European Network of
Transmission System Operators
for Electricity

CENTRAL TRANSPARENCY PLATFORM – IMPLEMENTATION GUIDE FOR EUROPEAN PLATFORMS

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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.).

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Revision History

Version	Release	Date	Comments
1	0	2020-12-15	To be approved by MC.
1	1	2021-06-01	CIM maintenance request IF01: Chapter 5.3.2 HVDC link market document • Document status attribute updated with additional value • Domain mRID attribute updated to “Used” from “not used”. • Reason code now associated with time series rather than Header • Business type code was updated Chapter 5.3.3 Capacity market document • Introductory paragraph updated by deleting statement on “border values must be provided for each direction in the file.” • The time interval attribute description updated. • Reason associated with time series rather than header Chapter 5.3.7 Unavailability Market document • Contradictory statement about reason associated with header deleted. • Disconnections may be submitted for LFC area Approved by MC.
1	2	2021-07-06	CIM maintenance request IF02: - Exchanged volumes will be published with 4 second resolution for aFRR. - Exchanged volumes shall have either preliminary or final status also for aFRR. Approved by MC.

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1 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.

2 References

2.1 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 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 62325-451-3, 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 62325-451-6, 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

IEC 62325-503-2018 Framework for energy market communications - Part 503: Market data exchanges guidelines for the IEC 62325-351 profile

IEC 62325-504- 2015 Framework for energy market communications - Part 504: Utilization of web services for electronic data interchanges on the European energy market for electricity

2.2 Other references

ENTSO-E Manual of Procedures for central Transparency Platform v3r2

Commission Regulation (EU) 2017/2195 of 23 November 2017 establishing a guideline on electricity balancing (EB GL)

Commission Regulation (EU) 2013/543 of 14 June 2013 on submission and publication of data in electricy markets (TR)

3 Terms and definitions

TERM	DEFINITION
aFRR	Automatically activated frequency restoration reserves
BSP	Balancing service provider
DSO	Distribution System Operator
EB GL	Electricity Balancing Guideline
IF	Implementation framework
ISP	Imbalance Settlement Period, harmonised to 15 minutes for TSOs without derogation as foreseen by EB GL article 53(1)
IN	Imbalance netting
mFRR	Manually activated frequency restoration reserves
MIA	Market information aggregator
MOL	Merit Order List
MTU	Market time unit
LFC area	Load frequency control area
SO	System operator
TSO	Transmission system operator
TP	Transparency Platform
TR	Transparency Regulation
Data provider	The entity responsible for submitting data to the Transparency Platform

4 Scope

This implementation guide defines the data exchanges between the European platforms,TSOs and TP for the purpose of the transparency publications foreseen by their implementation frameworks, to the degree such data exchanges have not already been defined by the manual of procedures for the EB GL or the TR. The legal basis for the implementation frameworks are listed below:

- Article 20 mandates the establishment of a European platform for the exchange of balancing energy from frequency restoration reserves with manual activation, with article 20.1 requesting the corresponding implementation framework
- Article 21 mandates the establishment of a European platform for the exchange of balancing energy from frequency restoration reserves with automatic activation, with article 21.1 requesting the corresponding implementation framework
- Article 22 mandates the establishment of a European platform for the imbalance netting process, with article 22.1 requesting the corresponding implementation framework.

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164 4.1 Applicable ESMPdocuments

165 This implementation guide assumes the use of the following ESMP documents and contextual
166 and assembly models (also referred to as XSD or schema versions):

167 **Table 1 - Applicable ESMP documents**

EDI document	version
Capacity document	urn :iec62325.351 :tc 57wg16 :451-3 :capacitydocument:8:0
HVDC link market document	urn:iec62325.451:tc57wg16:451-8:hvdclinkdocument:1:1
Bid document	urn:iec62325.351:tc57wg16:451-7:reservebiddocument:7:2
Balancing market document	urn:iec62325.351:tc57wg16:451-6:balancingdocument:4:1
Acknowledgement document	urn:iec62325.351:tc57wg16:451-1:acknowledgementdocument:8:1
Unavailability market document	urn:iec62325.351:tc57wg16:451-6:outagedocument:4:0
Bid availability market document	urn:iec62325.351:tc57wg16:451-n:bidavailabilitydocument:1:0

168 All schemas are available for download from the ENTSO-E website.

169 4.2 Applicable protocols for file based data exchange

170 For file-based data exchange the following protocols will be supported:

171 - MADES (IEC 62325-503)

172 - Web services (IEC 62325-504)

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5 Business and Process view of publication of transparency data for mFRR, aFRR and IN processes

5.1 Business Overview

The Use cases below illustrate the business context for the exchange of data forseen between the European platforms or SOs and MIA, particularly for mFRR, aFRR and IN processes.

Figure 1:Transparency publication use cases

Table 2 - Role labels and descriptions

Role Label	Role Description
System operator	The system operator submits permanent limitations on HVDC lines to the market information aggregator. For aFRR and IN processes, the system operator may submit cross-border capacity limits to the market information aggregator.
MOL responsible	The MOL responsible submits the following data to the market information aggregator: - cross-border capacity limits - Netted volumes (for IN process) and net positions (for aFRR and mFRR processes) - Fall-backs - Elastic demands (for mFRR process) - Changes to bid availability (for aFRR and mFRR processes)
Market information aggregator	The market information aggregator receives, validates and publishes successfully validated data on the central transparency platform.

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187 **Table 3 – Transparency publication use cases**

Use case label	Roles involved	Action descriptions and assertions
Publish permanent HVDC limitations	• System operator • Market information aggregator	System operator sends to the market information aggregator the permanent HVDC limitations. The market information aggregator receives, validates and publishes successfully validated data on the central transparency platform.
Publish cross-border capacity limits	• System operator • MOL responsible • Market information aggregator	System operator and/or MOL responsible sends to the market information aggregator the cross-border capacity limitations. The market information aggregator receives, validates and publishes successfully validated data on the central transparency platform.
Publish netted volumes / net positions	• MOL responsible • Market information aggregator	MOL responsible sends to the market information aggregator the netted volumes or net positions. The market information aggregator receives, validates and publishes successfully validated data on the central transparency platform.

Publish fall-backs	• MOL responsible • Market information aggregator	MOL responsible sends to the market information aggregator the fall-backs. The market information aggregator receives, validates and publishes successfully validated data on the central transparency platform.
Publish elastic demands	• MOL responsible • Market information aggregator	MOL responsible sends to the market information aggregator the elastic demands. The market information aggregator receives, validates and publishes successfully validated data on the central transparency platform.
Publish changes to bid availability	• MOL responsible • Market information aggregator	MOL responsible sends to the market information aggregator the changes to bid availability. The market information aggregator receives, validates and publishes successfully validated data on the central transparency platform.

5.2 Process context

This Implementation guide provides the basis for exchanging the additional transparency data between the European platforms,SOs and TP, as foreseen by the platforms' IFs. It provides all concerned parties the information necessary to fulfill the process requirements of the use cases outlined in paragraph 5.1. The processes are described below including the frequency of exchange and any updates to the exchanged data.

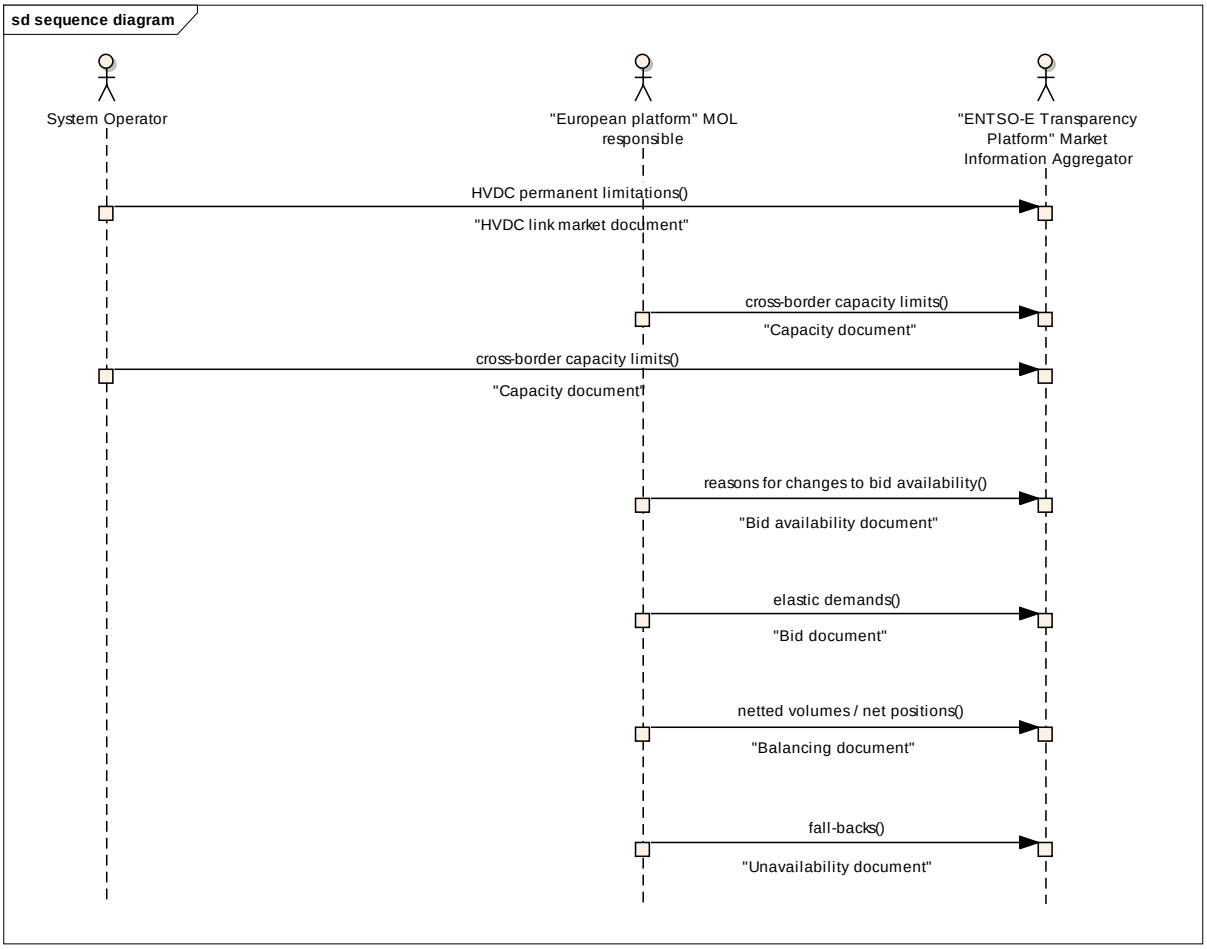

Figure 2: European platforms' additional transparency publications - sequence diagram

The illustration above depicts file exchanges only. Signalling is not in scope.

The information flows under normal operating conditions are outlined in the following paragraphs. Details of data exchanged are contained in the subsequent dependency tables described later in this document. Exchanges related to missing, rejected or conflicting data will be described in the operational handbooks of the mFRR, aFRR and IN platforms.

5.2.1 HVDC permanent limitations to cross border capacity

SO submits to TP data describing permanent limitations to the cross-zonal exchange of energy on HVDC interconnectors. This data shall be published before the limitations apply.

5.2.2 Cross-border capacity limits

SOs and European platforms, as applicable depending on the reserve process, provide data on cross border capacity limits for the exchange of balancing reserves to TP for publication. Data is submitted no later than 30 minutes after the end of the ISP in which the limit applies.

European platforms or SOs may ad-hoc additionally provide updates to the submitted CBCLs, reflecting operational security constraints.

5.2.3 Changes to bid availability

European platforms may submit to TP detailed reasons for modifications to the availability of bids for standard aFRR or mFRR products. As changes to bid availability cannot be foreseen, this data is submitted ad-hoc.

5.2.4 Elastic demands

The European platform submits to TP all elastic demands for scheduled activation of standard mFRR products. The data is exchanged with TP on ad-hoc basis and no later than 30 minutes after the end of the MTU period.

5.2.5 Net positions / Netted Volumes

European platforms submit to TP netted volumes for the IN process and net positions for the mFRR and aFRR standard product processes. For the IN process preliminary values will be updated with final values after the matching process. Data is submitted no later than 30 minutes after the end of the ISP.

5.2.6 Fall-backs

Whenever a SO is disconnected from or the European platform itself becomes unavailable or experiences a failure, the European platform sends data to TP describing the event and the reason. Data shall be published no later than 30 minutes after the end of the concerned ISP.

5.3 Business rules

5.3.1 General rules

For each file-based electronic data interchange defined in this documen, an acknowledgement document, as defined in IEC 62325-451-1, must be generated either accepting the whole received document or rejecting it completely. Problem documents may be exchanged in exceptional circumstances, as outlined by the European platforms' operational handbooks.

The business process described in this chapter will be executed separately for each process. For each process, there is a dedicated region, also referred to as virtual scheduling area:

Region	EIC code	Geographical scope
mFRR virtual scheduling area	10Y1001C--00085O	scheduling areas of all TSOs participating in the mFRR process
aFRR virtual scheduling area	10Y1001C--00090V	scheduling areas of all TSOs participating in the aFRR process
IN virtual scheduling area	10Y1001C--00119X	scheduling areas of all TSOs participating in the IN process

Table 4 – Region codes

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

5.3.2 Dependencies governing the HVDCLink_Marketdocument

The HVDC Link market document is used by TSOs for publishing information on permanent cross border limitations.

		Use	XSD requirements
HVDCLink_MarketDocument			
mRID	Unique identification of the HVDC link market document	Used	Mandatory
revisionNumber	Initial transmission should normally equal "1"	Used	Mandatory
type	A99 = HVDC link constraints	Used	Mandatory
process.processType	A47 = Manual frequency restoration reserve A51 = Automatic frequency restoration reserves A63 = Imbalance Netting	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the Transmission System Operator	Used	Mandatory
sender_MarketParticipant.marketRole.type	A04 = System operator	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of the central transparency platform: 10X1001A1001A450	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A32 = Market information aggregator	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
schedule_Period.timeInterval		Not used	Conditional
docStatus	A02 = Final A13 = Withdrawn Only used in case a document has been submitted by mistake	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	B06 = DC link constraint	Used	Mandatory
product	8716867000016 = active power	Used	Mandatory
objectAggregation	A09 = DC link	Not used	Mandatory
connectingLine_RegisteredResource.mRID	The identification of a set of lines that connect two areas together. It may be used when it is necessary to distinguish between the interconnectors on a given border. This may typically be the case when there is more than one HVDC interconnector on the border.	May be used	Conditional
hVDCMode_AttributeInstanceComponent.attribute		Not used	Conditional
out_Domain.mRID	EIC identification of the area where the energy is coming from	Used	Mandatory
in_Domain.mRID	EIC identification of the area where the energy is being put	Used	Mandatory

measurement_Unit.name	MAW= Megawatts	Used	Mandatory
curveType		Not used	Conditional
minimumExchange_Quantity.quantity		Not used	Conditional
maximumExchange_Quantity.quantity	The permanent capacity limitation	Used	Conditional
start_DateAndOrTime.dateTime	Start date and time of first ISP in which limitation applies	Used	Conditional
end_DateAndOrTime.dateTime	End date and time of last ISP in which limitation applies	May be used	Conditional

244

Series_Period	**Not used**		**Conditional**
timeInterval		Not used	Mandatory
resolution		Not used	Mandatory

245

Point	**Not used since Series_Period not used**	Use	**Mandatory**
position		Not used	Mandatory
quantity		Not used	Conditional
minimum_Quantity.quantity		Not used	Conditional
maximum_Quantity.quantity		Not used	Conditional
optimum_Quantity.quantity		Not used	Conditional

246

Reason (associated with time series)	Exactly one instance of Reason class shall be included	Used	Conditional
code	B61 = Physical cable or converter restrictions B62 = Limitations in controller systems	Used	Conditional
text	May be populated to provide additional explanation or justification in free text format	May be used	Conditional

247 **Table 5 - HVDC Link Market document dependency table**

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249 ### 5.3.3 Dependencies governing the Capacity_MarketDocument (CBCLs)

250 The capacity market document is used to provide the cross-border capacity limits and
251 technical profiles during one or several MTU periods.

		Use	**XSD requirements**
Capacity_MarketDocument			
mRID	Unique identification of the Capacity Document	Used	Mandatory
revisionNumber	Initial transmission should normally equal "1"	Used	Mandatory
type	A31 = Agreed capacity	Used	Mandatory
process.processType	A47 = Manual frequency restoration reserve A51 = Automatic frequency restoration	Used	Mandatory

		Use	XSD requirements
	reserves A63 = Imbalance Netting		
sender_MarketParticipant.mRID	EIC of the European common platform Operator EIC of the Transmission system operator (IN and aFRR only)	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible A04 = System Operator	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of the central transparency platform: 10X1001A1001A450	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A32 = Market information aggregator	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
period.timeInterval	The ISP(s) described	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 area where the energy is being put	Used	Mandatory
out_Domain.mRID	EIC identification of the area where the energy 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 A03 = Variable block	Used	Mandatory
connectingLine_RegisteredResource.mRID	The identification of a set of lines that connect two areas together. It may be used when it is necessary to distinguish between the interconnectors on a given border. This may typically be the case when there is more than one HVDC interconnector on the border. .	May be used	Conditional

Series_Period			
timeInterval	A time interval within period.timeInterval	Used	Mandatory
resolution	PT15M	Used	Mandatory

Point			
position	Position within the time interval	Not used	Mandatory
quantity	Quantity of limit with 1 MW precision. Negative values are not permitted.	Not used	Mandatory

		Use	XSD requirements
Reason (associated with Times series)	Exactly one instance of Reason class may be included to indicate adjustment due to operational security.	May be used	**Conditional**
code	B47 = Operational security constraints	Used	
text	May be populated to provide additional explanation or justification in free text format	May be used	

Table 6 – capacity market document dependency table

5.3.4 Dependencies governing the BidAvailability_MarketDocument

The bid availability market document is used to provide the detailed reasons for changes to the availability of bids for standard product aFRR or mFRR. Whenever a TSO, DSO or BSP modifies a bid, the European platform publishes the reasons to TP.

		Use	XSD requirements
BidAvailability_MarketDocument			
mRID	Unique identification of the bid availability market document	Used	Mandatory
revisionNumber	Initial transmission should normally equal "1"	Used	Mandatory
type	B45 = bid availability document	Used	Mandatory
process.processType	A47 = Manual frequency restoration reserve A51= Automatic frequency restoration reserve	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the European platform operator	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of the ENTSO-E transparency platform: 10X1001A1001A450	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A32 = Market information aggregator	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
docStatus	A13 = Withdrawn Only used in case a document has been submitted by mistake	May be used	Conditional
time_Period.timeInterval	The MTU period(s) covered by bid(s) referenced in the document	Used	Mandatory

BidTimeSeries			
mRID	Identification of the bid time series. multipartBidIdentification when multipart bid. exclusiveBidsIdentification when exclusive bid.	Used	Mandatory
bidDocument_MarketDocument.mRID	Bid document that contained the bid time series	Used	Mandatory
bidDocument_MarketDocument.revisionNumber	Version number of the bid document	Used	Mandatory
requestingParty_MarketParticipant.mRID	EIC code of Party requesting update of bid	Used	Mandatory

requestingParty_MarketParticipant.name	Populated when Requesting Party is a DSO or BSP	Used	Conditional
requestingParty_MarketParticipant.marketRole.type	A49 = Transmission System Operator A46 = Balancing Service Provider A50 = Distribution System Operator	Used	Mandatory
businessType	C40 = Conditional bid C41 = Thermal limit C42 = Frequency limit C43 = Voltage limit C44 = Current limit C45 = Short-circuit current limits C46 = Dynamic stability limit	Used	Conditional
domain.mRID	EIC code of scheduling area from which bid originates	Used	Mandatory
operationalLimit_Quantity.quantity		Not used	Conditional
limit_Measurement_Unit.name		Not used	Conditional

259

Reason (associated with time series)	**Exactly one instance of reason shall be populated.**		
code	When business type = C40 the following reason only applies: B16 = Tender unavailable in MOL list When business type = C42 one of the following reasons apply: B58 = Insufficiency of required reserve capacity B59 = Technical unavailability of specific reserve providing unit(s) When business type = C41, C43, C44, C45 or C46 one of the following reasons apply: B18 = Failure B46 = Internal congestion B47 = Operational security constraints B60 = Unavailability of automatic protection systems	Used	Mandatory
text	May be populated to provide additional explanation in free text format	May be used	Conditional

260

RegisteredResource (associated with BitTimeSeries)	**See note 1 below.**		
mRID	EIC code of concerned network element	May be used	Condtional

261 **Table 7 – bid availability market document dependency table**

262 Note 1: Exactly one instance of Reason shall be populated.

263 Note 2: One or several instances of RegisteredResource shall be associated with the
264 BidTimeSeries when Business Type is Thermal Limit = C41 and
265 requestingParty_MarketParticipant.marketRole.type is A04 (System Operator).
266 RegisteredResource shall not be populated for any other business Types.

5.3.5 Dependencies governing the ReserveBid_MarketDocument (elastic demands)

The reserve bid market document is used to provide all the information related to elastic demands.

The table below provides the dependencies for the reserve bid market document when the European platform submits elastic demands.

		Use	XSD requirements
ReserveBid_MarketDocument			
mRID	Unique identification of the Bid Document	Used	Mandatory
revisionNumber	Initial transmission should normally equal "1"	Used	Mandatory
type	A37 = Reserve Bid document	Used	Mandatory
process.processType	A47=Manual frequency restoration reserve	Used	Mandatory
sender_MarketParticipant.mRID	EIC of European platform operator:	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 MTU period (15 minutes)	Used	Mandatory
domain.mRID	EIC of the region	Used	Mandatory
subject_MarketParticipant.mRID	EIC of European platform Operator	Used	Mandatory
subject_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory

BidTimeSeries			
mRID	Unique identification of the demand assigned by the transmitting TSO	Used	Mandatory
auction.mRID	Constant value of “AUCTION-mFRR”.	Used	Mandatory
businessType	B75 = Need	Used	Mandatory
acquiring_Domain.mRID	EIC identification of the scheduling area, control area or an aggregation of scheduling areas belonging to different control areas (in case of aggregated demand)	Used	Mandatory
connecting_Domain.mRID	EIC identification of the region providing the reserves	Region	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	Mandatory
price_Measure_Unit.name	MWH = Megawatt hours	Used	Mandatory
divisible	Indicates whether activated quantity may be reduced to the minimum quantity: A01 = Yes A02 = No	A01 only is used	Mandatory

linkedBidsIdentification	Populated if the bid is technically linked	Not used	Conditional
multipartBidIdentification	Populated if the bid is multipart	Not used	Conditional
exclusiveBidsIdentification	Populated if the bid is exclusive	Not used	Conditional
blockBid	Not used. Redundant due to the existence of Divisible attribute.	Not used	Optional
status	A06 = Available A11 = Unavailable	Not 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	Used	Mandatory
stepIncrementQuantity	Not used	Not used	Conditional
energyPrice_Measure_Unit.name	MWH = Megawatt hours	Used	Conditional
marketAgreement.type	The type of the market agreement	Not used	Conditional
marketAgreement.mRID	Not used	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	The type of product that the demand refers to: 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	Not used	Conditional
validity_Period.timeInterval	The period when the bid can be activated	Not used	Conditional
procuredFor_MarketParticipant		Not used	Conditional
sharedWith_MarketParticipant		Not used	Conditional
Period			
timeInterval	A time interval that coincides with the MTU period	Used	Mandatory

Resolution	PT15M	Used	Mandatory
Point			
position	Position within the time interval	Used	Mandatory
quantity.quantity	Quantity requested with 1 MW precision	Used	Mandatory
minimum_Quantity.quantity		Not used	Conditional
price.amount		Not used	Conditional
energy_Price.amount	The price of the product. Precision is 0.01.	Used	Conditional
AvailableMBA_Domain (Associated with time series)	Not used	Not used	**Conditional**
mRID			
Reason (associated with time series)		Not used	**Conditional**
code		Not used	
text		Not used	

Table 8 – Reserve bid market document dependency table

Note: Linked_BidTimeSeries class is not used for this publication.

5.3.6 Dependencies governing the Balancing_MarketDocument (Netted volumes and net positions)

The balancing market document covers the data exchange requirements for transmission of Net positions for aFRR and mFRR processes and netted volumes for IN process from the European platforms to the ENTSO-E transparency platform.

The table below provides the dependencies for the balancing market document when the European platform sends net positions or netted volumes to the ENTSO-E transparency platform.

		Use	XSD requirements
Balancing_MarketDocument			
mRID	Unique identification of the balancing market Document	Used	Mandatory
revisionNumber	Initial transmission should normally equal "1"	Used	Mandatory
type	B17 – Aggregated netted external TSO schedule document	Used	Mandatory
process.processType	A47 = Manual frequency restoration reserve A51 = Automatic frequency restoration reserves A63= Imbalance Netting	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the European platform operator	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	A35 = Preliminary A02 = Final	Used when process type A63 or A51	Conditional
Area.Domain.mRID	EIC of the region	Used	Conditional
allocationDecision_DateAndOrTime	Date and time when the decision on allocation was made	Not used	Optional
Period.timeInterval	The ISP(s) covered by the document	Used	Mandatory

TimeSeries			
mRID	Unique identification of the time series	Used	Mandatory
businessType	B09 = Net position	Used	Mandatory
acquiring_Domain.mRID	The EIC identification of an area that imports energy. The EIC identification of the region when area exports energy.	Used	Conditional
connecting_Domain.mRID	The EIC identification of an area that exports energy. The EIC identification of the region when area imports energy.	Used	Conditional
type_MarketAgreement.type	Identification of the procurement time unit.	Not used	Conditional
standard_MarketProduct.marketProductType	A01 = Standard product	Used when process type A47 or A51	Conditional

original_MarketProduct.marketProductType		Not used	Conditional
mktPSRType.psrType	Identification of the source type of the reserve	Not used	Conditional
flowDirection.direction		Not used	Conditional
currency_Unit.name		Not used	Conditional
quantity_Measure_Unit.name	MWH = Megawatt hours	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	May be used	Conditional

284

Series_Period			
timeInterval	A time interval within Period.timeInterval	Used	Mandatory
resolution	PT15M when process type A47 or A63 PT4S when process type A51	Used	Mandatory

Point			
position	Position within the time interval	Used	Mandatory
quantity	The net position when process type is A47 or A51 The netted volume when process type is A63	Used	Mandatory
secondaryQuantity	The activated quantity	Not used	Conditional
unavailable_Quantity	The unavailable quantity	Not 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		Not used	Conditional

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

285 **Table 9 - Balancing market document dependency table**

286

287 For IN process, data will be submitted per LFC area. A zero quantity shall be submitted in
288 case no netting occurred in the given area.

289 For aFRR and mFRR processes, data will be submitted per scheduling area, LFC area or an
290 aggregation thereof.

291

292 5.3.7 Dependencies governing the Unavailability_MarketDocument (Fall-backs)

293 The unavailability document is used to communicate the disconnection of a TSO or
294 unavailability and failure in the European platform. Updates to the disconnection,
295 unavailability or failure will be reported in a higher version of the original document.

296 Each document will describe a single instance of a disconnection, unavailability or failure.
297 Hence the document shall contain exactly one time series. No Series_Period shall be included.

298

		Use	XSD requirements
Unavailability_MarketDocument			
mRID	Unique identification of the unavailability market document	Used	Mandatory
revisionNumber	Initial transmission should normally equal "1"	Used	Mandatory
type	A53 = Outage publication document	Used	Mandatory
process.processType	A47 = Manual frequency restoration reserve A60 = mFRR with scheduled activation A61 = mFRR with direct activation A51 = Automatic frequency restoration reserves A63= Imbalance Netting	Used	Mandatory
createdDateTime	Date and time of document creation	Used	Mandatory
sender_MarketParticipant.mRID	EIC of the European platform operator	Used	Mandatory
sender_MarketParticipant.marketRole.type	A35 = MOL responsible	Used	Mandatory
receiver_MarketParticipant.mRID	EIC of the ENTSO-E transparency platform: 10X1001A1001A450	Used	Mandatory
receiver_MarketParticipant.marketRole.type	A32 = Market information aggregator	Used	Mandatory
Unavailability_Time_Period.timeInterval	The ISP(s) affected by the unavailability	Used	Mandatory
docStatus	A01 = Intermediate A02 = Final A09 = Cancelled A13 = Withdrawn A09 is used when a future dated outage or disconnection is cancelled. A13 may be used to withdraw erroneously communicated outage.	Used	Mandatory

TimeSeries			
mRID	identification of the time series	Used	Mandatory
businessType	C47 = Disconnection A83 = Auction cancellation (used in case no solution found or algorithm failure) A53 = Planned maintenance A54 = Unplanned outage	Used	Mandatory
biddingZone_Domain.mRID	EIC code of control area or LFC area when businessType = C47	Used	Conditional

	EIC code of region when businessType = A83, A53 or A54		
in_Domain.mRID		Not used	Conditional
Out_Domain.mRID		Not used	Conditional
start_DateAndOrTime.Date	start date of the first affected validity period	Used	Mandatory
start_DateAndOrTime.Time	start time of the first affected validity period	Used	Mandatory
end_DateAndOrTime.Date	start date of the first validity period no longer affected by the unavailability	Used	Mandatory
end_DateAndOrTime.Time	start time of the first validity period no longer affected by the unavailability	Used	Mandatory
Quantity_Measure_Unit.name	MAW	Used	Mandatory
curveType	A03	Used	Mandatory
production_RegisteredResource.mRID		Not used	Conditional
production_RegisteredResource.name		Not used	Conditional
production_RegisteredResource.location.name		Not used	Conditional
production_RegisteredResource.pSRType.psrType		Not used	Conditional
production_RegisteredResource.pSRType.powerSystemResources.mRID		Not used	Conditional
production_RegisteredResource.pSRType.powerSystemResources.name		Not used	Conditional
production_RegisteredResource.pSRType.powerSystemResources.nominalP		Not used	Conditional

299

Reason (associated with time series)			
code	B13 = Communication status currently inactive (when TSO disconnects) B18 = Failure (in platform) B19 = Foreseen Maintenance B27 = Calculation process failed (when algorithm failed) A99 = Auction cancelled (when no solution found by algorithm)	Used	Mandatory
text	May be populated to provide additional explanation in free text format	May be used	Conditional

300 **Table 10 – Unavailability market document dependency table**

301 Series period and point classes will not be used for this publication. The attributes curve type
302 and measurement unit in Time Series class will nevertheless be populated with default values
303 A03 and MAW, respectively, as they are mandatory fields according to the schema.

304 Exactly one reason shall be associated with the time series.