



European Network of
Transmission System Operators
for Electricity

ENTSO-E

Capacity allocation configuration Implementation guide

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Revision History

Version	Release	Date	Paragraph	Comments
0	0	2015-02-25		Draft release
0	1	2015-03-08		Review by WG EDI
1	0	2015-04-10		Version approved by the Market Committee on 2015-05-06
1	1	2015-10-29		Updates of the document to handle the flow-based allocation process.
1	2	2019-03-28		Maintenance requests EMFIP52 and EMFIP 56. Updates of the document to distinguish whether the submitted data within the document is aggregated or separated and to distinguish the interconnectors on the same border for an allocation. In consequence, dependency tables and rules have been updated. Approved by MC.
1	3	2022-06-28		Maintenance request EMFIP77: Modelling of continuous allocations. Figure 1 with use cases and Table 2 updated accordingly. Added missing table with schema and removed descriptions of schema attributes. Approved by MC.

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INTRODUCTION

This document was drafted based on IEC62325 series. In particular, the IEC 62325-450 methodology was applied to develop the conceptual and assembly models.

Scope

The objective of this implementation guide is to make it possible for software vendors to develop an IT application to enable the submission to the ENTSO-E central transparency platform of documents describing instances of transmission capacity allocations and in particular the handling of the transmission capacity allocation calendar of the platform.

The implementation guide is one of the building blocks for using UML (Unified Modelling Language) based techniques in defining processes and documents for interchange between the involved actors.

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 62325-451-6, *Framework for energy market communications - Part 451-6: Publication of information on market, contextual and assembly models for European-style markets*

Applicable ESMP documents

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

Table 1 - Applicable ESMP documents

EDI document	version
Capacity allocation configuration market document	Urn:iec62325.351:tc57wg16:451-6:capacityallocationconfigurationdocument:1:0

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

100 The transmission capacity allocation configuration business process

101 4.1 Overall business context

102 The capacity allocation processes have to be configured on the ENTSO-E central transparency
103 platform before any data describing the offered or allocated capacities are submitted. Data
104 providers have a choice between manually configuring the capacity allocation processes or
105 submitting a capacity allocation configuration document.

106 The ENTSO-E central transparency platform will use the allocation configuration to validate
107 data submitted under articles 11.1(a), 12.1.a, 12.1.c, 12.1.e and 12.1.h of the EU Transparency
108 Regulation. The allocation configuration will also be used to monitor compliance with the
109 submission deadlines outlined in articles 11.2, 12.2.a, 12.2.c and 12.2.g of the EU Transparency
110 Regulation.

111 4.2 Use case

112 The provision of capacity allocation configuration is relatively straightforward (see Figure 1) and
113 is basically broken down into three alternative sub use cases. The two alternative sub use cases
114 are as follows:

- 115 a) Provide explicit capacity allocation configuration
- 116 b) Provide implicit capacity allocation configuration
- 117 c) Provide continuous capacity allocation configuration

118 The capacity allocation configuration will not be published by the ENTSO-E central
119 transparency platform. Rather, it is intended to validate submitted data and to monitor
120 compliance with submission deadlines.

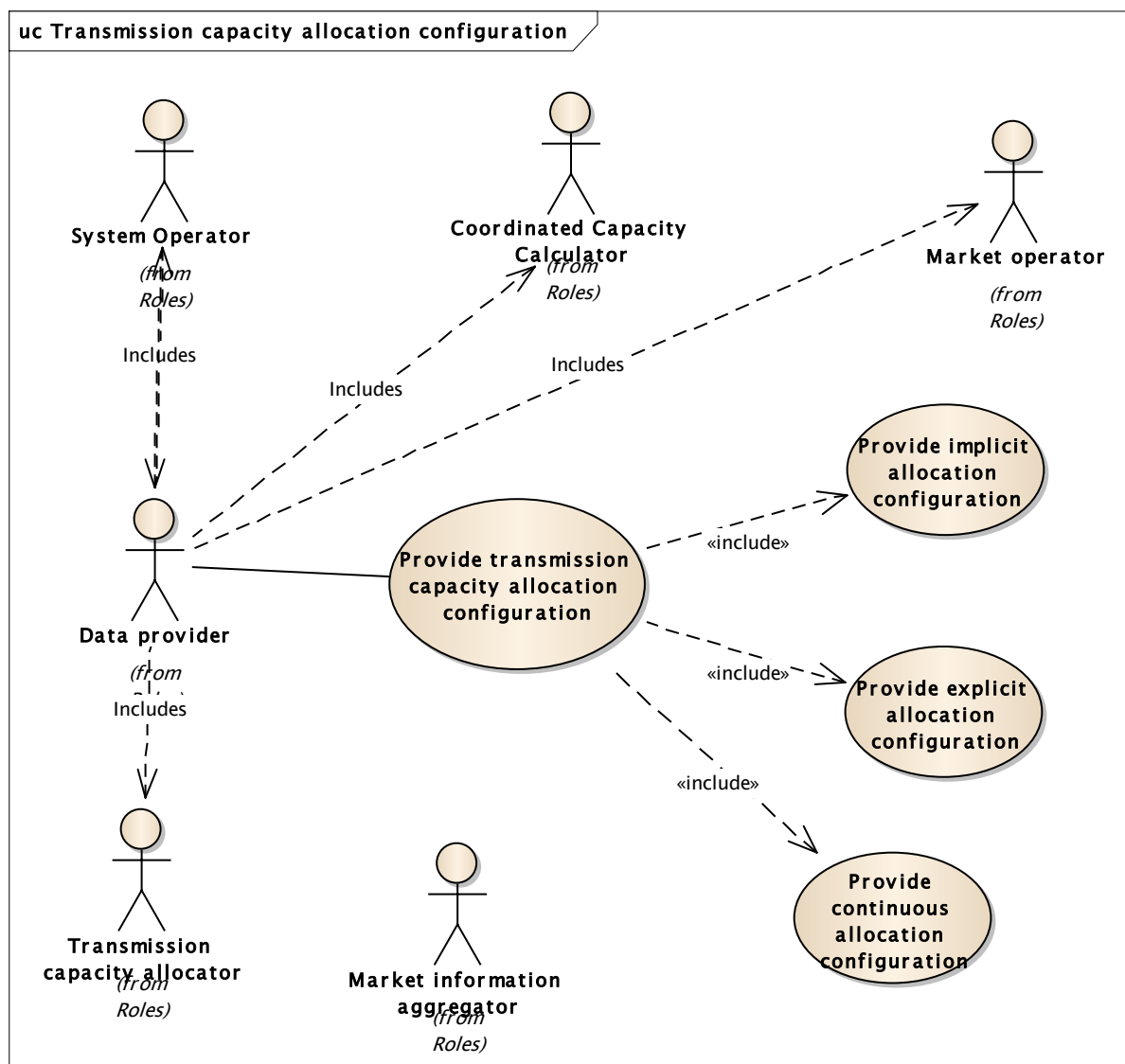


Figure 1 – Use case

4.3 Sequence diagram

The sequence diagram is provided in Figure 2.

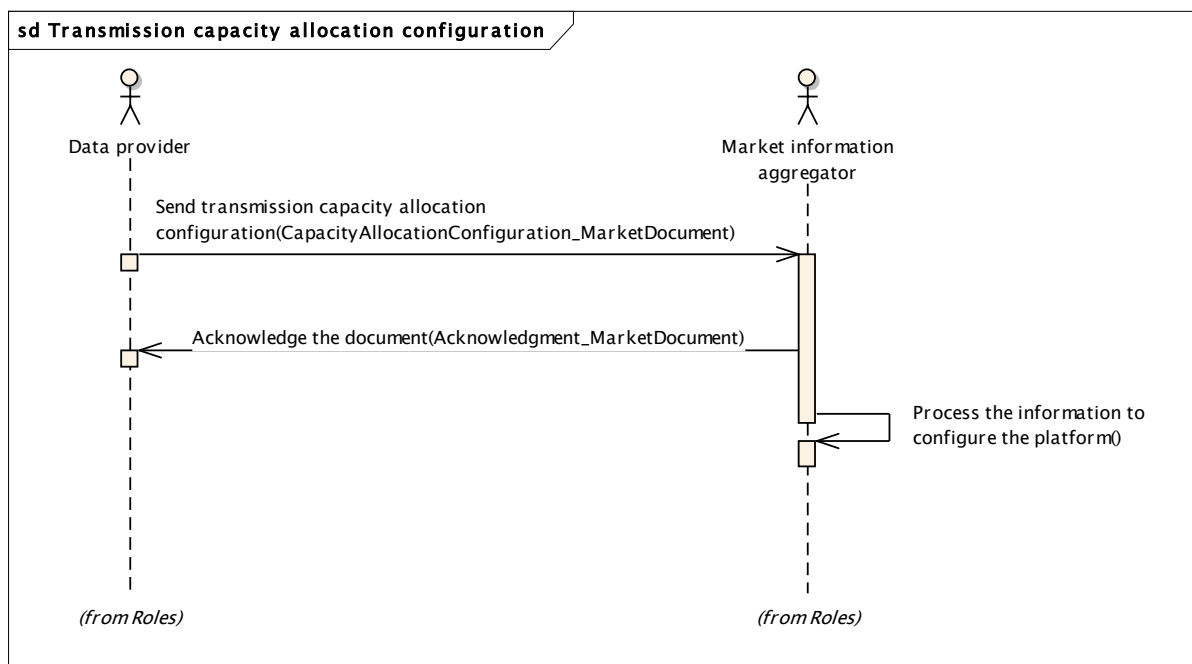


Figure 2 – Sequence diagram

Business rules for the capacity allocation configuration process

5.1 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.

5.2 Cancellation of allocation instance

The cancellation of an allocation instance, i.e. the couple (allocation instance and delivery period), is carried out as an update with the attribute cancelled set to "A01" (yes).

5.3 Dependencies governing the Document

The XML document described in this implementation guide is to be used for the upload of information to the ENTSO-E central platform. It is currently not foreseen that the document would be used to download information.

As this IG is within the context of transparency platform reporting, only EIC codes are in scope. For that reason, you are obliged to use only EIC codes to identify parties, zones or assets. In this case, you must specify in the coding scheme attribute of your XML document code A01 (EIC).

144 The header (CapacityAllocationConfiguration_MarketDocument class) attributes are described
145 in Table 2:

146 **Table 2 – Header attributes**

Attribute name	Set of value
mRID	Mandatory
type	A51 = Capacity auction specification document
process.processType	A07 = Capacity allocation
process.classificationType	May be used (Only for explicit allocations) A01 = Detail Type (Separated Information) A02 = Summary Type (Aggregated Information)
sender_MarketParticipant.mRID	Mandatory
sender_MarketParticipant.marketRole.type	Mandatory
receiver_MarketParticipant.mRID	The EIC code is 10X1001A1001A450 for the EMFIP platform.
receiver_MarketParticipant.marketRole.type	The role is A32, market information aggregator.
createdDateTime	Mandatory as YYYY-MM-DDTHH:MM:SSZ

147
148 The attributes in table 2 are dependent:

149 **Table 3 – Dependent attributes**

Attribute		Explicit allocation	Implicit allocation	Continuous allocation
Allocation_TimeSeries	Name	Mandatory 20 character length Any free human readable and possibly non unique text identifying the allocation instance. The combination of the name and delivery_Period shall be unique.		
	cancelledTS	May be used A01 = Yes (Allocation Instance should be cancelled) A02 = No (Allocation Instance is active and valid). A02 is the default value when element is not provided.		
	description	May be used 100 character length		
	auction.type	A02 = Explicit	A01 = Implicit	Axx = Continuous
	auction.allocationMode	May be used A01 = Auction (with pro rata as secondary criterion) A02 = Auction (with first come – first served as secondary criterion) A03 = First come – first served A04 = Pro rata		A03 = First come – first served

Attribute		Explicit allocation	Implicit allocation	Continuous allocation
	subType_Auction.type	May be used A06 = shadow auction	May be used, A07 = flow based	Not used
	marketAgreement.type	A01 = Daily. A02 = Weekly A03 = Monthly A04 = Yearly A06 = Long term A07 = Intraday A08 = Quarter Yearly A09 = Semestrial	A01 = Daily A07 = Intraday	A07 = Intraday
	timeZone_AttributeInstanceComponent.attribute	Mandatory. The local time zone where the allocation will be carried out: WET – Western European Time CET – Central European Time EET – Eastern European Time UTC – Coordinated Universal Time		
	delivery_Period.timeInterval	Mandatory. The period when the capacity is to be used.		
	allocation_Period.timeInterval	Mandatory. The period of time when capacity allocation is carried out.		
	bidding_Period.timeInterval	May be used. Period within which capacity traders can submit a bid to the transmission capacity allocator.		
	offeredCapacityProvider_MarketParticipant.mRID	May be used Article 11.1		Used
	useOfCapacityProvider_MarketParticipant.mRID	May be used Article 12.1(a)	Not used	Not used
	alreadyAllocatedCapacityProvider_MarketParticipant.mRID	May be used Article 12.1(c)	Not used	Not used
	auctionRevenueProvider_MarketParticipant.mRID	May be used Article 12.1(a)	Not used	Not used
	capacityThirdCountriesProvider_MarketParticipant.mRID	May be used Article 12.1(h)	May be used Article 12.1(h)	Not used
	congestionIncome_MarketParticipant.mRID	Not used	May be used Article 12.1(e)	Not used

Attribute		Explicit allocation	Implicit allocation	Continuous allocation
	conductingParty_MarketParticipant.mRID	May be used		
	connectingLine_RegisteredResource.mRID	May be used	Not used	May be used
Point	position	Mandatory		
	timeSeries.name	Mandatory		
	timeSeries.in_Domain.mRID	Mandatory		
	timeSeries.out_Domain.mRID	Mandatory		
	timeSeries.currency_Unit.name	Mandatory		
	timeSeries.auction.category	Mandatory A01 = Base A02 = Peak A03 = Offpeak A04 = Hourly	Not used	Not used

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