**ISO 20022**

Order Book Data Reporting

**Message Definition Report** **- Part 1**

**Approved by the Securities SEG on 17 August 2023**

August 2023

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**Preliminary note:**

The Message Definition Report (MDR) is made of three parts:

**MDR Part 1**

This describes the contextual background required to understand the functionality of the proposed message set. Part 1 is produced by the submitting organisation that developed or maintained the message set in line with a MDR Part1 template provided by the ISO 20022 Registration Authority (RA) on [www.iso20022.org](http://www.iso20022.org)

**MDR Part 2**

This is the detailed description of each message definition of the message set. Part 2 is produced by the RA using the model developed by the submitting organisation.

**MDR Part 3**

This is an extract of the ISO 20022 Business Model describing the business concepts used in the message set. Part 3 is an Excel document produced by the RA.

# Introduction

## Terms and definitions

The following terms are reserved words defined in ISO 20022 – Part1. When used in this document, they will follow the UpperCamelCase notation.

|  |  |
| --- | --- |
| Term | Definition |
| BusinessRole | Functional role played by a business actor in a particular BusinessProcess or BusinessTransaction. |
| Participant | Involvement of a BusinessRole in a BusinessTransaction. |
| BusinessProcess | Unrealized definition of the business activities undertaken by BusinessRoles within a BusinessArea whereby each BusinessProcess fulfils one type of business activity and whereby a BusinessProcess may include and extend other BusinessProcesses. |
| BusinessTransaction | Solution that meets the communication requirements and the interaction requirements of a particular BusinessProcess and BusinessArea. |
| MessageDefinition | Formal description of the structure of a MessageInstance. |

## Abbreviations and Acronyms

The following is a list of abbreviations and acronyms used in the document.

|  |  |
| --- | --- |
| Abbreviation/ Acronym | Definition |
| BAH | Business Application Header |
| TV | Trading Venue |
| CA(s) | Competent Authority (ies) |
| EEA | European Economic Area |
| ESMA | European Securities and Markets Authority |
| EU | European Union |
| MiFID | Markets in Financial Instruments Directive |
| MiFIR | Markets in Financial Instruments Regulation |
| RCA | Relevant Competent Authority |
| SEG | Standards Evaluation Group |
| SWIFT | Society for Worldwide Interbank Financial Telecommunication |
| TC | Third Country |

## Document Scope and Objectives

This document is the first part of the ISO 20022 Message Definition Report (MDR) that describes the BusinessTransactions and underlying message set. For the sake of completeness, the document may also describe BusinessActivities that are not in the scope of the business processes covered in this document.

This document describes the following:

* The BusinessProcess scope
* The BusinessRoles involved in these BusinessProcesses

The main objectives of this document are:

* To explain the BusinessProcesses and BusinessActivities these candidates MessageDefinitions have addressed
* To give a high-level description of BusinessProcesses and the associated BusinessRoles
* To document the BusinessTransactions and their associated BusinessRoles
* To document the BusinessTransactions

The candidate messages definitions are specified in Message Definition Report Part 2

## References

| Document | Version | Date | Author |
| --- | --- | --- | --- |
| MiFIR - Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 | N/A | 12 June 2014 | European Parliament and Council |
| MiFID II - Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 | N/A | 15 May 2014 | European Parliament and Council |
| COMMISSION DELEGATED REGULATION (EU) 2017/580  supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the maintenance of relevant data relating to orders in financial instruments | N/A | 24 June 2016 | European Parliament and Council |
| Order book regulatory reporting Business Justification | 2.1 | 16 February 2023 | ESMA |

# Scope and Functionality

## Scope

This Message Definition Report covers one ISO 20022 MessageDefinition developed by the European Securities and Markets Authority (ESMA) in close collaboration with SWIFT and submitted to the approval of the Securities Standards Evaluation Group (SEG). This candidate MessageDefinition is specifically designed to support the reporting of data on orders in financial instruments (order book data) under the MiFIR.

The MiFIR, specifically art. 25, as well as Regulation (EU) No 2017/580 have introduced the obligation of maintaining records and keeping at the disposal of the CA, for 5 years, the relevant data relating to all orders in financial instruments which are advertised through the trading venues systems.

Neither the Regulation nor the subsequent Technical Standards prescribe technical arrangements for operators of TVs and CAs to access order book data. This was left at the discretion of the operators of TVs and CAs.

To facilitate the access by CAs to this information and perform coordination role in relation to the access by CAs, ESMA has prepared candidate MessageDefinition that contains order book data requested under Regulation (EU) No 2017/580.

It is advised for CAs to transmit information on order book data to other CAs using order book data in the ISO 20022 format.

Operators of TVs may also decide on a voluntary basis to use the ISO 20022 format when making available order book data to the Competent Authority (CA) requesting such information pursuant to Article 25(2) of Regulation (EU) No 600/2014.

CAs shall exchange the information on order book data upon their agreement since there is no predetermined frequency imposed by the Regulation.

No MessageDefinition has been prepared in relation with the query that contains the definition of data request on order book data, i.e. the search criteria defined by the receiving CAs and submitted to the CA.

## MessageDefinitions and Functionality

The order book business flow concerns the transmission of order book data from one CA to another.

The following type of message is exchanged:

* Order book data reporting message (auth.113)

1. This message is to be used with the ISO 20022 Business Application Header (head.001). The schema and more information about the Business Application Header (BAH) can be found on the www.iso20022.org web site

### Order book data reporting message

The Order Book reporting message is used to exchange information related to orders in financial instruments and contains the Regulatory data as requested under Regulation (EU) No 2017/580.

|  |  |
| --- | --- |
| **MessageDefinition** | **Message Identifier** |
| Order Book report | Auth.113 |

# BusinessRoles and Participants

A BusinessRole represents an entity (or a class of entities) of the real world, physical or legal, a person, a group of persons, a corporation. Examples of BusinessRoles: “Financial Institution”, “ACH”, “CSD”.

A Participant is a functional role performed by a BusinessRole in a particular BusinessProcess or BusinessTransaction: for example the “user” of a system, “debtor”, “creditor”, “investor” etc.

The relationship between BusinessRoles and Participants is many-to-many. One BusinessRole (that is, a person) can be involved as different Participants at different moments in time or at the same time: "user", "debtor”, "creditor", "investor", etc. Different BusinessRoles can be involved as the same Participant.

In the context of the order book reporting, the high-level BusinessRoles and typical Participants can be represented as follows.

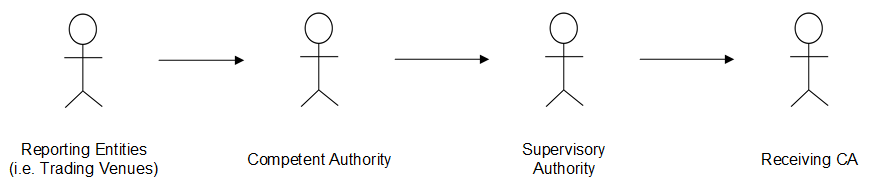


Figure 1 BusinessRoles and Participants for Order Book

## Participants and BusinessRoles Definitions

**Order book Data**

| **Participants and BusinessRoles definitions** | |
| --- | --- |
| **Description** | **Definition** |
| **Participants** | |
| Supervisory Authority | Entity which collects and transmits all relevant messages between Competent Authorities |
| Competent Authority | Entity which regulates reporting entities and collects data to undertake regulatory tasks |
| Reporting Entity | Any entity that has to report order book data under the scope of MiFIR / MiFID II Article 25 to its CA.  On a voluntary basis, the order book data may be reported by the operators of the Trading Venue to its CA using the ISO 20022 format. |
| **BusinessRoles** | |
| ESMA | European Securities and Markets Authority |
| Competent Authority | Entity which regulates reporting entities, collects order book data from the reporting entities under its jurisdiction and sends this data on-demand to other CAs |
| Receiving CA | Entity which receives order book data from another CA on demand for order book data related to Trading Venues that do not operate under its jurisdiction. |
| TV | Operators of Trading Venue |

## BusinessRoles and Participants Table

|  |  |  |  |
| --- | --- | --- | --- |
| Participants  **BusinessRoles** | Competent Authority | Supervisory Authority | Reporting entity |
| ESMA |  | X |  |
| CA | X |  |  |
| Receiving CA | X |  |  |
| TV |  |  | X |

# BusinessProcess Description

This diagram depicts the high level BusinessProcesses covered by this project. The aim of the below is to describe the high-level scope of the project, not to be exhaustive.

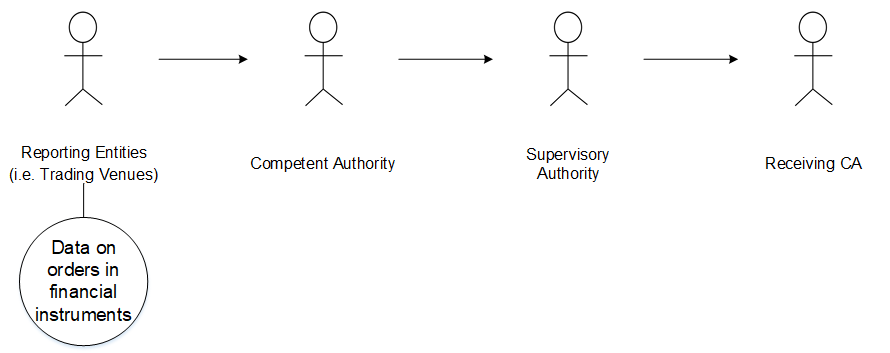


Figure 2 BusinessProcess for Order Book

Order book data submission from TV to CA

|  |  |
| --- | --- |
| Item | Description |
| Definition | A Reporting Entity i.e., TV submits data related to orders in financial instruments to its CA |
| Trigger | Data is submitted upon CA’s request |
| Pre-conditions | Order book data records for the instrument(s) of interest are maintained by the TV. |
| Post-conditions | CA has received the report containing requested order book data |
| Role | TV, CA |

Order Book data submission from CA to Receiving CA

|  |  |
| --- | --- |
| Item | Description |
| Definition | The CA submits the data related to orders in financial instruments received from its Trading Venue(s) to another CA (receiving CA) using ISO 20022 format. The data submission is performed through ESMA |
| Trigger | Data is submitted upon receiving CA’s request |
| Pre-conditions | Trading Venues have submitted the order book data to the CA |
| Post-conditions | The receiving CA has received the order book data. |
| Role | CA, Receiving CA, ESMA |

# Description of BusinessActivities

This section presents the different BusinessActivities within each BusinessProcess. BusinessActivities of a process are described in swim lane diagrams and are referred in this document as activity diagrams.

The development of an activity diagram is part of the ISO 20022 modelling process and allows capturing the requirements.

The activity diagram provides a zoom-in on the BusinessActivities taking place during each of the BusinessProcesses described in Section 4. It also shows the BusinessActivities that are triggered when another BusinessActivity has a negative result.

What is the activity diagram about?

* It is a diagram representing the ‘common lifecycle’ of a BusinessProcess
* A start point ⚫ shows where the lifecycle of the BusinessProcess commences and the end point End point shows where the lifecycle may possibly end
* A lozenge means that a choice between several actions can be made
* A bar means that several actions are initiated in parallel
* The activity diagram shows the flow of activities between the involved Participants (parties)
* BusinessActivities may result in different actions, that is, information is conveyed from one party to another party.
* The arrow indicates the sequence in which the activities take place

Both in-scope and out-of-scope activities are included, with a different level of details. There are no information requirements for out-of-scope activities, except that they should be clearly identified in the diagram.

Activity diagrams are always accompanied with a text describing the BusinessActivities and their interactions.

## Order book data reporting

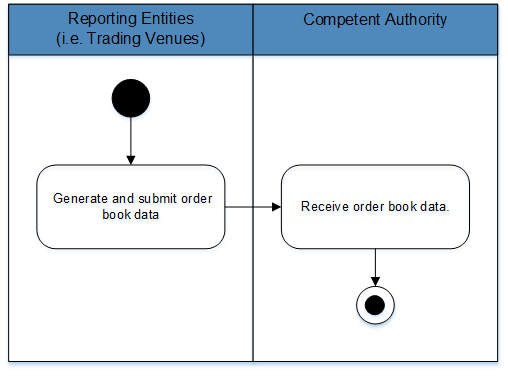


Figure 3 Order Book data submission from Reporting Entity to CA

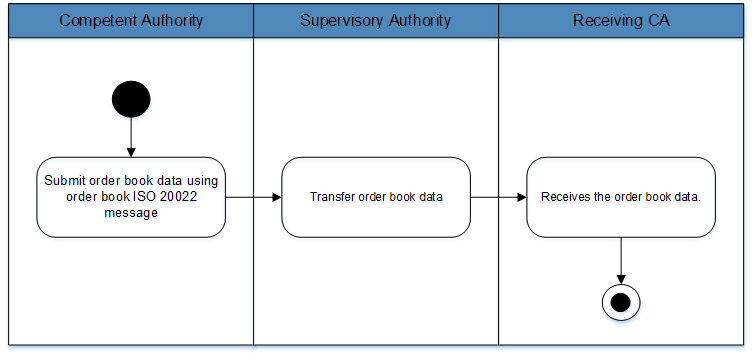


Figure 4 Order book data submission from CA to Receiving CA

| **Description of the BusinessActivities** | |
| --- | --- |
|  | **Initiator** |
| Reporting Entity i.e. TV keeps records of data on orders in financial instruments and submits them to its CA upon request.  Reporting entities may use on a voluntary basis the ISO 20022 format. | **TV** |
| CA receives the order book data from its Trading Venue. | **Competent Authority -CA** |
| CA prepares the order book report that contains the order book data using ISO 20022 format and submits it to the receiving CA through ESMA | **Competent Authority -CA** |
| ESMA transfers the order book data to Competent Authority - Receiving CA. | **ESMA** |
| Competent Authority - Receiving CA receives the order book data  from the CA through ESMA | **Competent Authority -Receiving CA** |

# BusinessTransactions

This section describes the message flows based on the activity diagrams documented above. It shows the typical exchanges of information in the context of a BusinessTransaction.

When a CA (Receiving CA) wants to access data on orders in financial instruments which were advertised through the systems of TVs not falling under its jurisdiction, it should request this data from the CA. The CA, in turn, should request this data from the TV (Reporting Entity) that operates under its jurisdiction. Once the data is received from the Reporting Entity, the CA should submit this data to the Receiving CA through the Central HUB. In this context, the Central HUB, which is operated by ESMA, acts as a routing mechanism (proxy). ESMA does not open or process the Order Book report.

The flow bellow describes a Reporting Entity submitting order book data to its CA. Based on the order book data received from the TV, the CA submits the ISO 20022 Order Book report to the Central HUB. The Central HUB transfers the report to the Receiving CA.

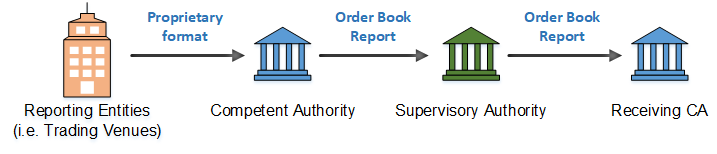


Figure 5 Order Book business transaction

# Examples

This section describes a business example of the MessageDefinition.

## Order book Data

Description

This following MessageInstance provides an example of the auth.113.001.01 MessageDefinition. This example describes an Order Book Report that is being reported by the French NCA to a receiving NCA. It contains order book data from the French Stock Exchange (XPAR) on ISIN XX0000000000 for trading date. 2022-10-01.

NCA: France

MIC: XPAR

ISIN: XX0000000000

Type of order related data: both order data and auction data

Message Instance

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# Revision Record

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Revision** | **Date** | **Author** | **Description** | **Sections affected** |
| 0.1 | 30/11/2022 | ESMA | First draft | All |
| 0.2 | 07/12/2022 | ESMA | Second draft | All |
| 0.3 | 15/12/2022 | ESMA | Second draft | All |
| 0.4 | 20/1/2023 | ESMA | Third draft | All |
| 1.0 | 16/03/2023 | ESMA | Final version | All |
| 2.0 | 17/08/2023 | ISO 20022 RA | Approved version | All |

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