European Network of
Transmission System Operators
for Electricity

Common Platform for Replacement Reserves

IMPLEMENTATION GUIDE

2022-03-15

APPROVED DOCUMENT
VERSION 1.2

1

Copyright notice:

This document is maintained by the TERRE project team with the support of WG CIM. Comments or remarks are to be provided at cim@entsoe.eu

NOTE CONCERNING WORDING USED IN THIS DOCUMENT

The force of the following words is modified by the requirement level of the document in which they are used.

- SHALL: This word, or the terms “REQUIRED” or “MUST”, means that the definition is an absolute requirement of the specification.
- SHALL NOT: This phrase, or the phrase “MUST NOT”, means that the definition is an absolute prohibition of the specification.
- SHOULD: This word, or the adjective “RECOMMENDED”, means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications shall be understood and carefully weighed before choosing a different course.
- SHOULD NOT: This phrase, or the phrase “NOT RECOMMENDED”, means that there may exist valid reasons in particular circumstances when the particular behaviour is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behaviour described with this label.
- MAY: This word, or the adjective “OPTIONAL”, means that an item is truly optional. One vendor may choose to include the item because a particular marketplace requires it or because the vendor feels that it enhances the product while another vendor may omit the same item. An implementation which does not include a particular option SHALL be prepared to interoperate with another implementation which does include the option, though perhaps with reduced functionality. In the same vein an implementation which does include a particular option SHALL be prepared to interoperate with another implementation which does not include the option (except, of course, for the feature the option provides.).

40

Revision History

Version	Release	Date	Comments
1	0	2018-11-08	First version Approved by MC.
1	1	2019-10-30	Removed all references to mFRR as there will be a dedicated implementation guide for the mFRR platform. Removed settlement for inelastic need netting and price divergence. Clarified that resolution shall coincide with border scheduling step for XB capacity and resulting schedules. Specified reason codes for declaring bid as unavailable. Editorial corrections, aligned order of attributes in tables with XSDs. Net positions reported to PEVF and TSO will exceptionally and temporarily be provided per control area for Terna. Resulting CMOL will always be sent in a single document, no matter whether interconnector flow constraints were applied or not. Settlement mode shall be indicated by new attribute paymentTerms. Activation purpose shall be declared with reason codes for each activated offer or satisfied elastic need. The offered/requested price shall be included in the Energy_price.amount attribute which earlier was unused. Specified coding scheme. Corrected code related to attribute cancelledTS. Approved by MC.
1	2	2022-03-15	Editorial corrections: Energy_Price.amount rather than price.amount attribute will be used to convey the price when bid is reported to Transparency Platform. Price payment table revised to reflect that offers are settled between TSO and BSP. Reason for unavailability must be specified when reporting unavailable bids. Optionally it shall additionally be possible to indicate the purpose when an unavailable bid is activated locally. Updated process timeline in chapter 5.1. Replaced TSO by System Operator in sequence diagram. Single clearing run: Negative congestion income output toward settlement service. Approved by MC.

41 # CONTENTS

42 Copyright notice:....3
43 Revision History....4
44 CONTENTS....5
45 Introduction....7
46 Scope....7
47 Normative references....7
48 Terms and definitions....9
49 The replacement reserve business process for standard products....9
50 5.1 General overview....9
51 5.2 Overall business context....9
52 5.2.1 Final ATC....11
53 5.2.2 HVDC and AC constraints....11
54 5.2.3 HVDC schedules....11
55 5.2.4 TSO reserve offers and needs....11
56 5.2.5 Accepted needs and offers to be activated....11
57 5.2.6 Cross border schedules....11
58 5.2.7 Net position....11
59 5.2.8 Clearing prices....11
60 5.2.9 Remaining ATC....11
61 5.2.10 Transparency reporting....11
62 5.2.11 Invoicing and financial data....11
63 5.3 Business rules....12
64 5.3.1 General rules....12
65 5.3.2 Dependencies governing the Capacity_MarketDocument....13
66 5.3.3 Dependencies governing the HVDCLink_marketDocument....15
67 5.3.4 Dependencies governing the ReserveBid_MarketDocument....18
68 5.3.5 Price payment table....27
69 5.3.6 Dependencies governing the MeritOrderList_MarketDocument....28
70 5.3.7 Dependencies governing the Schedule_MarketDocument....32
71 5.3.8 Dependencies governing the
72 EnergyAccount_MarketDocument....35
73 5.3.9 Financial amount table....36
74 5.3.10 Dependencies governing the Balancing_MarketDocument....37
75 5.3.11 Dependencies governing the Reporting_MarketDocument....43
76 Contextual and assembly models....45
77 6.1 Capacity market document....45
78 6.2 HVDCLink market document....45
79 6.3 Reserve bid market document....45
80 6.4 Merit order list market document....45
81 6.5 Schedule market document....45
82 6.6 Energy account market document....45
83 6.7 Balancing market document....45
84 6.8 Reporting market document....45
85 6.9 Acknowledgement document....45
86 6.10 Problem statement document....45
87 XML schema....46

List of figures

Figure 1: Replacement reserve process overview 9
Figure 2: The replacement reserve process sequence diagram 10

List of tables

Table 1 – Capacity market document dependency table 13
Table 2 - HVDC link market document dependency table 15
Table 3 – Reserve bid market document dependency table (submissions to common platform) 18
Table 4 – Reserve bid market document dependency table (submissions to transparency platform) 22
Table 5 - Price payment table 27
Table 6 - merit order list market document dependency table 28
Table 7 - Schedule market document dependency table 32
Table 8 – Energy account market document dependency table 35
Table 9 – Financial amount table 36
Table 10 – Balancing market document dependency table (submission of clearing prices to transparency platform) 37
Table 11 – Balancing market document dependency table (submission of clearing prices to TSO) 38
Table 12 – Balancing market document dependency table (submission of aggregated bids to transparency platform) 40
Table 13 – Reporting market document dependency table 43

Introduction

This document was drafted based on IEC 62325 series. In particular, the IEC 62325-450 methodology was applied to develop the conceptual and assembly models.

Scope

The Trans European replacement reserves exchange (TERRE) project is a pilot project for the exchange of replacement reserve balancing energy. It is eventually targeted to become the common platform mandated under the electricity balancing guideline (Network Code)

The aims of the project are to permit:

- The reduction of balancing costs through the introduction of an optimization based matching process;
- The increase of the available balancing energy for each TSO with positive impact on the security of supply and on the integration of renewable energy in the electric systems.
- A more efficient use of cross border interconnectors after Intraday Markets.

Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC TS 61970-2, *Energy management system application program interface (EMS-API) –Part 2: Glossary*

IEC 62325-301, *Framework for energy market communications – Part 301: Common information model (CIM) extensions for markets*

IEC 62325-351, *Framework for energy market communications – Part 351: CIM European market model exchange profile*

IEC 62325-450, *Framework for energy market communications – Part 450: Profile and context modeling rules*

IEC 62325-451-1, *Framework for energy market communications – Part 451-1: Acknowledgement business process and contextual model for CIM European market*

IEC 62325-451-2, Framework for energy market communications – Part 451-2: Scheduling business process and contextual model for CIM European market

IEC 62325-451-3, Framework for energy market communications – Part 451-3: Transmission capacity allocation business process (explicit or implicit auction) and contextual model for CIM European market

IEC 62325-451-4, Framework for energy market communications – Part 451-4: Settlement and reconciliation business process and contextual model for CIM European market

IEC 62325-451-6, Framework for energy market communications – Part 451-6: Transparency business process and contextual model for CIM European market

IEC 62325-451-7, *Framework for energy market communications – Part 451-7: Reserve resource business process and contextual model for CIM European market*

ENTSO-E RG CE scheduling reporting process implementation guide

ENTSO-E Manual of Procedures for central Transparency Platform v3r2

154 *Harmonised role model 2019-01*

Terms and definitions

4.1 RR

Replacement reserves; The reserves used to restore/support the required level of FRR to be prepared for additional system imbalances. This category includes operating reserves with activation time from Time to Restore Frequency up to hours.

The replacement reserve business process for standard products

5.1 General overview

The common platform has a number of operational phases that are carried out throughout the day. Initially these phases will be carried out over a three-hour period.

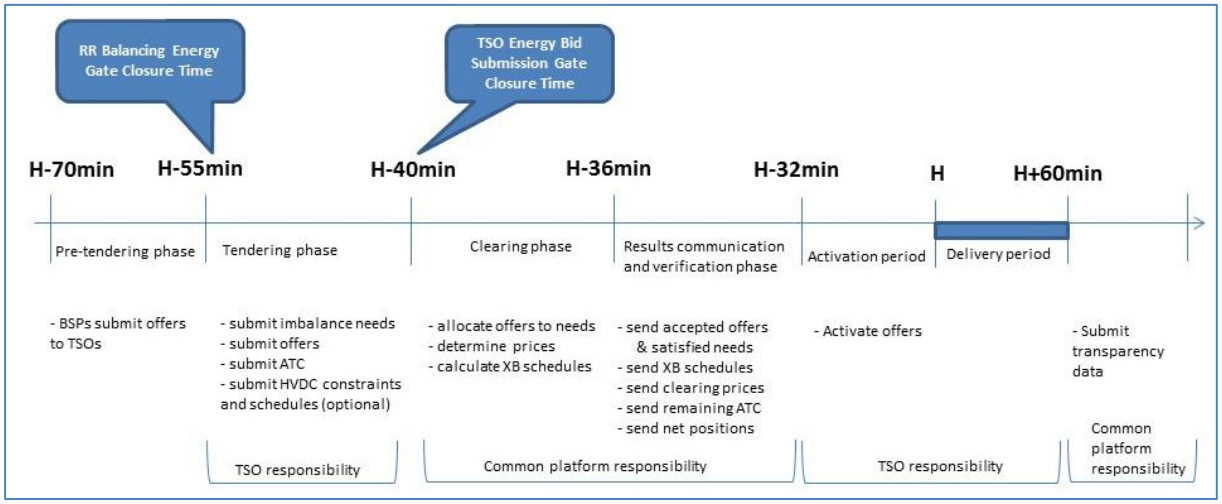


Figure 1: Replacement reserve process overview

The common platform's operational phases outlined in Figure 1 exhibits the timing in order to satisfy a one-hour delivery period.

The Balance Service Providers (BSP) may during a pre-tendering phase submit offers to the TSOs.

At the balancing energy gate closure time H-55 min the tendering phase begins on the common platform. Each TSO submits to the common platform the replacement reserve (RR) imbalance needs, the offers and the available transfer capacity (ATC).

At the gate closure of the tendering phase H-40 min the common platform begins the clearing phase and allocates the offers to satisfy the RR needs, fixes the prices and calculates the cross-border schedules.

At H-36 the resulting accepted offers, satisfied needs, cross border schedules, net positions and remaining ATC are submitted to the concerned parties and are verified.

At H-32 the activation phase begins where each TSO activates the offers under its responsibility that are needed in order to satisfy the overall needs.

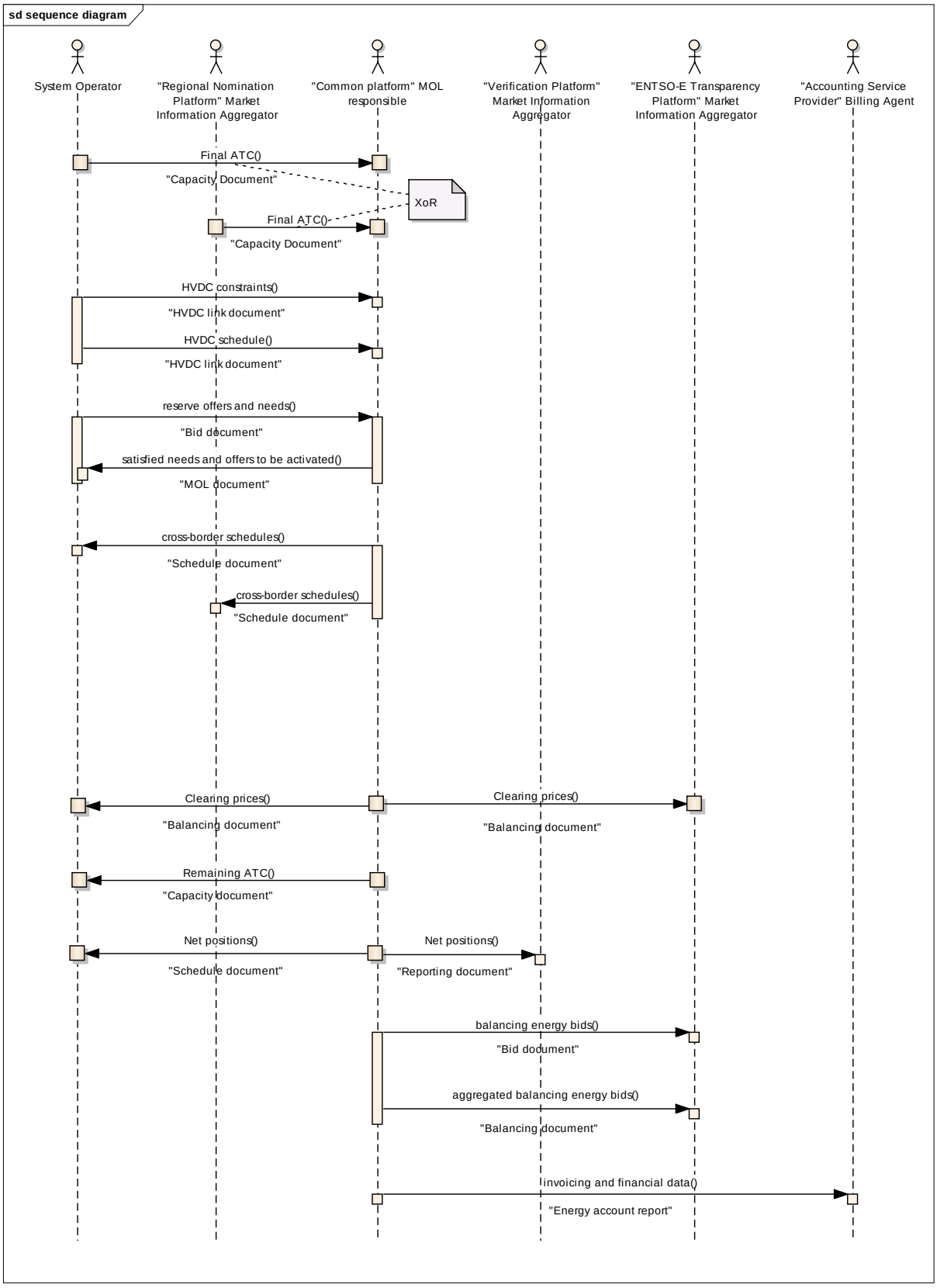
At H the activation for one hour occurs.

At H+90 minutes the latest, all the information required for transparency reporting purposes is provided.

5.2 Overall business context

This Implementation Guide provides the means of exchanging between the common platform and all concerned parties the information necessary to satisfy replacement reserve requirements as outlined in paragraph 4.1.

188



189

190 **Figure 2: The replacement reserve process sequence diagram**

191 The information flows are outlined in the following paragraphs.

5.2.1 Final ATC

The participating TSOs provide to the common platform during the tendering phase the final available transfer capacity (ATC). This information will be used during the calculation of the replacement reserves for the coming delivery period. In some cases participating TSOs may provide the ATC through a regional nomination platform.

5.2.2 HVDC and AC constraints

The TSOs with high voltage direct current (HVDC) lines provide to the common platform the constraints in relation to the lines in question. Optionally constraints on AC links may also be provided to the platform.

5.2.3 HVDC schedules

The TSOs with high voltage direct current (HVDC) lines provide to the common platform the schedules in relation to the lines in question and where HVDC constraints have also been transmitted.

5.2.4 TSO reserve offers and needs

During the tendering phase the participating TSOs provide to the common platform the list of all the offers for reserve use as well as the list of all the reserve needs for the coming delivery period.

5.2.5 Accepted needs and offers to be activated

The common platform, after carrying out the analysis of the submitted data during the clearing phase, sends to each participating TSO the needs that will be met as well as those which cannot be satisfied. In addition it will provide the offers that have to be activated within the TSO area.

5.2.6 Cross border schedules

The common platform informs the participating TSOs and the regional nomination platform of the schedules that have to be included in the coming scheduling process.

5.2.7 Net position

The common platform informs the pan-European verification platform of the net position per control area for the schedule day of all participating TSOs, resulting from the flows on AC interconnectors. Flows on HVDC interconnectors are not taken into account.

Each TSO receives the net position for its control area. Flows on AC interconnectors are taken into account but flows on HVDC interconnectors are excluded.

5.2.8 Clearing prices

The common platform provides the clearing prices to the TSOs.

5.2.9 Remaining ATC

The common platform notifies the participating TSOs of any ATC that remains unused at the end of the process.

5.2.10 Transparency reporting

The common platform submits clearing prices, all energy balancing bids and an aggregation of all energy balancing bids to the ENTSO-E central transparency platform for publication.

5.2.11 Invoicing and financial data

The common platform provides the financial information to the billing agent that will carry out financial settlement between the TSOs. Any TSO may optionally subscribe to this information for reconciliation purposes.

5.3 Business rules

5.3.1 General rules

For each electronic data interchange defined in this document, an acknowledgement document, as defined in IEC 62325-451-1, should be generated either accepting the whole received document or rejecting it completely.

The business process described in this chapter will be executed separately for each region, also referred to as virtual scheduling area. For Replacement Reserves, the following regions shall apply:

Region	EIC code	Geographical scope
Western Europe	10Y1001C--00031A	UK-FR-CH-IT-ES-PT
Central Europe	10Y1001C--00030C	PL-CZ
Eastern Europe	10Y1001C--000328	HU-RO

In all documents the single applicable coding scheme shall be A01 = EIC coding scheme.

5.3.2 Dependencies governing the Capacity_MarketDocument

The capacity market document is used to provide the ATC that is available in a TSO area for a given period. Data for more than one border or interconnector may at the discretion of the data provider be conveyed in a single or separate documents. For a given border or interconnector, values must be provided for both directions in the same document. The capacity market document is also used by the common platform to inform the TSOs of any ATC that remains.

Table 1 provides the dependencies for the capacity market document.

Table 1 – Capacity market document dependency table

		Use	XSD requirements
Capacity_MarketDocument			
mRID	Unique identification of the Capacity Document	Used	Mandatory
revisionNumber	Initial transmission shall equal "1"	Used	Mandatory
type	A31 = Agreed capacity (used when submitting available capacity to common platform) A26 = Capacity document (used to transmit remaining capacity from the common platform to the TSOs)	Used	Mandatory
process.processType	A15 = Capacity determination	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the Transmission System Operator when the document type = A31 EIC of the common platform Operator when the DocumentType = A26.	Used	Mandatory
sender_MarketParticipant.marketRole.type	A04 = System operator when the document type = A31 A35 = MOL responsible when the document type = A26	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of the common platform Operator when the document type = A31: 10X1001C--00006N EIC of the Transmission System Operator when the document type = A26	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A35 = MOL responsible Operator when the document type = A31 A04 = System operator when the document type = A26	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
period.timeInterval	The duration of the delivery period (initially 1 hour)	Used	Mandatory
domain.mRID	EIC of the region	Used	Mandatory

TimeSeries			
mRID	The unique identification of the time series within the document	Used	Mandatory
businessType	A26 = ATC	Used	Mandatory
product	8716867000016 = active power	Used	Mandatory
in_Domain.mRID	EIC identification of the scheduling area where the power is being put	Used	Mandatory
out_Domain.mRID	EIC identification of the scheduling area where the power is coming from	Used	Mandatory
measure_Unit.name	MAW = Megawatts	Used	Mandatory
auction.mRID	The identification of an auction specification	Not used	Conditional
auction.category	The category under which capacity is classified	Not used	Conditional
curveType	A01 = Sequential fixed size block	Used	Mandatory
connectingLine_RegisteredResource.mRID	The identification of a set of lines that connect two areas together. This is only used when specific tie lines have to be identified.	May be used	Conditional

Period			
timeInterval	A time interval of the same length as the delivery period (initially 1 hour)	Used	Mandatory
resolution	Shall coincide with the scheduling step of the border: PT60M PT30M PT15M	Used	Mandatory

Point			
position	Position within the time interval	Used	Mandatory
quantity	Quantity of ATC with 0.1 MW precision	used	Mandatory

Reason (associated with header and point)		Not used	**Conditional**

254

5.3.3 Dependencies governing the HVDCLink_marketDocument

The HVDC link market document is used by the transmission system operator to provide all the HVDC constraints and schedules to the common platform. This document may optionally also be used by TSOs to provide constraints on AC links. For a given interconnector, schedules must be provided for both directions in the same file.

Table 2 provides the dependencies for the HVDC link market document.

Table 2 - HVDC link market document dependency table

		Constraint	schedule	XSD requirements
HVDCLink_MarketDocument				
mRID	Unique identification of the Schedule Document	Used	Used	Mandatory
revisionNumber	Initial transmission shall equal "1"	Used	Used	Mandatory
type	The coded type of a document. The document type describes the principal characteristic of the document.	A99 = HVDC link constraints	B02 HVDC schedule	Mandatory
process.processType	A02 = Intraday incremental	Used	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the Transmission System Operator	Used	Used	Mandatory
sender_MarketParticipant.marketRole.type	A04 = System operator	Used	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of the common platform Operator: 10X1001C--00006N	Used	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Used	Mandatory
schedule_Period.timeInterval	The time interval covered by the schedule	Used	Used	Mandatory
docStatus	A01 = Intermediate A02 = Final	Used	Used	Mandatory
domain.mRID	EIC of the region	Used	Used	Mandatory

TimeSeries		Constraint	Schedule	
mRID	The unique identification of the time series within the document	Used	Used	Mandatory
businessType	B30 = HVDC settings	Used	Used	Mandatory
product	8716867000016 = active power	Used	Used	Mandatory
objectAggregation	A09 = DC link	Used	Used	Mandatory
connectingLine_RegisteredResource.mRID	The identification of the HVDC link or group of HVDC links. May also be used to identify an AC link.	Used	Used	Mandatory
hVDCMode_AttributeInstanceComponent.attribute	A01 = HVDC set point schedule	Used	Used	Conditional
out_Domain.mRID	EIC identification of the scheduling area where the product is being extracted	Used	Used	Conditional
in_Domain.mRID	EIC identification of the scheduling area where the product is being delivered	Used	Used	Conditional
measurement_Unit.name	MAW = Megawatts	Used	Used	Mandatory
curveType	A01 = Sequential fixed size block A03 = Variable block	Used	Used	Conditional
minimumExchange_Quantity.quantity	The minimum value of a power exchange range between the In_Domain and the Out_Domain of the timeseries.	Not used	Not used	Conditional
maximumExchange_Quantity.quantity	The maximum value of a power exchange range between the In_Domain and the Out_Domain of the timeseries.	Not used	Not used	Conditional

Series_Period				
timeInterval	A time interval of the length of the delivery period (initially 1 hour)	Used	Used	Mandatory
resolution	Shall coincide with the scheduling step of the border: PT60M PT30M PT15M	Used	Used	Mandatory

262

Point		Constraint	Schedule	
position	Position within the time interval	Used	Used	Mandatory
quantity	The value of the scheduled product. One of the directions must equal zero (net schedule). Precision is 0.1 MW.	Not used	Used	Conditional
minimum_Quantity.quantity	The minimum value of power exchange on the HVDC line (or AC link) for a scheduled point. Precision is 0.1 MW. Shall be zero if constraints are provided in both directions for a given position.	Used	Not used	Conditional
maximum_Quantity.quantity	The maximum value of power exchange on the HVDC line (or AC link) for a scheduled point. Precision is 0.1 MW.	Used	Not used	Conditional
optimum_Quantity.quantity	The value of the optimum power exchange on the HVDC line for a scheduled point.	Not used	Not used	Conditional

263

5.3.4 Dependencies governing the ReserveBid_MarketDocument

The reserve bid market document is used to provide all the information related to offers and needs that are submitted to the common platform. It is also used to submit all offers to the ENTSO-E central transparency platform.

All needs from a given TSO (elastic, inelastic and flexible needs) must be placed within a single document. Offers may be distributed among more than one document, at the discretion of the TSO.

If data provider wants to withdraw a single need or offer that already has been submitted to the platform, it is necessary to submit a higher version of the same document and exclude the corresponding time series.

Table 3 provides the dependencies for the reserve bid market document when TSOs submit offers and needs to the common platform.

Table 3 – Reserve bid market document dependency table (submissions to common platform)

		OFFER	NEED	XSD requirements
ReserveBid_MarketDocument				
mRID	Unique identification of the Bid Document	Used	Used	Mandatory
revisionNumber	Initial transmission shall equal "1"	Used	Used	Mandatory
type	A37 = Reserve Bid document	Used	Used	Mandatory
process.processType	A46 = Replacement reserve (RR)	Used	Used	Conditional
sender_MarketParticipant.mRID	EIC of the transmitting TSO	Used	Used	Mandatory
sender_MarketParticipant.marketRole.type	A04 = System Operator	Used	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of common platform operator: 10X1001C--00006N	Used	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Used	Mandatory
reserveBid_Period.timeInterval	The duration of the delivery period (initially 1 hour)	Used	Used	Mandatory
domain.mRID	EIC of region	Used	Used	Mandatory
subject_MarketParticipant.mRID	EIC of the transmitting TSO	Used	Used	Mandatory

subject_MarketParticipant.marketRole.type	A27 = Resource Provider	Used	Used	Mandatory

273

Bid_TimeSeries				
mRID	Unique identification of the bid assigned by the transmitting TSO	Used	Used	Mandatory
auction.mRID	Constant value of “AUCTION-RR”. It identifies that the bid refers to the auction specifications for a replacement reserve tender. Other values may be added as the replacement reserve process further evolves.	Used	Used	Mandatory
businessType	B74 = Offer B75 = Need B90 = Flexible need	B74 = Offer	B75 = Need B90 = Flexible need	Mandatory
acquiring_Domain.mRID	For offers it corresponds to the EIC identification of the region. For needs it corresponds to the EIC identification of the sending TSO’s scheduling area.	region	TSO’s control area or scheduling area	Mandatory
connecting_Domain.mRID	For offers it corresponds to the EIC identification of the sending TSO’s scheduling area providing the reserves. Associated multipart, linked and exclusive bids must be associated with the same scheduling area. For needs it corresponds to the EIC identification of the region providing the reserves	Used	Used	Mandatory
provider_MarketParticipant.mRID	The balance service provider (BSP) identification.	May be used	Not used	Conditional
quantity_Measure_Unit.name	MAW = Megawatts	Used	Used	Mandatory
currency_Unit.name	EUR = Euro. This currency is only provided in the case of a need where there is a price in the point class. Otherwise it is not used.	Used	May be used	Conditional
price_Measure_Unit.name	MWH = Megawatt hours. This unit of measure is only provided in the case of a need where there is a price in the point class. Otherwise it is not used	Used	May be used	Conditional
divisible	A01 = quantity may be reduced to the minimum activation quantity by increments of the StepIncrementQuantity A02 = No reduction possible on the quantity	Used	A01	Mandatory
linkedBidsIdentification	The identification used to associate bids that are to be linked together. If one bid is accepted then all others with the same identification must also be accepted. If the bid is not linked then the attribute is not used.	May be used. See note below.	Not used	Conditional
multipartBidIdentification	The identification used to associate multipart bids. If bid with flowDirection.direction=A01 (Up) is accepted then all associated bids with inferior price must also be accepted. If bid with flowDirection.direction=A02 (Down) is accepted then all associated bids with superior price must also be accepted. If the bid is not multipart then the attribute is not used.	May be used. See note below.	Not used	Conditional

exclusiveBidsIdentification	The identification used to associate exclusive bids. If bid is accepted then all others with same identification shall be ignored. If the bid is not exclusive then the attribute is not used.	May be used. See note below.	Not used	Conditional
blockBid	Not used. Redundant due to the existence of Divisible attribute.	Not used	Not used	Optional
status	A06 = Available A11 = Unavailable Associated multipart, linked and exclusive bids must have the same status.	Used	Not used	Conditional
priority	A sequential number indicating the priority of the bid in relation to other bids	Not used	Not used	Conditional
registeredResource.mRID	The identification of the resource used to provide the reserves	May be used	Not used	Conditional
flowDirection.direction	A01 = UP A02 = DOWN Refer to the price payment table for use in relation to price. Multipart offers shall have the same direction.	Used	Used	Mandatory
stepIncrementQuantity	Not used. For needs and divisible offers the input step increment has been harmonised to 1 MW.	Not used	Not used	Conditional
energyPrice_Measure_Unit.name	MWH = Megawatt hours	Not used	Not used	Conditional
marketAgreement.type	The type of the market agreement	Not used	Not used	Conditional
marketAgreement.mRID	Identification of the agreement with the resource provider	Not used	Not used	Conditional
marketAgreement.createdDateTime	Time stamp used to identify the date and time that a specific offer was received.	Not used	Not used	Conditional
activation_ConstraintDuration.duration	Not used	Not used	Not used	Conditional
resting_ConstraintDuration.duration	Not used	Not used	Not used	Conditional
minimum_ConstraintDuration.duration	Not used	Not used	Not used	Conditional

maximum_ConstraintDuration.duration	Not used	Not used	Not used	Conditional
standard_MarketProduct.marketProductType	Used when the bid refers to a standard product or a specific product that has been converted into a standard product: A01 = Standard product Associated multipart, linked and exclusive bids must have the same value.	Used	Not used	Conditional
original_MarketProduct.marketProductType	Used when the bid refers to a specific product or a specific product that has been converted into a standard product: A02 = Specific product A03 = Integrated scheduling process Associated multipart, linked and exclusive bids must have the same value.	May be used	Not used	Conditional
validity_Period.timeInterval	The period when the bid can be activated	Not used	Not used	Optional

Note: The attributes linkedBidIdentification, exclusiveBidIdentification and multipartBidIdentification are mutually exclusive and cannot be used in combination. Associated bids shall carry the same value in the identification attribute. For example: The document contains three bids that are linked – those three bids shall have the same value in the linkedBidIdentification attribute. The values used in these attributes must be unique within the document but may be reused in subsequently submitted documents.

Period				
timeInterval	A time interval within the delivery period. Multipart offers shall have the same timeInterval. Linked offers must have a time interval of exactly 15 minutes. Linked offers may not overlap in time.	Used	Used	Mandatory
Resolution	PT60M PT30M PT15M	Used	Used	Mandatory
Point				
position	Position within the time interval	Used	Used	Mandatory
quantity.quantity	Quantity offered or needed with 1 MW precision. Multipart offers shall have constant quantity throughout the Period.	Quantity offered	Quantity needed	Mandatory
minimum_Quantity.quantity	Required if divisible = A01. Precision is 1 MW. Multipart offers shall have constant minimum quantity throughout the Period.	May be used	0	Conditional

price.amount	The price of the product. Precision is 0.01. Multipart offers shall have constant price throughout the Period. Note: Refer to the Price payment table for establishing who is paid.	The price of the offer	May be used to indicate the price cap set by the TSO	Conditional
energy_Price.amount	Not used	Not used	Not used	Conditional

AvailableMBA_Domain (Associated with time series)	Not used	Not used	Not used	**Conditional**
mRID				

Reason (associated with time series)	Note: This class is strictly associated with the status attribute that has the value of A11 = Unavailable.	May be used	Not used	**Conditional**
code	Reason for unavailability: B46 = internal congestion B47 = operational security constraints Activation purpose: B55 = Because of redispatching B56 = Because of countertrading B57 = Because of other remedial action	Used	Not used	Mandatory
text	Textual information provided by the TSO	May be used	Not used	Optional

Note on Reason class: If the necessary information is at the disposal of the TSO at the time of submission, TSO may include a second instance of Reason to indicate the activation purpose when an unavailable bid was activated locally.

Table 4 provides the dependencies for the reserve bid market document when the common platform submits offers to the ENTSO-E transparency platform. A separate document will be sent for every scheduling area.

Table 4 – Reserve bid market document dependency table (submissions to transparency platform)

		Use	XSD requirements
ReserveBid_MarketDocument			

mRID	Unique identification of the Bid Document	Used	Mandatory
revisionNumber	Initial transmission shall equal "1"	Used	Mandatory
type	A37 = Reserve Bid document	Used	Mandatory
process.processType	A46 = Replacement reserve (RR)	Used	Conditional
sender_MarketParticipant.mRID	EIC of common platform operator: 10X1001C--00006N	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory
receiver_MarketParticipant.mRID	10X1001A1001A450 = EIC of the ENTSO-E transparency platform	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A32 = Market information aggregator	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
reserveBid_Period.timeInterval	The duration of the delivery period (initially 1 hour)	Used	Mandatory
domain.mRID	EIC of the region	Used	Mandatory
subject_MarketParticipant.mRID	EIC of common platform Operator	Used	Mandatory
subject_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory

286

BidTimeSeries			
mRID	Unique identification of the bid assigned by the transmitting TSO	Used	Mandatory
auction.mRID	Constant value of “AUCTION-RR”. It identifies that the bid refers to the auction specifications for a replacement reserve tender	Used	Mandatory
businessType	B74 = Offer	Used	Mandatory
acquiring_Domain.mRID	EIC identification of the region	Used	Mandatory
connecting_Domain.mRID	EIC identification of the sending TSO’s scheduling area providing the reserves	Used	Mandatory
provider_MarketParticipant.mRID	The balance service provider (BSP) identification	Not used	Conditional
quantity_Measure_Unit.name	MAW = Megawatts	Used	Mandatory
currency_Unit.name	EUR = Euro	Used	Conditional

price_Measure_Unit.name	MWH = Megawatt hours	Used	Conditional
divisible	A01 = quantity may be reduced to the minimum activation quantity A02 = No reduction possible on the quantity	Used	Mandatory
linkedBidsIdentification	Populated if the bid is linked	May be used	Conditional
multipartBidIdentification	Populated if the bid is multipart	May be used	Conditional
exclusiveBidsIdentification	Populated if the bid is exclusive	May be used	Conditional
blockBid	Not used. Redundant due to the existence of Divisible attribute.	Not used	Optional
status	A06 = Available A11 = Unavailable	Used	Conditional
priority	A sequential number indicating the priority of the bid in relation to other bids	Not used	Conditional
registeredResource.mRID	The identification of the resource used to provide the reserves	Not used	Conditional
flowDirection.direction	A01 = UP A02 = DOWN Refer to the price payment table for use in relation to price	Used	Mandatory
stepIncrementQuantity	Not used. For needs and divisible offers the input step increment has been harmonised to 1 MW.	Not used	Conditional
energyPrice_Measure_Unit.name	MWH = Megawatt hours	Not used	Conditional
marketAgreement.type	The type of the market agreement	Not used	Conditional
marketAgreement.mRID	Identification of the agreement with the resource provider	Not used	Conditional
marketAgreement.createdDateTime	Time stamp used to identify the date and time that a specific offer was received.	Not used	Conditional
activation_ConstraintDuration.duration	Not used	Not used	Conditional
resting_ConstraintDuration.duration	Not used	Not used	Conditional

minimum_ConstraintDuration.duration	Not used	Not used	Conditional
maximum_ConstraintDuration.duration	Not used	Not used	Conditional
standard_MarketProduct.marketProductType	Used when the bid refers to a standard product or a specific product that has been converted into a standard product: A01 = Standard product	Used	Conditional
original_MarketProduct.marketProductType	Used when the bid refers to a specific product that has been converted into a standard product: A02 = Specific product A03 = Integrated scheduling process	May be used	Conditional
validity_Period.timeInterval	The period when the bid can be activated	Used	Optional
Period			
timeInterval	A time interval within the delivery period	Used	Mandatory
resolution	PT15M	Used	Mandatory
Point			
position	Position within the time interval	Used	Mandatory
quantity.quantity	Quantity offered with 1 MW precision	Used	Mandatory
minimum_Quantity.quantity		Not used	Conditional
price.amount	Not used	Not used	Conditional
energy_Price.amount	The price of the product. Precision is 0.01. Refer to the Price payment table for establishing who is paid.	Used	Conditional

AvailableMBA_Domain (Associated with time series)	Not used	Not used	**Conditional**
mRID			

Reason (associated with time series)	This class is only used when status attribute contains A11 = Unavailable.	May be used	**Conditional**
code	Reason for unavailability: B46 = internal congestion B47 = operational security constraints Activation purpose: B55 = Because of redispatching B56 = Because of countertrading B57 = Because of other remedial action	Used	Mandatory
text	Textual information provided by the TSO	-May be used	Optional

Note on Reason class: If the information has been provided by TSO, a second instance of Reason may be included to indicate the activation purpose when an unavailable bid was activated locally.

5.3.5 Price payment table

Aligning with EB GL art. 48, Table 5 clarifies whether TSO or Balancing Service Provider (BSP) should pay the price indicated.

Table 5 - Price payment table

OFFERS					
acquiring_Domain.mRID	Domain where the reserve will be used	region	region	region	region
connecting_Domain.mRID	Domain providing the reserve	TSO control area	TSO control area	TSO control area	TSO control area
flowDirection.direction	Direction of the flow	UP	UP	DOWN	DOWN
price.amount	Price of the energy	>0	<0	>0	<0
Which party pays		TSO	BSP	BSP	TSO

5.3.6 Dependencies governing the MeritOrderList_MarketDocument

The merit order list market document is used by the common platform to provide all the information related to the offers that been accepted as well the needs that have been satisfied.

Table 6 provides the dependencies for the merit order list market document.

Table 6 - merit order list market document dependency table

		OFFER	NEED	XSD requirements
MeritOrderList_MarketDocument				
mRID	Unique identification of the MOL Document	Used	Used	Mandatory
revisionNumber	Initial transmission shall equal "1"	Used	Used	Mandatory
type	A66 = Final MOL	Used	Used	Mandatory
process.processType	A46 = Replacement reserve (RR)	Used	Used	Conditional
sender_MarketParticipant.mRID	EIC of the common Operator: 10X1001C--00006N	Used	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of the Transmission System Operator	Used	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A04 = System operator	Used	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Used	Mandatory
period.timeInterval	The duration of the delivery period (initially 1 hour)	Used	Used	Mandatory
domain.mRID	EIC of the region	Used	Used	Conditional

BidTimeSeries				
marketAgreement.mRID	Identification of the offer or the need as defined in the receiving TSO submission.	Used	Used	Mandatory
marketAgreement_createdDateTime	The timestamp of when the bid was received	Not used	Not used	Conditional
priority	A sequential number indicating the priority of the bid in relation to other bids.	Not used	Not used	Conditional
resourceProvider_MarketParticipant.mRID	The balance service provider (BSP) identification.	May be used	Not used	Conditional
registeredResource.mRID	The identification of the resource used to provide the reserves.	May be used	Not used	Conditional
acquiring_Domain.mRID	For offers it corresponds to the EIC identification of the region. For needs it corresponds to the EIC identification of the receiving TSO's control area or scheduling area.	region	Receiving TSO's bidding zone or scheduling area	Mandatory
connecting_Domain.mRID	for offers it corresponds to the EIC identification of the receiving TSO's scheduling area providing the reserves. for needs it corresponds to the EIC identification of the region providing the reserves	Receiving TSO's bidding zone	region	Mandatory
auction.mRID	Identification of auction as defined in the reserve bid document.	Used	Used	Mandatory
auction.paymentTerms	A01 = Pay as bid A02 = Pay as cleared	Used when offer accepted	Used when elastic need satisfied	Conditional
businessType	B74 = Offer B75 = Need B90 = Flexible need	B74 = Offer	B75 = Need B90 = Flexible need	Mandatory
bid_Period.timeInterval	The duration of the delivery period (initially 1 hour)	Used	Used	Mandatory
quantity_Measure_Unit.name	MAW = Megawatts	Used	Used	Mandatory
currency_Unit.name	EUR = Euro	Used	Used	Conditional
price_Measurement_Unit.name	MWH = Megawatt hours	Used	Used	Conditional
energyPrice_Measurement_Unit.name	MWH = Megawatt hours	Not used	Not used	Conditional

direction	A01 = UP A02 = DOWN Refer to the price payment table for use in relation to price.	Used	Used	Mandatory
minimumActivation_Quantity.quantity	The minimum quantity that can be activated	Not used	Not used	Conditional
stepIncrement_Quantity.quantity	Not used. For needs and divisible offers the output step increment has been harmonised to 0.1 MW.	Not used	Used	Conditional
marketObjectStatus.status	A06 = available (the offer has not been activated) A10 = Ordered (i.e. common platform has requested that the TSO activate an offer) A33 = Not satisfied (i.e. The need cannot be satisfied by the common platform)	A06 = available A10 = ordered	A10 = ordered A33 = Not satisfied	Mandatory

Period				
timeInterval	A time interval of the length of the delivery period (initially 1 hour)	Used	Used	Mandatory
resolution	PT15M	Used	Used	Mandatory

299

Point				
position	Position within the time interval	Used	Used	Mandatory
quantity.quantity	Quantity offered or needed. Precision is 1 MW.	Quantity offered	Quantity needed	Mandatory
price.amount	The price for activating the product. Precision is 0.01.	Used when offer accepted	Used when need satisfied	Conditional
energy_Price.amount	For offers; The offered price. For elastic needs: The requested price. Precision is 0.01.	Used	Used when elastic need	Conditional

activated_Quantity.quantity	Quantity activated. Precision is 0.1 MW.	Quantity to be activated	Quantity for which activation has been requested	Conditional

300

Reason (associated with time series)	Note: This class is strictly associated with the status attribute that has the value of A10=Ordered	Used when offer accepted	Used when elastic need satisfied	**Conditional**
code	A96 = Technical constraint B49 = Balancing	Used	Used	
text	Textual information provided by the TSO	Not used	Not used	

301 Note: Two instances of Reason will be associated with the Time Series when an offer or elastic need has been activated for balancing purposes and
302 due to system constraints.

303

304 5.3.7 Dependencies governing the Schedule_MarketDocument

305 The schedule document is used by the common platform to provide all the cross-border
306 information related to the nominations that been assigned. It is also used to provide the TSO
307 with the net position of its scheduling area.

308 The schedule documents containing cross-border schedules and net positions are provided
309 by the common platform per delivery period, not per business day. Each schedule document
310 contains an individual message mRID and starts with revision number “1”.

311 Table 7 provides the dependencies for the schedule market document.

312 **Table 7 - Schedule market document dependency table**

		Use	XSD requirements
Schedule_MarketDocument			
mRID	Unique identification of the Schedule Document	Used	Mandatory
revisionNumber	Initial transmission shall equal "1"	Used	Mandatory
type	A30 = Cross border schedule B17 = Aggregated netted external TSO schedule document	Used	Mandatory
process.processType	A46 = Replacement reserve (RR)	Used	Mandatory
process.classificationType	A01 = Detail type	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the common platform Operator: 10X1001C--00006N	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of the Transmission System Operator	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A04 = System operator A32 = Market Information Aggregator	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
schedule_Time_Period.timeInterval	The duration of the delivery period (initially 1 hour)	Used	Mandatory
domain.mRID	EIC of the region	Used	Mandatory
subject_MarketParticipant.mRID	EIC of the receiving TSO	Used	Mandatory
subject_MarketParticipant.marketRole.type	A04 = System Operator	Used	Mandatory
matching_Time_Period.timeInterval	Matching period for the schedule document	Not used	Conditional

313

TimeSeries			
mRID	The unique identification of the time series within the document	Used	Mandatory
version	The version of the time series. It must always be the same as the version of the document	Used	Mandatory
businessType	A05 = External trade total B09 = Net position	Used	Mandatory
product	8716867000016 = active power	Used	Mandatory
objectAggregation	A01 = Area	Used	Mandatory
in_Domain.mRID	EIC identification of the scheduling area where the power is being put	Used	Conditional
out_Domain.mRID	EIC identification of the scheduling area where the power is coming from	Used	Conditional
marketEvaluationPoint.mRID	Identification of a resource	Not used	Conditional
in_MarketParticipant.mRID	identification of a market participant putting the power into the area	May be used when type=B17	Conditional
out_MarketParticipant.mRID	Identification of a market participant that is taking the power from the area	May be used when type=B17	Conditional
marketAgreement.type	Identification of the type of agreement	Not used	Conditional
marketAgreement.mRID	Identification of the reserve contract	Not used	Conditional
connectingLine_RegisteredResource.mRID	Provided in case there are multiple interconnectors	May be used when type=A30	Conditional
measurement_Unit.name	MAW = Megawatts	Used	Mandatory
curveType	A01 = Sequential fixed size block	Used	Mandatory

314

Period			
timeInterval	A time interval of the length of the delivery period (initially 1 hour)	Used	Mandatory
resolution	Shall coincide with the scheduling step of the border when document type = A30: PT60M PT30M PT15M Always PT15M when document type = B17	Used	Mandatory

Point			
position	Position within the time interval	Used	Mandatory
quantity	Quantity scheduled	Used	Mandatory

Reason (associated with time series and point)		Not used	**Conditional**

315 Notes:

316 1. When Business type is B09 = Net position and TSO is exporting, the in_Domain shall
317 be populated with the region and out_Domain with the TSO's scheduling area. When
318 TSO is importing, in_Domain shall be populated with the TSO's scheduling area and
319 out_Domain with the region.

320 2. Information on In and Out Market Participants will be included for select scheduling
321 areas, due to local market rules for handling of reserve products: When B09 = Net
322 position out_MarketParticipant or in_MarketParticipant will be populated with the party

code of the BRP, depending on whether the TSO is importing or exporting energy. The other attribute will be populated with the party code of the entity operating the common platform.

3. Exceptionally and temporarily, the net position for Terna will be reported per control area.

5.3.8 Dependencies governing the EnergyAccount_MarketDocument

The energy account document is used by the common platform to provide the invoicing financial information for the reserves that have been replaced. The document is used in five cases:

1. To provide the financial settlement of the net positions;
2. To provide the positive congestion income;
3. To provide the negative congestion income due to the imposition of constraints on interconnectors.

Table 8 provides the dependencies for the energy account market document.

Table 8 – Energy account market document dependency table

		Use	XSD requirements
EnergyAccount_MarketDocument			
mRID	Unique identification of the Energy Account market Document	Used	Mandatory
revisionNumber	Initial transmission shall equal "1"	Used	Mandatory
type	A12 = Imbalance report	Used	Mandatory
docStatus	A02 = Final	Used	Mandatory
process.processType	A06 = Imbalance settlement	Used	Mandatory
process.classificationType	A01 = Detail type	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the common platform Operator: 10X1001C--00006N	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of the settlement billing agent: 10X1001A1001A57U	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A10 = Billing agent	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
period.timeInterval	The duration of the settlement period	Used	Mandatory
domain.mRID	EIC of the region	Used	Conditional

TimeSeries			
mRID	Unique identification of the time series	Used	Mandatory
businessType	A24 Total trade where the time series covers financial values; B10 = Congestion income; B77 = Financial compensation or penalties B77 is used to convey negative congestion income.	Used	Mandatory
Product	8716867000016 = Active power	Used	Mandatory
objectAggregation	A01 = Area	Used	Mandatory
area_Domain.mRID	EIC identification of the control area	Used	Mandatory
marketParticipant.mRID	identification of TSO responsible for the area	Used	Conditional
marketAgreement.mRID	Identification of the reserve contract	Not used	Conditional
measure_Unit.name	MWH = Megawatts hours	Used	Mandatory

currency_Unit.name	EUR = Euro	Used	Conditional
marketEvaluationPoint.mRID	Identification of an accounting point	Not used	Conditional

339

Period			
timeInterval	A time interval of the settlement period	Used	Mandatory
resolution	PT15M	Used	Mandatory

Point			
position	Position within the time interval	Used	Mandatory
in_Quantity.quantity	Quantity going into an area	Used	Mandatory
in_Quantity.quality	The quality of the quantity	Not used	Conditional
out_Quantity.quantity	Quantity going out of an area	Used	Mandatory
out_Quantity.quality	The quality of the quantity	Not used	conditional
price.amount	settlement amount. This represents the total financial value for the point in respect to the time series businessType. The value may be negative.	Used	conditional

340 Note: The in quantity and out quantity represent a netted value consequently one of the values
341 must always be equal to zero.

Reason (associated with Point)		Not used	**Conditional**

342

343 ### 5.3.9 Financial amount table

344 Table 9 indicates the domain owner that should pay the amount indicated.

345 **Table 9 – Financial amount table**

Price.amount	Settlement amount	>0	<0
Which party pays		TSO	common platform

346

5.3.10 Dependencies governing the Balancing_MarketDocument

The balancing market document covers requirements for transmission of the clearing prices from the common platform to TSOs and the ENTSO-E transparency platform per imbalance settlement period. The same document will also be used for transmitting to the ENTSO-E transparency platform the aggregated balancing energy bids.

Note that due to the design of the optimisation algorithm in the common platform, prices for Up and Down regulation will always be equal.

Table 10 provides the dependencies for the balancing market document when the common sends clearing prices to the ENTSO-E transparency platform.

Table 10 – Balancing market document dependency table (submission of clearing prices to transparency platform)

		Use	XSD requirements
Balancing_MarketDocument			
mRID	Unique identification of the balancing market Document	Used	Mandatory
revisionNumber	Initial transmission shall equal "1"	Used	Mandatory
type	A84 = activated balancing price	Used	Mandatory
process.processType	A16 = Realised	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the common platform Operator: 10X1001C--00006N	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory
receiver_MarketParticipant.mRID	10X1001A1001A450 = EIC of the ENTSO-E transparency platform	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A32 = Market information aggregator	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
docStatus	A01 = Intermediate A02 = Final	Not used	Conditional
controlArea.Domain.mRID	Scheduling area described by the document	Used	Conditional
allocationDecision_DateAndOrTime	Date and time when the decision on allocation was made	Not used	Optional
period.timeInterval	The duration of the delivery period covered by the document.	Used	Mandatory

TimeSeries			
mRID	Unique identification of the time series	Used	Mandatory
businessType	A98 = replacement reserve	Used	Mandatory
acquiring_Domain.mRID		Not used	Conditional
connecting_Domain.mRID		Not used	Conditional
type_MarketAgreement.type	Identification of the procurement time unit.	Not used	Conditional
standard_MarketProduct.marketProductType	Used when the reported quantities refer to standard products: A01 = Standard product	Used	Conditional
original_MarketProduct.marketProductType	Used when the reported quantities refer to specific products: A02 = Specific product A03 = Integrated scheduling process	Not used	Conditional
mktPSRType.psrType	Identification of the source type of the reserve	Not used	Conditional
flowDirection.direction	A01 = Up A02 = Down	Used	Conditional

currency_Unit.name	EUR = Euro	Used	Conditional
quantity_Measure_Unit.name	MAW = Megawatts	Not used	Conditional
price_Measure_Unit.name	MWH= Megawatt hours	Used	Conditional
curveType	A01 = Sequential fixed block	Used	Conditional
cancelledTS	If the data for a time series has been cancelled this attribute shall be specified with A01 = Yes	Not used	Conditional

358

Period			
timeInterval	A time interval equivalent to the delivery period	Used	Mandatory
resolution	PT15M	Used	Mandatory

Point			
position	Position within the time interval	Used	Mandatory
quantity	The accepted offer quantity identified for a point.	Not used	Conditional
secondaryQuantity	The activated quantity	Not used	Conditional
unavailable_Quantity.quantity	The unavailable quantity	Not used	Conditional
activation_Price.amount	The activation price for the quantity of reserve.	Used	Conditional
procurement_Price.amount	The procurement price for the quantity of reserve.	Not used	Conditional
min_Price.amount	The minimum price for the reserve	Not used	Conditional
max_Price.amount	The maximum price for the reserve	Not used	Conditional
imbalance_Price.amount	The imbalance price for the quantity of reserve.	Not used	Conditional
imbalance_Price.category	Identification whether the imbalance price is due to excess or insufficient balance.	Not used	Conditional
flowDirection.direction	A01 = Up A02 = Down	Not used	Conditional

Financial_Price (associated with Point)		**Not used**	**Conditional**
amount		Not used	Mandatory
direction		Not used	Conditional

359

360 Table 11 provides the dependencies for the balancing market document when the common
361 platform sends the clearing prices to the TSO.

362 **Table 11 – Balancing market document dependency table (submission of clearing**
363 **prices to TSO)**

		Use	**XSD requirements**
Balancing_MarketDocument			
mRID	Unique identification of the balancing market Document	Used	Mandatory

revisionNumber	Initial transmission shall equal "1"	Used	Mandatory
type	A84 = activated balancing price	Used	Mandatory
process.processType	A16 = Realised	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the common platform Operator: 10X1001C--00006N	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of the Transmission System Operator	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A04 = System operator	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
docStatus	A01 = Intermediate A02 = Final	Not used	Conditional
controlArea.Domain.mRID	Scheduling area described by the document	Used	Conditional
allocationDecision_DateAndOrTime	Date and time when the decision on allocation was made	Not used	Optional
period.timeInterval	The duration of the delivery period covered by the document.	Used	Mandatory

TimeSeries			
mRID	Unique identification of the time series	Used	Mandatory
businessType	A98 = replacement reserve	Used	Mandatory
acquiring_Domain.mRID		Not used	Conditional
connecting_Domain.mRID		Not used	Conditional
type_MarketAgreement.type	Identification of the procurement time unit.	Not used	Conditional
standard_MarketProduct.marketProductType	Used when the reported quantities refer to standard products: A01 = Standard product	Used	Conditional
original_MarketProduct.marketProductType		Not used	Conditional
mktPSRType.psrType	Identification of the source type of the reserve	Not used	Conditional
flowDirection.direction	A03 = Up and Down	Used	Conditional
currency_Unit.name	EUR = Euro	Used	Conditional
quantity_Measure_Unit.name	MAW = Megawatts	Not used	Conditional
price_Measure_Unit.name	MWH= Megawatt hours	Used	Conditional
curveType	A01 = Sequential fixed block	Used	Conditional
cancelledTS	If the data for a time series has been cancelled this attribute shall be specified with A01 = Yes	Not used	Conditional

364

Period			

timeInterval	A time interval equivalent to the delivery period	Used	Mandatory
resolution	PT15M	Used	Mandatory

Point			
position	Position within the time interval	Used	Mandatory
quantity	The accepted offer quantity identified for a point.	Not used	Conditional
secondaryQuantity	The activated quantity	Not used	Conditional
unavailable_Quantity.quantity	The unavailable quantity	Not used	Conditional
activation_Price.amount	The activation price for the quantity of reserve.	Used	Conditional
procurement_Price.amount	The procurement price for the quantity of reserve.	Not used	Conditional
min_Price.amount	The minimum price for the reserve	Not used	Conditional
max_Price.amount	The maximum price for the reserve	Not used	Conditional
imbalance_Price.amount	The imbalance price for the quantity of reserve.	Not used	Conditional
imbalance_Price.category	Identification of whether the imbalance price is in excess or insufficient balance.	Not used	Conditional
flowDirection.direction	A01 = Up A02 = Down	Not used	Conditional

Financial_Price (associated with Point)		**Not used**	**Conditional**
amount		Not used	Mandatory
direction		Not used	Conditional

Table 12 provides the dependencies for the balancing market document when the common platform sends aggregated balancing energy bids to the ENTSO-E transparency platform.

Table 12 – Balancing market document dependency table (submission of aggregated bids to transparency platform)

		Use	**XSD requirements**
Balancing_MarketDocument			
mRID	Unique identification of the balancing market Document	Used	Mandatory
revisionNumber	Initial transmission shall equal "1"	Used	Mandatory
type	A24 = Bid document	Used	Mandatory
process.processType	A46 = Replacement reserve (RR)	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the common platform Operator: 10X1001C--00006N	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory
receiver_MarketParticipant.mRID	10X1001A1001A450 = EIC of the ENTSO-E transparency platform	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A32 = Market information aggregator	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
docStatus	A01 = Intermediate A02 = Final	Not used	Conditional
controlArea.Domain.mRID	Scheduling area described by the document	Used	Conditional

allocationDecision_DateAndOrTime	Date and time when the decision on allocation was made	Not used	Optional
period.timeInterval	The duration of the delivery period covered by the document	Used	Mandatory

TimeSeries			
mRID	Unique identification of the time series	Used	Mandatory
businessType	A14 = Aggregated energy data	Used	Mandatory
acquiring_Domain.mRID		Not used	Conditional
connecting_Domain.mRID		Not used	Conditional
type_MarketAgreement.type	Identification of the procurement time unit.	Not used	Conditional
standard_MarketProduct.marketProductType	Used when the reported quantities refer to standard products: A01 = Standard product	Used	Conditional
original_MarketProduct.marketProductType	Used when the reported quantities refer to specific products: A02 = Specific product A03 = Integrated scheduling process	Not used	Conditional
mktPSRType.psrType	Identification of the source type of the reserve	Not used	Conditional
flowDirection.direction	A01 = Up A02 = Down	Used	Conditional
currency_Unit.name		Not used	Conditional
quantity_Measure_Unit.name	MAW = Megawatts	Used	Conditional
price_Measure_Unit.name		Not used	Conditional
curveType	A01 = Sequential fixed block	Used	Conditional
cancelledTS	If the data for a time series has been cancelled this attribute shall be specified with A01 = Yes	Not used	Conditional

370

Period			
timeInterval	A time interval equal to the delivery period	Used	Mandatory
resolution	PT15M	Used	Mandatory

Point			
position	Position within the time interval	Used	Mandatory
quantity	The offered quantity	Used	Conditional
secondaryQuantity	The activated quantity	Used	Conditional
unavailable_Quantity	The unavailable quantity	Used	Conditional
activation_Price.amount	The activation price for the quantity of reserve.	Not used	Conditional
procurement_Price.amount	The procurement price for the quantity of reserve.	Not used	Conditional
min_Price.amount	The minimum price for the reserve	Not used	Conditional
max_Price.amount	The maximum price for the reserve	Not used	Conditional
imbalance_Price.amount	The imbalance price for the quantity of reserve.	Not used	Conditional
imbalance_Price.category	Identification whether the imbalance price is due to excess or insufficient balance.	Not used	Conditional

flowDirection.direction	A01 = Up A02 = Down	Not used	Conditional

Financial_Price (associated with Point)		**Not used**	**Conditional**
amount		Not used	Mandatory
direction		Not used	Conditional

371

372

5.3.11 Dependencies governing the Reporting_MarketDocument

The reporting market document covers requirements for transmission by the common platform to the ENTSO-E verification platform of the aggregated netted external TSO schedule for the net balancing position between the common platform and the TSO's scheduling area. It should be noted that this schedule only describes the outcome of the RR process.

There will be separate virtual scheduling areas corresponding to the regions for RR.

Table 13 provides the dependencies for the reporting market document.

Table 13 – Reporting market document dependency table

		Used	XSD Requirements
Reporting_MarketDocument			
mRID	Unique identification of the reporting market Document	Used	Mandatory
revisionNumber	Initial transmission shall equal "1"	Used	Mandatory
type	B17 = Aggregated netted external TSO schedule document	Used	Mandatory
process.processType	A18 = Total intraday	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the common platform Operator: 10X1001C--00006N	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory
receiver_MarketParticipant.mRID	10V000000000009D V-code of the verification platform	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A32 = Market information aggregator	Used	Mandatory
createdDateTime	Date and time of document creation. Expressed in UTC	Used	Mandatory
time_Period.timeInterval	The period covered by the document expressed in UTC. The period must cover a complete scheduling day.	Used	Mandatory
domain.mRID / codingScheme	The common platform's virtual scheduling area identified with an EIC Y code. codingScheme = A01	Used	Mandatory
subject_Domain.mRID / codingScheme	The common platform's virtual scheduling area identified with an EIC Y code. codingScheme = A01	Used	Mandatory

TimeSeries			
mRID	Unique identification of the time series.	Used	Mandatory
businessType	B62 = Aggregated netted external TSO schedule	Used	Mandatory
product	8716867000016 = Active Power.	Used	Mandatory
in_Domain.mRID / codingScheme	A scheduling area where the product is being delivered identified with an EIC Y code. codingScheme = A01.	Used	Mandatory
out_Domain.mRID / codingScheme	A scheduling area where the product is being extracted identified with an EIC Y code. codingScheme = A01.	Used	Mandatory
connectingLine_RegisteredResource.mRID	Required if DC link or controllable AC link	Not used	Conditional
quantity_Measure_Unit.name	MAW = Mega watts	Used	Mandatory
curveType	A03 = Variable block	Used	Mandatory
Period			
timeInterval	The start and end time of the period expressed in UTC.	Used	Mandatory
resolution	PT1M = 1 minute	Used	Mandatory
Point			
position	The relative position of the point in relation to the start time interval.	Used	Mandatory
quantity	The quantity representing the net position.	Used	Mandatory

Note 1: The in_Domain or the out_Domain must identify the region, also referred to as the virtual scheduling area. The other domain shall be equivalent to a TSO's scheduling area.

Note 2: There is a time series for both directions, one of the directions must equal zero.

Note 3: No references to connecting lines are included since net positions are reported.

Note 4: Exceptionally and temporarily, the net position for Terna will be reported per control area.

Contextual and assembly models

6.1 Capacity market document

The contextual and assembly models for the capacity market document shall be based on the equivalent models as defined in urn:iec62325.351:tc57wg16:451-3:capacitydocument:8:0.

6.2 HVDCLink market document

The contextual and assembly models for the HVDC link market document shall be based on the equivalent models as defined in urn:iec62325.351:tc57wg16:451-8:hvdclinkdocument:1:0.

6.3 Reserve bid market document

The contextual and assembly models for the reserve bid market document shall be based on the equivalent models as defined in urn:iec62325.351:tc57wg16:451-7:reservebiddocument:7:1.

6.4 Merit order list market document

The contextual and assembly models for the merit order list market document shall be based on the equivalent models as defined in urn:iec62325.351:tc57wg16:451-7:moldocument:7:2.

6.5 Schedule market document

The contextual and assembly models for the schedule market document shall be based on the equivalent models as defined in urn:iec62325.351:tc57wg16:451-2:scheduledocument:5:1.

6.6 Energy account market document

The contextual and assembly models for the energy account market document shall be based on the equivalent models as defined in urn:iec62325.351:tc57wg16:451-4:energyaccountdocument:4:0.

6.7 Balancing market document

The contextual and assembly models for the balancing market document shall be based on the equivalent models as defined in urn:iec62325.351:tc57wg16:451-6:balancingdocument:4:0.

6.8 Reporting market document

The contextual and assembly models for the reporting market document shall be based on the equivalent models as defined in urn:iec62325.351:tc57wg16:451-n:reportingdocument:2:0.

6.9 Acknowledgement document

The contextual and assembly models for the acknowledgement document shall be based on the equivalent models as defined in urn:iec62325.351:tc57wg16:451-1:acknowledgementdocument:8:0.

6.10 Problem statement document

The contextual and assembly models for the problem statement document shall be based on the equivalent models as defined in urn:iec62325.351:tc57wg16:451-5:problemdocument:3:0.

XML schema

All XML schemas for the replacement reserve process are available for download from the ENTSO-E website.