..*]			188
	Identification <Id>	[1..1]	Text		188
	Value <Val>	[0..1]	Binary		188
	ProtectedValue <PrctcdVal>	[0..1]	±		188
	Type <Tp>	[0..1]	Text		189

4.3.3 SecurityTrailer <SctyTrlr>

Presence: [0..1]

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

SecurityTrailer <SctyTrlr> contains the following elements (see "ContentInformationType33" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		443
	AuthenticatedData <AuthntcdData>	[0..1]	±		443
	SignedData <SgndData>	[0..1]	±		444

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]			73
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		73
	FormatVersion <FrmtVrsn>	[1..1]	Text		73
	ExchangeIdentification <XchgId>	[1..1]	Quantity		73
	CreationDateTime <CreDtTm>	[1..1]	DateTime		73
	InitiatingParty <InitgPty>	[1..1]	±		73
	RecipientParty <RcptPty>	[0..1]	±		74
	Traceability <Tracblt>	[0..*]	±		74
	Reject <Rjct>	[1..1]			75
	RejectReason <RjctRsn>	[1..1]	CodeSet		75
	AdditionalInformation <AddtlInf>	[0..1]	Text		76
	MessageInError <MsgInErr>	[0..1]	Binary		76

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		73
	FormatVersion <FrmtVrsn>	[1..1]	Text		73
	Exchangeldentification <Xchgld>	[1..1]	Quantity		73
	CreationDateTime <CreDtTm>	[1..1]	DateTime		73
	InitiatingParty <InitgPty>	[1..1]	±		73
	RecipientParty <RcptPty>	[0..1]	±		74
	Traceability <Tracblt>	[0..*]	±		74

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 529):

- *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 535

5.3.1.3 Exchangeldentification <Xchgld>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 530

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 528

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

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 405 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		405
	ProtocolName <PrtcolNm>	[0..1]	Text		406
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		406
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		406
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		406

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		75
	AdditionalInformation <AddtlInf>	[0..1]	Text		76
	MessageInError <MsgInErr>	[0..1]	Binary		76

5.3.2.1 RejectReason <RjctRsn>

Presence: [1..1]

Definition: Reject reason of the request or the advice.

Datatype: "RejectReason2Code" on page 513

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 534

5.3.2.3 MessageInError <MsgInErr>

Presence: [0..1]

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

Datatype: "Max100KBinary" on page 473

6 catm.005.001.09 MaintenanceDelegationRequestV09

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 MaintenanceDelegationRequestV09 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]			80
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		80
	FormatVersion <FrmtVrsn>	[1..1]	Text		80
	ExchangeIdentification <XchgId>	[1..1]	Quantity		81
	CreationDateTime <CreDtTm>	[1..1]	DateTime		81
	InitiatingParty <InitgPty>	[1..1]	±		81
	RecipientParty <RcptPty>	[0..1]	±		81
	Traceability <Tracblt>	[0..*]	±		82
	MaintenanceDelegationRequest <MntncDlgnReq>	[1..1]			82
	TMIIdentification <TMId>	[1..1]	±		84
	MasterTMIIdentification <MstrTMId>	[0..1]	±		84
	TMDDateTime <TMDtTm>	[1..1]	DateTime		85
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		85
	RequestedDelegation <ReqdDlgn>	[1..*]			85
	DelegationType <DlgnTp>	[1..1]	CodeSet		87
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		87
	PartialDelegation <PrtlDlgn>	[0..1]	Indicator		88
	POISubset <POISubset>	[0..*]	Text		88
	DelegatedAction <DlgtActn>	[0..1]	±		88
	DelegationScopeIdentification <DlgnScpld>	[0..1]	Text		90
	DelegationScopeDefinition <DlgnScpDef>	[0..1]	Binary		90
	Certificate <Cert>	[0..*]	Binary		90
	POIIdentificationAssociation <POIIdAssocn>	[0..*]	±		90
	SymmetricKey <SmmtrcKey>	[0..*]			90
	KeyIdentification <KeyId>	[1..1]	Text		91
	KeyVersion <KeyVrsn>	[1..1]	Text		91
	SequenceNumber <SeqNb>	[0..1]	Quantity		91
	DerivationIdentification <DerivtnId>	[0..1]	Binary		91
	Type <Tp>	[0..1]	CodeSet		91

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Function <Fctn>	[0..*]	CodeSet		92
	ParameterDataSet <ParamDataSet>	[0..1]			93
	Identification <Id>	[1..1]	±		93
	SequenceCounter <SeqCntr>	[0..1]	Text		94
	LastSequence <LastSeq>	[0..1]	Indicator		94
	POIIdentification <POIID>	[0..*]	±		94
	ConfigurationScope <CfgrScp>	[0..1]	CodeSet		94
	Content <Cntt>	[1..1]			95
	ReplaceConfiguration <RplcCfgr>	[0..1]	Indicator		95
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		95
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		96
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		99
	MerchantParameters <MrchntParams>	[0..*]	±		99
	TerminalParameters <TermnlParams>	[0..*]	±		100
	ApplicationParameters <ApplParams>	[0..*]	±		101
	HostCommunicationParameters <HstComParams>	[0..*]	±		102
	SecurityParameters <SctyParams>	[0..*]	±		103
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		104
	TerminalPackage <TermnlPackg>	[0..*]	±		104
	SecurityTrailer <SctyTrlr>	[1..1]	±		105

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 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.

C3 Country

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

C4 IBAN

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

C5 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.

C6 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		80
	FormatVersion <FrmtVrsn>	[1..1]	Text		80
	ExchangeIdentification <XchgId>	[1..1]	Quantity		81
	CreationDateTime <CreDtTm>	[1..1]	DateTime		81
	InitiatingParty <InitgPty>	[1..1]	±		81
	RecipientParty <RcptPty>	[0..1]	±		81
	Traceability <Tracblt>	[0..*]	±		82

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 529):

- *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 535

6.4.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: "Number" on page 530

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 528

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

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 405 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		405
	ProtocolName <PrtcolNm>	[0..1]	Text		406
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		406
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		406
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		406

6.4.2 MaintenanceDelegationRequest <MntncDlgtReq>

Presence: [1..1]

Definition: Information related to the request of maintenance delegations.

MaintenanceDelegationRequest <MntncDlgnReq> contains the following
MaintenanceDelegationRequest9 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMIdentification <TMId>	[1..1]	±		84
	MasterTMIdentification <MstrTMId>	[0..1]	±		84
	TMDateTime <TMDtTm>	[1..1]	DateTime		85
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		85
	RequestedDelegation <ReqdDlgn>	[1..*]			85
	DelegationType <DlgnTp>	[1..1]	CodeSet		87
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		87
	PartialDelegation <PrtlDlgn>	[0..1]	Indicator		88
	POISubset <POISubset>	[0..*]	Text		88
	DelegatedAction <DlgtActn>	[0..1]	±		88
	DelegationScopeIdentification <DlgnScpld>	[0..1]	Text		90
	DelegationScopeDefinition <DlgnScpDef>	[0..1]	Binary		90
	Certificate <Cert>	[0..*]	Binary		90
	POIIdentificationAssociation <POIIdAssoctn>	[0..*]	±		90
	SymmetricKey <SmmtrcKey>	[0..*]			90
	KeyIdentification <KeyId>	[1..1]	Text		91
	KeyVersion <KeyVrsn>	[1..1]	Text		91
	SequenceNumber <SeqNb>	[0..1]	Quantity		91
	DerivationIdentification <DerivtnId>	[0..1]	Binary		91
	Type <Tp>	[0..1]	CodeSet		91
	Function <Fctn>	[0..*]	CodeSet		92
	ParameterDataSet <ParamDataSet>	[0..1]			93
	Identification <Id>	[1..1]	±		93
	SequenceCounter <SeqCntr>	[0..1]	Text		94
	LastSequence <LastSeq>	[0..1]	Indicator		94
	POIIdentification <POIId>	[0..*]	±		94
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		94
	Content <Cntt>	[1..1]			95
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		95
	TMSProtocolParameters <TMSPrctolParams>	[0..*]	±		95

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		96
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		99
	MerchantParameters <MrchntParams>	[0..*]	±		99
	TerminalParameters <TermnlParams>	[0..*]	±		100
	ApplicationParameters <ApplParams>	[0..*]	±		101
	HostCommunicationParameters <HstComParams>	[0..*]	±		102
	SecurityParameters <SctyParams>	[0..*]	±		103
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		104
	TerminalPackage <TermnlPackg>	[0..*]	±		104

6.4.2.1 TMIdentification <TMId>

Presence: [1..1]

Definition: Terminal manager identification.

TMIdentification <TMId> contains the following elements (see "[GenericIdentification176](#)" on page 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

6.4.2.2 MasterTMIdentification <MstrTMId>

Presence: [0..1]

Definition: Master terminal manager identification.

MasterTMIdentification <MstrTMId> contains the following elements (see "[GenericIdentification176](#)" on page 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

6.4.2.3 TMDatetime <TMDtTm>

Presence: [1..1]

Definition: Date and Time of the TMS.

Datatype: "ISODateTime" on page 528

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 474

6.4.2.5 RequestedDelegation <ReqdDlgn>

Presence: [1..*]

Definition: Information on the delegation of a maintenance action.

RequestedDelegation <ReqdDlgn> contains the following **MaintenanceDelegation15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DelegationType <DlgnTp>	[1..1]	CodeSet		87
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		87
	PartialDelegation <PrtlDlgn>	[0..1]	Indicator		88
	POISubset <POISubset>	[0..*]	Text		88
	DelegatedAction <DlgtActn>	[0..1]	±		88
	DelegationScopeIdentification <DlgnScpld>	[0..1]	Text		90
	DelegationScopeDefinition <DlgnScpDef>	[0..1]	Binary		90
	Certificate <Cert>	[0..*]	Binary		90
	POIIdentificationAssociation <POIIdAssoctn>	[0..*]	±		90
	SymmetricKey <SmmtrcKey>	[0..*]			90
	KeyIdentification <KeyId>	[1..1]	Text		91
	KeyVersion <KeyVrsn>	[1..1]	Text		91
	SequenceNumber <SeqNb>	[0..1]	Quantity		91
	DerivationIdentification <DerivtnId>	[0..1]	Binary		91
	Type <Tp>	[0..1]	CodeSet		91
	Function <Fctn>	[0..*]	CodeSet		92
	ParameterDataSet <ParamDataSet>	[0..1]			93
	Identification <Id>	[1..1]	±		93
	SequenceCounter <SeqCntr>	[0..1]	Text		94
	LastSequence <LastSeq>	[0..1]	Indicator		94
	POIIdentification <POIId>	[0..*]	±		94
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		94
	Content <Cntt>	[1..1]			95
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		95
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		95
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		96
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		99
	MerchantParameters <MrchntParams>	[0..*]	±		99
	TerminalParameters <TermnlParams>	[0..*]	±		100
	ApplicationParameters <ApplParams>	[0..*]	±		101
	HostCommunicationParameters <HstComParams>	[0..*]	±		102

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SecurityParameters <SctyParams>	[0..*]	±		103
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		104
	TerminalPackage <TermnlPackg>	[0..*]	±		104

6.4.2.5.1 DelegationType <DlgtTp>

Presence: [1..1]

Definition: Type of delegation action.

Datatype: "TerminalManagementAction3Code" on page 522

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: "DataSetCategory16Code" on page 495

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).

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.
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.

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.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 529](#)):

- *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 534](#)

6.4.2.5.5 DelegatedAction <DlgtActn>

Presence: [0..1]

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

DelegatedAction <DlgtActn> contains the following elements (see "MaintenanceDelegationAction8" on page 274 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PeriodicAction <PrdcActn>	[0..1]	Indicator		276
	TMRemoteAccess <TMRmotAccs>	[0..1]	±		276
	TMSProtocol <TMSPrtcol>	[0..1]	Text		276
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		277
	DataSetIdentification <DataSetId>	[0..1]	±		277
	ReTry <ReTry>	[0..1]	±		277
	AdditionalInformation <AddtlInf>	[0..*]	Binary		277
	Action <Actn>	[0..*]			277
	Type <Tp>	[1..1]	CodeSet		278
	RemoteAccess <RmotAccs>	[0..1]	±		279
	Key <Key>	[0..*]			280
	KeyIdentification <KeyId>	[1..1]	Text		280
	KeyVersion <KeyVrsn>	[1..1]	Text		280
	SequenceNumber <SeqNb>	[0..1]	Quantity		280
	DerivationIdentification <DerivtnId>	[0..1]	Binary		280
	Type <Tp>	[0..1]	CodeSet		280
	Function <Fctn>	[0..*]	CodeSet		281
	TerminalManagerIdentification <TermnlMgrId>	[0..1]	±		282
	TMSProtocol <TMSPrtcol>	[0..1]	Text		282
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		282
	DataSetIdentification <DataSetId>	[0..1]	±		282
	ComponentType <CmpntTp>	[0..*]	CodeSet		283
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		284
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		284
	DelegationProof <DlgtProof>	[0..1]	Binary		284
	ProtectedDelegationProof <PrctcdDlgtProof>	[0..1]	±		284
	Trigger <Trggr>	[1..1]	CodeSet		285
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		285
	ReTry <ReTry>	[0..1]	±		285
	TimeCondition <TmCond>	[0..1]	±		286

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMChallenge <TMChllng>	[0..1]	Binary		286
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		286
	ErrorAction <ErrActn>	[0..*]	±		286
	AdditionalInformation <AddtlInf>	[0..*]	Binary		287
	MessageItem <Msgltn>	[0..*]	±		287
	DeviceRequest <DvcReq>	[0..1]	±		287

6.4.2.5.6 DelegationScopelIdentification <DlgtNScpld>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 534

6.4.2.5.7 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 474

6.4.2.5.8 Certificate <Cert>

Presence: [0..*]

Definition: Certificate path of the terminal manager.

Datatype: "Max10KBinary" on page 474

6.4.2.5.9 POIIdentificationAssociation <POIdAssoctn>

Presence: [0..*]

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

POIIdentificationAssociation <POIdAssoctn> contains the following elements (see "MaintenanceIdentificationAssociation1" on page 404 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MasterTMIdentification <MstrTMId>	[1..1]	Text		405
	TMIdentification <TMId>	[1..1]	Text		405

6.4.2.5.10 SymmetricKey <SmmtrcKey>

Presence: [0..*]

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

SymmetricKey <SmmtrcKey> contains the following **KEKIdentifier5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		91
	KeyVersion <KeyVrsn>	[1..1]	Text		91
	SequenceNumber <SeqNb>	[0..1]	Quantity		91
	DerivationIdentification <DerivtnId>	[0..1]	Binary		91
	Type <Tp>	[0..1]	CodeSet		91
	Function <Fctn>	[0..*]	CodeSet		92

6.4.2.5.10.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: "Max140Text" on page 532

6.4.2.5.10.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 532

6.4.2.5.10.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 530

6.4.2.5.10.4 DerivationIdentification <DerivtnId>

Presence: [0..1]

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

Datatype: "Min5Max16Binary" on page 476

6.4.2.5.10.5 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType3Code" on page 494

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).

CodeName	Name	Definition
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).

6.4.2.5.10.6 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 501

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).

CodeName	Name	Definition
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

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 **AcceptorConfigurationDataSet4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		93
	SequenceCounter <SeqCntr>	[0..1]	Text		94
	LastSequence <LastSeq>	[0..1]	Indicator		94
	POIIdentification <POIID>	[0..*]	±		94
	ConfigurationScope <CfgtnScp>	[0..1]	CodeSet		94
	Content <Cntt>	[1..1]			95
	ReplaceConfiguration <RplcCfgtn>	[0..1]	Indicator		95
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		95
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		96
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		99
	MerchantParameters <MrchntParams>	[0..*]	±		99
	TerminalParameters <TermnlParams>	[0..*]	±		100
	ApplicationParameters <ApplParams>	[0..*]	±		101
	HostCommunicationParameters <HstComParams>	[0..*]	±		102
	SecurityParameters <SctyParams>	[0..*]	±		103
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		104
	TerminalPackage <TermnlPackg>	[0..*]	±		104

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 ["DataSetIdentification10"](#) on page 290 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		290
	Type <Tp>	[1..1]	CodeSet		290
	Version <Vrsn>	[0..1]	Text		292
	CreationDateTime <CreDtTm>	[0..1]	DateTime		292

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 536

6.4.2.5.11.3 LastSequence <LastSeq>

Presence: [0..1]

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

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 529):

- *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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 507

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.

Content <Cntt> contains the following **AcceptorConfigurationContent12** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ReplaceConfiguration <RplcCfgrn>	[0..1]	Indicator		95
	TMSProtocolParameters <TMSPrtcolParams>	[0..*]	±		95
	AcquirerProtocolParameters <AcqrrPrtcolParams>	[0..*]	±		96
	ServiceProviderParameters <SvcPrvdrParams>	[0..*]	±		99
	MerchantParameters <MrchntParams>	[0..*]	±		99
	TerminalParameters <TermnlParams>	[0..*]	±		100
	ApplicationParameters <ApplParams>	[0..*]	±		101
	HostCommunicationParameters <HstComParams>	[0..*]	±		102
	SecurityParameters <SctyParams>	[0..*]	±		103
	SaleToPOIParameters <SaleToPOIParams>	[0..*]	±		104
	TerminalPackage <TermnlPackg>	[0..*]	±		104

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.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 529](#)):

- *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
"TMSProtocolParameters7" on page 223 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		224
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		224
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		225
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		225
	Version <Vrsn>	[1..1]	Text		226
	ApplicationIdentification <ApplId>	[0..*]	Text		226
	HostIdentification <Hstld>	[1..1]	Text		226
	POIIdentification <POIId>	[0..1]	Text		226
	InitiatingPartyIdentification <InitgPtyld>	[0..1]	Text		226
	RecipientPartyIdentification <RcptPtyld>	[0..1]	Text		226
	FileTransfer <FileTrf>	[0..1]	Indicator		226
	MessageItem <Msgltn>	[0..*]	±		226
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		227

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
"AcquirerProtocolParameters16" on page 201 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		204
	AcquirerIdentification <Acqrrld>	[1..*]	±		204
	Version <Vrsn>	[1..1]	Text		204
	ApplicationIdentification <Applld>	[0..*]	Text		204
	Host <Hst>	[0..*]			205
	HostIdentification <Hstld>	[1..1]	Text		205
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		205
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		206
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		206
	OnLineTransaction <OnLineTx>	[0..1]			206
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		207
	BatchTransfer <BtchTrf>	[0..1]			207
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		208
	MaximumNumber <MaxNb>	[0..1]	Quantity		208
	MaximumAmount <MaxAmt>	[0..1]	Amount		209
	ReTry <ReTry>	[0..1]	±		209
	TimeCondition <TmCond>	[0..1]	±		209
	CompletionExchange <CmpltnXchg>	[0..1]			209
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		210
	MaximumNumber <MaxNb>	[0..1]	Quantity		210
	MaximumAmount <MaxAmt>	[0..1]	Amount		211
	ReTry <ReTry>	[0..1]	±		211
	TimeCondition <TmCond>	[0..1]	±		211
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		211
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		211
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		212
	OffLineTransaction <OffLineTx>	[0..1]			212
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		213
	BatchTransfer <BtchTrf>	[0..1]			213
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		214

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaximumNumber <MaxNb>	[0..1]	Quantity		214
	MaximumAmount <MaxAmt>	[0..1]	Amount		215
	ReTry <ReTry>	[0..1]	±		215
	TimeCondition <TmCond>	[0..1]	±		215
	CompletionExchange <CmpltnXchg>	[0..1]			215
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		216
	MaximumNumber <MaxNb>	[0..1]	Quantity		216
	MaximumAmount <MaxAmt>	[0..1]	Amount		217
	ReTry <ReTry>	[0..1]	±		217
	TimeCondition <TmCond>	[0..1]	±		217
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		217
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		217
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		218
	ReconciliationExchange <RcncltnXchg>	[0..1]			218
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		218
	MaximumNumber <MaxNb>	[0..1]	Quantity		219
	MaximumAmount <MaxAmt>	[0..1]	Amount		219
	ReTry <ReTry>	[0..1]	±		219
	TimeCondition <TmCond>	[0..1]	±		219
	ReconciliationByAcquirer <RcncltnByAcqrr>	[0..1]	Indicator		220
	TotalsPerCurrency <TtlsPerCcy>	[0..1]	Indicator		220
	SplitTotals <SplTtls>	[0..1]	Indicator		220
	SplitTotalCriteria <SplTtlCrit>	[0..*]	CodeSet		220
	CompletionAdviceMandated <CmpltnAdvMndtd>	[0..1]	Indicator		221
	AmountQualifierForReservation <AmtQlfrForRsvatn>	[0..*]	CodeSet		221
	ReconciliationError <RcncltnErr>	[0..1]	Indicator		221
	CardDataVerification <CardDataVrfctn>	[0..1]	Indicator		222
	NotifyOffLineCancellation <NtfyOffLineCxl>	[0..1]	Indicator		222
	BatchTransferContent <BtchTrfCntt>	[0..*]	CodeSet		222
	FileTransferBatch <FileTrfBtch>	[0..1]	Indicator		222
	BatchDigitalSignature <BtchDgtlSgntr>	[0..1]	Indicator		222

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageItem <MsgItm>	[0..*]	±		223
	ProtectCardData <PrctCardData>	[1..1]	Indicator		223
	PrivateCardData <PrvtCardData>	[0..1]	Indicator		223
	MandatorySecurityTrailer <MndtrySctyTrlr>	[0..1]	Indicator		223

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 "ServiceProviderParameters3" on page 198 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		198
	ServiceProviderIdentification <SvcPrvdrId>	[1..*]	±		199
	Version <Vrsn>	[1..1]	Text		199
	ApplicationIdentification <ApplId>	[0..*]	Text		199
	Host <Hst>	[0..*]			199
	HostIdentification <HstId>	[1..1]	Text		199
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		200
	ProtocolVersion <PrctlVrsn>	[0..1]	Text		200
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		200
	NonFinancialActionSupported <NonFinActnSpprtd>	[0..*]	CodeSet		201

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 231 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		231
	MerchantIdentification <MrchntId>	[0..1]	Text		231
	Version <Vrsn>	[0..1]	Text		231
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		232
	Proxy <Prxy>	[0..1]			232
	Type <Tp>	[1..1]	CodeSet		232
	Access <Accs>	[1..1]	±		232
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		233
	OffsetStart <OffsetStart>	[0..1]	Quantity		233
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		233
	OtherParameters <OthrParams>	[0..1]	Binary		233

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 227 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		228
	VendorIdentification <VndrId>	[0..1]	Text		228
	Version <Vrsn>	[0..1]	Text		228
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		228
	ClockSynchronisation <ClckSynctn>	[0..1]			228
	POITimeZone <POITmZone>	[1..1]	Text		228
	SynchronisationServer <SynctnSvr>	[0..*]	±		229
	Delay <Dely>	[0..1]	Time		229
	TimeZoneLine <TmZoneLine>	[0..*]	Text		229
	LocalDateTime <LclDtTm>	[0..*]			229
	FromDateTime <FrDtTm>	[0..1]	DateTime		230
	ToDateTime <ToDtTm>	[0..1]	DateTime		230
	UTCOffset <UTCOffset>	[1..1]	Quantity		230
	OtherParametersLength <OthrParamsLngh>	[0..1]	Quantity		230
	OffsetStart <OffsetStart>	[0..1]	Quantity		230
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		230
	OtherParameters <OthrParams>	[0..1]	Binary		230

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
"ApplicationParameters12" on page 196 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		196
	ApplicationIdentification <ApplId>	[1..1]	Text		197
	Version <Vrsn>	[0..1]	Text		197
	ParameterFormatIdentifier <ParamFrmtIdr>	[0..1]	Text		197
	ParametersLength <ParamsLngh>	[0..1]	Quantity		197
	OffsetStart <OffsetStart>	[0..1]	Quantity		197
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		197
	Parameters <Params>	[0..*]	Binary		197
	EncryptedParameters <NcrptdParams>	[0..1]	±		198

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 "HostCommunicationParameter6" on page 179 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		179
	HostIdentification <HstId>	[1..1]	Text		180
	Address <Adr>	[0..1]	±		180
	Key <Key>	[0..*]			180
	KeyIdentification <KeyId>	[1..1]	Text		181
	KeyVersion <KeyVrsn>	[1..1]	Text		181
	SequenceNumber <SeqNb>	[0..1]	Quantity		181
	DerivationIdentification <DerivtnId>	[0..1]	Binary		181
	Type <Tp>	[0..1]	CodeSet		181
	Function <Fctn>	[0..*]	CodeSet		182
	NetworkServiceProvider <NtwkSvcPrvdr>	[0..1]	±		183
	PhysicalInterface <PhysIntrfc>	[0..1]			183
	InterfaceName <IntrfcNm>	[1..1]	Text		184
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		184
	UserName <UsrNm>	[0..1]	Text		184
	AccessCode <AccsCd>	[0..1]	Binary		184
	SecurityProfile <SctyPrfl>	[0..1]	Text		185
	AdditionalParameters <AddtlParams>	[0..1]	Binary		185

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 "SecurityParameters15" on page 194 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		195
	Version <Vrsn>	[1..1]	Text		195
	POIChallenge <POIChllng>	[0..1]	Binary		195
	TMChallenge <TMChllng>	[0..1]	Binary		195
	SecurityElement <SctyElmt>	[0..*]	±		195

6.4.2.5.11.6.10 SaleToPOIPParameters <SaleToPOIPParams>

Presence: [0..*]

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

SaleToPOIPParameters <SaleToPOIPParams> contains the following elements (see "SaleToPOIPProtocolParameter3" on page 189 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		189
	MerchantIdentification <MrchntId>	[0..1]			190
	CommonName <CmonNm>	[1..1]	Text		190
	Address <Adr>	[0..1]	Text		190
	CountryCode <CtryCd>	[1..1]	CodeSet		190
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		190
	RegisteredIdentifier <RegdIdr>	[1..1]	Text		190
	Version <Vrsn>	[1..1]	Text		190
	HostIdentification <HstId>	[1..1]	Text		191
	MerchantPOIIdentification <MrchntPOId>	[0..1]	Text		191
	SaleIdentification <SaleId>	[0..1]	Text		191
	AllowedSaleMessage <AllwdSaleMsg>	[0..*]	CodeSet		191
	AllowedPOIMessage <AllwdPOIMsg>	[0..*]	CodeSet		192
	AllowedPOIService <AllwdPOISvc>	[0..*]	CodeSet		193
	AllowedSaleDevice <AllwdSaleDvc>	[0..*]	CodeSet		194
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		194

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 "TerminalPackageType4" on page 185 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIComponentIdentification <POICmpntId>	[0..*]			185
	ItemNumber <itmNb>	[0..1]	Text		186
	ProviderIdentification <PrvdrId>	[0..1]	Text		186
	Identification <Id>	[0..1]	Text		186
	SerialNumber <SrlNb>	[0..1]	Text		186
	Package <Packg>	[1..*]			186
	PackageIdentification <PackgId>	[0..1]	±		187
	PackageLength <PackgLngh>	[0..1]	Quantity		187
	OffsetStart <OffsetStart>	[0..1]	Quantity		187
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		187
	PackageBlock <PackgBlck>	[0..*]			188
	Identification <Id>	[1..1]	Text		188
	Value <Val>	[0..1]	Binary		188
	ProtectedValue <PrctcdVal>	[0..1]	±		188
	Type <Tp>	[0..1]	Text		189

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 "ContentInformationType33" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		443
	AuthenticatedData <AuthntcdData>	[0..1]	±		443
	SignedData <SgndData>	[0..1]	±		444

7 catm.006.001.07 MaintenanceDelegationResponseV07

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 MaintenanceDelegationResponseV07 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]			108
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		108
	FormatVersion <FrmtVrsn>	[1..1]	Text		108
	ExchangeIdentification <XchgId>	[1..1]	Quantity		108
	CreationDateTime <CreDtTm>	[1..1]	DateTime		108
	InitiatingParty <InitgPty>	[1..1]	±		108
	RecipientParty <RcptPty>	[0..1]	±		109
	Traceability <Tracblt>	[0..*]	±		109
	MaintenanceDelegationResponse <MntncDlgtRspn>	[1..1]			110
	TMIIdentification <TMId>	[1..1]	±		110
	MasterTMIIdentification <MstrTMId>	[0..1]	±		111
	TMDDateTime <TMDtTm>	[1..1]	DateTime		111
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		111
	DelegationResponse <DlgtRspn>	[1..*]			111
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		112
	Response <Rspn>	[1..1]	CodeSet		113
	ResponseReason <RspnRsn>	[0..1]	Text		113
	DelegationType <DlgtTp>	[1..1]	CodeSet		113
	POISubset <POISubset>	[0..*]	Text		113
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		114
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		114
	DelegationProof <DlgtProof>	[0..1]	Binary		114
	ProtectedDelegationProof <PrtctdDlgtProof>	[0..1]	±		114
	POIIdentificationAssociation <POIIdAssoctn>	[0..*]	±		114
	SecurityTrailer <SctyTrlr>	[0..1]	±		115

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		108
	FormatVersion <FrmtVrsn>	[1..1]	Text		108
	Exchangeldentification <Xchgld>	[1..1]	Quantity		108
	CreationDateTime <CreDtTm>	[1..1]	DateTime		108
	InitiatingParty <InitgPty>	[1..1]	±		108
	RecipientParty <RcptPty>	[0..1]	±		109
	Traceability <Tracblt>	[0..*]	±		109

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 529):

- *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 535

7.3.1.3 Exchangeldentification <Xchgld>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 530

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 528

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

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 405 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		405
	ProtocolName <PrtcolNm>	[0..1]	Text		406
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		406
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		406
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		406

7.3.2 MaintenanceDelegationResponse <MntncDlgtRspn>

Presence: [1..1]

Definition: Information related to the request of maintenance delegations.

MaintenanceDelegationResponse <MntncDlgtRspn> contains the following
MaintenanceDelegationResponse7 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	TMIdentification <TMId>	[1..1]	±		110
	MasterTMIdentification <MstrTMId>	[0..1]	±		111
	TMDateTime <TMDtTm>	[1..1]	DateTime		111
	TMChallengeValue <TMChllngVal>	[1..1]	Binary		111
	DelegationResponse <DlgtRspn>	[1..*]			111
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		112
	Response <Rspn>	[1..1]	CodeSet		113
	ResponseReason <RspnRsn>	[0..1]	Text		113
	DelegationType <DlgtTp>	[1..1]	CodeSet		113
	POISubset <POISubset>	[0..*]	Text		113
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		114
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		114
	DelegationProof <DlgtProof>	[0..1]	Binary		114
	ProtectedDelegationProof <PrtctdDlgtProof>	[0..1]	±		114
	POIIdentificationAssociation <POIIdAssocn>	[0..*]	±		114

7.3.2.1 TMIdentification <TMId>

Presence: [1..1]

Definition: Terminal manager identification.

TMIdentification <TMId> contains the following elements (see "[GenericIdentification176](#)" on page 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

7.3.2.2 MasterTMIdentification <MstrTMId>

Presence: [0..1]

Definition: Master terminal manager identification.

MasterTMIdentification <MstrTMId> contains the following elements (see "[GenericIdentification176](#)" on page 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

7.3.2.3 TMDateTime <TMDtTm>

Presence: [1..1]

Definition: Date and Time of the TMS.

Datatype: "[ISODatetime](#)" on page 528

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 474

7.3.2.5 DelegationResponse <DlgtRspn>

Presence: [1..*]

Definition: Information on the delegation of a maintenance action.

DelegationResponse <DlgtnRspn> contains the following **MaintenanceDelegation16** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		112
	Response <Rspn>	[1..1]	CodeSet		113
	ResponseReason <RspnRsn>	[0..1]	Text		113
	DelegationType <DlgtnTp>	[1..1]	CodeSet		113
	POISubset <POISubset>	[0..*]	Text		113
	DelegationScopeIdentification <DlgtnScpld>	[0..1]	Text		114
	DelegationScopeDefinition <DlgtnScpDef>	[0..1]	Binary		114
	DelegationProof <DlgtnProof>	[0..1]	Binary		114
	ProtectedDelegationProof <PrctcdDlgtnProof>	[0..1]	±		114
	POIIdentificationAssociation <POIIdAssocn>	[0..*]	±		114

7.3.2.5.1 MaintenanceService <MntncSvc>

Presence: [1..*]

Definition: Maintenance service to be delegated.

Datatype: "DataSetCategory16Code" on page 495

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.

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 515

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 534

7.3.2.5.4 DelegationType <DlgtTp>

Presence: [1..1]

Definition: Type of delegation action.

Datatype: "TerminalManagementAction3Code" on page 522

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 534

7.3.2.5.6 DelegationScopelIdentification <DlgnScpld>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 534

7.3.2.5.7 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 474

7.3.2.5.8 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 475

7.3.2.5.9 ProtectedDelegationProof <PrtctdDlgnProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgnProof> contains the following elements (see "ContentInformationType34" on page 438 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		439
	EnvelopedData <EnvlpdData>	[0..1]	±		439
	AuthenticatedData <AuthntcdData>	[0..1]	±		440
	SignedData <SgndData>	[0..1]	±		441
	DigestedData <DgstdData>	[0..1]	±		442

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 404 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MasterTMIdentification <MstrTMId>	[1..1]	Text		405
	TMIdentification <TMId>	[1..1]	Text		405

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 "[ContentInformationType33](#)" on [page 443](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		443
	AuthenticatedData <AuthntcdData>	[0..1]	±		443
	SignedData <SgndData>	[0..1]	±		444

8 catm.007.001.06 CertificateManagementRequestV06

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 CertificateManagementRequestV06 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]			118
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		118
	FormatVersion <FrmtVrsn>	[1..1]	Text		119
	ExchangeIdentification <XchgId>	[1..1]	Quantity		119
	CreationDateTime <CreDtTm>	[1..1]	DateTime		119
	InitiatingParty <InitgPty>	[1..1]	±		119
	RecipientParty <RcptPty>	[0..1]	±		119
	Traceability <Tracblt>	[0..*]	±		120
	CertificateManagementRequest <CertMgmtReq>	[1..1]			120
	POIIdentification <POIID>	[1..1]	±		122
	TMIIdentification <TMId>	[0..1]	±		122
	CertificateService <CertSvc>	[1..1]	CodeSet		122
	SecurityDomain <SctyDomn>	[0..1]	Text		123
	KeyFunction <KeyFctn>	[0..*]	CodeSet		123
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		124
	POIDateTime <POIDtTm>	[1..1]	DateTime		124
	BinaryCertificationRequest <BinryCertfctnReq>	[0..1]	Text		124
	CertificationRequest <CertfctnReq>	[0..1]			124
	CertificateRequestInformation <CertReqInf>	[1..1]			125
	Version <Vrsn>	[0..1]	Quantity		126
	SubjectName <SbjNm>	[0..1]			126
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			126
	AttributeType <AttrTp>	[1..1]	CodeSet		127
	AttributeValue <AttrVal>	[1..1]	Text		127
	SubjectPublicKeyInformation <SbjtPblcKeyInf>	[1..1]			127
	Algorithm <Algo>	[0..1]	CodeSet		128
	PublicKeyValue <PblcKeyVal>	[1..1]			128
	Modulus <Mdlus>	[1..1]	Binary		128
	Exponent <Expnt>	[1..1]	Binary		128

Or	MessageElement/BuildingBlock<XML Tag>	Mult.	Type	Constr. No.	Page
	Attribute <Attr>	[1..*]			128
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129
	KeyIdentification <KeyId>	[0..1]	Text		129
	KeyVersion <KeyVrsn>	[0..1]	Text		129
	ClientCertificate <ClntCert>	[0..1]	Binary		129
	WhiteListIdentification <WhtListId>	[0..1]			129
	ManufacturerIdentifier <Manfctrldr>	[1..1]	Text		130
	Model <Mdl>	[1..1]	Text		130
	SerialNumber <SrlNb>	[1..1]	Text		130
	SecurityTrailer <SctyTrlr>	[0..1]	±		130

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		118
	FormatVersion <FrmtVrsn>	[1..1]	Text		119
	ExchangeIdentification <XchgId>	[1..1]	Quantity		119
	CreationDateTime <CreDtTm>	[1..1]	DateTime		119
	InitiatingParty <InitgPty>	[1..1]	±		119
	RecipientParty <RcptPty>	[0..1]	±		119
	Traceability <Tracblt>	[0..*]	±		120

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 529](#)):

- *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 535

8.3.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: "Number" on page 530

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 528

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

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 405 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		405
	ProtocolName <PrtcolNm>	[0..1]	Text		406
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		406
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		406
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		406

8.3.2 CertificateManagementRequest <CertMgmtReq>

Presence: [1..1]

Definition: Information related to the request of certificate management.

CertificateManagementRequest <CertMgmtReq> contains the following
CertificateManagementRequest3 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	POIIDentification <POIID>	[1..1]	±		122
	TMIdentification <TMId>	[0..1]	±		122
	CertificateService <CertSvc>	[1..1]	CodeSet		122
	SecurityDomain <SctyDomn>	[0..1]	Text		123
	KeyFunction <KeyFctn>	[0..*]	CodeSet		123
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		124
	POIDateTime <POIDtTm>	[1..1]	DateTime		124
	BinaryCertificationRequest <BinryCertfctnReq>	[0..1]	Text		124
	CertificationRequest <CertfctnReq>	[0..1]			124
	CertificateRequestInformation <CertReqInf>	[1..1]			125
	Version <Vrsn>	[0..1]	Quantity		126
	SubjectName <SbjNm>	[0..1]			126
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			126
	AttributeType <AttrTp>	[1..1]	CodeSet		127
	AttributeValue <AttrVal>	[1..1]	Text		127
	SubjectPublicKeyInformation <SbjtPbkcKeyInf>	[1..1]			127
	Algorithm <Algo>	[0..1]	CodeSet		128
	PublicKeyValue <PbkcKeyVal>	[1..1]			128
	Modulus <Mdlus>	[1..1]	Binary		128
	Exponent <Expnt>	[1..1]	Binary		128
	Attribute <Attr>	[1..*]			128
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129
	KeyIdentification <KeyId>	[0..1]	Text		129
	KeyVersion <KeyVrsn>	[0..1]	Text		129
	ClientCertificate <CIntCert>	[0..1]	Binary		129
	WhiteListIdentification <WhtListId>	[0..1]			129
	ManufacturerIdentifier <ManfctrlrIdr>	[1..1]	Text		130
	Model <Mdl>	[1..1]	Text		130
	SerialNumber <SrlNb>	[1..1]	Text		130

8.3.2.1 POIdentification <POId>

Presence: [1..1]

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

POIdentification <POId> contains the following elements (see "[GenericIdentification176](#)" on page 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

8.3.2.3 CertificateService <CertSvc>

Presence: [1..1]

Definition: Requested certificate management service.

Datatype: "[CardPaymentServiceType10Code](#)" on page 492

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	RenewCertificate	Renewal of an X.509 certificate, protected by the certificate to renew.
CRTK	RevokeCertificate	Revocation of an active X.509 certificate.

CodeName	Name	Definition
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 535

8.3.2.5 KeyFunction <KeyFctn>

Presence: [0..*]

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

Datatype: "KeyUsage1Code" on page 501

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 474

8.3.2.7 POIDateTime <POIDtTm>

Presence: [1..1]

Definition: Date and Time of the POI.

Datatype: "ISODatetime" on page 528

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 532

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 **CertificationRequest1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CertificateRequestInformation <CertReqInf>	[1..1]			125
	Version <Vrsn>	[0..1]	Quantity		126
	SubjectName <SbjtNm>	[0..1]			126
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			126
	AttributeType <AttrTp>	[1..1]	CodeSet		127
	AttributeValue <AttrVal>	[1..1]	Text		127
	SubjectPublicKeyInformation <SbjtPbkcKeyInf>	[1..1]			127
	Algorithm <Algo>	[0..1]	CodeSet		128
	PublicKeyValue <PbkcKeyVal>	[1..1]			128
	Modulus <Mdls>	[1..1]	Binary		128
	Exponent <Expnt>	[1..1]	Binary		128
	Attribute <Attr>	[1..*]			128
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129
	KeyIdentification <KeyId>	[0..1]	Text		129
	KeyVersion <KeyVrsn>	[0..1]	Text		129

8.3.2.9.1 CertificateRequestInformation <CertReqInf>

Presence: [1..1]

Definition: Information of the certificate to create.

CertificateRequestInformation <CertReqInf> contains the following **CertificationRequest2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		126
	SubjectName <SbjtNm>	[0..1]			126
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			126
	AttributeType <AttrTp>	[1..1]	CodeSet		127
	AttributeValue <AttrVal>	[1..1]	Text		127
	SubjectPublicKeyInformation <SbjtPblcKeyInf>	[1..1]			127
	Algorithm <Algo>	[0..1]	CodeSet		128
	PublicKeyValue <PblcKeyVal>	[1..1]			128
	Modulus <Mdlus>	[1..1]	Binary		128
	Exponent <Expnt>	[1..1]	Binary		128
	Attribute <Attr>	[1..*]			128
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129

8.3.2.9.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the certificate request information data structure.

Datatype: "Number" on page 530

8.3.2.9.1.2 SubjectName <SbjtNm>

Presence: [0..1]

Definition: Distinguished name of the certificate subject, the entity whose public key is to be certified.

SubjectName <SbjtNm> contains the following **CertificateIssuer1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			126
	AttributeType <AttrTp>	[1..1]	CodeSet		127
	AttributeValue <AttrVal>	[1..1]	Text		127

8.3.2.9.1.2.1 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		127
	AttributeValue <AttrVal>	[1..1]	Text		127

8.3.2.9.1.2.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 484

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).

8.3.2.9.1.2.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 532

8.3.2.9.1.3 SubjectPublicKeyInformation <SbjtpbKeyInf>

Presence: [1..1]

Definition: Information about the public key being certified.

SubjectPublicKeyInformation <SbjtpbKeyInf> contains the following **PublicRSAKey2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[0..1]	CodeSet		128
	PublicKeyValue <PbKeyVal>	[1..1]			128
	Modulus <Mdlus>	[1..1]	Binary		128
	Exponent <Expnt>	[1..1]	Binary		128

8.3.2.9.1.3.1 Algorithm <Algo>

Presence: [0..1]

Definition: Asymmetric cryptographic algorithm.

Datatype: "Algorithm7Code" on page 483

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).

8.3.2.9.1.3.2 PublicKeyValue <PblicKeyVal>

Presence: [1..1]

Definition: Public key value.

PublicKeyValue <PblicKeyVal> contains the following **PublicRSAKey1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Modulus <Mdlus>	[1..1]	Binary		128
	Exponent <Expnt>	[1..1]	Binary		128

8.3.2.9.1.3.2.1 Modulus <Mdlus>

Presence: [1..1]

Definition: Modulus of the RSA key.

Datatype: "Max5000Binary" on page 475

8.3.2.9.1.3.2.2 Exponent <Expnt>

Presence: [1..1]

Definition: Public exponent of the RSA key.

Datatype: "Max5000Binary" on page 475

8.3.2.9.1.4 Attribute <Attr>

Presence: [1..*]

Definition: Attribute of the certificate service to be put in the certificate extensions, or to be used for the request.

Attribute <Attr> contains the following **RelativeDistinguishedName2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AttributeType <AttrTp>	[1..1]	CodeSet		129
	AttributeValue <AttrVal>	[1..1]	Text		129

8.3.2.9.1.4.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType2Code" on page 485

CodeName	Name	Definition
EMAL	EmailAddress	Email address of the certificate subject.
CHLG	ChallengePassword	Password by which an entity may request certificate revocation.

8.3.2.9.1.4.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 532

8.3.2.9.2 KeyIdentification <KeyId>

Presence: [0..1]

Definition: Identification of the key.

Datatype: "Max140Text" on page 532

8.3.2.9.3 KeyVersion <KeyVrsn>

Presence: [0..1]

Definition: Version of the key.

Datatype: "Max140Text" on page 532

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 474

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 <ManfctrId>	[1..1]	Text		130
	Model <Mdl>	[1..1]	Text		130
	SerialNumber <SrINb>	[1..1]	Text		130

8.3.2.11.1 ManufacturerIdentifier <Manfctrldr>

Presence: [1..1]

Definition: Identifier of the terminal manufacturer.

Datatype: "Max35Text" on page 534

8.3.2.11.2 Model <Mdl>

Presence: [1..1]

Definition: Identifier of the terminal model.

Datatype: "Max35Text" on page 534

8.3.2.11.3 SerialNumber <Srlnb>

Presence: [1..1]

Definition: Serial number of the terminal manufacturer.

Datatype: "Max35Text" on page 534

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 "[ContentInformationType33](#)" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		443
	AuthenticatedData <AuthntcdData>	[0..1]	±		443
	SignedData <SgndData>	[0..1]	±		444

9 catm.008.001.06 CertificateManagementResponseV06

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 CertificateManagementResponseV06 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]			132
	DownloadTransfer <DwnldTrf>	[1..1]	Indicator		133
	FormatVersion <FrmtVrsn>	[1..1]	Text		133
	ExchangeIdentification <XchgId>	[1..1]	Quantity		133
	CreationDateTime <CreDtTm>	[1..1]	DateTime		133
	InitiatingParty <InitgPty>	[1..1]	±		133
	RecipientParty <RcptPty>	[0..1]	±		134
	Traceability <Tracblt>	[0..*]	±		134
	CertificateManagementResponse <CertMgmtRspn>	[1..1]			135
	POIIdentification <POIID>	[1..1]	±		135
	TMIIdentification <TMId>	[0..1]	±		136
	CertificateService <CertSvc>	[1..1]	CodeSet		136
	Result <Rslt>	[1..1]			137
	Response <Rspn>	[1..1]	CodeSet		137
	ResponseDetail <RspnDtl>	[0..1]	CodeSet		137
	AdditionalResponse <AddtlRspn>	[0..1]	Text		137
	SecurityProfile <SctyPrfl>	[0..1]	Text		137
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		137
	TMSDateTime <TMSDtTm>	[1..1]	DateTime		138
	ClientCertificate <CIntCert>	[0..1]	Binary		138
	ClientCertificatePath <CIntCertPth>	[0..*]	Binary		138
	ServerCertificatePath <SvrCertPth>	[0..*]	Binary		138
	SecurityTrailer <SctyTrlr>	[0..1]	±		138

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		133
	FormatVersion <FrmtVrsn>	[1..1]	Text		133
	ExchangeIdentification <XchgId>	[1..1]	Quantity		133
	CreationDateTime <CreDtTm>	[1..1]	DateTime		133
	InitiatingParty <InitgPty>	[1..1]	±		133
	RecipientParty <RcptPty>	[0..1]	±		134
	Traceability <Tracblt>	[0..*]	±		134

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 529):

- *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 535

9.3.1.3 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Unique identification of an exchange occurrence.

Datatype: ["Number"](#) on page 530

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 528

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

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 405 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RelayIdentification <RlayId>	[1..1]	±		405
	ProtocolName <PrtcolNm>	[0..1]	Text		406
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		406
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		406
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		406

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]	±		135
	TMIIdentification <TMID>	[0..1]	±		136
	CertificateService <CertSvc>	[1..1]	CodeSet		136
	Result <Rslt>	[1..1]			137
	Response <Rspn>	[1..1]	CodeSet		137
	ResponseDetail <RspnDtl>	[0..1]	CodeSet		137
	AdditionalResponse <AddtlRspn>	[0..1]	Text		137
	SecurityProfile <SctyPrfl>	[0..1]	Text		137
	POIChallengeValue <POIChllngVal>	[1..1]	Binary		137
	TMSDateTime <TMSDtTm>	[1..1]	DateTime		138
	ClientCertificate <CIntCert>	[0..1]	Binary		138
	ClientCertificatePath <CIntCertPth>	[0..*]	Binary		138
	ServerCertificatePath <SvrCertPth>	[0..*]	Binary		138

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

9.3.2.3 CertificateService <CertSvc>

Presence: [1..1]

Definition: Requested certificate management service.

Datatype: "[CardPaymentServiceType10Code](#)" on page 492

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		137
	ResponseDetail <RspnDtl>	[0..1]	CodeSet		137
	AdditionalResponse <AddtlRspn>	[0..1]	Text		137

9.3.2.4.1 Response <Rspn>

Presence: [1..1]

Definition: Response of the terminal manager.

Datatype: "Response2Code" on page 515

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 515

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 532

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 534

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 474](#)

9.3.2.7 TMSDateTime <TMSDtTm>

Presence: [1..1]

Definition: Date and Time of the TMS.

Datatype: ["ISODateTime" on page 528](#)

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 474](#)

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 474](#)

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 474](#)

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 ["ContentInformationType33" on page 443](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		443
	AuthenticatedData <AuthntcdData>	[0..1]	±		443
	SignedData <SgndData>	[0..1]	±		444

10 Message Items Types

10.1 MessageComponents

10.1.1 Acquirer

10.1.1.1 Acquirer10

Definition: Acquirer involved in the card payment.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		139
	ParametersVersion <ParamsVrsn>	[0..1]	Text		139

10.1.1.1.1 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 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

10.1.1.1.2 ParametersVersion <ParamsVrsn>

Presence: [0..1]

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

Datatype: "Max256Text" on page 533

10.1.1.2 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		140
	KeyVersion <KeyVrsn>	[1..1]	Text		140
	SequenceNumber <SeqNb>	[0..1]	Quantity		140
	DerivationIdentification <DerivtnId>	[0..1]	Binary		140

10.1.1.2.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: "Max140Text" on page 532

10.1.1.2.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 532

10.1.1.2.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 530

10.1.1.2.4 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 475

10.1.2 Action

10.1.2.1 DeviceRequest6

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]	±		143
	Context <Cntxt>	[0..1]	±		149
	ServiceContent <SvcCntt>	[1..1]	CodeSet		152
	DisplayRequest <DispReq>	[0..1]			152
	DisplayOutput <DispOutpt>	[1..*]	±		152
	InputRequest <InptReq>	[0..1]			153
	DisplayOutput <DispOutpt>	[0..1]	±		154
	InputData <InptData>	[1..1]			155
	DeviceType <DvcTp>	[1..1]	CodeSet		156
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		156
	InputCommand <InptCmd>	[1..1]	CodeSet		157
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		158
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		158
	InputText <InptTxt>	[0..1]	±		158
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		159
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		159
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		159
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		160
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		160
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		160
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		160
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		160
	PrintRequest <PrtReq>	[0..1]			161
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		161
	ResponseMode <RspnMd>	[1..1]	CodeSet		161
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		162
	RequiredSignatureFlag <ReqrdSgntrFlg>	[0..1]	Indicator		162
	OutputContent <OutptCntt>	[1..1]	±		162
	PlayResourceRequest <PlayRsrcReq>	[0..1]			163
	ResponseMode <RspnMd>	[0..1]	CodeSet		164
	ResourceAction <RsrcActn>	[1..1]	CodeSet		164

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SoundVolume <SoundVol>	[0..1]	Rate		164
	DisplayResolution <DispRsln>	[0..1]	Text		164
	Resource <Rsrc>	[0..1]			164
	ResourceType <RsrcTp>	[1..1]	CodeSet		165
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		165
	Language <Lang>	[0..1]	CodeSet	C6	165
	ResourceReference <RsrcRef>	[0..1]	Text		165
	TimingSlot <TmgSlot>	[0..1]	CodeSet		166
	SecureInputRequest <ScrInptReq>	[0..1]			166
	PINRequestType <PINReqTp>	[1..1]	CodeSet		166
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		167
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		167
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		167
	CardholderPIN <CrdhldrPIN>	[0..1]			167
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		167
	PINFormat <PINFrmt>	[1..1]	CodeSet		168
	AdditionalInput <AddtlInpt>	[0..1]	Text		168
	InitialisationCardReaderRequest <InitlstnCardRdrReq>	[0..1]			168
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		169
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		169
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		170
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		170
	DisplayOutput <DispOutpt>	[0..1]	±		170
	CardReaderAPDURequest <CardRdrAPDUReq>	[0..1]			171
	Class <Cls>	[1..1]	Binary		171
	Instruction <Instr>	[1..1]	Binary		171
	Parameter1 <Param1>	[1..1]	Binary		171
	Parameter2 <Param2>	[1..1]	Binary		171
	Data <Data>	[0..1]	Binary		171
	ExpectedLength <XpctdLngh>	[0..1]	Binary		171
	PowerOffCardReaderRequest <PwrOffCardRdrReq>	[0..1]			172

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		172
	DisplayOutput <DispOutpt>	[0..1]	±		172
	TransmissionRequest <TrnsmssnReq>	[0..1]			173
	DestinationAddress <DstnAdr>	[1..1]	±		173
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		174
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		174
	MessageToSend <MsgToSnd>	[1..1]	Binary		174
	InputNotification <InptNtfctn>	[0..1]			174
	ExchangeIdentification <XchgId>	[1..1]	Text		174
	OutputContent <OutptCntt>	[1..1]	±		175
	SupplementaryData <SplmtryData>	[0..*]	±	C5	175

10.1.2.1.1 Environment <Envt>

Presence: [0..1]

Definition: Environment of the transaction.

Environment <Envt> contains the following elements (see "[CardPaymentEnvironment79](#)" on page 292 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Acquirer <Acqrr>	[0..1]	±		298
	ServiceProvider <SvcPrvdr>	[0..1]	±		298
	Merchant <Mrchnt>	[0..1]			298
	Identification <Id>	[0..1]	±		299
	CommonName <CmonNm>	[0..1]	Text		299
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		299
	LocationAndContact <LctnAndCtct>	[0..1]	±		300
	SchemeData <SchmeData>	[0..1]	Text		300
	POI <POI>	[0..1]			300
	Identification <Id>	[1..1]	±		300
	SystemName <SysNm>	[0..1]	Text		301
	GroupIdentification <Grpld>	[0..1]	Text		301
	Capabilities <Cpblties>	[0..1]	±		301
	TimeZone <TmZone>	[0..1]	Text		302
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		302
	Component <Cmpnt>	[0..*]	±		303
	Card <Card>	[0..1]			305
	ProtectedCardData <PrctcdCardData>	[0..1]	±		306
	PrivateCardData <PrvtCardData>	[0..1]	Binary		306
	PlainCardData <PlainCardData>	[0..1]	±		306
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		307
	MaskedPAN <MskdPAN>	[0..1]	Text		307
	IssuerBIN <IssrBIN>	[0..1]	Text		307
	CardCountryCode <CardCtryCd>	[0..1]	Text		307
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		307
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		308
	CardBrand <CardBrnd>	[0..1]	Text		308
	CardProductType <CardPdctTp>	[0..1]	CodeSet		308
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		308
	InternationalCard <IntrnlCard>	[0..1]	Indicator		308

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AllowedProduct <AllwdPdct>	[0..*]	Text		308
	ServiceOption <SvcOptn>	[0..1]	Text		309
	AdditionalCardData <AddtlCardData>	[0..1]	Text		309
	Check <Chck>	[0..1]			309
	BankIdentification <Bkld>	[0..1]	Text		309
	AccountNumber <AcctNb>	[0..1]	Text		309
	CheckNumber <ChckNb>	[0..1]	Text		309
	CheckCardNumber <ChckCardNb>	[0..1]	Text		310
	CheckTrackData2 <ChckTrckData2>	[0..1]			310
	TrackNumber <TrckNb>	[0..1]	Quantity		310
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		310
	TrackValue <TrckVal>	[1..1]	Text		311
	CheckType <ChckTp>	[0..1]	CodeSet		311
	Country <Ctry>	[0..1]	Text		311
	StoredValueAccount <StordValAcct>	[0..*]			311
	AccountType <AcctTp>	[0..1]	CodeSet		312
	IdentificationType <IdTp>	[0..1]	CodeSet		313
	Identification <Id>	[0..1]	Text		313
	Brand <Brnd>	[0..1]	Text		313
	Provider <Prvdr>	[0..1]	Text		313
	OwnerName <OwnrNm>	[0..1]	Text		313
	ExpiryDate <XpryDt>	[0..1]	Text		314
	EntryMode <NtryMd>	[0..1]	CodeSet		314
	Currency <Ccy>	[0..1]	CodeSet	C1	314
	Balance <Bal>	[0..1]	Amount		315
	LoyaltyAccount <LltyAcct>	[0..*]	±		315
	CustomerDevice <CstmrDvc>	[0..1]	±		315
	Wallet <Wlt>	[0..1]	±		315
	PaymentToken <PmtTkn>	[0..1]	±		316
	MerchantToken <MrchntTkn>	[0..1]	±		316
	Cardholder <Crhdldr>	[0..1]			317

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification </d>	[0..1]			321
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		321
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		321
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		322
	DriverIdentification <DrvrId>	[0..1]	Text		322
	CustomerNumber <CstmrNb>	[0..1]	Text		322
	SocialSecurityNumber <ScIScTyNb>	[0..1]	Text		322
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		322
	PassportNumber <PsptNb>	[0..1]	Text		322
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		322
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		322
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		323
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		323
	JobNumber <JobNb>	[0..1]	Text		323
	Department <Dept>	[0..1]	Text		323
	EmailAddress <EmailAdr>	[0..1]	Text		323
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			323
	BirthDate <BirthDt>	[1..1]	Date		323
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		324
	CityOfBirth <CityOfBirth>	[1..1]	Text		324
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	324
	Other <Othr>	[0..*]	±		324
	Name <Nm>	[0..1]	Text		324
	Language <Lang>	[0..1]	CodeSet	C6	324
	BillingAddress <BllgAdr>	[0..1]	±		325
	ShippingAddress <ShppgAdr>	[0..1]	±		325
	TripNumber <TripNb>	[0..1]	Text		326
	Vehicle <Vhcl>	[0..1]	±		326
	Authentication <Authntcn>	[0..*]			327
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		329
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		330

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		331
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		331
	CardholderOnLinePIN <CrhdldrOnLinePIN>	[0..1]			331
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		331
	PINFormat <PINFrmt>	[1..1]	CodeSet		332
	AdditionalInput <AddtlInpt>	[0..1]	Text		332
	CardholderIdentification <Crhdldrld>	[0..1]			332
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		333
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		333
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		333
	DriverIdentification <Drvrld>	[0..1]	Text		334
	CustomerNumber <CstmrNb>	[0..1]	Text		334
	SocialSecurityNumber <ScIscItyNb>	[0..1]	Text		334
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		334
	PassportNumber <PsptNb>	[0..1]	Text		334
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		334
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		334
	EmployerIdentificationNumber <MplyrldNb>	[0..1]	Text		334
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		335
	JobNumber <JobNb>	[0..1]	Text		335
	Department <Dept>	[0..1]	Text		335
	EmailAddress <EmailAdr>	[0..1]	Text		335
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			335
	BirthDate <BirthDt>	[1..1]	Date		335
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		335
	CityOfBirth <CityOfBirth>	[1..1]	Text		336
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	336
	Other <Othr>	[0..*]	±		336
	AddressVerification <AdrVrfctn>	[0..1]			336
	AddressDigits <AdrDgts>	[0..1]	Text		336
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		337

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationType <AuthntcnTp>	[0..1]	Text		337
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		337
	AuthenticationResult <AuthntcnRsIt>	[0..1]	CodeSet		337
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			337
	Identification <Id>	[1..1]	Text		338
	Value <Val>	[0..1]	Binary		338
	ProtectedValue <PrctcdVal>	[0..1]	±		338
	Type <Tp>	[0..1]	Text		338
	TransactionVerificationResult <TxVrfctnRsIt>	[0..*]			338
	Method <Mtd>	[1..1]	CodeSet		339
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		340
	Result <RsIt>	[0..1]	CodeSet		340
	AdditionalResult <AddtlRsIt>	[0..1]	Text		340
	PersonalData <PrsnlData>	[0..1]	Text		341
	MobileData <MobData>	[0..*]			341
	MobileCountryCode <MobCtryCd>	[0..1]	Text		341
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		341
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		342
	Geolocation <Glctn>	[0..1]			342
	GeographicCoordinates <GeogcCordints>	[0..1]			342
	Latitude <Lat>	[1..1]	Text		342
	Longitude <Long>	[1..1]	Text		342
	UTMCoordinates <UTMCordints>	[0..1]			343
	UTMZone <UTMZone>	[1..1]	Text		343
	UTMEastward <UTMEstwr>	[1..1]	Text		343
	UTMNorthward <UTMNrthwr>	[1..1]	Text		343
	SensitiveMobileData <SnstvMobData>	[0..1]			343
	MSISDN <MSISDN>	[1..1]	Text		344
	IMSI <IMSI>	[0..1]	Text		344
	IMEI <IMEI>	[0..1]	Text		344
	ProtectedMobileData <PrctcdMobData>	[0..1]	±		344

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProtectedCardholderData <PrtctdCrhdldrData>	[0..1]	±		344
	SaleEnvironment <SaleEnv>	[0..1]			345
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		345
	Currency <Ccy>	[0..1]	CodeSet	C1	346
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		346
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		346
	MinimumSplitAmount <MinSpltAmt>	[0..1]	Amount		347
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		347
	LoyaltyHandling <LltyHdlg>	[0..1]	CodeSet		347

10.1.2.1.2 Context <Cntxt>

Presence: [0..1]

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

Context <Cntxt> contains the following elements (see "CardPaymentContext30" on page 347 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentContext <PmtCntxt>	[0..1]			350
	CardPresent <CardPres>	[0..1]	Indicator		350
	CardholderPresent <CrdrhldrPres>	[0..1]	Indicator		350
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		351
	AttendanceContext <AttdnctCntxt>	[0..1]	CodeSet		351
	TransactionEnvironment <TxEnvnt>	[0..1]	CodeSet		351
	TransactionChannel <TxChanl>	[0..1]	CodeSet		351
	BusinessArea <BizArea>	[0..1]	CodeSet		352
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		352
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C6	352
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		353
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		353
	SupportedOption <SpprtdOptn>	[0..*]	CodeSet		354
	SaleContext <SaleCntxt>	[0..1]			354
	SaleIdentification <SaleId>	[0..1]	Text		355
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		355
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		356
	CashierIdentification <CshrId>	[0..1]	Text		356
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C6	356
	ShiftNumber <ShftNb>	[0..1]	Text		356
	CustomerOrderRequestFlag <CstmrOrdRReqFlg>	[0..1]	Indicator		356
	PurchaseOrderNumber <PurchsOrdRNb>	[0..1]	Text		356
	InvoiceNumber <InvNb>	[0..1]	Text		356
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		357
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			357
	CommonName <CmonNm>	[1..1]	Text		357
	Address <Adr>	[0..1]	Text		357
	CountryCode <CtryCd>	[1..1]	CodeSet		357
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		357
	RegisteredIdentifier <RegdIdr>	[1..1]	Text		357

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SplitPayment <SpltPmt>	[0..1]	Indicator		358
	RemainingAmount <RmngAmt>	[0..1]	Amount		358
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		358
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		358
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		358
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		359
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		359
	DirectDebitContext <DrctDbtCntxt>	[0..1]			359
	DebtorIdentification <DbtrId>	[0..1]			360
	Debtor <Dbtr>	[0..1]			361
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	361
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		362
Or}	NameAndAddress <NmAndAdr>	[1..1]			362
	Name <Nm>	[1..1]	Text		362
	Address <Adr>	[1..1]	±		362
	AccountIdentification <AcctId>	[0..1]			363
{Or	IBAN <IBAN>	[1..1]	IdentifierSet	C4	363
Or	BBAN <BBAN>	[1..1]	IdentifierSet		363
Or	UPIC <UPIC>	[1..1]	IdentifierSet		364
Or}	DomesticAccount <DmstAcct>	[1..1]			364
	Identification <Id>	[1..1]	Text		364
	CreditorIdentification <CdtrId>	[1..1]			364
	Creditor <Cdtr>	[1..1]			365
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	365
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		365
Or}	NameAndAddress <NmAndAdr>	[1..1]			365
	Name <Nm>	[1..1]	Text		366
	Address <Adr>	[1..1]	±		366
	RegistrationIdentification <RegnId>	[0..1]	Text		366
	MandateRelatedInformation <MndtRltdInf>	[1..1]			366
	MandateIdentification <MndtId>	[1..1]	Text		367

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DateOfSignature <DtOfSgntr>	[0..1]	Date		367
	MandateImage <MndtImg>	[0..1]	Binary		367

10.1.2.1.3 ServiceContent <SvcCntt>

Presence: [1..1]

Definition: Define the type of service requested.

Datatype: "RetailerService8Code" on page 518

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.

10.1.2.1.4 DisplayRequest <DispReq>

Presence: [0..1]

Definition: Content of the Display Request message.

DisplayRequest <DispReq> contains the following **DeviceDisplayRequest5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DisplayOutput <DispOutpt>	[1..*]	±		152

10.1.2.1.4.1 DisplayOutput <DispOutpt>

Presence: [1..*]

Definition: Message to be displayed.

DisplayOutput <DispOutput> contains the following elements (see "ActionMessage10" on page 367 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		367
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		368
	Format <Frmt>	[0..1]	CodeSet		369
	MessageContent <MsgCntt>	[0..1]	Text		369
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		369
	OutputBarcode <OutptBrcd>	[0..1]			369
	BarcodeType <BrcdTp>	[1..1]	CodeSet		370
	BarcodeValue <BrcdVal>	[0..1]	Text		370
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		370
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		371
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		371
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		371
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		371
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		371

10.1.2.1.5 InputRequest <InptReq>

Presence: [0..1]

Definition: Content of the Input Request message.

InputRequest <InptReq> contains the following **DeviceInputRequest5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DisplayOutput <DispOutpt>	[0..1]	±		154
	InputData <InptData>	[1..1]			155
	DeviceType <DvcTp>	[1..1]	CodeSet		156
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		156
	InputCommand <InptCmd>	[1..1]	CodeSet		157
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		158
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		158
	InputText <InptTxt>	[0..1]	±		158
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		159
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		159
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		159
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		160
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		160
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		160
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		160
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		160

10.1.2.1.5.1 DisplayOutput <DispOutpt>

Presence: [0..1]

Definition: Information to display before input.

DisplayOutput <DispOutput> contains the following elements (see "ActionMessage10" on page 367 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		367
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		368
	Format <Frmt>	[0..1]	CodeSet		369
	MessageContent <MsgCntt>	[0..1]	Text		369
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		369
	OutputBarcode <OutptBrcd>	[0..1]			369
	BarcodeType <BrcdTp>	[1..1]	CodeSet		370
	BarcodeValue <BrcdVal>	[0..1]	Text		370
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		370
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		371
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		371
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		371
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		371
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		371

10.1.2.1.5.2 InputData <InptData>

Presence: [1..1]

Definition: Information related to an Input request.

InputData <InptData> contains the following **InputData5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		156
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		156
	InputCommand <InptCmd>	[1..1]	CodeSet		157
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		158
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		158
	InputText <InptTxt>	[0..1]	±		158
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		159
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		159
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		159
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		160
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		160
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		160
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		160
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		160

10.1.2.1.5.2.1 DeviceType <DvcTp>

Presence: [1..1]

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

Datatype: "SaleCapabilities2Code" on page 520

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).

10.1.2.1.5.2.2 InformationQualifier <InfQlfr>

Presence: [1..1]

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

Datatype: "InformationQualify1Code" on page 499

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	The 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	The 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.

10.1.2.1.5.2.3 InputCommand <InptCmd>

Presence: [1..1]

Definition: Type of requested input.

Datatype: "InputCommand1Code" on page 500

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.

10.1.2.1.5.2.4 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 529](#)):

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

10.1.2.1.5.2.5 MaximumInputTime <MaxInptTm>

Presence: [0..1]

Definition: Maximum input time in seconds.

Datatype: ["Number" on page 530](#)

10.1.2.1.5.2.6 InputText <InptTxt>

Presence: [0..1]

Definition: Text value set for an input command.

InputText <InptTxt> contains the following elements (see ["ActionMessage10"](#) on page 367 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		367
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		368
	Format <Frmt>	[0..1]	CodeSet		369
	MessageContent <MsgCntt>	[0..1]	Text		369
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		369
	OutputBarcode <OutptBrcd>	[0..1]			369
	BarcodeType <BrcdTp>	[1..1]	CodeSet		370
	BarcodeValue <BrcdVal>	[0..1]	Text		370
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		370
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		371
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		371
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		371
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		371
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		371

10.1.2.1.5.2.7 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 529):

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

10.1.2.1.5.2.8 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 529):

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

10.1.2.1.5.2.9 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 529):

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

10.1.2.1.5.2.10 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 529](#)):

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

10.1.2.1.5.2.11 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 529](#)):

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

10.1.2.1.5.2.12 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 529](#)):

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

10.1.2.1.5.2.13 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 529](#)):

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

10.1.2.1.5.2.14 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 529](#)):

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

10.1.2.1.6 PrintRequest <PrtReq>

Presence: [0..1]

Definition: Content of the Print Request message.

PrintRequest <PrtReq> contains the following **DevicePrintRequest5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		161
	ResponseMode <RspnMd>	[1..1]	CodeSet		161
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		162
	RequiredSignatureFlag <ReqrdSgntFlg>	[0..1]	Indicator		162
	OutputContent <OutptCntt>	[1..1]	±		162

10.1.2.1.6.1 DocumentQualifier <DocQlfr>

Presence: [1..1]

Definition: Qualifies the type of document.

Datatype: "DocumentType7Code" on page 497

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.

10.1.2.1.6.2 ResponseMode <RspnMd>

Presence: [1..1]

Definition: Type of awaited response (none, immediate, after printing, after sound).

Datatype: "ResponseMode2Code" on page 515

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.

10.1.2.1.6.3 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 529):

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

10.1.2.1.6.4 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 529):

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

10.1.2.1.6.5 OutputContent <OutptCntt>

Presence: [1..1]

Definition: Content of the message to print.

OutputContent <OutptCntt> contains the following elements (see "ActionMessage10" on page 367 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		367
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		368
	Format <Frmt>	[0..1]	CodeSet		369
	MessageContent <MsgCntt>	[0..1]	Text		369
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		369
	OutputBarcode <OutptBrcd>	[0..1]			369
	BarcodeType <BrcdTp>	[1..1]	CodeSet		370
	BarcodeValue <BrcdVal>	[0..1]	Text		370
	QRCodeBinaryValue <QRcdBinryVal>	[0..1]	Binary		370
	QRCodeVersion <QRcdVrsn>	[0..1]	Text		371
	QRCodeEncodingMode <QRcdNcodgMd>	[0..1]	CodeSet		371
	QRCodeErrorCorrection <QRcdErrCrrctn>	[0..1]	CodeSet		371
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		371
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		371

10.1.2.1.7 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		164
	ResourceAction <RsrcActn>	[1..1]	CodeSet		164
	SoundVolume <SoundVol>	[0..1]	Rate		164
	DisplayResolution <DispRsln>	[0..1]	Text		164
	Resource <Rsrc>	[0..1]			164
	ResourceType <RsrcTp>	[1..1]	CodeSet		165
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		165
	Language <Lang>	[0..1]	CodeSet	C6	165
	ResourceReference <RsrcRef>	[0..1]	Text		165
	TimingSlot <TmgSlot>	[0..1]	CodeSet		166

10.1.2.1.7.1 ResponseMode <RspnMd>

Presence: [0..1]

Definition: Message response awaited by the initiator of the Request.

Datatype: "ResponseMode2Code" on page 515

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.

10.1.2.1.7.2 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 514

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.

10.1.2.1.7.3 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 530

10.1.2.1.7.4 DisplayResolution <DispRsln>

Presence: [0..1]

Definition: Resolution to use.

Datatype: "Max35Text" on page 534

10.1.2.1.7.5 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		165
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		165
	Language <Lang>	[0..1]	CodeSet	C6	165
	ResourceReference <RsrcRef>	[0..1]	Text		165

10.1.2.1.7.5.1 ResourceType <RsrcTp>

Presence: [1..1]

Definition: Type of media resource.

Datatype: "ResourceType1Code" on page 514

CodeName	Name	Definition
TEXT	TextToSpeech	Voice synthesis.
URLI	UniformResourceIdentifier	String of characters that unambiguously identifies a particular resource.

10.1.2.1.7.5.2 ResourceFormat <RsrcFrmt>

Presence: [0..1]

Definition: Format of the media resource;

Datatype: "SoundFormat1Code" on page 521

CodeName	Name	Definition
MSGR	MessageRef	Reference of a preloaded text to play.
SNDP	SoundRef	Preloaded sound File.
TEXT	Text	Text to play.

10.1.2.1.7.5.3 Language <Lang>

Presence: [0..1]

Definition: Language of the media resource.

Impacted by: C6 "ValidationByTable"

Datatype: "LanguageCode" on page 502

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.2.1.7.5.4 ResourceReference <RsrcRef>

Presence: [0..1]

Definition: Reference of a media resource.

Datatype: "Max1025Text" on page 531

10.1.2.1.7.6 TimingSlot <TmgSlot>

Presence: [0..1]

Definition: Identification of the moment to manage the media resource.

Datatype: "ProcessingPosition2Code" on page 512

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.

10.1.2.1.8 SecureInputRequest <ScrInptReq>

Presence: [0..1]

Definition: Request a secure input for a PIN.

SecureInputRequest <ScrInptReq> contains the following **DeviceSecureInputRequest5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PINRequestType <PINReqTp>	[1..1]	CodeSet		166
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		167
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		167
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		167
	CardholderPIN <CrdhldrPIN>	[0..1]			167
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		167
	PINFormat <PINFrmt>	[1..1]	CodeSet		168
	AdditionalInput <AddtlInpt>	[0..1]	Text		168

10.1.2.1.8.1 PINRequestType <PINReqTp>

Presence: [1..1]

Definition: Type of PIN Service.

Datatype: "PINRequestType1Code" on page 510

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.

10.1.2.1.8.2 PINVerificationMethod <PINVrfctnMtd>

Presence: [0..1]

Definition: Identify the PIN verification method and keys.

Datatype: "Max35Text" on page 534

10.1.2.1.8.3 MaximumWaitingTime <MaxWtgTm>

Presence: [0..1]

Definition: Maximum time to wait for the request processing in seconds.

Datatype: "Number" on page 530

10.1.2.1.8.4 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 529):

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

10.1.2.1.8.5 CardholderPIN <CrdhldrPIN>

Presence: [0..1]

Definition: Enciphered PIN and related information.

CardholderPIN <CrdhldrPIN> contains the following **OnLinePIN10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		167
	PINFormat <PINFrmt>	[1..1]	CodeSet		168
	AdditionalInput <AddtlInpt>	[0..1]	Text		168

10.1.2.1.8.5.1 EncryptedPINBlock <NcrptdPINBlck>

Presence: [1..1]

Definition: Encrypted PIN (Personal Identification Number).

EncryptedPINBlock <NcrptdPINBlck> contains the following elements (see
"ContentInformationType35" on page 436 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		436
	EnvelopedData <EnvlpdData>	[1..1]	±		437

10.1.2.1.8.5.2 PINFormat <PINFrmt>

Presence: [1..1]

Definition: PIN (Personal Identification Number) format before encryption.

Datatype: "PINFormat3Code" on page 509

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.

10.1.2.1.8.5.3 AdditionalInput <AddtlInpt>

Presence: [0..1]

Definition: Additional information required to verify the PIN (Personal Identification Number).

Datatype: "Max35Text" on page 534

10.1.2.1.9 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
DeviceInitialisationCardReaderRequest5 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		169
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		169
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		170
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		170
	DisplayOutput <DispOutpt>	[0..1]	±		170

10.1.2.1.9.1 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 529):

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

10.1.2.1.9.2 ForceEntryMode <ForceNtryMd>

Presence: [0..*]

Definition: Payment instrument entry mode requested by the Sale System.

Datatype: ["CardDataReading8Code"](#) on page 490

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.)

10.1.2.1.9.3 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 529](#)):

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

10.1.2.1.9.4 MaximumWaitingTime <MaxWtgTm>

Presence: [0..1]

Definition: Maximum time in seconds that the POI has to wait for a card response.

Datatype: ["Number" on page 530](#)

10.1.2.1.9.5 DisplayOutput <DispOutpt>

Presence: [0..1]

Definition: Information to display.

DisplayOutput <DispOutpt> contains the following elements (see ["ActionMessage10" on page 367](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstrn>	[1..1]	CodeSet		367
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		368
	Format <Frmt>	[0..1]	CodeSet		369
	MessageContent <MsgCntt>	[0..1]	Text		369
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		369
	OutputBarcode <OutptBrnd>	[0..1]			369
	BarcodeType <BrndTp>	[1..1]	CodeSet		370
	BarcodeValue <BrndVal>	[0..1]	Text		370
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		370
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		371
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		371
	QRCodeErrorCorrection <QRCDErrCrctn>	[0..1]	CodeSet		371
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		371
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		371

10.1.2.1.10 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		171
	Instruction <Instr>	[1..1]	Binary		171
	Parameter1 <Param1>	[1..1]	Binary		171
	Parameter2 <Param2>	[1..1]	Binary		171
	Data <Data>	[0..1]	Binary		171
	ExpectedLength <XpctdLngh>	[0..1]	Binary		171

10.1.2.1.10.1 Class <Class>

Presence: [1..1]

Definition: Class field of the Application Protocol Data Unit command (CLA).

Datatype: "Min1Max256Binary" on page 475

10.1.2.1.10.2 Instruction <Instr>

Presence: [1..1]

Definition: Instruction field of the Application Protocol Data Unit command (INS).

Datatype: "Min1Max256Binary" on page 475

10.1.2.1.10.3 Parameter1 <Param1>

Presence: [1..1]

Definition: Parameter 1 field of the Application Protocol Data Unit command

Datatype: "Min1Max256Binary" on page 475

10.1.2.1.10.4 Parameter2 <Param2>

Presence: [1..1]

Definition: Parameter 2 field of the Application Protocol Data Unit command

Datatype: "Min1Max256Binary" on page 475

10.1.2.1.10.5 Data <Data>

Presence: [0..1]

Definition: Data field of the Application Protocol Data Unit command to send including the length.

Datatype: "Min1Max256Binary" on page 475

10.1.2.1.10.6 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 475

10.1.2.1.11 PowerOffCardReaderRequest <PwrOffCardRdrReq>

Presence: [0..1]

Definition: Content of the Power Off Card Reader Request message.

PowerOffCardReaderRequest <PwrOffCardRdrReq> contains the following **DevicePoweroffCardReaderRequest5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		172
	DisplayOutput <DispOutpt>	[0..1]	±		172

10.1.2.1.11.1 PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>

Presence: [0..1]

Definition: Maximum time to wait for the request processing in seconds.

Datatype: "Number" on page 530

10.1.2.1.11.2 DisplayOutput <DispOutpt>

Presence: [0..1]

Definition: Optional message before Power-Off.

DisplayOutput <DispOutput> contains the following elements (see "ActionMessage10" on page 367 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		367
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		368
	Format <Frmt>	[0..1]	CodeSet		369
	MessageContent <MsgCntt>	[0..1]	Text		369
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		369
	OutputBarcode <OutptBrcd>	[0..1]			369
	BarcodeType <BrCdTp>	[1..1]	CodeSet		370
	BarcodeValue <BrCdVal>	[0..1]	Text		370
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		370
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		371
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		371
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		371
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		371
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		371

10.1.2.1.12 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]	±		173
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		174
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		174
	MessageToSend <MsgToSnd>	[1..1]	Binary		174

10.1.2.1.12.1 DestinationAddress <DstnAdr>

Presence: [1..1]

Definition: Transport address.

DestinationAddress <DstnAdr> contains the following elements (see "NetworkParameters7" on page 408 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		409
	ClientCertificate <CIntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

10.1.2.1.12.2 MaximumTransmissionTime <MaxTrnsmssnTm>

Presence: [1..1]

Definition: Maximum time in seconds of transmission.

Datatype: "Number" on page 530

10.1.2.1.12.3 MaximumWaitingTime <MaxWtgTm>

Presence: [0..1]

Definition: Defines the timeout to receive an answer.

Datatype: "Number" on page 530

10.1.2.1.12.4 MessageToSend <MsgToSnd>

Presence: [1..1]

Definition: Content of the message to be transmitted.

Datatype: "Max100KBinary" on page 473

10.1.2.1.13 InputNotification <InptNtfctn>

Presence: [0..1]

Definition: Content of the Input notification message.

InputNotification <InptNtfctn> contains the following **DeviceInputNotification5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ExchangeIdentification <XchgId>	[1..1]	Text		174
	OutputContent <OutptCntt>	[1..1]	±		175

10.1.2.1.13.1 ExchangeIdentification <XchgId>

Presence: [1..1]

Definition: Message main identifier.

Datatype: "Max35Text" on page 534

10.1.2.1.13.2 OutputContent <OutptCntt>

Presence: [1..1]

Definition: Updated content of the message to display before input.

OutputContent <OutptCntt> contains the following elements (see "ActionMessage10" on page 367 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		367
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		368
	Format <Frmt>	[0..1]	CodeSet		369
	MessageContent <MsgCntt>	[0..1]	Text		369
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		369
	OutputBarcode <OutptBrcd>	[0..1]			369
	BarcodeType <BrcdTp>	[1..1]	CodeSet		370
	BarcodeValue <BrcdVal>	[0..1]	Text		370
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		370
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		371
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		371
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		371
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		371
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		371

10.1.2.1.14 SupplementaryData <SplmtryData>

Presence: [0..*]

Definition: Additional information incorporated as an extension to the message.

Impacted by: C5 "SupplementaryDataRule"

SupplementaryData <SplmtryData> contains the following elements (see "SupplementaryData1" on page 242 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PlaceAndName <PlcAndNm>	[0..1]	Text		242
	Envelope <Envlp>	[1..1]	(External Schema)		242

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.

10.1.3 Address

10.1.3.1 CommunicationAddress9

Definition: Communication information.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PostalAddress <PstlAdr>	[0..1]	±		176
	Email <Email>	[0..1]	Text		176
	URLAddress <URLAdr>	[0..1]	Text		177
	Phone <Phne>	[0..1]	Text		177
	CustomerService <CstmrSvc>	[0..1]	Text		177
	AdditionalContactInformation <AddtlCtctInf>	[0..1]	Text		177

10.1.3.1.1 PostalAddress <PstlAdr>

Presence: [0..1]

Definition: Postal address of the entity.

PostalAddress <PstlAdr> contains the following elements (see "[PostalAddress22](#)" on page 410 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		410
	Department <Dept>	[0..1]	Text		411
	SubDepartment <SubDept>	[0..1]	Text		411
	AddressLine <AdrLine>	[0..2]	Text		411
	StreetName <StrtNm>	[0..1]	Text		411
	BuildingNumber <BldgNb>	[0..1]	Text		411
	PostCode <PstCd>	[0..1]	Text		411
	TownName <TwnNm>	[0..1]	Text		411
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		412
	CountryCode <CtryCd>	[0..1]	Text		412

10.1.3.1.2 Email <Email>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 533

10.1.3.1.3 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 533

10.1.3.1.4 Phone <Phne>

Presence: [0..1]

Definition: Collection of information that identifies a phone number, as defined by telecom services.

Datatype: "PhoneNumber" on page 537

10.1.3.1.5 CustomerService <CstmrSvc>

Presence: [0..1]

Definition: Phone number of the customer service.

Datatype: "PhoneNumber" on page 537

10.1.3.1.6 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 533

10.1.4 Card

10.1.4.1 PlainCardData15

Definition: Sensible data associated with the payment card performing the transaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PAN <PAN>	[1..1]	Text		178
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		178
	EffectiveDate <FctvDt>	[0..1]	Text		178
	ExpiryDate <XpryDt>	[1..1]	Text		178
	ServiceCode <SvcCd>	[0..1]	Text		178
	Track1 <Trck1>	[0..1]	Text		178
	Track2 <Trck2>	[0..1]	Text		178
	Track3 <Trck3>	[0..1]	Text		178
	CardholderName <CrdhldrNm>	[0..1]	Text		179

10.1.4.1.1 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 537

10.1.4.1.2 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 536

10.1.4.1.3 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 531

10.1.4.1.4 ExpiryDate <XpryDt>

Presence: [1..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 531

10.1.4.1.5 ServiceCode <SvcCd>

Presence: [0..1]

Definition: Services attached to the card, as defined in ISO 7813.

Datatype: "Exact3NumericText" on page 531

10.1.4.1.6 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 535

10.1.4.1.7 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 534

10.1.4.1.8 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 531

10.1.4.1.9 CardholderName <CrhdldrNm>

Presence: [0..1]

Definition: Name of the cardholder stored on the card.

Datatype: "Max45Text" on page 534

10.1.5 Configuration

10.1.5.1 HostCommunicationParameter6

Definition: Configuration parameters to communicate with a host.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		179
	HostIdentification <Hstld>	[1..1]	Text		180
	Address <Adr>	[0..1]	±		180
	Key <Key>	[0..*]			180
	KeyIdentification <Keyld>	[1..1]	Text		181
	KeyVersion <KeyVrsn>	[1..1]	Text		181
	SequenceNumber <SeqNb>	[0..1]	Quantity		181
	DerivationIdentification <Derivtnld>	[0..1]	Binary		181
	Type <Tp>	[0..1]	CodeSet		181
	Function <Fctn>	[0..*]	CodeSet		182
	NetworkServiceProvider <NtwkSvcPrvdr>	[0..1]	±		183
	PhysicalInterface <PhysIntrfc>	[0..1]			183
	InterfaceName <IntrfcNm>	[1..1]	Text		184
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		184
	UserName <UsrNm>	[0..1]	Text		184
	AccessCode <AccsCd>	[0..1]	Binary		184
	SecurityProfile <SctyPrfl>	[0..1]	Text		185
	AdditionalParameters <AddtlParams>	[0..1]	Binary		185

10.1.5.1.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 522

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.

10.1.5.1.2 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of the host.

Datatype: "Max35Text" on page 534

10.1.5.1.3 Address <Adr>

Presence: [0..1]

Definition: Network parameters of the host.

Address <Adr> contains the following elements (see "NetworkParameters7" on page 408 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		409
	ClientCertificate <CIntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

10.1.5.1.4 Key <Key>

Presence: [0..*]

Definition: Cryptographic key used to communicate with the host.

Key <Key> contains the following **KEKIdentifier5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		181
	KeyVersion <KeyVrsn>	[1..1]	Text		181
	SequenceNumber <SeqNb>	[0..1]	Quantity		181
	DerivationIdentification <DerivtnId>	[0..1]	Binary		181
	Type <Tp>	[0..1]	CodeSet		181
	Function <Fctr>	[0..*]	CodeSet		182

10.1.5.1.4.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: "Max140Text" on page 532

10.1.5.1.4.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 532

10.1.5.1.4.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 530

10.1.5.1.4.4 DerivationIdentification <DerivtnId>

Presence: [0..1]

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

Datatype: "Min5Max16Binary" on page 476

10.1.5.1.4.5 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType3Code" on page 494

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).

CodeName	Name	Definition
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).

10.1.5.1.4.6 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 501

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).

CodeName	Name	Definition
KEYG	KeyGeneration	Key may generate keys.
KEYI	KeyImport	Key may import keys.
KEYX	KeyExport	Key may export keys.
KEYD	KeyDerivation	Key may derive keys.

10.1.5.1.5 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 408 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		409
	ClientCertificate <ClntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

10.1.5.1.6 PhysicalInterface <PhysIntrfc>

Presence: [0..1]

Definition: Physical Interface where the host is connected.

PhysicalInterface <PhysIntrfc> contains the following **PhysicalInterfaceParameter1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InterfaceName <IntrfcNm>	[1..1]	Text		184
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		184
	UserName <UsrNm>	[0..1]	Text		184
	AccessCode <AccsCd>	[0..1]	Binary		184
	SecurityProfile <SctyPrfl>	[0..1]	Text		185
	AdditionalParameters <AddtlParams>	[0..1]	Binary		185

10.1.5.1.6.1 InterfaceName <IntrfcNm>

Presence: [1..1]

Definition: Identification of the interface.

Datatype: "Max35Text" on page 534

10.1.5.1.6.2 InterfaceType <IntrfcTp>

Presence: [0..1]

Definition: Identification of the physical link layer.

Datatype: "POICommunicationType2Code" on page 510

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.

10.1.5.1.6.3 UserName <UsrNm>

Presence: [0..1]

Definition: Optional user name to provide to use this interface.

Datatype: "Max35Text" on page 534

10.1.5.1.6.4 AccessCode <AccsCd>

Presence: [0..1]

Definition: Optional access code to provide to use this interface.

Datatype: "Max35Binary" on page 475

10.1.5.1.6.5 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the optional security profile to use with this interface.

Datatype: "Max35Text" on page 534

10.1.5.1.6.6 AdditionalParameters <AddtlParams>

Presence: [0..1]

Definition: Any other parameters relevant for this interface.

Datatype: "Max2KBinary" on page 474

10.1.5.2 TerminalPackageType4

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..*]			185
	ItemNumber <ItmNb>	[0..1]	Text		186
	ProviderIdentification <PrvdrlId>	[0..1]	Text		186
	Identification <Id>	[0..1]	Text		186
	SerialNumber <SrlNb>	[0..1]	Text		186
	Package <Packg>	[1..*]			186
	PackageIdentification <PackgId>	[0..1]	±		187
	PackageLength <PackgLngh>	[0..1]	Quantity		187
	OffsetStart <OffsetStart>	[0..1]	Quantity		187
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		187
	PackageBlock <PackgBlck>	[0..*]			188
	Identification <Id>	[1..1]	Text		188
	Value <Val>	[0..1]	Binary		188
	ProtectedValue <PrctcdVal>	[0..1]	±		188
	Type <Tp>	[0..1]	Text		189

10.1.5.2.1 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		186
	ProviderIdentification <PrvdrId>	[0..1]	Text		186
	Identification <Id>	[0..1]	Text		186
	SerialNumber <SrINb>	[0..1]	Text		186

10.1.5.2.1.1 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 534

10.1.5.2.1.2 ProviderIdentification <PrvdrId>

Presence: [0..1]

Definition: Identifies the provider of the software, hardware or parameters of the POI component.

Datatype: "Max35Text" on page 534

10.1.5.2.1.3 Identification <Id>

Presence: [0..1]

Definition: Identification of the POI component assigned by its provider.

Datatype: "Max256Text" on page 533

10.1.5.2.1.4 SerialNumber <SrINb>

Presence: [0..1]

Definition: Serial number identifying an occurrence of an hardware component.

Datatype: "Max256Text" on page 533

10.1.5.2.2 Package <Packg>

Presence: [1..*]

Definition: Chunk of a software package.

Package <Packg> contains the following **PackageType4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PackageIdentification <PackgId>	[0..1]	±		187
	PackageLength <PackgLngh>	[0..1]	Quantity		187
	OffsetStart <OffsetStart>	[0..1]	Quantity		187
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		187
	PackageBlock <PackgBlck>	[0..*]			188
	Identification <Id>	[1..1]	Text		188
	Value <Val>	[0..1]	Binary		188
	ProtectedValue <PrtctdVal>	[0..1]	±		188
	Type <Tp>	[0..1]	Text		189

10.1.5.2.2.1 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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

10.1.5.2.2.2 PackageLength <PackgLngh>

Presence: [0..1]

Definition: Full length of software package identified through PackageIdentification.

Datatype: "[PositiveNumber](#)" on page 530

10.1.5.2.2.3 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 530

10.1.5.2.2.4 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 530

10.1.5.2.2.5 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 **ExternallyDefinedData4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		188
	Value <Val>	[0..1]	Binary		188
	ProtectedValue <PrctcdVal>	[0..1]	±		188
	Type <Tp>	[0..1]	Text		189

10.1.5.2.2.5.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the set of data to exchange.

Datatype: "Max1025Text" on page 531

10.1.5.2.2.5.2 Value <Val>

Presence: [0..1]

Definition: Data to exchange according to an external standard.

Datatype: "Max100KBinary" on page 473

10.1.5.2.2.5.3 ProtectedValue <PrctcdVal>

Presence: [0..1]

Definition: Protection of the values to exchange.

ProtectedValue <PrctcdVal> contains the following elements (see "ContentInformationType34" on page 438 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		439
	EnvelopedData <EnvlpdData>	[0..1]	±		439
	AuthenticatedData <AuthntcdData>	[0..1]	±		440
	SignedData <SgndData>	[0..1]	±		441
	DigestedData <DgstdData>	[0..1]	±		442

10.1.5.2.2.5.4 Type <Tp>

Presence: [0..1]

Definition: Identification of the standard used to encode the values to exchange.

Datatype: "Max1025Text" on page 531

10.1.5.3 SaleToPOIProtocolParameter3

Definition: Configuration parameters to communicate with a sale system.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		189
	MerchantIdentification <MrchntId>	[0..1]			190
	CommonName <CmonNm>	[1..1]	Text		190
	Address <Adr>	[0..1]	Text		190
	CountryCode <CtryCd>	[1..1]	CodeSet		190
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		190
	RegisteredIdentifier <RegIdr>	[1..1]	Text		190
	Version <Vrsn>	[1..1]	Text		190
	HostIdentification <HstId>	[1..1]	Text		191
	MerchantPOIIdentification <MrchntPOId>	[0..1]	Text		191
	SaleIdentification <SaleId>	[0..1]	Text		191
	AllowedSaleMessage <AllwdSaleMsg>	[0..*]	CodeSet		191
	AllowedPOIMessage <AllwdPOIMsg>	[0..*]	CodeSet		192
	AllowedPOIService <AllwdPOISvc>	[0..*]	CodeSet		193
	AllowedSaleDevice <AllwdSaleDvc>	[0..*]	CodeSet		194
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		194

10.1.5.3.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 522

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.

10.1.5.3.2 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		190
	Address <Adr>	[0..1]	Text		190
	CountryCode <CtryCd>	[1..1]	CodeSet		190
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		190
	RegisteredIdentifier <Regdldr>	[1..1]	Text		190

10.1.5.3.2.1 CommonName <CmonNm>

Presence: [1..1]

Definition: Name of the merchant.

Datatype: "Max70Text" on page 535

10.1.5.3.2.2 Address <Adr>

Presence: [0..1]

Definition: Location of the merchant.

Datatype: "Max140Text" on page 532

10.1.5.3.2.3 CountryCode <CtryCd>

Presence: [1..1]

Definition: Country of the merchant.

Datatype: "ISO3NumericCountryCode" on page 501

10.1.5.3.2.4 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 536

10.1.5.3.2.5 RegisteredIdentifier <Regdldr>

Presence: [1..1]

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

Datatype: "Max35Text" on page 534

10.1.5.3.3 Version <Vrsn>

Presence: [1..1]

Definition: Version of the parameters.

Datatype: "Max256Text" on page 533

10.1.5.3.4 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification used to retrieve HostCommunicationParameters.

Datatype: "Max35Text" on page 534

10.1.5.3.5 MerchantPOIIdentification <MrchntPOId>

Presence: [0..1]

Definition: Identification of the POI during communication with sale system.

Datatype: "Max35Text" on page 534

10.1.5.3.6 SaleIdentification <SaleId>

Presence: [0..1]

Definition: Identification of the SaleSystem connected to the POI.

Datatype: "Max35Text" on page 534

10.1.5.3.7 AllowedSaleMessage <AllwdSaleMsg>

Presence: [0..*]

Definition: Identify a message that a Sale system could send to the POI system.

Datatype: "RetailerMessage1Code" on page 515

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.

CodeName	Name	Definition
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.

10.1.5.3.8 AllowedPOIMessage <AllwdPOIMsg>

Presence: [0..*]

Definition: Identify a message that a POI system could send to the Sale system.

Datatype: "RetailerMessage1Code" on page 515

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.

CodeName	Name	Definition
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.

10.1.5.3.9 AllowedPOIService <AllwdPOISvc>

Presence: [0..*]

Definition: Identify a service that a POI system could support to the Sale system.

Datatype: "RetailerService2Code" on page 518

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.

10.1.5.3.10 AllowedSaleDevice <AllwdSaleDvc>

Presence: [0..*]

Definition: Identify a device request that a Sale system could ask to the POI system.

Datatype: "RetailerService8Code" on page 518

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.

10.1.5.3.11 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 531

10.1.5.4 SecurityParameters15

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		195
	Version <Vrsn>	[1..1]	Text		195
	POIChallenge <POIChllng>	[0..1]	Binary		195
	TMChallenge <TMChllng>	[0..1]	Binary		195
	SecurityElement <SctyElmt>	[0..*]	±		195

10.1.5.4.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 522

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.

10.1.5.4.2 Version <Vrsn>

Presence: [1..1]

Definition: Version of the security parameters.

Datatype: "Max256Text" on page 533

10.1.5.4.3 POIChallenge <POIChllng>

Presence: [0..1]

Definition: Point of interaction challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 474

10.1.5.4.4 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: "Max140Binary" on page 474

10.1.5.4.5 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 "CryptographicKey17" on page 445 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		446
	AdditionalIdentification <AddtlId>	[0..1]	Binary		446
	Name <Nm>	[0..1]	Text		446
	SecurityProfile <SctyPrfl>	[0..1]	Text		447
	ItemNumber <ItmNb>	[0..1]	Text		447
	Version <Vrsn>	[1..1]	Text		447
	Type <Tp>	[0..1]	CodeSet		447
	Function <Fctn>	[0..*]	CodeSet		448
	ActivationDate <ActvtnDt>	[0..1]	DateTime		448
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		448
	KeyValue <KeyVal>	[0..1]	±		449
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		449
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			449
	Name <Nm>	[1..1]	Text		449
	Value <Val>	[0..1]	Text		449

10.1.5.5 ApplicationParameters12

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		196
	ApplicationIdentification <ApplId>	[1..1]	Text		197
	Version <Vrsn>	[0..1]	Text		197
	ParameterFormatIdentifier <ParamFrmtIdr>	[0..1]	Text		197
	ParametersLength <ParamsLngh>	[0..1]	Quantity		197
	OffsetStart <OffsetStart>	[0..1]	Quantity		197
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		197
	Parameters <Params>	[0..*]	Binary		197
	EncryptedParameters <NcrptdParams>	[0..1]	±		198

10.1.5.5.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 522

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.

10.1.5.5.2 ApplicationIdentification <ApplId>

Presence: [1..1]

Definition: Identification of the payment application.

Datatype: "Max35Text" on page 534

10.1.5.5.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the payment application configuration parameters.

Datatype: "Max256Text" on page 533

10.1.5.5.4 ParameterFormatIdentifier <ParamFrmtIdr>

Presence: [0..1]

Definition: Version of the parameters' format.

Datatype: "Max8Text" on page 536

10.1.5.5.5 ParametersLength <ParamsLngh>

Presence: [0..1]

Definition: Full length of parameters.

Datatype: "PositiveNumber" on page 530

10.1.5.5.6 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of this Block, beginning with 0, in the full parameters.

Datatype: "PositiveNumber" on page 530

10.1.5.5.7 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of this Block in the full parameters.

Datatype: "PositiveNumber" on page 530

10.1.5.5.8 Parameters <Params>

Presence: [0..*]

Definition: Configuration parameters used by the related payment application.

Datatype: "Max100KBinary" on page 473

10.1.5.5.9 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 "ContentInformationType35" on page 436 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		436
	EnvelopedData <EnvlpdData>	[1..1]	±		437

10.1.5.6 ServiceProviderParameters3

Definition: Service provider parameters of the point of interaction (POI).

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		198
	ServiceProviderIdentification <SvcPrvdrId>	[1..*]	±		199
	Version <Vrsn>	[1..1]	Text		199
	ApplicationIdentification <ApplId>	[0..*]	Text		199
	Host <Hst>	[0..*]			199
	HostIdentification <HstId>	[1..1]	Text		199
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		200
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		200
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		200
	NonFinancialActionSupported <NonFinActnSpprtd>	[0..*]	CodeSet		201

10.1.5.6.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 522

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.

CodeName	Name	Definition
UPDT	Update	Request to update the element identified inside the message exchange.

10.1.5.6.2 ServiceProviderIdentification <SvcPrvdrId>

Presence: [1..*]

Definition: Identification of the service provider.

ServiceProviderIdentification <SvcPrvdrId> contains the following elements (see "GenericIdentification176" on page 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

10.1.5.6.3 Version <Vrsn>

Presence: [1..1]

Definition: Version of the service provider parameters.

Datatype: "Max256Text" on page 533

10.1.5.6.4 ApplicationIdentification <ApplId>

Presence: [0..*]

Definition: Identification of payment application relevant for this service provider.

Datatype: "Max35Text" on page 534

10.1.5.6.5 Host <Hst>

Presence: [0..*]

Definition: Service provider host configuration.

Host <Hst> contains the following **AcquirerHostConfiguration9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	HostIdentification <HstId>	[1..1]	Text		199
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		200
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		200
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		200

10.1.5.6.5.1 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of a host.

Datatype: "Max35Text" on page 534

10.1.5.6.5.2 MessageToSend <MsgToSnd>

Presence: [0..*]

Definition: Types of message to sent to this host.

Datatype: "MessageFunction43Code" on page 504

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.

10.1.5.6.5.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Protocol version to use when using these parameters.

Datatype: "Max8Text" on page 536

10.1.5.6.5.4 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 531

10.1.5.6.6 NonFinancialActionSupported <NonFinActnSpprtd>

Presence: [0..*]

Definition: Identification of non financial action supported by the Service Provider.

Datatype: "NonFinancialRequestType2Code" on page 505

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.

10.1.5.7 AcquirerProtocolParameters16

Definition: Acceptor parameters dedicated to the acquirer protocol.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		204
	AcquirerIdentification <Acqrrld>	[1..*]	±		204
	Version <Vrsn>	[1..1]	Text		204
	ApplicationIdentification <Applld>	[0..*]	Text		204
	Host <Hst>	[0..*]			205
	HostIdentification <Hstld>	[1..1]	Text		205
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		205
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		206
	ExternallyTypeSupported <XtrnlyTpSpptd>	[0..*]	Text		206
	OnLineTransaction <OnLineTx>	[0..1]			206
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		207
	BatchTransfer <BtchTrf>	[0..1]			207
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		208
	MaximumNumber <MaxNb>	[0..1]	Quantity		208
	MaximumAmount <MaxAmt>	[0..1]	Amount		209
	ReTry <ReTry>	[0..1]	±		209
	TimeCondition <TmCond>	[0..1]	±		209
	CompletionExchange <CmpltnXchg>	[0..1]			209
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		210
	MaximumNumber <MaxNb>	[0..1]	Quantity		210
	MaximumAmount <MaxAmt>	[0..1]	Amount		211
	ReTry <ReTry>	[0..1]	±		211
	TimeCondition <TmCond>	[0..1]	±		211
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		211
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		211
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		212
	OffLineTransaction <OffLineTx>	[0..1]			212
	FinancialCapture <FinCaptr>	[1..1]	CodeSet		213
	BatchTransfer <BtchTrf>	[0..1]			213
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		214
	MaximumNumber <MaxNb>	[0..1]	Quantity		214

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MaximumAmount <MaxAmt>	[0..1]	Amount		215
	ReTry <ReTry>	[0..1]	±		215
	TimeCondition <TmCond>	[0..1]	±		215
	CompletionExchange <CmpltnXchg>	[0..1]			215
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		216
	MaximumNumber <MaxNb>	[0..1]	Quantity		216
	MaximumAmount <MaxAmt>	[0..1]	Amount		217
	ReTry <ReTry>	[0..1]	±		217
	TimeCondition <TmCond>	[0..1]	±		217
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		217
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		217
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		218
	ReconciliationExchange <RcncltnXchg>	[0..1]			218
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		218
	MaximumNumber <MaxNb>	[0..1]	Quantity		219
	MaximumAmount <MaxAmt>	[0..1]	Amount		219
	ReTry <ReTry>	[0..1]	±		219
	TimeCondition <TmCond>	[0..1]	±		219
	ReconciliationByAcquirer <RcncltnByAcqrr>	[0..1]	Indicator		220
	TotalsPerCurrency <TtlsPerCcy>	[0..1]	Indicator		220
	SplitTotals <SplTtls>	[0..1]	Indicator		220
	SplitTotalCriteria <SplTtlCrit>	[0..*]	CodeSet		220
	CompletionAdviceMandated <CmpltnAdvcmndtd>	[0..1]	Indicator		221
	AmountQualifierForReservation <AmtQlfrForRsvatn>	[0..*]	CodeSet		221
	ReconciliationError <RcncltnErr>	[0..1]	Indicator		221
	CardDataVerification <CardDataVrfctn>	[0..1]	Indicator		222
	NotifyOffLineCancellation <NtfyOffLineCxl>	[0..1]	Indicator		222
	BatchTransferContent <BtchTrfCntt>	[0..*]	CodeSet		222
	FileTransferBatch <FileTrfBtch>	[0..1]	Indicator		222
	BatchDigitalSignature <BtchDgtlSgntr>	[0..1]	Indicator		222
	MessageItem <Msgltn>	[0..*]	±		223

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProtectCardData <PrtctCardData>	[1..1]	Indicator		223
	PrivateCardData <PrvtCardData>	[0..1]	Indicator		223
	MandatorySecurityTrailer <MndtrySctyTrlr>	[0..1]	Indicator		223

10.1.5.7.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 522

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.

10.1.5.7.2 AcquirerIdentification <Acqrrld>

Presence: [1..*]

Definition: Identification of the acquirer using this protocol.

AcquirerIdentification <Acqrrld> contains the following elements (see "GenericIdentification176" on page 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

10.1.5.7.3 Version <Vrsn>

Presence: [1..1]

Definition: Version of the acquirer protocol parameters.

Datatype: "Max256Text" on page 533

10.1.5.7.4 ApplicationIdentification <Applld>

Presence: [0..*]

Definition: Identification of the payment application, user of the acquirer protocol.

Datatype: "Max35Text" on page 534

10.1.5.7.5 Host <Hst>

Presence: [0..*]

Definition: Acquirer host configuration.

Host <Hst> contains the following **AcquirerHostConfiguration9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	HostIdentification <HstId>	[1..1]	Text		205
	MessageToSend <MsgToSnd>	[0..*]	CodeSet		205
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		206
	ExternallyTypeSupported <XtrnlyTpSprrtd>	[0..*]	Text		206

10.1.5.7.5.1 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of a host.

Datatype: "Max35Text" on page 534

10.1.5.7.5.2 MessageToSend <MsgToSnd>

Presence: [0..*]

Definition: Types of message to sent to this host.

Datatype: "MessageFunction43Code" on page 504

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.

10.1.5.7.5.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Protocol version to use when using these parameters.

Datatype: "Max8Text" on page 536

10.1.5.7.5.4 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 531

10.1.5.7.6 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		207
	BatchTransfer <BtchTrf>	[0..1]			207
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		208
	MaximumNumber <MaxNb>	[0..1]	Quantity		208
	MaximumAmount <MaxAmt>	[0..1]	Amount		209
	ReTry <ReTry>	[0..1]	±		209
	TimeCondition <TmCond>	[0..1]	±		209
	CompletionExchange <CmpltnXchg>	[0..1]			209
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		210
	MaximumNumber <MaxNb>	[0..1]	Quantity		210
	MaximumAmount <MaxAmt>	[0..1]	Amount		211
	ReTry <ReTry>	[0..1]	±		211
	TimeCondition <TmCond>	[0..1]	±		211
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		211
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		211
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		212

10.1.5.7.6.1 FinancialCapture <FinCaptr>

Presence: [1..1]

Definition: Mode for the financial capture of the transaction by the acquirer.

Datatype: "FinancialCapture1Code" on page 499

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.

10.1.5.7.6.2 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		208
	MaximumNumber <MaxNb>	[0..1]	Quantity		208
	MaximumAmount <MaxAmt>	[0..1]	Amount		209
	ReTry <ReTry>	[0..1]	±		209
	TimeCondition <TmCond>	[0..1]	±		209

10.1.5.7.6.2.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 498

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.

10.1.5.7.6.2.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 530

10.1.5.7.6.2.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: ["ImpliedCurrencyAndAmount"](#) on page 473

10.1.5.7.6.2.4 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 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		467
	MaximumNumber <MaxNb>	[0..1]	Quantity		467
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		467

10.1.5.7.6.2.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see ["ProcessTiming6"](#) on page 468 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		468
	EndTime <EndTm>	[0..1]	DateTime		468
	Period <Prd>	[0..1]	Text		468
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		468

10.1.5.7.6.3 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		210
	MaximumNumber <MaxNb>	[0..1]	Quantity		210
	MaximumAmount <MaxAmt>	[0..1]	Amount		211
	ReTry <ReTry>	[0..1]	±		211
	TimeCondition <TmCond>	[0..1]	±		211
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		211
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		211

10.1.5.7.6.3.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 498

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.

10.1.5.7.6.3.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 530

10.1.5.7.6.3.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 473

10.1.5.7.6.3.4 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 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		467
	MaximumNumber <MaxNb>	[0..1]	Quantity		467
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		467

10.1.5.7.6.3.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 468 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		468
	EndTime <EndTm>	[0..1]	DateTime		468
	Period <Prd>	[0..1]	Text		468
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		468

10.1.5.7.6.3.6 ExchangeFailed <XchgFaild>

Presence: [0..1]

Definition: Failed transaction must be exchanged.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 529):

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

10.1.5.7.6.3.7 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 529):

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

10.1.5.7.6.4 CancellationExchange <CxlXchg>

Presence: [0..1]

Definition: Configuration of the cancellation exchanges.

Datatype: "CancellationProcess2Code" on page 489

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.

10.1.5.7.7 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		213
	BatchTransfer <BtchTrf>	[0..1]			213
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		214
	MaximumNumber <MaxNb>	[0..1]	Quantity		214
	MaximumAmount <MaxAmt>	[0..1]	Amount		215
	ReTry <ReTry>	[0..1]	±		215
	TimeCondition <TmCond>	[0..1]	±		215
	CompletionExchange <CmpltnXchg>	[0..1]			215
	ExchangePolicy <XchgPlcy>	[1..*]	CodeSet		216
	MaximumNumber <MaxNb>	[0..1]	Quantity		216
	MaximumAmount <MaxAmt>	[0..1]	Amount		217
	ReTry <ReTry>	[0..1]	±		217
	TimeCondition <TmCond>	[0..1]	±		217
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		217
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		217
	CancellationExchange <CxlXchg>	[0..1]	CodeSet		218

10.1.5.7.7.1 FinancialCapture <FinCaptr>

Presence: [1..1]

Definition: Mode for the financial capture of the transaction by the acquirer.

Datatype: "FinancialCapture1Code" on page 499

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.

10.1.5.7.7.2 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		214
	MaximumNumber <MaxNb>	[0..1]	Quantity		214
	MaximumAmount <MaxAmt>	[0..1]	Amount		215
	ReTry <ReTry>	[0..1]	±		215
	TimeCondition <TmCond>	[0..1]	±		215

10.1.5.7.7.2.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 498

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.

10.1.5.7.7.2.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 530

10.1.5.7.7.2.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 473

10.1.5.7.7.2.4 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 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		467
	MaximumNumber <MaxNb>	[0..1]	Quantity		467
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		467

10.1.5.7.7.2.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 468 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		468
	EndTime <EndTm>	[0..1]	DateTime		468
	Period <Prd>	[0..1]	Text		468
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		468

10.1.5.7.7.3 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		216
	MaximumNumber <MaxNb>	[0..1]	Quantity		216
	MaximumAmount <MaxAmt>	[0..1]	Amount		217
	ReTry <ReTry>	[0..1]	±		217
	TimeCondition <TmCond>	[0..1]	±		217
	ExchangeFailed <XchgFaild>	[0..1]	Indicator		217
	ExchangeDeclined <XchgDclnd>	[0..1]	Indicator		217

10.1.5.7.7.3.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 498

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.

10.1.5.7.7.3.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 530

10.1.5.7.7.3.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 473

10.1.5.7.7.3.4 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 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		467
	MaximumNumber <MaxNb>	[0..1]	Quantity		467
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		467

10.1.5.7.7.3.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see "ProcessTiming6" on page 468 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		468
	EndTime <EndTm>	[0..1]	DateTime		468
	Period <Prd>	[0..1]	Text		468
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		468

10.1.5.7.7.3.6 ExchangeFailed <XchgFaild>

Presence: [0..1]

Definition: Failed transaction must be exchanged.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 529):

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

10.1.5.7.7.3.7 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 529):

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

10.1.5.7.4 CancellationExchange <CxlXchg>

Presence: [0..1]

Definition: Configuration of the cancellation exchanges.

Datatype: "CancellationProcess2Code" on page 489

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.

10.1.5.7.8 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		218
	MaximumNumber <MaxNb>	[0..1]	Quantity		219
	MaximumAmount <MaxAmt>	[0..1]	Amount		219
	ReTry <ReTry>	[0..1]	±		219
	TimeCondition <TmCond>	[0..1]	±		219

10.1.5.7.8.1 ExchangePolicy <XchgPlcy>

Presence: [1..*]

Definition: Exchange policy between parties.

Datatype: "ExchangePolicy2Code" on page 498

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.

10.1.5.7.8.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of transactions without exchange.

Datatype: "Number" on page 530

10.1.5.7.8.3 MaximumAmount <MaxAmt>

Presence: [0..1]

Definition: Maximum cumulative amount of the transactions without exchange.

Datatype: "ImpliedCurrencyAndAmount" on page 473

10.1.5.7.8.4 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 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		467
	MaximumNumber <MaxNb>	[0..1]	Quantity		467
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		467

10.1.5.7.8.5 TimeCondition <TmCond>

Presence: [0..1]

Definition: Timing condition for periodic exchanges.

TimeCondition <TmCond> contains the following elements (see ["ProcessTiming6"](#) on page 468 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StartTime <StartTm>	[0..1]	DateTime		468
	EndTime <EndTm>	[0..1]	DateTime		468
	Period <Prd>	[0..1]	Text		468
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		468

10.1.5.7.9 ReconciliationByAcquirer <RcncltnByAcqrr>

Presence: [0..1]

Definition: Indicates the reconciliation period is assigned by the acquirer instead of the acceptor.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 529):

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

10.1.5.7.10 TotalsPerCurrency <TtlsPerCcy>

Presence: [0..1]

Definition: Indicates the reconciliation total amounts are computed per currency.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 529):

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

10.1.5.7.11 SplitTotals <SplTtIs>

Presence: [0..1]

Definition: Indicates that totals in reconciliation or batch must be split.

Datatype: One of the following values must be used (see ["TrueFalseIndicator"](#) on page 529):

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

10.1.5.7.12 SplitTotalCriteria <SplTtlCrit>

Presence: [0..*]

Definition: List of criterion to use when totals in reconciliation or batch must be split.

Datatype: ["ReconciliationCriteria1Code"](#) on page 513

CodeName	Name	Definition
BRND	CardBrand	The set is defined by transactions made with cards belonging to the same brand.

CodeName	Name	Definition
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.

10.1.5.7.13 CompletionAdviceMandated <CmpltnAdvcdMndtd>

Presence: [0..1]

Definition: To notify that the acquirer expect to receive a completion advice after each update of reservation.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 529):

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

10.1.5.7.14 AmountQualifierForReservation <AmtQlfrForRsvatn>

Presence: [0..*]

Definition: Identification of available amount qualifier for a reservation.

Datatype: "TypeOfAmount8Code" on page 526

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.
RESA	Reserved	Reserved or updated reserved amount for reservation.

10.1.5.7.15 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.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 529):

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

10.1.5.7.16 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.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 529](#)):

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

10.1.5.7.17 NotifyOffLineCancellation <NtfyOffLineCxl>

Presence: [0..1]

Definition: Send a cancellation advice for offline transactions not yet captured.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 529](#)):

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

10.1.5.7.18 BatchTransferContent <BtchTrfCntt>

Presence: [0..*]

Definition: Types of transaction to include in the batch.

Datatype: ["BatchTransactionType1Code" on page 488](#)

CodeName	Name	Definition
DTCT	DebitCredit	Debit and credit transactions.
CNCL	Cancellation	Cancellation of a previous transaction.
FAIL	Failed	Failed transactions.
DCLN	Declined	Declined transactions.

10.1.5.7.19 FileTransferBatch <FileTrfBtch>

Presence: [0..1]

Definition: BatchTransfer are exchanged per file transfer protocol rather than per message.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 529](#)):

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

10.1.5.7.20 BatchDigitalSignature <BtchDgtlSgntr>

Presence: [0..1]

Definition: BatchTransfer are authenticated by digital signature rather than a MAC (Message Authentication Code).

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 529](#)):

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

10.1.5.7.21 MessageItem <Msgltn>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <Msgltn> contains the following elements (see "[MessageItemCondition2](#)" on page 273 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		273
	Condition <Cond>	[1..1]	CodeSet		273
	Value <Val>	[0..*]	Text		273

10.1.5.7.22 ProtectCardData <PrtctCardData>

Presence: [1..1]

Definition: Indicator to require protection of sensitive card data in messages.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 529):

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

10.1.5.7.23 PrivateCardData <PrvtCardData>

Presence: [0..1]

Definition: Indicator to require a private protection of sensitive card data in messages.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 529):

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

10.1.5.7.24 MandatorySecurityTrailer <MndtrySctyTrlr>

Presence: [0..1]

Definition: A security trailer is mandatory in the messages.

Datatype: One of the following values must be used (see "[TrueFalseIndicator](#)" on page 529):

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

10.1.5.8 TMSProtocolParameters7

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		224
	TerminalManagerIdentification <TermnlMgrld>	[1..1]	±		224
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		225
	MaintenanceService <MntncSvc>	[1..*]	CodeSet		225
	Version <Vrsn>	[1..1]	Text		226
	ApplicationIdentification <Applld>	[0..*]	Text		226
	HostIdentification <Hstld>	[1..1]	Text		226
	POIIdentification <POIld>	[0..1]	Text		226
	InitiatingPartyIdentification <InitgPtyld>	[0..1]	Text		226
	RecipientPartyIdentification <RcptPtyld>	[0..1]	Text		226
	FileTransfer <FileTrf>	[0..1]	Indicator		226
	MessageItem <Msgltm>	[0..*]	±		226
	ExternallyTypeSupported <XtrnlyTpSpprtd>	[0..*]	Text		227

10.1.5.8.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 522

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.

10.1.5.8.2 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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

10.1.5.8.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Protocol version to use when using these parameters.

Datatype: "Max8Text" on page 536

10.1.5.8.4 MaintenanceService <MntncSvc>

Presence: [1..*]

Definition: Maintenance services provided by the terminal manager.

Datatype: "DataSetCategory10Code" on page 494

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.

10.1.5.8.5 Version <Vrsn>

Presence: [1..1]

Definition: Version of the TMS protocol parameters.

Datatype: "Max256Text" on page 533

10.1.5.8.6 ApplicationIdentification <ApplId>

Presence: [0..*]

Definition: Identification of applications which may be managed by the TM, partially or globally.

Datatype: "Max35Text" on page 534

10.1.5.8.7 HostIdentification <HstId>

Presence: [1..1]

Definition: Identification of the terminal manager host.

Datatype: "Max35Text" on page 534

10.1.5.8.8 POIIdentification <POIId>

Presence: [0..1]

Definition: New identification of the POI for the terminal manager.

Datatype: "Max35Text" on page 534

10.1.5.8.9 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 534

10.1.5.8.10 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 534

10.1.5.8.11 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 529):

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

10.1.5.8.12 MessageItem <Msgltn>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <Msgltm> contains the following elements (see "MessageItemCondition2" on page 273 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <Itmld>	[1..1]	Text		273
	Condition <Cond>	[1..1]	CodeSet		273
	Value <Val>	[0..*]	Text		273

10.1.5.8.13 ExternallyTypeSupported <XtrnlyTpSprrtd>

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 531

10.1.5.9 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		228
	VendorIdentification <Vndrld>	[0..1]	Text		228
	Version <Vrsn>	[0..1]	Text		228
	ParameterFormatIdentifier <ParamFrmtldr>	[0..1]	Text		228
	ClockSynchronisation <ClckSynctn>	[0..1]			228
	POITimeZone <POITmZone>	[1..1]	Text		228
	SynchronisationServer <SynctnSvr>	[0..*]	±		229
	Delay <Dely>	[0..1]	Time		229
	TimeZoneLine <TmZoneLine>	[0..*]	Text		229
	LocalDateTime <LclDtTm>	[0..*]			229
	FromDateTime <FrDtTm>	[0..1]	DateTime		230
	ToDateTime <ToDtTm>	[0..1]	DateTime		230
	UTCOffset <UTCOffset>	[1..1]	Quantity		230
	OtherParametersLength <OthrParamsLngth>	[0..1]	Quantity		230
	OffsetStart <OffsetStart>	[0..1]	Quantity		230
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		230
	OtherParameters <OthrParams>	[0..1]	Binary		230

10.1.5.9.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 522

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.

10.1.5.9.2 VendorIdentification <Vndrld>

Presence: [0..1]

Definition: Identification of the vendor for the MTM, if the POI manages various subsets of terminal parameters.

Datatype: "Max35Text" on page 534

10.1.5.9.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the terminal parameters.

Datatype: "Max256Text" on page 533

10.1.5.9.4 ParameterFormatIdentifier <ParamFrmtldr>

Presence: [0..1]

Definition: Version of the parameters' format.

Datatype: "Max8Text" on page 536

10.1.5.9.5 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		228
	SynchronisationServer <SynctnSvr>	[0..*]	±		229
	Delay <Dely>	[0..1]	Time		229

10.1.5.9.5.1 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 535

10.1.5.9.5.2 SynchronisationServer <SynctnSvr>

Presence: [0..*]

Definition: Parameters to contact a time server.

SynchronisationServer <SynctnSvr> contains the following elements (see "NetworkParameters7" on page 408 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		409
	ClientCertificate <CIntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

10.1.5.9.5.3 Delay <Dely>

Presence: [0..1]

Definition: Delay between two contacts of the server.

Datatype: "ISOTime" on page 537

10.1.5.9.6 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 535

10.1.5.9.7 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		230
	ToDateTime <ToDtTm>	[0..1]	DateTime		230
	UTCOffset <UTCOffset>	[1..1]	Quantity		230

10.1.5.9.7.1 FromDateTime <FrDtTm>

Presence: [0..1]

Definition: Date time of the beginning of the period (inclusive).

Datatype: "ISODatetime" on page 528

10.1.5.9.7.2 ToDateTime <ToDtTm>

Presence: [0..1]

Definition: Date time of the end of the period (exclusive).

Datatype: "ISODatetime" on page 528

10.1.5.9.7.3 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 530

10.1.5.9.8 OtherParametersLength <OthrParamsLngth>

Presence: [0..1]

Definition: Full length of other parameters.

Datatype: "PositiveNumber" on page 530

10.1.5.9.9 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of this Block, beginning with 0, in the full other parameters.

Datatype: "PositiveNumber" on page 530

10.1.5.9.10 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of this Block in the full other parameters.

Datatype: "PositiveNumber" on page 530

10.1.5.9.11 OtherParameters <OthrParams>

Presence: [0..1]

Definition: Others manufacturer configuration parameters of the point of interaction.

Datatype: "Max10000Binary" on page 473

10.1.5.10 MerchantConfigurationParameters6

Definition: Acceptor parameters dedicated to the merchant.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		231
	MerchantIdentification <MrchntId>	[0..1]	Text		231
	Version <Vrsn>	[0..1]	Text		231
	ParameterFormatIdentifier <ParamFrmtIdr>	[0..1]	Text		232
	Proxy <Prxy>	[0..1]			232
	Type <Tp>	[1..1]	CodeSet		232
	Access <Accs>	[1..1]	±		232
	OtherParametersLength <OthrParamsLngth>	[0..1]	Quantity		233
	OffsetStart <OffsetStart>	[0..1]	Quantity		233
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		233
	OtherParameters <OthrParams>	[0..1]	Binary		233

10.1.5.10.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Type of action for the configuration parameters.

Datatype: "TerminalManagementAction3Code" on page 522

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.

10.1.5.10.2 MerchantIdentification <MrchntId>

Presence: [0..1]

Definition: Identification of the merchant for the MTM, if the POI manages several merchants.

Datatype: "Max35Text" on page 534

10.1.5.10.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the merchant parameters.

Datatype: "Max256Text" on page 533

10.1.5.10.4 ParameterFormatIdentifier <ParamFrmtIdr>

Presence: [0..1]

Definition: Version of the parameters' format.

Datatype: "Max8Text" on page 536

10.1.5.10.5 Proxy <Prxy>

Presence: [0..1]

Definition: Local proxy configuration.

Proxy <Prxy> contains the following **NetworkParameters8** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		232
	Access <Accs>	[1..1]	±		232

10.1.5.10.5.1 Type <Tp>

Presence: [1..1]

Definition: Type of proxy.

Datatype: "NetworkType2Code" on page 505

CodeName	Name	Definition
SCK5	Sock5	Sock5 proxy.
SCK4	Sock4	Sock4 proxy.
HTTP	HTTP	HTTP proxy.

10.1.5.10.5.2 Access <Accs>

Presence: [1..1]

Definition: Access information to the proxy.

Access <Accs> contains the following elements (see "NetworkParameters7" on page 408 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		409
	ClientCertificate <ClntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

10.1.5.10.6 OtherParametersLength <OthrParamsLngth>

Presence: [0..1]

Definition: Full length of other parameters.

Datatype: "PositiveNumber" on page 530

10.1.5.10.7 OffsetStart <OffsetStart>

Presence: [0..1]

Definition: Place of this Block, beginning with 0, in the full other parameters.

Datatype: "PositiveNumber" on page 530

10.1.5.10.8 OffsetEnd <OffsetEnd>

Presence: [0..1]

Definition: Following place of this Block in the full other parameters.

Datatype: "PositiveNumber" on page 530

10.1.5.10.9 OtherParameters <OthrParams>

Presence: [0..1]

Definition: Other merchant parameters.

Datatype: "Max10000Binary" on page 473

10.1.6 Identification Information

10.1.6.1 GenericIdentification32

Definition: Identification of an entity.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		233
	Type <Tp>	[0..1]	CodeSet		233
	Issuer <Issr>	[0..1]	CodeSet		234
	ShortName <ShrtNm>	[0..1]	Text		234

10.1.6.1.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the entity.

Datatype: "Max35Text" on page 534

10.1.6.1.2 Type <Tp>

Presence: [0..1]

Definition: Type of identified entity.

Datatype: "PartyType3Code" on page 507

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.

10.1.6.1.3 Issuer <lssr>

Presence: [0..1]

Definition: Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).

Datatype: "PartyType4Code" on page 508

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.

10.1.6.1.4 ShortName <ShrtNm>

Presence: [0..1]

Definition: Name of the entity.

Datatype: "Max35Text" on page 534

10.1.6.2 GenericIdentification177

Definition: Identification of an entity.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

10.1.6.2.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the entity.

Datatype: "Max35Text" on page 534

10.1.6.2.2 Type <Tp>

Presence: [0..1]

Definition: Type of identified entity.

Datatype: "PartyType33Code" on page 507

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.

CodeName	Name	Definition
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.

10.1.6.2.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).

Datatype: "PartyType33Code" on page 507

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.

10.1.6.2.4 Country <Ctry>

Presence: [0..1]

Definition: Country of the entity (ISO 3166-1 alpha-2 or alpha-3).

Datatype: "Min2Max3AlphaText" on page 536

10.1.6.2.5 ShortName <ShrtNm>

Presence: [0..1]

Definition: Name of the entity.

Datatype: "Max35Text" on page 534

10.1.6.2.6 RemoteAccess <RmotAccs>

Presence: [0..1]

Definition: Access information to reach the target host.

RemoteAccess <RmotAccs> contains the following elements (see "NetworkParameters7" on page 408 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		409
	ClientCertificate <CIntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

10.1.6.2.7 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]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwrdr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		239

10.1.6.2.7.1 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		238
	Longitude <Long>	[1..1]	Text		238

10.1.6.2.7.1.1 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 534

10.1.6.2.7.1.2 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 534

10.1.6.2.7.2 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		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

10.1.6.2.7.2.1 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 534

10.1.6.2.7.2.2 UTMEastward <UTMEstwr>

Presence: [1..1]

Definition: X-coordinate of the Universal Transverse Mercator

coordinate system.

Datatype: "Max35Text" on page 534

10.1.6.2.7.2.3 UTMNorthward <UTMNrthwrd>

Presence: [1..1]

Definition: Y-coordinate of the Universal Transverse Mercator

coordinate system.

Datatype: "Max35Text" on page 534

10.1.6.3 GenericIdentification176

Definition: Identification of an entity.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

10.1.6.3.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the entity.

Datatype: "Max35Text" on page 534

10.1.6.3.2 Type <Tp>

Presence: [0..1]

Definition: Type of identified entity.

Datatype: "PartyType33Code" on page 507

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.

CodeName	Name	Definition
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.

10.1.6.3.3 Issuer <Issr>

Presence: [0..1]

Definition: Entity assigning the identification (for example merchant, acceptor, acquirer, or tax authority).

Datatype: "PartyType33Code" on page 507

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.

10.1.6.3.4 Country <Ctry>

Presence: [0..1]

Definition: Country of the entity (ISO 3166-1 alpha-2 or alpha-3).

Datatype: "Min2Max3AlphaText" on page 536

10.1.6.3.5 ShortName <ShrtNm>

Presence: [0..1]

Definition: Name of the entity.

Datatype: "Max35Text" on page 534

10.1.6.4 GenericIdentification36

Definition: Identification using a proprietary scheme.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		241
	Issuer <Issr>	[1..1]	Text		241
	SchemeName <SchmeNm>	[0..1]	Text		241

10.1.6.4.1 Identification <Id>

Presence: [1..1]

Definition: Proprietary information, often a code, issued by the data source scheme issuer.

Datatype: "Max35Text" on page 534

10.1.6.4.2 Issuer <Issr>

Presence: [1..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 534

10.1.6.4.3 SchemeName <SchmeNm>

Presence: [0..1]

Definition: Short textual description of the scheme.

Datatype: "Max35Text" on page 534

10.1.6.5 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		241
	IdentificationType <IdTp>	[1..1]	Text		241

10.1.6.5.1 Identification <Id>

Presence: [1..1]

Definition: Identifier issued to a person for which no specific identifier has been defined.

Datatype: "Max35Text" on page 534

10.1.6.5.2 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 534

10.1.7 Miscellaneous

10.1.7.1 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		242
	Envelope <Envlp>	[1..1]	(External Schema)		242

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.

10.1.7.1.1 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 533

10.1.7.1.2 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.

10.1.7.2 TMSEvent10

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		244
	Result <RsIt>	[1..1]	CodeSet		244
	ActionIdentification <ActnId>	[1..1]			245
	ActionType <ActnTp>	[1..1]	CodeSet		246
	DataSetIdentification <DataSetId>	[0..1]	±		246
	AdditionalErrorInformation <AddtlErrInf>	[0..1]	Text		247
	TerminalManagerIdentification <TermnlMgrId>	[0..1]	Text		247
	DeviceResponse <DvcRspn>	[0..1]			247
	Environment <Envt>	[0..1]	±		249
	Context <Cntxt>	[0..1]	±		255
	ServiceContent <SvcCntt>	[1..1]	CodeSet		258
	DisplayResponse <DispRspn>	[0..1]			258
	OutputResult <OutptRsIt>	[1..*]			258
	DeviceType <DvcTp>	[1..1]	CodeSet		259
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		259
	Response <Rspn>	[1..1]	±		260
	InputResponse <InptRspn>	[0..1]			260
	OutputResult <OutptRsIt>	[0..1]			261
	DeviceType <DvcTp>	[1..1]	CodeSet		261
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		262
	Response <Rspn>	[1..1]	±		263
	InputResult <InptRsIt>	[1..1]			263
	DeviceType <DvcTp>	[1..1]	CodeSet		263
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		264
	InputResultData <InptRsItData>	[1..1]			264
	InputCommand <InptCmd>	[1..1]	CodeSet		265
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		266
	FunctionKey <FctnKey>	[0..1]	Quantity		266
	InputMessage <InptMsg>	[0..1]	Text		266
	Password <Pwd>	[0..1]	±		266
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			267

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ImageFormat <ImgFrmt>	[1..1]	Text		267
	ImageData <ImgData>	[0..1]	Binary		267
	ImageReference <ImgRef>	[0..1]	Text		267
	AdditionalInformation <AddtlInf>	[0..1]	Text		267
	PrintResponse <PrtRspn>	[0..1]			267
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		267
	SecureInputResponse <ScrInptRspn>	[0..1]			268
	CardholderPIN <CrhdldrPIN>	[0..1]			268
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		269
	PINFormat <PINFrmt>	[1..1]	CodeSet		269
	AdditionalInput <AddtlInpt>	[0..1]	Text		269
	InitialisationCardReaderResponse <InitlstrCardRdrRspn>	[0..1]			269
	CardEntryMode <CardNtryMd>	[0..1]	CodeSet		270
	ICCRResetData <ICCRstData>	[0..1]			270
	ATRValue <ATRVAl>	[0..1]	Binary		271
	CardStatus <CardSts>	[0..1]	Binary		271
	AdditionalInformation <AddtlInf>	[0..1]	Binary		271
	CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn>	[0..1]			271
	Data <Data>	[0..1]	Binary		271
	CardStatus <CardSts>	[1..1]	Binary		271
	TransmissionResponse <TrnsmssnRspn>	[0..1]			272
	ReceivedMessage <RcvdMsg>	[0..1]	Binary		272
	Response <Rspn>	[1..1]	±		272
	SupplementaryData <SplmtryData>	[0..*]	±	C5	272

10.1.7.2.1 TimeStamp <TmStmp>

Presence: [1..1]

Definition: Date time of the terminal management action performed by the point of interaction.

Datatype: "ISODatetime" on page 528

10.1.7.2.2 Result <RsIt>

Presence: [1..1]

Definition: Final result of the processed terminal management action.

Datatype: "TerminalManagementActionResult5Code" on page 523

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.
ULER	UnlistedError	Any error that is not defined by a code value inside the TerminalManagementActionResultCode.
SUCC	Success	Action was successfully performed.

10.1.7.2.3 ActionIdentification <ActnId>

Presence: [1..1]

Definition: Identification of the terminal management action performed by the point of interaction.

ActionIdentification <ActnId> contains the following **TMSActionIdentification9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionType <ActnTp>	[1..1]	CodeSet		246
	DataSetIdentification <DataSetId>	[0..1]	±		246

10.1.7.2.3.1 ActionType <ActnTp>

Presence: [1..1]

Definition: Types of terminal management action performed by a point of interaction.

Datatype: "TerminalManagementAction5Code" on page 522

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.

10.1.7.2.3.2 DataSetIdentification <DataSetId>

Presence: [0..1]

Definition: Data set on which the action has been performed.

DataSetIdentification <DataSetId> contains the following elements (see "[DataSetIdentification10](#)" on page 290 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		290
	Type <Tp>	[1..1]	CodeSet		290
	Version <Vrsn>	[0..1]	Text		292
	CreationDateTime <CreDtTm>	[0..1]	DateTime		292

10.1.7.2.4 AdditionalErrorInformation <AddtlErrInf>

Presence: [0..1]

Definition: Additional information related to a failure.

Datatype: "[Max70Text](#)" on page 535

10.1.7.2.5 TerminalManagerIdentification <TermnlMgrId>

Presence: [0..1]

Definition: Identification of the terminal management system (TMS) used with the action.

Datatype: "[Max35Text](#)" on page 534

10.1.7.2.6 DeviceResponse <DvcRspn>

Presence: [0..1]

Definition: Response of a device request done previously.

DeviceResponse <DvcRspn> contains the following **DeviceResponse6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±		249
	Context <Cntxt>	[0..1]	±		255
	ServiceContent <SvcCntt>	[1..1]	CodeSet		258
	DisplayResponse <DispRspn>	[0..1]			258
	OutputResult <OutptRslt>	[1..*]			258
	DeviceType <DvcTp>	[1..1]	CodeSet		259
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		259
	Response <Rspn>	[1..1]	±		260
	InputResponse <InptRspn>	[0..1]			260
	OutputResult <OutptRslt>	[0..1]			261
	DeviceType <DvcTp>	[1..1]	CodeSet		261
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		262
	Response <Rspn>	[1..1]	±		263
	InputResult <InptRslt>	[1..1]			263
	DeviceType <DvcTp>	[1..1]	CodeSet		263
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		264
	InputResultData <InptRsltData>	[1..1]			264
	InputCommand <InptCmd>	[1..1]	CodeSet		265
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		266
	FunctionKey <FctnKey>	[0..1]	Quantity		266
	InputMessage <InptMsg>	[0..1]	Text		266
	Password <Pwd>	[0..1]	±		266
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			267
	ImageFormat <ImgFrmt>	[1..1]	Text		267
	ImageData <ImgData>	[0..1]	Binary		267
	ImageReference <ImgRef>	[0..1]	Text		267
	AdditionalInformation <AddtlInf>	[0..1]	Text		267
	PrintResponse <PrtRspn>	[0..1]			267
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		267
	SecureInputResponse <ScrInptRspn>	[0..1]			268
	CardholderPIN <CrdhldrPIN>	[0..1]			268

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		269
	PINFormat <PINFrmt>	[1..1]	CodeSet		269
	AdditionalInput <AddtlInpt>	[0..1]	Text		269
	InitialisationCardReaderResponse <InitlstnCardRdrRspn>	[0..1]			269
	CardEntryMode <CardNtryMd>	[0..1]	CodeSet		270
	ICCRResetData <ICCRstData>	[0..1]			270
	ATRValue <ATRVAl>	[0..1]	Binary		271
	CardStatus <CardSts>	[0..1]	Binary		271
	AdditionalInformation <AddtlInf>	[0..1]	Binary		271
	CardReaderApplicationProtocolDataUnitResponse <CardRdrApplPrtcolDataUnitRspn>	[0..1]			271
	Data <Data>	[0..1]	Binary		271
	CardStatus <CardSts>	[1..1]	Binary		271
	TransmissionResponse <TrnsmssnRspn>	[0..1]			272
	ReceivedMessage <RcvdMsg>	[0..1]	Binary		272
	Response <Rspn>	[1..1]	±		272
	SupplementaryData <SplmtryData>	[0..*]	±	C5	272

10.1.7.2.6.1 Environment <Envt>

Presence: [0..1]

Definition: Environment of the transaction.

Environment <Envt> contains the following elements (see "[CardPaymentEnvironment79](#)" on page 292 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Acquirer <Acqrr>	[0..1]	±		298
	ServiceProvider <SvcPrvdr>	[0..1]	±		298
	Merchant <Mrchnt>	[0..1]			298
	Identification <Id>	[0..1]	±		299
	CommonName <CmonNm>	[0..1]	Text		299
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		299
	LocationAndContact <LctnAndCtct>	[0..1]	±		300
	SchemeData <SchmeData>	[0..1]	Text		300
	POI <POI>	[0..1]			300
	Identification <Id>	[1..1]	±		300
	SystemName <SysNm>	[0..1]	Text		301
	GroupIdentification <Grpld>	[0..1]	Text		301
	Capabilities <Cpblties>	[0..1]	±		301
	TimeZone <TmZone>	[0..1]	Text		302
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		302
	Component <Cmpnt>	[0..*]	±		303
	Card <Card>	[0..1]			305
	ProtectedCardData <PrctcdCardData>	[0..1]	±		306
	PrivateCardData <PrvtCardData>	[0..1]	Binary		306
	PlainCardData <PlainCardData>	[0..1]	±		306
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		307
	MaskedPAN <MskdPAN>	[0..1]	Text		307
	IssuerBIN <IssrBIN>	[0..1]	Text		307
	CardCountryCode <CardCtryCd>	[0..1]	Text		307
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		307
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		308
	CardBrand <CardBrnd>	[0..1]	Text		308
	CardProductType <CardPdctTp>	[0..1]	CodeSet		308
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		308
	InternationalCard <IntrnlCard>	[0..1]	Indicator		308

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AllowedProduct <AllwdPdct>	[0..*]	Text		308
	ServiceOption <SvcOptn>	[0..1]	Text		309
	AdditionalCardData <AddtlCardData>	[0..1]	Text		309
	Check <Chck>	[0..1]			309
	BankIdentification <Bkld>	[0..1]	Text		309
	AccountNumber <AcctNb>	[0..1]	Text		309
	CheckNumber <ChckNb>	[0..1]	Text		309
	CheckCardNumber <ChckCardNb>	[0..1]	Text		310
	CheckTrackData2 <ChckTrckData2>	[0..1]			310
	TrackNumber <TrckNb>	[0..1]	Quantity		310
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		310
	TrackValue <TrckVal>	[1..1]	Text		311
	CheckType <ChckTp>	[0..1]	CodeSet		311
	Country <Ctry>	[0..1]	Text		311
	StoredValueAccount <StordValAcct>	[0..*]			311
	AccountType <AcctTp>	[0..1]	CodeSet		312
	IdentificationType <IdTp>	[0..1]	CodeSet		313
	Identification <Id>	[0..1]	Text		313
	Brand <Brnd>	[0..1]	Text		313
	Provider <Prvdr>	[0..1]	Text		313
	OwnerName <OwnrNm>	[0..1]	Text		313
	ExpiryDate <XpryDt>	[0..1]	Text		314
	EntryMode <NtryMd>	[0..1]	CodeSet		314
	Currency <Ccy>	[0..1]	CodeSet	C1	314
	Balance <Bal>	[0..1]	Amount		315
	LoyaltyAccount <LltyAcct>	[0..*]	±		315
	CustomerDevice <CstmrDvc>	[0..1]	±		315
	Wallet <Wlt>	[0..1]	±		315
	PaymentToken <PmtTkn>	[0..1]	±		316
	MerchantToken <MrchntTkn>	[0..1]	±		316
	Cardholder <Crhdldr>	[0..1]			317

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification </d>	[0..1]			321
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		321
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		321
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		322
	DriverIdentification <DrvrId>	[0..1]	Text		322
	CustomerNumber <CstmrNb>	[0..1]	Text		322
	SocialSecurityNumber <ScIscTyNb>	[0..1]	Text		322
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		322
	PassportNumber <PsptNb>	[0..1]	Text		322
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		322
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		322
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		323
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		323
	JobNumber <JobNb>	[0..1]	Text		323
	Department <Dept>	[0..1]	Text		323
	EmailAddress <EmailAdr>	[0..1]	Text		323
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			323
	BirthDate <BirthDt>	[1..1]	Date		323
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		324
	CityOfBirth <CityOfBirth>	[1..1]	Text		324
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	324
	Other <Othr>	[0..*]	±		324
	Name <Nm>	[0..1]	Text		324
	Language <Lang>	[0..1]	CodeSet	C6	324
	BillingAddress <BllgAdr>	[0..1]	±		325
	ShippingAddress <ShppgAdr>	[0..1]	±		325
	TripNumber <TripNb>	[0..1]	Text		326
	Vehicle <Vhcl>	[0..1]	±		326
	Authentication <Authntcn>	[0..*]			327
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		329
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		330

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		331
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		331
	CardholderOnLinePIN <CrhdldrOnLinePIN>	[0..1]			331
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		331
	PINFormat <PINFrmt>	[1..1]	CodeSet		332
	AdditionalInput <AddtlInpt>	[0..1]	Text		332
	CardholderIdentification <Crhdldrld>	[0..1]			332
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		333
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		333
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		333
	DriverIdentification <Drvrld>	[0..1]	Text		334
	CustomerNumber <CstmrNb>	[0..1]	Text		334
	SocialSecurityNumber <ScIscItyNb>	[0..1]	Text		334
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		334
	PassportNumber <PsptNb>	[0..1]	Text		334
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		334
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		334
	EmployerIdentificationNumber <MplyrldNb>	[0..1]	Text		334
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		335
	JobNumber <JobNb>	[0..1]	Text		335
	Department <Dept>	[0..1]	Text		335
	EmailAddress <EmailAdr>	[0..1]	Text		335
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			335
	BirthDate <BirthDt>	[1..1]	Date		335
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		335
	CityOfBirth <CityOfBirth>	[1..1]	Text		336
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	336
	Other <Othr>	[0..*]	±		336
	AddressVerification <AdrVrfctn>	[0..1]			336
	AddressDigits <AdrDgts>	[0..1]	Text		336
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		337

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationType <AuthntcnTp>	[0..1]	Text		337
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		337
	AuthenticationResult <AuthntcnRsIt>	[0..1]	CodeSet		337
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			337
	Identification <Id>	[1..1]	Text		338
	Value <Val>	[0..1]	Binary		338
	ProtectedValue <PrctcdVal>	[0..1]	±		338
	Type <Tp>	[0..1]	Text		338
	TransactionVerificationResult <TxVrfctnRsIt>	[0..*]			338
	Method <Mtd>	[1..1]	CodeSet		339
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		340
	Result <RsIt>	[0..1]	CodeSet		340
	AdditionalResult <AddtlRsIt>	[0..1]	Text		340
	PersonalData <PrsnlData>	[0..1]	Text		341
	MobileData <MobData>	[0..*]			341
	MobileCountryCode <MobCtryCd>	[0..1]	Text		341
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		341
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		342
	Geolocation <Glctn>	[0..1]			342
	GeographicCoordinates <GeogcCordints>	[0..1]			342
	Latitude <Lat>	[1..1]	Text		342
	Longitude <Long>	[1..1]	Text		342
	UTMCoordinates <UTMCordints>	[0..1]			343
	UTMZone <UTMZone>	[1..1]	Text		343
	UTMEastward <UTMEstwr>	[1..1]	Text		343
	UTMNorthward <UTMNrthwr>	[1..1]	Text		343
	SensitiveMobileData <SnstvMobData>	[0..1]			343
	MSISDN <MSISDN>	[1..1]	Text		344
	IMSI <IMSI>	[0..1]	Text		344
	IMEI <IMEI>	[0..1]	Text		344
	ProtectedMobileData <PrctcdMobData>	[0..1]	±		344

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProtectedCardholderData <PrtctdCrhdldrData>	[0..1]	±		344
	SaleEnvironment <SaleEnv>	[0..1]			345
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		345
	Currency <Ccy>	[0..1]	CodeSet	C1	346
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		346
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		346
	MinimumSplitAmount <MinSpltAmt>	[0..1]	Amount		347
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		347
	LoyaltyHandling <LltyHdlg>	[0..1]	CodeSet		347

10.1.7.2.6.2 Context <Cntxt>

Presence: [0..1]

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

Context <Cntxt> contains the following elements (see "[CardPaymentContext30](#)" on page 347 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentContext <PmtCntxt>	[0..1]			350
	CardPresent <CardPres>	[0..1]	Indicator		350
	CardholderPresent <CrdrHldrPres>	[0..1]	Indicator		350
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		351
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		351
	TransactionEnvironment <TxEnvnt>	[0..1]	CodeSet		351
	TransactionChannel <TxChanl>	[0..1]	CodeSet		351
	BusinessArea <BizArea>	[0..1]	CodeSet		352
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		352
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C6	352
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		353
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		353
	SupportedOption <SpprtdOptn>	[0..*]	CodeSet		354
	SaleContext <SaleCntxt>	[0..1]			354
	SaleIdentification <SaleId>	[0..1]	Text		355
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		355
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		356
	CashierIdentification <CshrId>	[0..1]	Text		356
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C6	356
	ShiftNumber <ShftNb>	[0..1]	Text		356
	CustomerOrderRequestFlag <CstmrOrdrReqFlg>	[0..1]	Indicator		356
	PurchaseOrderNumber <PurchsOrdrNb>	[0..1]	Text		356
	InvoiceNumber <InvNb>	[0..1]	Text		356
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		357
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			357
	CommonName <CmonNm>	[1..1]	Text		357
	Address <Adr>	[0..1]	Text		357
	CountryCode <CtryCd>	[1..1]	CodeSet		357
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		357
	RegisteredIdentifier <RegdIdr>	[1..1]	Text		357

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SplitPayment <SpltPmt>	[0..1]	Indicator		358
	RemainingAmount <RmngAmt>	[0..1]	Amount		358
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		358
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		358
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		358
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		359
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		359
	DirectDebitContext <DrctDbtCntxt>	[0..1]			359
	DebtorIdentification <DbtrId>	[0..1]			360
	Debtor <Dbtr>	[0..1]			361
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	361
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		362
Or}	NameAndAddress <NmAndAdr>	[1..1]			362
	Name <Nm>	[1..1]	Text		362
	Address <Adr>	[1..1]	±		362
	AccountIdentification <AcctId>	[0..1]			363
{Or	IBAN <IBAN>	[1..1]	IdentifierSet	C4	363
Or	BBAN <BBAN>	[1..1]	IdentifierSet		363
Or	UPIC <UPIC>	[1..1]	IdentifierSet		364
Or}	DomesticAccount <DmstAcct>	[1..1]			364
	Identification <Id>	[1..1]	Text		364
	CreditorIdentification <CdtrId>	[1..1]			364
	Creditor <Cdtr>	[1..1]			365
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	365
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		365
Or}	NameAndAddress <NmAndAdr>	[1..1]			365
	Name <Nm>	[1..1]	Text		366
	Address <Adr>	[1..1]	±		366
	RegistrationIdentification <RegnId>	[0..1]	Text		366
	MandateRelatedInformation <MndtRltdInf>	[1..1]			366
	MandateIdentification <MndtId>	[1..1]	Text		367

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DateOfSignature <DtOfSgntr>	[0..1]	Date		367
	MandateImage <MndtImg>	[0..1]	Binary		367

10.1.7.2.6.3 ServiceContent <SvcCntt>

Presence: [1..1]

Definition: Define the type of service answered.

Datatype: "RetailerService9Code" on page 519

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.

10.1.7.2.6.4 DisplayResponse <DispRspn>

Presence: [0..1]

Definition: Content of the Display Response message.

DisplayResponse <DispRspn> contains the following **DeviceDisplayResponse2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	OutputResult <OutptRslt>	[1..*]			258
	DeviceType <DvcTp>	[1..1]	CodeSet		259
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		259
	Response <Rspn>	[1..1]	±		260

10.1.7.2.6.4.1 OutputResult <OutptRslt>

Presence: [1..*]

Definition: Give result for display request.

OutputResult <OutputRslt> contains the following **OutputResult2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		259
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		259
	Response <Rspn>	[1..1]	±		260

10.1.7.2.6.4.1.1 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: "UserInterface4Code" on page 527

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.

10.1.7.2.6.4.1.2 InformationQualifier <InfQlfr>

Presence: [1..1]

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

Datatype: "InformationQualify1Code" on page 499

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	The 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.

CodeName	Name	Definition
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	The 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.

10.1.7.2.6.4.1.3 Response <Rspn>

Presence: [1..1]

Definition: Gives response for each peripheral.

Response <Rspn> contains the following elements (see "ResponseType11" on page 391 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		392
	ResponseReason <RspnRsn>	[0..1]	CodeSet		392
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		393

10.1.7.2.6.5 InputResponse <InptRspn>

Presence: [0..1]

Definition: Content of the Input Response message.

InputResponse <InptRspn> contains the following **DeviceInputResponse5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	OutputResult <OutptRslt>	[0..1]			261
	DeviceType <DvcTp>	[1..1]	CodeSet		261
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		262
	Response <Rspn>	[1..1]	±		263
	InputResult <InptRslt>	[1..1]			263
	DeviceType <DvcTp>	[1..1]	CodeSet		263
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		264
	InputResultData <InptRsltData>	[1..1]			264
	InputCommand <InptCmd>	[1..1]	CodeSet		265
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		266
	FunctionKey <FctnKey>	[0..1]	Quantity		266
	InputMessage <InptMsg>	[0..1]	Text		266
	Password <Pwd>	[0..1]	±		266
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			267
	ImageFormat <ImgFrmt>	[1..1]	Text		267
	ImageData <ImgData>	[0..1]	Binary		267
	ImageReference <ImgRef>	[0..1]	Text		267
	AdditionalInformation <AddtlInf>	[0..1]	Text		267

10.1.7.2.6.5.1 OutputResult <OutptRslt>

Presence: [0..1]

Definition: Result of display request.

OutputResult <OutptRslt> contains the following **OutputResult2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		261
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		262
	Response <Rspn>	[1..1]	±		263

10.1.7.2.6.5.1.1 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: "UserInterface4Code" on page 527

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.

10.1.7.2.6.5.1.2 InformationQualifier <InfQlfr>

Presence: [1..1]

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

Datatype: "InformationQualify1Code" on page 499

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	The 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	The 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.

10.1.7.2.6.5.1.3 Response <Rspn>

Presence: [1..1]

Definition: Gives response for each peripheral.

Response <Rspn> contains the following elements (see "ResponseType11" on page 391 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		392
	ResponseReason <RspnRsn>	[0..1]	CodeSet		392
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		393

10.1.7.2.6.5.2 InputResult <InptRsIt>

Presence: [1..1]

Definition: Result of input request.

InputResult <InptRsIt> contains the following **InputResult5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DeviceType <DvcTp>	[1..1]	CodeSet		263
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		264
	InputResultData <InptRsItData>	[1..1]			264
	InputCommand <InptCmd>	[1..1]	CodeSet		265
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		266
	FunctionKey <FctnKey>	[0..1]	Quantity		266
	InputMessage <InptMsg>	[0..1]	Text		266
	Password <Pwd>	[0..1]	±		266
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			267
	ImageFormat <ImgFrmt>	[1..1]	Text		267
	ImageData <ImgData>	[0..1]	Binary		267
	ImageReference <ImgRef>	[0..1]	Text		267
	AdditionalInformation <AddtlInf>	[0..1]	Text		267

10.1.7.2.6.5.2.1 DeviceType <DvcTp>

Presence: [1..1]

Definition: Type of Input device.

Datatype: "SaleCapabilities2Code" on page 520

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).

10.1.7.2.6.5.2.2 InformationQualifier <InfQlfr>

Presence: [1..1]

Definition: Qualifies the type of given information.

Datatype: "InformationQualify1Code" on page 499

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	The 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	The 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.

10.1.7.2.6.5.2.3 InputResultData <InptRsItData>

Presence: [1..1]

Definition: Data resulting of input after POI or Sale processing.

InputResultData <InptRsltData> contains the following **InputResultData5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	InputCommand <InptCmd>	[1..1]	CodeSet		265
	ConfirmedFlag <ConfdFlg>	[0..1]	Indicator		266
	FunctionKey <FctnKey>	[0..1]	Quantity		266
	InputMessage <InptMsg>	[0..1]	Text		266
	Password <Pwd>	[0..1]	±		266
	ImageCapturedSignature <ImgCaptrdSgntr>	[0..1]			267
	ImageFormat <ImgFrmt>	[1..1]	Text		267
	ImageData <ImgData>	[0..1]	Binary		267
	ImageReference <ImgRef>	[0..1]	Text		267
	AdditionalInformation <AddtlInf>	[0..1]	Text		267

10.1.7.2.6.5.2.3.1 InputCommand <InptCmd>

Presence: [1..1]

Definition: Type of processed input.

Datatype: "InputCommand1Code" on page 500

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.

10.1.7.2.6.5.2.3.2 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 529](#)):

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

10.1.7.2.6.5.2.3.3 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 530](#)

10.1.7.2.6.5.2.3.4 InputMessage <InptMsg>

Presence: [0..1]

Definition: Specifies the input text and data given by the POI or the Sale System.

Datatype: ["Max20000Text" on page 532](#)

10.1.7.2.6.5.2.3.5 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 ["ContentInformationType34" on page 438](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		439
	EnvelopedData <EnvlpdData>	[0..1]	±		439
	AuthenticatedData <AuthntcdData>	[0..1]	±		440
	SignedData <SgndData>	[0..1]	±		441
	DigestedData <DgstdData>	[0..1]	±		442

10.1.7.2.6.5.2.3.6 ImageCapturedSignature <ImgCaptrdSgntr>

Presence: [0..1]

Definition: Numeric value of a handwritten signature.

ImageCapturedSignature <ImgCaptrdSgntr> contains the following **CapturedSignature1** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ImageFormat <ImgFrmt>	[1..1]	Text		267
	ImageData <ImgData>	[0..1]	Binary		267
	ImageReference <ImgRef>	[0..1]	Text		267
	AdditionalInformation <AddtlInf>	[0..1]	Text		267

10.1.7.2.6.5.2.3.6.1 ImageFormat <ImgFrmt>

Presence: [1..1]

Definition: Format of the image.

Datatype: "Max35Text" on page 534

10.1.7.2.6.5.2.3.6.2 ImageData <ImgData>

Presence: [0..1]

Definition: Data of the image.

Datatype: "Max2MBBinary" on page 474

10.1.7.2.6.5.2.3.6.3 ImageReference <ImgRef>

Presence: [0..1]

Definition: URL or name of the image.

Datatype: "Max500Text" on page 534

10.1.7.2.6.5.2.3.6.4 AdditionalInformation <AddtlInf>

Presence: [0..1]

Definition: Additional information for the image.

Datatype: "Max140Text" on page 532

10.1.7.2.6.6 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		267

10.1.7.2.6.6.1 DocumentQualifier <DocQlfr>

Presence: [1..1]

Definition: Qualification of the document printed to the Cashier or the Customer.

Datatype: "DocumentType7Code" on page 497

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.

10.1.7.2.6.7 SecureInputResponse <ScripntRspn>

Presence: [0..1]

Definition: Response to a secure input request.

SecureInputResponse <ScripntRspn> contains the following **DeviceSecureInputResponse5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardholderPIN <CrdhldrPIN>	[0..1]			268
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		269
	PINFormat <PINFrmt>	[1..1]	CodeSet		269
	AdditionalInput <AddtlInpt>	[0..1]	Text		269

10.1.7.2.6.7.1 CardholderPIN <CrdhldrPIN>

Presence: [0..1]

Definition: Cardholder PIN data when needed.

CardholderPIN <CrdhldrPIN> contains the following **OnLinePIN10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		269
	PINFormat <PINFrmt>	[1..1]	CodeSet		269
	AdditionalInput <AddtlInpt>	[0..1]	Text		269

10.1.7.2.6.7.1.1 EncryptedPINBlock <NcrptdPINBlck>

Presence: [1..1]

Definition: Encrypted PIN (Personal Identification Number).

EncryptedPINBlock <NcrptdPINBlck> contains the following elements (see "ContentInformationType35" on page 436 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		436
	EnvelopedData <EnvlpdData>	[1..1]	±		437

10.1.7.2.6.7.1.2 PINFormat <PINFrmt>

Presence: [1..1]

Definition: PIN (Personal Identification Number) format before encryption.

Datatype: "PINFormat3Code" on page 509

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.

10.1.7.2.6.7.1.3 AdditionalInput <AddtlInpt>

Presence: [0..1]

Definition: Additional information required to verify the PIN (Personal Identification Number).

Datatype: "Max35Text" on page 534

10.1.7.2.6.8 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		270
	ICCRResetData <ICCRstData>	[0..1]			270
	ATRValue <ATRVa/>	[0..1]	Binary		271
	CardStatus <CardSts>	[0..1]	Binary		271
	AdditionalInformation <AddtlInf>	[0..1]	Binary		271

10.1.7.2.6.8.1 CardEntryMode <CardNtryMd>

Presence: [0..1]

Definition: Payment instrument entry mode requested by the Sale System.

Datatype: "CardDataReading8Code" on page 490

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.)

10.1.7.2.6.8.2 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		271
	CardStatus <CardSts>	[0..1]	Binary		271

10.1.7.2.6.8.2.1 ATRValue <ATRVa>

Presence: [0..1]

Definition: Value of the Answer To Reset of a chip card.

Datatype: "Max140Binary" on page 474

10.1.7.2.6.8.2.2 CardStatus <CardSts>

Presence: [0..1]

Definition: Status of a smartcard response to a command (SW1-SW2).

Datatype: "Max35Binary" on page 475

10.1.7.2.6.8.3 AdditionalInformation <AddtlInf>

Presence: [0..1]

Definition: Additional information about the Device Initialisation Card Reader Response.

Datatype: "Max10000Binary" on page 473

10.1.7.2.6.9 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		271
	CardStatus <CardSts>	[1..1]	Binary		271

10.1.7.2.6.9.1 Data <Data>

Presence: [0..1]

Definition: Class field of the Application Protocol Data Unit command (CLA).

Datatype: "Min1Max256Binary" on page 475

10.1.7.2.6.9.2 CardStatus <CardSts>

Presence: [1..1]

Definition: Status of a smartcard response to a command (SW1-SW2). Reference: ISO 7816-4.

Datatype: "Min1Max256Binary" on page 475

10.1.7.2.6.10 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		272

10.1.7.2.6.10.1 ReceivedMessage <RcvdMsg>

Presence: [0..1]

Definition: Content of a transmitted message.

Datatype: "Max100KBinary" on page 473

10.1.7.2.6.11 Response <Rspn>

Presence: [1..1]

Definition: Result of the processing of the request.

Response <Rspn> contains the following elements (see "ResponseType11" on page 391 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		392
	ResponseReason <RspnRsn>	[0..1]	CodeSet		392
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		393

10.1.7.2.6.12 SupplementaryData <SplmtryData>

Presence: [0..*]

Definition: Additional information incorporated as an extension to the message.

Impacted by: C5 "SupplementaryDataRule"

SupplementaryData <SplmtryData> contains the following elements (see "SupplementaryData1" on page 242 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PlaceAndName <PlcAndNm>	[0..1]	Text		242
	Envelope <Envlp>	[1..1]	(External Schema)		242

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.

10.1.7.3 MessageItemCondition2

Definition: Presence condition of a message item.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		273
	Condition <Cond>	[1..1]	CodeSet		273
	Value <Val>	[0..*]	Text		273

10.1.7.3.1 ItemIdentification <ItmId>

Presence: [1..1]

Definition: Unique identification of the message and the message item.

Datatype: "Max140Text" on page 532

10.1.7.3.2 Condition <Cond>

Presence: [1..1]

Definition: Condition of presence of the message item.

Datatype: "MessageItemCondition2Code" on page 504

CodeName	Name	Definition
MNDT	Mandatory	Message item must be present.
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.

10.1.7.3.3 Value <Val>

Presence: [0..*]

Definition: Value to be used for the message item.

Datatype: "Max140Text" on page 532

10.1.7.4 MaintenanceDelegateAction8

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		276
	TMRemoteAccess <TMRemoteAccs>	[0..1]	±		276
	TMSProtocol <TMSPrtcol>	[0..1]	Text		276
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		277
	DataSetIdentification <DataSetId>	[0..1]	±		277
	ReTry <ReTry>	[0..1]	±		277
	AdditionalInformation <AddtlInf>	[0..*]	Binary		277
	Action <Actn>	[0..*]			277
	Type <Tp>	[1..1]	CodeSet		278
	RemoteAccess <RmotAccs>	[0..1]	±		279
	Key <Key>	[0..*]			280
	KeyIdentification <KeyId>	[1..1]	Text		280
	KeyVersion <KeyVrsn>	[1..1]	Text		280
	SequenceNumber <SeqNb>	[0..1]	Quantity		280
	DerivationIdentification <DerivtnId>	[0..1]	Binary		280
	Type <Tp>	[0..1]	CodeSet		280
	Function <Fctn>	[0..*]	CodeSet		281
	TerminalManagerIdentification <TermnlMgrId>	[0..1]	±		282
	TMSProtocol <TMSPrtcol>	[0..1]	Text		282
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		282
	DataSetIdentification <DataSetId>	[0..1]	±		282
	ComponentType <CmpntTp>	[0..*]	CodeSet		283
	DelegationScopeIdentification <DlgnScpld>	[0..1]	Text		284
	DelegationScopeDefinition <DlgnScpDef>	[0..1]	Binary		284
	DelegationProof <DlgnProof>	[0..1]	Binary		284
	ProtectedDelegationProof <PrctcdDlgnProof>	[0..1]	±		284
	Trigger <Trggr>	[1..1]	CodeSet		285
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		285
	ReTry <ReTry>	[0..1]	±		285
	TimeCondition <TmCond>	[0..1]	±		286
	TMChallenge <TMChllng>	[0..1]	Binary		286

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		286
	ErrorAction <ErrActn>	[0..*]	±		286
	AdditionalInformation <AddtllInf>	[0..*]	Binary		287
	MessageItem <Msgltm>	[0..*]	±		287
	DeviceRequest <DvcReq>	[0..1]	±		287

10.1.7.4.1 PeriodicAction <PrdcActn>

Presence: [0..1]

Definition: Flag to indicate that the delegated actions have to be included in a periodic sequence of actions.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 529):

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

10.1.7.4.2 TMRemoteAccess <TMRmotAccs>

Presence: [0..1]

Definition: Network address and parameters of the terminal manager host which will performs the delegated actions.

TMRemoteAccess <TMRmotAccs> contains the following elements (see "NetworkParameters7" on page 408 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertldr>	[0..*]	Binary		409
	ClientCertificate <CIntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

10.1.7.4.3 TMSProtocol <TMSPrtcol>

Presence: [0..1]

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

Datatype: "Max35Text" on page 534

10.1.7.4.4 TMSProtocolVersion <TMSPrtcolVrsn>

Presence: [0..1]

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

Datatype: "Max35Text" on page 534

10.1.7.4.5 DataSetIdentification <DataSetId>

Presence: [0..1]

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

DataSetIdentification <DataSetId> contains the following elements (see "DataSetIdentification10" on page 290 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		290
	Type <Tp>	[1..1]	CodeSet		290
	Version <Vrsn>	[0..1]	Text		292
	CreationDateTime <CreDtTm>	[0..1]	DateTime		292

10.1.7.4.6 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 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		467
	MaximumNumber <MaxNb>	[0..1]	Quantity		467
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		467

10.1.7.4.7 AdditionalInformation <AddtlInf>

Presence: [0..*]

Definition: Additional information to include in the maintenance action.

Datatype: "Max3000Binary" on page 474

10.1.7.4.8 Action <Actn>

Presence: [0..*]

Definition: Sequence of action to include in the next MTM management plan.

Action <Actn> contains the following **TMSAction11** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		278
	RemoteAccess <RmotAccs>	[0..1]	±		279
	Key <Key>	[0..*]			280
	KeyIdentification <KeyId>	[1..1]	Text		280
	KeyVersion <KeyVrsn>	[1..1]	Text		280
	SequenceNumber <SeqNb>	[0..1]	Quantity		280
	DerivationIdentification <DerivtnId>	[0..1]	Binary		280
	Type <Tp>	[0..1]	CodeSet		280
	Function <Fctn>	[0..*]	CodeSet		281
	TerminalManagerIdentification <TermnlMgrld>	[0..1]	±		282
	TMSProtocol <TMSPrtcol>	[0..1]	Text		282
	TMSProtocolVersion <TMSPrtcolVrsn>	[0..1]	Text		282
	DataSetIdentification <DataSetId>	[0..1]	±		282
	ComponentType <CmpntTp>	[0..*]	CodeSet		283
	DelegationScopeIdentification <DlgtScpld>	[0..1]	Text		284
	DelegationScopeDefinition <DlgtScpDef>	[0..1]	Binary		284
	DelegationProof <DlgtProof>	[0..1]	Binary		284
	ProtectedDelegationProof <PrtctdDlgtProof>	[0..1]	±		284
	Trigger <Trggr>	[1..1]	CodeSet		285
	AdditionalProcess <AddtlPrc>	[0..*]	CodeSet		285
	ReTry <ReTry>	[0..1]	±		285
	TimeCondition <TmCond>	[0..1]	±		286
	TMChallenge <TMChllng>	[0..1]	Binary		286
	KeyEnciphermentCertificate <KeyNcphrmntCert>	[0..*]	Binary		286
	ErrorAction <ErrActn>	[0..*]	±		286
	AdditionalInformation <AddtlInf>	[0..*]	Binary		287
	MessageItem <Msgltn>	[0..*]	±		287
	DeviceRequest <DvcReq>	[0..1]	±		287

10.1.7.4.8.1 Type <Tp>

Presence: [1..1]

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

Datatype: "TerminalManagementAction5Code" on page 522

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.

10.1.7.4.8.2 RemoteAccess <RmotAccs>

Presence: [0..1]

Definition: Host access information.

RemoteAccess <RmotAccs> contains the following elements (see "NetworkParameters7" on page 408 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		409
	ClientCertificate <CIntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

10.1.7.4.8.3 Key <Key>

Presence: [0..*]

Definition: Cryptographic key used to communicate with the host.

Key <Key> contains the following **KEKIdentifier5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		280
	KeyVersion <KeyVrsn>	[1..1]	Text		280
	SequenceNumber <SeqNb>	[0..1]	Quantity		280
	DerivationIdentification <DerivtnId>	[0..1]	Binary		280
	Type <Tp>	[0..1]	CodeSet		280
	Function <Fctr>	[0..*]	CodeSet		281

10.1.7.4.8.3.1 KeyIdentification <KeyId>

Presence: [1..1]

Definition: Identification of the cryptographic key.

Datatype: "Max140Text" on page 532

10.1.7.4.8.3.2 KeyVersion <KeyVrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max140Text" on page 532

10.1.7.4.8.3.3 SequenceNumber <SeqNb>

Presence: [0..1]

Definition: Number of usages of the cryptographic key.

Datatype: "Number" on page 530

10.1.7.4.8.3.4 DerivationIdentification <DerivtnId>

Presence: [0..1]

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

Datatype: "Min5Max16Binary" on page 476

10.1.7.4.8.3.5 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType3Code" on page 494

CodeName	Name	Definition
AES2	AES128	AES (Advanced Encryption Standard) 128 bits cryptographic key as defined by

CodeName	Name	Definition
		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).

10.1.7.4.8.3.6 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 501

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	TranslatelInput	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).

CodeName	Name	Definition
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.

10.1.7.4.8.4 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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

10.1.7.4.8.5 TMSProtocol <TMSPrtcol>

Presence: [0..1]

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

Datatype: "Max35Text" on page 534

10.1.7.4.8.6 TMSProtocolVersion <TMSPrtcolVrsn>

Presence: [0..1]

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

Datatype: "Max35Text" on page 534

10.1.7.4.8.7 DataSetIdentification <DataSetId>

Presence: [0..1]

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

DataSetIdentification <DataSetId> contains the following elements (see "DataSetIdentification10" on page 290 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		290
	Type <Tp>	[1..1]	CodeSet		290
	Version <Vrsn>	[0..1]	Text		292
	CreationDateTime <CreDtTm>	[0..1]	DateTime		292

10.1.7.4.8.8 ComponentType <CmpntTp>

Presence: [0..*]

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

Datatype: "DataSetCategory18Code" on page 496

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).

CodeName	Name	Definition
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.

10.1.7.4.8.9 DelegationScopelIdentification <DIgtnScpld>

Presence: [0..1]

Definition: Identifies the delegation scope assigned by the MTM.

Datatype: "Max35Text" on page 534

10.1.7.4.8.10 DelegationScopeDefinition <DIgtnScpDef>

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 474

10.1.7.4.8.11 DelegationProof <DIgtnProof>

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 475

10.1.7.4.8.12 ProtectedDelegationProof <PrtctdDIgtnProof>

Presence: [0..1]

Definition: Protected proof of delegation.

ProtectedDelegationProof <PrtctdDlgtProof> contains the following elements (see
"ContentInformationType34" on page 438 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		439
	EnvelopedData <EnvlpdData>	[0..1]	±		439
	AuthenticatedData <AuthntcdData>	[0..1]	±		440
	SignedData <SgndData>	[0..1]	±		441
	DigestedData <DgstdData>	[0..1]	±		442

10.1.7.4.8.13 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 524

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.

10.1.7.4.8.14 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 524

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.

10.1.7.4.8.15 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 467 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Delay <Dely>	[1..1]	Text		467
	MaximumNumber <MaxNb>	[0..1]	Quantity		467
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		467

10.1.7.4.8.16 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 469 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	WaitingTime <WtgTm>	[0..1]	Text		469
	StartTime <StartTm>	[0..1]	DateTime		469
	EndTime <EndTm>	[0..1]	DateTime		469
	Period <Prd>	[0..1]	Text		469
	MaximumNumber <MaxNb>	[0..1]	Quantity		469
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		469

10.1.7.4.8.17 TMChallenge <TMChllng>

Presence: [0..1]

Definition: Terminal manager challenge for cryptographic key injection.

Datatype: ["Max140Binary"](#) on page 474

10.1.7.4.8.18 KeyEnciphermentCertificate <KeyNcphrmntCert>

Presence: [0..*]

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

Datatype: ["Max10KBinary"](#) on page 474

10.1.7.4.8.19 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 407 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ActionResult <ActnRslt>	[1..*]	CodeSet		407
	ActionToProcess <ActnToPrc>	[1..1]	CodeSet		408

10.1.7.4.8.20 AdditionalInformation <AddtlInf>

Presence: [0..*]

Definition: Additional information about the maintenance action.

Datatype: "Max3000Binary" on page 474

10.1.7.4.8.21 MessageItem <Msgltn>

Presence: [0..*]

Definition: Configuration of a message item.

MessageItem <Msgltn> contains the following elements (see "MessageItemCondition2" on page 273 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ItemIdentification <ItmId>	[1..1]	Text		273
	Condition <Cond>	[1..1]	CodeSet		273
	Value <Val>	[0..*]	Text		273

10.1.7.4.8.22 DeviceRequest <DvcReq>

Presence: [0..1]

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

DeviceRequest <DvcReq> contains the following elements (see "DeviceRequest6" on page 140 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Environment <Envt>	[0..1]	±		143
	Context <Cntxt>	[0..1]	±		149
	ServiceContent <SvcCntt>	[1..1]	CodeSet		152
	DisplayRequest <DispReq>	[0..1]			152
	DisplayOutput <DispOutpt>	[1..*]	±		152
	InputRequest <InptReq>	[0..1]			153
	DisplayOutput <DispOutpt>	[0..1]	±		154
	InputData <InptData>	[1..1]			155
	DeviceType <DvcTp>	[1..1]	CodeSet		156
	InformationQualifier <InfQlfr>	[1..1]	CodeSet		156
	InputCommand <InptCmd>	[1..1]	CodeSet		157
	NotifyCardInputFlag <NtfyCardInptFlg>	[1..1]	Indicator		158
	MaximumInputTime <MaxInptTm>	[0..1]	Quantity		158
	InputText <InptTxt>	[0..1]	±		158
	ImmediateResponseFlag <ImdtRspnFlg>	[0..1]	Indicator		159
	WaitUserValidationFlag <WaitUsrVldtnFlg>	[0..1]	Indicator		159
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		159
	GlobalCorrectionFlag <GblCrrctnFlg>	[0..1]	Indicator		160
	DisableCancelFlag <DsblCclFlg>	[0..1]	Indicator		160
	DisableCorrectFlag <DsblCrrctFlg>	[0..1]	Indicator		160
	DisableValidFlag <DsblVldFlg>	[0..1]	Indicator		160
	MenuBackFlag <MenuBckFlg>	[0..1]	Indicator		160
	PrintRequest <PrtReq>	[0..1]			161
	DocumentQualifier <DocQlfr>	[1..1]	CodeSet		161
	ResponseMode <RspnMd>	[1..1]	CodeSet		161
	IntegratedPrintFlag <IntgrtdPrtFlg>	[0..1]	Indicator		162
	RequiredSignatureFlag <ReqrdSgntrFlg>	[0..1]	Indicator		162
	OutputContent <OutptCntt>	[1..1]	±		162
	PlayResourceRequest <PlayRsrcReq>	[0..1]			163
	ResponseMode <RspnMd>	[0..1]	CodeSet		164

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ResourceAction <RsrcActn>	[1..1]	CodeSet		164
	SoundVolume <SoundVol>	[0..1]	Rate		164
	DisplayResolution <DispRsln>	[0..1]	Text		164
	Resource <Rsrc>	[0..1]			164
	ResourceType <RsrcTp>	[1..1]	CodeSet		165
	ResourceFormat <RsrcFrmt>	[0..1]	CodeSet		165
	Language <Lang>	[0..1]	CodeSet	C6	165
	ResourceReference <RsrcRef>	[0..1]	Text		165
	TimingSlot <TmgSlot>	[0..1]	CodeSet		166
	SecureInputRequest <ScrInptReq>	[0..1]			166
	PINRequestType <PINReqTp>	[1..1]	CodeSet		166
	PINVerificationMethod <PINVrfctnMtd>	[0..1]	Text		167
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		167
	BeepKeyFlag <BeepKeyFlg>	[0..1]	Indicator		167
	CardholderPIN <CrhdldrPIN>	[0..1]			167
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		167
	PINFormat <PINFrmt>	[1..1]	CodeSet		168
	AdditionalInput <AddtlInpt>	[0..1]	Text		168
	InitialisationCardReaderRequest <InitlstnCardRdrReq>	[0..1]			168
	WarmResetFlag <WarmRstFlg>	[0..1]	Indicator		169
	ForceEntryMode <ForceNtryMd>	[0..*]	CodeSet		169
	LeaveCardFlag <LeavCardFlg>	[0..1]	Indicator		170
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		170
	DisplayOutput <DispOutpt>	[0..1]	±		170
	CardReaderAPDURequest <CardRdrAPDUReq>	[0..1]			171
	Class <Clss>	[1..1]	Binary		171
	Instruction <Instr>	[1..1]	Binary		171
	Parameter1 <Param1>	[1..1]	Binary		171
	Parameter2 <Param2>	[1..1]	Binary		171
	Data <Data>	[0..1]	Binary		171
	ExpectedLength <XpctdLngth>	[0..1]	Binary		171

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PowerOffCardReaderRequest <PwrOffCardRdrReq>	[0..1]			172
	PowerOffMaximumWaitingTime <PwrOffMaxWtgTm>	[0..1]	Quantity		172
	DisplayOutput <DispOutpt>	[0..1]	±		172
	TransmissionRequest <TrnsmssnReq>	[0..1]			173
	DestinationAddress <DstnAdr>	[1..1]	±		173
	MaximumTransmissionTime <MaxTrnsmssnTm>	[1..1]	Quantity		174
	MaximumWaitingTime <MaxWtgTm>	[0..1]	Quantity		174
	MessageToSend <MsgToSnd>	[1..1]	Binary		174
	InputNotification <InptNtfctn>	[0..1]			174
	ExchangeIdentification <Xchgld>	[1..1]	Text		174
	OutputContent <OutptCntt>	[1..1]	±		175
	SupplementaryData <SplmtryData>	[0..*]	±	C5	175

10.1.7.5 DataSetIdentification10

Definition: Identification of a data set.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[0..1]	Text		290
	Type <Tp>	[1..1]	CodeSet		290
	Version <Vrsn>	[0..1]	Text		292
	CreationDateTime <CreDtTm>	[0..1]	DateTime		292

10.1.7.5.1 Name <Nm>

Presence: [0..1]

Definition: Name of the data set.

Datatype: "Max256Text" on page 533

10.1.7.5.2 Type <Tp>

Presence: [1..1]

Definition: Category of data set.

Datatype: "DataSetCategory18Code" on page 496

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.

10.1.7.5.3 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data set.

Datatype: "Max256Text" on page 533

10.1.7.5.4 CreationDateTime <CreDtTm>

Presence: [0..1]

Definition: Date and time of creation of the data set.

Datatype: "ISODatetime" on page 528

10.1.7.6 CardPaymentEnvironment79

Definition: Environment of the transaction.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Acquirer <Acqrr>	[0..1]	±		298
	ServiceProvider <SvcPrvdr>	[0..1]	±		298
	Merchant <Mrchnt>	[0..1]			298
	Identification <Id>	[0..1]	±		299
	CommonName <CmonNm>	[0..1]	Text		299
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		299
	LocationAndContact <LctnAndCtct>	[0..1]	±		300
	SchemeData <SchmeData>	[0..1]	Text		300
	POI <POI>	[0..1]			300
	Identification <Id>	[1..1]	±		300
	SystemName <SysNm>	[0..1]	Text		301
	GroupIdentification <Grpld>	[0..1]	Text		301
	Capabilities <Cpblties>	[0..1]	±		301
	TimeZone <TmZone>	[0..1]	Text		302
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		302
	Component <Cmpnt>	[0..*]	±		303
	Card <Card>	[0..1]			305
	ProtectedCardData <PrtctdCardData>	[0..1]	±		306
	PrivateCardData <PrvtCardData>	[0..1]	Binary		306
	PlainCardData <PlainCardData>	[0..1]	±		306
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		307
	MaskedPAN <MskdPAN>	[0..1]	Text		307
	IssuerBIN <IssrBIN>	[0..1]	Text		307
	CardCountryCode <CardCtryCd>	[0..1]	Text		307
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		307
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		308
	CardBrand <CardBrnd>	[0..1]	Text		308
	CardProductType <CardPdctTp>	[0..1]	CodeSet		308
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		308
	InternationalCard <IntrnlCard>	[0..1]	Indicator		308
	AllowedProduct <AllwdPdct>	[0..*]	Text		308

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ServiceOption <SvcOptn>	[0..1]	Text		309
	AdditionalCardData <AddtlCardData>	[0..1]	Text		309
	Check <Chck>	[0..1]			309
	BankIdentification <Bkld>	[0..1]	Text		309
	AccountNumber <AcctNb>	[0..1]	Text		309
	CheckNumber <ChckNb>	[0..1]	Text		309
	CheckCardNumber <ChckCardNb>	[0..1]	Text		310
	CheckTrackData2 <ChckTrckData2>	[0..1]			310
	TrackNumber <TrckNb>	[0..1]	Quantity		310
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		310
	TrackValue <TrckVal>	[1..1]	Text		311
	CheckType <ChckTp>	[0..1]	CodeSet		311
	Country <Ctry>	[0..1]	Text		311
	StoredValueAccount <StordValAcct>	[0..*]			311
	AccountType <AcctTp>	[0..1]	CodeSet		312
	IdentificationType <IdTp>	[0..1]	CodeSet		313
	Identification <Id>	[0..1]	Text		313
	Brand <Brnd>	[0..1]	Text		313
	Provider <Prvdr>	[0..1]	Text		313
	OwnerName <OwnrNm>	[0..1]	Text		313
	ExpiryDate <XpryDt>	[0..1]	Text		314
	EntryMode <NtryMd>	[0..1]	CodeSet		314
	Currency <Ccy>	[0..1]	CodeSet	C1	314
	Balance <Bal>	[0..1]	Amount		315
	LoyaltyAccount <LltyAcct>	[0..*]	±		315
	CustomerDevice <CstmrDvc>	[0..1]	±		315
	Wallet <Wlt>	[0..1]	±		315
	PaymentToken <PmtTkn>	[0..1]	±		316
	MerchantToken <MrchntTkn>	[0..1]	±		316
	Cardholder <Crdhldr>	[0..1]			317
	Identification <Id>	[0..1]			321

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		321
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		321
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		322
	DriverIdentification <DrvrId>	[0..1]	Text		322
	CustomerNumber <CstmrNb>	[0..1]	Text		322
	SocialSecurityNumber <SclSctyNb>	[0..1]	Text		322
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		322
	PassportNumber <PsptNb>	[0..1]	Text		322
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		322
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		322
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		323
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		323
	JobNumber <JobNb>	[0..1]	Text		323
	Department <Dept>	[0..1]	Text		323
	EmailAddress <EmailAdr>	[0..1]	Text		323
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			323
	BirthDate <BirthDt>	[1..1]	Date		323
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		324
	CityOfBirth <CityOfBirth>	[1..1]	Text		324
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	324
	Other <Othr>	[0..*]	±		324
	Name <Nm>	[0..1]	Text		324
	Language <Lang>	[0..1]	CodeSet	C6	324
	BillingAddress <BlgAdr>	[0..1]	±		325
	ShippingAddress <ShppgAdr>	[0..1]	±		325
	TripNumber <TripNb>	[0..1]	Text		326
	Vehicle <Vhcl>	[0..1]	±		326
	Authentication <Authntcn>	[0..*]			327
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		329
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		330
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		331

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProtectedAuthenticationValue <PrtctdAuthntcnVal>	[0..1]	±		331
	CardholderOnLinePIN <CrdhldrOnLinePIN>	[0..1]			331
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		331
	PINFormat <PINFrmt>	[1..1]	CodeSet		332
	AdditionalInput <AddtlInpt>	[0..1]	Text		332
	CardholderIdentification <CrdhldrId>	[0..1]			332
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		333
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		333
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		333
	DriverIdentification <DrvrId>	[0..1]	Text		334
	CustomerNumber <CstmrNb>	[0..1]	Text		334
	SocialSecurityNumber <ScIscyNb>	[0..1]	Text		334
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		334
	PassportNumber <PsptNb>	[0..1]	Text		334
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		334
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		334
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		334
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		335
	JobNumber <JobNb>	[0..1]	Text		335
	Department <Dept>	[0..1]	Text		335
	EmailAddress <EmailAdr>	[0..1]	Text		335
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			335
	BirthDate <BirthDt>	[1..1]	Date		335
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		335
	CityOfBirth <CityOfBirth>	[1..1]	Text		336
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	336
	Other <Othr>	[0..*]	±		336
	AddressVerification <AdrVrfctn>	[0..1]			336
	AddressDigits <AdrDgts>	[0..1]	Text		336
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		337
	AuthenticationType <AuthntcnTp>	[0..1]	Text		337

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		337
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		337
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			337
	Identification <Id>	[1..1]	Text		338
	Value <Val>	[0..1]	Binary		338
	ProtectedValue <PrctcdVal>	[0..1]	±		338
	Type <Tp>	[0..1]	Text		338
	TransactionVerificationResult <TxVrfctnRslt>	[0..*]			338
	Method <Mtd>	[1..1]	CodeSet		339
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		340
	Result <Rslt>	[0..1]	CodeSet		340
	AdditionalResult <AddtlRslt>	[0..1]	Text		340
	PersonalData <PrsnlData>	[0..1]	Text		341
	MobileData <MobData>	[0..*]			341
	MobileCountryCode <MobCtryCd>	[0..1]	Text		341
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		341
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		342
	Geolocation <Glctn>	[0..1]			342
	GeographicCoordinates <GeogcCordints>	[0..1]			342
	Latitude <Lat>	[1..1]	Text		342
	Longitude <Long>	[1..1]	Text		342
	UTMCoordinates <UTMCordints>	[0..1]			343
	UTMZone <UTMZone>	[1..1]	Text		343
	UTMEastward <UTMEstwr>	[1..1]	Text		343
	UTMNorthward <UTMNrthwr>	[1..1]	Text		343
	SensitiveMobileData <SnstvMobData>	[0..1]			343
	MSISDN <MSISDN>	[1..1]	Text		344
	IMSI <IMSI>	[0..1]	Text		344
	IMEI <IMEI>	[0..1]	Text		344
	ProtectedMobileData <PrctcdMobData>	[0..1]	±		344
	ProtectedCardholderData <PrctcdCrhdldrData>	[0..1]	±		344

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SaleEnvironment <SaleEnv>	[0..1]			345
	SaleCapabilities <SaleCpblties>	[0..*]	CodeSet		345
	Currency <Ccy>	[0..1]	CodeSet	C1	346
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		346
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		346
	MinimumSplitAmount <MinSpltAmt>	[0..1]	Amount		347
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		347
	LoyaltyHandling <LltyHdlg>	[0..1]	CodeSet		347

10.1.7.6.1 Acquirer <Acqrr>

Presence: [0..1]

Definition: Acquirer involved in the card payment.

Acquirer <Acqrr> contains the following elements (see "Acquirer10" on page 139 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		139
	ParametersVersion <ParamsVrsn>	[0..1]	Text		139

10.1.7.6.2 ServiceProvider <SvcPrvdr>

Presence: [0..1]

Definition: Third party agent which provides services.

ServiceProvider <SvcPrvdr> contains the following elements (see "Acquirer10" on page 139 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		139
	ParametersVersion <ParamsVrsn>	[0..1]	Text		139

10.1.7.6.3 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 **Organisation41** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	±		299
	CommonName <CmonNm>	[0..1]	Text		299
	LocationCategory <LctnCtgy>	[0..1]	CodeSet		299
	LocationAndContact <LctnAndCtct>	[0..1]	±		300
	SchemeData <SchmeData>	[0..1]	Text		300

10.1.7.6.3.1 Identification <Id>

Presence: [0..1]

Definition: Identification of the merchant.

Identification <Id> contains the following elements (see "[GenericIdentification32](#)" on page 233 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		233
	Type <Tp>	[0..1]	CodeSet		233
	Issuer <Issr>	[0..1]	CodeSet		234
	ShortName <ShrtNm>	[0..1]	Text		234

10.1.7.6.3.2 CommonName <CmonNm>

Presence: [0..1]

Definition: Name of the merchant as appearing on the receipt.

Datatype: "[Max70Text](#)" on page 535

10.1.7.6.3.3 LocationCategory <LctnCtgy>

Presence: [0..1]

Definition: Location category of the place where the merchant actually performed the transaction.

Datatype: "[LocationCategory4Code](#)" on page 502

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.

CodeName	Name	Definition
VIRT	VirtualShop	Virtual Shop is used for any ecommerce solution.

10.1.7.6.3.4 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 176 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PostalAddress <PstlAdr>	[0..1]	±		176
	Email <Email>	[0..1]	Text		176
	URLAddress <URLAdr>	[0..1]	Text		177
	Phone <Phne>	[0..1]	Text		177
	CustomerService <CstmrSvc>	[0..1]	Text		177
	AdditionalContactInformation <AddtlCtctInf>	[0..1]	Text		177

10.1.7.6.3.5 SchemeData <SchmeData>

Presence: [0..1]

Definition: Additional merchant data required by a card scheme.

Datatype: "Max140Text" on page 532

10.1.7.6.4 POI <POI>

Presence: [0..1]

Definition: Point of interaction (POI) performing the transaction.

POI <POI> contains the following **PointOfInteraction13** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	±		300
	SystemName <SysNm>	[0..1]	Text		301
	GroupIdentification <Grpld>	[0..1]	Text		301
	Capabilities <Cpblties>	[0..1]	±		301
	TimeZone <TmZone>	[0..1]	Text		302
	TerminalIntegration <TermnlIntgtn>	[0..1]	CodeSet		302
	Component <Cmpnt>	[0..*]	±		303

10.1.7.6.4.1 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 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwr>	[1..1]	Text		239

10.1.7.6.4.2 SystemName <SysNm>

Presence: [0..1]

Definition: Common name assigned by the acquirer to the POI (Point Of Interaction) system.

Datatype: "[Max70Text](#)" on page 535

10.1.7.6.4.3 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 534

10.1.7.6.4.4 Capabilities <Cpblties>

Presence: [0..1]

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

Capabilities <Cpblties> contains the following elements (see "PointOfInteractionCapabilities9" on page 394 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardReadingCapabilities <CardRdngCpblties>	[0..*]	CodeSet		394
	CardholderVerificationCapabilities <CrdhldrVrfctnCpblties>	[0..*]	CodeSet		395
	PINLengthCapabilities <PINLnghCpblties>	[0..1]	Quantity		396
	ApprovalCodeLength <ApprvlCdLngh>	[0..1]	Quantity		396
	MaxScriptLength <MxScrpLngth>	[0..1]	Quantity		396
	CardCaptureCapable <CardCaptrCpbl>	[0..1]	Indicator		396
	OnLineCapabilities <OnLineCpblties>	[0..1]	CodeSet		396
	MessageCapabilities <MsgCpblties>	[0..*]			397
	Destination <Dstn>	[1..*]	CodeSet		397
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		397
	NumberOfLines <NbOfLines>	[0..1]	Quantity		398
	LineWidth <LineWidth>	[0..1]	Quantity		398
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C6	398

10.1.7.6.4.5 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 535

10.1.7.6.4.6 TerminalIntegration <TermnlIntgtn>

Presence: [0..1]

Definition: Indicates the type of integration of the POI terminal in the sale environment.

Datatype: "LocationCategory3Code" on page 502

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.

10.1.7.6.4.7 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 "PointOfInteractionComponent14" on page 372 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[1..1]	CodeSet		374
	SubTypeInfoInformation <SubTpInf>	[0..1]	Text		375
	Identification <Id>	[1..1]			376
	ItemNumber <ItmNb>	[0..1]	Text		376
	ProviderIdentification <PrvdrlId>	[0..1]	Text		376
	Identification <Id>	[0..1]	Text		376
	SerialNumber <SrlNb>	[0..1]	Text		376
	Status <Sts>	[0..1]			376
	VersionNumber <VrsnNb>	[0..1]	Text		377
	Status <Sts>	[0..1]	CodeSet		377
	ExpiryDate <XpryDt>	[0..1]	Date		377
	StandardCompliance <StdCmplc>	[0..*]			377
	Identification <Id>	[1..1]	Text		377
	Version <Vrsn>	[1..1]	Text		378
	Issuer <Issr>	[1..1]	Text		378
	Characteristics <Chrtcs>	[0..1]			378
	Memory <Mmry>	[0..*]			379
	Identification <Id>	[1..1]	Text		380
	TotalSize <TtlSz>	[1..1]	Quantity		380
	FreeSize <FreeSz>	[1..1]	Quantity		380
	Unit <Unit>	[1..1]	CodeSet		380
	Communication <Com>	[0..*]			380
	CommunicationType <ComTp>	[1..1]	CodeSet		381
	RemoteParty <RmotPty>	[1..*]	CodeSet		382
	Active <Actv>	[1..1]	Indicator		382
	Parameters <Params>	[0..1]	±		382
	PhysicalInterface <PhysIntrfc>	[0..1]			383
	InterfaceName <IntrfcNm>	[1..1]	Text		383
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		383
	UserName <UsrNm>	[0..1]	Text		384

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AccessCode <AccsCd>	[0..1]	Binary		384
	SecurityProfile <SctyPrfl>	[0..1]	Text		384
	AdditionalParameters <AddtlParams>	[0..1]	Binary		384
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		385
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		385
	SecurityElement <SctyElmt>	[0..*]	±		385
	Assessment <Assmnt>	[0..*]			385
	Type <Tp>	[1..1]	CodeSet		386
	Assigner <Assgnr>	[1..*]	Text		386
	DeliveryDate <DlrvyDt>	[0..1]	DateTime		386
	ExpirationDate <XprtnDt>	[0..1]	DateTime		386
	Number <Nb>	[1..1]	Text		386
	Package <Packg>	[0..*]			387
	PackageIdentification <PackgId>	[0..1]	±		387
	PackageLength <PackgLngh>	[0..1]	Quantity		387
	OffsetStart <OffsetStart>	[0..1]	Quantity		387
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		388
	PackageBlock <PackgBlck>	[0..*]			388
	Identification <Id>	[1..1]	Text		388
	Value <Val>	[0..1]	Binary		388
	ProtectedValue <PrctcdVal>	[0..1]	±		388
	Type <Tp>	[0..1]	Text		389

10.1.7.6.5 Card <Card>

Presence: [0..1]

Definition: Payment card performing the transaction.

Card <Card> contains the following **PaymentCard33** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ProtectedCardData <PrtctdCardData>	[0..1]	±		306
	PrivateCardData <PrvtCardData>	[0..1]	Binary		306
	PlainCardData <PlainCardData>	[0..1]	±		306
	PaymentAccountReference <PmtAcctRef>	[0..1]	Text		307
	MaskedPAN <MskdPAN>	[0..1]	Text		307
	IssuerBIN <IssrBIN>	[0..1]	Text		307
	CardCountryCode <CardCtryCd>	[0..1]	Text		307
	CardCurrencyCode <CardCcyCd>	[0..1]	Text		307
	CardProductProfile <CardPdctPrfl>	[0..1]	Text		308
	CardBrand <CardBrnd>	[0..1]	Text		308
	CardProductType <CardPdctTp>	[0..1]	CodeSet		308
	CardProductSubType <CardPdctSubTp>	[0..1]	Text		308
	InternationalCard <IntrnlCard>	[0..1]	Indicator		308
	AllowedProduct <AllwdPdct>	[0..*]	Text		308
	ServiceOption <SvcOptn>	[0..1]	Text		309
	AdditionalCardData <AddtlCardData>	[0..1]	Text		309

10.1.7.6.5.1 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 "ContentInformationType35" on page 436 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		436
	EnvelopedData <EnvlpdData>	[1..1]	±		437

10.1.7.6.5.2 PrivateCardData <PrvtCardData>

Presence: [0..1]

Definition: Replacement of the message element PlainCardData by a private envelope.

Datatype: "Max100KBinary" on page 473

10.1.7.6.5.3 PlainCardData <PlainCardData>

Presence: [0..1]

Definition: Sensitive data associated with the card performing the transaction.

PlainCardData <PlainCardData> contains the following elements (see "[PlainCardData15](#)" on page 177 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PAN <PAN>	[1..1]	Text		178
	CardSequenceNumber <CardSeqNb>	[0..1]	Text		178
	EffectiveDate <FctvDt>	[0..1]	Text		178
	ExpiryDate <XpryDt>	[1..1]	Text		178
	ServiceCode <SvcCd>	[0..1]	Text		178
	Track1 <Trck1>	[0..1]	Text		178
	Track2 <Trck2>	[0..1]	Text		178
	Track3 <Trck3>	[0..1]	Text		178
	CardholderName <CrdhldrNm>	[0..1]	Text		179

10.1.7.6.5.4 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 535

10.1.7.6.5.5 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 533

10.1.7.6.5.6 IssuerBIN <IssrBIN>

Presence: [0..1]

Definition: Bank identifier number of the issuer for routing purpose.

Datatype: "[Max15NumericText](#)" on page 532

10.1.7.6.5.7 CardCountryCode <CardCtryCd>

Presence: [0..1]

Definition: Country code assigned to the card by the card issuer.

Datatype: "[Max3Text](#)" on page 534

10.1.7.6.5.8 CardCurrencyCode <CardCcyCd>

Presence: [0..1]

Definition: Currency code of the card issuer (ISO 4217 numeric code).

Datatype: "[Exact3AlphaNumericText](#)" on page 530

10.1.7.6.5.9 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 534

10.1.7.6.5.10 CardBrand <CardBrnd>

Presence: [0..1]

Definition: Brand name of the card.

Datatype: "Max35Text" on page 534

10.1.7.6.5.11 CardProductType <CardPdctTp>

Presence: [0..1]

Definition: Type of card product.

Datatype: "CardProductType1Code" on page 493

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.

10.1.7.6.5.12 CardProductSubType <CardPdctSubTp>

Presence: [0..1]

Definition: Additional information to identify CardProduct.

Datatype: "Max35Text" on page 534

10.1.7.6.5.13 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 529):

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

10.1.7.6.5.14 AllowedProduct <AllwdPdct>

Presence: [0..*]

Definition: Product that can be purchased with the card.

Datatype: "Max70Text" on page 535

10.1.7.6.5.15 ServiceOption <SvcOptn>

Presence: [0..1]

Definition: Options to the service provided by the card.

Datatype: "Max35Text" on page 534

10.1.7.6.5.16 AdditionalCardData <AddtlCardData>

Presence: [0..1]

Definition: Additional card issuer specific data.

Datatype: "Max70Text" on page 535

10.1.7.6.6 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		309
	AccountNumber <AcctNb>	[0..1]	Text		309
	CheckNumber <ChckNb>	[0..1]	Text		309
	CheckCardNumber <ChckCardNb>	[0..1]	Text		310
	CheckTrackData2 <ChckTrckData2>	[0..1]			310
	TrackNumber <TrckNb>	[0..1]	Quantity		310
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		310
	TrackValue <TrckVal>	[1..1]	Text		311
	CheckType <ChckTp>	[0..1]	CodeSet		311
	Country <Ctry>	[0..1]	Text		311

10.1.7.6.6.1 BankIdentification <Bkld>

Presence: [0..1]

Definition: Identification of the institution (bank) issuing the check.

Datatype: "Max35Text" on page 534

10.1.7.6.6.2 AccountNumber <AcctNb>

Presence: [0..1]

Definition: Identification of the account linked to the check.

Datatype: "Max35Text" on page 534

10.1.7.6.6.3 CheckNumber <ChckNb>

Presence: [0..1]

Definition: Identification of the check.

Datatype: "Max35Text" on page 534

10.1.7.6.6.4 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 534

10.1.7.6.6.5 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		310
	TrackFormat <TrckFrmt>	[0..1]	CodeSet		310
	TrackValue <TrckVal>	[1..1]	Text		311

10.1.7.6.6.5.1 TrackNumber <TrckNb>

Presence: [0..1]

Definition: Track number of the card.

Datatype: "Number" on page 530

10.1.7.6.6.5.2 TrackFormat <TrckFrmt>

Presence: [0..1]

Definition: Card or check track format.

Datatype: "TrackFormat1Code" on page 525

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.

CodeName	Name	Definition
JIS2	JISIIFormat	Japanese track format II.

10.1.7.6.5.3 TrackValue <TrckVal>

Presence: [1..1]

Definition: Card track content or equivalent.

Datatype: "Max140Text" on page 532

10.1.7.6.6 CheckType <ChckTp>

Presence: [0..1]

Definition: Type of the check (personal or professional).

Datatype: "CheckType1Code" on page 493

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.

10.1.7.6.6.7 Country <Ctry>

Presence: [0..1]

Definition: Country of the check.

Datatype: "Max3Text" on page 534

10.1.7.6.7 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		312
	IdentificationType <IdTp>	[0..1]	CodeSet		313
	Identification <Id>	[0..1]	Text		313
	Brand <Brnd>	[0..1]	Text		313
	Provider <Prvdr>	[0..1]	Text		313
	OwnerName <OwnrNm>	[0..1]	Text		313
	ExpiryDate <XpryDt>	[0..1]	Text		314
	EntryMode <NtryMd>	[0..1]	CodeSet		314
	Currency <Ccy>	[0..1]	CodeSet	C1	314
	Balance <Bal>	[0..1]	Amount		315

10.1.7.6.7.1 AccountType <AcctTp>

Presence: [0..1]

Definition: Type of stored value account.

Datatype: "StoredValueAccountType1Code" on page 521

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 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).

CodeName	Name	Definition
CARD	SmartCardTag	Stored value account hold on the chip of a smart card.
TRVL	Travel	Travel prepaid account.

10.1.7.6.7.2 IdentificationType <IdTp>

Presence: [0..1]

Definition: Type of identification for this Stored Value Account.

Datatype: "CardIdentificationType1Code" on page 492

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.

10.1.7.6.7.3 Identification <Id>

Presence: [0..1]

Definition: Identification of Stored Value Account.

Datatype: "Max35Text" on page 534

10.1.7.6.7.4 Brand <Brnd>

Presence: [0..1]

Definition: Brand to which belong the account.

Datatype: "Max35Text" on page 534

10.1.7.6.7.5 Provider <Prvdr>

Presence: [0..1]

Definition: Provider of the Stored Value Account.

Datatype: "Max35Text" on page 534

10.1.7.6.7.6 OwnerName <OwnrNm>

Presence: [0..1]

Definition: Owner name of an account.

Datatype: "Max45Text" on page 534

10.1.7.6.7.7 ExpiryDate <XpryDt>

Presence: [0..1]

Definition: Expiry date of the account of card.

Datatype: "Max10Text" on page 531

10.1.7.6.7.8 EntryMode <NtryMd>

Presence: [0..1]

Definition: Standard or last entry mode to access the Stored Value account or card.

Datatype: "CardDataReading8Code" on page 490

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.)

10.1.7.6.7.9 Currency <Ccy>

Presence: [0..1]

Definition: Currency of the Stored Value account.

Impacted by: C1 "ActiveCurrency"

Datatype: "ActiveCurrencyCode" on page 476

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.

10.1.7.6.7.10 Balance <Bal>

Presence: [0..1]

Definition: Current balance of the Stored Value account.

Datatype: "ImpliedCurrencyAndAmount" on page 473

10.1.7.6.8 LoyaltyAccount <LtyAcct>

Presence: [0..*]

Definition: Store value account associated to the payment.

LoyaltyAccount <LtyAcct> contains the following elements (see "LoyaltyAccount3" on page 389 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	LoyaltyIdentification <LtyId>	[1..1]	Text		389
	EntryMode <NtryMd>	[0..1]	CodeSet		389
	IdentificationType <IdTp>	[0..1]	CodeSet		390
	Brand <Brnd>	[0..1]	Text		390
	Provider <Prvdr>	[0..1]	Text		391
	OwnerName <OwnrNm>	[0..1]	Text		391
	Unit <Unit>	[0..1]	CodeSet		391
	Currency <Ccy>	[0..1]	CodeSet	C1	391
	Balance <Bal>	[0..1]	Amount		391

10.1.7.6.9 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 393 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		394
	Type <Tp>	[0..1]	Text		394
	Provider <Prvdr>	[0..1]	Text		394

10.1.7.6.10 Wallet <WlIt>

Presence: [0..1]

Definition: Container for tenders used by the customer to perform the payment transaction.

Wallet <Wlt> contains the following elements (see "[CustomerDevice3](#)" on page 393 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]	Text		394
	Type <Tp>	[0..1]	Text		394
	Provider <Prvdr>	[0..1]	Text		394

10.1.7.6.11 PaymentToken <PmtTkn>

Presence: [0..1]

Definition: Payment token information.

PaymentToken <PmtTkn> contains the following elements (see "[Token1](#)" on page 470 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentToken <PmtTkn>	[0..1]	Text		470
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		470
	TokenRequestorIdentification <TknRqstrId>	[0..1]	Text		470
	TokenAssuranceData <TknAssrncData>	[0..1]	Text		471
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		471
	TokenInitiatedIndicator <TknInittldInd>	[0..1]	Indicator		471

10.1.7.6.12 MerchantToken <MrchntTkn>

Presence: [0..1]

Definition: Merchant token information.

MerchantToken <MrchntTkn> contains the following elements (see "[MerchantToken2](#)" on page 471 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Token <Tkn>	[0..1]	Text		471
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		472
	TokenCharacteristic <TknChrtc>	[0..*]	Text		472
	TokenRequestor <TknRqstr>	[0..1]			472
	ProviderIdentification <PrvdrId>	[1..1]	Text		472
	RequestorIdentification <RqstrId>	[1..1]	Text		472
	TokenAssuranceLevel <TknAssrncLvl>	[0..1]	Quantity		472
	TokenAssuranceData <TknAssrncData>	[0..1]	Binary		472
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		473
	TokenInitiatedIndicator <TknInittldInd>	[0..1]	Indicator		473

10.1.7.6.13 Cardholder <Crdhdr>

Presence: [0..1]

Definition: Cardholder involved in the card payment.

Cardholder <Crhdldr> contains the following **Cardholder20** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[0..1]			321
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		321
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		321
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		322
	DriverIdentification <DrvrId>	[0..1]	Text		322
	CustomerNumber <CstmrNb>	[0..1]	Text		322
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		322
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		322
	PassportNumber <PsptNb>	[0..1]	Text		322
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		322
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		322
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		323
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		323
	JobNumber <JobNb>	[0..1]	Text		323
	Department <Dept>	[0..1]	Text		323
	EmailAddress <EmailAdr>	[0..1]	Text		323
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			323
	BirthDate <BirthDt>	[1..1]	Date		323
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		324
	CityOfBirth <CityOfBirth>	[1..1]	Text		324
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	324
	Other <Othr>	[0..*]	±		324
	Name <Nm>	[0..1]	Text		324
	Language <Lang>	[0..1]	CodeSet	C6	324
	BillingAddress <BllgAdr>	[0..1]	±		325
	ShippingAddress <ShppgAdr>	[0..1]	±		325
	TripNumber <TripNb>	[0..1]	Text		326
	Vehicle <Vhcl>	[0..1]	±		326
	Authentication <Authntcn>	[0..*]			327
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		329
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		330

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		331
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		331
	CardholderOnLinePIN <CrhdldrOnLinePIN>	[0..1]			331
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		331
	PINFormat <PINFrmt>	[1..1]	CodeSet		332
	AdditionalInput <AddtlInpt>	[0..1]	Text		332
	CardholderIdentification <Crhdldrld>	[0..1]			332
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		333
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		333
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		333
	DriverIdentification <Drvrld>	[0..1]	Text		334
	CustomerNumber <CstmrNb>	[0..1]	Text		334
	SocialSecurityNumber <ScIScItyNb>	[0..1]	Text		334
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		334
	PassportNumber <PsptNb>	[0..1]	Text		334
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		334
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		334
	EmployerIdentificationNumber <MplyrldNb>	[0..1]	Text		334
	EmployeeIdentificationNumber <MplyeeldNb>	[0..1]	Text		335
	JobNumber <JobNb>	[0..1]	Text		335
	Department <Dept>	[0..1]	Text		335
	EmailAddress <EmailAdr>	[0..1]	Text		335
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			335
	BirthDate <BirthDt>	[1..1]	Date		335
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		335
	CityOfBirth <CityOfBirth>	[1..1]	Text		336
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	336
	Other <Othr>	[0..*]	±		336
	AddressVerification <AdrVrfctn>	[0..1]			336
	AddressDigits <AdrDgts>	[0..1]	Text		336
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		337

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationType <AuthntcnTp>	[0..1]	Text		337
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		337
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		337
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			337
	Identification <Id>	[1..1]	Text		338
	Value <Val>	[0..1]	Binary		338
	ProtectedValue <PrctcdVal>	[0..1]	±		338
	Type <Tp>	[0..1]	Text		338
	TransactionVerificationResult <TxVrfctnRslt>	[0..*]			338
	Method <Mtd>	[1..1]	CodeSet		339
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		340
	Result <Rslt>	[0..1]	CodeSet		340
	AdditionalResult <AddtlRslt>	[0..1]	Text		340
	PersonalData <PrsnlData>	[0..1]	Text		341
	MobileData <MobData>	[0..*]			341
	MobileCountryCode <MobCtryCd>	[0..1]	Text		341
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		341
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		342
	Geolocation <Glctn>	[0..1]			342
	GeographicCoordinates <GeogcCordints>	[0..1]			342
	Latitude <Lat>	[1..1]	Text		342
	Longitude <Long>	[1..1]	Text		342
	UTMCoordinates <UTMCordints>	[0..1]			343
	UTMZone <UTMZone>	[1..1]	Text		343
	UTMEastward <UTMEstwr>	[1..1]	Text		343
	UTMNorthward <UTMNrthwr>	[1..1]	Text		343
	SensitiveMobileData <SnstvMobData>	[0..1]			343
	MSISDN <MSISDN>	[1..1]	Text		344
	IMSI <IMSI>	[0..1]	Text		344
	IMEI <IMEI>	[0..1]	Text		344
	ProtectedMobileData <PrctcdMobData>	[0..1]	±		344

10.1.7.6.13.1 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		321
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		321
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		322
	DriverIdentification <DrvrId>	[0..1]	Text		322
	CustomerNumber <CstmrNb>	[0..1]	Text		322
	SocialSecurityNumber <ScIscTyNb>	[0..1]	Text		322
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		322
	PassportNumber <PsptNb>	[0..1]	Text		322
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		322
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		322
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		323
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		323
	JobNumber <JobNb>	[0..1]	Text		323
	Department <Dept>	[0..1]	Text		323
	EmailAddress <EmailAdr>	[0..1]	Text		323
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			323
	BirthDate <BirthDt>	[1..1]	Date		323
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		324
	CityOfBirth <CityOfBirth>	[1..1]	Text		324
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	324
	Other <Othr>	[0..*]	±		324

10.1.7.6.13.1.1 DriverLicenseNumber <DrvrLicNb>

Presence: [0..1]

Definition: Number assigned by a license authority to a driver's license.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.2 DriverLicenseLocation <DrvrLicLctn>

Presence: [0..1]

Definition: Country, state or province, issuer of the driver license.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.3 DriverLicenseName <DrvrLicNm>

Presence: [0..1]

Definition: Name or title of the driver license.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.4 DriverIdentification <DrvrId>

Presence: [0..1]

Definition: Identification of the driver in the fleet of vehicle.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.5 CustomerNumber <CstmrNb>

Presence: [0..1]

Definition: Number assigned by an agent to identify its customer.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.6 SocialSecurityNumber <SciSctyNb>

Presence: [0..1]

Definition: Number assigned by a social security agency.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.7 AlienRegistrationNumber <AlnRegnNb>

Presence: [0..1]

Definition: Number assigned by a government agency to identify foreign nationals.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.8 PassportNumber <PsptNb>

Presence: [0..1]

Definition: Number assigned by a passport authority to a passport.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.9 TaxIdentificationNumber <TaxIdNb>

Presence: [0..1]

Definition: Number assigned by a tax authority to an entity.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.10 IdentityCardNumber <IdntyCardNb>

Presence: [0..1]

Definition: Number assigned by a national authority to an identity card.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.11 EmployerIdentificationNumber <MplyrIdNb>

Presence: [0..1]

Definition: Number assigned to an employer by a registration authority.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.12 EmployeeIdentificationNumber <MplyeIdNb>

Presence: [0..1]

Definition: Number assigned to an employee by a employer.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.13 JobNumber <JobNb>

Presence: [0..1]

Definition: Identification of the job.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.14 Department <Dept>

Presence: [0..1]

Definition: Identification of the department.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.15 EmailAddress <EmailAdr>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 533

10.1.7.6.13.1.16 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		323
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		324
	CityOfBirth <CityOfBirth>	[1..1]	Text		324
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	324

10.1.7.6.13.1.16.1 BirthDate <BirthDt>

Presence: [1..1]

Definition: Date on which a person is born.

Datatype: "ISODate" on page 527

10.1.7.6.13.1.16.2 ProvinceOfBirth <PrvcOfBirth>

Presence: [0..1]

Definition: Province where a person was born.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.16.3 CityOfBirth <CityOfBirth>

Presence: [1..1]

Definition: City where a person was born.

Datatype: "Max35Text" on page 534

10.1.7.6.13.1.16.4 CountryOfBirth <CtryOfBirth>

Presence: [1..1]

Definition: Country where a person was born.

Impacted by: C3 "Country"

Datatype: "CountryCode" on page 494

Constraints

- **Country**

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

10.1.7.6.13.1.17 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 241 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		241
	IdentificationType <IdTp>	[1..1]	Text		241

10.1.7.6.13.2 Name <Nm>

Presence: [0..1]

Definition: Cardholder name associated with the card.

Datatype: "Max45Text" on page 534

10.1.7.6.13.3 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: C6 "ValidationByTable"

Datatype: "LanguageCode" on page 502

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.7.6.13.4 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 410 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		410
	Department <Dept>	[0..1]	Text		411
	SubDepartment <SubDept>	[0..1]	Text		411
	AddressLine <AdrLine>	[0..2]	Text		411
	StreetName <StrtNm>	[0..1]	Text		411
	BuildingNumber <BldgNb>	[0..1]	Text		411
	PostCode <PstCd>	[0..1]	Text		411
	TownName <TwnNm>	[0..1]	Text		411
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		412
	CountryCode <CtryCd>	[0..1]	Text		412

10.1.7.6.13.5 ShippingAddress <ShppgAdr>

Presence: [0..1]

Definition: Postal address for delivery of goods or services.

ShippingAddress <ShppgAdr> contains the following elements (see "PostalAddress22" on page 410 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressType <AdrTp>	[0..1]	CodeSet		410
	Department <Dept>	[0..1]	Text		411
	SubDepartment <SubDept>	[0..1]	Text		411
	AddressLine <AdrLine>	[0..2]	Text		411
	StreetName <StrtNm>	[0..1]	Text		411
	BuildingNumber <BldgNb>	[0..1]	Text		411
	PostCode <PstCd>	[0..1]	Text		411
	TownName <TwnNm>	[0..1]	Text		411
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		412
	CountryCode <CtryCd>	[0..1]	Text		412

10.1.7.6.13.6 TripNumber <TripNb>

Presence: [0..1]

Definition: Identification of the trip.

Datatype: "Max35Text" on page 534

10.1.7.6.13.7 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 398 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	VehicleNumber <VhclNb>	[0..1]	Text		399
	TrailerNumber <TrlrNb>	[0..1]	Text		399
	VehicleTag <VhclTag>	[0..1]	Text		400
	VehicleTagEntryMode <VhclTagNtryMd>	[0..1]	CodeSet		400
	UnitNumber <UnitNb>	[0..1]	Text		400
	ReplacementCar <RplcmntCar>	[0..1]	Indicator		400
	Odometer <Odmtr>	[0..1]	Quantity		400
	Hubometer <Hbmtr>	[0..1]	Quantity		401
	TrailerHours <TrlrHrs>	[0..1]	Text		401
	ReferHours <RefrHrs>	[0..1]	Text		401
	Maintenanceldentification <Mntncld>	[0..1]	Text		401
	DriverOrVehicleCard <DrvrOrVhclCard>	[0..1]			401
	PAN <PAN>	[0..1]	Text		401
	Track1 <Trck1>	[0..1]	Text		402
	Track2 <Trck2>	[0..1]	Text		402
	Track3 <Trck3>	[0..1]	Text		402
	AdditionalCardData <AddtlCardData>	[0..*]	Text		402
	EntryMode <NtryMd>	[0..1]	CodeSet		402
	AdditionalVehicleData <AddtlVhclData>	[0..*]			403
	Type <Tp>	[0..1]	Text		403
	EntryMode <NtryMd>	[0..1]	CodeSet		403
	Data <Data>	[1..1]	Text		404

10.1.7.6.13.8 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 **CardholderAuthentication16** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AuthenticationMethod <AuthntcnMtd>	[0..1]	CodeSet		329
	AuthenticationExemption <AuthntcnXmptn>	[0..1]	CodeSet		330
	AuthenticationValue <AuthntcnVal>	[0..1]	Binary		331
	ProtectedAuthenticationValue <PrctcdAuthntcnVal>	[0..1]	±		331
	CardholderOnLinePIN <CrhdldrOnLinePIN>	[0..1]			331
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		331
	PINFormat <PINFrmt>	[1..1]	CodeSet		332
	AdditionalInput <AddtlInpt>	[0..1]	Text		332
	CardholderIdentification <CrhdldrId>	[0..1]			332
	DriverLicenseNumber <DrvrLicNb>	[0..1]	Text		333
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		333
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		333
	DriverIdentification <DrvrId>	[0..1]	Text		334
	CustomerNumber <CstmrNb>	[0..1]	Text		334
	SocialSecurityNumber <SciSctyNb>	[0..1]	Text		334
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		334
	PassportNumber <PsptNb>	[0..1]	Text		334
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		334
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		334
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		334
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		335
	JobNumber <JobNb>	[0..1]	Text		335
	Department <Dept>	[0..1]	Text		335
	EmailAddress <EmailAdr>	[0..1]	Text		335
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			335
	BirthDate <BirthDt>	[1..1]	Date		335
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		335
	CityOfBirth <CityOfBirth>	[1..1]	Text		336
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	336
	Other <Othr>	[0..*]	±		336
	AddressVerification <AdrVrfctn>	[0..1]			336

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	AddressDigits <AdrDgts>	[0..1]	Text		336
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		337
	AuthenticationType <AuthntcnTp>	[0..1]	Text		337
	AuthenticationLevel <AuthntcnLvl>	[0..1]	Text		337
	AuthenticationResult <AuthntcnRslt>	[0..1]	CodeSet		337
	AuthenticationAdditionalInformation <AuthntcnAddtlInf>	[0..1]			337
	Identification <Id>	[1..1]	Text		338
	Value <Val>	[0..1]	Binary		338
	ProtectedValue <PrctcdVal>	[0..1]	±		338
	Type <Tp>	[0..1]	Text		338

10.1.7.6.13.8.1 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 486

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.

10.1.7.6.13.8.2 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 498

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.

10.1.7.6.13.8.3 AuthenticationValue <AuthntcnVal>

Presence: [0..1]

Definition: Value used to authenticate the cardholder.

Datatype: "Max5000Binary" on page 475

10.1.7.6.13.8.4 ProtectedAuthenticationValue <PrctcdAuthntcnVal>

Presence: [0..1]

Definition: Protection of the authentication value.

ProtectedAuthenticationValue <PrctcdAuthntcnVal> contains the following elements (see "ContentInformationType35" on page 436 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		436
	EnvelopedData <EnvlpdData>	[1..1]	±		437

10.1.7.6.13.8.5 CardholderOnLinePIN <CrdhldrOnLinePIN>

Presence: [0..1]

Definition: Encrypted personal identification number (PIN) and related information.

CardholderOnLinePIN <CrdhldrOnLinePIN> contains the following **OnLinePIN10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptedPINBlock <NcrptdPINBlck>	[1..1]	±		331
	PINFormat <PINFrmt>	[1..1]	CodeSet		332
	AdditionalInput <AddtlInpt>	[0..1]	Text		332

10.1.7.6.13.8.5.1 EncryptedPINBlock <NcrptdPINBlck>

Presence: [1..1]

Definition: Encrypted PIN (Personal Identification Number).

EncryptedPINBlock <NcrptdPINBlck> contains the following elements (see
"ContentInformationType35" on page 436 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		436
	EnvelopedData <EnvlpdData>	[1..1]	±		437

10.1.7.6.13.8.5.2 PINFormat <PINFrmt>

Presence: [1..1]

Definition: PIN (Personal Identification Number) format before encryption.

Datatype: "PINFormat3Code" on page 509

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.

10.1.7.6.13.8.5.3 AdditionalInput <AddtlInpt>

Presence: [0..1]

Definition: Additional information required to verify the PIN (Personal Identification Number).

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6 CardholderIdentification <Crhdldrld>

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		333
	DriverLicenseLocation <DrvrLicLctn>	[0..1]	Text		333
	DriverLicenseName <DrvrLicNm>	[0..1]	Text		333
	DriverIdentification <DrvrId>	[0..1]	Text		334
	CustomerNumber <CstmrNb>	[0..1]	Text		334
	SocialSecurityNumber <ScIScItyNb>	[0..1]	Text		334
	AlienRegistrationNumber <AlnRegnNb>	[0..1]	Text		334
	PassportNumber <PsptNb>	[0..1]	Text		334
	TaxIdentificationNumber <TaxIdNb>	[0..1]	Text		334
	IdentityCardNumber <IdntyCardNb>	[0..1]	Text		334
	EmployerIdentificationNumber <MplyrIdNb>	[0..1]	Text		334
	EmployeeIdentificationNumber <MplyeIdNb>	[0..1]	Text		335
	JobNumber <JobNb>	[0..1]	Text		335
	Department <Dept>	[0..1]	Text		335
	EmailAddress <EmailAdr>	[0..1]	Text		335
	DateAndPlaceOfBirth <DtAndPlcOfBirth>	[0..1]			335
	BirthDate <BirthDt>	[1..1]	Date		335
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		335
	CityOfBirth <CityOfBirth>	[1..1]	Text		336
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	336
	Other <Othr>	[0..*]	±		336

10.1.7.6.13.8.6.1 DriverLicenseNumber <DrvrLicNb>

Presence: [0..1]

Definition: Number assigned by a license authority to a driver's license.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.2 DriverLicenseLocation <DrvrLicLctn>

Presence: [0..1]

Definition: Country, state or province, issuer of the driver license.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.3 DriverLicenseName <DrvrLicNm>

Presence: [0..1]

Definition: Name or title of the driver license.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.4 DriverIdentification <DrvrlId>

Presence: [0..1]

Definition: Identification of the driver in the fleet of vehicle.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.5 CustomerNumber <CstmrNb>

Presence: [0..1]

Definition: Number assigned by an agent to identify its customer.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.6 SocialSecurityNumber <ScISctyNb>

Presence: [0..1]

Definition: Number assigned by a social security agency.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.7 AlienRegistrationNumber <AlnRegnNb>

Presence: [0..1]

Definition: Number assigned by a government agency to identify foreign nationals.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.8 PassportNumber <PsptNb>

Presence: [0..1]

Definition: Number assigned by a passport authority to a passport.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.9 TaxIdentificationNumber <TaxIdNb>

Presence: [0..1]

Definition: Number assigned by a tax authority to an entity.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.10 IdentityCardNumber <IdntyCardNb>

Presence: [0..1]

Definition: Number assigned by a national authority to an identity card.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.11 EmployerIdentificationNumber <MplyrIdNb>

Presence: [0..1]

Definition: Number assigned to an employer by a registration authority.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.12 EmployeeIdentificationNumber <MplyeeldNb>

Presence: [0..1]

Definition: Number assigned to an employee by a employer.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.13 JobNumber <JobNb>

Presence: [0..1]

Definition: Identification of the job.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.14 Department <Dept>

Presence: [0..1]

Definition: Identification of the department.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.15 EmailAddress <EmailAdr>

Presence: [0..1]

Definition: Address for electronic mail (e-mail).

Datatype: "Max256Text" on page 533

10.1.7.6.13.8.6.16 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		335
	ProvinceOfBirth <PrvcOfBirth>	[0..1]	Text		335
	CityOfBirth <CityOfBirth>	[1..1]	Text		336
	CountryOfBirth <CtryOfBirth>	[1..1]	CodeSet	C3	336

10.1.7.6.13.8.6.16.1 BirthDate <BirthDt>

Presence: [1..1]

Definition: Date on which a person is born.

Datatype: "ISODate" on page 527

10.1.7.6.13.8.6.16.2 ProvinceOfBirth <PrvcOfBirth>

Presence: [0..1]

Definition: Province where a person was born.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.16.3 CityOfBirth <CityOfBirth>

Presence: [1..1]

Definition: City where a person was born.

Datatype: "Max35Text" on page 534

10.1.7.6.13.8.6.16.4 CountryOfBirth <CtrOfBirth>

Presence: [1..1]

Definition: Country where a person was born.

Impacted by: C3 "Country"

Datatype: "CountryCode" on page 494

Constraints

- **Country**

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

10.1.7.6.13.8.6.17 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 241 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		241
	IdentificationType <IdTp>	[1..1]	Text		241

10.1.7.6.13.8.7 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		336
	PostalCodeDigits <PstlCdDgts>	[0..1]	Text		337

10.1.7.6.13.8.7.1 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 535

10.1.7.6.13.8.7.2 PostalCodeDigits <PstlCdDgts>

Presence: [0..1]

Definition: Numeric characters from the cardholder's postal code.

Datatype: "Max5NumericText" on page 535

10.1.7.6.13.8.8 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 534

10.1.7.6.13.8.9 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 534

10.1.7.6.13.8.10 AuthenticationResult <AuthntcnRslt>

Presence: [0..1]

Definition: Result of authentication.

Datatype: "AuthenticationResult1Code" on page 487

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.

10.1.7.6.13.8.11 AuthenticationAdditionalInformation <AuthntcnAddtlInf>

Presence: [0..1]

Definition: Additional information related to the result of the authentication.

AuthenticationAdditionalInformation <AuthntcnAddtlInf> contains the following
ExternallyDefinedData4 elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		338
	Value <Val>	[0..1]	Binary		338
	ProtectedValue <PrctcdVal>	[0..1]	±		338
	Type <Tp>	[0..1]	Text		338

10.1.7.6.13.8.11.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the set of data to exchange.

Datatype: "Max1025Text" on page 531

10.1.7.6.13.8.11.2 Value <Val>

Presence: [0..1]

Definition: Data to exchange according to an external standard.

Datatype: "Max100KBinary" on page 473

10.1.7.6.13.8.11.3 ProtectedValue <PrctcdVal>

Presence: [0..1]

Definition: Protection of the values to exchange.

ProtectedValue <PrctcdVal> contains the following elements (see "ContentInformationType34" on page 438 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		439
	EnvelopedData <EnvlpdData>	[0..1]	±		439
	AuthenticatedData <AuthntcdData>	[0..1]	±		440
	SignedData <SgndData>	[0..1]	±		441
	DigestedData <DgstdData>	[0..1]	±		442

10.1.7.6.13.8.11.4 Type <Tp>

Presence: [0..1]

Definition: Identification of the standard used to encode the values to exchange.

Datatype: "Max1025Text" on page 531

10.1.7.6.13.9 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		339
	VerificationEntity <VrfctnNtty>	[0..1]	CodeSet		340
	Result <RsIt>	[0..1]	CodeSet		340
	AdditionalResult <AddtlRsIt>	[0..1]	Text		340

10.1.7.6.13.9.1 Method <Mtd>

Presence: [1..1]

Definition: Method of verification that has been performed.

Datatype: "AuthenticationMethod6Code" on page 485

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.

10.1.7.6.13.9.2 VerificationEntity <VrfctnNtty>

Presence: [0..1]

Definition: Entity or device that has performed the verification.

Datatype: "AuthenticationEntity2Code" on page 485

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.

10.1.7.6.13.9.3 Result <RsIt>

Presence: [0..1]

Definition: Result of the verification.

Datatype: "Verification1Code" on page 527

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.

10.1.7.6.13.9.4 AdditionalResult <AddtlRsIt>

Presence: [0..1]

Definition: Additional result of the verification.

Datatype: "Max500Text" on page 534

10.1.7.6.13.10 PersonalData <PrsnlData>

Presence: [0..1]

Definition: Identifies personal data related to the cardholder.

Datatype: "Max70Text" on page 535

10.1.7.6.13.11 MobileData <MobData>

Presence: [0..*]

Definition: Data related to the mobile of stakeholder.

MobileData <MobData> contains the following **MobileData5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MobileCountryCode <MobCtryCd>	[0..1]	Text		341
	MobileNetworkCode <MobNtwkCd>	[0..1]	Text		341
	MobileMaskedMSISDN <MobMskdMSISDN>	[0..1]	Text		342
	Geolocation <Glctn>	[0..1]			342
	GeographicCoordinates <GeogcCordints>	[0..1]			342
	Latitude <Lat>	[1..1]	Text		342
	Longitude <Long>	[1..1]	Text		342
	UTMCoordinates <UTMCordints>	[0..1]			343
	UTMZone <UTMZone>	[1..1]	Text		343
	UTMEastward <UTMEstwrdr>	[1..1]	Text		343
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		343
	SensitiveMobileData <SnstvlMobData>	[0..1]			343
	MSISDN <MSISDN>	[1..1]	Text		344
	IMSI <IMSI>	[0..1]	Text		344
	IMEI <IMEI>	[0..1]	Text		344
	ProtectedMobileData <PrtctdMobData>	[0..1]	±		344

10.1.7.6.13.11.1 MobileCountryCode <MobCtryCd>

Presence: [0..1]

Definition: Identifies the country of a mobile phone operator.

Datatype: "Min2Max3AlphaText" on page 536

10.1.7.6.13.11.2 MobileNetworkCode <MobNtwkCd>

Presence: [0..1]

Definition: Identifies the mobile phone operator inside a country.

Datatype: "Min2Max3NumericText" on page 536

10.1.7.6.13.11.3 MobileMaskedMSISDN <MobMskdMSISDN>

Presence: [0..1]

Definition: Masked Mobile Subscriber Integrated Service Digital Network.

Datatype: "Max35Text" on page 534

10.1.7.6.13.11.4 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]			342
	Latitude <Lat>	[1..1]	Text		342
	Longitude <Long>	[1..1]	Text		342
	UTMCoordinates <UTMCordints>	[0..1]			343
	UTMZone <UTMZone>	[1..1]	Text		343
	UTMEastward <UTMEstwrdr>	[1..1]	Text		343
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		343

10.1.7.6.13.11.4.1 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		342
	Longitude <Long>	[1..1]	Text		342

10.1.7.6.13.11.4.1.1 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 534

10.1.7.6.13.11.4.1.2 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 534

10.1.7.6.13.11.4.2 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		343
	UTMEastward <UTMEstwr>	[1..1]	Text		343
	UTMNorthward <UTMNrthwr>	[1..1]	Text		343

10.1.7.6.13.11.4.2.1 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 534

10.1.7.6.13.11.4.2.2 UTMEastward <UTMEstwr>

Presence: [1..1]

Definition: X-coordinate of the Universal Transverse Mercator coordinate system.

Datatype: "Max35Text" on page 534

10.1.7.6.13.11.4.2.3 UTMNorthward <UTMNrthwr>

Presence: [1..1]

Definition: Y-coordinate of the Universal Transverse Mercator coordinate system.

Datatype: "Max35Text" on page 534

10.1.7.6.13.11.5 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		344
	IMSI <IMSI>	[0..1]	Text		344
	IMEI <IMEI>	[0..1]	Text		344

10.1.7.6.13.11.5.1 MSISDN <MSISDN>

Presence: [1..1]

Definition: identifies the mobile - Mobile Subscriber Integrated Service Digital Network (The SIM identifier).

Datatype: "Max35NumericText" on page 533

10.1.7.6.13.11.5.2 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 533

10.1.7.6.13.11.5.3 IMEI <IMEI>

Presence: [0..1]

Definition: International Mobile Equipment Identity is a number usually unique to identify a mobile phone.

Datatype: "Max35NumericText" on page 533

10.1.7.6.13.11.6 ProtectedMobileData <PrtctdMobData>

Presence: [0..1]

Definition: Sensitive information related to the mobile phone, protected by CMS.

ProtectedMobileData <PrtctdMobData> contains the following elements (see "ContentInformationType35" on page 436 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		436
	EnvelopedData <EnvlpdData>	[1..1]	±		437

10.1.7.6.14 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
"ContentInformationType35" on page 436 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		436
	EnvelopedData <EnvlpdData>	[1..1]	±		437

10.1.7.6.15 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		345
	Currency <Ccy>	[0..1]	CodeSet	C1	346
	MinimumAmountToDeliver <MinAmtToDlvr>	[0..1]	Amount		346
	MaximumCashBackAmount <MaxCshBckAmt>	[0..1]	Amount		346
	MinimumSplitAmount <MinSpltAmt>	[0..1]	Amount		347
	DebitPreferredFlag <DbtPrefrdFlg>	[0..1]	Indicator		347
	LoyaltyHandling <LtyHdlg>	[0..1]	CodeSet		347

10.1.7.6.15.1 SaleCapabilities <SaleCpblties>

Presence: [0..*]

Definition: Capabilities of the Sale system.

Datatype: "SaleCapabilities1Code" on page 519

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.

10.1.7.6.15.2 Currency <Ccy>

Presence: [0..1]

Definition: Default currency associated with the sale system.

Impacted by: C1 "ActiveCurrency"

Datatype: "ActiveCurrencyCode" on page 476

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.

10.1.7.6.15.3 MinimumAmountToDeliver <MinAmtToDlvr>

Presence: [0..1]

Definition: Minimum amount the Sale System is allowed to deliver for this payment.

Datatype: "ImpliedCurrencyAndAmount" on page 473

10.1.7.6.15.4 MaximumCashBackAmount <MaxCshBckAmt>

Presence: [0..1]

Definition: Maximum amount which could be requested for cash-back.

Datatype: ["ImpliedCurrencyAndAmount"](#) on page 473

10.1.7.6.15.5 MinimumSplitAmount <MinSpltAmt>

Presence: [0..1]

Definition: Minimum amount to split a sale transaction.

Datatype: ["ImpliedCurrencyAndAmount"](#) on page 473

10.1.7.6.15.6 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 529):

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

10.1.7.6.15.7 LoyaltyHandling <LltyHdlg>

Presence: [0..1]

Definition: Way of Loyalty handling.

Datatype: ["LoyaltyHandling1Code"](#) on page 503

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.

10.1.7.7 CardPaymentContext30

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

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentContext <PmtCntxt>	[0..1]			350
	CardPresent <CardPres>	[0..1]	Indicator		350
	CardholderPresent <CrhdldrPres>	[0..1]	Indicator		350
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		351
	AttendanceContext <AttnhdncCntxt>	[0..1]	CodeSet		351
	TransactionEnvironment <TxEnvnt>	[0..1]	CodeSet		351
	TransactionChannel <TxChanl>	[0..1]	CodeSet		351
	BusinessArea <BizArea>	[0..1]	CodeSet		352
	AttendantMessageCapable <AtndntMsgCpbl>	[0..1]	Indicator		352
	AttendantLanguage <AtndntLang>	[0..1]	CodeSet	C6	352
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		353
	FallbackIndicator <FllbckInd>	[0..1]	CodeSet		353
	SupportedOption <SpptdOptn>	[0..*]	CodeSet		354
	SaleContext <SaleCntxt>	[0..1]			354
	SaleIdentification <SaleId>	[0..1]	Text		355
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		355
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		356
	CashierIdentification <CshrlId>	[0..1]	Text		356
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C6	356
	ShiftNumber <ShftNb>	[0..1]	Text		356
	CustomerOrderRequestFlag <CstmrOrdRReqFlg>	[0..1]	Indicator		356
	PurchaseOrderNumber <PurchsOrdRNb>	[0..1]	Text		356
	InvoiceNumber <InvcNb>	[0..1]	Text		356
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		357
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			357
	CommonName <CmonNm>	[1..1]	Text		357
	Address <Adr>	[0..1]	Text		357
	CountryCode <CtryCd>	[1..1]	CodeSet		357
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		357
	RegisteredIdentifier <Regdldr>	[1..1]	Text		357
	SplitPayment <Spltpmt>	[0..1]	Indicator		358

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	RemainingAmount <RmngAmt>	[0..1]	Amount		358
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		358
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		358
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		358
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		359
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		359
	DirectDebitContext <DrctDbtCntxt>	[0..1]			359
	DebtorIdentification <DbtrId>	[0..1]			360
	Debtor <Dbtr>	[0..1]			361
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	361
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		362
Or}	NameAndAddress <NmAndAdr>	[1..1]			362
	Name <Nm>	[1..1]	Text		362
	Address <Adr>	[1..1]	±		362
	AccountIdentification <AcctId>	[0..1]			363
{Or	IBAN <IBAN>	[1..1]	IdentifierSet	C4	363
Or	BBAN <BBAN>	[1..1]	IdentifierSet		363
Or	UPIC <UPIC>	[1..1]	IdentifierSet		364
Or}	DomesticAccount <DmstAcct>	[1..1]			364
	Identification <Id>	[1..1]	Text		364
	CreditorIdentification <CdtrId>	[1..1]			364
	Creditor <Cdtr>	[1..1]			365
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	365
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		365
Or}	NameAndAddress <NmAndAdr>	[1..1]			365
	Name <Nm>	[1..1]	Text		366
	Address <Adr>	[1..1]	±		366
	RegistrationIdentification <RegnId>	[0..1]	Text		366
	MandateRelatedInformation <MndtRltdInf>	[1..1]			366
	MandateIdentification <MndtId>	[1..1]	Text		367
	DateOfSignature <DtOfSgntr>	[0..1]	Date		367

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MandatImage <MndtImg>	[0..1]	Binary		367

10.1.7.7.1 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		350
	CardholderPresent <CrhdldrPres>	[0..1]	Indicator		350
	OnLineContext <OnLineCntxt>	[0..1]	Indicator		351
	AttendanceContext <AttdncCntxt>	[0..1]	CodeSet		351
	TransactionEnvironment <TxEnvnt>	[0..1]	CodeSet		351
	TransactionChannel <TxChanl>	[0..1]	CodeSet		351
	BusinessArea <BizArea>	[0..1]	CodeSet		352
	AttendantMessageCapable <AttdntMsgCpbl>	[0..1]	Indicator		352
	AttendantLanguage <AttdntLang>	[0..1]	CodeSet	C6	352
	CardDataEntryMode <CardDataNtryMd>	[0..1]	CodeSet		353
	FallbackIndicator <FlbckInd>	[0..1]	CodeSet		353
	SupportedOption <SpprtdOptn>	[0..*]	CodeSet		354

10.1.7.7.1.1 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 529](#)):

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

10.1.7.7.1.2 CardholderPresent <CrhdldrPres>

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 529](#)):

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

10.1.7.7.1.3 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 529):

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

10.1.7.7.1.4 AttendanceContext <AttndncCntxt>

Presence: [0..1]

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

Datatype: "AttendanceContext1Code" on page 484

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.

10.1.7.7.1.5 TransactionEnvironment <TxEnv>

Presence: [0..1]

Definition: Indicates the environment of the transaction.

Datatype: "TransactionEnvironment1Code" on page 526

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

10.1.7.7.1.6 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 526

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.

10.1.7.7.1.7 BusinessArea <BizArea>

Presence: [0..1]

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

Datatype: "BusinessArea2Code" on page 488

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.

10.1.7.7.1.8 AttendantMessageCapable <AtndntMsgCpbl>

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 529):

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

10.1.7.7.1.9 AttendantLanguage <AtndntLang>

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: C6 "ValidationByTable"

Datatype: "LanguageCode" on page 502

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.7.7.1.10 CardDataEntryMode <CardDataNtryMd>

Presence: [0..1]

Definition: Entry mode of the card data.

Datatype: "CardDataReading8Code" on page 490

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.)

10.1.7.7.1.11 FallbackIndicator <FlbckInd>

Presence: [0..1]

Definition: Indicator of a card entry mode fallback.

Datatype: "CardFallback1Code" on page 491

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.

10.1.7.7.1.12 SupportedOption <SpprtdOptn>

Presence: [0..*]

Definition: Payment options the card acceptor can support.

Datatype: "SupportedPaymentOption2Code" on page 522

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.

10.1.7.7.2 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		355
	SaleReferenceNumber <SaleRefNb>	[0..1]	Text		355
	SaleReconciliationIdentification <SaleRcncltnId>	[0..1]	Text		356
	CashierIdentification <CshrlId>	[0..1]	Text		356
	CashierLanguage <CshrLang>	[0..*]	CodeSet	C6	356
	ShiftNumber <ShiftNb>	[0..1]	Text		356
	CustomerOrderRequestFlag <CstmrOrdrrReqFlg>	[0..1]	Indicator		356
	PurchaseOrderNumber <PurchsOrdrrNb>	[0..1]	Text		356
	InvoiceNumber <InvNb>	[0..1]	Text		356
	DeliveryNoteNumber <DlvryNoteNb>	[0..1]	Text		357
	SponsoredMerchant <SpnsrdMrchnt>	[0..*]			357
	CommonName <CmonNm>	[1..1]	Text		357
	Address <Adr>	[0..1]	Text		357
	CountryCode <CtryCd>	[1..1]	CodeSet		357
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		357
	RegisteredIdentifier <Reglddr>	[1..1]	Text		357
	SplitPayment <Spltpmt>	[0..1]	Indicator		358
	RemainingAmount <RmngAmt>	[0..1]	Amount		358
	ForceOnlineFlag <ForceOnlnFlg>	[0..1]	Indicator		358
	ReuseCardDataFlag <ReuseCardDataFlg>	[0..1]	Indicator		358
	AllowedEntryMode <AllwdNtryMd>	[0..*]	CodeSet		358
	SaleTokenScope <SaleTknScp>	[0..1]	CodeSet		359
	AdditionalSaleData <AddtlSaleData>	[0..1]	Text		359

10.1.7.7.2.1 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 534

10.1.7.7.2.2 SaleReferenceNumber <SaleRefNb>

Presence: [0..1]

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

Datatype: "Max35Text" on page 534

10.1.7.7.2.3 SaleReconciliationIdentification <SaleRcncltnId>

Presence: [0..1]

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

Datatype: "Max35Text" on page 534

10.1.7.7.2.4 CashierIdentification <CshrlId>

Presence: [0..1]

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

Datatype: "Max35Text" on page 534

10.1.7.7.2.5 CashierLanguage <CshrLang>

Presence: [0..*]

Definition: Languages used by the cashier.

Impacted by: C6 "ValidationByTable"

Datatype: "LanguageCode" on page 502

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.7.7.2.6 ShiftNumber <ShftNb>

Presence: [0..1]

Definition: Identifies the shift of the cashier.

Datatype: "Max2NumericText" on page 533

10.1.7.7.2.7 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 529):

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

10.1.7.7.2.8 PurchaseOrderNumber <PurchsOrdRNb>

Presence: [0..1]

Definition: Identification of the purchase order.

Datatype: "Max35Text" on page 534

10.1.7.7.2.9 InvoiceNumber <InvcNb>

Presence: [0..1]

Definition: Identification of the invoice.

Datatype: "Max35Text" on page 534

10.1.7.7.2.10 DeliveryNoteNumber <DlvryNoteNb>

Presence: [0..1]

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

Datatype: "Max35Text" on page 534

10.1.7.7.2.11 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		357
	Address <Adr>	[0..1]	Text		357
	CountryCode <CtryCd>	[1..1]	CodeSet		357
	MerchantCategoryCode <MrchntCtgyCd>	[1..1]	Text		357
	RegisteredIdentifier <Regdldr>	[1..1]	Text		357

10.1.7.7.2.11.1 CommonName <CmonNm>

Presence: [1..1]

Definition: Name of the merchant.

Datatype: "Max70Text" on page 535

10.1.7.7.2.11.2 Address <Adr>

Presence: [0..1]

Definition: Location of the merchant.

Datatype: "Max140Text" on page 532

10.1.7.7.2.11.3 CountryCode <CtryCd>

Presence: [1..1]

Definition: Country of the merchant.

Datatype: "ISO3NumericCountryCode" on page 501

10.1.7.7.2.11.4 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 536

10.1.7.7.2.11.5 RegisteredIdentifier <Regdldr>

Presence: [1..1]

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

Datatype: "Max35Text" on page 534

10.1.7.7.2.12 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 529):

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

10.1.7.7.2.13 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 473

10.1.7.7.2.14 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 529):

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

10.1.7.7.2.15 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 529):

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

10.1.7.7.2.16 AllowedEntryMode <AllwdNtryMd>

Presence: [0..*]

Definition: Type of card data reading.

Datatype: "CardDataReading8Code" on page 490

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.)

10.1.7.7.2.17 SaleTokenScope <SaleTknScp>

Presence: [0..1]

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

Datatype: "SaleTokenScope1Code" on page 521

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.

10.1.7.7.2.18 AdditionalSaleData <AddtlSaleData>

Presence: [0..1]

Definition: Additional information associated with the sale transaction.

Datatype: "Max70Text" on page 535

10.1.7.7.3 DirectDebitContext <DrctDbtCntxt>

Presence: [0..1]

Definition: Context of the direct debit transaction.

DirectDebitContext <DrctDbtCntxt> contains the following **CardDirectDebit2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DebtorIdentification <DbtrId>	[0..1]			360
	Debtor <Dbtr>	[0..1]			361
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	361
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		362
Or}	NameAndAddress <NmAndAdr>	[1..1]			362
	Name <Nm>	[1..1]	Text		362
	Address <Adr>	[1..1]	±		362
	AccountIdentification <AcctId>	[0..1]			363
{Or	IBAN <IBAN>	[1..1]	IdentifierSet	C4	363
Or	BBAN <BBAN>	[1..1]	IdentifierSet		363
Or	UPIC <UPIC>	[1..1]	IdentifierSet		364
Or}	DomesticAccount <DmstAcct>	[1..1]			364
	Identification <Id>	[1..1]	Text		364
	CreditorIdentification <CdtrId>	[1..1]			364
	Creditor <Cdtr>	[1..1]			365
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	365
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		365
Or}	NameAndAddress <NmAndAdr>	[1..1]			365
	Name <Nm>	[1..1]	Text		366
	Address <Adr>	[1..1]	±		366
	RegistrationIdentification <RegnId>	[0..1]	Text		366
	MandateRelatedInformation <MndtRltdInf>	[1..1]			366
	MandateIdentification <MndtId>	[1..1]	Text		367
	DateOfSignature <DtOfSgntr>	[0..1]	Date		367
	MandateImage <MndtImg>	[0..1]	Binary		367

10.1.7.7.3.1 DebtorIdentification <DbtrId>

Presence: [0..1]

Definition: Information related to the debtor.

DebtorIdentification <DbtrId> contains the following **Debtor4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Debtor <Dbtr>	[0..1]			361
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	361
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		362
Or}	NameAndAddress <NmAndAdr>	[1..1]			362
	Name <Nm>	[1..1]	Text		362
	Address <Adr>	[1..1]	±		362
	AccountIdentification <AcctId>	[0..1]			363
{Or	IBAN <IBAN>	[1..1]	IdentifierSet	C4	363
Or	BBAN <BBAN>	[1..1]	IdentifierSet		363
Or	UPIC <UPIC>	[1..1]	IdentifierSet		364
Or}	DomesticAccount <DmstAcct>	[1..1]			364
	Identification <Id>	[1..1]	Text		364

10.1.7.7.3.1.1 Debtor <Dbtr>

Presence: [0..1]

Definition: Party that owes an amount of money to the (ultimate) creditor. In the context of the payment model, the debtor is also the debit account owner.

Debtor <Dbtr> contains one of the following **PartyIdentification178Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	361
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		362
Or}	NameAndAddress <NmAndAdr>	[1..1]			362
	Name <Nm>	[1..1]	Text		362
	Address <Adr>	[1..1]	±		362

10.1.7.7.3.1.1.1 AnyBIC <AnyBIC>

Presence: [1..1]

Definition: Unique and unambiguous identifier for an organisation that is allocated by an institution, for example, Dun & Bradstreet Identification.

Impacted by: C2 "AnyBIC"

Datatype: "AnyBICDec2014Identifier" on page 528

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.

10.1.7.7.3.1.1.2 ProprietaryIdentification <Prtryld>

Presence: [1..1]

Definition: Unique and unambiguous identifier, as assigned to a financial institution using a proprietary identification scheme.

ProprietaryIdentification <Prtryld> contains the following elements (see "[GenericIdentification36](#)" on page 241 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		241
	Issuer <Issr>	[1..1]	Text		241
	SchemeName <SchmeNm>	[0..1]	Text		241

10.1.7.7.3.1.1.3 NameAndAddress <NmAndAdr>

Presence: [1..1]

Definition: Name by which a party is known and which is usually used to identify that party.

NameAndAddress <NmAndAdr> contains the following **NameAndAddress6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[1..1]	Text		362
	Address <Adr>	[1..1]	±		362

10.1.7.7.3.1.1.3.1 Name <Nm>

Presence: [1..1]

Definition: Name by which a party is known and which is usually used to identify that party.

Datatype: "[Max70Text](#)" on page 535

10.1.7.7.3.1.1.3.2 Address <Adr>

Presence: [1..1]

Definition: Information that locates and identifies a specific address, as defined by postal services.

Address <Adr> contains the following elements (see "PostalAddress2" on page 466 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StreetName <StrtNm>	[0..1]	Text		466
	PostCodeIdentification <PstCdd>	[1..1]	Text		466
	TownName <TwnNm>	[1..1]	Text		466
	CountrySubDivision <CtrySubDvsn>	[0..1]	Text		466
	Country <Ctry>	[1..1]	CodeSet	C3	466

10.1.7.7.3.1.2 AccountIdentification <AcctId>

Presence: [0..1]

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

AccountIdentification <AcctId> contains one of the following **CashAccountIdentification7Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	IBAN <IBAN>	[1..1]	IdentifierSet	C4	363
Or	BBAN <BBAN>	[1..1]	IdentifierSet		363
Or	UPIC <UPIC>	[1..1]	IdentifierSet		364
Or}	DomesticAccount <DmstAcct>	[1..1]			364
	Identification </d>	[1..1]	Text		364

10.1.7.7.3.1.2.1 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: C4 "IBAN"

Datatype: "IBAN2007Identifier" on page 529

Constraints

- IBAN**

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

10.1.7.7.3.1.2.2 BBAN <BBAN>

Presence: [1..1]

Definition: Basic Bank Account Number (BBAN) - identifier used nationally by financial institutions, ie, in individual countries, generally as part of a National Account Numbering Scheme(s), to uniquely identify the account of a customer.

Datatype: "BBANIdentifier" on page 528

10.1.7.7.3.1.2.3 UPIC <UPIC>

Presence: [1..1]

Definition: Universal Payment Identification Code (UPIC) - identifier used by the New York Clearing House to mask confidential data, such as bank accounts and bank routing numbers. UPIC numbers remain with business customers, regardless of banking relationship changes.

Datatype: "UPICIdentifier" on page 529

10.1.7.7.3.1.2.4 DomesticAccount <DmstAcct>

Presence: [1..1]

Definition: Account number used by financial institutions in individual countries to identify an account of a customer, but not necessarily the bank and branch of the financial institution in which the account is held.

DomesticAccount <DmstAcct> contains the following **SimpleIdentificationInformation4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		364

10.1.7.7.3.1.2.4.1 Identification <Id>

Presence: [1..1]

Definition: Name or number assigned by an entity to enable recognition of that entity, for example, account identifier.

Datatype: "Max35Text" on page 534

10.1.7.7.3.2 CreditorIdentification <CdtrId>

Presence: [1..1]

Definition: Information related to the creditor.

CreditorIdentification <CdtrId> contains the following **Creditor4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Creditor <Cdtr>	[1..1]			365
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	365
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		365
Or}	NameAndAddress <NmAndAdr>	[1..1]			365
	Name <Nm>	[1..1]	Text		366
	Address <Adr>	[1..1]	±		366
	RegistrationIdentification <RegnId>	[0..1]	Text		366

10.1.7.7.3.2.1 Creditor <Cdtr>

Presence: [1..1]

Definition: Party that receives an amount of money from the debtor. In the context of the payment model, the creditor is also the credit account owner.

Creditor <Cdtr> contains one of the following **PartyIdentification178Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	AnyBIC <AnyBIC>	[1..1]	IdentifierSet	C2	365
Or	ProprietaryIdentification <PrtryId>	[1..1]	±		365
Or}	NameAndAddress <NmAndAdr>	[1..1]			365
	Name <Nm>	[1..1]	Text		366
	Address <Adr>	[1..1]	±		366

10.1.7.7.3.2.1.1 AnyBIC <AnyBIC>

Presence: [1..1]

Definition: Unique and unambiguous identifier for an organisation that is allocated by an institution, for example, Dun & Bradstreet Identification.

Impacted by: C2 "AnyBIC"

Datatype: "AnyBICDec2014Identifier" on page 528

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.

10.1.7.7.3.2.1.2 ProprietaryIdentification <PrtryId>

Presence: [1..1]

Definition: Unique and unambiguous identifier, as assigned to a financial institution using a proprietary identification scheme.

ProprietaryIdentification <PrtryId> contains the following elements (see "GenericIdentification36" on page 241 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		241
	Issuer <Issr>	[1..1]	Text		241
	SchemeName <SchmeNm>	[0..1]	Text		241

10.1.7.7.3.2.1.3 NameAndAddress <NmAndAdr>

Presence: [1..1]

Definition: Name by which a party is known and which is usually used to identify that party.

NameAndAddress <NmAndAdr> contains the following **NameAndAddress6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Name <Nm>	[1..1]	Text		366
	Address <Adr>	[1..1]	±		366

10.1.7.7.3.2.1.3.1 Name <Nm>

Presence: [1..1]

Definition: Name by which a party is known and which is usually used to identify that party.

Datatype: "Max70Text" on page 535

10.1.7.7.3.2.1.3.2 Address <Adr>

Presence: [1..1]

Definition: Information that locates and identifies a specific address, as defined by postal services.

Address <Adr> contains the following elements (see "PostalAddress2" on page 466 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StreetName <StrtNm>	[0..1]	Text		466
	PostCodeIdentification <PstCdId>	[1..1]	Text		466
	TownName <TwnNm>	[1..1]	Text		466
	CountrySubDivision <CtrySubDvsn>	[0..1]	Text		466
	Country <Ctry>	[1..1]	CodeSet	C3	466

10.1.7.7.3.2.2 RegistrationIdentification <RegnId>

Presence: [0..1]

Definition: Reference assigned to a creditor by its financial institution, or relevant authority, authorising the creditor to take part in a direct debit scheme.

Datatype: "Max35Text" on page 534

10.1.7.7.3.3 MandateRelatedInformation <MndtRltdInf>

Presence: [1..1]

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

MandateRelatedInformation <MndtRltdInf> contains the following **MandateRelatedInformation13** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MandateIdentification <MndtId>	[1..1]	Text		367
	DateOfSignature <DtOfSgntr>	[0..1]	Date		367
	MandateImage <MndtImg>	[0..1]	Binary		367

10.1.7.7.3.3.1 MandateIdentification <MndtId>

Presence: [1..1]

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

Datatype: "Max35Text" on page 534

10.1.7.7.3.3.2 DateOfSignature <DtOfSgntr>

Presence: [0..1]

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

Datatype: "ISODate" on page 527

10.1.7.7.3.3.3 MandateImage <MndtImg>

Presence: [0..1]

Definition: Image of scanned signed mandate.

Datatype: "Max2MBBinary" on page 474

10.1.7.8 ActionMessage10

Definition: Information to display, print or store.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	MessageDestination <MsgDstn>	[1..1]	CodeSet		367
	InformationQualifier <InfQlfr>	[0..1]	CodeSet		368
	Format <Frmt>	[0..1]	CodeSet		369
	MessageContent <MsgCntt>	[0..1]	Text		369
	MessageContentSignature <MsgCnttSgntr>	[0..1]	±		369
	OutputBarcode <OutptBrcd>	[0..1]			369
	BarcodeType <BrCdTp>	[1..1]	CodeSet		370
	BarcodeValue <BrCdVal>	[0..1]	Text		370
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		370
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		371
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		371
	QRCodeErrorCorrection <QRCDErrCrctn>	[0..1]	CodeSet		371
	ResponseRequiredFlag <RspnReqrdFlg>	[0..1]	Indicator		371
	MinimumDisplayTime <MinDispTm>	[0..1]	Quantity		371

10.1.7.8.1 MessageDestination <MsgDstn>

Presence: [1..1]

Definition: Destination of the message.

Datatype: "UserInterface4Code" on page 527

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.

10.1.7.8.2 InformationQualifier <InfQlfr>

Presence: [0..1]

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

Datatype: "InformationQualify1Code" on page 499

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	The 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	The 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.

10.1.7.8.3 Format <Frmt>

Presence: [0..1]

Definition: Message format.

Datatype: "OutputFormat3Code" on page 506

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.

10.1.7.8.4 MessageContent <MsgCntt>

Presence: [0..1]

Definition: Content or reference of the message.

Datatype: "Max20000Text" on page 532

10.1.7.8.5 MessageContentSignature <MsgCnttSgntr>

Presence: [0..1]

Definition: Digital signature of the message.

MessageContentSignature <MsgCnttSgntr> contains the following elements (see "ContentInformationType33" on page 443 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		443
	AuthenticatedData <AuthntcdData>	[0..1]	±		443
	SignedData <SgndData>	[0..1]	±		444

10.1.7.8.6 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		370
	BarcodeValue <BrcdVal>	[0..1]	Text		370
	QRCodeBinaryValue <QRCDBinryVal>	[0..1]	Binary		370
	QRCodeVersion <QRCDVrsn>	[0..1]	Text		371
	QRCodeEncodingMode <QRCDNcodgMd>	[0..1]	CodeSet		371
	QRCodeErrorCorrection <QRCDErrCrrctn>	[0..1]	CodeSet		371

10.1.7.8.6.1 BarcodeType <BrcdTp>

Presence: [1..1]

Definition: Type of Barcode coding.

Datatype: "BarcodeType1Code" on page 488

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.

10.1.7.8.6.2 BarcodeValue <BrcdVal>

Presence: [0..1]

Definition: Value with a Barcode coding.

Datatype: "Max8000Text" on page 535

10.1.7.8.6.3 QRCodeBinaryValue <QRCDBinryVal>

Presence: [0..1]

Definition: Use for binary and Kanji Quick Response Code.

Datatype: "Max3000Binary" on page 474

10.1.7.8.6.4 QRCodeVersion <QRCDVrsn>

Presence: [0..1]

Definition: Version of the Quick Response Code.

Datatype: "Max16Text" on page 532

10.1.7.8.6.5 QRCodeEncodingMode <QRCDNcodgMd>

Presence: [0..1]

Definition: Encoding Mode of Quick Response Code.

Datatype: "QRCodeEncodingMode1Code" on page 512

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.

10.1.7.8.6.6 QRCodeErrorCorrection <QRCDErrCrrctn>

Presence: [0..1]

Definition: Error Correction mode of Quick Response Code.

Datatype: "QRCodeErrorCorrection1Code" on page 513

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%

10.1.7.8.7 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 529):

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

10.1.7.8.8 MinimumDisplayTime <MinDispTm>

Presence: [0..1]

Definition: Number of seconds the message has to be displayed.

Datatype: "Number" on page 530

10.1.7.9 PointOfInteractionComponent14

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		374
	SubTypeInfoInformation <SubTpInf>	[0..1]	Text		375
	Identification <Id>	[1..1]			376
	ItemNumber <ItmNb>	[0..1]	Text		376
	ProviderIdentification <PrvdrlId>	[0..1]	Text		376
	Identification <Id>	[0..1]	Text		376
	SerialNumber <SrlNb>	[0..1]	Text		376
	Status <Sts>	[0..1]			376
	VersionNumber <VrsnNb>	[0..1]	Text		377
	Status <Sts>	[0..1]	CodeSet		377
	ExpiryDate <XpryDt>	[0..1]	Date		377
	StandardCompliance <StdCmplc>	[0..*]			377
	Identification <Id>	[1..1]	Text		377
	Version <Vrsn>	[1..1]	Text		378
	Issuer <Issr>	[1..1]	Text		378
	Characteristics <Chrtcs>	[0..1]			378
	Memory <Mmry>	[0..*]			379
	Identification <Id>	[1..1]	Text		380
	TotalSize <TtlSz>	[1..1]	Quantity		380
	FreeSize <FreeSz>	[1..1]	Quantity		380
	Unit <Unit>	[1..1]	CodeSet		380
	Communication <Com>	[0..*]			380
	CommunicationType <ComTp>	[1..1]	CodeSet		381
	RemoteParty <RmotPty>	[1..*]	CodeSet		382
	Active <Actv>	[1..1]	Indicator		382
	Parameters <Params>	[0..1]	±		382
	PhysicalInterface <PhysIntrfc>	[0..1]			383
	InterfaceName <IntrfcNm>	[1..1]	Text		383
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		383
	UserName <UsrNm>	[0..1]	Text		384
	AccessCode <AccsCd>	[0..1]	Binary		384

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	SecurityProfile <SctyPrfl>	[0..1]	Text		384
	AdditionalParameters <AddtlParams>	[0..1]	Binary		384
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		385
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		385
	SecurityElement <SctyElmt>	[0..*]	±		385
	Assessment <Assmnt>	[0..*]			385
	Type <Tp>	[1..1]	CodeSet		386
	Assigner <Assgnr>	[1..*]	Text		386
	DeliveryDate <DlvryDt>	[0..1]	DateTime		386
	ExpirationDate <XprtnDt>	[0..1]	DateTime		386
	Number <Nb>	[1..1]	Text		386
	Package <Packg>	[0..*]			387
	PackageIdentification <PackgId>	[0..1]	±		387
	PackageLength <PackgLngh>	[0..1]	Quantity		387
	OffsetStart <OffsetStart>	[0..1]	Quantity		387
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		388
	PackageBlock <PackgBlck>	[0..*]			388
	Identification <Id>	[1..1]	Text		388
	Value <Val>	[0..1]	Binary		388
	ProtectedValue <PrctcdVal>	[0..1]	±		388
	Type <Tp>	[0..1]	Text		389

10.1.7.9.1 Type <Tp>

Presence: [1..1]

Definition: Type of component belonging to a POI (Point Of Interaction) Terminal.

Datatype: "POIComponentType6Code" on page 511

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.

10.1.7.9.2 SubTypeInformation <SubTpInf>

Presence: [0..1]

Definition: Additional information regarding the type of the component.

Datatype: "Max70Text" on page 535

10.1.7.9.3 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		376
	ProviderIdentification <PrvdrId>	[0..1]	Text		376
	Identification <Id>	[0..1]	Text		376
	SerialNumber <SrlNb>	[0..1]	Text		376

10.1.7.9.3.1 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 534

10.1.7.9.3.2 ProviderIdentification <PrvdrId>

Presence: [0..1]

Definition: Identifies the provider of the software, hardware or parameters of the POI component.

Datatype: "Max35Text" on page 534

10.1.7.9.3.3 Identification <Id>

Presence: [0..1]

Definition: Identification of the POI component assigned by its provider.

Datatype: "Max256Text" on page 533

10.1.7.9.3.4 SerialNumber <SrlNb>

Presence: [0..1]

Definition: Serial number identifying an occurrence of an hardware component.

Datatype: "Max256Text" on page 533

10.1.7.9.4 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		377
	Status <Sts>	[0..1]	CodeSet		377
	ExpiryDate <XpryDt>	[0..1]	Date		377

10.1.7.9.4.1 VersionNumber <VrsnNb>

Presence: [0..1]

Definition: Current version of the component that might include the release number.

Datatype: "Max256Text" on page 533

10.1.7.9.4.2 Status <Sts>

Presence: [0..1]

Definition: Current status of the component.

Datatype: "POIComponentStatus1Code" on page 511

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.

10.1.7.9.4.3 ExpiryDate <XpryDt>

Presence: [0..1]

Definition: Expiration date of the component.

Datatype: "ISODate" on page 527

10.1.7.9.5 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		377
	Version <Vrsn>	[1..1]	Text		378
	Issuer <Issr>	[1..1]	Text		378

10.1.7.9.5.1 Identification <Id>

Presence: [1..1]

Definition: Proprietary information, often a code, issued by the data source scheme issuer.

Datatype: "Max35Text" on page 534

10.1.7.9.5.2 Version <Vrsn>

Presence: [1..1]

Definition: Version of the identification.

Datatype: "Max35Text" on page 534

10.1.7.9.5.3 Issuer <Issr>

Presence: [1..1]

Definition: Entity that assigns the identification.

Datatype: "Max35Text" on page 534

10.1.7.9.6 Characteristics <Chrtcs>

Presence: [0..1]

Definition: Characteristics of a POI (Point Of Interaction) component.

Characteristics <Chrtcs> contains the following **PointOfInteractionComponentCharacteristics9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Memory <Mmry>	[0..*]			379
	Identification <Id>	[1..1]	Text		380
	TotalSize <TtlSz>	[1..1]	Quantity		380
	FreeSize <FreeSz>	[1..1]	Quantity		380
	Unit <Unit>	[1..1]	CodeSet		380
	Communication <Com>	[0..*]			380
	CommunicationType <ComTp>	[1..1]	CodeSet		381
	RemoteParty <RmotPty>	[1..*]	CodeSet		382
	Active <Actv>	[1..1]	Indicator		382
	Parameters <Params>	[0..1]	±		382
	PhysicalInterface <PhysIntrfc>	[0..1]			383
	InterfaceName <IntrfcNm>	[1..1]	Text		383
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		383
	UserName <UsrNm>	[0..1]	Text		384
	AccessCode <AccsCd>	[0..1]	Binary		384
	SecurityProfile <SctyPrfl>	[0..1]	Text		384
	AdditionalParameters <AddtlParams>	[0..1]	Binary		384
	SecurityAccessModules <SctyAccsMdl>	[0..1]	Quantity		385
	SubscriberIdentityModules <SbcbrldntyMdl>	[0..1]	Quantity		385
	SecurityElement <SctyElmt>	[0..*]	±		385

10.1.7.9.6.1 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		380
	TotalSize <TtlSz>	[1..1]	Quantity		380
	FreeSize <FreeSz>	[1..1]	Quantity		380
	Unit <Unit>	[1..1]	CodeSet		380

10.1.7.9.6.1.1 Identification <Id>

Presence: [1..1]

Definition: Identification or name of the memory.

Datatype: "Max35Text" on page 534

10.1.7.9.6.1.2 TotalSize <TtlSz>

Presence: [1..1]

Definition: Total size of the memory unit.

Datatype: "DecimalNumber" on page 529

10.1.7.9.6.1.3 FreeSize <FreeSz>

Presence: [1..1]

Definition: Total size of the available memory.

Datatype: "DecimalNumber" on page 529

10.1.7.9.6.1.4 Unit <Unit>

Presence: [1..1]

Definition: Memory unit of the sizes.

Datatype: "MemoryUnit1Code" on page 503

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.

10.1.7.9.6.2 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		381
	RemoteParty <RmotPty>	[1..*]	CodeSet		382
	Active <Actv>	[1..1]	Indicator		382
	Parameters <Params>	[0..1]	±		382
	PhysicalInterface <PhysIntrfc>	[0..1]			383
	InterfaceName <IntrfcNm>	[1..1]	Text		383
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		383
	UserName <UsrNm>	[0..1]	Text		384
	AccessCode <AccsCd>	[0..1]	Binary		384
	SecurityProfile <SctyPrfl>	[0..1]	Text		384
	AdditionalParameters <AddtlParams>	[0..1]	Binary		384

10.1.7.9.6.2.1 CommunicationType <ComTp>

Presence: [1..1]

Definition: Type of low level communication.

Datatype: "POICommunicationType2Code" on page 510

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.

10.1.7.9.6.2.2 RemoteParty <RmotPty>

Presence: [1..*]

Definition: Entity that communicate with the current component, using this communication device.

Datatype: "PartyType7Code" on page 509

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.

10.1.7.9.6.2.3 Active <Actv>

Presence: [1..1]

Definition: Communication hardware is activated.

Datatype: One of the following values must be used (see "TrueFalseIndicator" on page 529):

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

10.1.7.9.6.2.4 Parameters <Params>

Presence: [0..1]

Definition: Network parameters of the communication link.

Parameters <Params> contains the following elements (see "[NetworkParameters7](#)" on page 408 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		409
	ClientCertificate <CIntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

10.1.7.9.6.2.5 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		383
	InterfaceType <IntrfcTp>	[0..1]	CodeSet		383
	UserName <UsrNm>	[0..1]	Text		384
	AccessCode <AccsCd>	[0..1]	Binary		384
	SecurityProfile <SctyPrfl>	[0..1]	Text		384
	AdditionalParameters <AddtlParams>	[0..1]	Binary		384

10.1.7.9.6.2.5.1 InterfaceName <IntrfcNm>

Presence: [1..1]

Definition: Identification of the interface.

Datatype: "[Max35Text](#)" on page 534

10.1.7.9.6.2.5.2 InterfaceType <IntrfcTp>

Presence: [0..1]

Definition: Identification of the physical link layer.

Datatype: "[POICommunicationType2Code](#)" on page 510

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.

10.1.7.9.6.2.5.3 UserName <UsrNm>

Presence: [0..1]

Definition: Optional user name to provide to use this interface.

Datatype: "Max35Text" on page 534

10.1.7.9.6.2.5.4 AccessCode <AccsCd>

Presence: [0..1]

Definition: Optional access code to provide to use this interface.

Datatype: "Max35Binary" on page 475

10.1.7.9.6.2.5.5 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the optional security profile to use with this interface.

Datatype: "Max35Text" on page 534

10.1.7.9.6.2.5.6 AdditionalParameters <AddtlParams>

Presence: [0..1]

Definition: Any other parameters relevant for this interface.

Datatype: ["Max2KBinary" on page 474](#)

10.1.7.9.6.3 SecurityAccessModules <SctyAccsMdls>

Presence: [0..1]

Definition: Number of security access modules (SAM).

Datatype: ["Number" on page 530](#)

10.1.7.9.6.4 SubscriberIdentityModules <SbcbrldntyMdls>

Presence: [0..1]

Definition: Number of subscriber identity modules (SIM).

Datatype: ["Number" on page 530](#)

10.1.7.9.6.5 SecurityElement <SctyElmt>

Presence: [0..*]

Definition: Security characteristics of the component.

SecurityElement <SctyElmt> contains the following elements (see ["CryptographicKey17" on page 445](#) for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		446
	AdditionalIdentification <AddtlId>	[0..1]	Binary		446
	Name <Nm>	[0..1]	Text		446
	SecurityProfile <SctyPrfl>	[0..1]	Text		447
	ItemNumber <ItmNb>	[0..1]	Text		447
	Version <Vrsn>	[1..1]	Text		447
	Type <Tp>	[0..1]	CodeSet		447
	Function <Fctn>	[0..*]	CodeSet		448
	ActivationDate <ActvtnDt>	[0..1]	DateTime		448
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		448
	KeyValue <KeyVal>	[0..1]	±		449
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		449
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			449
	Name <Nm>	[1..1]	Text		449
	Value <Val>	[0..1]	Text		449

10.1.7.9.7 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		386
	Assigner <Assgnr>	[1..*]	Text		386
	DeliveryDate <DlvryDt>	[0..1]	DateTime		386
	ExpirationDate <XprtnDt>	[0..1]	DateTime		386
	Number <Nb>	[1..1]	Text		386

10.1.7.9.7.1 Type <Tp>

Presence: [1..1]

Definition: Type of assessment of the component.

Datatype: "POIComponentAssessment1Code" on page 511

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.

10.1.7.9.7.2 Assigner <Assgnr>

Presence: [1..*]

Definition: Body which has delivered the assessment.

Datatype: "Max35Text" on page 534

10.1.7.9.7.3 DeliveryDate <DlvryDt>

Presence: [0..1]

Definition: Date when the assessment has been delivered.

Datatype: "ISODateTime" on page 528

10.1.7.9.7.4 ExpirationDate <XprtnDt>

Presence: [0..1]

Definition: Date when the assessment will expire.

Datatype: "ISODateTime" on page 528

10.1.7.9.7.5 Number <Nb>

Presence: [1..1]

Definition: Unique assessment number for the component.

Datatype: "Max35Text" on page 534

10.1.7.9.8 Package <Packg>

Presence: [0..*]

Definition: Chunk of a software package.

Package <Packg> contains the following **PackageType4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Packageldentification <PackgId>	[0..1]	±		387
	PackageLength <PackgLngh>	[0..1]	Quantity		387
	OffsetStart <OffsetStart>	[0..1]	Quantity		387
	OffsetEnd <OffsetEnd>	[0..1]	Quantity		388
	PackageBlock <PackgBlck>	[0..*]			388
	Identification <Id>	[1..1]	Text		388
	Value <Val>	[0..1]	Binary		388
	ProtectedValue <PrctcdVal>	[0..1]	±		388
	Type <Tp>	[0..1]	Text		389

10.1.7.9.8.1 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 239 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		239
	Type <Tp>	[0..1]	CodeSet		239
	Issuer <Issr>	[0..1]	CodeSet		240
	Country <Ctry>	[0..1]	Text		240
	ShortName <ShrtNm>	[0..1]	Text		240

10.1.7.9.8.2 PackageLength <PackgLngh>

Presence: [0..1]

Definition: Full length of software package identified through Packageldentification.

Datatype: "[PositiveNumber](#)" on page 530

10.1.7.9.8.3 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 530

10.1.7.9.8.4 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 530

10.1.7.9.8.5 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 **ExternallyDefinedData4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		388
	Value <Val>	[0..1]	Binary		388
	ProtectedValue <PrctcdVal>	[0..1]	±		388
	Type <Tp>	[0..1]	Text		389

10.1.7.9.8.5.1 Identification <Id>

Presence: [1..1]

Definition: Identification of the set of data to exchange.

Datatype: "Max1025Text" on page 531

10.1.7.9.8.5.2 Value <Val>

Presence: [0..1]

Definition: Data to exchange according to an external standard.

Datatype: "Max100KBinary" on page 473

10.1.7.9.8.5.3 ProtectedValue <PrctcdVal>

Presence: [0..1]

Definition: Protection of the values to exchange.

ProtectedValue <PrctcdVal> contains the following elements (see "[ContentInformationType34](#)" on page 438 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		439
	EnvelopedData <EnvlpdData>	[0..1]	±		439
	AuthenticatedData <AuthntcdData>	[0..1]	±		440
	SignedData <SgndData>	[0..1]	±		441
	DigestedData <DgstdData>	[0..1]	±		442

10.1.7.9.8.5.4 Type <Tp>

Presence: [0..1]

Definition: Identification of the standard used to encode the values to exchange.

Datatype: "[Max1025Text](#)" on page 531

10.1.7.10 LoyaltyAccount3

Definition: Loyalty Account description.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	LoyaltyIdentification <Lltyld>	[1..1]	Text		389
	EntryMode <NtryMd>	[0..1]	CodeSet		389
	IdentificationType <ldTp>	[0..1]	CodeSet		390
	Brand <Brnd>	[0..1]	Text		390
	Provider <Prvdr>	[0..1]	Text		391
	OwnerName <OwnrNm>	[0..1]	Text		391
	Unit <Unit>	[0..1]	CodeSet		391
	Currency <Ccy>	[0..1]	CodeSet	C1	391
	Balance <Bal>	[0..1]	Amount		391

10.1.7.10.1 LoyaltyIdentification <Lltyld>

Presence: [1..1]

Definition: Identification of Loyalty Account.

Datatype: "[Max35Text](#)" on page 534

10.1.7.10.2 EntryMode <NtryMd>

Presence: [0..1]

Definition: Standard or last entry mode to access the Loyalty account or card.

Datatype: "[CardDataReading8Code](#)" on page 490

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.)

10.1.7.10.3 IdentificationType <IdTp>

Presence: [0..1]

Definition: Type of identification for this Loyalty Account.

Datatype: "CardIdentificationType1Code" on page 492

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.

10.1.7.10.4 Brand <Brnd>

Presence: [0..1]

Definition: Brand to which belong the account.

Datatype: "Max35Text" on page 534

10.1.7.10.5 Provider <Prvdr>

Presence: [0..1]

Definition: Provider of the Loyalty Account.

Datatype: "Max35Text" on page 534

10.1.7.10.6 OwnerName <OwnrNm>

Presence: [0..1]

Definition: Owner name of an account.

Datatype: "Max45Text" on page 534

10.1.7.10.7 Unit <Unit>

Presence: [0..1]

Definition: Unit of a Loyalty Account (Point or Currency).

Datatype: "AmountUnit1Code" on page 484

CodeName	Name	Definition
MONE	Monetary	The amount is expressed in a monetary value in a currency.
POIN	Point	The amount is expressed in point.

10.1.7.10.8 Currency <Ccy>

Presence: [0..1]

Definition: Currency of a Loyalty Account if any.

Impacted by: C1 "ActiveCurrency"

Datatype: "ActiveCurrencyCode" on page 476

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.

10.1.7.10.9 Balance <Bal>

Presence: [0..1]

Definition: Balance of a Loyalty Account.

Datatype: "ImpliedCurrencyAndAmount" on page 473

10.1.7.11 ResponseType11

Definition: Response of a requested service.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Response <Rspn>	[1..1]	CodeSet		392
	ResponseReason <RspnRsn>	[0..1]	CodeSet		392
	AdditionalResponseInformation <AddtlRspnInf>	[0..1]	Text		393

10.1.7.11.1 Response <Rspn>

Presence: [1..1]

Definition: Result of the requested transaction.

Datatype: "Response11Code" on page 514

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.

10.1.7.11.2 ResponseReason <RspnRsn>

Presence: [0..1]

Definition: Detail of the response.

Datatype: "RetailerResultDetail1Code" on page 516

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").

CodeName	Name	Definition
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, 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.

10.1.7.11.3 AdditionalResponseInformation <AddtlRspnInf>

Presence: [0..1]

Definition: Additional information to be logged for further examination.

Datatype: "Max140Text" on page 532

10.1.7.12 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		394
	Type <Tp>	[0..1]	Text		394
	Provider <Prvdr>	[0..1]	Text		394

10.1.7.12.1 Identification <Id>

Presence: [0..1]

Definition: Identifier of the component.

Datatype: "Max35Text" on page 534

10.1.7.12.2 Type <Tp>

Presence: [0..1]

Definition: Type of component.

Datatype: "Max70Text" on page 535

10.1.7.12.3 Provider <Prvdr>

Presence: [0..1]

Definition: Provider of the component.

Datatype: "Max35Text" on page 534

10.1.7.13 PointOfInteractionCapabilities9

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

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	CardReadingCapabilities <CardRdngCpblties>	[0..*]	CodeSet		394
	CardholderVerificationCapabilities <CrhdldrVrfctnCpblties>	[0..*]	CodeSet		395
	PINLengthCapabilities <PINLnghCpblties>	[0..1]	Quantity		396
	ApprovalCodeLength <ApprvICdLngh>	[0..1]	Quantity		396
	MaxScriptLength <MxScrptLngh>	[0..1]	Quantity		396
	CardCaptureCapable <CardCaptrCpbl>	[0..1]	Indicator		396
	OnLineCapabilities <OnLineCpblties>	[0..1]	CodeSet		396
	MessageCapabilities <MsgCpblties>	[0..*]			397
	Destination <Dstn>	[1..*]	CodeSet		397
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		397
	NumberOfLines <NbOfLines>	[0..1]	Quantity		398
	LineWidth <LineWidth>	[0..1]	Quantity		398
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C6	398

10.1.7.13.1 CardReadingCapabilities <CardRdngCpblties>

Presence: [0..*]

Definition: Card reading capabilities of the POI (Point Of Interaction) performing the transaction.

Datatype: "CardDataReading8Code" on page 490

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.)

10.1.7.13.2 CardholderVerificationCapabilities <CrhdldrVrfctnCpblties>

Presence: [0..*]

Definition: Cardholder verification capabilities of the POI (Point Of Interaction) performing the transaction.

Datatype: "CardholderVerificationCapability4Code" on page 491

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).

CodeName	Name	Definition
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.

10.1.7.13.3 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 530

10.1.7.13.4 ApprovalCodeLength <ApprvlCdLngh>

Presence: [0..1]

Definition: Maximum number of characters of the approval code the POI is able to manage.

Datatype: "PositiveNumber" on page 530

10.1.7.13.5 MaxScriptLength <MxScrptLngh>

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 530

10.1.7.13.6 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 529):

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

10.1.7.13.7 OnLineCapabilities <OnLineCpblties>

Presence: [0..1]

Definition: On-line and off-line capabilities of the POI (Point Of Interaction).

Datatype: "OnLineCapability1Code" on page 506

CodeName	Name	Definition
OFLN	OffLine	Off-line only capable.
ONLN	OnLine	On-line only capable.

CodeName	Name	Definition
SMON	SemiOffLine	Off-line capable with possible on-line requests to the acquirer.

10.1.7.13.8 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 **DisplayCapabilities4** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Destination <Dstn>	[1..*]	CodeSet		397
	AvailableFormat <AvlblFrmt>	[0..*]	CodeSet		397
	NumberOfLines <NbOfLines>	[0..1]	Quantity		398
	LineWidth <LineWidth>	[0..1]	Quantity		398
	AvailableLanguage <AvlblLang>	[0..*]	CodeSet	C6	398

10.1.7.13.8.1 Destination <Dstn>

Presence: [1..*]

Definition: Destination of the message to present.

Datatype: "UserInterface4Code" on page 527

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.

10.1.7.13.8.2 AvailableFormat <AvlblFrmt>

Presence: [0..*]

Definition: Available message format.

Datatype: "OutputFormat1Code" on page 506

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.

10.1.7.13.8.3 NumberOfLines <NbOfLines>

Presence: [0..1]

Definition: Number of lines of the display.

Datatype: "Number" on page 530

10.1.7.13.8.4 LineWidth <LineWidth>

Presence: [0..1]

Definition: Number of columns of the display or printer.

Datatype: "Number" on page 530

10.1.7.13.8.5 AvailableLanguage <AvlblLang>

Presence: [0..*]

Definition: Available language for the message. Reference ISO 639-1 (alpha-2) et ISO 639-2 (alpha-3).

Impacted by: C6 "ValidationByTable"

Datatype: "LanguageCode" on page 502

Constraints

- **ValidationByTable**

Must be a valid terrestrial language.

10.1.7.14 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		399
	TrailerNumber <TrlrNb>	[0..1]	Text		399
	VehicleTag <VhclTag>	[0..1]	Text		400
	VehicleTagEntryMode <VhclTagNtryMd>	[0..1]	CodeSet		400
	UnitNumber <UnitNb>	[0..1]	Text		400
	ReplacementCar <RplcmntCar>	[0..1]	Indicator		400
	Odometer <Odmttr>	[0..1]	Quantity		400
	Hubometer <Hbmtr>	[0..1]	Quantity		401
	TrailerHours <TrlrHrs>	[0..1]	Text		401
	ReferHours <RefrHrs>	[0..1]	Text		401
	Maintenanceldentification <Mntncld>	[0..1]	Text		401
	DriverOrVehicleCard <DrvrOrVhclCard>	[0..1]			401
	PAN <PAN>	[0..1]	Text		401
	Track1 <Trck1>	[0..1]	Text		402
	Track2 <Trck2>	[0..1]	Text		402
	Track3 <Trck3>	[0..1]	Text		402
	AdditionalCardData <AddtlCardData>	[0..*]	Text		402
	EntryMode <NtryMd>	[0..1]	CodeSet		402
	AdditionalVehicleData <AddtlVhclData>	[0..*]			403
	Type <Tp>	[0..1]	Text		403
	EntryMode <NtryMd>	[0..1]	CodeSet		403
	Data <Data>	[1..1]	Text		404

10.1.7.14.1 VehicleNumber <VhclNb>

Presence: [0..1]

Definition: Number assigned to the vehicle for identification.

Datatype: "Max35NumericText" on page 533

10.1.7.14.2 TrailerNumber <TrlrNb>

Presence: [0..1]

Definition: Number assigned to the vehicle trailer for identification.

Datatype: "Max35NumericText" on page 533

10.1.7.14.3 VehicleTag <VhclTag>

Presence: [0..1]

Definition: Registration tag of the vehicle.

Datatype: "Max35Text" on page 534

10.1.7.14.4 VehicleTagEntryMode <VhclTagNtryMd>

Presence: [0..1]

Definition: Entry mode of the registration tag.

Datatype: "CardDataReading5Code" on page 490

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.

10.1.7.14.5 UnitNumber <UnitNb>

Presence: [0..1]

Definition: Identification of the vehicle in the fleet.

Datatype: "Max35NumericText" on page 533

10.1.7.14.6 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 529):

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

10.1.7.14.7 Odometer <Odmtr>

Presence: [0..1]

Definition: Odometer reading value indicating the distance travelled by the vehicle.

Datatype: "DecimalNumber" on page 529

10.1.7.14.8 Hubometer <Hbmtr>

Presence: [0..1]

Definition: Hubometer reading value indicating the distance travelled by the trailer.

Datatype: "DecimalNumber" on page 529

10.1.7.14.9 TrailerHours <TrlrHrs>

Presence: [0..1]

Definition: Number of hours the trailer has been in operation.

Datatype: "Max35Text" on page 534

10.1.7.14.10 ReferHours <RefrHrs>

Presence: [0..1]

Definition: Number of hours the refer unit has been in operation.

Datatype: "Max35Text" on page 534

10.1.7.14.11 MaintenanceIdentification <Mntncld>

Presence: [0..1]

Definition: Identification assigned to the vehicle related to maintenance.

Datatype: "Max35Text" on page 534

10.1.7.14.12 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		401
	Track1 <Trck1>	[0..1]	Text		402
	Track2 <Trck2>	[0..1]	Text		402
	Track3 <Trck3>	[0..1]	Text		402
	AdditionalCardData <AddtlCardData>	[0..*]	Text		402
	EntryMode <NtryMd>	[0..1]	CodeSet		402

10.1.7.14.12.1 PAN <PAN>

Presence: [0..1]

Definition: Primary Account Number (PAN) of the card.

Datatype: "Min8Max28NumericText" on page 537

10.1.7.14.12.2 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 535

10.1.7.14.12.3 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 534

10.1.7.14.12.4 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 531

10.1.7.14.12.5 AdditionalCardData <AddtlCardData>

Presence: [0..*]

Definition: Additional card issuer specific data.

Datatype: "Max35Text" on page 534

10.1.7.14.12.6 EntryMode <NtryMd>

Presence: [0..1]

Definition: Entry mode of the card.

Datatype: "CardDataReading5Code" on page 490

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

CodeName	Name	Definition
		(standard initiated by Europay, Mastercard and Visa).
CDFL	CardOnFile	Card information are stored on a file.

10.1.7.14.13 AdditionalVehicleData <AddtlVhclData>

Presence: [0..*]

Definition: Additional information related to the vehicle.

AdditionalVehicleData <AddtlVhclData> contains the following **Vehicle2** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Type <Tp>	[0..1]	Text		403
	EntryMode <NtryMd>	[0..1]	CodeSet		403
	Data <Data>	[1..1]	Text		404

10.1.7.14.13.1 Type <Tp>

Presence: [0..1]

Definition: Type of information related to the vehicle.

Datatype: "Max35Text" on page 534

10.1.7.14.13.2 EntryMode <NtryMd>

Presence: [0..1]

Definition: Entry mode of the information.

Datatype: "CardDataReading5Code" on page 490

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.

10.1.7.14.13.3 Data <Data>

Presence: [1..1]

Definition: Information related to the vehicle.

Datatype: "Max35Text" on page 534

10.1.7.15 EncapsulatedContent3

Definition: Data to authenticate.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		404
	Content <Cntt>	[0..1]	Binary		404

10.1.7.15.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data which have been authenticated.

Datatype: "ContentType2Code" on page 493

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).

10.1.7.15.2 Content <Cntt>

Presence: [0..1]

Definition: Actual data to authenticate.

Datatype: "Max100KBinary" on page 473

10.1.7.16 MaintenancelIdentificationAssociation1

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		405
	TMIdentification <TMId>	[1..1]	Text		405

10.1.7.16.1 MasterTMIdentification <MstrTMId>

Presence: [1..1]

Definition: Identifier for the master terminal manager.

Datatype: "Max35Text" on page 534

10.1.7.16.2 TMIdentification <TMId>

Presence: [1..1]

Definition: Identifier for the terminal manager requesting the delegation.

Datatype: "Max35Text" on page 534

10.1.8 Monitoring

10.1.8.1 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]	±		405
	ProtocolName <PrtcolNm>	[0..1]	Text		406
	ProtocolVersion <PrtcolVrsn>	[0..1]	Text		406
	TraceDateTimeIn <TracDtTmIn>	[1..1]	DateTime		406
	TraceDateTimeOut <TracDtTmOut>	[1..1]	DateTime		406

10.1.8.1.1 RelayIdentification <RlayId>

Presence: [1..1]

Definition: Identification of a partner of a message exchange.

RelayIdentification <RlyId> contains the following elements (see "[GenericIdentification177](#)" on page 234 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		235
	Type <Tp>	[0..1]	CodeSet		235
	Issuer <Issr>	[0..1]	CodeSet		236
	Country <Ctry>	[0..1]	Text		236
	ShortName <ShrtNm>	[0..1]	Text		236
	RemoteAccess <RmotAccs>	[0..1]	±		237
	Geolocation <Glctn>	[0..1]			237
	GeographicCoordinates <GeogcCordints>	[0..1]			237
	Latitude <Lat>	[1..1]	Text		238
	Longitude <Long>	[1..1]	Text		238
	UTMCoordinates <UTMCordints>	[0..1]			238
	UTMZone <UTMZone>	[1..1]	Text		238
	UTMEastward <UTMEstwrdr>	[1..1]	Text		238
	UTMNorthward <UTMNrthwrdr>	[1..1]	Text		239

10.1.8.1.2 ProtocolName <PrtcolNm>

Presence: [0..1]

Definition: Name of the outgoing protocol used by the node.

Datatype: "[Max35Text](#)" on page 534

10.1.8.1.3 ProtocolVersion <PrtcolVrsn>

Presence: [0..1]

Definition: Version of the protocol.

Datatype: "[Max6Text](#)" on page 535

10.1.8.1.4 TraceDateTimeln <TracDtTmln>

Presence: [1..1]

Definition: Date and time of incoming data exchange for relaying or processing.

Datatype: "[ISODateTime](#)" on page 528

10.1.8.1.5 TraceDateTimeOut <TracDtTmOut>

Presence: [1..1]

Definition: Date and time of the outgoing exchange for relaying or processing.

Datatype: "[ISODateTime](#)" on page 528

10.1.8.2 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		407
	ActionToProcess <ActnToPrc>	[1..1]	CodeSet		408

10.1.8.2.1 ActionResult <ActnRsIt>

Presence: [1..*]

Definition: List of error action result codes.

Datatype: "TerminalManagementActionResult5Code" on page 523

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".

CodeName	Name	Definition
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.

10.1.8.2.2 ActionToProcess <ActnToPrc>

Presence: [1..1]

Definition: Action to be processed for the related errors.

Datatype: "TerminalManagementErrorAction2Code" on page 525

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.

10.1.9 Network Access

10.1.9.1 NetworkParameters7

Definition: Parameters to communicate with a host.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Address <Adr>	[1..*]			408
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409
	UserName <UsrNm>	[0..1]	Text		409
	AccessCode <AccsCd>	[0..1]	Binary		409
	ServerCertificate <SvrCert>	[0..*]	Binary		409
	ServerCertificateIdentifier <SvrCertIdr>	[0..*]	Binary		409
	ClientCertificate <CIntCert>	[0..*]	Binary		410
	SecurityProfile <SctyPrfl>	[0..1]	Text		410

10.1.9.1.1 Address <Adr>

Presence: [1..*]

Definition: Network addresses of the host.

Address <Adr> contains the following **NetworkParameters9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	NetworkType <NtwkTp>	[1..1]	CodeSet		409
	AddressValue <AdrVal>	[1..1]	Text		409

10.1.9.1.1.1 NetworkType <NtwkTp>

Presence: [1..1]

Definition: Type of communication network.

Datatype: "NetworkType1Code" on page 505

CodeName	Name	Definition
IPNW	InternetProtocol	Protocol of an IP network.
PSTN	PublicTelephone	Protocol of a Public Switched Telephone Network (PSTN).

10.1.9.1.1.2 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 534

10.1.9.1.2 UserName <UsrNm>

Presence: [0..1]

Definition: User name identifying the client.

Datatype: "Max35Text" on page 534

10.1.9.1.3 AccessCode <AccsCd>

Presence: [0..1]

Definition: Password authenticating the client.

Datatype: "Max35Binary" on page 475

10.1.9.1.4 ServerCertificate <SvrCert>

Presence: [0..*]

Definition: X.509 Certificate required to authenticate the server.

Datatype: "Max10KBinary" on page 474

10.1.9.1.5 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 474

10.1.9.1.6 ClientCertificate <CIntCert>

Presence: [0..*]

Definition: X.509 Certificate required to authenticate the client.

Datatype: "Max10KBinary" on page 474

10.1.9.1.7 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the set of security elements to access the host.

Datatype: "Max35Text" on page 534

10.1.10 Postal Address

10.1.10.1 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		410
	Department <Dept>	[0..1]	Text		411
	SubDepartment <SubDept>	[0..1]	Text		411
	AddressLine <AdrLine>	[0..2]	Text		411
	StreetName <StrtNm>	[0..1]	Text		411
	BuildingNumber <BldgNb>	[0..1]	Text		411
	PostCode <PstCd>	[0..1]	Text		411
	TownName <TwnNm>	[0..1]	Text		411
	CountrySubDivision <CtrySubDvsn>	[0..2]	Text		412
	CountryCode <CtryCd>	[0..1]	Text		412

10.1.10.1.1 AddressType <AdrTp>

Presence: [0..1]

Definition: Identifies the nature of the postal address.

Datatype: "AddressType2Code" on page 476

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.

CodeName	Name	Definition
MLTO	MailTo	Address is the address to which mail is sent.
DLVY	DeliveryTo	Address is the address to which delivery is to take place.

10.1.10.1.2 Department <Dept>

Presence: [0..1]

Definition: Identification of a division of a large organisation or building.

Datatype: "Max70Text" on page 535

10.1.10.1.3 SubDepartment <SubDept>

Presence: [0..1]

Definition: Identification of a sub-division of a large organisation or building.

Datatype: "Max70Text" on page 535

10.1.10.1.4 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 535

10.1.10.1.5 StreetName <StrtNm>

Presence: [0..1]

Definition: Name of a street or thoroughfare.

Datatype: "Max70Text" on page 535

10.1.10.1.6 BuildingNumber <BldgNb>

Presence: [0..1]

Definition: Number that identifies the position of a building on a street.

Datatype: "Max16Text" on page 532

10.1.10.1.7 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 532

10.1.10.1.8 TownName <TwnNm>

Presence: [0..1]

Definition: Name of a built-up area, with defined boundaries, and a local government.

Datatype: "Max70Text" on page 535

10.1.10.1.9 CountrySubDivision <CtrySubDvsn>

Presence: [0..2]

Definition: Identifies a subdivision of a country such as state, region, county.

Datatype: "Max35Text" on page 534

10.1.10.1.10 CountryCode <CtryCd>

Presence: [0..1]

Definition: Nation with its own government.

Datatype: "Min2Max3AlphaText" on page 536

10.1.11 Secure Element

10.1.11.1 DigestedData5

Definition: Digest computed on the identified data.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		412
	DigestAlgorithm <DgstAlgo>	[1..1]	±		412
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		412
	Digest <Dgst>	[1..1]	Binary		413

10.1.11.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 530

10.1.11.1.2 DigestAlgorithm <DgstAlgo>

Presence: [1..1]

Definition: Identification of the digest algorithm.

DigestAlgorithm <DgstAlgo> contains the following elements (see "AlgorithmIdentification21" on page 461 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		461

10.1.11.1.3 EncapsulatedContent <NcpsltdCntt>

Presence: [1..1]

Definition: Data on which the digest is computed.

EncapsulatedContent <NcpsltdCntt> contains the following elements (see "[EncapsulatedContent3](#)" on page 404 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		404
	Content <Cntt>	[0..1]	Binary		404

10.1.11.1.4 Digest <Dgst>

Presence: [1..1]

Definition: Result of data-digesting process.

Datatype: "[Max140Binary](#)" on page 474

10.1.11.2 AuthenticatedData9

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		414
	Recipient <Rcpt>	[1..*]			414
{Or	KeyTransport <KeyTrnsprt>	[1..1]			415
	Version <Vrsn>	[0..1]	Quantity		416
	RecipientIdentification <RcptId>	[1..1]			416
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			416
	Issuer <Issr>	[1..1]			417
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			417
	AttributeType <AttrTp>	[1..1]	CodeSet		417
	AttributeValue <AttrVal>	[1..1]	Text		418
	SerialNumber <SrlNb>	[1..1]	Binary		418
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		418
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		418
	EncryptedKey <NcrptdKey>	[1..1]	Binary		418
Or	KEK <KEK>	[1..1]			419
	Version <Vrsn>	[0..1]	Quantity		419
	KEKIdentification <KEKId>	[1..1]	±		419
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		419
	EncryptedKey <NcrptdKey>	[0..1]	Binary		420
Or}	KeyIdentifier <Keyldr>	[1..1]	±		420
	MACAlgorithm <MACAlgo>	[1..1]	±		420
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		421
	MAC <MAC>	[1..1]	Binary		421

10.1.11.2.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 530

10.1.11.2.2 Recipient <Rcpt>

Presence: [1..*]

Definition: Session key or protection key identification used by the recipient.

Recipient <Rcpt> contains one of the following **Recipient14Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	KeyTransport <KeyTrnsprt>	[1..1]			415
	Version <Vrsn>	[0..1]	Quantity		416
	RecipientIdentification <RcptId>	[1..1]			416
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			416
	Issuer <Issr>	[1..1]			417
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			417
	AttributeType <AttrTp>	[1..1]	CodeSet		417
	AttributeValue <AttrVal>	[1..1]	Text		418
	SerialNumber <SrlNb>	[1..1]	Binary		418
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		418
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		418
	EncryptedKey <NcrptdKey>	[1..1]	Binary		418
Or	KEK <KEK>	[1..1]			419
	Version <Vrsn>	[0..1]	Quantity		419
	KEKIdentification <KEKId>	[1..1]	±		419
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		419
	EncryptedKey <NcrptdKey>	[0..1]	Binary		420
Or}	KeyIdentifier <Keyldr>	[1..1]	±		420

10.1.11.2.2.1 KeyTransport <KeyTrnsprt>

Presence: [1..1]

Definition: Encryption key using previously distributed asymmetric public key.

KeyTransport <KeyTrnsprt> contains the following **KeyTransport9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		416
	RecipientIdentification <Rcptld>	[1..1]			416
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			416
	Issuer <Issr>	[1..1]			417
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			417
	AttributeType <AttrTp>	[1..1]	CodeSet		417
	AttributeValue <AttrVal>	[1..1]	Text		418
	SerialNumber <SrlNb>	[1..1]	Binary		418
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		418
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		418
	EncryptedKey <NcrptdKey>	[1..1]	Binary		418

10.1.11.2.2.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 530

10.1.11.2.2.1.2 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]			416
	Issuer <Issr>	[1..1]			417
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			417
	AttributeType <AttrTp>	[1..1]	CodeSet		417
	AttributeValue <AttrVal>	[1..1]	Text		418
	SerialNumber <SrlNb>	[1..1]	Binary		418
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		418

10.1.11.2.2.1.2.1 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]			417
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			417
	AttributeType <AttrTp>	[1..1]	CodeSet		417
	AttributeValue <AttrVal>	[1..1]	Text		418
	SerialNumber <SrInb>	[1..1]	Binary		418

10.1.11.2.2.1.2.1.1 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..*]			417
	AttributeType <AttrTp>	[1..1]	CodeSet		417
	AttributeValue <AttrVal>	[1..1]	Text		418

10.1.11.2.2.1.2.1.1.1 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		417
	AttributeValue <AttrVal>	[1..1]	Text		418

10.1.11.2.2.1.2.1.1.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 484

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).

10.1.11.2.2.1.2.1.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 532

10.1.11.2.2.1.2.1.2 SerialNumber <SrINb>

Presence: [1..1]

Definition: Certificate serial number (see X.509).

Datatype: "Max500Binary" on page 475

10.1.11.2.2.1.2.2 SubjectKeyIdentifier <SbjtKeyldr>

Presence: [1..1]

Definition: Specifies the recipient's certificate by a key identifier.

Datatype: "Max140Binary" on page 474

10.1.11.2.2.1.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

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

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following elements (see "AlgorithmIdentification19" on page 462 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		462
	Parameter <Param>	[0..1]			462
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		463
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		463
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		464

10.1.11.2.2.1.4 EncryptedKey <NcrptdKey>

Presence: [1..1]

Definition: Encrypted key encryption key (KEK).

Datatype: "Max5000Binary" on page 475

10.1.11.2.2.2 KEK <KEK>

Presence: [1..1]

Definition: Key encryption key using previously distributed symmetric key.

KEK <KEK> contains the following **KEK8** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		419
	KEKIdentification <KEKId>	[1..1]	±		419
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		419
	EncryptedKey <NcrptdKey>	[0..1]	Binary		420

10.1.11.2.2.2.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 530

10.1.11.2.2.2.2 KEKIdentification <KEKId>

Presence: [1..1]

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

KEKIdentification <KEKId> contains the following elements (see "KEKIdentifier7" on page 140 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		140
	KeyVersion <KeyVrsn>	[1..1]	Text		140
	SequenceNumber <SeqNb>	[0..1]	Quantity		140
	DerivationIdentification <DerivtnId>	[0..1]	Binary		140

10.1.11.2.2.2.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

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

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following elements (see "[AlgorithmIdentification29](#)" on page 454 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		454
	Parameter <Param>	[0..1]			456
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		457
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		457
	BytePadding <BPddg>	[0..1]	CodeSet		457

10.1.11.2.2.4 EncryptedKey <NcrptdKey>

Presence: [0..1]

Definition: Encrypted key encryption key (KEK).

Datatype: "[Max500Binary](#)" on page 475

10.1.11.2.2.3 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 140 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		140
	KeyVersion <KeyVrsn>	[1..1]	Text		140
	SequenceNumber <SeqNb>	[0..1]	Quantity		140
	DerivationIdentification <DerivtnId>	[0..1]	Binary		140

10.1.11.2.3 MACAlgorithm <MACAlgo>

Presence: [1..1]

Definition: Algorithm to compute message authentication code (MAC).

MACAlgorithm <MACAlgo> contains the following elements (see "[AlgorithmIdentification22](#)" on page 458 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		458
	Parameter <Param>	[0..1]			460
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		460
	BytePadding <BPddg>	[0..1]	CodeSet		460

10.1.11.2.4 EncapsulatedContent <NcpsltdCntt>

Presence: [1..1]

Definition: Data to authenticate.

EncapsulatedContent <NcpsltdCntt> contains the following elements (see "[EncapsulatedContent3](#)" on page 404 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		404
	Content <Cntt>	[0..1]	Binary		404

10.1.11.2.5 MAC <MAC>

Presence: [1..1]

Definition: Message authentication code value.

Datatype: "[Max140Binary](#)" on page 474

10.1.11.3 EnvelopedData10

Definition: Encrypted data with encryption key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		422
	OriginatorInformation <OrgtrlInf>	[0..1]			423
	Certificate <Cert>	[0..*]	Binary		423
	Recipient <Rcpt>	[1..*]			423
{Or	KeyTransport <KeyTrnsprt>	[1..1]			424
	Version <Vrsn>	[0..1]	Quantity		425
	RecipientIdentification <RcptId>	[1..1]			425
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			425
	Issuer <Issr>	[1..1]			426
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			426
	AttributeType <AttrTp>	[1..1]	CodeSet		426
	AttributeValue <AttrVal>	[1..1]	Text		427
	SerialNumber <SrlNb>	[1..1]	Binary		427
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		427
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		427
	EncryptedKey <NcrptdKey>	[1..1]	Binary		427
Or	KEK <KEK>	[1..1]			428
	Version <Vrsn>	[0..1]	Quantity		428
	KEKIdentification <KEKId>	[1..1]	±		428
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		428
	EncryptedKey <NcrptdKey>	[0..1]	Binary		429
Or}	KeyIdentifier <Keyldr>	[1..1]	±		429
	EncryptedContent <NcrptdCntt>	[0..1]			429
	ContentType <CnttTp>	[1..1]	CodeSet		429
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]	±		430
	EncryptedData <NcrptdData>	[1..1]	Binary		430

10.1.11.3.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 530

10.1.11.3.2 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		423

10.1.11.3.2.1 Certificate <Cert>

Presence: [0..*]

Definition: It may contain originator certificates associated with several different key management algorithms.

Datatype: "Max5000Binary" on page 475

10.1.11.3.3 Recipient <Rcpt>

Presence: [1..*]

Definition: Session key or identification of the protection key used by the recipient.

Recipient <Rcpt> contains one of the following **Recipient14Choice** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
{Or	KeyTransport <KeyTrnsprt>	[1..1]			424
	Version <Vrsn>	[0..1]	Quantity		425
	RecipientIdentification <RcptId>	[1..1]			425
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			425
	Issuer <Issr>	[1..1]			426
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			426
	AttributeType <AttrTp>	[1..1]	CodeSet		426
	AttributeValue <AttrVal>	[1..1]	Text		427
	SerialNumber <SrlNb>	[1..1]	Binary		427
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		427
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		427
	EncryptedKey <NcrptdKey>	[1..1]	Binary		427
Or	KEK <KEK>	[1..1]			428
	Version <Vrsn>	[0..1]	Quantity		428
	KEKIdentification <KEKId>	[1..1]	±		428
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		428
	EncryptedKey <NcrptdKey>	[0..1]	Binary		429
Or}	KeyIdentifier <Keyldr>	[1..1]	±		429

10.1.11.3.3.1 KeyTransport <KeyTrnsprt>

Presence: [1..1]

Definition: Encryption key using previously distributed asymmetric public key.

KeyTransport <KeyTrnsprt> contains the following **KeyTransport9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		425
	RecipientIdentification <Rcptld>	[1..1]			425
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			425
	Issuer <Issr>	[1..1]			426
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			426
	AttributeType <AttrTp>	[1..1]	CodeSet		426
	AttributeValue <AttrVal>	[1..1]	Text		427
	SerialNumber <SrlNb>	[1..1]	Binary		427
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		427
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		427
	EncryptedKey <NcrptdKey>	[1..1]	Binary		427

10.1.11.3.3.1.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 530

10.1.11.3.3.1.2 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]			425
	Issuer <Issr>	[1..1]			426
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			426
	AttributeType <AttrTp>	[1..1]	CodeSet		426
	AttributeValue <AttrVal>	[1..1]	Text		427
	SerialNumber <SrlNb>	[1..1]	Binary		427
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		427

10.1.11.3.3.1.2.1 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]			426
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			426
	AttributeType <AttrTp>	[1..1]	CodeSet		426
	AttributeValue <AttrVal>	[1..1]	Text		427
	SerialNumber <SrInb>	[1..1]	Binary		427

10.1.11.3.3.1.2.1.1 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..*]			426
	AttributeType <AttrTp>	[1..1]	CodeSet		426
	AttributeValue <AttrVal>	[1..1]	Text		427

10.1.11.3.3.1.2.1.1.1 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		426
	AttributeValue <AttrVal>	[1..1]	Text		427

10.1.11.3.3.1.2.1.1.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 484

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).

10.1.11.3.3.1.2.1.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 532

10.1.11.3.3.1.2.1.2 SerialNumber <SrlNb>

Presence: [1..1]

Definition: Certificate serial number (see X.509).

Datatype: "Max500Binary" on page 475

10.1.11.3.3.1.2.2 SubjectKeyIdentifier <SbjtKeyldr>

Presence: [1..1]

Definition: Specifies the recipient's certificate by a key identifier.

Datatype: "Max140Binary" on page 474

10.1.11.3.3.1.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

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

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following elements (see "AlgorithmIdentification19" on page 462 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		462
	Parameter <Param>	[0..1]			462
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		463
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		463
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		464

10.1.11.3.3.1.4 EncryptedKey <NcrptdKey>

Presence: [1..1]

Definition: Encrypted key encryption key (KEK).

Datatype: "Max5000Binary" on page 475

10.1.11.3.3.2 KEK <KEK>

Presence: [1..1]

Definition: Key encryption key using previously distributed symmetric key.

KEK <KEK> contains the following **KEK8** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		428
	KEKIdentification <KEKId>	[1..1]	±		428
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		428
	EncryptedKey <NcrptdKey>	[0..1]	Binary		429

10.1.11.3.3.2.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 530

10.1.11.3.3.2.2 KEKIdentification <KEKId>

Presence: [1..1]

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

KEKIdentification <KEKId> contains the following elements (see "KEKIdentifier7" on page 140 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		140
	KeyVersion <KeyVrsn>	[1..1]	Text		140
	SequenceNumber <SeqNb>	[0..1]	Quantity		140
	DerivationIdentification <DerivtnId>	[0..1]	Binary		140

10.1.11.3.3.2.3 KeyEncryptionAlgorithm <KeyNcrptnAlgo>

Presence: [1..1]

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

KeyEncryptionAlgorithm <KeyNcrptnAlgo> contains the following elements (see ["AlgorithmIdentification29"](#) on page 454 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		454
	Parameter <Param>	[0..1]			456
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		457
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		457
	BytePadding <BPddg>	[0..1]	CodeSet		457

10.1.11.3.3.2.4 EncryptedKey <NcrptdKey>

Presence: [0..1]

Definition: Encrypted key encryption key (KEK).

Datatype: ["Max500Binary"](#) on page 475

10.1.11.3.3.3 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 140 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	KeyIdentification <KeyId>	[1..1]	Text		140
	KeyVersion <KeyVrsn>	[1..1]	Text		140
	SequenceNumber <SeqNb>	[0..1]	Quantity		140
	DerivationIdentification <DerivtnId>	[0..1]	Binary		140

10.1.11.3.4 EncryptedContent <NcrptdCntt>

Presence: [0..1]

Definition: Data protection by encryption (digital envelope), with an encryption key.

EncryptedContent <NcrptdCntt> contains the following **EncryptedContent6** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		429
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]	±		430
	EncryptedData <NcrptdData>	[1..1]	Binary		430

10.1.11.3.4.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data which have been encrypted.

Datatype: "ContentType2Code" on page 493

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).

10.1.11.3.4.2 ContentEncryptionAlgorithm <CnttNcrptnAlgo>

Presence: [0..1]

Definition: Algorithm used to encrypt the data.

ContentEncryptionAlgorithm <CnttNcrptnAlgo> contains the following elements (see "AlgorithmIdentification29" on page 454 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		454
	Parameter <Param>	[0..1]			456
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		457
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		457
	BytePadding <BPddg>	[0..1]	CodeSet		457

10.1.11.3.4.3 EncryptedData <NcrptdData>

Presence: [1..1]

Definition: Encrypted data, result of the content encryption.

Datatype: "Max100KBinary" on page 473

10.1.11.4 SignedData8

Definition: Digital signatures of data from one or several signers.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		431
	DigestAlgorithm <DgstAlgo>	[0..*]	±		431
	EncapsulatedContent <NcpsltdCntt>	[0..1]	±		432
	Certificate <Cert>	[0..*]	Binary		432
	Signer <Sgnr>	[0..*]			432
	Version <Vrsn>	[0..1]	Quantity		433
	SignerIdentification <SgnrId>	[0..1]			433
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			433
	Issuer <Issr>	[1..1]			433
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			434
	AttributeType <AttrTp>	[1..1]	CodeSet		434
	AttributeValue <AttrVal>	[1..1]	Text		434
	SerialNumber <SrlNb>	[1..1]	Binary		434
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		435
	DigestAlgorithm <DgstAlgo>	[1..1]	±		435
	SignedAttributes <SgndAttrbts>	[0..*]			435
	Name <Nm>	[1..1]	Text		435
	Value <Val>	[0..1]	Text		435
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		435
	Signature <Sgntr>	[1..1]	Binary		436

10.1.11.4.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the data structure.

Datatype: "Number" on page 530

10.1.11.4.2 DigestAlgorithm <DgstAlgo>

Presence: [0..*]

Definition: Identification of digest algorithm applied before signature.

DigestAlgorithm <DgstAlgo> contains the following elements (see "AlgorithmIdentification21" on page 461 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		461

10.1.11.4.3 EncapsulatedContent <NcpsltdCntt>

Presence: [0..1]

Definition: Data to sign.

EncapsulatedContent <NcpsltdCntt> contains the following elements (see "[EncapsulatedContent3](#)" on page 404 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		404
	Content <Cntt>	[0..1]	Binary		404

10.1.11.4.4 Certificate <Cert>

Presence: [0..*]

Definition: Chain of X.509 certificates.

Datatype: "[Max5000Binary](#)" on page 475

10.1.11.4.5 Signer <Sgnr>

Presence: [0..*]

Definition: Digital signature and identification of a signer.

Signer <Sgnr> contains the following **Signer7** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		433
	SignerIdentification <SgnrId>	[0..1]			433
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			433
	Issuer <Issr>	[1..1]			433
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			434
	AttributeType <AttrTp>	[1..1]	CodeSet		434
	AttributeValue <AttrVal>	[1..1]	Text		434
	SerialNumber <SrlNb>	[1..1]	Binary		434
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		435
	DigestAlgorithm <DgstAlgo>	[1..1]	±		435
	SignedAttributes <SgndAttrbts>	[0..*]			435
	Name <Nm>	[1..1]	Text		435
	Value <Val>	[0..1]	Text		435
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		435
	Signature <Sgntr>	[1..1]	Binary		436

10.1.11.4.5.1 Version <Vrsn>

Presence: [0..1]

Definition: Version of the Cryptographic Message Syntax (CMS) data structure.

Datatype: "Number" on page 530

10.1.11.4.5.2 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]			433
	Issuer <Issr>	[1..1]			433
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			434
	AttributeType <AttrTp>	[1..1]	CodeSet		434
	AttributeValue <AttrVal>	[1..1]	Text		434
	SerialNumber <SrlNb>	[1..1]	Binary		434
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		435

10.1.11.4.5.2.1 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]			433
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			434
	AttributeType <AttrTp>	[1..1]	CodeSet		434
	AttributeValue <AttrVal>	[1..1]	Text		434
	SerialNumber <SrlNb>	[1..1]	Binary		434

10.1.11.4.5.2.1.1 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..*]			434
	AttributeType <AttrTp>	[1..1]	CodeSet		434
	AttributeValue <AttrVal>	[1..1]	Text		434

10.1.11.4.5.2.1.1.1 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		434
	AttributeValue <AttrVal>	[1..1]	Text		434

10.1.11.4.5.2.1.1.1.1 AttributeType <AttrTp>

Presence: [1..1]

Definition: Type of attribute of a distinguished name (see X.500).

Datatype: "AttributeType1Code" on page 484

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).

10.1.11.4.5.2.1.1.1.2 AttributeValue <AttrVal>

Presence: [1..1]

Definition: Value of the attribute of a distinguished name (see X.500).

Datatype: "Max140Text" on page 532

10.1.11.4.5.2.1.2 SerialNumber <SrINb>

Presence: [1..1]

Definition: Certificate serial number (see X.509).

Datatype: "Max500Binary" on page 475

10.1.11.4.5.2.2 SubjectKeyIdentifier <SbjtKeyldr>

Presence: [1..1]

Definition: Specifies the recipient's certificate by a key identifier.

Datatype: "Max140Binary" on page 474

10.1.11.4.5.3 DigestAlgorithm <DgstAlgo>

Presence: [1..1]

Definition: Identification of a digest algorithm to apply before signature.

DigestAlgorithm <DgstAlgo> contains the following elements (see "AlgorithmIdentification21" on page 461 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		461

10.1.11.4.5.4 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		435
	Value <Val>	[0..1]	Text		435

10.1.11.4.5.4.1 Name <Nm>

Presence: [1..1]

Definition: Name of the generic information to exchange.

Datatype: "Max70Text" on page 535

10.1.11.4.5.4.2 Value <Val>

Presence: [0..1]

Definition: Value of the generic information to exchange.

Datatype: "Max140Text" on page 532

10.1.11.4.5.5 SignatureAlgorithm <SgntrAlgo>

Presence: [1..1]

Definition: Cryptographic digital signature algorithm.

SignatureAlgorithm <SgntrAlgo> contains the following elements (see "[AlgorithmIdentification30](#)" on page 450 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		450
	Parameter <Param>	[0..1]			451
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		452
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]			453
	Algorithm <Algo>	[1..1]	CodeSet		453
	Parameter <Param>	[0..1]			453
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		453
	SaltLength <SaltLngth>	[0..1]	Quantity		454
	TrailerField <TrlrFld>	[0..1]	Quantity		454
	OIDCurveName <OIDCrvNm>	[0..1]	Text		454

10.1.11.4.5.6 Signature <Sgntr>

Presence: [1..1]

Definition: Digital signature.

Datatype: "[Max3000Binary](#)" on page 474

10.1.11.5 ContentInformationType35

Definition: General cryptographic message syntax (CMS) containing encrypted data.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		436
	EnvelopedData <EnvlpdData>	[1..1]	±		437

10.1.11.5.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data protection.

Datatype: "[ContentType2Code](#)" on page 493

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).

CodeName	Name	Definition
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).

10.1.11.5.2 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 "EnvelopedData10" on page 421 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		422
	OriginatorInformation <OrgtrlInf>	[0..1]			423
	Certificate <Cert>	[0..*]	Binary		423
	Recipient <Rcpt>	[1..*]			423
{Or	KeyTransport <KeyTrnsprt>	[1..1]			424
	Version <Vrsn>	[0..1]	Quantity		425
	RecipientIdentification <RcptId>	[1..1]			425
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			425
	Issuer <Issr>	[1..1]			426
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			426
	AttributeType <AttrTp>	[1..1]	CodeSet		426
	AttributeValue <AttrVal>	[1..1]	Text		427
	SerialNumber <SrlNb>	[1..1]	Binary		427
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		427
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		427
	EncryptedKey <NcrptdKey>	[1..1]	Binary		427
Or	KEK <KEK>	[1..1]			428
	Version <Vrsn>	[0..1]	Quantity		428
	KEKIdentification <KEKId>	[1..1]	±		428
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		428
	EncryptedKey <NcrptdKey>	[0..1]	Binary		429
Or}	KeyIdentifier <Keyldr>	[1..1]	±		429
	EncryptedContent <NcrptdCntt>	[0..1]			429
	ContentType <CnttTp>	[1..1]	CodeSet		429
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]	±		430
	EncryptedData <NcrptdData>	[1..1]	Binary		430

10.1.11.6 ContentInformationType34

Definition: General cryptographic message syntax (CMS) containing protected data.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		439
	EnvelopedData <EnvlpdData>	[0..1]	±		439
	AuthenticatedData <AuthntcdData>	[0..1]	±		440
	SignedData <SgndData>	[0..1]	±		441
	DigestedData <Dgstddata>	[0..1]	±		442

10.1.11.6.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data protection.

Datatype: "ContentType2Code" on page 493

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).

10.1.11.6.2 EnvelopedData <EnvlpdData>

Presence: [0..1]

Definition: Data protection by encryption, with a session key.

EnvelopedData <EnvpdData> contains the following elements (see "EnvelopedData10" on page 421 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		422
	OriginatorInformation <OrgtrlInf>	[0..1]			423
	Certificate <Cert>	[0..*]	Binary		423
	Recipient <Rcpt>	[1..*]			423
{Or	KeyTransport <KeyTrnsprt>	[1..1]			424
	Version <Vrsn>	[0..1]	Quantity		425
	RecipientIdentification <RcptId>	[1..1]			425
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			425
	Issuer <Issr>	[1..1]			426
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			426
	AttributeType <AttrTp>	[1..1]	CodeSet		426
	AttributeValue <AttrVal>	[1..1]	Text		427
	SerialNumber <SrlNb>	[1..1]	Binary		427
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		427
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		427
	EncryptedKey <NcrptdKey>	[1..1]	Binary		427
Or	KEK <KEK>	[1..1]			428
	Version <Vrsn>	[0..1]	Quantity		428
	KEKIdentification <KEKId>	[1..1]	±		428
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		428
	EncryptedKey <NcrptdKey>	[0..1]	Binary		429
Or}	KeyIdentifier <Keyldr>	[1..1]	±		429
	EncryptedContent <NcrptdCntt>	[0..1]			429
	ContentType <CnttTp>	[1..1]	CodeSet		429
	ContentEncryptionAlgorithm <CnttNcrptnAlgo>	[0..1]	±		430
	EncryptedData <NcrptdData>	[1..1]	Binary		430

10.1.11.6.3 AuthenticatedData <AuthntcdData>

Presence: [0..1]

Definition: Data protection by a message authentication code (MAC).

AuthenticatedData <AuthntcdData> contains the following elements (see "AuthenticatedData9" on page 413 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		414
	Recipient <Rcpt>	[1..*]			414
{Or	KeyTransport <KeyTrnsprt>	[1..1]			415
	Version <Vrsn>	[0..1]	Quantity		416
	RecipientIdentification <RcptId>	[1..1]			416
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			416
	Issuer <Issr>	[1..1]			417
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			417
	AttributeType <AttrTp>	[1..1]	CodeSet		417
	AttributeValue <AttrVal>	[1..1]	Text		418
	SerialNumber <SrlNb>	[1..1]	Binary		418
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		418
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		418
	EncryptedKey <NcrptdKey>	[1..1]	Binary		418
Or	KEK <KEK>	[1..1]			419
	Version <Vrsn>	[0..1]	Quantity		419
	KEKIdentification <KEKId>	[1..1]	±		419
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		419
	EncryptedKey <NcrptdKey>	[0..1]	Binary		420
Or}	KeyIdentifier <Keyldr>	[1..1]	±		420
	MACAlgorithm <MACAlgo>	[1..1]	±		420
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		421
	MAC <MAC>	[1..1]	Binary		421

10.1.11.6.4 SignedData <SgndData>

Presence: [0..1]

Definition: Data protected by a digital signatures.

SignedData <SgndData> contains the following elements (see "SignedData8" on page 430 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		431
	DigestAlgorithm <DgstAlgo>	[0..*]	±		431
	EncapsulatedContent <NcpsltdCntt>	[0..1]	±		432
	Certificate <Cert>	[0..*]	Binary		432
	Signer <Sgnr>	[0..*]			432
	Version <Vrsn>	[0..1]	Quantity		433
	SignerIdentification <SgnrId>	[0..1]			433
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			433
	Issuer <Issr>	[1..1]			433
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			434
	AttributeType <AttrTp>	[1..1]	CodeSet		434
	AttributeValue <AttrVal>	[1..1]	Text		434
	SerialNumber <SrlNb>	[1..1]	Binary		434
Or}	SubjectKeyIdentifier <SbjtKeyIdr>	[1..1]	Binary		435
	DigestAlgorithm <DgstAlgo>	[1..1]	±		435
	SignedAttributes <SgndAttrbts>	[0..*]			435
	Name <Nm>	[1..1]	Text		435
	Value <Val>	[0..1]	Text		435
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		435
	Signature <Sgntr>	[1..1]	Binary		436

10.1.11.6.5 DigestedData <DgstData>

Presence: [0..1]

Definition: Data protected by a digest.

DigestedData <DgstData> contains the following elements (see "DigestedData5" on page 412 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		412
	DigestAlgorithm <DgstAlgo>	[1..1]	±		412
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		412
	Digest <Dgst>	[1..1]	Binary		413

10.1.11.7 ContentInformationType33

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		443
	AuthenticatedData <AuthntcdData>	[0..1]	±		443
	SignedData <SgndData>	[0..1]	±		444

10.1.11.7.1 ContentType <CnttTp>

Presence: [1..1]

Definition: Type of data protection.

Datatype: "ContentType2Code" on page 493

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).

10.1.11.7.2 AuthenticatedData <AuthntcdData>

Presence: [0..1]

Definition: Data protection by a message authentication code (MAC).

AuthenticatedData <AuthntcdData> contains the following elements (see "AuthenticatedData9" on page 413 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		414
	Recipient <Rcpt>	[1..*]			414
{Or	KeyTransport <KeyTrnsprt>	[1..1]			415
	Version <Vrsn>	[0..1]	Quantity		416
	RecipientIdentification <RcptId>	[1..1]			416
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			416
	Issuer <Issr>	[1..1]			417
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			417
	AttributeType <AttrTp>	[1..1]	CodeSet		417
	AttributeValue <AttrVal>	[1..1]	Text		418
	SerialNumber <SrlNb>	[1..1]	Binary		418
Or}	SubjectKeyIdentifier <SbjtKeyldr>	[1..1]	Binary		418
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		418
	EncryptedKey <NcrptdKey>	[1..1]	Binary		418
Or	KEK <KEK>	[1..1]			419
	Version <Vrsn>	[0..1]	Quantity		419
	KEKIdentification <KEKId>	[1..1]	±		419
	KeyEncryptionAlgorithm <KeyNcrptnAlgo>	[1..1]	±		419
	EncryptedKey <NcrptdKey>	[0..1]	Binary		420
Or}	KeyIdentifier <Keyldr>	[1..1]	±		420
	MACAlgorithm <MACAlgo>	[1..1]	±		420
	EncapsulatedContent <NcpsltdCntt>	[1..1]	±		421
	MAC <MAC>	[1..1]	Binary		421

10.1.11.7.3 SignedData <SgndData>

Presence: [0..1]

Definition: Data protected by a digital signatures.

SignedData <SgndData> contains the following elements (see "SignedData8" on page 430 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Version <Vrsn>	[0..1]	Quantity		431
	DigestAlgorithm <DgstAlgo>	[0..*]	±		431
	EncapsulatedContent <NcpsltdCntt>	[0..1]	±		432
	Certificate <Cert>	[0..*]	Binary		432
	Signer <Sgnr>	[0..*]			432
	Version <Vrsn>	[0..1]	Quantity		433
	SignerIdentification <SgnrId>	[0..1]			433
{Or	IssuerAndSerialNumber <IssrAndSrlNb>	[1..1]			433
	Issuer <Issr>	[1..1]			433
	RelativeDistinguishedName <RltvDstngshdNm>	[1..*]			434
	AttributeType <AttrTp>	[1..1]	CodeSet		434
	AttributeValue <AttrVal>	[1..1]	Text		434
	SerialNumber <SrlNb>	[1..1]	Binary		434
Or}	SubjectKeyIdentifier <SbjtKeyIdr>	[1..1]	Binary		435
	DigestAlgorithm <DgstAlgo>	[1..1]	±		435
	SignedAttributes <SgndAttrbts>	[0..*]			435
	Name <Nm>	[1..1]	Text		435
	Value <Val>	[0..1]	Text		435
	SignatureAlgorithm <SgntrAlgo>	[1..1]	±		435
	Signature <Sgntr>	[1..1]	Binary		436

10.1.11.8 CryptographicKey17

Definition: Cryptographic Key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Identification <Id>	[1..1]	Text		446
	AdditionalIdentification <AddtlId>	[0..1]	Binary		446
	Name <Nm>	[0..1]	Text		446
	SecurityProfile <SctyPrfl>	[0..1]	Text		447
	ItemNumber <ItmNb>	[0..1]	Text		447
	Version <Vrsn>	[1..1]	Text		447
	Type <Tp>	[0..1]	CodeSet		447
	Function <Fctn>	[0..*]	CodeSet		448
	ActivationDate <ActvtnDt>	[0..1]	DateTime		448
	DeactivationDate <DeactvtnDt>	[0..1]	DateTime		448
	KeyValue <KeyVal>	[0..1]	±		449
	KeyCheckValue <KeyChckVal>	[0..1]	Binary		449
	AdditionalManagementInformation <AddtlMgmtInf>	[0..*]			449
	Name <Nm>	[1..1]	Text		449
	Value <Val>	[0..1]	Text		449

10.1.11.8.1 Identification <Id>

Presence: [1..1]

Definition: Name of the cryptographic key.

Datatype: "Max350Text" on page 533

10.1.11.8.2 AdditionalIdentification <AddtlId>

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 475

10.1.11.8.3 Name <Nm>

Presence: [0..1]

Definition: Name of the Cryptographic Element.

Datatype: "Max256Text" on page 533

10.1.11.8.4 SecurityProfile <SctyPrfl>

Presence: [0..1]

Definition: Identification of the set of security elements to which this element belongs.

Datatype: "Max35Text" on page 534

10.1.11.8.5 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 534

10.1.11.8.6 Version <Vrsn>

Presence: [1..1]

Definition: Version of the cryptographic key.

Datatype: "Max256Text" on page 533

10.1.11.8.7 Type <Tp>

Presence: [0..1]

Definition: Type of algorithm used by the cryptographic key.

Datatype: "CryptographicKeyType3Code" on page 494

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).

10.1.11.8.8 Function <Fctn>

Presence: [0..*]

Definition: Allowed usage of the key.

Datatype: "KeyUsage1Code" on page 501

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.

10.1.11.8.9 ActivationDate <ActvtnDt>

Presence: [0..1]

Definition: Date and time on which the key must be activated.

Datatype: "ISODatetime" on page 528

10.1.11.8.10 DeactivationDate <DeactvtnDt>

Presence: [0..1]

Definition: Date and time on which the key must be deactivated.

Datatype: "ISODatetime" on page 528

10.1.11.8.11 KeyValue <KeyVal>

Presence: [0..1]

Definition: Encrypted cryptographic key.

KeyValue <KeyVal> contains the following elements (see "[ContentInformationType34](#)" on page 438 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	ContentType <CnttTp>	[1..1]	CodeSet		439
	EnvelopedData <EnvlpdData>	[0..1]	±		439
	AuthenticatedData <AuthntcdData>	[0..1]	±		440
	SignedData <SgndData>	[0..1]	±		441
	DigestedData <DgstdData>	[0..1]	±		442

10.1.11.8.12 KeyCheckValue <KeyChckVal>

Presence: [0..1]

Definition: Value for checking a cryptographic key security parameter.

Datatype: "[Max35Binary](#)" on page 475

10.1.11.8.13 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		449
	Value <Val>	[0..1]	Text		449

10.1.11.8.13.1 Name <Nm>

Presence: [1..1]

Definition: Name of the generic information to exchange.

Datatype: "[Max70Text](#)" on page 535

10.1.11.8.13.2 Value <Val>

Presence: [0..1]

Definition: Value of the generic information to exchange.

Datatype: "[Max140Text](#)" on page 532

10.1.11.9 AlgorithmIdentification30

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		450
	Parameter <Param>	[0..1]			451
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		452
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]			453
	Algorithm <Algo>	[1..1]	CodeSet		453
	Parameter <Param>	[0..1]			453
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		453
	SaltLength <SaltLngth>	[0..1]	Quantity		454
	TrailerField <TrlrFld>	[0..1]	Quantity		454
	OIDCurveName <OIDCrvNm>	[0..1]	Text		454

10.1.11.9.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the algorithm.

Datatype: "Algorithm25Code" on page 482

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.

CodeName	Name	Definition
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.

10.1.11.9.2 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 **Parameter15** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		452
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]			453
	Algorithm <Algo>	[1..1]	CodeSet		453
	Parameter <Param>	[0..1]			453
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		453
	SaltLength <SaltLngth>	[0..1]	Quantity		454
	TrailerField <TrlrFld>	[0..1]	Quantity		454
	OIDCurveName <OIDCrvNm>	[0..1]	Text		454

10.1.11.9.2.1 DigestAlgorithm <DgstAlgo>

Presence: [0..1]

Definition: Identification of the digest algorithm.

Datatype: "Algorithm16Code" on page 477

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).

CodeName	Name	Definition
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).

10.1.11.9.2.2 MaskGeneratorAlgorithm <MskGnrtrAlgo>

Presence: [0..1]

Definition: Mask generator function cryptographic algorithm and parameters.

MaskGeneratorAlgorithm <MskGnrtrAlgo> contains the following **AlgorithmIdentification12** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		453
	Parameter <Param>	[0..1]			453
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		453

10.1.11.9.2.2.1 Algorithm <Algo>

Presence: [1..1]

Definition: Mask generator function cryptographic algorithm.

Datatype: "Algorithm8Code" on page 483

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).

10.1.11.9.2.2.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the mask generator function cryptographic algorithm.

Parameter <Param> contains the following **Parameter5** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		453

10.1.11.9.2.2.2.1 DigestAlgorithm <DgstAlgo>

Presence: [0..1]

Definition: Digest algorithm used in the mask generator function.

Datatype: "Algorithm11Code" on page 476

CodeName	Name	Definition
HS25	SHA256	Message digest algorithm SHA-256 as defined in FIPS 180-1 and 2 - (ASN.1 Object Identifier: id-sha256).

CodeName	Name	Definition
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).

10.1.11.9.2.3 SaltLength <SaltLngth>

Presence: [0..1]

Definition: Length of the salt to include in the signature.

Datatype: "Number" on page 530

10.1.11.9.2.4 TrailerField <TrlrFld>

Presence: [0..1]

Definition: Trailer field number.

Datatype: "Number" on page 530

10.1.11.9.2.5 OIDCurveName <OIDCrvNm>

Presence: [0..1]

Definition: Name of the Elliptic Curve according to the OID notation.

Datatype: "Max140Text" on page 532

10.1.11.10 AlgorithmIdentification29

Definition: Cryptographic algorithm and parameters for the protection of the transported key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		454
	Parameter <Param>	[0..1]			456
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		457
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		457
	BytePadding <BPddg>	[0..1]	CodeSet		457

10.1.11.10.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the algorithm.

Datatype: "Algorithm24Code" on page 480

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 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.

CodeName	Name	Definition
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 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).

10.1.11.10.2 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		457
	InitialisationVector <InitlstnVctr>	[0..1]	Binary		457
	BytePadding <BPddg>	[0..1]	CodeSet		457

10.1.11.10.2.1 EncryptionFormat <NcrptnFrmt>

Presence: [0..1]

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

Datatype: "EncryptionFormat2Code" on page 498

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.

10.1.11.10.2.2 InitialisationVector <InitlstnVctr>

Presence: [0..1]

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

Datatype: "Max500Binary" on page 475

10.1.11.10.2.3 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 489

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.

10.1.11.11 AlgorithmIdentification22

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		458
	Parameter <Param>	[0..1]			460
	InitialisationVector <InitlStnVctr>	[0..1]	Binary		460
	BytePadding <BPddg>	[0..1]	CodeSet		460

10.1.11.11.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the MAC algorithm.

Datatype: "Algorithm17Code" on page 478

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).

10.1.11.11.2 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		460
	BytePadding <BPddg>	[0..1]	CodeSet		460

10.1.11.11.2.1 InitialisationVector <InitIstnVctr>

Presence: [0..1]

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

Datatype: "Max500Binary" on page 475

10.1.11.11.2.2 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 489

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.

10.1.11.12 AlgorithmIdentification21

Definition: Cryptographic algorithm and parameters of digests.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		461

10.1.11.12.1 Algorithm <Algo>

Presence: [1..1]

Definition: Identification of the digest algorithm.

Datatype: "Algorithm16Code" on page 477

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).

CodeName	Name	Definition
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).

10.1.11.13 AlgorithmIdentification19

Definition: Cryptographic algorithms and parameters for the protection of transported keys by an asymmetric key.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		462
	Parameter <Param>	[0..1]			462
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		463
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		463
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		464

10.1.11.13.1 Algorithm <Algo>

Presence: [1..1]

Definition: Asymmetric encryption algorithm of a transport key.

Datatype: "Algorithm7Code" on page 483

CodeName	Name	Definition
ERSA	RSAEncryption	RSA encryption algorithm - (ASN.1 Object Identifier: rsaEncryption).
RSAO	RSAES-OAEP	RSA encryption scheme based on Optimal Asymmetric Encryption scheme (PKCS #1 version 2.1) - (ASN.1 Object Identifier: id-RSAES-OAEP).

10.1.11.13.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters of the encryption algorithm.

Parameter <Param> contains the following **Parameter10** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	EncryptionFormat <NcrptnFrmt>	[0..1]	CodeSet		463
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		463
	MaskGeneratorAlgorithm <MskGnrtrAlgo>	[0..1]	±		464

10.1.11.13.2.1 EncryptionFormat <NcrptnFrmt>

Presence: [0..1]

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

Datatype: "EncryptionFormat2Code" on page 498

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.

10.1.11.13.2.2 DigestAlgorithm <DgstAlgo>

Presence: [0..1]

Definition: Identification of the digest algorithm.

Datatype: "Algorithm16Code" on page 477

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).

CodeName	Name	Definition
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).

10.1.11.13.2.3 MaskGeneratorAlgorithm <MskGnrtrAlgo>

Presence: [0..1]

Definition: Mask generator function cryptographic algorithm and parameters.

MaskGeneratorAlgorithm <MskGnrtrAlgo> contains the following elements (see "AlgorithmIdentification18" on page 464 for details)

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		464
	Parameter <Param>	[0..1]			465
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		465

10.1.11.14 AlgorithmIdentification18

Definition: Mask generator function cryptographic algorithm and parameters.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Algorithm <Algo>	[1..1]	CodeSet		464
	Parameter <Param>	[0..1]			465
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		465

10.1.11.14.1 Algorithm <Algo>

Presence: [1..1]

Definition: Mask generator function cryptographic algorithm.

Datatype: "Algorithm8Code" on page 483

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).

10.1.11.14.2 Parameter <Param>

Presence: [0..1]

Definition: Parameters associated to the mask generator function cryptographic algorithm.

Parameter <Param> contains the following **Parameter9** elements

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	DigestAlgorithm <DgstAlgo>	[0..1]	CodeSet		465

10.1.11.14.2.1 DigestAlgorithm <DgstAlgo>

Presence: [0..1]

Definition: Digest algorithm used in the mask generator function.

Datatype: "Algorithm16Code" on page 477

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).

10.1.12 Structured Postal Address

10.1.12.1 PostalAddress2

Definition: Address of a party expressed in a formal structure, usually according to the country's postal services specifications.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	StreetName <StrtNm>	[0..1]	Text		466
	PostCodeIdentification <PstCld>	[1..1]	Text		466
	TownName <TwnNm>	[1..1]	Text		466
	CountrySubDivision <CtrySubDvsn>	[0..1]	Text		466
	Country <Ctry>	[1..1]	CodeSet	C3	466

10.1.12.1.1 StreetName <StrtNm>

Presence: [0..1]

Definition: Name of a street or thoroughfare.

Datatype: "Max70Text" on page 535

10.1.12.1.2 PostCodeIdentification <PstCld>

Presence: [1..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 532

10.1.12.1.3 TownName <TwnNm>

Presence: [1..1]

Definition: Name of a built-up area, with defined boundaries, and a local government.

Datatype: "Max35Text" on page 534

10.1.12.1.4 CountrySubDivision <CtrySubDvsn>

Presence: [0..1]

Definition: Identifies a subdivision of a country for example, state, region, county.

Datatype: "Max35Text" on page 534

10.1.12.1.5 Country <Ctry>

Presence: [1..1]

Definition: Nation with its own government.

Impacted by: C3 "Country"

Datatype: "CountryCode" on page 494

Constraints

- **Country**

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

10.1.13 Synchronisation

10.1.13.1 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		467
	MaximumNumber <MaxNb>	[0..1]	Quantity		467
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		467

10.1.13.1.1 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 536

10.1.13.1.2 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of retries.

Datatype: "Number" on page 530

10.1.13.1.3 UnitOfTime <UnitOfTm>

Presence: [0..1]

Definition: Identification of the minimum unit of time used by time configuration parameters.

Datatype: "TimeUnit1Code" on page 525

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.

10.1.13.2 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		468
	EndTime <EndTm>	[0..1]	DateTime		468
	Period <Prd>	[0..1]	Text		468
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		468

10.1.13.2.1 StartTime <StartTm>

Presence: [0..1]

Definition: Date and time to start the action.

Datatype: "ISODatetime" on page 528

10.1.13.2.2 EndTime <EndTm>

Presence: [0..1]

Definition: Date and time after which the action cannot be processed.

Datatype: "ISODatetime" on page 528

10.1.13.2.3 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 536

10.1.13.2.4 UnitOfTime <UnitOfTm>

Presence: [0..1]

Definition: Identification of the minimum unit of time used by time configuration parameters.

Datatype: "TimeUnit1Code" on page 525

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.

10.1.13.3 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		469
	StartTime <StartTm>	[0..1]	DateTime		469
	EndTime <EndTm>	[0..1]	DateTime		469
	Period <Prd>	[0..1]	Text		469
	MaximumNumber <MaxNb>	[0..1]	Quantity		469
	UnitOfTime <UnitOfTm>	[0..1]	CodeSet		469

10.1.13.3.1 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 536

10.1.13.3.2 StartTime <StartTm>

Presence: [0..1]

Definition: Date and time to start the action.

Datatype: "ISODateTime" on page 528

10.1.13.3.3 EndTime <EndTm>

Presence: [0..1]

Definition: Date and time after which the action cannot be processed.

Datatype: "ISODateTime" on page 528

10.1.13.3.4 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 536

10.1.13.3.5 MaximumNumber <MaxNb>

Presence: [0..1]

Definition: Maximum number of cyclic calls.

Datatype: "Number" on page 530

10.1.13.3.6 UnitOfTime <UnitOfTm>

Presence: [0..1]

Definition: Identification of the minimum unit of time used by time configuration parameters.

Datatype: "TimeUnit1Code" on page 525

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.

10.1.14 Token

10.1.14.1 Token1

Definition: Unencrypted sensitive data of a token.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	PaymentToken <PmtTkn>	[0..1]	Text		470
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		470
	TokenRequestorIdentification <TknRqstrld>	[0..1]	Text		470
	TokenAssuranceData <TknAssrncData>	[0..1]	Text		471
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		471
	TokenInitiatedIndicator <TknInittldInd>	[0..1]	Indicator		471

10.1.14.1.1 PaymentToken <PmtTkn>

Presence: [0..1]

Definition: Surrogate value of the PAN.

Datatype: "Max19NumericText" on page 532

10.1.14.1.2 TokenExpiryDate <TknXpryDt>

Presence: [0..1]

Definition: Expiry date of the payment token.

ISO 8583 bit 14.

Datatype: "Exact4NumericText" on page 531

10.1.14.1.3 TokenRequestorIdentification <TknRqstrld>

Presence: [0..1]

Definition: Identification of a party requesting a token.

Datatype: ["Max11NumericText" on page 532](#)

10.1.14.1.4 TokenAssuranceData <TknAssrncData>

Presence: [0..1]

Definition: Supporting information for the Token Assurance Method.

Datatype: ["Max140Text" on page 532](#)

10.1.14.1.5 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 533](#)

10.1.14.1.6 TokenInitiatedIndicator <TknInittldInd>

Presence: [0..1]

Definition: Original transaction was initiated by Token.

Datatype: One of the following values must be used (see ["TrueFalseIndicator" on page 529](#)):

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

10.1.14.2 MerchantToken2

Definition: Merchant token information.

Or	MessageElement<XML Tag>	Mult.	Type	Constr. No.	Page
	Token <Tkn>	[0..1]	Text		471
	TokenExpiryDate <TknXpryDt>	[0..1]	Text		472
	TokenCharacteristic <TknChrtc>	[0..*]	Text		472
	TokenRequestor <TknRqstr>	[0..1]			472
	ProviderIdentification <PrvdrlId>	[1..1]	Text		472
	RequestorIdentification <Rqstrld>	[1..1]	Text		472
	TokenAssuranceLevel <TknAssrncLvl>	[0..1]	Quantity		472
	TokenAssuranceData <TknAssrncData>	[0..1]	Binary		472
	TokenAssuranceMethod <TknAssrncMtd>	[0..1]	Text		473
	TokenInitiatedIndicator <TknInittldInd>	[0..1]	Indicator		473

10.1.14.2.1 Token <Tkn>

Presence: [0..1]

Definition: Surrogate value of the PAN.

Datatype: ["Max35Text" on page 534](#)

10.1.14.2.2 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 531

10.1.14.2.3 TokenCharacteristic <TknChrtc>

Presence: [0..*]

Definition: Additional payment token information.

Datatype: "Max35Text" on page 534

10.1.14.2.4 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		472
	RequestorIdentification <RqstrId>	[1..1]	Text		472

10.1.14.2.4.1 ProviderIdentification <PrvdrId>

Presence: [1..1]

Definition: Identifier of the token provider.

Datatype: "Max35Text" on page 534

10.1.14.2.4.2 RequestorIdentification <RqstrId>

Presence: [1..1]

Definition: Identifier of the token requestor.

Datatype: "Max35Text" on page 534

10.1.14.2.5 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 530

10.1.14.2.6 TokenAssuranceData <TknAssrncData>

Presence: [0..1]

Definition: Information about the identification and verification of the cardholder.

Datatype: "Max500Binary" on page 475

10.1.14.2.7 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 533

10.1.14.2.8 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 529):

- *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

10.2.2.12 Min5Max16Binary

Definition: Specifies a binary string with a minimum length of 5 bytes, and a maximum length of 16 bytes.

Type: Binary

Format

minLength	5
maxLength	16

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}
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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 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.

10.2.3.3 Algorithm11Code

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).

10.2.3.4 Algorithm16Code

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).
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).

CodeName	Name	Definition
SHK2	SHAKE256	Message digest algorithm SHAKE-256 as defined in FIPS 202 - (ASN.1 Object Identifier: id-shake256).

10.2.3.5 Algorithm17Code

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 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.

CodeName	Name	Definition
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.
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

CodeName	Name	Definition
		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).

10.2.3.6 Algorithm24Code

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 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

CodeName	Name	Definition
		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 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

CodeName	Name	Definition
		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).

10.2.3.7 Algorithm25Code

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.

CodeName	Name	Definition
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.

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).
RSOA	RSASignature	RSA signature scheme based on Optimal Asymmetric Encryption scheme (PKCS #1 version 2.1) - (ASN.1 Object Identifier: id-RSASignature).

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 AttributeType2Code

Definition: Attributes of certificate extensions.

Type: CodeSet

CodeName	Name	Definition
EMAL	EmailAddress	Email address of the certificate subject.
CHLG	ChallengePassword	Password by which an entity may request certificate revocation.

10.2.3.14 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.

10.2.3.15 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.

CodeName	Name	Definition
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.
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.

10.2.3.16 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.

CodeName	Name	Definition
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.
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.

10.2.3.17 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.

CodeName	Name	Definition
UCRP	WithoutCryptogram	Authentication succeeded without a cryptogram.

10.2.3.18 BarcodeType1Code

Definition: Type of BarCode coding.

Type: CodeSet

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.

10.2.3.19 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.

10.2.3.20 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.

CodeName	Name	Definition
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.

10.2.3.21 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.

10.2.3.22 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

CodeName	Name	Definition
		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.

10.2.3.23 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.

10.2.3.24 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.
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.)

10.2.3.25 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.

10.2.3.26 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.
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).

CodeName	Name	Definition
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.

10.2.3.27 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.

10.2.3.28 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.
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.

10.2.3.29 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.

10.2.3.30 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.

10.2.3.31 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).
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).

10.2.3.32 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).

10.2.3.33 CryptographicKeyType3Code

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 197 - November 6, 2001 - Advanced Encryption Standard).
EDE4	DES168	Data encryption standard key of 168 bits (without the parity bits).

10.2.3.34 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.
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.

10.2.3.35 DataSetCategory16Code

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).

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.
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.

10.2.3.36 DataSetCategory18Code

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.

CodeName	Name	Definition
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.

10.2.3.37 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.

10.2.3.38 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.

10.2.3.39 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.

10.2.3.40 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.
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.

10.2.3.41 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.

10.2.3.42 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

CodeName	Name	Definition
		currency conversion ...). Used by the Sale System when the printer is not located on the Sale System.
ERRO	Error	The 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	The 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.

10.2.3.43 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.
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

CodeName	Name	Definition
		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.

10.2.3.44 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}

10.2.3.45 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).
SIGG	SignatureGeneration	Key may generate digital signatures.
SUGV	SignatureVerification	Key may verify digital signatures.
PINE	PINEncryption	Key may encrypt personal identification numbers (PIN).

CodeName	Name	Definition
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.

10.2.3.46 LanguageCode

Definition: Specifies a language.

Type: CodeSet

Constraints

- **ValidationByTable**
Must be a valid terrestrial language.

10.2.3.47 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.

10.2.3.48 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,

CodeName	Name	Definition
		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.

10.2.3.49 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.

10.2.3.50 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.
TERA	TeraByte	Tera byte.

10.2.3.51 MessageFunction43Code

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 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.

10.2.3.52 MessageItemCondition2Code

Definition: Rule to apply for the presence of a message item.

Type: CodeSet

CodeName	Name	Definition
MNDT	Mandatory	Message item must be present.
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.

CodeName	Name	Definition
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.

10.2.3.53 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).

10.2.3.54 NetworkType2Code

Definition: Type of proxy.

Type: CodeSet

CodeName	Name	Definition
SCK5	Sock5	Sock5 proxy.
SCK4	Sock4	Sock4 proxy.
HTTP	HTTP	HTTP proxy.

10.2.3.55 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.

CodeName	Name	Definition
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.

10.2.3.56 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.

10.2.3.57 OutputFormat1Code

Definition: Message format.

Type: CodeSet

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.

10.2.3.58 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.

CodeName	Name	Definition
HTML	XHTML	XHTML document which includes a subset of the XHTML output tag.

10.2.3.59 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.

10.2.3.60 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.
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.

10.2.3.61 PartyType3Code

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	DelegatIssuer	Party to whom the card issuer delegates to authorise card payment transactions.

10.2.3.62 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.

10.2.3.63 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.

CodeName	Name	Definition
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.

10.2.3.64 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).
TMGT	TerminalManager	Responsible for one or several maintenance functions of a card payment acceptance terminal.
SALE	SaleSystem	Party selling goods and services.

10.2.3.65 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.

10.2.3.66 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.

10.2.3.67 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.

10.2.3.68 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.

10.2.3.69 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.
OUTD	OutOfOrder	Component not working properly.
OPER	InOperation	Component activated and in operation.
DACT	Deactivated	Component has been deactivated.

10.2.3.70 POIComponentType6Code

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).

CodeName	Name	Definition
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.

10.2.3.71 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.
INFO	Information	Specifies that the transactions/instructions are linked for information purposes only.

10.2.3.72 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.

10.2.3.73 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%

10.2.3.74 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.

10.2.3.75 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,

CodeName	Name	Definition
		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.

10.2.3.76 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.

10.2.3.77 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.

10.2.3.78 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.

10.2.3.79 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.

10.2.3.80 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.

10.2.3.81 ResultDetail3Code

Definition: Detail of the response.

Type: CodeSet

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

10.2.3.82 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.

10.2.3.83 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, 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.

10.2.3.84 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.

10.2.3.85 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.
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.

CodeName	Name	Definition
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.

10.2.3.86 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.

10.2.3.87 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.

10.2.3.88 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

CodeName	Name	Definition
		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).

10.2.3.89 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.

10.2.3.90 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.

10.2.3.91 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 gift. Usually, this Stored Value item is used only once.

CodeName	Name	Definition
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.

10.2.3.92 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.

10.2.3.93 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.

10.2.3.94 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.

10.2.3.95 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.
SIGE	SignatureError	Data transferred has a wrong digital signature.

CodeName	Name	Definition
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.

10.2.3.96 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.

10.2.3.97 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.

10.2.3.98 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.

10.2.3.99 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.

10.2.3.100 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.

10.2.3.101 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.

10.2.3.102 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.

10.2.3.103 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.
RESD	Reserved	Reserved or updated reserved amount for reservation.

10.2.3.104 UserInterface4Code

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.

10.2.3.105 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 BBANIdentifier

Definition: Basic Bank Account Number (BBAN). Identifier used nationally by financial institutions, ie, in individual countries, generally as part of a National Account Numbering Scheme(s), which uniquely identifies the account of a customer.

Type: IdentifierSet

Identification scheme: National Banking Association; Basic Bank Account Number

Format

pattern [a-zA-Z0-9]{1,30}

10.2.6.3 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.

10.2.6.4 UPICIdentifier

Definition: Universal Payment Identification Code (UPIC). Identifier used by the New York Clearing House to mask confidential data, such as bank accounts and bank routing numbers. UPIC numbers remain with business customers, regardless of banking relationship changes.

Type: IdentifierSet

Identification scheme: The Clearing House (formerly The New York Clearing House); Universal Payment Identification Code

Format

pattern [0-9]{8,17}

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}
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10.2.10.2 Exact3NumericText

Definition: Specifies a numeric string with an exact length of 3 digits.

Type: Text

Format

pattern	[0-9]{3}
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10.2.10.3 Exact4NumericText

Definition: Specifies a numeric string with an exact length of 4 digits.

Type: Text

Format

pattern	[0-9]{4}
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10.2.10.4 Max1025Text

Definition: Specifies a character string with a maximum length of 1025 characters.

Type: Text

Format

minLength	1
maxLength	1025

10.2.10.5 Max104Text

Definition: Specifies a character string with a maximum length of 104 characters.

Type: Text

Format

minLength	1
maxLength	104

10.2.10.6 Max10Text

Definition: Specifies a character string with a maximum length of 10 characters.

Type: Text

Format

minLength	1
maxLength	10

10.2.10.7 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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10.2.10.8 Max140Text

Definition: Specifies a character string with a maximum length of 140 characters.

Type: Text

Format

minLength	1
maxLength	140

10.2.10.9 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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10.2.10.10 Max16Text

Definition: Specifies a character string with a maximum length of 16 characters.

Type: Text

Format

minLength	1
maxLength	16

10.2.10.11 Max19NumericText

Definition: Specifies a numeric string with a maximum length of 19 digits.

Type: Text

Format

pattern	[0-9]{1,19}
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10.2.10.12 Max20000Text

Definition: Specifies a character string with a maximum length of 20, 000 characters.

Type: Text

Format

minLength	1
maxLength	20000

10.2.10.13 Max256Text

Definition: Specifies a character string with a maximum length of 256 characters.

Type: Text

Format

minLength	1
maxLength	256

10.2.10.14 Max2NumericText

Definition: Specifies a numeric string with a maximum length of 2 digits.

Type: Text

Format

pattern	[0-9]{1,2}
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10.2.10.15 Max30Text

Definition: Specifies a character string with a maximum length of 30 characters.

Type: Text

Format

maxLength	30
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10.2.10.16 Max350Text

Definition: Specifies a character string with a maximum length of 350 characters.

Type: Text

Format

minLength	1
maxLength	350

10.2.10.17 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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10.2.10.18 Max35Text

Definition: Specifies a character string with a maximum length of 35 characters.

Type: Text

Format

minLength	1
maxLength	35

10.2.10.19 Max37Text

Definition: Specifies a character string with a maximum length of 37 characters.

Type: Text

Format

minLength	1
maxLength	37

10.2.10.20 Max3Text

Definition: Specifies a character string with a maximum length of 3 characters.

Type: Text

Format

minLength	1
maxLength	3

10.2.10.21 Max45Text

Definition: Specifies a character string with a maximum length of 45 characters.

Type: Text

Format

minLength	1
maxLength	45

10.2.10.22 Max500Text

Definition: Specifies a character string with a maximum length of 500 characters.

Type: Text

Format

minLength	1
maxLength	500

10.2.10.23 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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10.2.10.24 Max6Text

Definition: Specifies a character string with a maximum length of 6 characters.

Type: Text

Format

minLength	1
maxLength	6

10.2.10.25 Max70Text

Definition: Specifies a character string with a maximum length of 70characters.

Type: Text

Format

minLength	1
maxLength	70

10.2.10.26 Max76Text

Definition: Specifies a character string with a maximum length of 76 characters.

Type: Text

Format

minLength	1
maxLength	76

10.2.10.27 Max8000Text

Definition: Specifies a character string with a maximum length of 8000 characters.

Type: Text

Format

minLength	1
maxLength	8000

10.2.10.28 Max8Text

Definition: Specifies a character string with a maximum length of 8 characters.

Type: Text

Format

minLength	1
maxLength	8

10.2.10.29 Max9NumericText

Definition: Specifies a numeric string with a maximum length of 9 digits.

Type: Text

Format

pattern	[0-9]{1,9}
---------	------------

10.2.10.30 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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10.2.10.31 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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10.2.10.32 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

10.2.10.33 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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10.2.10.34 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