



European Network of
Transmission System Operators
for Electricity

CENTRAL TRANSPARENCY PLATFORM

-

*BUSINESS REQUIREMENTS
SPECIFICATION*

2024-10-15

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109 REVISION HISTORY

Version	Release	Date	Comments
1	3	2014-01-28	Final document for inclusion in Manual of Procedures
2	0	2016-11-28	<p>Amended within the scope of the general revision of the manual of procedures.</p> <p>Amendments by ENTSO-E secretariat legal team.</p> <p>Incorporation of corrigendum.</p> <p>General editorial overhaul.</p> <p>Introduced flow-based allocations, amending chapters on articles 11.1.a, 12.1.e and allocation configuration. Inclusion of impact becomes conditional in articles 10.1.a&b.</p> <p>Introduced validation against overlapping outages. Clarified that recurring outages are to be submitted as several time series.</p> <p>7.1.a&b: Aggregated values only are published. Introduced curves instead of constant available capacity.</p> <p>9.1: Can be submitted also as a PDF report.</p> <p>12.1.a: Alternative submission of auction revenue in disaggregated format. Prices are not mandatory if allocated capacity is zero.</p> <p>12.1.b: Separate publications of values for intraday, day-ahead and long-term.</p> <p>12.1.e: Removed link between specific capacity allocation and net positions.</p> <p>12.1.f: Separate publications of values for day-ahead and intraday.</p> <p>12.1.g: Clarified that priorities must be the same in both directions.</p> <p>12.1.h: Added support for implicit allocations on borders with third countries.</p> <p>13.1.a: Redispatched energy will be submitted instead of capacity.</p>

Version	Release	Date	Comments
			<p>Introduced distinction between internal and cross-border redispatching. Added possibility to include comments.</p> <p>13.1.b Added possibility to include comments.</p> <p>14.1.b: No monitoring of installed capacity. Added publication of (de)commissioning date(s).</p> <p>14.1.d: Replaced single forecast by three separate per time horizon.</p> <p>15.1.a-d: Added optional filter for production or generation unit. Introduced curves instead of constant available capacity.</p> <p>17.1.b: Introduced new source type "mixed".</p> <p>17.1.d: Removed offered capacity.</p> <p>17.1.e: Unit of measurement set to MWh only.</p> <p>17.1.f: Prices may be positive as well as negative.</p> <p>17.1.h: Introduced distinction made between surplus and deficit.</p>
3	0	2018-03-20	<p>Amendments in Balancing domain due to GL EB. Added chapters on new data items corresponding to GL EB articles 12.3.a – l.</p> <p>Introduced optional Type of Product in article 17.1.f.</p> <p>Added attribute for data status in article 17.1.g.</p> <p>Introduced mandatory Reserve Type in article 17.1.j.</p> <p>Minor amendments to articles 17.1.a, 17.1.e and 17.1.h.</p>
3	1	2018-10-11	<p>Amendments in Balancing domain in response to feedback on draft MoP from ACER. Added dedicated chapter for GL EB article 12.3.a.</p> <p>Deprecated references to TR articles 17.1.a, d, e and j.</p> <p>Replaced term Market Balance Area by Scheduling Area.</p>

Version	Release	Date	Comments
			<p>Replaced term Balancing Time Unit by Imbalance Settlement Period (ISP).</p> <p>Introduced concepts of Imbalance area and Imbalance price area.</p> <p>Specified in further detail data monitoring rules for TR article 17.1.f.</p> <p>Introduced possibility to report separate market values for GL EB article 12.3.h.</p> <p>Added attribute for difference in TR article 17.1.h.</p> <p>Clarified web page navigation details due to new classification of Balancing data.</p>
3	2	2019-06-21	<p>When publishing offered capacity in implicit allocations, it will be possible to define also a round.</p> <p>All modifications to offered capacity in intraday allocations will be published under TR article 11.1.a.</p> <p>Introduced possibility to report market values, costs and benefits aggregated on regional level under EB GL articles 12.3.h&i.</p> <p>Amended the area types for which PDFs shall be published under EB GL articles 12.3.d&g&j.</p>
3	3	2022-05-04	<p>Introduced local balancing product. Corrected cross-validation rule and clarified publication in TR article 17.1.f.</p> <p>Updates to TR art. 17.1.f to handle higher resolution of prices from aFRR platform. Also clarified price types.</p> <p>For GL EB art. 12.3.b, addition of cross-reference to detailed reason for changes to bid availability. Also added reason and activation purpose for unavailable bids.</p> <p>Introduced ability to distinguish mFRR direct and scheduled activation for EB GL art. 12.3.e.</p>

Version	Release	Date	Comments
			<p>Addition of new process for IN under EB GL art. 12.3.k.</p> <p>Under TR art. 17.1.g, h and i; editorial change of status for published document.</p> <p>Merged publications of TR art. 17.1.b&c. Contract type made optional, procurement timestamp and type of product introduced.</p> <p>Corresponding updates made to EB GL art. 12.3.f: Time horizon optional, introduced procurement timestamp.</p> <p>Aligned TR 17.1.g with methodology for harmonized imbalance settlement: Introduced optional price components, single or dual pricing, deprecated separate prices for generation and consumption.</p> <p>Volumes and prices of balancing energy bids based on standard aFRR product, but selected for activation locally by TSO, will be reported separately under TR art. 17.1.f and EB GL art. 12.3.e.</p>
3	4	2023-07-27	<p>Introduced continuous allocations:</p> <p>Publication of TR 11.1.a Evolution of offered capacity is in scope for continuous allocations only. This is the only publication in scope for continuous allocations.</p> <p>Publication under TR 12.1.d renamed to Energy Prices and introduced support for optional publication of intraday prices, possibly with several rounds covering the same delivery period.</p> <p>Under TR 12.1.e, introduced the possibility to publish congestion income per round.</p> <p>Publications under TR.12.1.e Intraday net positions replaced by Total net positions.</p> <p>Added publication of net positions under TR 12.1.f.</p>

Version	Release	Date	Comments
			<p>Suppressed distinction market coupling/splitting which was recorded internally in transparency platform for informational purposes only.</p> <p>Clarified visibility of transmission assets, consumption units and production and generation units toward different categories of users.</p> <p>Under TR article 11.1.b, de-anonymisation of the transmission assets and publication of additional parameters relevant to flow-based allocations.</p>
3	5	2024-10-15	<p>Publications under TR article 11.1.b of flow-based publications extended with long-term time horizon.</p> <p>Publications under TR articles 10.1.a&b extended with possibilities to provide impact on net positions or combination of installed and available capacity.</p> <p>Prices for mFRR DA standard product cannot be monitored under TR art. 17.1.f.</p> <p>Editorial correction in chapter dedicated to TR art. 17.1.i.</p> <p>FCR added to scope of publications for EB GL art. 12.3.k.</p> <p>For intraday allocations, delivery period may have a duration of up to 29 hours.</p> <p>Publications of TR art. 12.1.d energy prices integrated with allocation calendar.</p> <p>Publications of TR art. 12.1.h merged with TR art. 12.1.a.</p> <p>Revision of allocation/auction modelling.</p> <p>Added chapter dedicated to statistical data portal and factsheet publications. To underpin those publications optional submissions of data in monthly resolution were added in chapters dedicated to TR art. 6.1.a, 12.1.g and 16.1.b&c.</p>

Version	Release	Date	Comments
			Master data of AC and DC links enriched with attributes for installed capacity and voltage level. Introduced additional type Converter. Introduced connecting TSO in publications for TR art. 13.1.a&b.

110

111

112 REFERENCE DOCUMENTS

- 113 [1] Commission Regulation (EU) N° 543/2013 of 14 June 2013 on submission and
114 publication of data in electricity markets and amending Annex I to Regulation (EC) No
115 714/2009 of the European Parliament and of the Council, referred to as TR in this document
- 116 [3] Detailed Data Descriptions – MoP Ref02
- 117 [4] Implementation Guides – MoP Ref05 through Ref09
- 118 [5] ENTSO-E Acknowledgement Document (EAD) Implementation Guide – version 5.1
- 119 [6] EMR Glossary: [link](#)
- 120 [7] ETSO Problem Statement Document Implementation Guide version 2.0 – MoP Ref16
- 121 [8] The Harmonised Electricity Market Role Model
- 122 [9] Manual of Procedures
- 123 [11] ECAN Implementation Guide v5r0: [link](#)
- 124 [12] Commission Regulation (EU) N° 2195/2017 of 23 November 2017 establishing a
125 guideline on electricity balancing, referred to as GL EB in this document
- 126 [13] Implementation guide for the Transparency Platform EB GL process – MoP Ref22

127 Note concerning wording used in this document:

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

130 · MUST: This word, or the terms “REQUIRED” or “SHALL”, means that the definition is
131 an absolute requirement of the specification.

132 · MUST NOT: This phrase, or the phrase “SHALL NOT”, means that the definition is an
133 absolute prohibition of the specification.

134 · SHOULD: This word, or the adjective “RECOMMENDED”, means that there may exist
135 valid reasons in particular circumstances to ignore a particular item, but the full implications
136 must be understood and carefully weighed before choosing a different course.

137 · SHOULD NOT: This phrase, or the phrase “NOT RECOMMENDED”, means that there
138 may exist valid reasons in particular circumstances when the particular behaviour is acceptable
139 or even useful, but the full implications should be understood and the case carefully weighed
140 before implementing any behaviour described with this label.

141 MAY: This word, or the adjective «OPTIONAL», means that an item is truly optional.
142 One vendor may choose to include the item because a particular marketplace requires it or
143 because the vendor feels that it enhances the product while another vendor may omit the same
144 item. An implementation which does not include a particular option MUST be prepared to
145 interoperate with another implementation which does include the option, though perhaps with
146 reduced functionality. In the same vein an implementation which does include a particular
147 option MUST be prepared to interoperate with another implementation which does not include
148 the option (except, of course, for the feature the option provides.)

149 Diagrams are for illustrative purposes only and do not constitute fully detailed definition of data
150 structures.

1 INTRODUCTION

The current transparency platform of the ENTSO for Electricity, entsoe.net, was developed as a tool for compliance with the *Congestion Management Guidelines* (CMG) and the *Guidelines of Good Practice on Information Management and Transparency in Electricity Markets* (GGP-IMT).

The European Commission has issued a new Transparency Regulation [1] on submission and publication of data in electricity markets. The requirements arising from the Transparency Regulation implies a significant extension of the scope of the existing entsoe.net transparency platform. The ENTSO for Electricity is responsible for ensuring that the transparency platform complies with the Transparency Regulation and proposes to develop a new platform, the central information transparency platform, hereafter referred to as “the platform”, which will support the full scope of the Transparency Regulation.

The project objectives are:

- To develop and maintain the platform in accordance and compliance with the Transparency Regulation,
- To establish standardised methods of communication between the platform and the data providers and the users,
- Be responsive to user and customer needs,
- To ensure a high-quality publication process of the data available to the users of the platform,
- To facilitate publication of the mandated information,
- Enable “transparency” data to be understandable based on a consolidated picture of the ENTSO-E data,
- Follow the ENTSO-E policies, standards and guidelines,
- To provide, if possible, a migration path from the existing entsoe.net Transparency Platform.

It is the responsibility of The Working Group Market Information and Transparency (WG MIT) and the Transparency Platform Coordinators group (TPC) of ENTSO-E, along with stakeholders, to define the Business Requirements for the publication of the relevant information.

As foreseen under article 12(5) of the Guideline on electricity balancing (GL EB), this document has been amended to incorporate also the business requirements for the publication of the relevant information as required under article 12(3) of the GL EB.

Further, the document has been extended to also cover the requirements for publications of statistical data.

2 OBJECTIVE

It is the objective of the Business Requirements Specification to define:

- Data to be published on the platform
- The requirements from the Data Provider point of view (submission)
- The requirements from the platform point of view (collection, assembling and publication)
- The high-level functionalities offered by the platform to the Information Receiver

3 TERMS, ACRONYMS AND ABBREVIATIONS

3.1 ACRONYMS AND ABBREVIATIONS

CCrd	Capacity Coordinator
ECAN	ENTSO-E Capacity Allocation and Nomination system
EDI	Electronic Data Interchange
FCR	Frequency Containment Reserves
FRR	Frequency Restoration Reserves
ISP	Imbalance Settlement Period
MTU	Market Time Unit
PX	Power Exchange
TCA	Transmission Capacity Allocator
TSO	Transmission System Operator
RR	Replacement Reserves
UTC	Universal Time Coordinated

3.2 TERMS

Term(s)	Matching with the Detailed Data	Matching with EDI	Definition for the BRS
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	Descriptions [3]		
Area	yes	Yes: matches an "Area" or a "Domain"	An Area is a space allocated for a specific purpose
Bidding Zone	Yes	Yes	See Transparency Regulation [1]
Bidding Zone Aggregation	Not used	No	A bidding Zone aggregation consists of two or more bidding Zones that share the same neighbouring bidding Zone.
Bidding Period	Not used	Yes (see [11])	The date and time when an auction opens for bidding until the date and time when bidding is stopped. For implicit auctions, the time period when market participants can send their orders books.
Capacity Allocation Period	Not used	Not used	This is the period of time during an auction when capacity allocation is calculated
Classification Category	Not used	Yes (see [11])	The classification category provides the basic category of the auction and describes what hours of the day are being auctioned (base, peak, off-peak, hourly)
Classification Sequence	Not used	Yes (see [11])	This defines the sequence within a given auction category such as Base 1 or Base 2. This in fact identifies the auction round being carried out for a category.
Conducting Party	Not used	No	A conducting party is a party that conducts an Explicit Auction. In the case of split explicit auctions, the capacity is split between two conducting parties, each one carrying out an explicit auction

			with the split capacity (usually 50/50).
Contract Type	Not used	Yes (see [11])	The contract type defines the conditions under which the capacity was allocated and handled (daily, weekly, monthly, etc. auctions). This also applies to capacity reservations for balancing and activation of reserves.
Day-ahead cut-off time	not used	No	This is the time after the daily matching process when no correction is possible on nominations.
Frequency Containment Reserve	Yes	No	See [3]
Data Provider	Not used	Yes	Refer to Harmonised Role Model
Frequency Restoration Reserve	Yes	No	See [3]
Gate closure time of the day-ahead market	Yes	No	This is the time when order books for energy trade are closed for day-ahead market by the power exchange.
Generation Unit	Yes	Yes: matches a Resource Object which itself is a special type of Asset	See Transparency Regulation [1]
In Area / Out Area	yes	Yes	- In Area: the Area where the energy is to be put - Out Area: the Area where the energy is coming from
Information Receiver	Not used	Yes	Refer to Harmonised Role Model

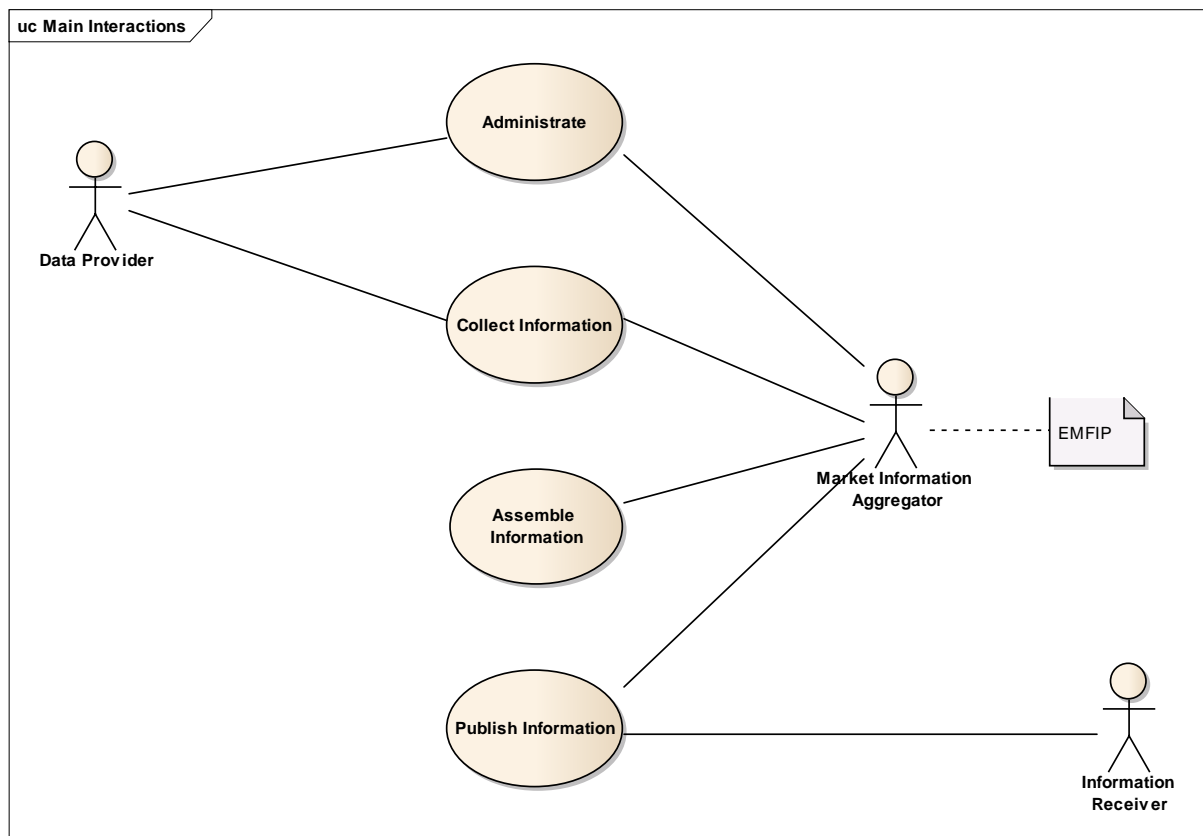
Interconnector	Not used	No	See Regulation (EC) N° 714/2009.
Market Information Aggregator	Not used	Yes	Refer to Harmonised Role Model
Market Time Unit	Yes	No	See Transparency Regulation [1]
Production Type	Yes	No	Manual of Procedures [9] will define Production Type and establish list of permitted values
Production Unit	Yes	Yes: matches a Resource Object which itself is a special type of Asset	See Transparency Regulation [1]
Region	Not used	Yes	A Region is an aggregation of Areas in the context of implicit auctions. CWE (Central West Europe), CEE (Central East Europe) are examples of regions.
Replacement Reserve	Yes	No	See [3]
Resource Object	Not used	Yes	A resource that can produce, consume or transmit energy. This is used to describe Generation, Production and Consumption Units and Transmission Assets.
Technical Profile	Yes: this is "Profile"	Yes: matches "Domain": a Bidding Zone aggregation used to define a Technical Profile is equivalent to a Domain	See Definitions [3] ("Profile")
Total Load	Yes	No	See Definitions [3]

Transmission Asset	yes	No (EDI only refers to Line and Tieline)	- Transmission assets are assets used for transmission. They can be DC Link, AC Link, Transformer or Converter
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4 BUSINESS PROCESS VIEWS

4.1 ACTORS AND USE CASES



There are three actors. The following descriptions intend to describe the context in which they are acting and should not be considered as definitions of the actors. The actors and their roles are formally defined in [8].

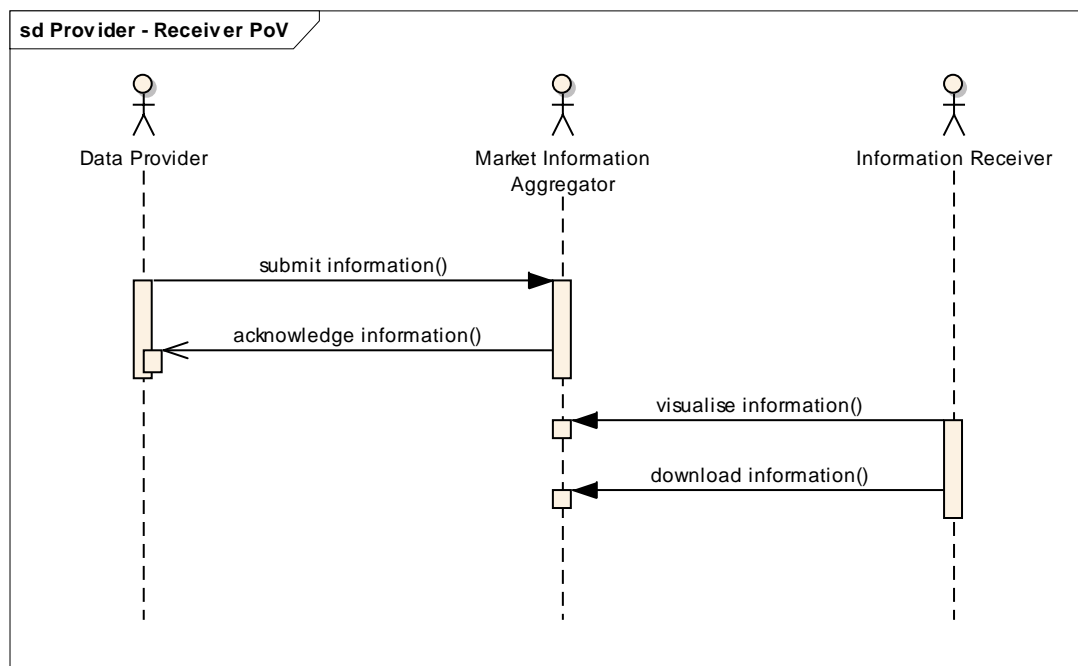
- Data Provider can either be a TSO or a third party acting as data provider. The Data Provider is not necessarily the primary owner of information but it is the entity that submits information to the Market Information Aggregator
- Market Information Aggregator: Embodied by the platform in this context, this actor is responsible for the assembling of the collected information (integration, processing and storage) and the publishing (formatting and presentation) to Information Receiver
- Information Receiver: Represents an individual or organisation that receives information from the Market Information Aggregator. In practice, it corresponds to a user of the platform that views or downloads information

The current document covers the three main types of interaction: Collection, assembling and publication.

213 Beside these three interactions lies the administration of the platform, which can be done by
214 someone on the Data Provider side (self-service mode) or by someone on the Market
215 Information Aggregator side (centralised mode).

216 4.2 EXTERNAL POINT OF VIEW SEQUENCE DIAGRAM

217 The diagram below presents the data submission and publication sequence from the point of
218 view of both the Data Provider and the Market Information Receiver.



- 219
- 220 • Data Providers submits information to the platform
 - 221 • Data Providers receive acknowledgement from the platform in accordance with [5]. The
 - 222 acknowledgement distinguishes between technical problems (syntax for example) and
 - 223 application problems (bidding zone not recognised, for example).
 - 224 • Information Receivers visualise information in a synchronous way on the web page of the
 - 225 platform
 - 226 • Information Receivers download information from the platform, in a “pull” way. Whenever
 - 227 feasible, format of downloaded data shall coincide with format for upload. Details are
 - 228 provided in [4].

229

5 GENERAL BUSINESS REQUIREMENTS

5.1 SUBMISSION

5.1.1 BUSINESS RULES

For some data items, the document time interval is not fixed. In such situations and when a resolution has been defined, the submitted document time interval must be a multiple of the resolution.

All submission deadlines given in the document are general business rules applicable to common cases. However, if for some reasons (for legal reasons or for business process reasons), the general submission deadline has to be superseded, this possibility will be offered by the platform to platform administrators.

- In nominal mode, all information shall be submitted in XML documents through the allowed protocols to the platform.
- In some cases, a man-machine interface is provided in order to permit the online capture of the information. Such interfaces may serve as a backup to automated data transmissions or as a complete substitute for them when machine-to-machine solutions are not feasible from the Data Provider's point of view.
- The data interchange process and XML documents shall comply with ENTSOE standards
- All submissions must be done in accordance with [4]

5.1.2 UPDATES

For all data items it shall be possible to submit updates. The latest received values shall replace any previously sent values. Exact details will be provided by [4].

Under normal circumstances, updated values are submitted through a new version of an already submitted document. This implies that the new version of the document must cover the same time interval as the previous version. However for all data items it must also be possible to update values for a larger time interval by submitting one single document. For example, if a Data Provider has undertaken twelve monthly submissions of a given data item during one year, then at the end of the year the Data Provider shall be able to submit one single document with updated values for the whole year.

Data Providers shall be able to revoke/withdraw data that has been submitted by mistake. This shall be possible before as well as after submission deadlines. Revoked/Withdrawn data is not physically deleted on the platform - rather it is no longer published. The exact mechanism will be defined in [4] when it is possible by machine-to-machine exchange. When this is impossible, Operational and Technical Support will perform the action.

263

264 5.1.3 REQUIREMENTS

265 The platform shall be able to manage a register of authorised Data Providers.

266 Data may be submitted by humans as well as machines, one record at a time and in bulk
267 mode.

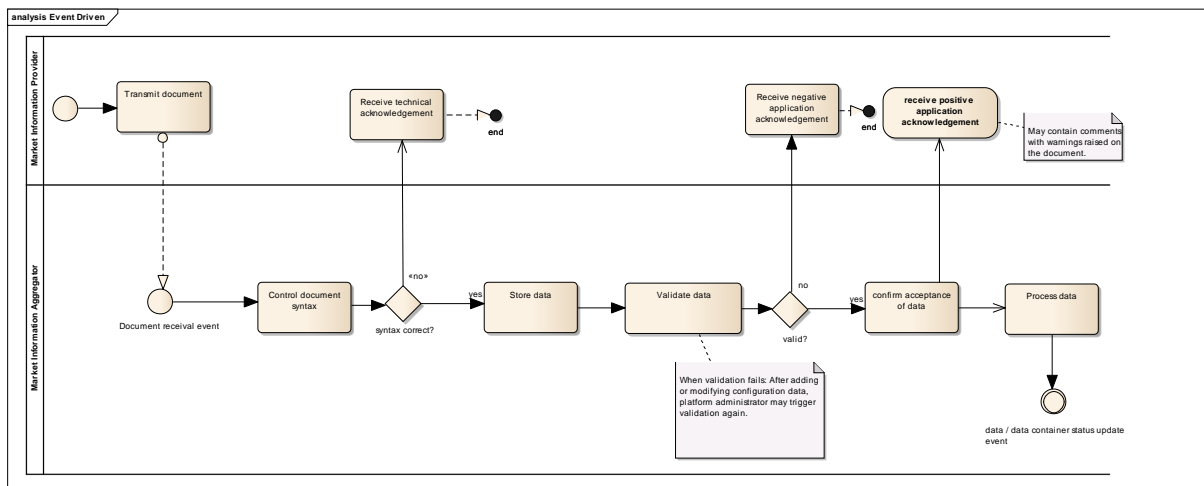
268 The platform shall support a variety of data submission frequencies (yearly, monthly, daily,
269 hourly, etc).

270 It shall be possible to submit incomplete data while respecting the syntax of the document. For
271 example, if Data Provider is lacking values for some entries in a time series, it shall be possible
272 to submit the available values. Subsequently Data Provider shall be able to submit an updated
273 version of the document with the missing values.

274 5.2 INTEGRATION

275 5.2.1 BEHAVIOUR ON DOCUMENT RECEIPT EVENT

276 The following diagram describes the general behaviour of the platform upon receipt of a
277 document.



278

279 When a Data Provider transmits a document to the platform, it triggers a “document receipt
280 event” on the platform¹ which starts the integration process. This process is made up of the
281 following steps:

282 1) Control document syntax

283 The document is controlled against the corresponding XML Schema as specified in [4].
284 Business values (code existence, range of values, etc.) are not controlled at this step. Once
285 a document is considered as valid in terms of syntax, its content is stored in the platform’s
286 database, using UTC convention for time. If not, the document is rejected entirely.

287 If a problem is detected at this first step of control, the Data Provider is notified with a
288 “technical acknowledgement”.

289 2) Validate data content

290 Once the content of the document is stored in the platform’s database, the platform
291 performs checks on the values of data, like code existence, respect of the range of values,
292 completeness and dependencies between values. Once data is considered as valid in
293 terms of its content, it is ready for further processing.

294 If a problem is detected at this second step of control, the Data Provider is notified with an
295 “application acknowledgement”. If the submitted document passes also this second step
296 an “application acknowledgement” is issued, accepting the submitted document in its
297 entirety.

298 Validations may also generate warnings. A warning is not reason to reject the document.
299 Warnings could for example be generated when reference data is missing. Data Provider
300 may consult warnings on the web pages requiring privileged access².

301 **5.2.2 REQUIREMENTS**

302 Configuration and reference data shall be stored in a structured manner. Where feasible and
303 necessary, it shall be possible to effective date this data.

304 Successfully validated data content shall be eligible for further processing and publication.

305 If validation of a document fails, normally the data provider would submit a new version of the
306 document. Additionally, the platform offers the option to repeat the validation. This would
307 typically be the case when some reference data has not been configured properly on the

¹ This is from a business point of view. The precise technical mechanism for chaining activities will be solved during the implementation phase.

² Currently, EDI documents cannot be used to transmit warnings.

308 platform. Validation may be repeated as long as the version of the document remains the
309 highest (i.e. no update received).

310 All submitted data shall be stored as received, for audit purposes.

311 Data submitted by Data Providers shall always be stored with versions and timestamps (in
312 UTC). Configuration data is versioned and time stamped when applicable.

313 Daylight saving times and leap years shall be taken into account.

314 The platform shall be able to handle the market data of the domains Load, Generation,
315 Transmission, Congestion Management, Balancing and Outages. Within each of the data
316 domains, there will be distinct data types. For example, under Generation there will be data
317 items such as "Actual generation per unit" or "Day ahead generation forecasts for wind and
318 solar". For future evolution of the platform, it shall be possible to add more domains of market
319 data, as well as introducing new data types under existing domains.

320 Submission of documents and issuing of acknowledgements will abide by the standards
321 prescribed by references [4] and [5], respectively. Additionally, reports about erroneous data
322 may be made available using email or SMS and published on the web (with access for
323 privileged users only).

324 Data Provider only will have access to invalid data.

325 5.3 PROCESSING

326 For some data items, the Platform is requested to perform aggregation of submitted data. In
327 such instances, submissions from all allowed Data Providers for the given data item will be
328 aggregated by the platform.

329 As new data or updates to existing data are continuously submitted, the platform shall be able
330 to update already processed data.

331 5.4 MONITORING

332 Data items may have just a single Data Provider or several ones. This is controlled by pre-
333 configuration where the allowed Data Provider(s) for a given data item is/are listed.

334 For every data item, it shall be possible, but not necessary³, to configure a submission
335 deadline. It will be possible to define exceptions to the deadline. Reason is that there may be
336 deviations due to local market practice.

337 It shall be possible to configure whether data is expected or not.

³ For example, due to the nature of data items describing Outages, there will not be a submission deadline.

338 The platform shall be capable of monitoring data submission, generate reminders and report
339 on submission status.

340 The platform shall notify Data Provider of missing data with a “Problem Statement Document”
341 as prescribed in reference [7]. Additionally, reports about missing data may be made available
342 using email or SMS and published on the web (with access for privileged users only). Data
343 Provider shall be capable of disabling email and SMS notification.

344 For each data item that is being monitored, it shall be possible to switch on and off monitoring
345 for every declared Data Provider.

346 5.4.1 MONITORING OF DATA ITEMS REQUIRING AGGREGATION

347 For data items that require aggregation, data will not be considered complete until all declared
348 Data Providers have made their contributions. The exception to this general rule is for Outages,
349 where due to the nature of the data items the submitted data will be aggregated and
350 subsequently published without any expectation whatsoever of receiving data from all allowed
351 Data Providers.

352 5.4.2 DECLARATION OF EXPECTATION AND SUBMISSION DEADLINES

353 As described above, any valid data is destined to be stored by the platform. Yet, by default,
354 the platform does not monitor anything regarding the completeness of data and their arrival on
355 time. By default, no data is expected for publication by the platform.

356 In order to make it possible to activate monitoring, the considered data has to be declared as
357 **expected** by the Data Provider or by the Administrator of the platform. This pre-configuration
358 consists of:

359 - the **declaration of expectation** (e.g. declaration that the platform shall expect an “forecasted
360 monthly transfer capacity” between France and Belgium, starting from a certain date)

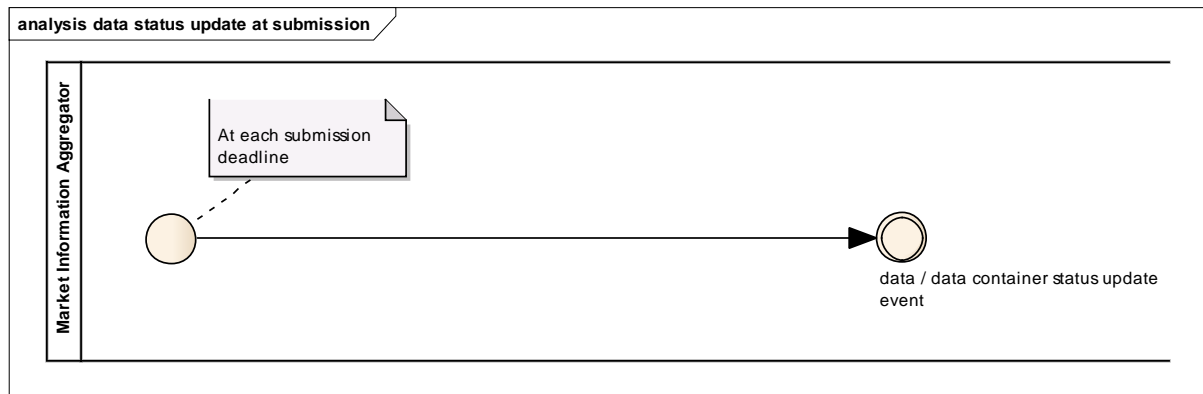
361 - the **definition of the submission deadline** (e.g. declaration that this “forecasted monthly
362 transfer capacity” has to be submitted no later than the 15th of the preceding month).

363 5.4.3 MONITORING FREQUENCY

364 Monitoring consists in changing the status of each expected data item for every applicable
365 period of time.

366 This data status update is performed at predetermined times, which can be:

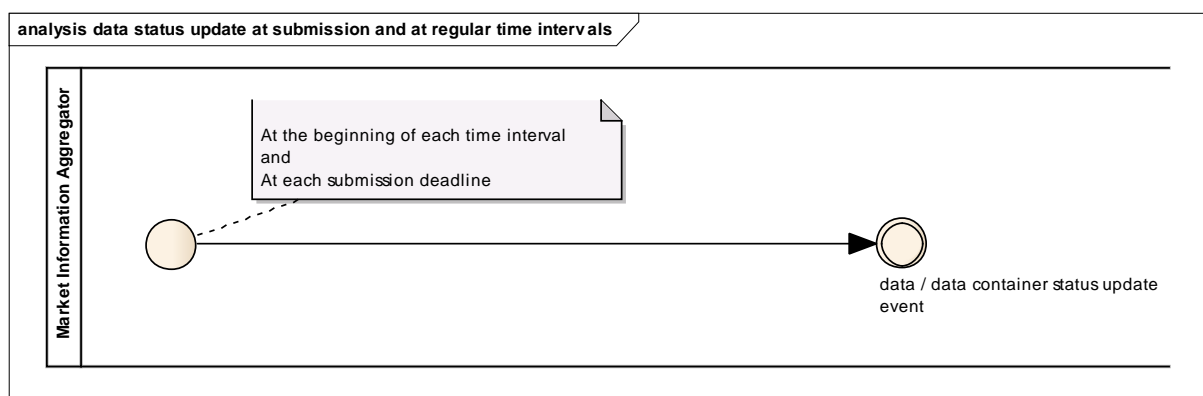
367 - at each submission deadline



368

369 or

370 - at a regular frequency in addition to the monitoring at each submission deadline (typically, at
371 the beginning of each time interval)



372

373 5.5 DATA CONTAINER STATUS / DATA STATUS

374 For expected and monitored data, two types of events are likely to update the status of data:

375 - a data receipt event

376 - a monitoring event

377 For expected and monitored data, three schemes are possible:

378 - None / Ready for publication / Missing scheme

379 - None / Waiting for Publication / Ready for publication / Missing scheme

380 - None / Waiting for Publication x 2 / Ready for publication / Missing scheme

381 For expected but not monitored data (i.e. with no submission deadline), only one type of event
382 is likely to update the status of data:

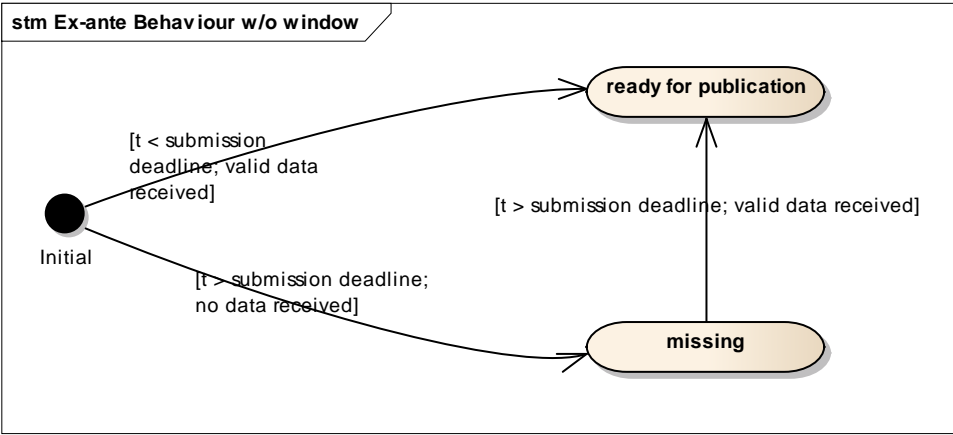
- a data receipt event
- For expected but not monitored data (i.e. with no submission deadline), only one scheme is possible:
- None / Ready for publication scheme
- Data that is not expected will be rejected by platform.

5.5.1 NONE / READY FOR PUBLICATION / MISSING SCHEME

- Until submission deadline, data can have the following additional status: none or ready for publication. Indeed, for this data item, data is to be published as soon as possible
- After submission deadline, data can have the following additional status: missing or ready for publication. Indeed, for this data item, the behaviour is based on a submission deadline and data not received at that deadline are considered as missing by the platform.

<until Submission Deadline>	<after Submission Deadline>
None	Missing
ready for publication	ready for publication

The following state diagram describes the different possible states for an expected data and the transition between them.



Whenever the platform receives data or at submission deadline, the platform checks state transition conditions to update the status of expected data.

5.5.2 NONE / WAITING FOR PUBLICATION / READY FOR PUBLICATION / MISSING SCHEME

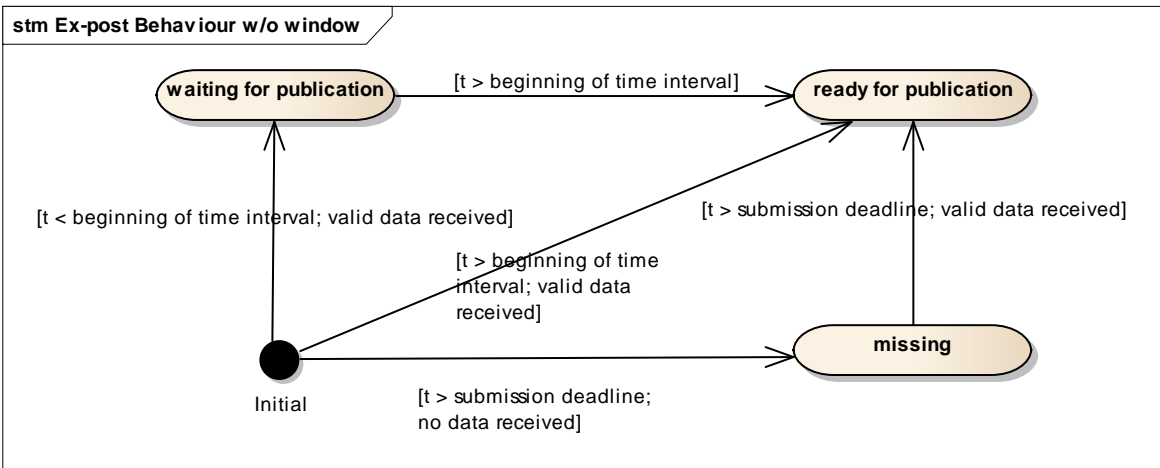
- Until the beginning of the time interval, data can have the following additional status: none or waiting for publication. Indeed, this data item should refer to ex-post information and should not be published before the beginning of the operating period⁴.

- Between the beginning of the time interval and the submission deadline, data can have the following additional status: none or ready for publication. In this interval, data is to be published as soon as available on the platform.

- After submission deadline, data can have the following additional status: missing or ready for publication.

<until the beginning of the time interval>	<between the beginning of the time interval and Submission Deadline>	<after Submission Deadline>
none	none	Missing
waiting for publication	ready for publication	ready for publication

The following state diagram describes the different possible states for an expected data and the transition between them.



⁴ Ex-post data referring to a time interval is considered to be ready for publication at the beginning of the time interval and not the end of the time interval

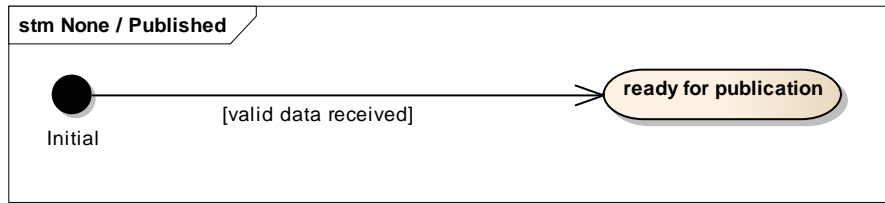
Whenever the platform receives data, at the beginning of the time interval or at submission deadline, the platform checks state transition conditions to update the status of expected data.

5.5.3 NONE / READY FOR PUBLICATION SCHEME

- Until valid data is received, data has the status none.
- Once valid data is received, data will have the status ready for publication. Indeed, for this data item, the behaviour is to publish as soon as received by the platform. There is no submission deadline.

<until valid data is received>	<after valid data is received>
none	ready for publication

The following state diagram describes the different possible states for an expected data and the transition between them.



Whenever the platform receives data, the platform checks state transition conditions to update the status of expected data.

5.5.4 NONE / WAITING FOR PUBLICATION x 2 / READY FOR PUBLICATION / MISSING SCHEME

This scheme is intended for data items representing ex-post information that should not be published before the submission deadline.

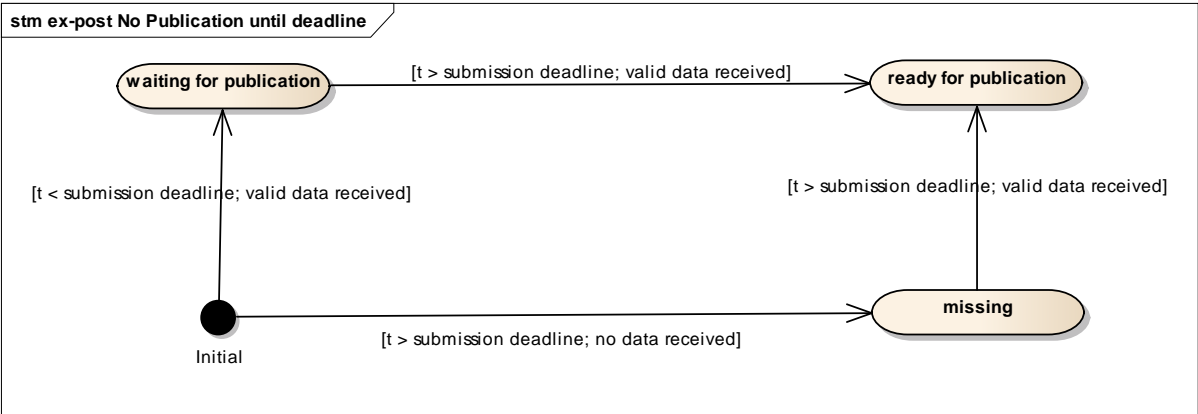
Until the submission deadline, data can have the following status: None or waiting for publication.

After submission deadline, data can have the following status: missing or ready for publication.

<until the beginning of the time interval>	<between the beginning of the time interval and Submission Deadline>	<after Submission Deadline>

none		none	Missing
waiting for publication	for	waiting for publication	ready for publication

The following state diagram describes the different possible states for an expected data and the transition between them.



Whenever the platform receives data, at the beginning of the time interval or at submission deadline, the platform checks state transition conditions to update the status of expected data.

5.6 PUBLICATION

- If a data has been declared as expected with a submission deadline, it is published whenever it is ready for publication
- When no submission deadline is required⁵, data will get published if declared as expected.
- Without further user interaction, only the latest version of the data is displayed by the platform, except where explicitly indicated otherwise. Older versions will be available online, by expanding the view.
- Status of data shall be visible.
- The last update time of published data (i.e. the document creation date and time) is available to the end user on the platform. End users shall be able to choose whether or not the last update time for the selected data is included or not when viewing and downloading data. By default, it is not displayed. Exception is made for Outages.

⁵ This is the case for outages where no submission deadline is required

- 453 For every data item, it shall be possible to configure the publication schedule.
- 454 It shall be possible to distinguish between missing data and data not being expected.
- 455 Before submission deadline has been reached for a data item, it shall be visible to data
456 providers and platform administrator whether data has been submitted or not.
- 457 When submission deadline is reached for a data item, there shall be visibility of the status of
458 the data, i.e. whether it is overdue or not.
- 459 When filtering and sorting criteria are available, all applicable criteria will be displayed for the
460 user to choose among. The criteria shall not be displayed If no data matching data is available
461 – when for example there is no declared data provider for a given area, that area shall not
462 appear as a filter criteria.
- 463 It shall be possible to filter data using value range criteria applied on the attributes of the data
464 item.
- 465 Incomplete data shall not be published. For example: Unique code of production unit has been
466 submitted with unavailability under data item [15.1.c], however reference data describing the
467 production unit as per chapter **Error! Reference source not found.** is missing. As a
468 consequence, the unavailability will not be published.

469 5.7 ADMINISTRATION OF USERS AND ORGANISATIONS

- 470 The system shall support the creation, modification, suspension, reactivation and deletion of
471 user accounts. Every user account shall be associated with an organisation.
- 472 It shall be possible to create, modify and delete user Roles, having different sets of privileges.
473 The following roles and privileges are foreseen:

Role	Privileges
General public	Read-only access to published data
Analysts ⁶	Read-only access to published data and reference data.
Data Providers	Read-only access to other organisations' published data and reference data. Submit data on behalf of own organisation. Update own organisation's reference data, to the extent access granted by Platform administrator.

⁶ Role intended for staff working at Data Providers and ENTSO-E secretariat. It could also be assigned to users from data owners, ACER and other organisations.

Platform administrator at ENTSO-E secretariat	Read-only access to published data. Update all organisations' reference data. Grant permissions to Data Providers to update select reference data. Create new user accounts. Reset passwords. Disable and re-enable user accounts.
Back-end support (vendor)	Update global settings. Execute ad-hoc queries.

474

475 General public and analysts are considered as the “end users” of the application.

476 Platform shall be able to model organisations and Data Providers. It shall be possible to
477 associate a Data Provider with one or several areas.

478 Platform shall be able to model countries and regions. It shall be possible to group
479 organisations into regions. It shall be possible to group countries into regions.

480 The platform must be able to restrict access to web pages, functionality and data to users with
481 specific privileges.

482 5.8 WEB ACCESS

483 It shall be possible to access select data, i.e. per Regulation (see reference [1]), without any
484 registration or login authentication. This data shall be provided on publicly available web
485 pages.

486 Web site design must provide a high level of usability, with access to data through a minimum
487 number of navigation steps. It shall have a consistent layout and metaphor use. Structure of
488 web site is expected to mirror the division of data into the domains Balancing, Transmission,
489 Generation, Outages, Congestion Management and Load.

490 The web site will include “Who is who” data. There shall be help pages providing basic
491 instructions on how to use the site, a glossary and Frequently Asked Questions pages.

492 The platform shall contain a message board capable of displaying administration messages
493 posted by system administrators and automatically generated messages concerning system
494 events.

495 Data shall be made available by the means of web services, download and display on
496 webpage. For data displayed on webpage, the formats table, chart and map shall be
497 supported. Downloads will be available in xml and xls formats.

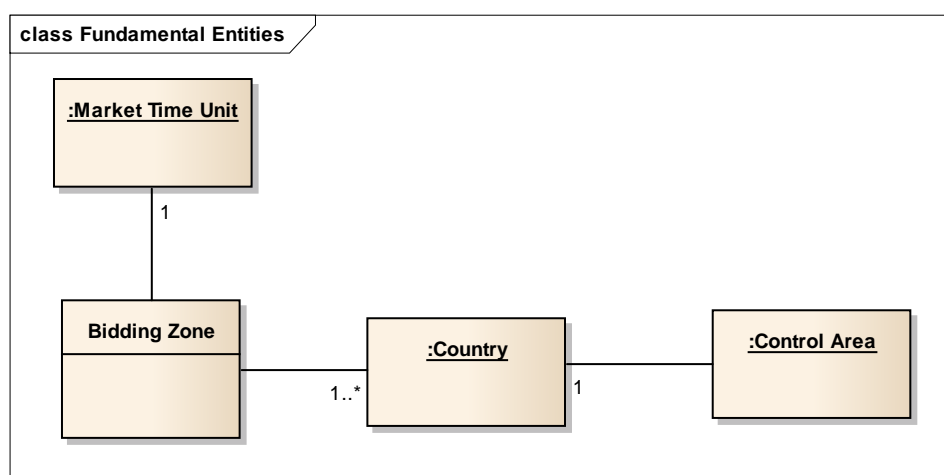
498 By default, data is displayed in Brussels time. Display and download are possible in UTC as
499 well as in any available time zone.

6 LOAD

6.1 REQUIREMENTS COMMON TO ALL DATA ITEMS

6.1.1 FUNDAMENTAL ENTITIES

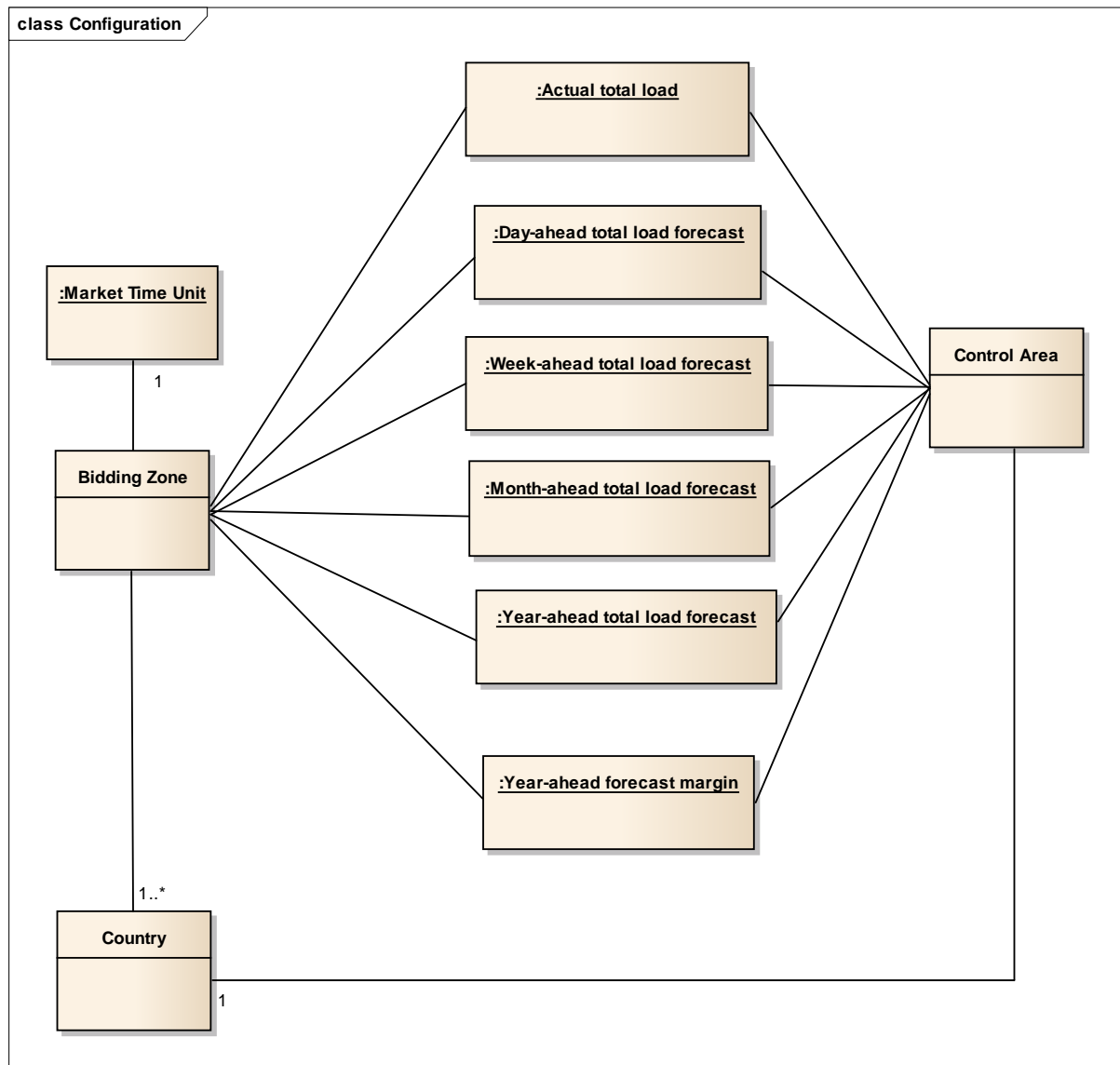
The following class diagram describes the fundamental entities to be taken into account within the scope of this document in order to pre-configure the platform.



- For a given Bidding Zone, there is one Market Time Unit
- Country will be deduced based on Control Area and Bidding Zone

It must be possible to determine to which bidding zone and control area data contained in submitted documents refer⁷

⁷ If format of data does not permit explicit declaration of Control Area it may be deduced from Sender.



510

511 6.1.2 PRE-CONFIGURATION

512 The platform administrator at ENTSO-E shall pre-configure application with the following
513 reference data:

514 - [C-LD-1] a list of Bidding Zones (common with Generation domain, refer to section 9.1)

515 - [C-LD-2] a list of Control Areas (common with Generation domain, refer to section 9.1)

516 - [C-LD-3] for each Bidding Zone, the value of the Market Time Unit (common with
517 Generation domain, refer to section 9.1)

518 - [C-LD-6] a list of countries and for each country, the corresponding Control Area(s). This is
519 the same configuration as for Generation, refer to section 9.1

520 - [C-LD-7] for each Bidding Zone, Control Area and data item, the single authorized Data
521 Provider. When a Bidding Zone consists of several Control Areas, it shall be possible to
522 configure for each data item either a single Data Provider for the whole Bidding Zone or
523 separate Data Providers per Control Area. The latter case implies that the contribution of all
524 these parties is necessary in order to aggregate and publish the single value for the whole
525 Bidding Zone

526 - [C-LD-11]] for those bidding zones consisting of more than one Control Area, an indicator
527 whether submitted values shall be displayed per Control Area in addition to the aggregated
528 value for the whole Bidding Zone Note that in some instances there will be one single Data
529 Provider for several Bidding Zones.

530 The following reference data will be managed by Data Providers:

531 - [C-LD-8] for each Bidding Zone and data item, an indicator whether data is expected or not.
532 By default it will be expected. This reference data is intended to be effective dated, meaning
533 that it will have a validity period, defined by a start date and optionally an end date. This
534 indicator is used for monitoring and publication purposes.

535 6.1.3 DATA CONTAINER STATUS / DATA STATUS

536 The ex-post data item “Actual Total Load” [6.1.a] follows the “none / waiting for publication /
537 ready for publication / missing” scheme.

538 All other data items follow the “None / Ready for publication / Missing” scheme.

539 6.1.4 PUBLICATION

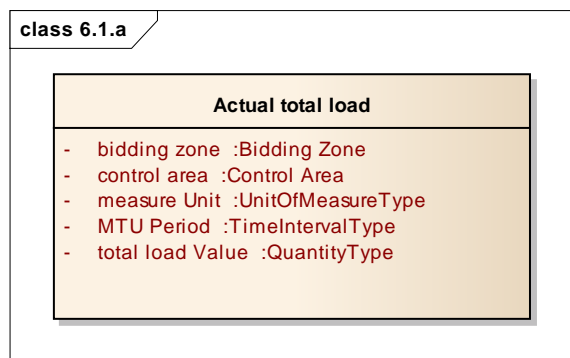
540 Data for a given bidding zone is being published as soon as it is complete, i.e. when all Data
541 Providers have submitted their contributions.

542 For all data items, end user will have the choice between displaying data in a table or in a
543 chart.

6.2 ACTUAL TOTAL LOAD PER BIDDING ZONE [6.1.A]

6.2.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone and Control Area, actual total load is described with one total load value per Market Time Unit period, expressed in measure Unit (MW).

When data is submitted for a whole Bidding Zone consisting of several Control Areas, the Control Area attribute shall not be populated. See item [C-LD-7] in chapter 6.1.2 for details.

For the purpose of providing input to the statistical data publication National Consumption (see chapter 13.3), data providers may optionally make a supplementary submission in monthly resolution.

6.2.2 PRE-CONFIGURATION

[PC-6.1.a-1] For each Bidding Zone, there is a submission deadline: At the latest one hour (H+1) after the end of the MTU period.

Example: if the Bidding Zone in question has a Market Time Unit of 30 minutes, and if the considered Period is November 17th, 2012, between 08:00 and 08:30 UTC, the document describing the actual total load during this Period must be submitted before November 17th, 2012, 09:30 UTC.

6.2.3 ASSUMPTIONS

There are no assumptions specific to this data item.

6.2.4 INTEGRATION

- The Bidding Zone and Control Area shall be recognised by the platform

566 - The sender of the document shall be consistent with the identified Bidding Zone and Control
567 Area

568 - Data should not be submitted before the end of the MTU Period. This validation will generate
569 a warning only. Configuration of platform can be changed to completely suppress this warning.

570 6.2.5 MONITORING

571 For a given Bidding Zone, Control Area and MTU Period, compliance with submission deadline
572 described in [PC-6.1.a-1] will be monitored.

573 6.2.6 PROCESSING

574 Submitted values for load and power used for energy storage (if provided) are aggregated per
575 Country, Bidding Zone and MTU Period. Aggregation here means adding up the submitted
576 values.

577 Aggregation per country will be performed with the help of pre-configuration [C-LD-6].

578 6.2.7 PUBLICATION

579 6.2.7.1 FILTERING AND SORTING CRITERIA

580 Data shall be visually accessed by selecting the following:

581 - Country or Bidding Zone (selection is mandatory)

582 - Control Area (selection is optional and available only when Bidding Zone consists of several
583 Control Areas)

584 - Day (Selection is mandatory)

585 6.2.7.2 DISPLAY

586 This data shall be displayed in the following section:

587 - Load / Actual Load

588 The following attributes of data shall be displayed:

589 - Title

590 - Country, Bidding Zone or Control Area name

591 - Day

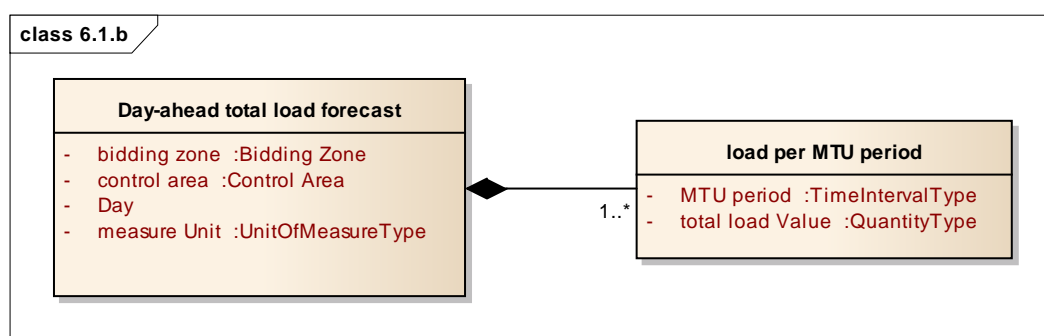
592 - Measurement Unit

- For each Market Time Unit period within the selected Day, the total load

6.3 DAY-AHEAD TOTAL LOAD FORECAST PER BIDDING ZONE [6.1.B]

6.3.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone and Control Area, the day-ahead total forecast is described as the forecast of the total load during one day, with one total load Value per Market Time Unit period, in measure Unit (MW).

When data is submitted for a whole Bidding Zone consisting of several Control Areas, the Control Area attribute shall not be populated. See item [C-LD-7] in chapter 6.1.2 for details.

6.3.2 PRE-CONFIGURATION

[PC-6.1.b-4] In every Bidding Zone there is a daily submission deadline for this data item. Submission must be done at the latest two hours (H-2) before the gate closure time of the day-ahead market if such a gate closure time exists. If there are several gate closure times⁸, the latest one shall be considered.

Example: if the gate closure time of the day-ahead market for the Bidding Zone in question is 14:00 UTC, the day-ahead total load forecast for November 17th, 2012 must be submitted before November 16th, 2012, 12:00 UTC.

If such a gate closure time does not exist, submission must be done at the latest on D-1 at 12:00 in local time zone of the Bidding Zone.

⁸ The Bidding Zone could for example be concerned by an explicit auction across one border and an implication auction across another border.

614 *Example: if there is no gate closure time, the day-ahead total load forecast for November 17th,*
615 *2012 must be submitted before November 16th, 2012, 12:00 in Local Time Zone.*

616 6.3.3 ASSUMPTIONS

617 There are no assumptions specific to this data item.

618 6.3.4 INTEGRATION

619 - The Bidding Zone and Control Area shall be recognised by the platform

620 - The sender of the document shall be consistent with the identified Bidding Zone and Control
621 Area

622 6.3.5 MONITORING

623 For a Bidding Zone, Control Area and day, compliance with submission deadline described in
624 [PC-6.1.b-4] will be monitored.

625 6.3.6 PROCESSING

626 Submitted load values are aggregated per Country, Bidding Zone and Market Time Unit period.
627 Aggregation here means adding up the submitted values.

628 Aggregation per country will be performed with the help of pre-configuration [C-LD-6].

629 6.3.7 PUBLICATION

630 6.3.7.1 FILTERING AND SORTING CRITERIA

631 Data shall be visually accessed by selecting the following:

632 - Country or Bidding Zone (selection is mandatory)

633 - Control Area (selection is optional and available only when Bidding Zone consists of several
634 Control Areas)

635 - Day (Selection is mandatory)

636 6.3.7.2 DISPLAY

637 This data shall be displayed in the following section:

638 - **Load / Day-ahead forecast**

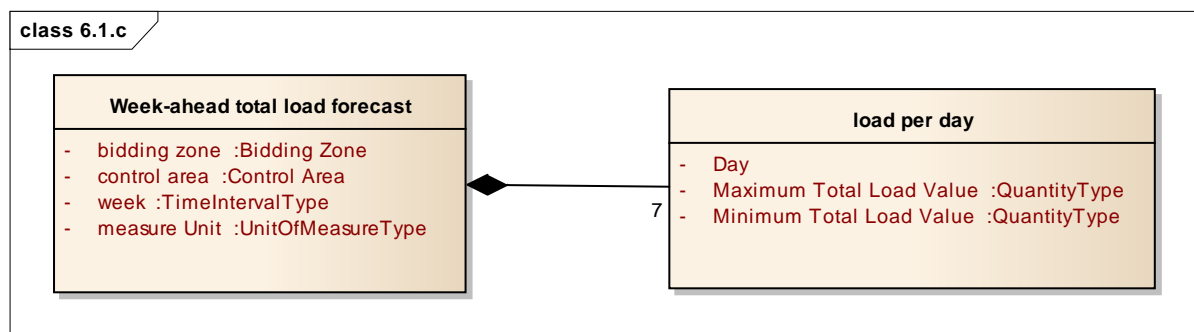
639 The following attributes of data shall be displayed:

- 640 - Title
- 641 - Country, Bidding Zone or Control Area name
- 642 - Selected day
- 643 - Measurement Unit
- 644 - For each Market Time Unit period during the selected day, the forecast total load value
- 645

6.4 WEEK-AHEAD TOTAL LOAD FORECAST PER BIDDING ZONE [6.1.C]

6.4.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone and Control Area, the week-ahead total forecast is described as the forecast of the total load for one week, with one minimum total load value and one maximum total load value per day, in measure Unit (MW).

When data is submitted for a whole Bidding Zone consisting of several Control Areas, the Control Area attribute shall not be populated. See item [C-LD-7] in chapter 6.1.2 for details.

Week is starting on Monday at 00:00 and ending on Sunday at 24:00, local time⁹.

6.4.2 PRE-CONFIGURATION

[PC-6.1.c-4] For each Bidding Zone there is a weekly submission deadline. Submission must be done at the latest on Friday the week before, two hours (H-2) before the gate closure time of the day-ahead market.

Example: if the gate closure time of the day-ahead market for the Bidding Zone in question is 14:00 UTC, the week-ahead total load forecast for the week spanning Monday November 19th, 2012 to Sunday November 25th, 2012, must be submitted before Friday November 16th, 2012, 12:00 UTC.

If such a gate closure time does not exist, submission must be done at the latest on Friday the week before at 14:00 in local time zone of the Bidding Zone.

⁹ For some bidding zones where forecasts are made for Saturday – Friday, a first submission will provide data for Monday – Friday and an update will provide data for Saturday – Sunday as soon as it becomes available.

667 *Example: if there is no gate closure time, the week-ahead total load forecast for the week*
668 *spanning Monday November 19th, 2012 to Sunday November 25th, 2012, must be submitted*
669 *before November 16th, 2012, 14:00 in Local Time Zone.*

670 For bidding zones where forecasts are made for Saturday – Friday, submission deadline will
671 be adjusted accordingly for monitoring purposes.

672 6.4.3 ASSUMPTIONS

673 Data Provider may submit data with higher resolution, up to MTU period.

674 6.4.4 INTEGRATION

675 - The Bidding Zone and Control Area shall be recognised by the platform

676 - The sender of the document shall be consistent with the identified Bidding Zone and Control
677 Area

678 - Per day, maximum value must be greater or equal to minimum value

679 6.4.5 MONITORING

680 For a Bidding Zone, Control Area and week, compliance with submission deadline described
681 in [PC-6.1.c-4] will be monitored.

682 6.4.6 PROCESSING

683 If data has been submitted with higher resolution than day, platform shall establish the
684 minimum value per day. For example if data is submitted in hourly values a computation must
685 be made to compute the lowest hourly value for every given day. Similarly, the maximum value
686 per day shall be established. This processing is identical to the one performed for forecasted
687 and offered transfer capacities, refer to chapter 7.10.6.

688 Once values per day have been established, submitted load values are aggregated per
689 Country, Bidding Zone and day. Aggregation here means adding up the submitted values
690 (minimum values with minimum values and maximum values with maximum values).

691 Aggregation per country will be performed with the help of pre-configuration [C-LD-6].

692 6.4.7 PUBLICATION

693 6.4.7.1 FILTERING AND SORTING CRITERIA

694 Data shall be visually accessed by selecting the following:

695 - Country or Bidding Zone (selection is mandatory)

696 - Control Area (selection is optional and available only when Bidding Zone consists of several
697 Control Areas)

698 - Week (Selection is mandatory)

699 6.4.7.2 DISPLAY

700 This data shall be displayed in the following section:

701 - **Load / Week-ahead forecast**

702 The following attributes of data shall be displayed:

703 - Title

704 - Country, Bidding Zone or Control Area name

705 - Selected week

706 - Measurement Unit

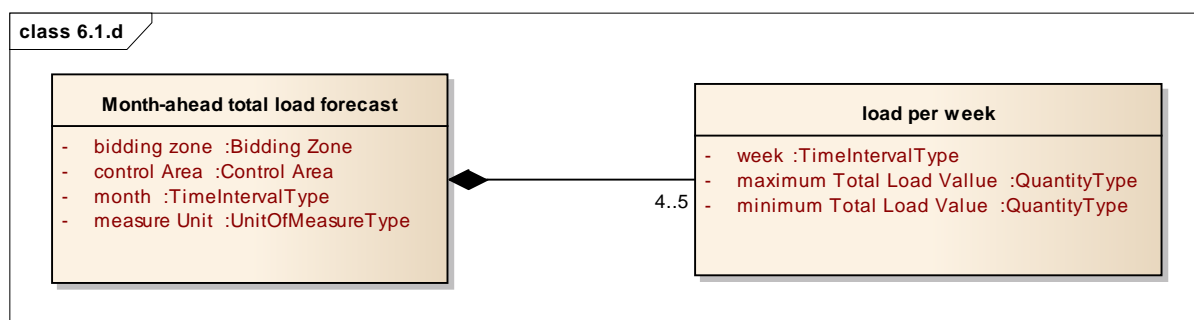
707 - For each day during the selected week, the forecast minimum total load value and maximum
708 total load value

709

6.5 MONTH-AHEAD TOTAL LOAD FORECAST PER BIDDING ZONE [6.1.D]

6.5.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone and Control Area, the month-ahead total forecast is described as the forecast of the total load for one month, with one minimum total load value and one maximum total load value per week, in measure Unit (MW).

When data is submitted for a whole Bidding Zone consisting of several Control Areas, the Control Area attribute shall not be populated. See item [C-LD-7] in chapter 6.1.2 for details.

6.5.2 PRE-CONFIGURATION

[PC-6.1.d-4] For each Bidding Zone, submission must be done at the latest one week (W-1) before the month described by the document.

Example: The month-ahead total load forecast for the month of November 2012 must be submitted before October 25th 2012, 00:00 UTC.

6.5.3 ASSUMPTIONS

Data Provider may submit data with higher resolution, up to MTU period.

6.5.4 INTEGRATION

- The Bidding Zone and Control Area shall be recognised by the platform

- The sender of the document shall be consistent with the identified Bidding Zone and Control Area

- Per week, maximum value must be greater or equal to minimum value

6.5.5 MONITORING

For a Bidding Zone, Control Area and month, compliance with submission deadline described in [PC-6.1.d-4] will be monitored.

6.5.6 PROCESSING

If data has been submitted with higher resolution than week, platform shall establish the minimum value per week. Similarly, the maximum value per week shall be established.

Once values per week have been established, submitted load values are aggregated per Country, Bidding Zone and week. Aggregation here means adding up the submitted values (minimum values with minimum values and maximum values with maximum values).

Aggregation per country will be performed with the help of pre-configuration [C-LD-6].

6.5.7 PUBLICATION

6.5.7.1 FILTERING AND SORTING CRITERIA

Data shall be visually accessed by selecting the following:

- Country or Bidding Zone (selection is mandatory)
- Control Area (selection is optional and available only when Bidding Zone consists of several Control Areas)
- Month (Selection is mandatory)

6.5.7.2 DISPLAY

This data shall be displayed in the following section:

- Load / Month-ahead forecast

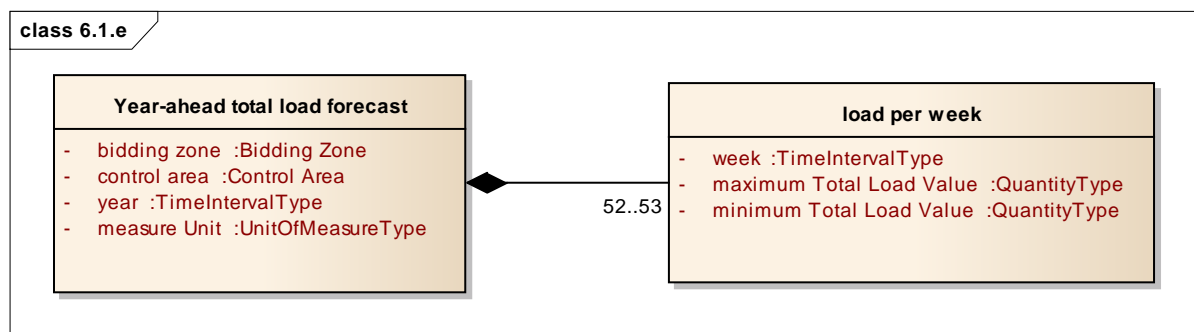
The following attributes of data shall be displayed:

- Title
- Country, Bidding Zone or Control Area name
- Selected month
- Measurement Unit
- For each week within the selected month, the forecast minimum total load value and maximum total load value

6.6 YEAR-AHEAD TOTAL LOAD FORECAST PER BIDDING ZONE [6.1.E]

6.6.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone and Control Area, the forecast of the total load for one year is described by one minimum total load value and one maximum total load value per week, in measure Unit (MW).

When data is submitted for a whole Bidding Zone consisting of several Control Areas, the Control Area attribute shall not be populated. See item [C-LD-7] in chapter 6.1.2 for details.

6.6.2 PRE-CONFIGURATION

[PC-6.1.e-4] Submission must be done at the latest the 15th calendar day of the month before the year in question.

Example: For year 2013, document must be submitted before December 16th 2012, 00:00 UTC.

6.6.3 ASSUMPTIONS

Data Provider may submit data with higher resolution, up to MTU period.

6.6.4 INTEGRATION

- The Bidding Zone and Control Area shall be recognised by the platform

- The sender of the document shall be consistent with the identified Bidding Zone and Control Area

- Per week, maximum value must be greater or equal to minimum value

6.6.5 MONITORING

For a Bidding Zone, Control Area and year, compliance with submission deadline described in [PC-6.1.e-4] will be monitored.

6.6.6 PROCESSING

If data has been submitted with higher resolution than week, platform shall establish the minimum value per week. Similarly, the maximum value per week shall be established.

Once values per week have been established, submitted load values are aggregated per Country, Bidding Zone and week. Aggregation here means adding up the submitted values (minimum values with minimum values and maximum values with maximum values).

Aggregation per country will be performed with the help of pre-configuration [C-LD-6].

6.6.7 PUBLICATION

6.6.7.1 FILTERING AND SORTING CRITERIA

Data shall be visually accessed by selecting the following:

- Country or Bidding Zone (selection is mandatory)
- Control Area (selection is optional and available only when Bidding Zone consists of several Control Areas)
- Year (Selection is mandatory)

6.6.7.2 DISPLAY

This data shall be displayed in the following section:

- Load / Year-ahead forecast

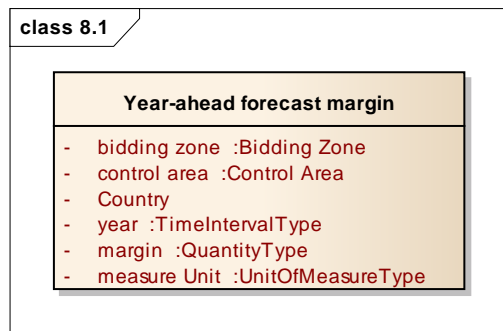
The following attributes of data shall be displayed:

- Title
- Country, Bidding Zone or Control Area name
- Selected year
- Measurement Unit
- For each week within the selected year, the forecast minimum total load value and maximum total load value

6.7 YEAR-AHEAD FORECAST MARGIN [8.1]

6.7.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone and Control Area, the year-ahead forecast margin is described as one forecast margin value for the whole year, expressed in measure Unit (MW). In this case, Country shall not be populated.

When data is submitted for a whole Bidding Zone consisting of several Control Areas, the Control Area and Country attributes shall not be populated. See item [C-LD-7] in chapter 6.1.2 for details.

When data is submitted for a whole country, the Bidding Zone and Control Area attributes shall not be populated.

6.7.2 PRE-CONFIGURATION

[PC-8.1-3] If there are yearly explicit auctions concerning the Bidding Zone, the latest end date of the bidding periods for all yearly explicit auctions will be used as reference to calculate the submission deadline. This end date will be called the end of the latest performed yearly auction.

Submission must be done at the latest one week (W-1) before end of the latest performed yearly auction if yearly auctions exist: this is the submission deadline for this data item.

Example: if the end of the latest performed yearly auction for the Bidding Zone in question and for the year 2013 is November 15th, 2012, the year-ahead forecast margin for the year 2013, must be submitted before November 8th, 2012, 00:00 UTC.

If such a reference does not exist, submission must be done at the latest the 15th calendar day of the month before the year in question.

Example: if there is no yearly auction for the Bidding Zone in question, the year-ahead forecast margin for year 2013 must be submitted before December 16th 2012, 00:00 UTC.

6.7.3 ASSUMPTIONS

If the Bidding Zone consists of several Control Areas, Data Providers will agree between themselves a single value for the forecast margin regarding the whole Bidding Zone and perform a single submission of that value. Additionally, they may submit separate forecast margins for their respective Control Areas.

If the Bidding Zone covers more than one Country or when there is more than one Control Area in a Country, Data Providers will agree a single value for the forecast margin regarding the Country and perform a single submission of that value.

6.7.4 INTEGRATION

- The Bidding Zone and Control Area shall be recognised by the platform

- The sender of the document shall be consistent with the identified Bidding Zone and Control Area

6.7.5 MONITORING

For a Bidding Zone, Control Area and year, compliance with submission deadline described in [PC-8.1-3] will be monitored.

6.7.6 PROCESSING

No further processing is performed on this data item.

6.7.7 PUBLICATION

6.7.7.1 FILTERING AND SORTING CRITERIA

Data shall be visually accessed by selecting the following:

- Country or Bidding Zone (selection is mandatory)

- Control Area (selection is optional and available only when Bidding Zone consists of several Control Areas)

- Year (Selection is mandatory)

6.7.7.2 DISPLAY

This data shall be displayed in the following section:

- **Load / Year-ahead forecast margin**

The following attributes of data shall be displayed:

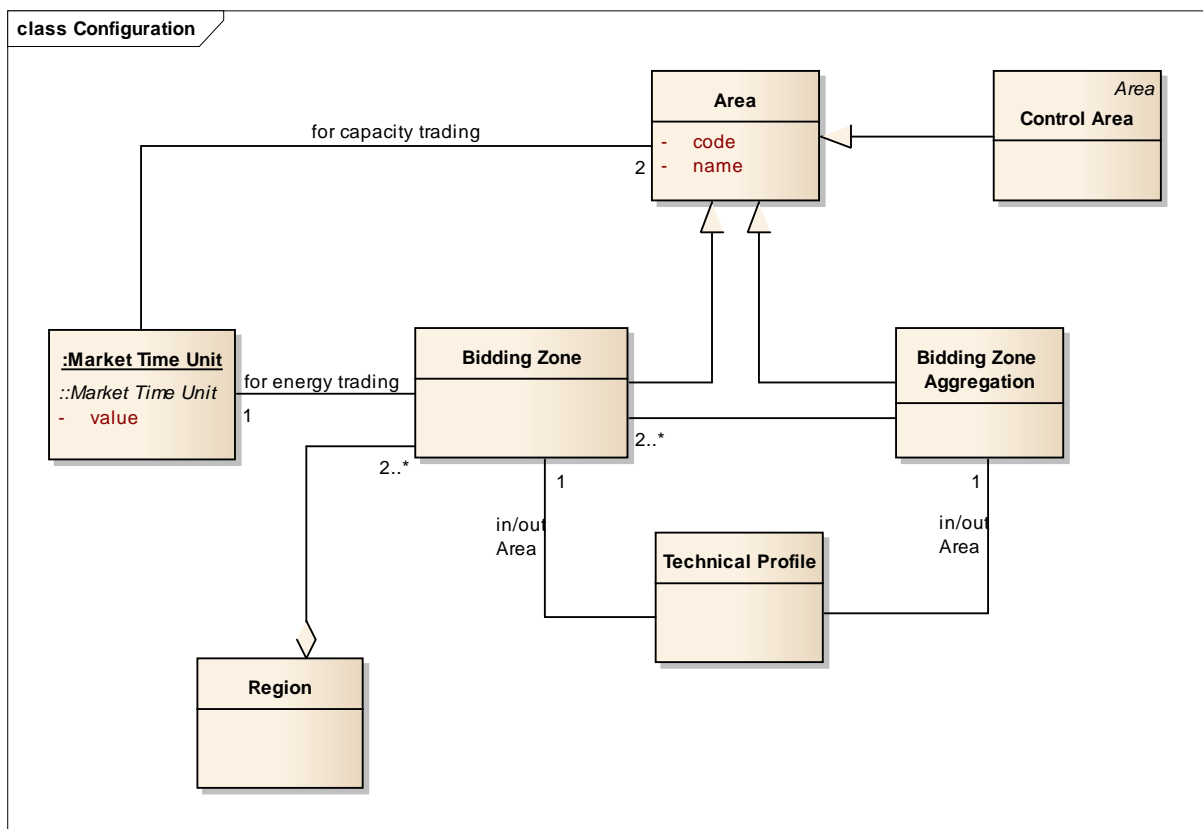
- 864 - Title
- 865 - Country, Bidding Zone or Control Area name
- 866 - Selected year
- 867 - Measurement Unit
- 868 - For the year, the forecast margin value

7 TRANSMISSION

7.1 REQUIREMENTS COMMON TO ALL DATA ITEMS

7.1.1 FUNDAMENTAL ENTITIES

The following class diagram describes the fundamental entities to be taken into account within the scope of this chapter in order to pre-configure the platform.



- Energy is traded within a **Bidding Zone**, where there is an associated **Market Time Unit**
- Capacity is traded between **Areas**, which can be a **Control Area**, a **Bidding Zone** or a **Bidding Zone Aggregation**. There is a **Market Time Unit** for capacity trading between two Areas¹⁰.
- A **Technical Profile** defines an oriented geographical boundary between one Bidding Zone and several neighbouring Bidding Zones (i.e. a Bidding Zone aggregation).

¹⁰ For a given pair of Areas, the MTU for capacity trading will be the same for all capacity products (yearly, monthly, daily, etc.)

- 881 • A Region consists of two or more Bidding Zones.

882 7.1.2 TRANSMISSION CAPACITY ALLOCATIONS

883 Cross-border capacity can be allocated through Implicit, Explicit or Continuous Allocation. An
884 allocation is characterized by the type of products that are being sold and the time horizon, as
885 determined by the Contract Type; Yearly, Monthly, Daily, etc. The Contract Type¹¹ determines
886 the length of the Delivery Period associated with the auction, which is the time interval when
887 the capacity will be used.

888 All Allocations present a Bidding Period, which is the time period where market participants
889 can submit bids and a Capacity Allocation Period, which is the time period where the
890 attribution of capacities to the participants is realised. The Bidding Period is optional and for
891 information purposes only. Submission deadlines for many data items depend on the
892 capacity allocation period which is mandatory.

893 Every allocation has a specific resolution, which typically is of 15, 30 or 60 minutes length.
894 Other resolutions such as yearly or monthly may also apply. This resolution will apply to all
895 publications associated with the allocation.

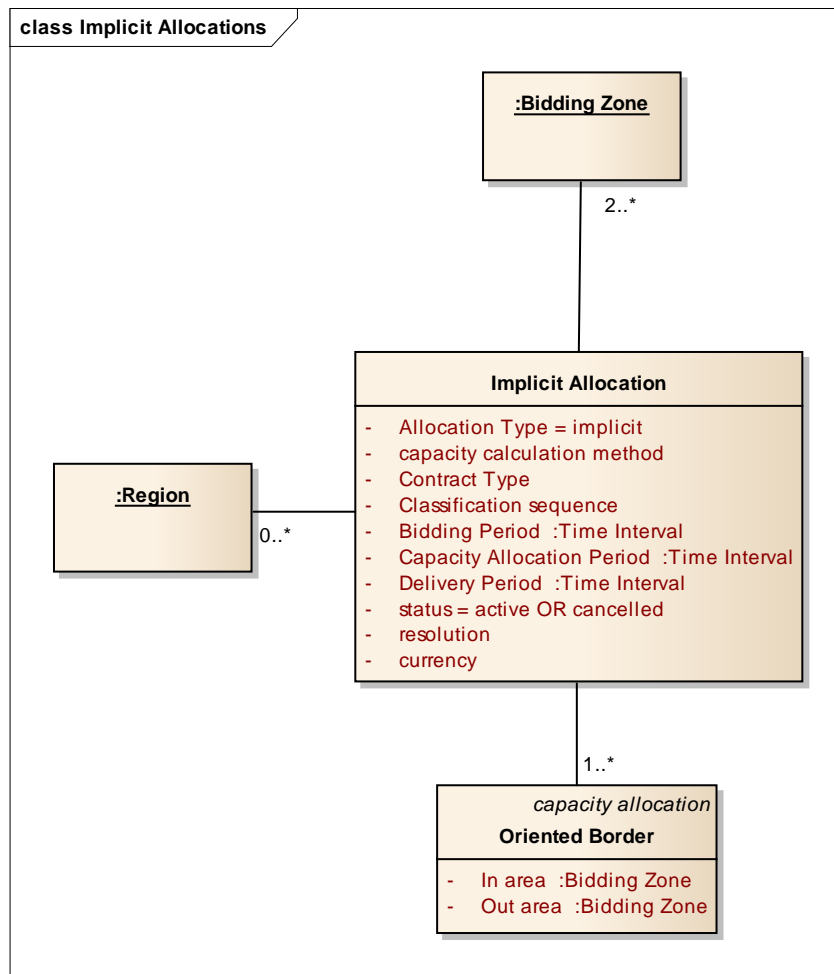
896 Every allocation is associated with exactly one currency.

897 By default, the Allocation Type is not specified. However there is a particular case where
898 Allocation Type is “shadow auction”. This is a fall-back solution, replacing a daily implicit
899 auction. Platform will not perform any monitoring of data submissions related to shadow
900 auctions.

901 7.1.2.1 IMPLICIT ALLOCATIONS

902 In implicit allocations transfer capacity is made implicitly available together with the energy. An
903 Implicit Allocation that covers two or more Bidding Zones may be associated with a Region.

¹¹ Sometimes referred to as “Time Horizon”.



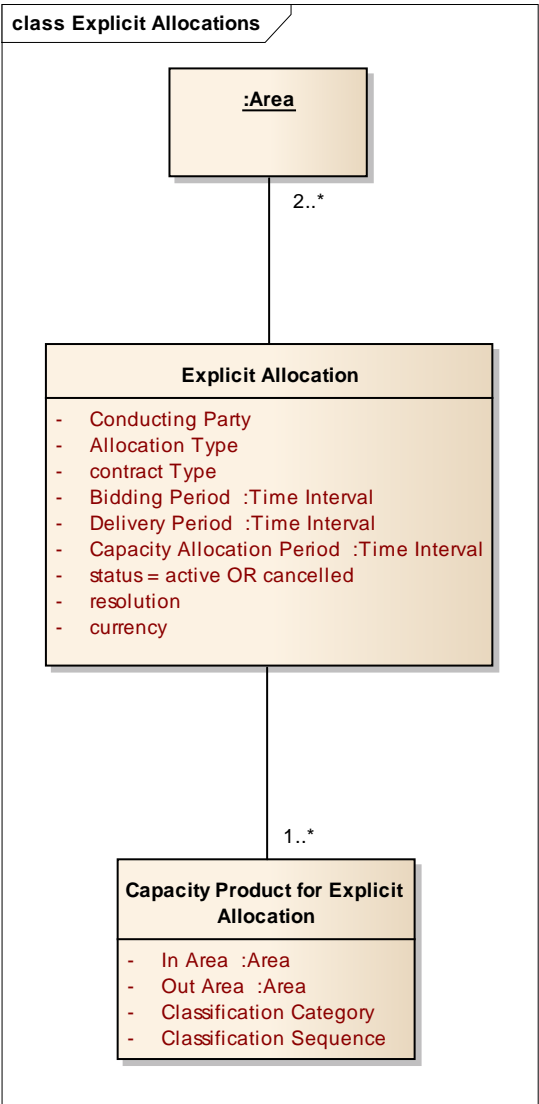
904

905 For implicit allocations the only relevant time horizons are daily and intraday. Optionally, a
 906 Sequence Classification (also referred to as round) may be associated with the allocation.
 907 Capacity calculation method is either NTC-based or flow-based. NTC-based allocations are
 908 further associated with one or several oriented borders, each one consisting of an In and Out
 909 area couple.

910 7.1.2.2 EXPLICIT ALLOCATIONS

911 In explicit allocations the transfer capacity is made available (via an auction, a first-come/first-
 912 serve system, or any another method) in a first step. Energy is traded separately on commodity
 913 markets in a second step. An Explicit Allocation occurs between several (2 to n) Areas and is
 914 optionally associated with a Conducting Party¹².

¹² This is to cater for split auctions



915

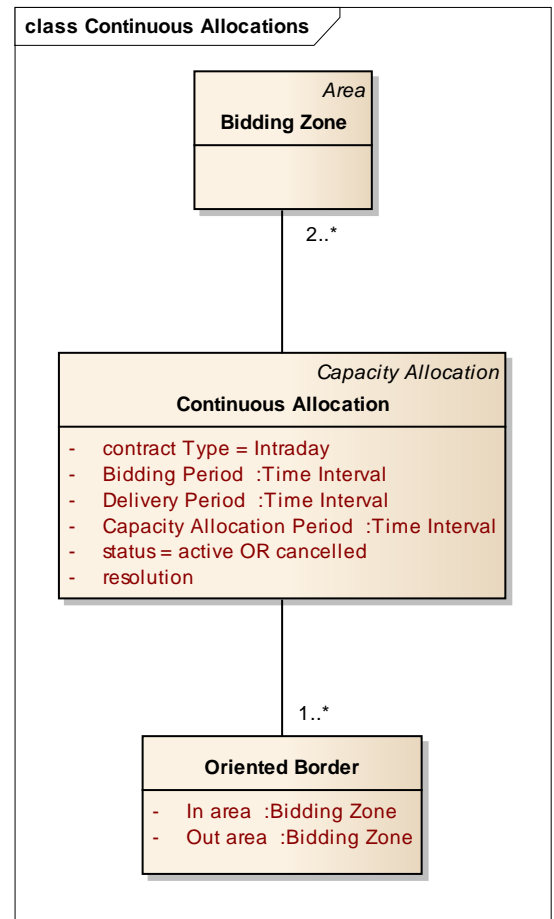
916 An explicit allocation is characterised by its Contract Type (for example Intraday, Daily, Weekly
917 ...). Further, there will be one or several capacity products where each one consists of an
918 oriented border, a Classification_Category (for example, Base, Peak, ...) and a Classification
919 Sequence (by default equal to 1). The purpose of the Classification Sequence is to distinguish
920 several auction rounds offering capacity for exactly the same Delivery Period.

921 Similar to implicit allocations, an oriented border consists of an In and Out area couple.

922

7.1.2.3 CONTINUOUS ALLOCATIONS

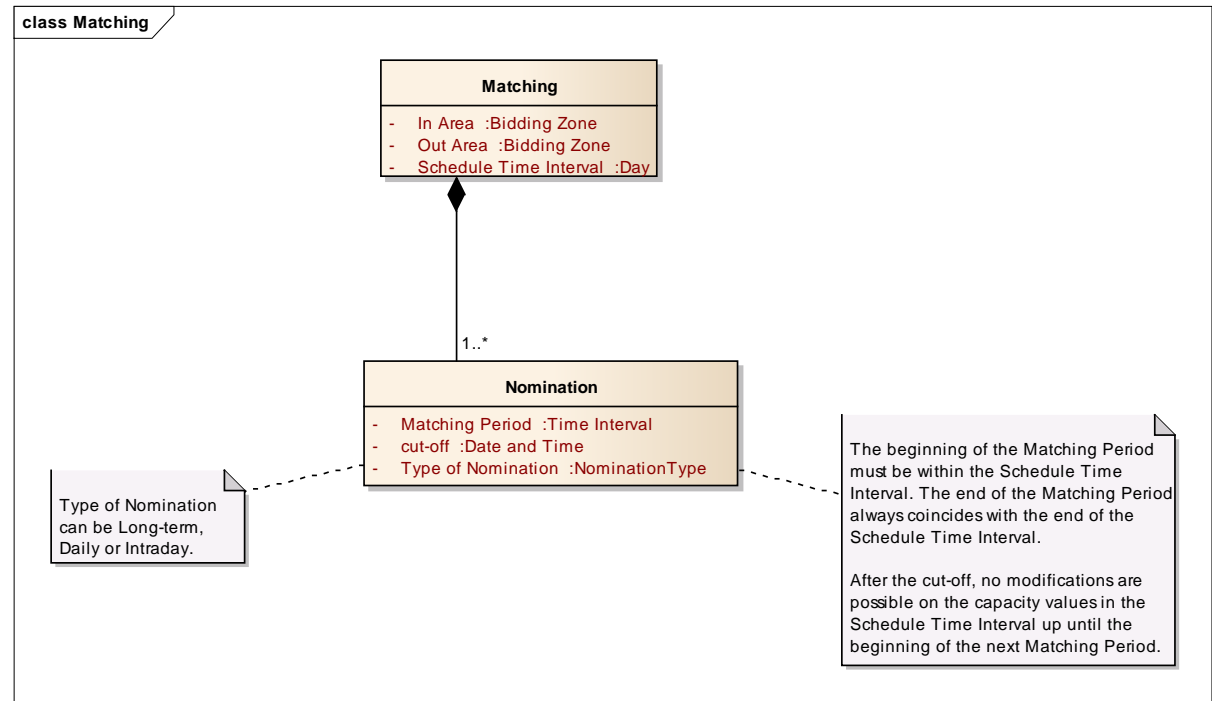
In continuous allocations bids from buyers and sellers are continuously matched while allocating available transmission capacity on the basis of first-come-first/served. A continuous allocation occurs between several (2 to n) Areas.



For continuous allocations, contract type is always intraday. A continuous allocation is associated with one or several oriented borders, each one consisting of an In and Out area couple.

For continuous allocations only offered capacity can be published. No price publication is foreseen.

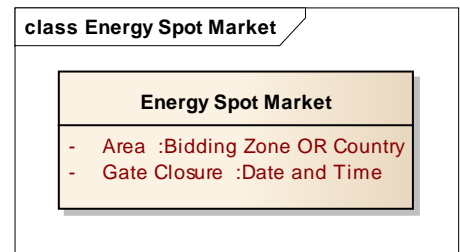
7.1.3 MATCHING



The matching process between TSOs is part of the nomination process (or nomination round). Matching may occur on a long-term, daily and also intraday basis for every couple of In and Out Areas. Matching is performed after the cut-off time. The cut-off time is the deadline for submission of nominations by the market to the respective TSOs.

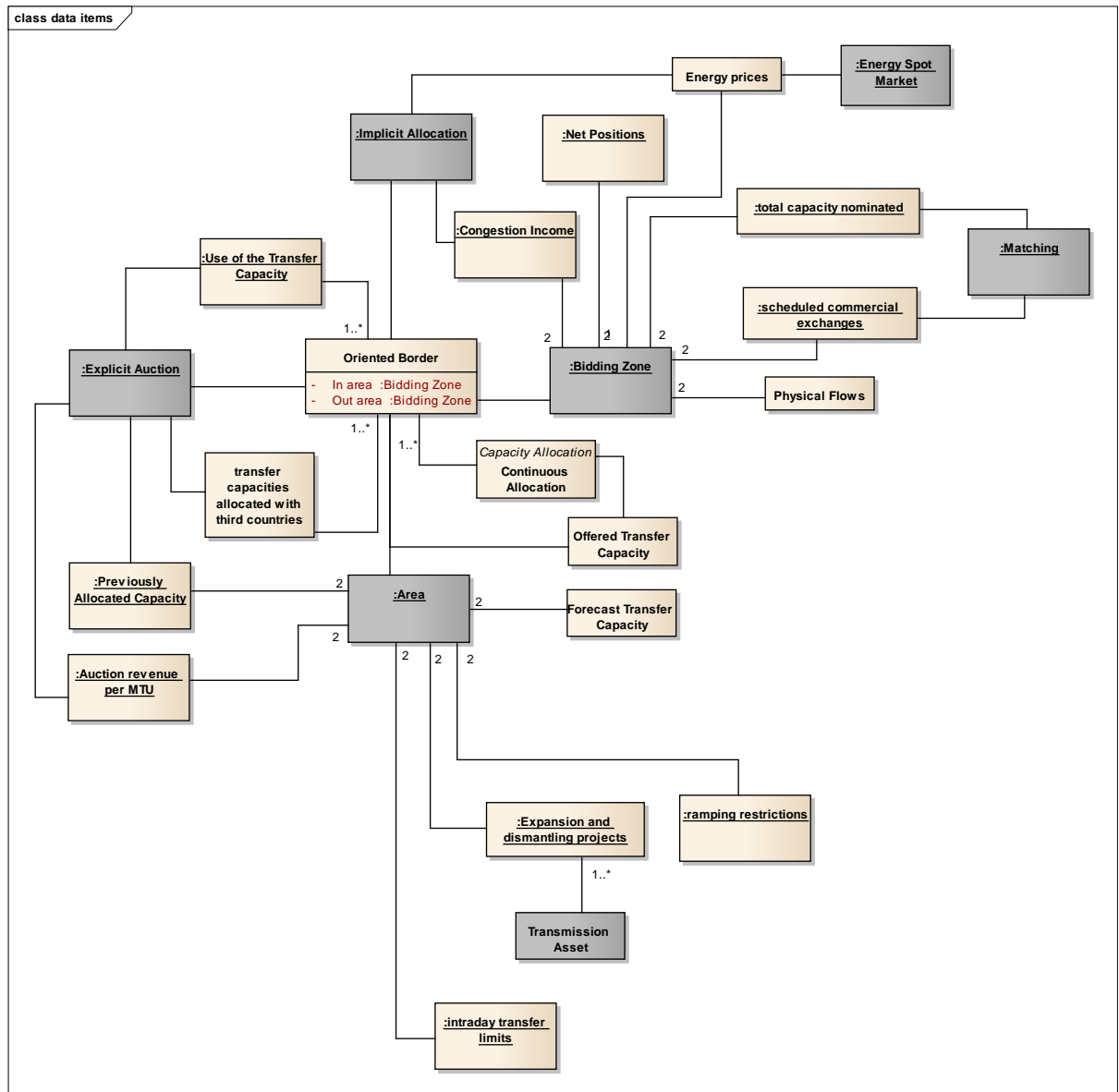
For a given couple of Bidding Zones and day (the Schedule Time Interval), the Matching Period represents the period of the Schedule for which matching process is completed. A Nominations process is considered finished for the Schedule Time Interval after the matching process is complete and until the beginning of the next nomination round with has its own specific Matching Period.

7.1.4 ENERGY SPOT MARKET



947 In every Bidding Zone or Country¹³ there is an Energy Spot Market that has a daily gate
948 closure.

949 7.1.5 DATA ITEMS



950

951 For several data items, applicable Bidding Zones or Areas will be deduced from the oriented
952 borders associated with the given allocation instance. Further, the instance's allocation period
953 will influence the submission deadline. Hence, the configuration of the allocation process will

¹³ This is the case for the bidding zone that covers Germany and Austria.

954 indirectly control monitoring of submission compliance, both in terms of completeness and
955 timing.

956 The applicable areas and submission deadlines of the data items that record offered transfer
957 capacities (chapters 7.8 through 7.13) will depend on the configuration of the allocation
958 process. Forecasted transfer capacities have their own independent configuration of applicable
959 areas and submission deadlines.

960 For implicit allocations, applicable bidding zones and submission deadlines for data item
961 Congestion Income (see chapter 7.24) depend on the implicit auction's capacity allocation
962 period.

963 Similarly for explicit allocations, the applicable areas and submission deadlines for the data
964 items Previously Allocated Capacity (see chapter 7.21), Use of the Transfer Capacity (see
965 chapter 7.18) and Transfer Capacities Allocated with Third Countries (see chapter **Error!**
966 **Reference source not found.**) depend on the explicit allocation's capacity allocation period.

967 The submission deadlines for the data items Total Nominated Capacity (see chapter 7.20) and
968 Scheduled Day-Ahead Commercial Exchanges (see chapter 7.25) depend on the configuration
969 of the matching process.

970 For the data item Energy Prices, (see chapter 7.22), the submission deadlines depend on the
971 Energy Spot Market configuration.

972 7.1.6 PRE-CONFIGURATION

973 The platform administrator at ENTSO-E shall pre-configure the platform with the following
974 reference data:

- 975 - [C-TRM-1] a list of Bidding Zones (e.g. FR). This is the same reference data as in
976 Generation and Load domains.
- 977 - [C-TRM-2] a list of Bidding Zone Aggregations (for Technical Profiles) (e.g. DE-CZ-SK)
- 978 - [C-TRM-3] a list of Technical Profiles (e.g. PL -> DE-CZ-SK)
- 979 - [C-TRM-4] for each Bidding Zone, the Market Time Unit for energy trading
- 980 - [C-TRM-5] for each couple of Areas, the Market Time Unit for capacity trading (if applicable)
- 981 - [C-TRM-6] a list of Regions and for each region the Bidding Zones that constitute the
982 Region
- 983 - [C-TRM-7] a list of Contract Types (for example Intraday, Daily, Weekly, quarterly,
984 semester,...)

- 985 - [C-TRM-8] a list of Classification Categories (for example, Base, Peak, ...)
- 986 - [C-TRM-9] for each Bidding Zone, the Currency. This is used for validation in data item
987 Energy Prices [12.1.d]
- 988 - [C-TRM-10] a list of countries and for each country, the corresponding Control Area(s). This
989 is the same reference data as in Generation and Load domains. It will be used to facilitate
990 search and filtering of published data by country.
- 991 - [C-TRM-11] for each Bidding Zone the country or countries that it covers completely or
992 partially. This is the same reference data as in Load domain. It will be used to facilitate
993 search and filtering of published data by country.
- 994 - [C-TRM-12] a list of valid Roles. This is used to validate Role of Data Provider in the
995 context of Forecast transfer capacity [11.1].
- 996 Data Providers will be responsible for pre-configuring the platform with:
- 997 - Allocations and associated Capacity Products and oriented borders. Details are provided in
998 chapter 7.27
- 999 - For Matching: Per couple of In and Out Bidding Zones, cut-offs and corresponding time
1000 intervals. Details as in chapter 7.1.3
- 1001 - For Energy Spot Markets: Gate closure per Bidding Zone. Details as in chapter 7.1.4

1002 7.1.7 DATA CONTAINER STATUS / DATA STATUS

- 1003 For all data items except the reports [11.3] and [11.4], data follows the “None / Ready for
1004 publication / Missing” scheme if properly declared as expected and if the submission
1005 deadline has been configured.

1006 7.1.8 PUBLICATION

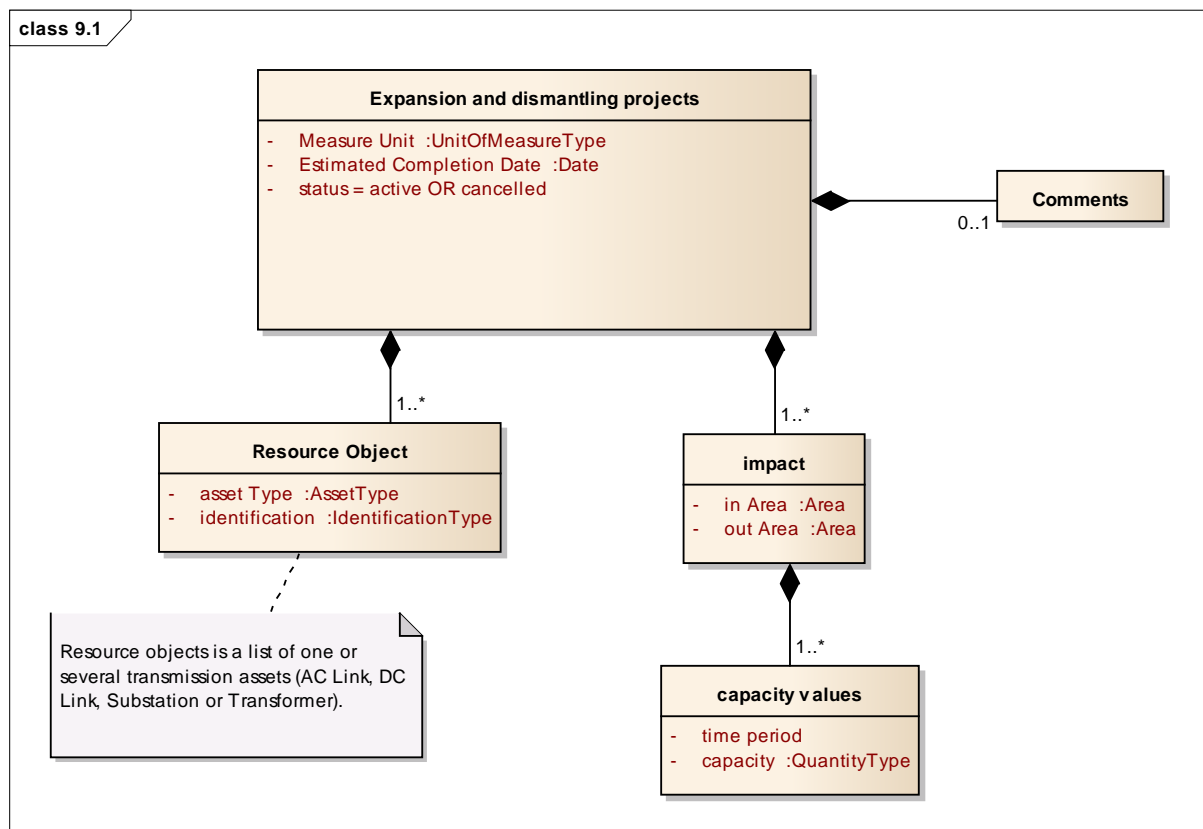
- 1007 For all data items except the report data items [11.3] and [11.4], data shall be available on web
1008 site in all three formats; table, map and chart, unless explicitly stated otherwise in the chapters
1009 dedicated to each data item.

1010

7.2 EXPANSION AND DISMANTLING PROJECTS [9.1]

7.2.1 DATA DESCRIPTION

This item can be described by the following class diagram:



Expansion and dismantling projects are described with the estimated impact on the transfer capacity between two Areas, for each direction. The impact is expressed in a unit of measure (MW). The completion date of the project shall also be estimated.

The concerned transmission assets are described by a list of resource objects. Transmission asset does not necessarily have to be a cross-border line – it could also be internal to the Control Area of the Data Provider.

Status of project is active or cancelled.

Optionally, comments may be provided.

Alternatively, data providers may choose to submit this data as a report, see chapter 7.3.

1024 7.2.2 PRE-CONFIGURATION

- 1025 - A list of Area couples for which the data item "Expansion and Dismantling Projects"
- 1026 may be submitted
- 1027 - For each Area couple, one or several Data Providers

1028 7.2.3 ASSUMPTIONS

- 1029 Transmission Assets have been declared with the mechanism described in chapter 11.11.
- 1030 Monitoring is not feasible for this data item, since projects cannot be anticipated.
- 1031 If more than one Data Provider submits data for given border, those Data Providers will
- 1032 coordinate between themselves the submitted data. Single submission for all of ENTSO-E
- 1033 could also be coordinated at the level of ENTSO-E secretariat.

1034 7.2.4 INTEGRATION

- 1035 - Area couple shall be recognised by the platform
- 1036 - The Data Provider shall be consistent with the identified Area couple
- 1037 - Transmission Assets are recognised by platform
- 1038 - Estimated impact is equal to or greater than 100 MW (configurable)

1039 7.2.5 MONITORING

- 1040 Monitoring is not performed on this data item.

1041 7.2.6 PROCESSING

- 1042 No processing is performed by the platform on this data item.

1043 7.2.7 PUBLICATION

1044 7.2.7.1 PUBLICATION BEHAVIOUR

- 1045 Latest version shall be published, however previous versions shall remain available on
- 1046 platform.

1047 7.2.7.2 FILTERING AND SORTING CRITERIA

- 1048 End user shall be able to select data for display by specifying:

- 1049 - Country (optional - If selected, In and/or Out Areas that at least partially cover the Country
1050 will be used as filtering criteria)
- 1051 - One or two Areas with direction (optional)
- 1052 - year or year range (mandatory)
- 1053 - status (optional)
- 1054 **7.2.7.3 DISPLAY**
- 1055 This data shall be displayed in the following section:
- 1056 Transmission / Expansion and dismantling projects
- 1057 The following attributes of data shall be displayed for all projects whose estimated completion
1058 date falls within the selected year or year range:
- 1059 - Title
- 1060 - Unit of measurement (MW)
- 1061 - status (active or cancelled)
- 1062 - For each couple of Areas and direction, the estimated impact and the estimated date of
1063 completion, and any comments. The concerned assets shall be published as a list, with links
1064 to pages providing further details on each asset.
- 1065 Data shall be displayed in table format only.
- 1066

7.3 EXPANSION AND DISMANTLING PROJECTS (REPORT) [9.1]

7.3.1 DATA DESCRIPTION

This data item consists of a report in the form of a PDF file, describing the expansion and dismantling projects in a given control area. The report has a publication date and a date range for which it is valid. A data provider that wishes to express the impact of projects as a value range would submit this information in a PDF report.

Alternatively, data providers may submit this data in structured format, see chapter 7.2.

7.3.2 PRE-CONFIGURATION

Data Providers shall be able to configure the following reference data on the platform:

- A list of Control Areas
- For each Control Area, the unique Data Provider

7.3.3 ASSUMPTIONS

Data is submitted as a report. No monitoring is performed on this data item.

7.3.4 INTEGRATION

Data Provider shall on the platform's web site, on the same page where these reports are published, be able to upload a PDF file and associated it with one Control Area. Platform shall validate that the Data Provider is authorized for the given Control Area.

7.3.5 MONITORING

No monitoring is performed on this data item.

7.3.6 PROCESSING

No processing is performed on this data item.

7.3.7 PUBLICATION

7.3.7.1 PUBLICATION BEHAVIOUR

Documents are published immediately after upload. All versions shall be published.

1092 **7.3.7.2 FILTERING AND SORTING CRITERIA**

1093 - Country or Control Area (mandatory)

1094 - Date range (optional)

1095 **7.3.7.3 DISPLAY**

1096 This data shall be displayed in the following section:

1097 **Transmission / Expansion and dismantling projects (report)**

1098 Each report shall be available for download by clicking a link.

1099 For every report, the publication date and validity date range shall be displayed.

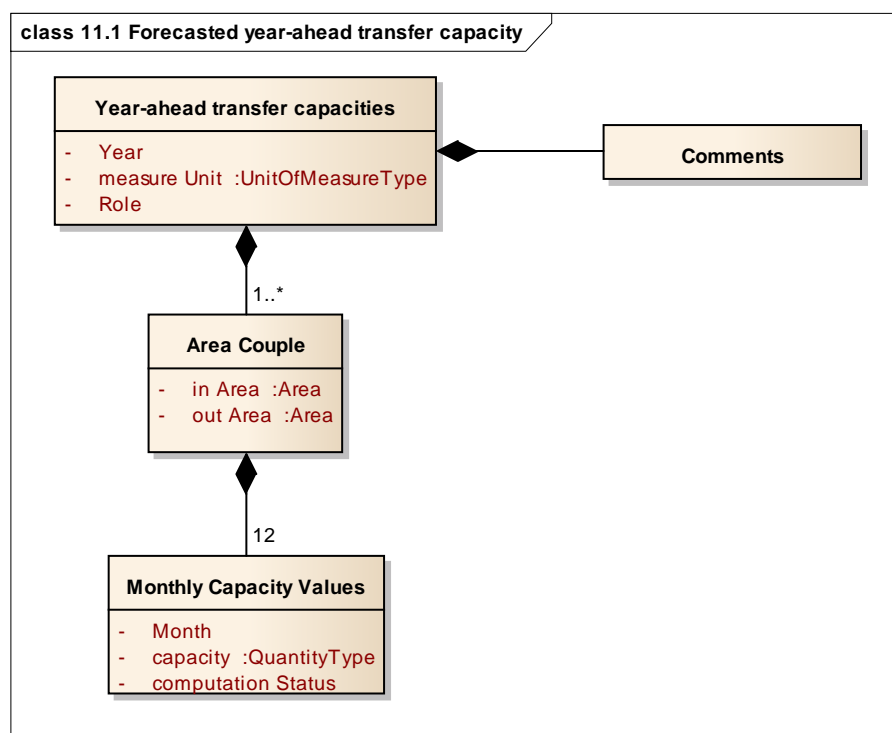
1100

7.4 FORECASTED YEAR-AHEAD TRANSFER CAPACITIES

[11.1]

7.4.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document may cover several area couples.

Forecasted year-ahead transfer capacities are described between an In Area (the Area flows come into) and an out Area (the Area flows come out from), for one year, with a capacity value by month expressed in Measure Unit, together with a computation Status ("minimum value" or "computed minimum value"). Role of Data Provider is included in submission.

Optionally, Forecasted year-ahead transfer capacities can be complemented with comments.

Note: Flow-based parameters are not in scope for year-ahead transfer capacities.

7.4.2 PRE-CONFIGURATION

- A list of Area couples where forecasted year-ahead transfer capacities are expected.

- For each couple of Areas mentioned above, one or several Data Providers.

1116 - For each couple of Areas mentioned above, the yearly submission deadline:

1117 At the latest one week (W-1) before the yearly allocation process

1118 *Example: if the oriented couple of Areas is France Bidding Zone to Germany Bidding Zone,*
1119 *the year is 2013 and if the Yearly Explicit Auction for 2013 has a Capacity Allocation Period*
1120 *from 15th November 2012, 20:00 UTC until 18th November 22:00 UTC, the document shall*
1121 *be submitted before November 8th, 2012, 20:00 UTC.*

1122 or

1123 at the latest December 15 the preceding year at 24:00 UTC.

1124 *Example: if the oriented couple of Areas is France Bidding Zone to Spain Bidding Zone,*
1125 *the year is 2013 and there is no Yearly Explicit Auction for 2013, the document shall be*
1126 *submitted before December 15th, 2012, 24:00 UTC.*

1127 7.4.3 ASSUMPTIONS

1128 Values should be given per month, but a higher resolution is possible (up to the Market Time
1129 Unit used by the couple of Areas).

1130 Submission can be done by multiple Data Providers.

1131 7.4.4 INTEGRATION

1132 - Areas shall be recognised by the platform

1133 - The Data Provider shall be consistent with pre-configuration described in 7.4.2

1134 - The time interval of the submitted document is one year

1135 - Role of Data Provider is recognised, as per [C-TRM-12]

1136 7.4.5 MONITORING

1137 Platform shall monitor that forecasted yearly transfer capacity values are submitted for all area
1138 couples declared in pre-configuration, see section 7.4.2, before the submission deadline
1139 described in same section. If no data has been submitted, all declared Data Providers will be
1140 notified.

1141 7.4.6 PROCESSING

1142 The following processing applies:

1143 - In case the resolution of the submitted document is higher than a month, the lowest value of
1144 the submitted data should be calculated for each month. For example if data is submitted in
1145 daily values a computation must be made to compute the lowest daily value for every given

1146 month of the submitted year. This makes it possible to compare this data with data submitted
1147 with a monthly resolution.

1148 - Once values are computed per month, the platform must apply the following business rule
1149 [PR-11.1], when processing submitted data for a given oriented couple of Areas and month in
1150 order to determine whether data shall be marked as “minimum value” or “computed minimum
1151 value”.

1152 • If data is received for a given couple of Areas from a Data Provider the data will be
1153 marked (computation status) as "minimum value".

1154 • If data is received for the same oriented couple of Areas, from a different Data Provider
1155 the platform must compute the 'minimum' value from the two received values and
1156 isolate this value as the value to be published with a “computed minimum value”
1157 computation status. The previously marked “minimum value” computation status must
1158 be deleted.

1159 • If data is marked as "minimum value" and the same Data Provider sends a new version
1160 to the platform, the platform will consider this latest version for publication by marking
1161 it as “minimum value” and delete the previous “minimum value” computation status.

1162 • If data is computed and marked as "computed minimum value" and either Data Provider
1163 involved sends a new version of the document, the platform must compute the
1164 'minimum' value from the received value and the value from the other Data Provider
1165 and will isolate this value as the value to be published, with the “computed minimum
1166 value” computation status. The “computed minimum value” computation status must
1167 be deleted from the previous version of the value.

1168 • If data is received for a given couple of Areas from a Data Provider with the role
1169 "Capacity Coordinator (CCrd) or "Transmission Capacity Allocator (TCA)", the data will
1170 be marked as "computed minimum value".

1171 • If data is marked as "computed minimum value" and the Data Provider with the role
1172 "CCrd" or "TCA" sends a new version to the platform, the platform will consider this
1173 latest version of the information for display by marking it as "computed minimum value"
1174 and delete from the previous version the “computed minimum value” computation
1175 status.

1176

1177 7.4.7 PUBLICATION

1178 7.4.7.1 PUBLICATION BEHAVIOUR

1179 Data to be published shall be marked with a “minimum value” or “computed minimum value”
1180 computation status. Data without any computation status shall not be published. This rule takes

1181 precedence over the common rule which states that all versions of the data are available on
1182 the platform.

1183 7.4.7.2 FILTERING AND SORTING CRITERIA

1184 Data shall be visually accessed by selecting the following:

1185 Year (Selection is mandatory)

1186 Country (selection is optional: If selected, Areas will be filtered to include only those that
1187 partially or completely cover the Country)

1188 Optionally, user may specify Area, couple of Areas and direction.

1189 7.4.7.3 DISPLAY

1190 This data shall be displayed in the following section:

1191 - **Forecasted transfer capacities / year-ahead**

1192 The following attributes of data shall be displayed:

1193 - Title

1194 - Measurement Unit

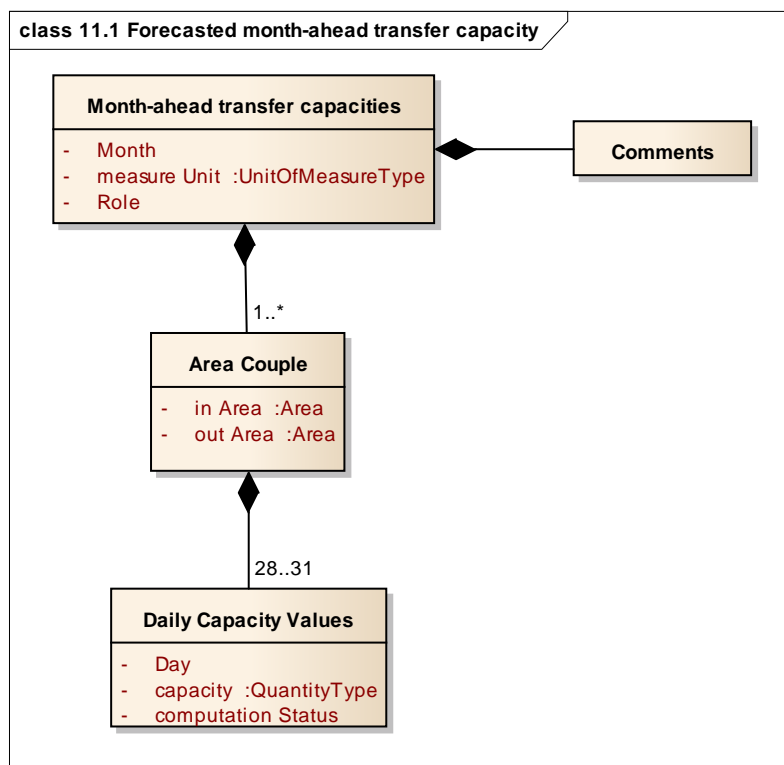
1195 - Comments

1196 - For each oriented couple of Areas the following data is repeated: Areas, direction and for
1197 each month within the selected year, the capacity value and its computation status
1198

7.5 FORECASTED MONTH-AHEAD TRANSFER CAPACITIES [11.1]

7.5.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document may cover several couples of areas.

Forecasted month-ahead transfer capacities are described between an In Area (the Area flows come into) and an out Area (the Area flows come out from), for one month, with a capacity value expressed in Measure Unit for every day, together with a computation Status ("minimum value" or "computed minimum value"). Role of Data Provider is included in submission.

Optionally, forecasted month-ahead transfer capacities can be complemented with comments.

Note: Flow-based parameters are not in scope for month-ahead transfer capacities.

7.5.2 PRE-CONFIGURATION

- A list of Area couples where forecasted month-ahead transfer capacities are expected

- For each couple of Areas mentioned above, one or several Data Providers

- 1214 - For each couple of Areas mentioned above, the monthly submission deadline:
- 1215 For a given month, submission must be done at the latest two working days (D-2) before
- 1216 the monthly allocation process.
- 1217 *Example: if the oriented couple of Areas is France Bidding Zone to Germany Bidding Zone,*
- 1218 *the month is April 2012 and if the Monthly Explicit Auction for April 2012 has a Capacity*
- 1219 *Allocation Period from March 15th 20:00 UTC to March 18th 20:00 UTC, the document shall*
- 1220 *be submitted before March 13th, 2012, 20:00 UTC.*

1221 7.5.3 ASSUMPTIONS

- 1222 Values should be given per day, but a higher resolution is possible (up to the Market Time Unit
- 1223 used by the couple of Areas).
- 1224 Submission can be done by multiple Data Providers.

1225 7.5.4 INTEGRATION

- 1226 - Areas shall be recognised by the platform
- 1227 - The Data Provider shall be consistent with pre-configuration described in 7.5.2
- 1228 - The time interval of the submitted document is one month
- 1229 - Role of Data Provider is recognised, as per [C-TRM-12]

1230 7.5.5 MONITORING

- 1231 Platform shall monitor that forecasted monthly transfer capacity values are submitted for all
- 1232 area couples declared in pre-configuration, see section 7.5.2, before the submission deadline
- 1233 described in same section. If no data has been submitted, all declared Data Providers will be
- 1234 notified.

1235 7.5.6 PROCESSING

- 1236 The following processing applies:
- 1237 - In case the resolution of the submitted document is higher than a day, the lowest value of the
- 1238 submitted data should be calculated for each day. For example if data is submitted per MTU
- 1239 period a computation must be made to compute the lowest daily value for every given day of
- 1240 the submitted month. This makes it possible to compare this data with data submitted with a
- 1241 daily resolution.
- 1242 - Once values are computed per day, the platform must apply the business rule [PR-11.1],
- 1243 refer to chapter 7.4.6, when processing submitted data for a given oriented couple of Areas

1244 and day in order to determine whether data shall be marked as “minimum value” or “computed
1245 minimum value”.

1246 7.5.7 PUBLICATION

1247 7.5.7.1 PUBLICATION BEHAVIOUR

1248 Data to be published shall be marked with a “minimum value” or “computed minimum value”
1249 computation status. Data without any computation status shall not be published. This rule takes
1250 precedence over the common rule which states that all versions of the data are available on
1251 the platform.

1252 7.5.7.2 FILTERING AND SORTING CRITERIA

1253 Data shall be visually accessed by selecting the following:

1254 Month (Selection is mandatory)

1255 Country (selection is optional: If selected, Areas will be filtered to include only those that
1256 partially or completely cover the Country)

1257 Optionally, user may specify Area, couple of Areas and direction.

1258 7.5.7.3 DISPLAY

1259 This data shall be displayed in the following section:

1260 - **Forecasted transfer capacities / month-ahead**

1261 The following attributes of data shall be displayed:

1262 - Title

1263 - Month

1264 - Measurement Unit

1265 - Comments

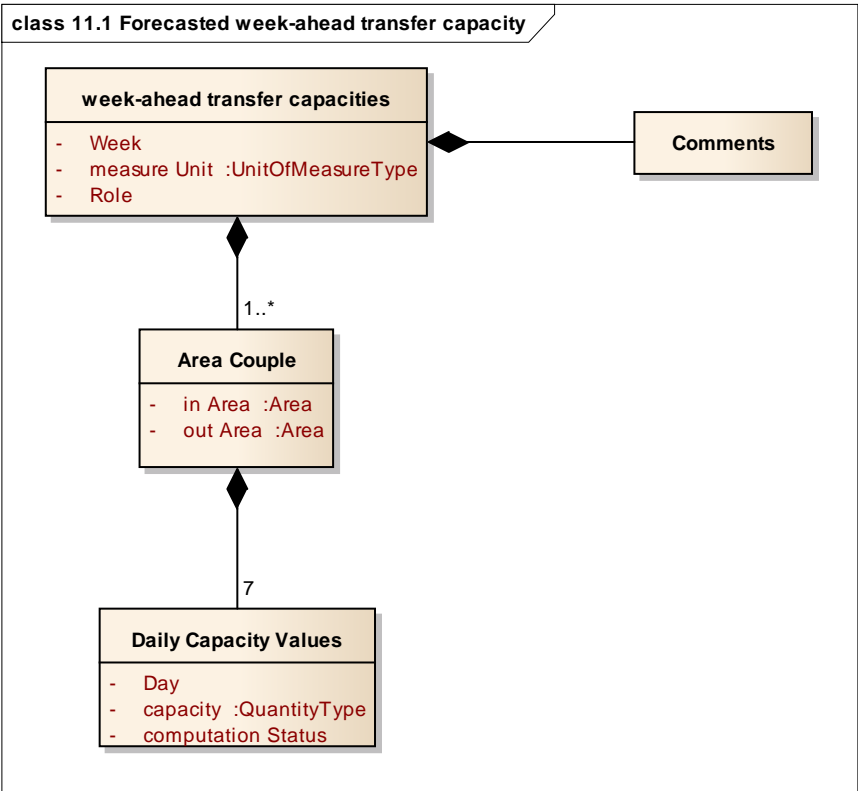
1266 - For each oriented couple of Areas the following data is repeated: Areas, direction and for
1267 each day within the selected month the capacity value and its computation status
1268

7.6 FORECASTED WEEK-AHEAD TRANSFER CAPACITIES

[11.1]

7.6.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document may cover several couples of areas.

Forecasted week-ahead transfer capacities are described between an In Area (the Area flows come into) and an out Area (the Area flows come out from), for one week, with a capacity value per day expressed in Measure Unit, together with a computation Status (“minimum value” or “computed minimum value”). Role of Data Provider is included in submission.

Optionally, forecasted week-ahead transfer capacities can be complemented with comments.

Note: Flow-based parameters are not in scope for week-ahead transfer capacities.

7.6.2 PRE-CONFIGURATION

- A list of Area couples where forecasted week-ahead transfer capacities are expected

- 1283 - For each couple of Areas mentioned above, one or several Data Providers
- 1284 - For each couple of Areas mentioned above, the weekly submission deadline: Friday before
- 1285 the week for which values refer to.
- 1286 *Example: if the oriented couple of Areas is France Bidding Zone to Germany Bidding Zone,*
- 1287 *and the week for which forecasts are to be provided is Week 11, 2012 (12th of March to 18th of*
- 1288 *March), the document shall be submitted before Friday March 9th, 2012, 24:00 UTC.*

1289 7.6.3 ASSUMPTIONS

- 1290 Values should be given per day, but a higher resolution is possible (up to the Market Time Unit
- 1291 used by the couple of Areas).
- 1292 Submission can be done by multiple Data Providers.

1293 7.6.4 INTEGRATION

- 1294 - Areas shall be recognised by the platform
- 1295 - The Data Provider shall be consistent with pre-configuration described in 7.6.2
- 1296 - The time interval of the submitted document is one week
- 1297 - Role of Data Provider is recognised, as per [C-TRM-12]

1298 7.6.5 MONITORING

- 1299 Platform shall monitor that forecasted weekly transfer capacity values are submitted for all area
- 1300 couples declared in pre-configuration, see section 7.6.2, before the submission deadline
- 1301 described in same section. If no data is submitted, all declared Data Providers will be notified.

1302 7.6.6 PROCESSING

- 1303 The following processing applies:
- 1304 - In case the resolution of the submitted document is higher than a day, the lowest value of the
- 1305 submitted data should be calculated for each day. For example if data is submitted in hourly
- 1306 values a computation must be made to compute the lowest hourly value for every given day of
- 1307 the submitted week. This makes it possible to compare this data with data submitted with a
- 1308 daily resolution.
- 1309 - Once values are computed per day, the platform must apply the business rules [PR-11.1],
- 1310 refer to chapter 7.4.6, when processing submitted data for a given oriented couple of Areas
- 1311 and day in order to determine whether data shall be marked as “minimum value” or “computed
- 1312 minimum value”.

1313 7.6.7 PUBLICATION

1314 7.6.7.1 PUBLICATION BEHAVIOUR

1315 Data to be published shall be marked with a “minimum value” or “computed minimum value”
1316 computation status. Data without any computation status shall not be published. This rule takes
1317 precedence over the common rule which states that all versions of the data are available on
1318 the platform.

1319 7.6.7.2 FILTERING AND SORTING CRITERIA

1320 Data shall be visually accessed by selecting the following:

1321 Week (Selection is mandatory)

1322 Country (selection is optional: If selected, Areas will be filtered to include only those that
1323 partially or completely cover the Country)

1324 Optionally, user may specify Area, couple of Areas and direction.

1325 7.6.7.3 DISPLAY

1326 This data shall be displayed in the following section:

1327 - **Forecasted transfer capacities / week-ahead**

1328 The following attributes of data shall be displayed:

1329 - Title

1330 - Week

1331 - Measurement Unit

1332 - Comments

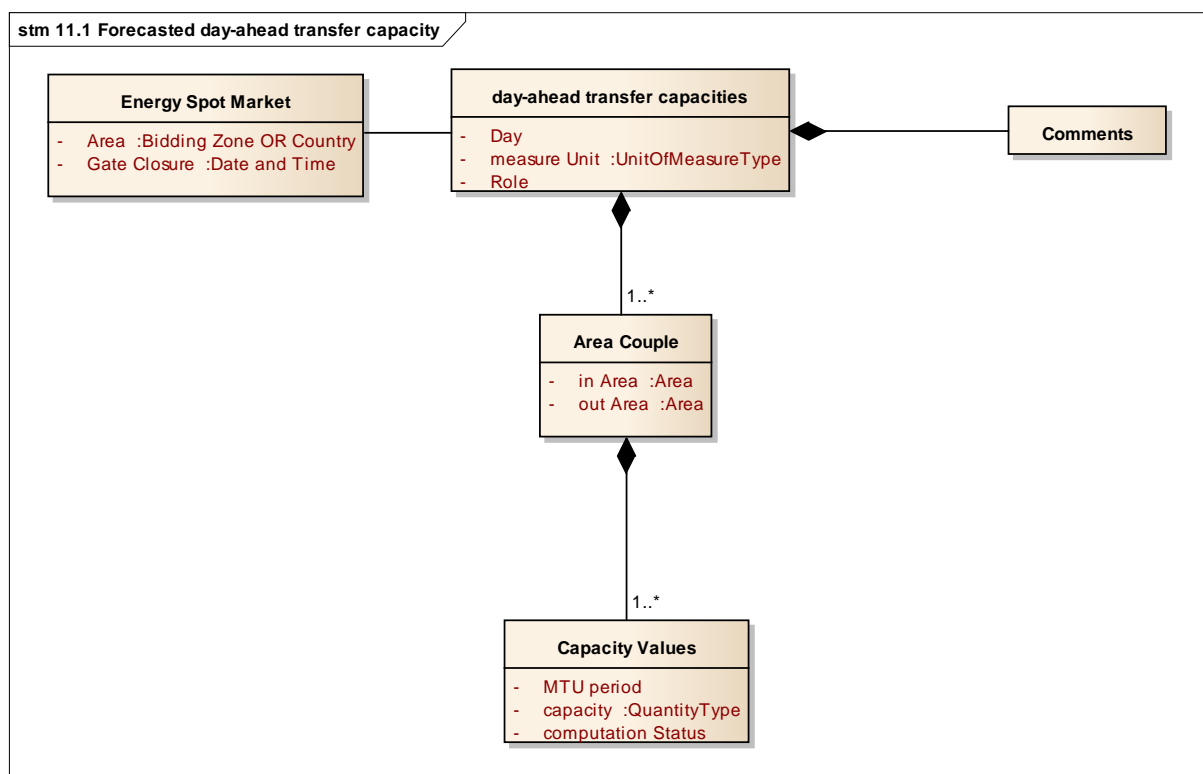
1333 - For each oriented couple of Areas the following data is repeated: Areas, direction and for
1334 each day within the week the capacity value and its computation status
1335

7.7 FORECASTED DAY-AHEAD TRANSFER CAPACITIES

[11.1]

7.7.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document may cover several couples of areas.

Forecasted day-ahead transfer capacities are described between an In Area (the Area flows come into) and an out Area (the Area flows come out from), for one day, with a capacity value per MTU period expressed in Measure Unit, together with a computation Status ("minimum value" or "computed minimum value"). Role of Data Provider is included in submission.

Optionally, day-ahead week-ahead transfer capacities can be complemented with comments.

Note: This is a data item which is not demanded by [1]. Hence, data submissions are voluntary.

7.7.2 PRE-CONFIGURATION

- A list of Area couples where forecasted day-ahead transfer capacities are expected

- For each couple of Areas mentioned above, one or several Data Providers

1351 - For each couple of Areas mentioned above, the daily submission deadline: 1 hour before
1352 spot market gate closure. Refer to chapter 7.1.4 for details on the configuration of energy
1353 spot markets.

1354 *Example: if the oriented couple of Areas is France Bidding Zone to Spain Bidding Zone,*
1355 *and if spot energy market gate closure is 10:00 UTC March 12th for the time interval of*
1356 *March 13th, 2012, the document shall be submitted before March 12th, 2012, 09:00 UTC.*

1357 7.7.3 ASSUMPTIONS

1358 Submission can be done by multiple Data Providers.

1359 7.7.4 INTEGRATION

1360 - Areas shall be recognised by the platform

1361 - The Data Provider shall be consistent with pre-configuration described in 7.6.2

1362 - The time interval of the submitted document is one day

1363 - Role of Data Provider is recognised, as per [C-TRM-12]

1364 7.7.5 MONITORING

1365 Platform shall monitor that forecasted daily transfer capacity values are submitted for all area
1366 couples declared in pre-configuration, see section 7.6.2, before the submission deadline
1367 described in same section. If no data is submitted, all declared Data Providers will be notified.

1368 7.7.6 PROCESSING

1369 The platform must apply the business rules [PR-11.1], refer to chapter 7.4.6, when processing
1370 submitted data for a given oriented couple of Areas and day in order to determine whether
1371 data shall be marked as “minimum value” or “computed minimum value”.

1372 7.7.7 PUBLICATION

1373 7.7.7.1 PUBLICATION BEHAVIOUR

1374 Data to be published shall be marked with a “minimum value” or “computed minimum value”
1375 computation status. Data without any computation status shall not be published. This rule takes
1376 precedence over the common rule which states that all versions of the data are available on
1377 the platform.

1378 7.7.7.2 FILTERING AND SORTING CRITERIA

1379 Data shall be visually accessed by selecting the following:

1380 Day (Selection is mandatory)

1381 Country (selection is optional: If selected, Areas will be filtered to include only those that
1382 partially or completely cover the Country)

1383 Optionally, user may specify Area, couple of Areas and direction.

1384 7.7.7.3 DISPLAY

1385 This data shall be displayed in the following section:

1386 - **Forecasted transfer capacities / day-ahead**

1387 The following attributes of data shall be displayed:

1388 - Title

1389 - Day

1390 - Measurement Unit

1391 - Comments

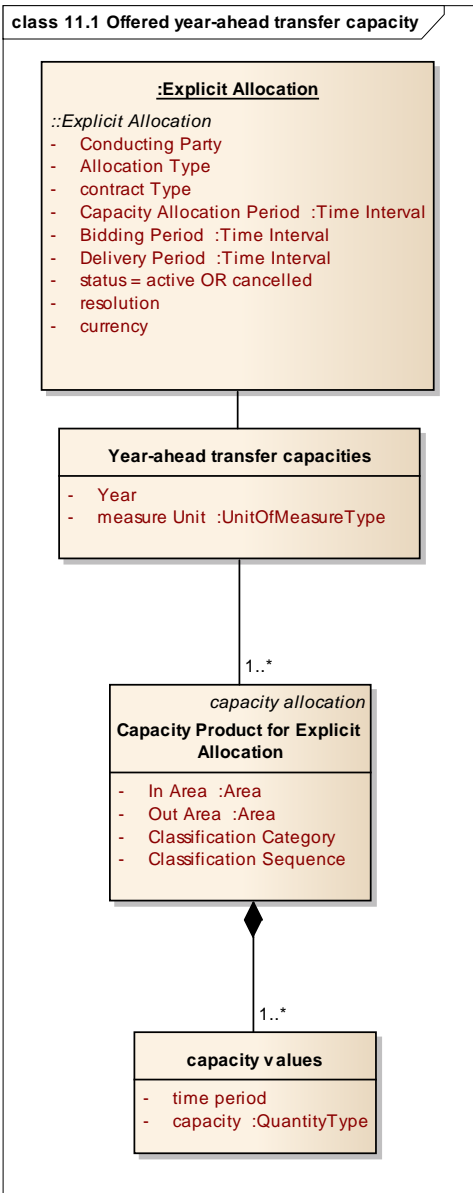
1392 - For each oriented couple of Areas the following data is repeated: Areas, direction and for
1393 each MTU period within the day the capacity value and its computation status
1394

7.8 OFFERED YEAR-AHEAD TRANSFER CAPACITIES

[11.1]

7.8.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document shall cover the offered capacities related to one auction only.

Yearly offered transfer capacities are associated with a yearly explicit transmission auction.

1402 Offered year-ahead transfer capacities are described between an In Area (the Area flows come
1403 into) and an out Area (the Area flows come out), for one year, with a single capacity value for
1404 the whole year expressed in Measure Unit.

1405 Capacity values are submitted separately per Classification Category and Classification
1406 Sequence.

1407 7.8.2 PRE-CONFIGURATION

1408 - Year-ahead transfer capacities are expected for all capacity products associated with a yearly
1409 auction. Refer to chapter 7.27.1.2 for details on the configuration of an auction's capacity
1410 products.

1411 - For each Auction, the Data Provider is the one indicated in the capacity allocation
1412 configuration. Refer to chapter 7.27.1.3 for details.

1413 The submission deadline is one week (W-1) before the yearly allocation process, but no later
1414 than the 15th of December. Therefore, there shall be a default submission deadline set to one
1415 week before the start of the yearly auction's capacity allocation period. Additionally, it must
1416 be possible to specify another deadline that supersedes the default.

1417 *Example: if the oriented couple of Areas is France Bidding Zone to Germany Bidding Zone,*
1418 *the year is 2013 and if the Yearly Explicit Auction for 2013 has a Capacity Allocation Period*
1419 *from November 2012, 15th 20:00 UTC to 18th 22:00 UTC, the document shall be submitted*
1420 *before November 8th, 2012, 20:00 UTC.*

1421 *Example: if the oriented couple of Areas is France Bidding Zone to Spain Bidding Zone,*
1422 *the year is 2013 and there is no Yearly Explicit Auction for 2013, the document shall be*
1423 *submitted before December 15th, 2012, 24:00 UTC.*

1424 The submission deadline is the same for all of the auction's capacity products.

1425 7.8.3 ASSUMPTIONS

1426 A single value should be provided for the whole year, but a higher resolution is possible (up to
1427 the Market Time Unit used by the couple of Areas).

1428 There is not more than one Data Provider per auction instance.

1429 7.8.4 INTEGRATION

1430 - Areas shall be recognised by the platform

1431 - The Data Provider shall be consistent with the auction configuration

1432 - The time interval of the submitted document is one year

1433 7.8.5 MONITORING

1434 For a given instance of an auction, platform shall monitor that offered transfer capacity values
1435 are submitted for all of the auction's capacity products. The submission deadline described in
1436 section 7.8.2 will be monitored.

1437

1438 7.8.6 PROCESSING

1439 No processing is performed on this data item.

1440 7.8.7 PUBLICATION

1441 7.8.7.1 PUBLICATION BEHAVIOUR

1442 No specific publication behaviour applies.

1443 7.8.7.2 FILTERING AND SORTING CRITERIA

1444 Data shall be visually accessed by selecting the following:

1445 Year (Selection is mandatory)

1446 Country (selection is optional: If selected, Areas will be filtered to include only those that
1447 partially or completely cover the Country)

1448 Optionally, user may specify Area, couple of Areas and direction.

1449 7.8.7.3 DISPLAY

1450 This data shall be displayed in the following section:

1451 **- offer of transfer capacities / year-ahead**

1452 The following attributes of data shall be displayed:

1453 - Title

1454 - Measurement Unit

1455 - Classification category

1456 - Classification sequence

1457 - For each oriented border the capacity value

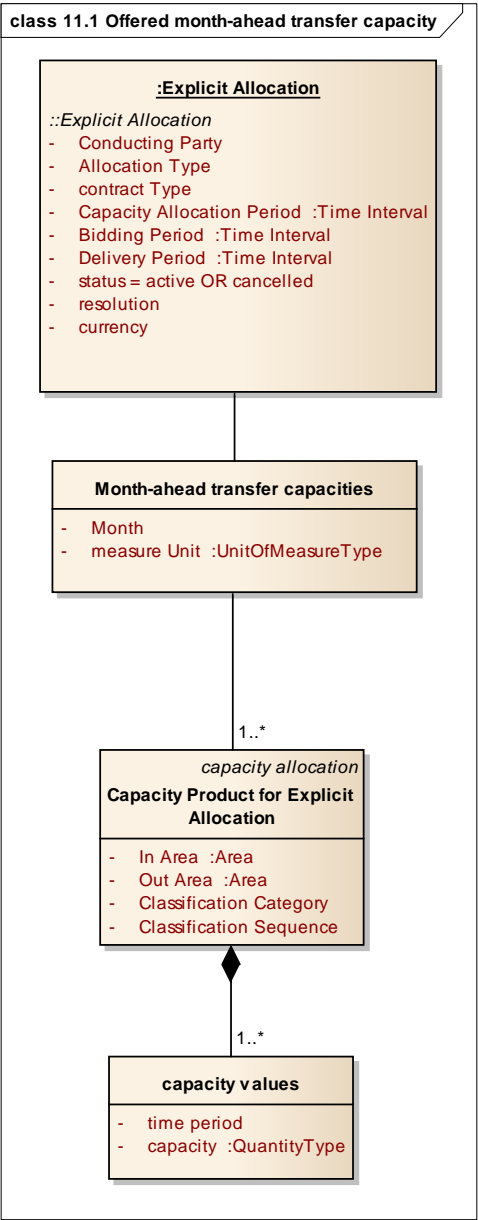
- 1458 If capacity values vary during the year, it shall be possible to expand the view so that they
1459 are displayed as a curve and in a table.

7.9 OFFERED MONTH-AHEAD TRANSFER CAPACITIES

[11.1]

7.9.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document shall cover the offered capacities related to one auction only.

Monthly offered transfer capacities are associated with a monthly explicit transmission auction.

1467 Offered month-ahead transfer capacities are described between an In Area (the Area flows
1468 come into) and an out Area (the Area flows come out from), for one month, with a single
1469 capacity value expressed in Measure Unit.

1470 Capacity values are submitted separately per Classification Category and Classification
1471 Sequence.

1472 7.9.2 PRE-CONFIGURATION

1473 - Month-ahead offered transfer capacities are expected for all of the monthly auction's capacity
1474 products. Refer to chapter 7.27.1.2 for details on the configuration of an auction's capacity
1475 products.

1476 - For each Auction, the Data Provider is the one indicated in the capacity allocation
1477 configuration. Refer to chapter 7.27.1.3 for details.

1478 For a given month, submission must be done at the latest two working days (D-2) before
1479 the start of the Allocation Period of the associated monthly explicit auction bidding.

1480 *Example: if the oriented couple of Areas is France Bidding Zone to Germany Bidding Zone,*
1481 *the month is April 2012 and if the Monthly Explicit Auction for April 2012 has a Capacity*
1482 *Allocation Period from March 15th 20:00 UTC to March 18th 20:00 UTC, the document shall*
1483 *be submitted before March 13th, 2012, 20:00 UTC.*

1484 The submission deadline applies to all capacity products associated with the auction.

1485 7.9.3 ASSUMPTIONS

1486 A single value should be given for the whole month, but a higher resolution is possible (up to
1487 the Market Time Unit used by the couple of Areas).

1488 There is not more than one Data Provider per auction instance.

1489 7.9.4 INTEGRATION

1490 - Areas shall be recognised by the platform

1491 - The Data Provider shall be consistent with the auction configuration

1492 - The time interval of the submitted document is one month

1493 7.9.5 MONITORING

1494 For a given instance of an auction, platform shall monitor that offered transfer capacity values
1495 are submitted for all of the auction's capacity products. There is a submission deadline as
1496 described in section 7.9.2.

1497 7.9.6 PROCESSING

1498 No processing is performed on this data item.

1499 7.9.7 PUBLICATION

1500 7.9.7.1 PUBLICATION BEHAVIOUR

1501 No specific publication behaviour applies.

1502 7.9.7.2 FILTERING AND SORTING CRITERIA

1503 Data shall be visually accessed by selecting the following:

1504 Month (Selection is mandatory)

1505 Country (selection is optional: If selected, Areas will be filtered to include only those that
1506 partially or completely cover the Country)

1507 Optionally, user may specify Area, couple of Areas and direction.

1508 7.9.7.3 DISPLAY

1509 This data shall be displayed in the following section:

1510 - offer of transfer capacities / month-ahead

1511 The following attributes of data shall be displayed:

1512 - Title

1513 - Month

1514 - Measurement Unit

1515 - Classification category

1516 - Classification sequence

1517 - For each oriented border the capacity value

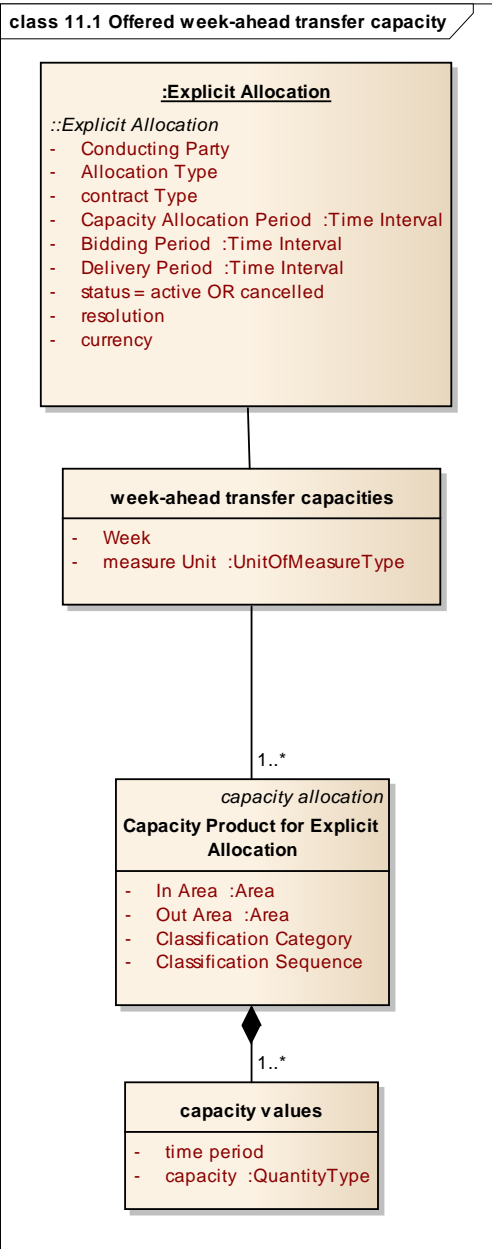
1518 If capacity values vary during the month, it shall be possible to expand the view so that they
1519 are displayed as a curve and in a table.

7.10 OFFERED WEEK-AHEAD TRANSFER CAPACITIES

[11.1]

7.10.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document shall cover the offered capacities related to one auction only.

1526 Weekly offered transfer capacities are associated with a weekly explicit transmission auction.

1527 Offered week-ahead transfer capacities are described between an In Area (the Area flows
1528 come into) and an out Area (the Area flows come out from), for one week, with a single capacity
1529 value for the whole week expressed in Measure Unit.

1530 Capacity values are submitted separately per Classification Category and Classification
1531 Sequence.

1532 7.10.2 PRE-CONFIGURATION

1533 - Week-ahead offered transfer capacities are expected for all of the weekly auction's capacity
1534 products. Refer to chapter 7.27.1.2 for details on the configuration of an auction's capacity
1535 products.

1536 - For each Auction, the Data Provider is the one indicated in the capacity allocation
1537 configuration. Refer to chapter 7.27.1.3 for details.

1538 - The submission deadline for offered week-ahead transfer capacity is one day (D-1) before
1539 the weekly allocation process:

1540 *Example: if the oriented couple of Areas is France Bidding Zone to Germany Bidding Zone,*
1541 *the weekly capacity allocation period starts on Friday 10:00 UTC and the week for which*
1542 *offers are to be provided is Week 11, 2012 (12th of March to 18th of March), the document*
1543 *shall be submitted before Thursday March 8th, 2012, 10:00 UTC.*

1544 The submission deadline is the same for all of the auction's capacity products.

1545 7.10.3 ASSUMPTIONS

1546 A single value should be provided for the whole week, but a higher resolution is possible (up
1547 to the Market Time Unit used by the couple of Areas).

1548 There is not more than one Data Provider per auction instance.

1549 7.10.4 INTEGRATION

1550 - Areas shall be recognised by the platform

1551 - The Data Provider shall be consistent with the capacity allocation configuration

1552 - The time interval of the submitted document is one week

1553 **7.10.5 MONITORING**

1554 For a given instance of an auction, platform shall monitor that offered transfer capacity values
1555 are submitted for all of the auction's capacity products. The submission deadline described in
1556 section 7.10.2 will be monitored.

1557 **7.10.6 PROCESSING**

1558 No processing is performed on this data item.

1559 **7.10.7 PUBLICATION**

1560 **7.10.7.1 PUBLICATION BEHAVIOUR**

1561 No specific publication behaviour applies.

1562 **7.10.7.2 FILTERING AND SORTING CRITERIA**

1563 Data shall be visually accessed by selecting the following:

1564 Week (Selection is mandatory)

1565 Country (selection is optional: If selected, Areas will be filtered to include only those that
1566 partially or completely cover the Country)

1567 Optionally, user may specify Area, couple of Areas and direction.

1568 **7.10.7.3 DISPLAY**

1569 This data shall be displayed in the following section:

1570 **- offer of transfer capacities / week-ahead**

1571 The following attributes of data shall be displayed:

1572 - Title

1573 - Week

1574 - Measurement Unit

1575 - Classification category

1576 - Classification sequence

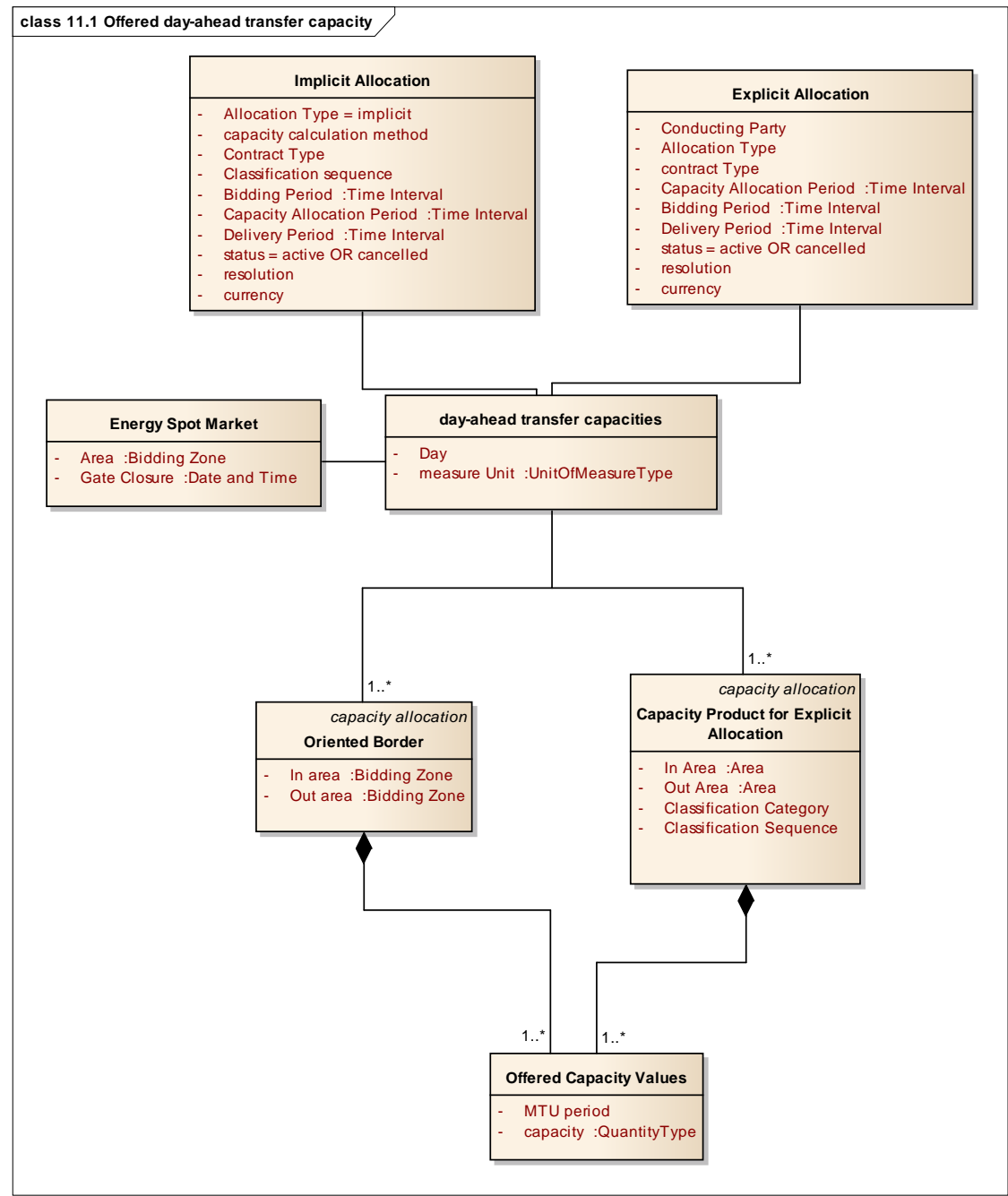
1577 - For each oriented border the capacity value

- 1578 If capacity values vary during the week, it shall be possible to expand the view so that they
1579 are displayed as a curve and in a table.

7.11 Offered DAY-AHEAD TRANSFER CAPACITY [11.1]

7.11.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document shall cover the offered capacities related to one allocation only.

1585 Day-ahead offered transfer capacities are associated with a daily capacity allocation (either
1586 implicit or explicit).

1587 Offered day-ahead transfer capacity is described between an In Area (the Area flows come
1588 into) and an out Area (the Area flows come out from), for one day, by Market Time Unit period,
1589 with a capacity value expressed in Measure Unit.

1590 If there are several Capacity Products, capacity values are submitted separately per
1591 Classification Category and Classification Sequence (this is the case for explicit auctions). For
1592 implicit allocations, optionally the classification sequence may be indicated.

1593 7.11.2 PRE-CONFIGURATION

1594 - Day-ahead transfer capacities are expected for all oriented borders or capacity products
1595 associated with a daily auction. Refer to chapter 7.27.1.2 for details on the configuration of an
1596 allocation's oriented borders and capacity products.

1597 - For each allocation, the Data Provider is the one indicated in the capacity allocation
1598 configuration. Refer to chapter 7.27.1.3 for details.

1599 The submission deadline for offered day-ahead transfer capacity is 1 hour (H-1) before
1600 energy spot market gate closure. Refer to chapter 7.1.4 for details on the configuration of
1601 energy spot markets.

1602 *Example: if the oriented couple of Areas is France Bidding Area to Germany Bidding Area,*
1603 *and if spot energy market gate closure is 10:00 UTC March 12th for the time interval of*
1604 *March 13th, 2012, the document shall be submitted before March 12th, 2012, 09:00 UTC.*

1605 7.11.3 ASSUMPTIONS

1606 There is not more than one Data Provider per auction instance.

1607 The deadline determined by spot market gate closure is the same for In Area and Out Area.

1608 7.11.4 INTEGRATION

1609 - Areas shall be recognised by the platform

1610 - The Data Provider shall be consistent with the allocation configuration

1611 - The time interval of the submitted document is one day

1612 - Resolution is coherent with the auction configuration

1613 7.11.5 MONITORING

1614 For a given instance of an auction, platform shall monitor that transfer capacity values are
1615 submitted for all oriented borders or capacity products associated with the allocation. The
1616 submission deadline as described in section 7.11.2 will be monitored.

1617 If classification sequence is defined for an implicit allocation, monitoring shall verify that values
1618 are submitted accordingly.

1619 7.11.6 PROCESSING

1620 No processing is performed on this data item.

1621 7.11.7 PUBLICATION

1622 7.11.7.1 PUBLICATION BEHAVIOUR

1623 No specific publication behaviour applies.

1624 7.11.7.2 FILTERING AND SORTING CRITERIA

1625 Data shall be visually accessed by selecting the following:

1626 Day (Selection is mandatory)

1627 Country (selection is optional: If selected, Areas will be filtered to include only those that
1628 partially or completely cover the Country)

1629 Optionally, user may specify Area, couple of Areas and direction.

1630 7.11.7.3 DISPLAY

1631 This data shall be displayed in the following section:

1632 - offer of transfer capacities / Day-ahead

1633 The following attributes of data shall be displayed:

1634 - Title

1635 - Day selection

1636 - Measurement Unit

1637 - Classification category (for explicit auctions only)

1638 - Classification sequence (always for explicit auctions and when applicable for implicit
1639 allocations)

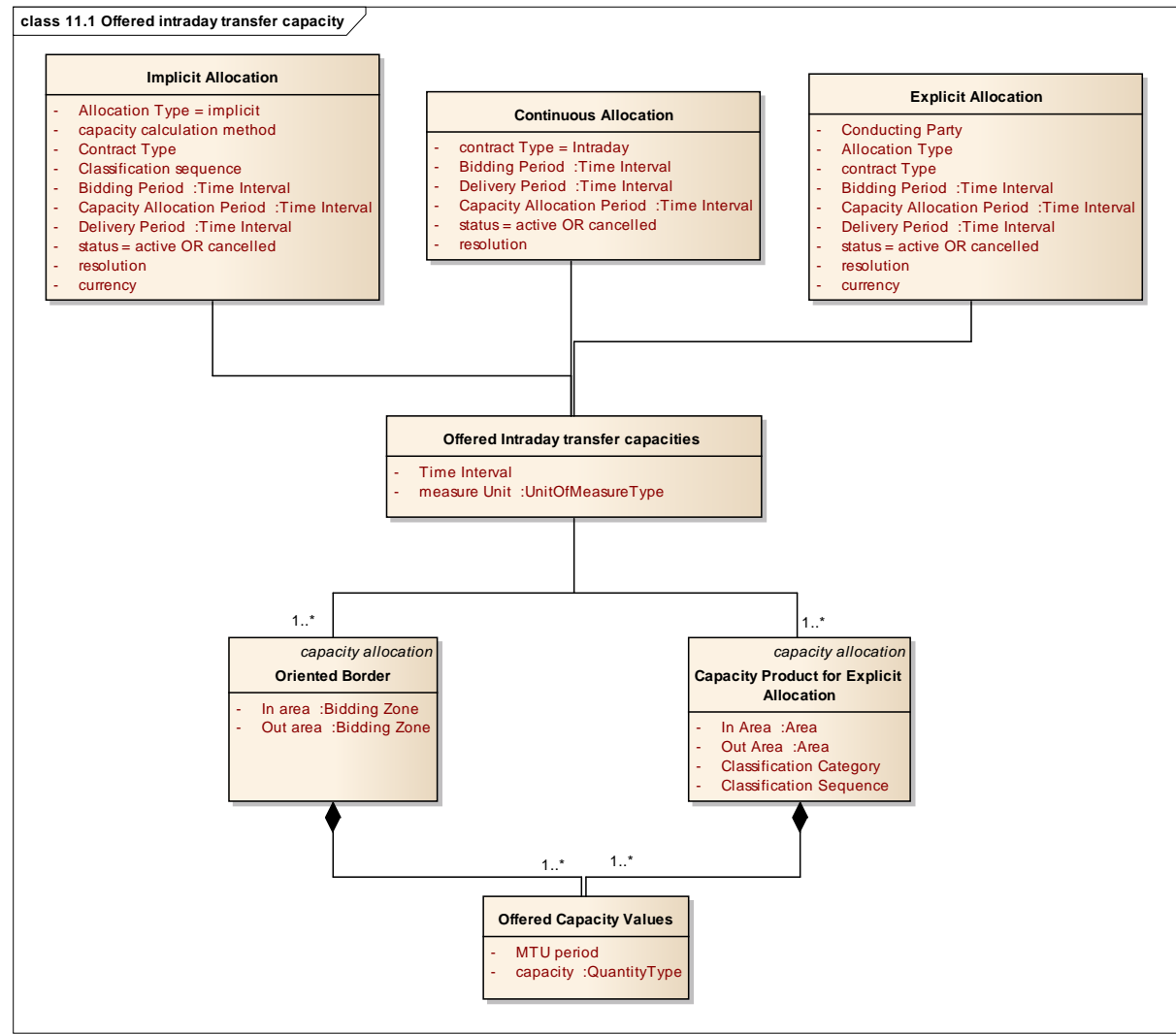
1640 - For each oriented border and for each Market Time Unit within the selected day the capacity
1641 value

1642

7.12 Offered INTRADAY TRANSFER CAPACITY [11.1]

7.12.1 DATA DESCRIPTION

This item can be described by the following class diagram:



Intraday offered transfer capacities are associated with an intraday explicit or implicit capacity allocation as well as with continuous allocations.

Offered intraday transfer capacities are described between an In Area and an Out Area, for a time interval spanning up to 29 hours. Values are provided for each MTU Period, with a capacity value expressed in Measure Unit (MW).

1653 For explicit allocations, capacity values are submitted separately per Classification Category
1654 and Classification Sequence. For implicit allocations, optionally a classification sequence may
1655 be indicated.

1656 For continuous allocations, if there are updates to the offered capacity a timestamp shall be
1657 included. Each updated set of values shall be submitted with its timestamp to the transparency
1658 platform.

1659 7.12.2 PRE-CONFIGURATION

1660 - Intraday transfer capacities are expected for all oriented borders or capacity products
1661 associated with the intraday capacity allocation. Refer to chapter 7.27.1.2 for details on the
1662 configuration of an auction's oriented borders and capacity products.

1663 - For each capacity allocation, the Data Provider is the one indicated in the capacity
1664 allocation configuration. Refer to chapter 7.27.1.3 for details.

1665 - The submission deadline for offered intraday transfer capacity is 15 minutes before the start
1666 of the capacity allocation period for the first allocation. For any subsequent intraday
1667 allocations, the deadline is 15 minutes before the start of the capacity allocation period. For
1668 continuous allocations, submissions will be performed close to real-time, for example 5
1669 minutes before the start of the allocation period.

1670 *Example: If the oriented couple of Areas is France to Germany Bidding Zones, and if*
1671 *intraday capacity allocation periods are as follows for day D:*

1672 - *1st Capacity Allocation Period: D-1, 18:00-19:00 UTC for the delivery period D, 00:00-*
1673 *24:00 UTC*

1674 - *2nd Capacity Allocation Period: D, 03:00-04:00 UTC for the delivery period D, 05:00-24:00*
1675 *UTC*

1676 - *3rd Capacity Allocation Period: D, 09:00-10:00 UTC for the delivery period D, 11:00-24:00*
1677 *UTC*

1678 - *4th Capacity Allocation Period: D, 15:00-16:00 UTC for the delivery period D, 17:00-24:00*
1679 *UTC*

1680 - *5th Capacity Allocation Period: D, 20:00-21:00 UTC for the delivery period D, 22:00-24:00*
1681 *UTC*

1682 *Data shall be submitted for the delivery period D, 00:00-24:00 UTC, no later than D-1,*
1683 *17:45 UTC. Data shall be submitted for the delivery period D, 05:00-24:00 UTC, by D,*
1684 *02:45 UTC, etc.*

1685 The submission deadline is the same for all oriented borders or capacity products
1686 associated with the capacity allocation.

1687 7.12.3 ASSUMPTIONS

1688 There is not more than one Data Provider per capacity allocation instance.

1689 7.12.4 INTEGRATION

1690 - Areas shall be recognised by the platform

1691 - The Data Provider shall be consistent with the capacity allocation configuration

1692 - The time interval in the document shall be up to one day

1693 - Resolution is coherent with the auction configuration

1694 7.12.5 MONITORING

1695 For a given instance of an allocation, platform shall monitor that offered transfer capacity
1696 values are submitted for all oriented borders or capacity products associated with the
1697 allocation.

1698 7.12.6 PROCESSING

1699 No processing is performed on this data item.

1700 7.12.7 PUBLICATION

1701 7.12.7.1 PUBLICATION BEHAVIOUR

1702 The most recent values of the offered capacity shall be published on the Transparency
1703 Platform at least once every 15 minutes. If no update has occurred during a given quarter hour,
1704 no values will be published for that quarter hour. The entire evolution of the offered capacity
1705 shall be available for download no later than 24 hours after the end of the allocation period.

1706 7.12.7.2 FILTERING AND SORTING CRITERIA

1707 Data shall be visually accessed by selecting the following:

1708 Allocation type: Explicit, implicit or continuous (single choice)

1709 Day (Selection is mandatory)

1710 Country (selection is optional: If selected, Areas will be filtered to include only those that
1711 partially or completely cover the Country)

1712 Couple of Areas and direction (mandatory).

1713 7.12.7.3 DISPLAY

1714 This data shall be displayed in the following section:

1715 - **offer of transfer capacities / Intraday**

1716 The following attributes of data shall be displayed:

1717 - Title

1718 - Selected day

1719 - Measurement Unit

1720 - Classification category (for explicit auctions only)

1721 - Classification sequence (always for explicit auctions and when applicable for implicit
1722 allocations)

1723 - For each oriented border and for each Market Time Unit period within the selected day, the
1724 capacity value

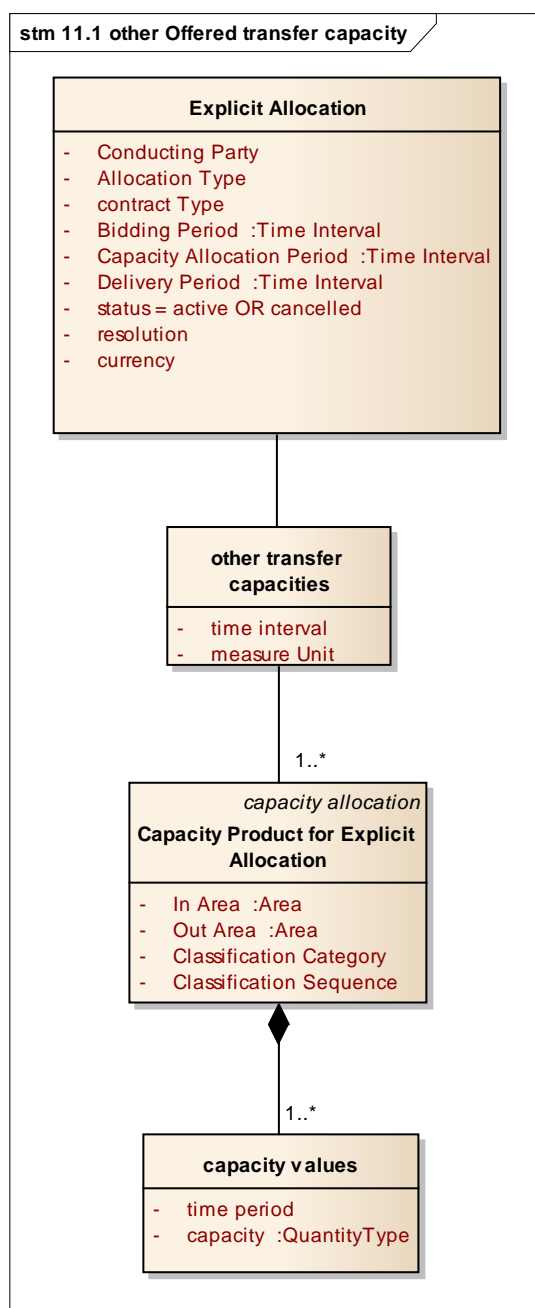
1725 - For continuous allocations: If there were updates to the offered capacity, the most recent
1726 capacity values at the end of every quarter hour.

1727
1728 For continuous allocations: When downloading the entire evolution of the offered capacity, all
1729 updates to the capacity values are included, along with their timestamps.

7.13 OTHER OFFERED TRANSFER CAPACITIES [11.1]

7.13.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document shall cover the offered capacities related to one allocation only.

1735 Other offered transfer capacities are associated with a semester, quarter, weekend and other
1736 explicit transmission allocations that are not covered by the data items described in chapters
1737 7.8 through 7.12.

1738 Other offered transfer capacities are described between an In Area (the Area flows come into)
1739 and an out Area (the Area flows come out from), during a time interval corresponding to the
1740 allocation's delivery period, with a single capacity value for the whole time interval expressed
1741 in Measure Unit.

1742 Capacity values are submitted separately per Classification Category and Classification
1743 Sequence.

1744 7.13.2 PRE-CONFIGURATION

1745 - Other offered transfer capacities are expected for all of the explicit allocation's capacity
1746 products. Refer to chapter 7.27.1.2 for details on the configuration of an auction's capacity
1747 products.

1748 - For each allocation, the Data Provider is the one indicated in the capacity allocation
1749 configuration. Refer to chapter 7.27.1.3 for details.

1750 - The submission deadline for other offered transfer capacities is a configurable time before
1751 the allocation process:

1752 *Example: The oriented couple of Areas is Netherlands Bidding Zone to Belgium Bidding*
1753 *Zone, the weekend capacity allocation period starts on Friday 10:00 UTC and deadline is*
1754 *D-1. The weekend for which offers are to be provided is 17th of March to 18th of March. The*
1755 *document shall be submitted before Thursday March 15th, 2012, 10:00 UTC.*

1756 The submission deadline is the same for all of the allocation's capacity products.

1757 7.13.3 ASSUMPTIONS

1758 A single value should be provided for the whole time interval, but a higher resolution is possible
1759 (up to the Market Time Unit used by the couple of Areas).

1760 There is not more than one Data Provider per auction instance.

1761 7.13.4 INTEGRATION

1762 - Areas shall be recognised by the platform

1763 - The Data Provider shall be consistent with the capacity allocation configuration

1764 - The time interval of the submitted document corresponds to the capacity allocation's delivery
1765 period

1766 7.13.5 MONITORING

1767 For a given instance of an allocation, platform shall monitor that offered transfer capacity
1768 values are submitted for all of the auction's capacity products. The submission deadline
1769 described in section 7.13.2 will be monitored.

1770 7.13.6 PROCESSING

1771 No processing is performed on this data item.

1772 7.13.7 PUBLICATION

1773 7.13.7.1 PUBLICATION BEHAVIOUR

1774 No specific publication behaviour applies.

1775 7.13.7.2 FILTERING AND SORTING CRITERIA

1776 Data shall be visually accessed by selecting the following:

1777 Contract Type (Selection is mandatory)

1778 Time interval (Selection is mandatory)

1779 Country (selection is optional: If selected, Areas will be filtered to include only those that
1780 partially or completely cover the Country)

1781 Optionally, user may specify Area, couple of Areas and direction.

1782 7.13.7.3 DISPLAY

1783 This data shall be displayed in the following section:

1784 **- offer of transfer capacities / other**

1785 The following attributes of data shall be displayed:

1786 - Title

1787 - Contract Type

1788 - Time interval

1789 - Measurement Unit

1790 - Classification category

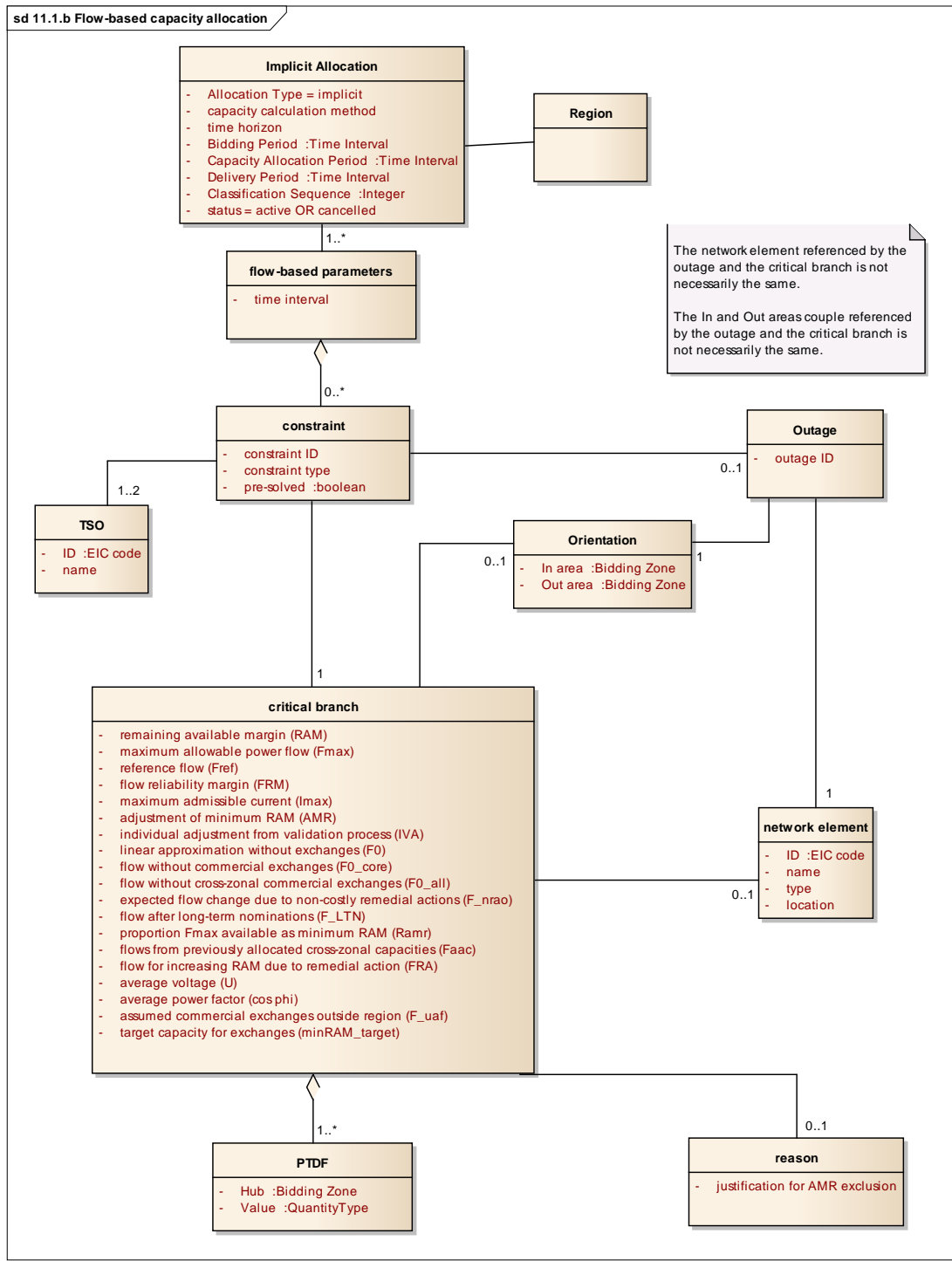
1791 - Classification sequence

- 1792 - For each oriented border the capacity value
- 1793 If capacity values vary during the time interval, it shall be possible to expand the view so that
- 1794 they are displayed as a curve and in a table.

7.14 Flow-based Capacity Allocation [11.1.B]

7.14.1 DATA DESCRIPTION

This item can be described by the following class diagram:



- 1799 The document shall contain the flow-based parameters related to one allocation instance only.
1800 The interval covered by the document header shall coincide with the delivery period of the
1801 allocation instance.
- 1802 The time horizon of the allocation instance may be: Yearly, monthly, daily or intraday.
- 1803 The following time intervals shall be supported: MTU period for daily and intraday time
1804 horizons, month for monthly time horizon and year for yearly time horizon.
- 1805 For a given time interval, the flow-based parameters consist of zero, one or several constraints.
1806 Each constraint has an ID and is either pre-solved or not. When applicable, it shall be indicated
1807 that the constraint is external, anonymous or combined dynamic.
- 1808 For both critical branches and outages, the In and Out areas are published (referred to as
1809 Orientation in diagram above), unless the constraint is anonymous. The In and Out areas are
1810 the same in case of a network element internal to a bidding zone.
- 1811 External, anonymous and combined dynamic constraints are not explicitly published as such.
1812 The objective of the indicator described above is to ensure data consistency and facilitate its
1813 validation. These types of constraints will not contain any references to network elements for
1814 the critical branch and will not contain any outage. Further, an anonymous constraint will not
1815 contain any Orientation for the critical branch.
- 1816 The TSO(s) that introduced the constraint are indicated. This is normally only one TSO but
1817 may be two for cross-border constraints.
- 1818 A constraint consists of exactly one critical branch and may optionally be associated with
1819 exactly one outage. An outage has an ID and consists of exactly one network element. A critical
1820 branch corresponds to exactly one network element.
- 1821 For a critical branch, the following attributes are always published:
- 1822 - remaining available margin (RAM)
 - 1823 - maximum allowable power flow (Fmax)
 - 1824 - reference flow (Fref)
 - 1825 - flow reliability margin (FRM)
 - 1826 - adjustment of minimum RAM (AMR)
 - 1827 - the power transfer distribution factors PTDF per bidding zone
 - 1828 - maximum admissible current (Imax) in Ampere
 - 1829 - individual value adjustment resulting from TSO validation process (IVA)
- 1830
- 1831 The following attributes are applicable to long-term (monthly and yearly) allocations only:
- 1832 - Average voltage (U) expressed in kV
 - 1833 - Average power factor (cos phi) as a percentage
- 1834
- 1835 The following attributes are applicable and mandatory only to the Core region:

- 1836 - flow without commercial exchanges F0_wce (also referred to as F0_core)
- 1837 - flow without commercial exchanges between bidding zones or other synchronous
- 1838 areas (F0_all)
- 1839 - the percentage of Fmax that need to be available as minimum RAM (Ramr)

1840

1841 The following attributes are applicable to day-ahead and intraday allocations only in Core

1842 region:

- 1843 - expected flow change due to non-costly remedial actions (F_nrao)
- 1844 - flow after consideration of long-term nominations (F_LTN)
- 1845 - coordinated value adjustment (CVA)
- 1846 - flow resulting from assumed commercial exchanges outside the region (F_uaf)
- 1847 - target capacity for exchanges by deducing the exchanges not related to the region
- 1848 (minRAM_target) expressed as a percentage

1849

1850 The following attributes are applicable and mandatory only to allocations the Nordic region:

- 1851 - the linear approximation of a flow in the reference net position in a situation without any
- 1852 cross-zonal exchanges (F0)
- 1853 - flow for increasing the RAM due to remedial action (FRA)

1854

1855 The following attributes are applicable and mandatory only to day ahead and intraday

1856 allocations in the Nordic region and to long-term allocations in both regions:

- 1857 - flows resulting from previously allocated cross-zonal capacities (Faac)

1858 The reference flow (Fref) and the expected flow change due to non-costly remedial actions

1859 (F_nrao) may be positive or negative.

1860 The PTDF may be positive as well as negative.

1861 Unless explicitly indicated otherwise above, all values are expressed in MW.

1862 For each published network element the name, type, location and EIC are published. If

1863 calculation failed for a given time interval, no network elements whatsoever are published for

1864 that time interval.

1865 7.14.2 PRE-CONFIGURATION

1866 - The flow-based parameters are expected for the Region covered by the flow-based allocation.

1867 Refer to chapter 7.27.1.1 for details on the configuration of the flow-based allocation.

1868 - For a given flow-based capacity allocation, the Data Provider is the one indicated in the

1869 capacity allocation configuration. Refer to chapter 7.27.1.3 for details.

1870 The network elements are recorded in the Transparency Platform's master data. Data

1871 provider will submit the EIC code only, while all related information shall be retrieved from

1872 master data. For external, combined dynamic and anonymous constraints no EIC codes are
1873 expected and hence no master data can or will be retrieved.

1874 The submission deadline for the flow-based parameters shall be configurable by data
1875 providers and will be related to the allocation period.

1876 *Example: For the daily flow-based allocation in the CWE region, the allocation starts at*
1877 *12:00 CET D-1. The submission deadline could then be set to one hour in advance, i.e. to*
1878 *11:00 CET D-1.*

1879 *Example: For the yearly allocation, the allocation starts on December 17 12:00 CET D-1.*
1880 *The submission deadline should then be set one week in advance, i.e. to December 10 at*
1881 *12:00 CET D-1.*

1882 *Example: For the monthly allocation, the allocation starts on the last day of the previous*
1883 *month. The submission deadline should then be set two working days in advance.*

1884

1885 7.14.3 ASSUMPTIONS

1886 There is not more than one Data Provider for an instance of a flow-based capacity allocation.

1887 7.14.4 INTEGRATION

1888 - Region and bidding zones shall be recognised by the platform

1889 - Referenced network elements are recognised by the platform

1890 - The Data Provider shall be consistent with the allocation configuration

1891 - The time interval of the header in the submitted document covers exactly the allocation
1892 instance's delivery period

1893 Due to the size of the data, data provider may make separate submissions per time interval.
1894 Publications on Transparency Platform will always cover the entire delivery period though,
1895 hence incomplete data will not be published.

1896 7.14.5 MONITORING

1897 For a given instance of a flow-based capacity allocation, platform shall monitor that the flow-
1898 based parameters are submitted. The submission deadline as described in section 7.14.2 will
1899 be monitored.

1900 7.14.6 PROCESSING

1901 No processing is performed on this data item.

1902 **7.14.7 PUBLICATION**

1903 **7.14.7.1 PUBLICATION BEHAVIOUR**

1904 No specific publication behaviour applies.

1905 **7.14.7.2 FILTERING AND SORTING CRITERIA**

1906 Data shall be visually accessed by selecting the following:

1907 Year, Month or Day, depending on Time horizon (Selection is mandatory)

1908 Region (selection is mandatory)

1909 Time horizon: Yearly, monthly daily or intraday (selection is mandatory)

1910 Constraint is pre-solved: Yes/No (selection is optional)

1911 Area or In/Out area couple (optional)

1912 **7.14.7.3 DISPLAY**

1913 If selection criteria have been provided for Area or In/Out area couple, those shall be used to
1914 filter for the published values in Orientation. If Orientation of either critical branch or Outage
1915 matches, the data shall be visible.

1916 This data shall be displayed in the following section:

1917 **- flow-based capacity allocation**

1918 The following attributes of data shall be displayed:

1919 - Title

1920 - Region

1921 - Month or Day selection

1922 - Time horizon

1923 - Measurement Units

1924 - For each time interval, the flow-based parameters are presented; the list of constraint IDs,
1925 indicator whether constraint is pre-solved or not.
1926

1927 - For each constraint: If applicable, an outage ID and the associated network element.

1928 - For each critical branch and outage: In and Out areas, when available

- 1929 - For each constraint: The network element associated with the critical branch (when provided),
1930 the applicable attributes (depending on region and time horizon) and the PTDF value for each
1931 bidding zone.
- 1932 - For every network element its EIC code, name, location, type

1933 7.15 CROSS-BORDER CAPACITY FOR DC LINKS [11.3] – 1934 RAMPING RESTRICTIONS

1935 7.15.1 DATA DESCRIPTION

1936 This data item consists of a report in the form of a PDF file, describing the ramping or other
1937 restrictions applied on a Transmission Asset of type DC Link. The two areas connected by the
1938 DC Link are also recorded inside the report.

1939 7.15.2 PRE-CONFIGURATION

1940 Data Providers shall be able to configure the following reference data on the platform:

- 1941 - A list of Control Areas where ramping restrictions may apply
- 1942 - For each Control Area, the unique Data Provider

1943 7.15.3 ASSUMPTIONS

1944 Data to be submitted as a report. No monitoring is performed on this data item, due to its
1945 unpredictability.

1946 7.15.4 INTEGRATION

1947 Data Provider shall on the platform's web site, on the same page where these reports are
1948 published, be able to upload a PDF file and associated it with one Control Area. Platform
1949 shall validate that the Data Provider is authorized for the given Control Area.

1950 7.15.5 MONITORING

1951 No monitoring is performed on this data item.

1952 7.15.6 PROCESSING

1953 No processing is performed on this data item.

1954 7.15.7 PUBLICATION

1955 7.15.7.1 PUBLICATION BEHAVIOUR

1956 Documents are published immediately after upload. All versions shall be published.

1957 **7.15.7.2 FILTERING AND SORTING CRITERIA**

1958 - Country or Control Area (mandatory)

1959 - Date range (optional)

1960 **7.15.7.3 DISPLAY**

1961 This data shall be displayed in the following section:

1962 **Transmission / Cross Border Capacity of DC Links**

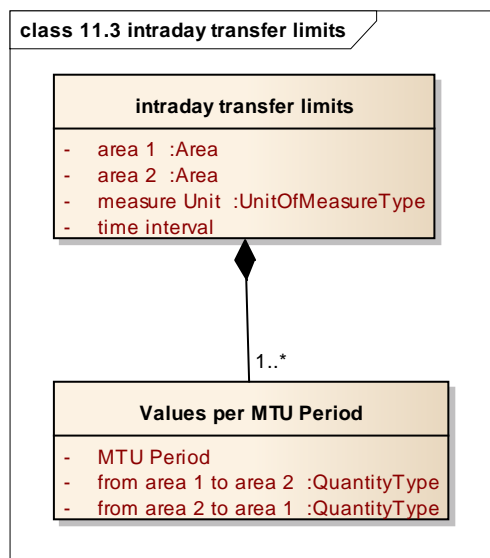
1963 Each report shall be available for download by clicking a link.

1964 For every report, the publication date shall be displayed.

1965

1966 7.16 CROSS-BORDER CAPACITY FOR DC LINKS [11.3] – 1967 INTRADAY TRANSFER LIMITS

1968 7.16.1 DATA DESCRIPTION



1969

1970 Document may contain data related to more than one area couple.

1971 For two connected Areas, this data item describes intraday transfer limits in each direction,
1972 applied on Transmission Assets of type DC Link, during a time interval up to one day. Values
1973 are provided per MTU period and expressed in measure unit (MW).

1974 Note that the transfer limits may be negative.

1975 7.16.2 PRE-CONFIGURATION

1976 Data Providers shall be able to configure the following reference data on the platform:

- 1977 - A list of Area couples where ramping restrictions may apply
- 1978 - For each Area couple, up to two Data Providers

1979 7.16.3 ASSUMPTIONS

1980 It is not necessary to provide references or details of the concerned transmission asset (of type
1981 DC Link).

1982 No monitoring is performed on this data item, due to its unpredictability.

1983 **7.16.4 INTEGRATION**

1984 Platform shall validate that it recognises the Area couple.

1985 Platform shall validate that the Data Provider is authorized for the given Area couple.

1986 Time interval covered by document is up to one day.

1987 **7.16.5 MONITORING**

1988 No monitoring is performed on this data item.

1989 **7.16.6 PROCESSING**

1990 If two Data Providers submit data relating to the same Area couple, platform shall for each
1991 direction and MTU period select the minimum value for publication.

1992 **7.16.7 PUBLICATION**

1993 **7.16.7.1 PUBLICATION BEHAVIOUR**

1994 Documents are published immediately after upload.

1995 Latest version only shall be published.

1996 **7.16.7.2 FILTERING AND SORTING CRITERIA**

1997 - Area couple (mandatory)

1998 - Date or date range (mandatory)

1999 **7.16.7.3 DISPLAY**

2000 This data shall be displayed in the following section:

2001 **Transmission / Cross Border Capacity of DC Links**

2002 The following attributes of the data shall be displayed:

2003 - Title

2004 - Unit of measurement (MW)

2005 - Area couple

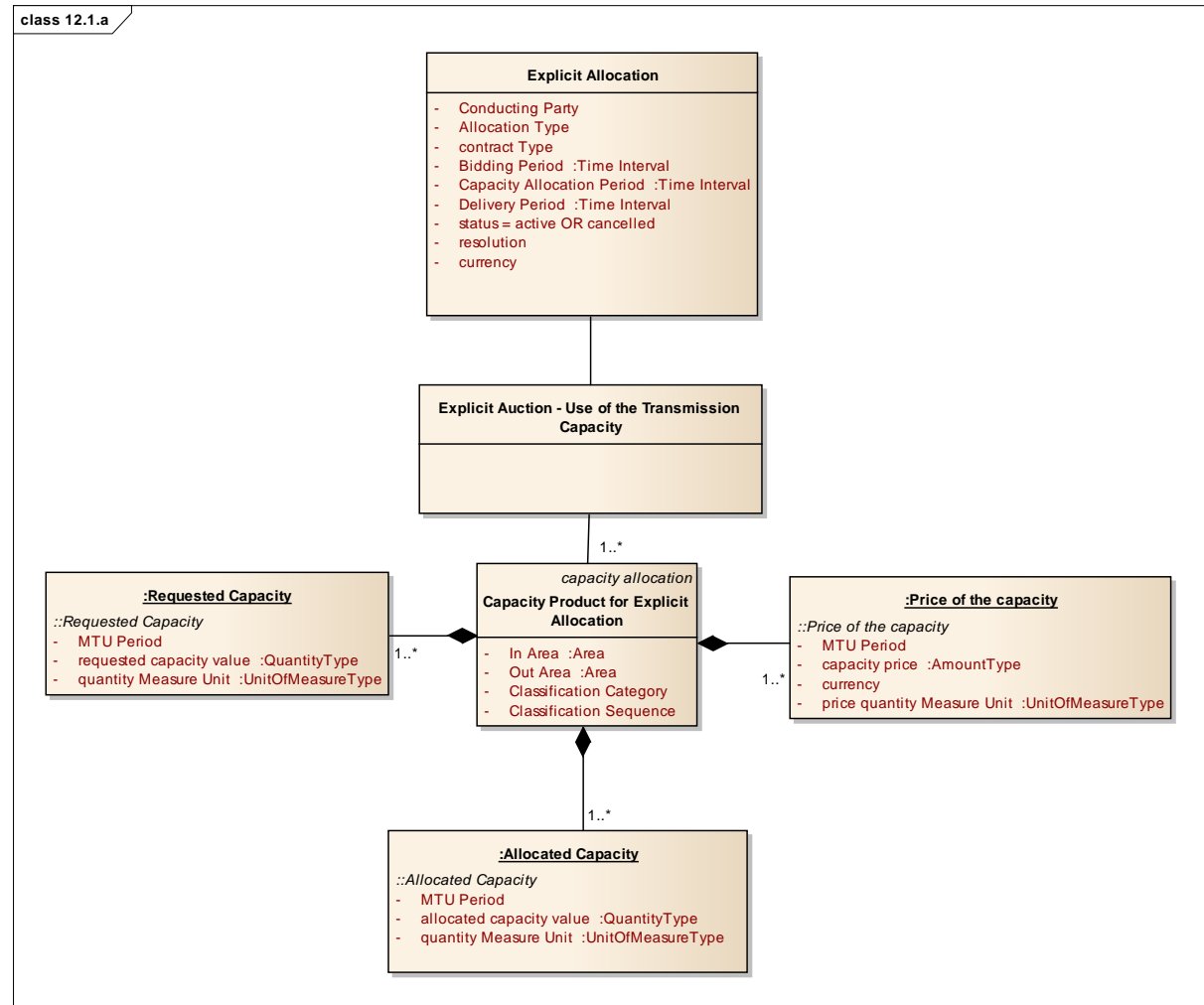
2006 - For each direction between the Areas and for each MTU period, the transfer limit

2007	7.17 YEARLY REPORT ABOUT CRITICAL NETWORK
2008	ELEMENTS LIMITING OFFERED CAPACITIES [11.4]
2009	7.17.1 DATA DESCRIPTION
2010	This data item consists of a file that shall be associated with one or several Control Areas. No
2011	monitoring will be performed.
2012	7.17.2 PRE-CONFIGURATION
2013	ENTSO-E administrator shall be able to manage the reference data that indicates the list of
2014	allowed Data Providers per Control Area for this data item.
2015	7.17.3 INTEGRATION
2016	Data Provider shall on the platform's web site, on the same page where these reports are
2017	published, be able to upload a file and associated it with one or several Control Areas.
2018	Platform shall validate combination of Control Area and Data Provider.
2019	7.17.4 PUBLICATION
2020	7.17.4.1 PUBLICATION BEHAVIOUR
2021	Documents are published immediately after upload.
2022	All versions shall be published.
2023	7.17.4.2 FILTERING AND SORTING CRITERIA
2024	End user shall be able to select data for display by specifying:
2025	- Country or Control Area (optional)
2026	- Publication year (optional)
2027	7.17.4.3 DISPLAY
2028	This data shall be displayed in the following section:
2029	Transmission / Critical network elements
2030	Each report shall be available for download by clicking a link.
2031	For every report, the publication date shall be displayed.
2032	

7.18 EXPLICIT ALLOCATIONS - USE OF THE TRANSFER
CAPACITY [12.1.A] AND [12.1.H]

7.18.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document shall contain data related to one auction only. Results of an Explicit Auction¹⁴ are given by capacity product for the Explicit Auction's Delivery Period, i.e. the time interval

¹⁴ The Explicit Auction in question is the same as the Explicit Auction described in « Total Capacity Already Allocated [12.1.c] »

2041 during which the transfer capacity will be used. The length of the time interval depends on the
2042 auction's Contract Type (one year, one month, one day, etc.). The results consist of:

2043 - the Requested Capacity with a quantity in quantity Measure Unit (MW) for each Market Time
2044 Unit period within the time interval

2045 - the Allocated Capacity with a quantity in quantity Measure Unit (MW) for each Market Time
2046 Unit period within the time interval

2047 - the Price of the Capacity with a price in Currency per Price Quantity Measure Unit (MWh) for
2048 each Market Time Unit period within the time interval

2049 For allocations with 3rd countries published in accordance with TR art. 12.1.h, allocated
2050 capacity is the only applicable result. Either In Area or Out Area shall be a third country The
2051 allocated capacity may be described as a constant value or may vary during the delivery
2052 period, with a resolution up to MTU.

2053 7.18.2 PRE-CONFIGURATION

2054 - For intra-EU allocations: For each Explicit Auction instance's capacity products, the data item
2055 "Use of the Transmission Capacity", shall be expected by the platform. Refer to chapter
2056 7.27.1.2 for details on the configuration of an auction's capacity products.

2057 - For allocations with 3rd countries: If for a given auction either the In Area or Out Area of all
2058 capacity products is a third country, the data "Transfer Capacities allocated with third countries"
2059 may be configured as expected by the platform¹⁵.

2060 - For each Explicit Auction instance, the unique allowed Data Provider is the one indicated by
2061 the capacity allocation configuration. Refer to chapter 7.27.1.3 for details.

2062 - For each explicit auction instance, the submission deadline:

- 2063 • For a given Explicit Auction instance, submission must be done at the latest one hour
2064 (H+1) after the end of the Capacity Allocation Period.

2065 *Example: if the capacity product is Yearly Base 1 between France and German Bidding*
2066 *Zones for the time interval of year 2013, and if the Capacity Allocation Period ends on*
2067 *November 17th, 2012, at 08:00 UTC, the document describing the use of transmission*
2068 *capacity in this time interval must be submitted before November 17th, 2012, 09:00 UTC.*

2069 Submission deadline is the same for all results associated with all of the Auction instance's
2070 capacity products.

¹⁵ This may be controlled manually by platform administrator.

2071 **7.18.3 ASSUMPTIONS**

2072 No specific assumptions apply to this data item.

2073 **7.18.4 INTEGRATION**

2074 - The Data Provider shall be consistent with the configuration of the capacity allocation

2075 - Capacity Product shall be consistent with the configuration of the capacity allocation

2076 - Currency shall be consistent with the configuration of the capacity allocation

2077 - The time interval described in the document shall be complete (e.g. a whole day for the results
2078 of a Daily Auction)

2079 - If there is no allocated capacity for a given time interval, prices do not have to be included

2080 - Resolution is coherent with the auction configuration

2081 **7.18.5 MONITORING**

2082 The submission deadline described in section 7.18.2 shall be monitored for each of the
2083 auction's capacity products.

2084 **7.18.6 PROCESSING**

2085 No processing is performed by the platform at this step.

2086 **7.18.7 PUBLICATION**

2087 **7.18.7.1 PUBLICATION BEHAVIOUR**

2088 No particular behaviour applies to this data item.

2089 **7.18.7.2 FILTERING AND SORTING CRITERIA**

2090 Data shall be visually accessed by selecting the following:

2091 - Contract Type (Selection is Mandatory)

2092 - Country (selection is optional: If selected, Areas will be filtered to include only those that
2093 partially or completely cover the Country)

2094 - Areas couple (Selection is Mandatory)

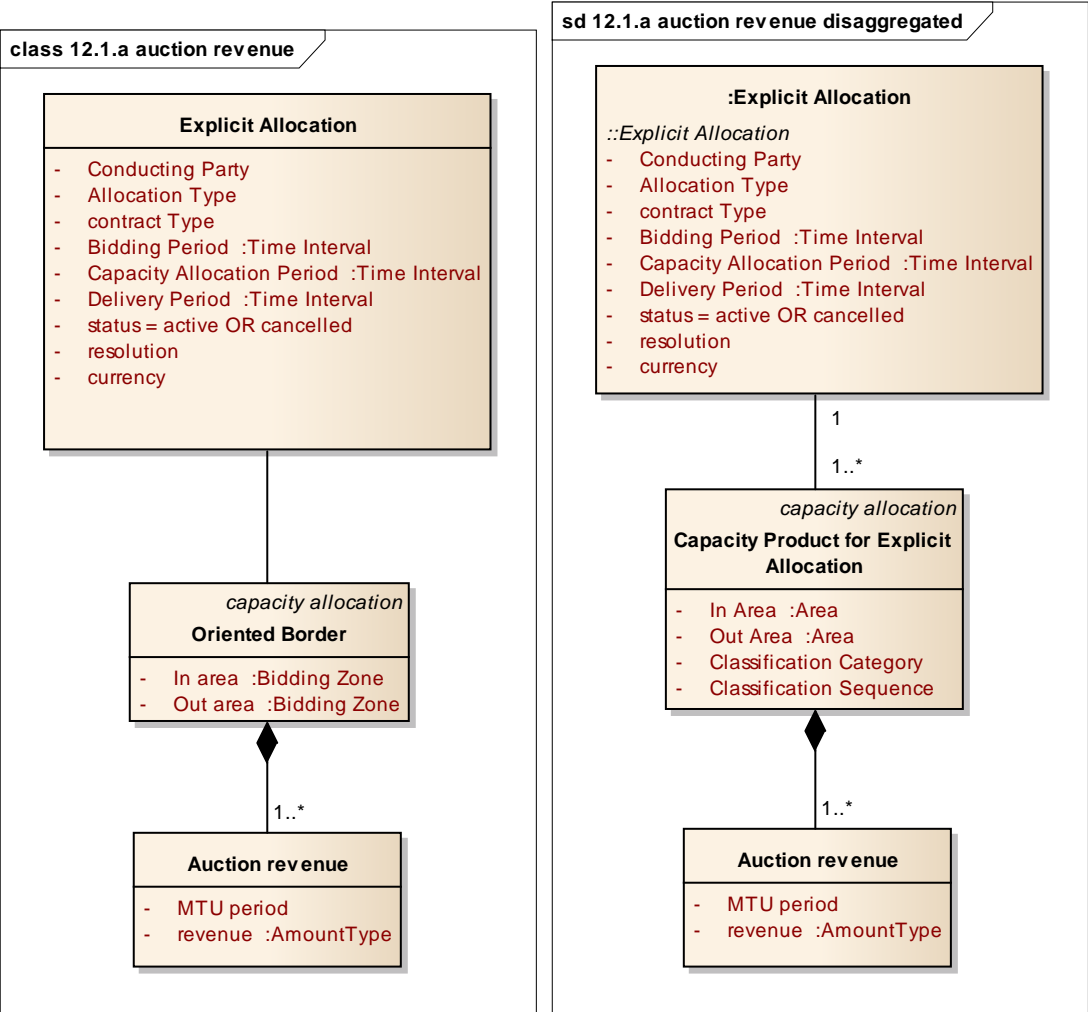
2095 - Direction (both by default) (Selection is Mandatory)

- 2096 - Classification Category (Selection is optional)
- 2097 - Classification Sequence (Selection is optional)
- 2098 - Conducting Party (Selection is optional)
- 2099 - Time interval (Start and End date) (Selection is mandatory)
- 2100 **7.18.7.3 DISPLAY**
- 2101 This data shall be displayed in the following section:
- 2102 - **Explicit Auctions** (together with the Total Capacity Already Allocated / [12.1.c])
- 2103 The following attributes of data shall be displayed:
- 2104 - Title
- 2105 - Areas name
- 2106 - Contract Type
- 2107 - Conducting Party
- 2108 - Time interval
- 2109 - Measurement Unit for requested and allocated capacity
- 2110 - Currency for capacity price
- 2111 - Measurement Unit for capacity price
- 2112 - Classification category
- 2113 - Classification sequence
- 2114 - For each oriented border and MTU period within the time interval, the requested capacity
- 2115 value, the allocated capacity value and the capacity price value.
- 2116

7.19 EXPLICIT ALLOCATIONS – AUCTION REVENUE
[12.1.A]

7.19.1 DATA DESCRIPTION

This item can be described by the following two alternative class diagrams:



The document shall contain data related to one auction only. Two alternative submission modes are available: In aggregated format, revenue from an Explicit Auction¹⁶ is given by oriented border. In disaggregated format, the revenue is submitted per capacity product, i.e. per oriented border, classification category and classification sequence. In both modes, values

¹⁶ The Explicit Auction in question is the same as the Explicit Auction described in « Total Capacity Already Allocated [12.1.c] »

2126 are provided for the whole Delivery Period, i.e. the time interval during which the transfer
2127 capacity will be used. The length of the time interval depends on the auction's Contract Type
2128 (one year, one month, one day, etc.). Revenue is expressed in a Currency. Resolution is MTU
2129 period.

2130 It is possible to submit revenue in the disaggregated format together with the use of the transfer
2131 capacity as described in chapter 7.18. Aggregated revenue has to be submitted separately
2132 though. For further details please refer to the implementation guide.

2133 7.19.2 PRE-CONFIGURATION

2134 - For each Explicit Auction instance, the data item "Explicit Auctions – Auction Revenue" shall
2135 be expected by the platform..

2136 - For each Explicit Auction instance, there shall be configuration indicating whether revenue is
2137 submitted aggregated or disaggregated.

2138 - For each Explicit Auction instance, the single allowed Data Provider is the one indicated by
2139 the capacity allocation configuration. Refer to chapter 7.27.1.3 for details.

2140 - For each explicit auction instance, the submission deadline:

- 2141 • For a given Explicit Auction instance, submission must be done at the latest one hour
2142 (H+1) after the end of the Capacity Allocation Period.

2143 *Example: if the Explicit Auction instance is Yearly Base 1 between France and German*
2144 *Bidding Zones for the time interval of year 2013, and if the Capacity Allocation Period ends*
2145 *on November 17th, 2012, at 08:00 UTC, the document describing the auction revenue in*
2146 *this time interval must be submitted before November 17th, 2012, 09:00 UTC.*

2147 Submission deadline is the same for all oriented borders or capacity products associated
2148 to the Explicit Auction instance.

2149 7.19.3 ASSUMPTIONS

2150 Not more than one Data Provider per Explicit Auction instance.

2151 There are two alternative submission modes: Aggregated per oriented border and
2152 disaggregated per capacity product, respectively. For a given allocation instance, only one
2153 mode will be used.

2154 Delivery Periods are the same in both directions across a border. Only one currency is
2155 applicable in both directions across a border.

2156 7.19.4 INTEGRATION

2157 - The Data Provider shall be consistent with the capacity allocation configuration

2158 - Oriented border or capacity product shall be consistent with capacity allocation configuration

2159 - Currency shall be consistent with the capacity allocation configuration

2160 - Resolution is coherent with the auction configuration

2161 7.19.5 MONITORING

2162 The submission deadline described in section 7.18.2 shall be monitored for all oriented
2163 borders or capacity products associated with the auction.

2164 7.19.6 PROCESSING

2165 Platform aggregates the total revenue for the whole delivery period by summing up the values
2166 submitted per MTU period.

2167 Once total revenue values for a given delivery period have been submitted for both directions,
2168 platform aggregates a grand total for the border.

2169 7.19.7 PUBLICATION

2170 7.19.7.1 PUBLICATION BEHAVIOUR

2171 A delay in submission of values in a given direction shall not withhold publication of already
2172 submitted values in the opposite direction. Publication of aggregated sum per border is
2173 performed independently of publication of values per direction. Aggregated sum per border
2174 shall be published as soon as values in both directions have been submitted.

2175 7.19.7.2 FILTERING AND SORTING CRITERIA

2176 Data shall be visually accessed by selecting the following:

2177 - Contract Type (selection is mandatory)

2178 - Country (selection is optional: If selected, Area couples will be filtered to include only those
2179 that partially or completely cover the Country)

2180 - Areas couple (selection is mandatory)

2181 - Date or date range (selection is mandatory)

2182 7.19.7.3 DISPLAY

2183 This data shall be displayed in the following section:

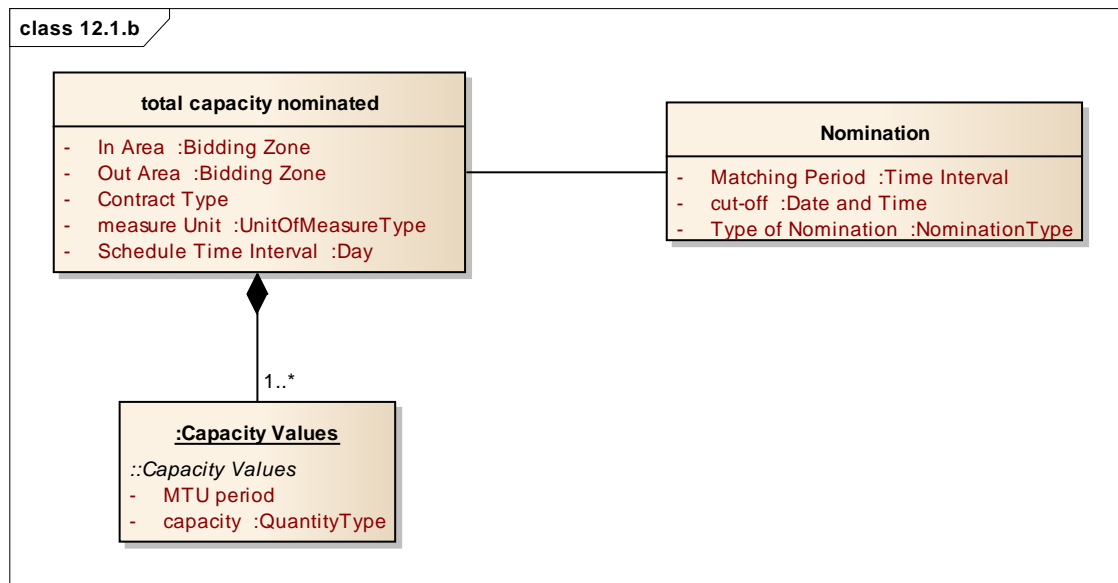
2184 - **Explicit Auctions** (together with the previously allocated Capacity / [12.1.c])

- 2185 The following attributes of data shall be displayed:
- 2186 - Title
 - 2187 - Oriented border
 - 2188 - Contract Type
 - 2189 - Currency
 - 2190 - Delivery Period
 - 2191 - For each delivery period during the selected date range, the following details of auction
 - 2192 revenue are displayed:
 - 2193 - In each direction and per MTU period
 - 2194 - aggregated revenue in each direction for the whole Delivery Period
 - 2195 - aggregated revenue for the border, for the whole Delivery Period

7.20 TOTAL CAPACITY NOMINATED [12.1.B]

7.20.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document may cover several couples of bidding zones and directions.

Values are expected for one day and are given by Market Time Unit period. Values for the time horizons long-term, day-ahead and intraday are published separately. For some borders, intraday values may not be applicable. For other borders, long-term may not be applicable.

7.20.2 PRE-CONFIGURATION

- A list of In and Out Area couples where the data item “Total Capacity Nominated” is expected

- For each In and Out Area couple, the allowed Data Provider(s), with their priorities

- For each In and Out Area couple, indicators whether intraday and/or long-term nominations are expected or not

- For each In and Out Area couple, the applicable submission deadlines for day-ahead and if applicable intraday and long-term time horizons, respectively:

- Submission must be done H+1 after the respective cut-off time of the concerned nomination round on this given In and Out Area couple.

- 2214 *Example A: The couple of Bidding Zones is France - Germany, the long-term cut-off time*
2215 *is at 20:00 UTC and the day-ahead cut-off time is at 22:00 UTC for the delivery day March*
2216 *13th, 2012. A first document shall be submitted with long-term values before March 12th,*
2217 *2012, 21:00 UTC and contain capacity values for the whole day of March 13th, 2012.*
- 2218 *A second document, containing values for the day-ahead time horizon that are updated*
2219 *with the day-ahead nomination, shall be submitted no later than March 12th, 2012, 23:00*
2220 *UTC.*
- 2221 *Example B: The couple of Bidding Zones is France – Spain and in addition to long-term*
2222 *and daily nominations there are also intraday nominations:*
- 2223 *long-term nomination round with cut-off at D-1, 12:00 UTC for the delivery period D, 00:00*
2224 *– 24:00 UTC*
- 2225 *daily nomination round with cut-off at D-1, 18:00 UTC for the delivery period D, 00:00 –*
2226 *24:00 UTC*
- 2227 *1st intraday nomination round with cut-off at D-1, 20:00 UTC for the delivery period D,*
2228 *06:00-24:00 UTC*
- 2229 *2nd intraday nomination round with cut-off at D, 04:00 UTC for the delivery period D, 12:00-*
2230 *24:00 UTC*
- 2231 *3rd intraday nomination round with cut-off at D, 12:00 UTC for the delivery period D, 18:00-*
2232 *24:00 UTC*
- 2233 *The following documents shall be submitted:*
- 2234 *A first document containing the values for the long-term time horizon for the whole delivery*
2235 *period D, 00:00 – 24:00 UTC, shall be submitted no later than D-1, 13:00 UTC*
- 2236 *A second document containing the values for the day-ahead time horizon for the whole*
2237 *delivery period D, 00:00 – 24:00 UTC, shall be submitted no later than D-1, 19:00 UTC.*
- 2238 *A third document containing the values for the intraday time horizon for the whole delivery*
2239 *period D, 00:00 – 24:00 UTC, shall be submitted no later than D-1, 21:00 UTC.*
- 2240 *A higher version of the third document containing the values for the intraday time horizon*
2241 *(including 2nd intraday nominations) for the whole delivery period D, 00:00 – 24:00 UTC,*
2242 *shall be submitted no later than D, 05:00 UTC.*
- 2243 *A higher version of the third document containing the values for the intraday time horizon*
2244 *(including 3rd intraday nominations) for the whole delivery period D, 00:00 – 24:00 UTC,*
2245 *shall be submitted no later than D, 13:00 UTC.*
- 2246 *The matching process, including cut-off times, is described in chapter 7.1.3.*

2247 7.20.3 ASSUMPTIONS

2248 If intraday nominations are applicable on a given border, platform will monitor submission
2249 deadline for the first intraday nomination only.

2250 Platform does not perform any aggregation.

2251 7.20.4 INTEGRATION

2252 - Area couple shall be recognised by the platform

2253 - The Data Provider shall be consistent with the identified Area couple

2254 - The Schedule Time Interval in the submitted document is one day

2255 7.20.5 MONITORING

2256 This data item is expected one or several times per day for all declared In and Out Area
2257 couples. For each couple of In and Out Areas, the submission deadlines for long-term, day-
2258 ahead and intraday values described in section 7.20.2 shall be monitored. If no data has
2259 been submitted, all declared Data Providers will be notified.

2260 7.20.6 PROCESSING

2261 If data has been submitted for a given Bidding Zone couple, direction, time horizon and
2262 schedule Time Interval (day) by more than one Data Provider, platform shall publish data
2263 coming from Data Provider with highest priority.

2264

2265 7.20.7 PUBLICATION

2266 7.20.7.1 PUBLICATION BEHAVIOUR

2267 Long-term, day-ahead and intraday values shall be published separately.

2268 7.20.7.2 FILTERING AND SORTING CRITERIA

2269 Data shall be visually accessed by selecting the following:

2270 - Day (Selection is mandatory)

2271 - Country (selection is optional: If selected, Bidding Zone couples will be filtered to include only
2272 those that partially or completely cover the Country)

2273 - Bidding Zones couple or Bidding Zone

2274 7.20.7.3 DISPLAY

2275 This data shall be displayed in the following section:

2276 - **Transmission / Total nominated capacity**

2277 The following attributes of data shall be displayed:

2278 - Title

2279 - Schedule Time Interval (i.e. selected Day)

2280 - Measurement Unit

2281 - MTU

2282 - Bidding Zone couple

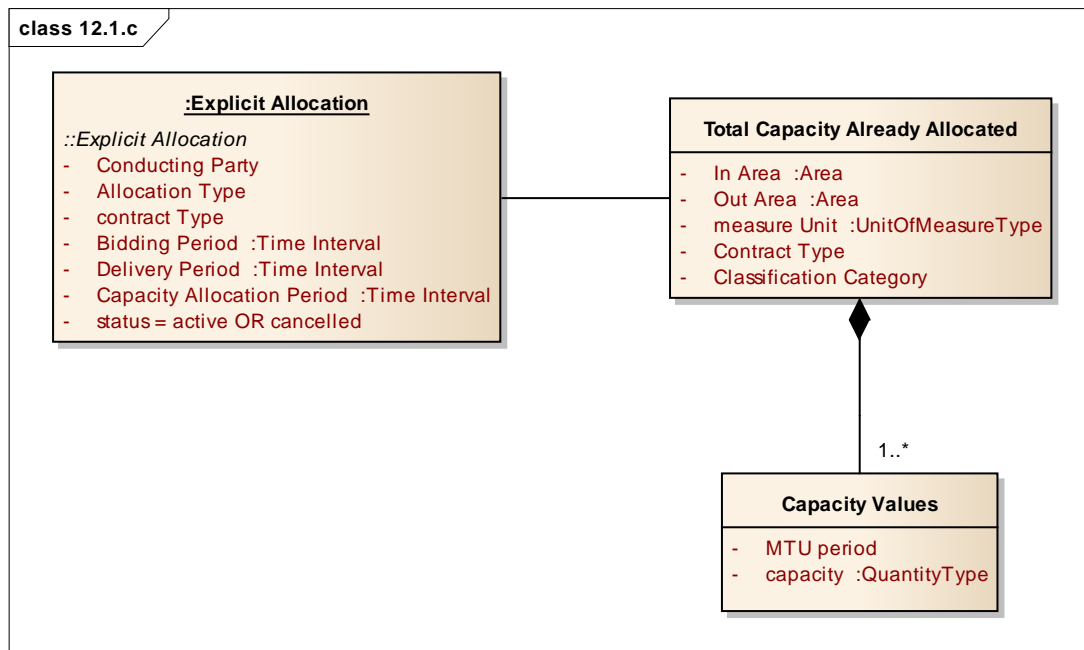
2283 - In each direction, the long-term, day-ahead and intraday values for each MTU

2284 Data is published in table and chart formats.

7.21 TOTAL CAPACITY ALREADY ALLOCATED [12.1.C]

7.21.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document shall contain data related to exactly one auction instance. The total capacity already allocated is described by In and Out Areas and per Contract Type and Classification Category, with one capacity value in measure Unit for each Market Time Unit period within a time interval corresponding to the auction's Delivery Period.

This data item is relevant for explicit allocations only.

Example: Before a daily base auction, a single document shall be submitted to the platform, containing the total capacity already allocated, taking into account earlier allocations (i.e. yearly, monthly and weekly auctions) and explicit resales or use it or sell it (UIOSI). Capacity values shall be provided for each MTU period of the delivery period of the daily auction. Contract Type of document is Daily and Classification Category is Base.

7.21.2 PRE-CONFIGURATION

- For each Explicit Allocation instance, the data item "Total Capacity Already Allocated" may be expected by the platform. Refer to chapter 7.27.1.2 for details on the configuration of a capacity allocation.

2303 - For each Explicit Allocation instance, the unique allowed Data Provider is the one indicated
2304 in the capacity allocation configuration. Refer to chapter 7.27.1.3 for details.

2305 - For a given allocation, the submission deadline depends on the Contract Type (monthly,
2306 weekly, etc.) and is the same as for the offered transfer capacity [11.1], refer to sections 7.11.2
2307 through 7.12.2.

2308 7.21.3 ASSUMPTIONS

2309 Data providers have performed all calculations, taking into account earlier allocations and
2310 explicit resales or use it or sell it (UIOSI). Platform will not perform any calculation.

2311 7.21.4 INTEGRATION

2312 - The Data Provider shall be consistent with the configuration of the capacity allocation, refer
2313 to chapter 7.27.1.3 for details

2314 - The time interval described in the document shall be complete (e.g. a whole day for a Daily
2315 auction)

2316 - Resolution is coherent with the auction configuration

2317 7.21.5 MONITORING

2318 For a given instance of an Explicit Allocation, platform shall monitor that the data item "Total
2319 Capacity Already Allocated" is submitted

2320 Submission deadlines depend on the auction as explained in chapter 7.21.2.

2321 7.21.6 PROCESSING

2322 No processing performed on this data item.

2323 7.21.7 PUBLICATION

2324 7.21.7.1 PUBLICATION BEHAVIOUR

2325 Standard publication behaviour applies.

2326 7.21.7.2 FILTERING AND SORTING CRITERIA

2327 Data shall be visually accessed by selecting the following:

2328 - Contract Type (Selection is Mandatory)

2329 - Country (selection is optional: If selected, Areas will be filtered to include only those that
2330 partially or completely cover the Country)

2331 - Areas couple (Selection is Mandatory)

2332 - Direction (both by default) (Selection is Mandatory)

2333 - Time window (Start and End date) (Selection is mandatory)

2334 7.21.7.3 DISPLAY

2335 This data shall be displayed in the following section:

2336 - **Explicit Auctions / Total Capacity Already Allocated**

2337 The following attributes of data shall be displayed:

2338 - Title

2339 - Areas name

2340 - Contract Type

2341 - Classification Category

2342 - Time window

2343 - Measurement Unit

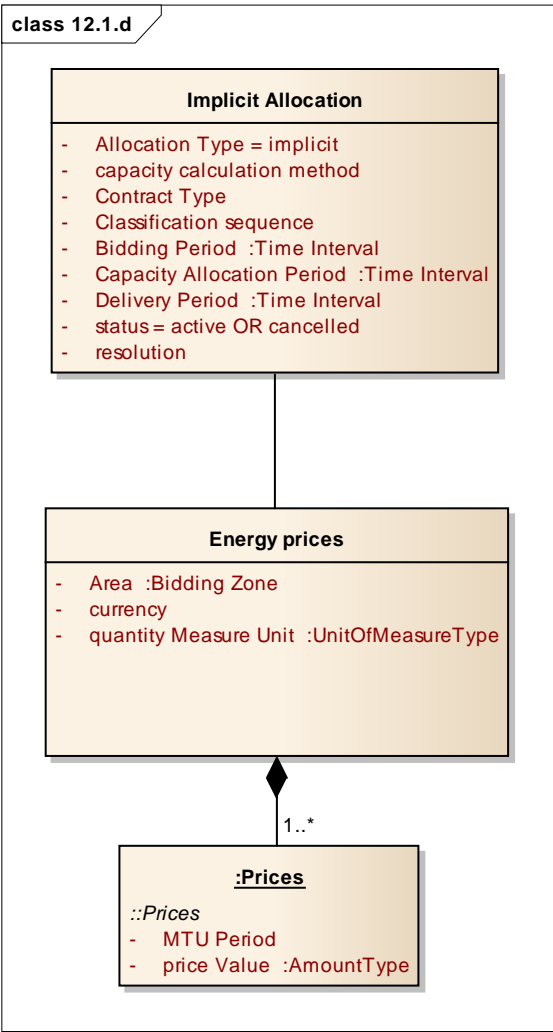
2344 - For each MTU Period within the time window, the total capacity already allocated. This is
2345 repeated per direction.

2346

7.22 ENERGY PRICES [12.1.D]

7.22.1 DATA DESCRIPTION

This item can be described by the following class diagram:



Energy prices are associated with implicit allocations. For a given bidding zone, contract type (also referred to as time horizon) and delivery period, prices are given for every MTU period and expressed in currency per MWh.

There may be several intraday delivery periods that overlap partially or completely. In case there are two identical delivery periods, the Classification Sequence (also referred to as round) becomes mandatory. Delivery period may cover up to 29 consecutive hours, i.e. partially covering two days.

2359

2360 **Note:** In some bidding zones, there may be several prices for the same time horizon having
2361 different resolutions (i.e. different length of MTU period), typically 15 and 60 minutes for the
2362 day-ahead time horizon. In this case, separate allocations will be configured on the platform.

2363 7.22.2 PRE-CONFIGURATION

2364 Energy prices are expected for all bidding zones covered by an implicit transmission capacity
2365 allocation for the day-ahead time horizon. Optionally, prices may be published for bidding
2366 zones covered by implicit transmission capacity allocations for the intraday time horizon.

2367 - For each Implicit Allocation instance, the data item “Energy Prices” may be expected by the
2368 platform. Refer to chapter 7.27.1.2 for details on the configuration of a capacity allocation.

2369 - In some cases, it is foreseen that TSOs may submit the prices in case the normal allocation
2370 performed by the allocation office is cancelled or a problem occurred in the data transmission.
2371 This may be handled by configuring a “shadow” allocation, as outlined in chapters 7.1.2 and
2372 7.27.1.1.

2373 - For each Implicit Allocation instance, the submission deadline depends on the Contract Type
2374 (daily or intraday) and is the same as for the offered transfer capacity [11.1], refer to sections
2375 7.11.2 through 7.12.2.

2376 - For each implicit allocation instance, the unique allowed Data Provider

2377 - For each implicit allocation instance, the submission deadline: One hour (H+1) after the
2378 gate closure of energy spot market for the day-ahead time horizon, as controlled by pre-
2379 configuration, refer to chapter 7.1.4 for details.

2380 7.22.3 ASSUMPTIONS

2381 No specific assumptions apply.

2382 7.22.4 INTEGRATION

2383 - Bidding zone shall be recognised by the platform

2384 - The Data Provider shall be consistent with the pre-configuration

2385 - If data for a time horizon, delivery period and classification sequence (if applicable) is received
2386 from more than one data provider and successfully validated, platform shall publish the most
2387 recently received data (see chapter 7.22.2).

2388 - Currency shall be consistent with pre-configuration [C9]

2389 - Bidding zone and time horizon (and delivery period and Classification Sequence, when
2390 applicable) shall be consistent with pre-configuration

2391 - Resolution shall be consistent with pre-configuration

2392 7.22.5 MONITORING

2393 For every bidding zone where energy prices data are expected, the submission deadline(s)
2394 shall be monitored.

2395 7.22.6 PROCESSING

2396 No processing is performed by the platform on this data item.

2397 7.22.7 PUBLICATION

2398 7.22.7.1 PUBLICATION BEHAVIOUR

2399 No particular behaviour applies to this data item.

2400 7.22.7.2 FILTERING AND SORTING CRITERIA

2401 Data shall be visually accessed by selecting the following:

2402 - Bidding zone (Selection is Mandatory)

2403 - Day (Selection is mandatory)

2404 - Classification Sequence (selection is optional)

2405 - Resolution (selection is mandatory when there is more than one resolution)

2406 7.22.7.3 DISPLAY

2407 This data shall be displayed in the following section:

2408 - **Energy prices**

2409 The following attributes of data shall be displayed:

2410 - Title

2411 - Bidding Zone

2412 - Selected day

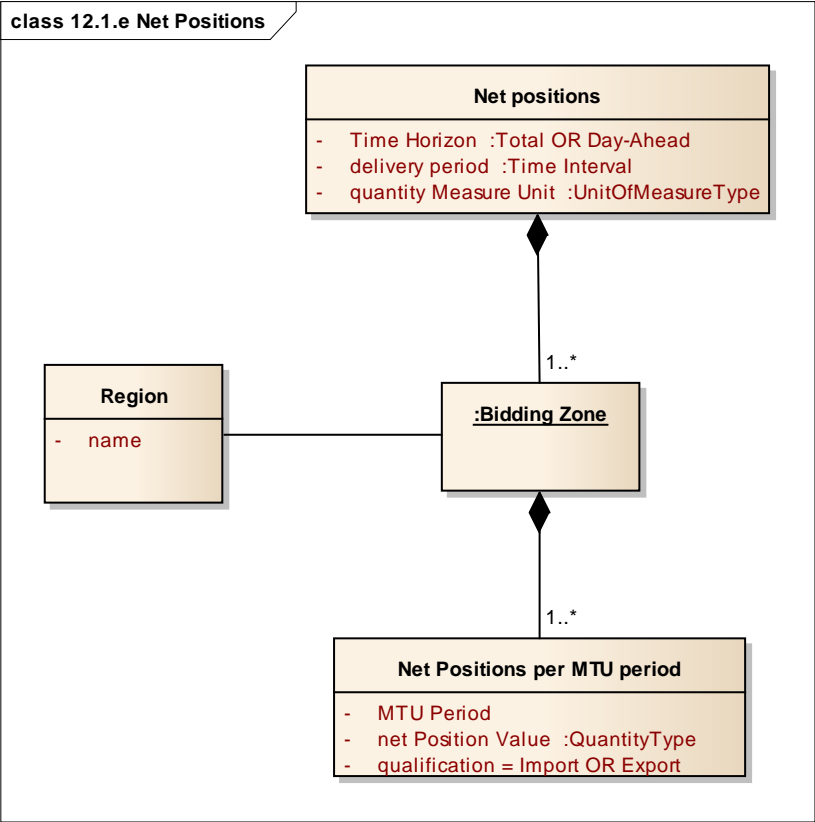
2413 - Currency

- 2414 - Quantity Measurement Unit (MWh)
- 2415 - Resolution
- 2416 - Time horizon(s): Day-ahead and/or intraday
- 2417 - Delivery period(s)
- 2418 - Classification Sequence(s), when applicable
- 2419 - For each MTU period during the selected day, the energy price per time horizon and
- 2420 delivery period and Classification Sequence (when applicable).
- 2421
- 2422 Data shall be visualised in a table and in a graph.
- 2423

7.23 IMPLICIT ALLOCATIONS – NET POSITIONS [12.1.E]

7.23.1 DATA DESCRIPTION

This item can be described by the following class diagram:



Implicit net positions are given by Bidding Zone for an entire day. There are separate publications for day-ahead time horizon and total net positions. The Net Positions consist of a value for each Market Time Unit period during the day, in Quantity Measure Unit (MW). Note that net position is always a positive value or zero. The Net Position is described as “import” or “export”.

7.23.2 PRE-CONFIGURATION

- For each bidding zone there will be configuration whether net positions are expected and separately for day-ahead and total time horizons.

- For each bidding zone and time horizon, the single allowed Data Provider.

2438 - For each bidding zone and time horizon, the daily submission deadline, which typically will
2439 be situated one hour after the last day-ahead allocation for the publication of day-ahead
2440 values. For the publication of total values, the deadline is one hour after the first intraday
2441 allocation. The total values shall be updated, if need be, no later than one hour after each
2442 subsequent intraday allocation.

2443

2444 7.23.3 ASSUMPTIONS

2445 Updates to the total values are submitted not more frequently than once every 15 minutes.

2446 7.23.4 INTEGRATION

2447 - The Data Provider shall be consistent with bidding zone and time horizon as per pre-
2448 configuration described in 7.23.2

2449 - Data is delivered for the entire day

2450 7.23.5 MONITORING

2451 For a given bidding zone and time horizon, the submission deadline shall be monitored.

2452 Updates are submitted only if the net position has been modified. As a consequence,
2453 monitoring of submission deadlines for updates are not feasible and will not be performed.

2454 7.23.6 PROCESSING

2455 No processing is performed by the platform.

2456 7.23.7 PUBLICATION

2457 7.23.7.1 PUBLICATION BEHAVIOUR

2458 No specific behaviour applies to this data item.

2459 7.23.7.2 FILTERING AND SORTING CRITERIA

2460 Data shall be visually accessed by selecting the following:

2461 - Country (selection is optional: If selected, bidding zones will be filtered to include only those
2462 that partially or completely cover the Country)

2463 - One Bidding Zone (Selection is Mandatory)

2464 - Day (Selection is mandatory)

2465 - Time horizon: Day-Ahead or Total

2466 7.23.7.3 DISPLAY

2467 This data shall be displayed in the following section:

2468 - **Implicit Allocations – Net positions**

2469 The following attributes of data shall be displayed:

2470 - Title

2471 - Day

2472 - Measurement Unit (MW)

2473 - Bidding zone

2474 - For each MTU Period within the selected day, the net position and whether it is “import” or
2475 “export” and with separate values per time horizon.

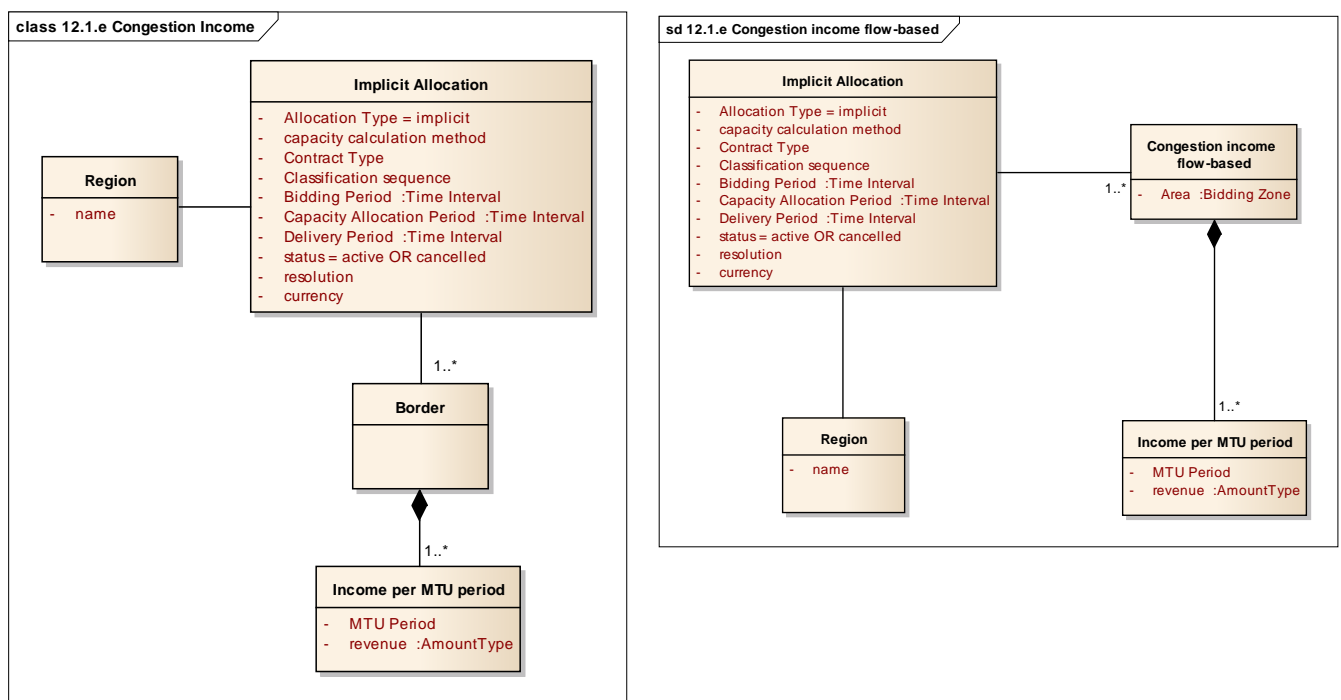
2476

7.24 IMPLICIT ALLOCATIONS – CONGESTION INCOME

[12.1.E]

7.24.1 DATA DESCRIPTION

This item can be described by the following class diagram:



Congestion income for an Implicit Allocation¹⁷ is given per border for a given time interval corresponding to the implicit allocation's delivery period (for which transfer capacity was auctioned and will be used), possibly also per Classification Sequence. For flow-based allocations, the congestion income is given per bidding zone.

When Contract Type is Day-Ahead, length of Delivery Period is exactly one day. When Contract Type is Intraday, length of Delivery Period may be up to 29 hours.

The congestion revenue is described by a value for each Market Time Unit period during the Delivery Period, in currency.

¹⁷ The Implicit Allocation in question is the same as the Implicit Allocation described in « Implicit Allocation – Net Positions » (chapter 7.23)

2490 7.24.2 PRE-CONFIGURATION

2491 - For each border covered by all the implicit allocation, Congestion Income shall be expected
2492 by the platform. Refer to chapter 7.27.1.2 for details on the configuration of an allocation's
2493 capacity products.

2494 - For each implicit allocation, there is a single allowed Data Provider indicated by the
2495 capacity allocation configuration. Refer to chapter 7.27.1.3 for details.

2496 - For flow-based allocations, a single allowed Data Provider for all bidding zones in the
2497 region is indicated.

2498 - For each Implicit Allocation, the submission deadline:

- 2499 • For a given Implicit Allocation instance, submission must be done at the latest one hour
2500 (H+1) after the end of the Capacity Allocation Period.

2501 *Example: if the Daily Implicit Allocation instance is between France and German Bidding*
2502 *Zones for the time interval of March 13th, 2012, and if the Capacity Allocation Period ends*
2503 *on March 12th, 2012, at 12:00 UTC, the documents describing the Congestion Income for*
2504 *this time interval must be submitted before March 12th, 2012, 13:00 UTC.*

2505 Submission deadline is the same for all borders covered by the Implicit Allocation. For flow-
2506 based allocations, the submission deadline is the same for all bidding zones in the region.

2507 7.24.3 ASSUMPTIONS

2508 Only one Data Provider per allocation.

2509 There is not more than one Implicit Allocation per Region.

2510 Data is submitted for NTC-based allocations per border, delivery period and possibly also
2511 Classification Sequence. For flow-based allocations data is submitted per bidding zone.
2512 Platform does not have to perform any calculation.

2513 7.24.4 INTEGRATION

2514 - Currency shall be consistent with the capacity allocation configuration

2515 - The Data Provider shall be consistent with the implicit allocation as per pre-configuration
2516 described in 7.24.2

2517 - The Delivery Period described in the document shall be complete

2518 - Resolution is coherent with allocation configuration

2519 7.24.5 MONITORING

2520 For a given instance of an Implicit Allocation, there is a submission deadline common to all
2521 borders or bidding zones (for flow-based). Platform shall monitor this submission deadline.

2522 7.24.6 PROCESSING

2523 No processing is performed by the platform at this step.

2524 7.24.7 PUBLICATION

2525 7.24.7.1 PUBLICATION BEHAVIOUR

2526 No specific behaviour applies to this data item.

2527 7.24.7.2 FILTERING AND SORTING CRITERIA

2528 Data shall be visually accessed by selecting the following:

2529 - Region (for flow-based)

2530 - Country (selection is optional: If selected, Bidding Zones will be filtered to include only those
2531 that partially or completely cover the Country)

2532 - One or several Bidding Zones (Selection is Mandatory)

2533 - Contract Type

2534 - One or several Classification Sequence(s) (selection is optional)

2535 - Day (Selection is mandatory)

2536 7.24.7.3 DISPLAY

2537 This data shall be displayed in the following section:

2538 - **Implicit Auctions**

2539 The following attributes of data shall be displayed:

2540 - Title

2541 - Capacity calculation method (ATC- or flow-based)

2542 - Region (for flow-based)

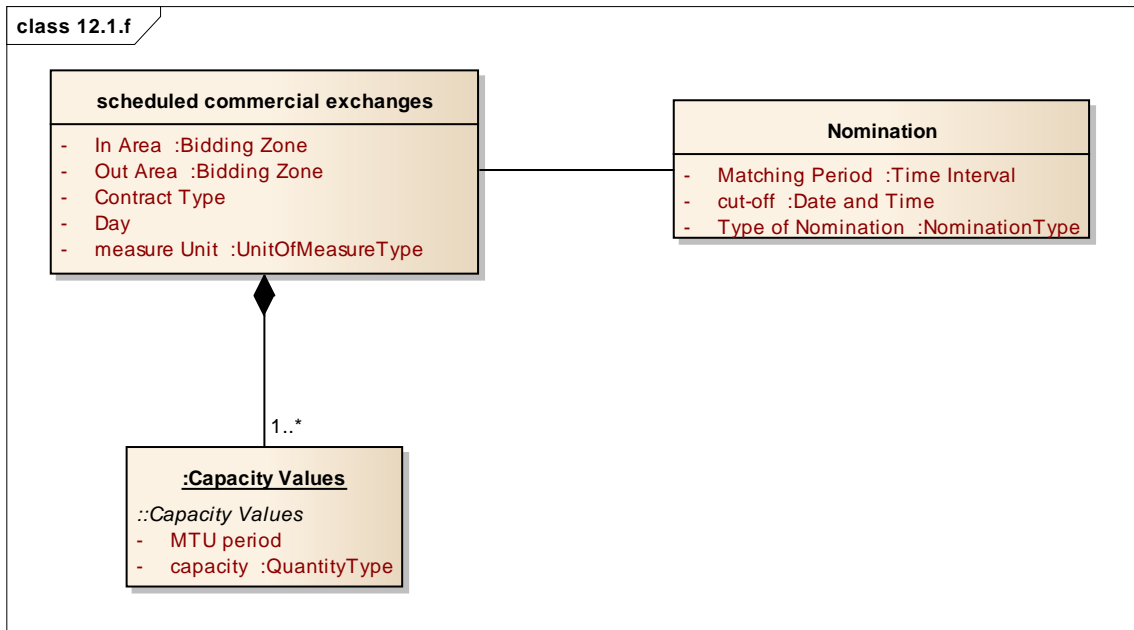
2543 - Day

- 2544 - Contract Type
- 2545 - sequence number (if applicable)
- 2546 - The following is repeated for each border or Bidding Zones (for flow-based): Name of Bidding
- 2547 Zone(s) and currency and for each MTU Period within the selected day, delivery period and
- 2548 Classification Sequence (if applicable), the revenue amount.

7.25 SCHEDULED COMMERCIAL EXCHANGES [12.1.F]

7.25.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The document may cover several couples of bidding zones and directions. Values for the day-ahead and total time horizons are published separately. Values are expected for one day and are given by Market Time Unit period. Values are published for both directions across the borders as well as the net position per bidding zone.

The net positions will be calculated by the transparency platform based on the submitted cross-zonal values. When downloading the net positions, the In and Out areas will be populated with a combination of bidding zone and Region to indicate import or export. The precise convention will be detailed in the implementation guide. .

For net positions, there shall not be more than one non-zero, positive value for a given area and MTU period.

7.25.2 PRE-CONFIGURATION

The data item "Scheduled commercial exchanges" is expected for all In and Out Area couples covered by a matching process. Refer to chapter 7.1.3 for details on the matching processes.

- For each In and Out Area couple, the allowed Data Provider(s) with their priorities

2567 - For each In and Out Area couple there is a daily submission deadline for the day-ahead
2568 values at one hour (H+1) after the day-ahead cut-off time.

2569 *Example: if the couple of Bidding Zones is France - Germany, and if the day-ahead cut-off*
2570 *time is 20:00 UTC, for the delivery day March 13th, 2012, the day-ahead values shall be*
2571 *submitted before March 12th, 2012, 21:00 UTC.*

2572 Further, if there are several intraday nominations or allocations on the In and Out Area
2573 couple and such intraday nomination or allocation results in an update to the scheduled
2574 commercial exchange, updated total values shall be submitted no later than two hours
2575 (H+2) after each intraday nomination or allocation.

2576 7.25.3 ASSUMPTIONS

2577 Updates are submitted only if schedule has been modified. As a consequence, monitoring of
2578 submission deadlines for updates are not feasible and will not be performed.

2579 Platform does not perform any aggregations for day-ahead or total values. Platform shall
2580 calculate net positions though based on the submitted cross-zonal values.

2581 Platform will monitor the separate submission deadlines for day-ahead and total values. If
2582 there is more than one intraday nomination on the given border, platform will monitor the first
2583 submission of total values only.

2584 Updates to the total values are submitted not more frequently than once every 15 minutes.

2585 7.25.4 INTEGRATION

2586 - Bidding Zones shall be recognised by the platform

2587 - The Data Provider shall be consistent with the identified Bidding Zones

2588 - The time interval in the submitted document is of one day

2589 7.25.5 MONITORING

2590 For each couple of In and Out Areas, the submission of day-ahead and first submission of
2591 total values described in section 7.25.2 shall be monitored. If no data has been submitted, all
2592 declared Data Providers will be notified.

2593 7.25.6 PROCESSING

2594 If for a given Bidding Zone couple and MTU period more than one Data Provider has submitted
2595 data, platform will publish the value from the Data Provider with highest priority.

2596 Platform shall calculate the net positions for day-ahead and total time horizons, respectively,
2597 based on the submitted cross-zonal values. If one or more cross-zonal values are missing, the
2598 corresponding net position shall not be published.

2599 7.25.7 PUBLICATION

2600 7.25.7.1 PUBLICATION BEHAVIOUR

2601 Day-ahead and total values will be published separately on the same data view.

2602 7.25.7.2 FILTERING AND SORTING CRITERIA

2603 Data shall be visually accessed by selecting the following:

2604 - Day (Selection is mandatory)

2605 - Country (selection is optional: If selected, Bidding Zone couples will be filtered to include only
2606 those that partially or completely cover the Country)

2607 - Bidding Zones couple or Bidding Zone

2608 7.25.7.3 DISPLAY

2609 This data shall be displayed in the following section:

2610 - **Transmission / Scheduled commercial exchanges**

2611 The following attributes of data shall be displayed:

2612 - Title

2613 - selected Day

2614 - Measurement Unit

2615 - MTU

2616 - for each couple of Bidding Zones, for each MTU period within the selected day, the day-
2617 ahead and total values per direction across each Bidding Zone border

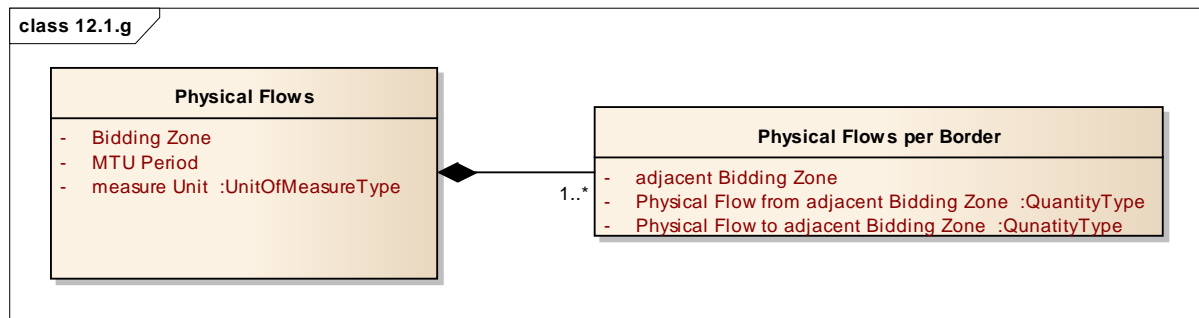
2618 - for each bidding zone, for each MTU period within the selected day, the day-ahead and total
2619 net positions

2620

7.26 PHYSICAL FLOWS [12.1.G]

7.26.1 DATA DESCRIPTION

This item can be described by the following class diagram:



Physical Flows are described between two Bidding Zones, or in some cases two countries, with one flow value per Market Time Unit period in each direction, in Measure Unit (MW).

For the purpose of providing input to the statistical data publication Physical energy and power flows (see chapter 13.2), data providers may optionally make a supplementary submission in monthly resolution.

7.26.2 PRE-CONFIGURATION

- A list of couples of Bidding Zones or countries where Physical Flows are expected
- For each couple of Bidding Zones or countries where Physical Flows are expected, as of what date and time it shall be expected by the platform. Optionally an end date and time may be configured as well.
- For each couple of Bidding Zones or countries, the allowed Data Providers, and their priorities for each direction across the border between the Bidding Zones
- For each couple of Bidding Zones or countries and Data Provider, an indicator whether netted or non-netted values are expected. By default, netted values are expected.
- For each couple of Bidding Zones or countries where Physical Flows are expected, the submission deadline (to be configured if needed to override the default submission deadline):
 - For a given couple of Bidding Zones or countries, submission must be done at the latest one hour (H+1) after the end of the MTU Period.

Example: if the couple of Bidding Zones is France - Germany, for a MTU Period of March 13th, 2012, between 10:00 and 10:30 UTC, the document describing the physical flows during this MTU Period must be submitted before March 13th, 2012, 11:30 UTC.

2646 7.26.3 ASSUMPTIONS

2647 Data Provider must have the same priority for both directions.

2648 7.26.4 INTEGRATION

2649 - Bidding Zones or countries shall be recognised by the platform

2650 - The Data Provider shall be consistent with the identified couple of Bidding Zones or countries

2651 - Data will be rejected if data provider configured as sending netted values sends non-netted
2652 values

2653 - Data will be rejected if data provider configured as sending non-netted values actually sends
2654 netted values (i.e. submits values in one direction only).

2655 7.26.5 MONITORING

2656 For a given couple of Bidding Zones or countries where Physical Flows are expected, the
2657 submission deadline described above shall be monitored for every MTU Period. If no data
2658 has been received, all declared Data Providers will be notified.

2659 7.26.6 PROCESSING

2660 If Data Provider is configured as submitting non-netted values for a given couple of Bidding
2661 Zones (or countries) and MTU period, platform shall calculate net value.

2662 If Data Provider is configured as submitting netted values, the absence of a value in a given
2663 direction and MTU period shall be treated as a zero value.

2664 Values from all senders (when applicable) are to be stored in the database, with the indication
2665 of the associated priority.

2666 7.26.7 PUBLICATION

2667 7.26.7.1 PUBLICATION BEHAVIOUR

2668 The following precedence rule applies, when more than one party is responsible for the
2669 submission of data:

2670 - For a given direction between a couple of Bidding Zones (or countries) and a given MTU
2671 Period, the platform shall publish the net value available from the party with the highest priority

2672 - If, for a given MTU Period, data is missing from the provider with the highest priority, then the
2673 net value from the Data Provider with the inferior priority shall be displayed if available (and so
2674 on if more than two providers).

2675 7.26.7.2 FILTERING AND SORTING CRITERIA

2676 Data shall be visually accessed by selecting the following:

2677 - Day (Selection is mandatory)

2678 - Country or Bidding Zone, alternatively couple of countries or Bidding Zones

2679

2680 7.26.7.3 DISPLAY

2681 This data shall be displayed in the following section:

2682 - **Cross-Border Physical Flows**

2683 The following attributes of data shall be displayed:

2684 - Title

2685 - Selected day

2686 - Measurement Unit

2687 - For each Bidding Zone or country couple, for each Market Time Unit within the selected day,
2688 the netted physical flow values in each direction

2689

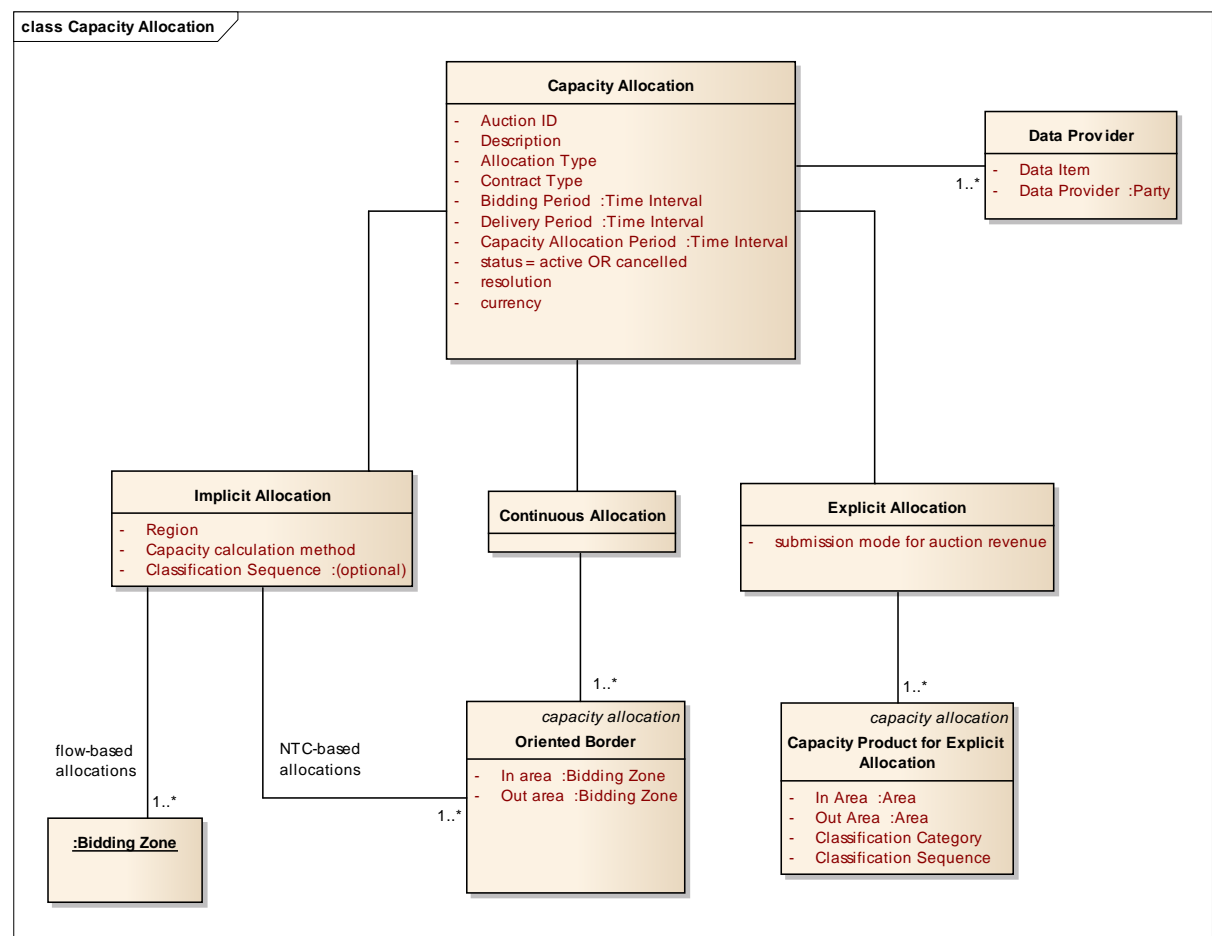
2690

7.27 CONFIGURATION OF TRANSMISSION CAPACITY ALLOCATION

7.27.1 DATA DESCRIPTION

7.27.1.1 CAPACITY ALLOCATIONS

A Transmission Capacity Allocation can be described by the following class diagram:



For each Capacity Allocation, the following attributes are mandatory: Type (implicit, explicit or continuous), time horizon (also referred to as Contract Type), currency, resolution and a unique Auction ID. An optional free-text description may be associated with an allocation.

For implicit allocations, Contract Type must be Day-ahead or Intraday. For continuous allocations only Intraday applies. For implicit allocations, optionally Classification Sequence may be defined.

2704 For implicit allocations, the capacity calculation method is either NTC-based or flow-based. For
2705 explicit as well as implicit allocations, the allocation type may in particular cases be further
2706 qualified as “shadow auction”. Capacity calculation method is always NTC-based for explicit
2707 and continuous allocations.

2708 For implicit allocations, optionally a Region may be indicated. Region is mandatory when
2709 capacity calculation method is flow-based.

2710 For explicit allocations, optionally a Conducting Party may be declared. For explicit allocations,
2711 the submission mode for auction revenue shall be indicated: Aggregated or disaggregated,
2712 refer to chapter 7.19 for details. The configuration of explicit allocations is further supplemented
2713 by capacity products: In and Out area, classification category and classification sequence.

2714 The Auction ID may never be modified once an Allocation has been created.

2715 Instances of capacity allocations have specific bidding, allocation and delivery periods.

2716 Allocations typically take place on a recurring basis, for example in December every year to
2717 sell capacity products for use during the following year (i.e. yearly products). The Contract
2718 Type determines the frequency, i.e. once a year, once a month, every day, etc.

2719 Exceptionally, there may also be non-recurring allocations, held at a single occasion only.

2720 For every allocation, it shall be possible to record the date(s) and time(s) when it is being
2721 held. It shall be possible to select the date(s) using a calendar.

2722 For recurring allocations, it shall be possible to record exceptions to the configuration that
2723 apply on a specific instance of the allocation (i.e. on a specific date). Examples of exceptions
2724 are extending the capacity allocation period, excluding or adding one or several capacity
2725 products or oriented borders from/to the capacity allocation or cancelling the whole capacity
2726 allocation instance.

2727 It shall be possible to cancel a capacity allocation instance. When a capacity allocation is
2728 cancelled, as a consequence platform will not expect any data submissions related to the
2729 capacity allocation or its products or oriented borders.

2730 7.27.1.2 CAPACITY PRODUCTS AND ORIENTED BORDERS

2731 Each capacity allocation is associated with one or several capacity products or oriented
2732 borders. Each oriented border is described by the following mandatory attributes: In Area and
2733 Out Area. For products associated with explicit allocations, additionally the attributes
2734 Classification Category and Classification Sequence are mandatory.

2735 By default the oriented border or capacity product will be applicable during the capacity
2736 allocation's Delivery Period. As a consequence, platform will expect data for the Capacity
2737 Product or oriented border. When an oriented border or capacity product exceptionally has

2738 been excluded from a capacity allocation instance¹⁸, platform shall not expect any data
2739 submissions related to that capacity product or oriented border.

2740 For implicit allocations having flow-based capacity calculation method, bidding zones rather
2741 than oriented borders apply.

2742 7.27.1.3 DATA PROVIDERS

2743 For a transmission capacity allocation the relevant Data Providers must be configured as
2744 well. For each applicable data item, the unique Data Provider is to be selected as outlined
2745 below.

2746 For implicit allocations with NTC-based capacity calculation method as well as explicit
2747 capacity allocations:

2748 - Offered Transfer Capacity [11.1]

2749 - Transfer Capacities Allocated with Third Countries [12.1.h]

2750 For implicit allocations with flow-based capacity calculation method:

2751 - Flow-based capacity allocation [11.1.b]

2752 - Congestion Income [12.1.e]

2753 For implicit capacity allocations:

2754 - Energy prices [12.1.d]

2755 - Congestion Income [12.1.e]

2756 For explicit capacity allocations:

2757 - Use of the Transfer Capacity [12.1.a]

2758 - Auction revenue [12.1.a]

2759 - Total Capacity already Allocated [12.1.c]

2760 For continuous allocations:

2761 - Offered Transfer Capacity [11.1]

2762

¹⁹ If format of data does not permit explicit declaration of Control Area it may be deduced from Sender.

2763 7.27.2 MONITORING

2764 No monitoring will be performed on the submission of capacity allocation configuration.

2765 7.27.3 CREATION OF CAPACITY ALLOCATION

2766 Capacity allocations may be created via human-to-machine submission. For human-to-
2767 machine submission, there shall be a webpage, where creation or modification of capacity
2768 allocations will require authentication.

2769 Data Providers shall be permitted to create capacity allocations. Platform administrator in
2770 ENTSO-E shall be able to create and modify capacity allocations on behalf of Data Providers.

2771 When capacity allocation is created, the uniqueness of the ID shall be verified by checking that
2772 no other capacity allocation on platform with same ID already exists. Note that the assignment
2773 of ID assumes a manual procedure that is outside the scope of the central platform.

2774 When creating or modifying capacity allocations, the values of the following attributes shall be
2775 validated against list of permitted values held in platform's master data: Type, sub-type, In
2776 Area, Out Area, resolution, combination of In and Out Areas, Contract Type, Classification
2777 Category and Currency.

2778 When creating a capacity allocation via the webpage, it shall be possible to use an already
2779 defined capacity allocation as template when defining a new one.

2780 7.27.4 UPDATES TO CAPACITY ALLOCATIONS

2781 The Data Provider that created the capacity allocation may update the data at any time. ID will
2782 be used to match updated data to Auction.

2783 Platform shall validate that capacity allocation with quoted ID already exists. If not, update will
2784 be rejected.

2785 Platform will validate that Data Provider performing update is consistent with the Data Provider
2786 recorded for the capacity allocation. Platform administrator in ENTSO-E shall be able to update
2787 capacity allocation on behalf of Data Provider.

2788 Deletions are not foreseen under normal circumstances, but could be performed in exceptional
2789 situations by platform administrator in ENTSO-E.

2790 7.27.5 QUERIES OF REFERENCE DATA FOR CAPACITY ALLOCATIONS

2791 Data on capacity allocation shall be made available for visual inspection and download via web
2792 page.

2793 7.27.5.1 FILTERING AND SORTING CRITERIA

2794 It shall be possible to search for a capacity allocation by using ID as search criterion.

2795 Also, it shall be possible to retrieve several capacity allocations at the same time, by specifying
2796 the following filtering and sorting criteria:

2797 - Country: Selection is optional. If selected, In and/or Out Areas that at least partially cover the
2798 Country will be used as filtering criteria

2799 - Area: Selection is mandatory, one or several may be chosen

2800 - Date: Selection is mandatory, one day or range may be chosen. By default the current date
2801 shall be used. This date or date range will be used to filter auctions by delivery period.

2802 - Allocation type: Explicit, implicit or continuous, selection is optional

2803 - Contract type: Selection is optional

2804 7.27.5.2 DISPLAY

2805 This data shall be displayed in the following section:

2806 - **Transmission / Auctions**

2807 The following attributes of data shall be displayed:

2808 - Description

2809 - ID

2810 - Allocation Type: Explicit, implicit or continuous

2811 - Allocation sub-type (when applicable)

2812 - Conducting Party (when applicable)

2813 - Region (when applicable)

2814 - Resolution

2815 - Effective Date

2816 - Bidding, Capacity Allocation and Delivery Period

2817 - Data Provider that created capacity allocation: Shall only be displayed towards authenticated
2818 users

2819 - Contract type

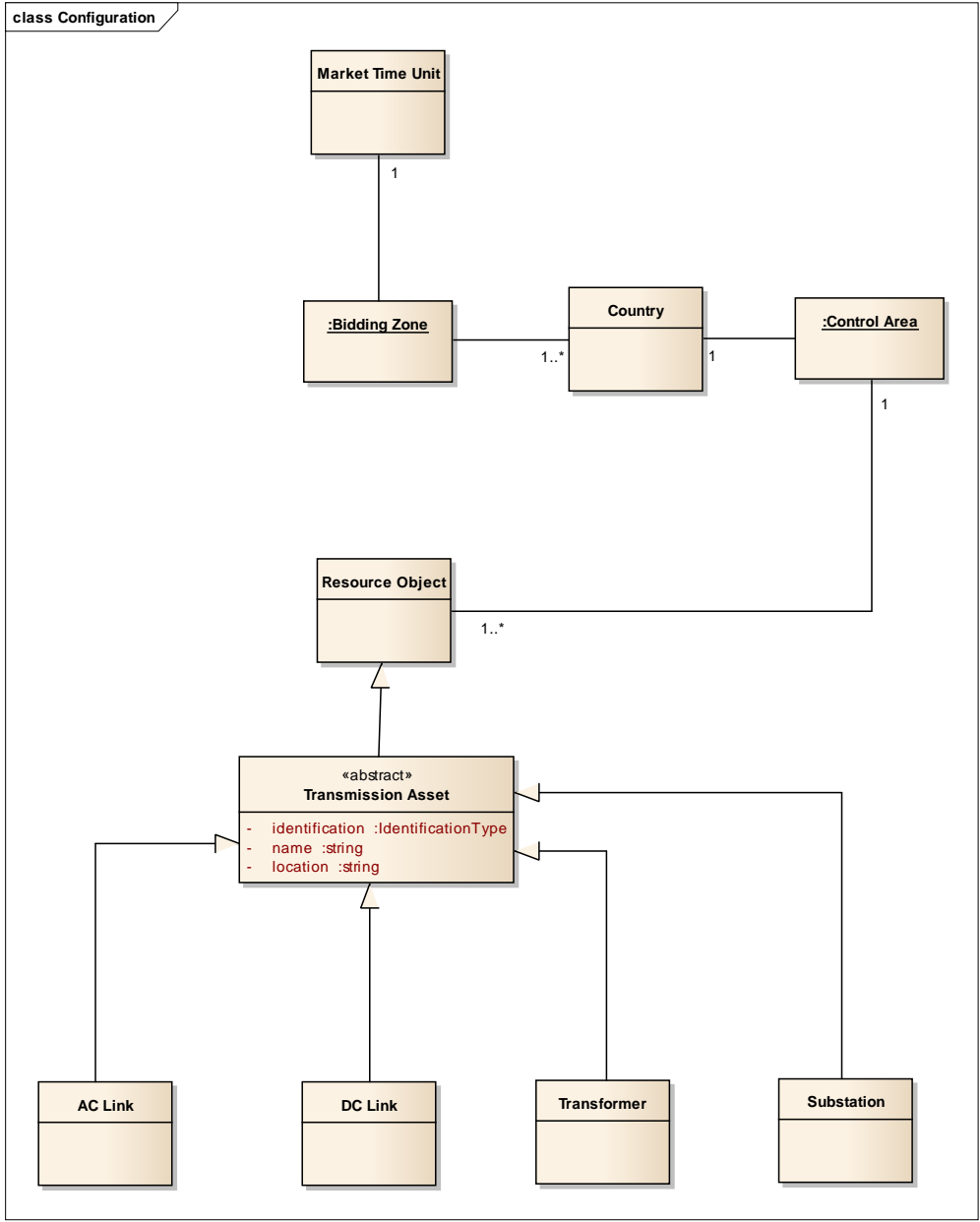
- 2820 - Classification sequence (as applicable for implicit allocations)
- 2821 - List of Capacity Products or Oriented Borders and their attributes
- 2822 - Clear indication when capacity allocation has been cancelled or capacity product or oriented
- 2823 border excluded
- 2824 - For each applicable data item, the Data Provider(s): Shall only be displayed towards
- 2825 authenticated users
- 2826 Data shall be displayed in a Table.
- 2827

8 CONGESTION MANAGEMENT

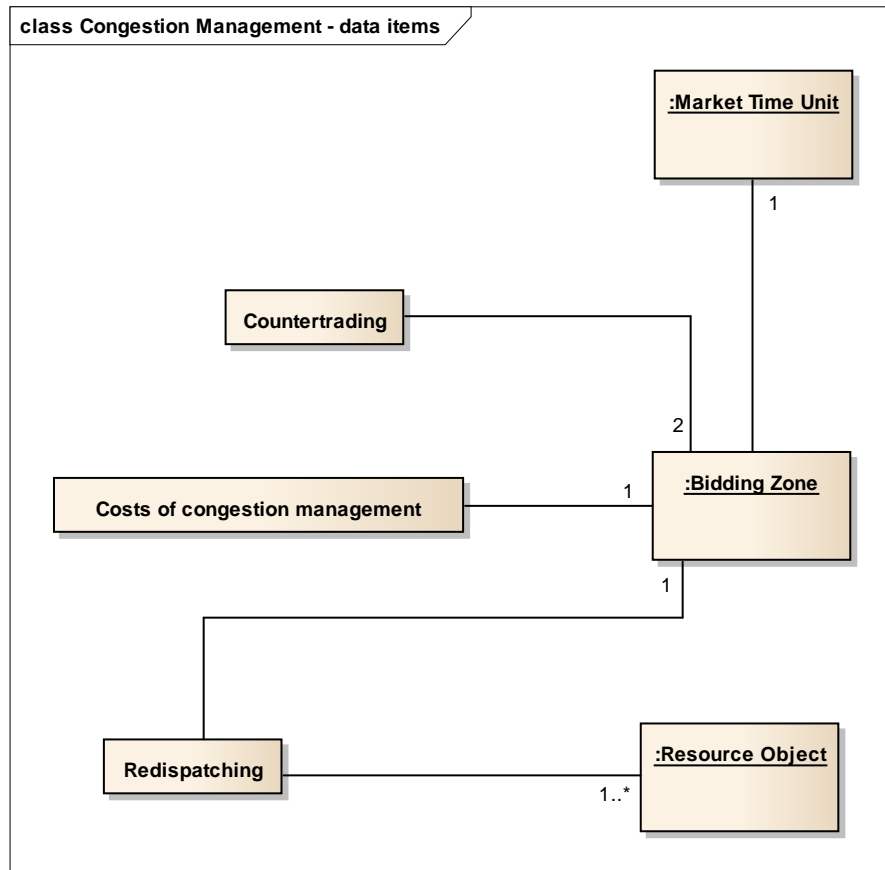
8.1 REQUIREMENTS COMMON TO ALL DATA ITEMS

8.1.1 FUNDAMENTAL ENTITIES

For Congestion Management, the fundamental entities are a subset of the ones relevant to the Transmission and Outages domains:



2834 For Congestion Management, the following relations between the fundamental entities and the
2835 required information have been identified:



2836

2837 8.1.2 PRE-CONFIGURATION

2838 - The platform administrator at ENTSO-E shall pre-configure the platform with the following
2839 reference data:

2840 - [C-CGT-1] a list of Bidding Zones. This is the same configuration as for Generation, Load
2841 and Transmission

2842 - [C-CGT-2] for each Bidding Zone, the Market Time Unit. This is the same configuration as
2843 for Generation, Load and Transmission

2844 - [C-CGT-3] a list of redispatching actions: Production increase or decrease, load increase or
2845 decrease

2846 - [C-CGT-4] a list of countertrading actions: Cross-zonal exchange increase or decrease

2847 - [C-CGT-5] for each Control Area, the single authorized Data Provider, identified by a unique
2848 Code. This is the same configuration as for Generation and Load

2849 - [C-CGT-6] for each Bidding Zone, the Currency. This is the same configuration as for
2850 Transmission

2851 - [C-CGT-7] a list of Control Areas. This is the same configuration as for Generation and
2852 Load

2853 - [C-CGT-8] a list of countries and for each country, the corresponding Control Area(s). This is
2854 the same configuration as for Generation and Load

2855 - [C-CGT-9] a list of reasons for congestion management: "Load flow overload" and "Voltage
2856 level adjustment"

2857 8.1.3 DATA CONTAINER STATUS / DATA STATUS

2858 All data items follow the "None / Ready for publication" scheme.

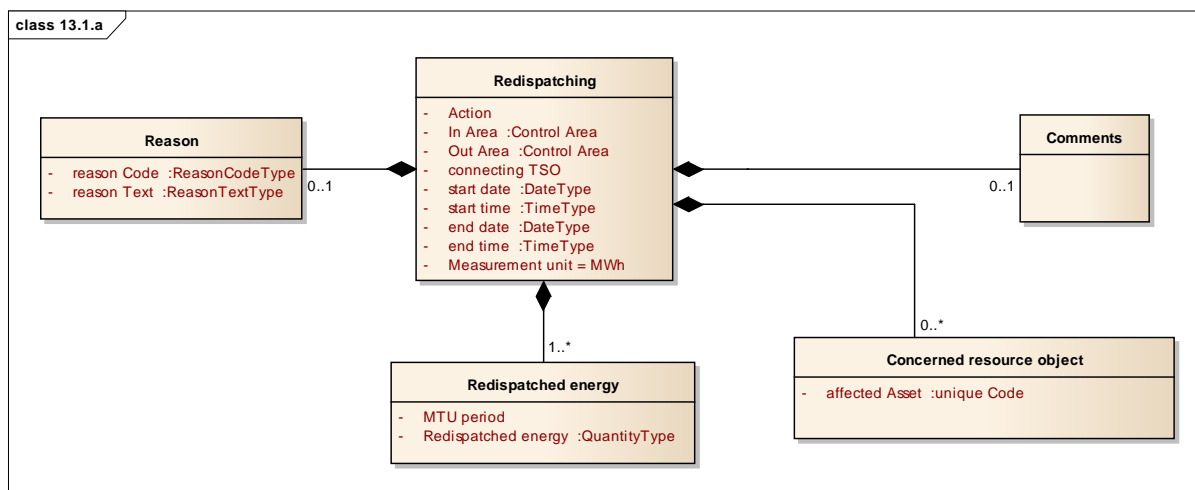
2859

2860

8.2 REDISPATCHING [13.1.A]

8.2.1 DATA DESCRIPTION

This item can be described by the following class diagram:



Redispatching is described by start and end dates and times, the action taken, connecting TSO, optionally a list of concerned resource objects and optionally a reason. For each MTU period during the time interval the redispatched energy expressed in MWh are specified. For cross-border redispatching, the In and Out areas are provided. For internal redispatching, a single area is submitted and published - In and Out areas will in that case be the same. Optionally, comments may be included.

Resource objects are Transmission Assets.

It is possible to submit and publish separately more than one redispatching action, i.e. there may be at the same time several production increases and/or load decreases.

8.2.2 PRE-CONFIGURATION

No specific pre-configuration applies to this data item.

8.2.3 ASSUMPTIONS

An update including the reason and/or concerned resource object(s) may be submitted after initial submission of document.

The concerned resource objects have been declared as per chapter 11.11.

Data should be submitted at the latest one hour after the end of the MTU period (H+1). However no monitoring can be performed, due to the nature of the data.

2890 Data Provider may choose to include in one single data submission values for a time interval
2891 longer than one MTU. The time interval would in this case necessarily be a multiple of the
2892 MTU.

2893
2894 For a given area, there may be several instances of redispatching occurring at the same
2895 time. No aggregation is performed on platform and every submitted and successfully
2896 validated instance will be published.

2897 8.2.4 INTEGRATION

- 2898
- 2899 - Areas are recognised by platform
- 2900
- 2901 - Data Provider is consistent with area(s)
- 2902
- 2903 - Connecting TSO is defined in master data and consistent with at least one of the In or Out
- 2904 Areas
- 2905
- 2906 - Data Provider is consistent with concerned resource objects. This validation shall trigger a
- 2907 warning only.
- 2908 - Concerned resource objects, if provided, are recognised by the platform.
- 2909
- 2910 - Concerned resource objects are located within the Area(s). This validation shall trigger a
- 2911 warning only.
- 2912 - Action is among the values prescribed by pre-configuration [C-CGT-3]
- 2913
- 2914 - Reason, if provided, is among the values prescribed by pre-configuration [C-CGT-9]
- 2915
- 2916 - Document should not be submitted before the start date and time declared within the
- 2917 document. Reason being that this is ex-post information. This validation shall trigger a
- 2918 warning only.
- 2919
- 2920 The time interval in the submitted document is of one MTU at least and is a multiple of the
- 2921 MTU identified for the area as per [C-CGT-2].

2922 8.2.5 MONITORING

2923 Due to the nature of the data, frequency of submission is not fixed and hence no monitoring
2924 is performed. Submission deadlines are not relevant to this data item.

2925 8.2.6 PROCESSING

2926 No processing is performed on this data item.

2927 8.2.7 PUBLICATION

2928 8.2.7.1 FILTERING AND SORTING CRITERIA

2929 Data shall be visually accessed by selecting the following:

2930 - Country (selection is optional: If selected, Areas will be filtered to include only those that
2931 partially or completely cover the Country)

2932 - Area(s) (selection is mandatory, at least one must be selected)

2933 - Day or date range (selection is mandatory)

2934 8.2.7.2 DISPLAY

2935 This data shall be displayed in the following section:

2936 - **Congestion Management / Redispatching**

2937 The following attributes of data shall be displayed:

2938 - Area(s)

2939 - Market Time Unit

2940 - Start and end dates and times

2941 - Measurement Unit

2942 - The action

2943 - Connecting TSO

2944 - For each MTU period during the matching redispatching time intervals, the redispatched
2945 energy.

2946
2947 - Reason, if provided

2948
2949 - Comments, if provided

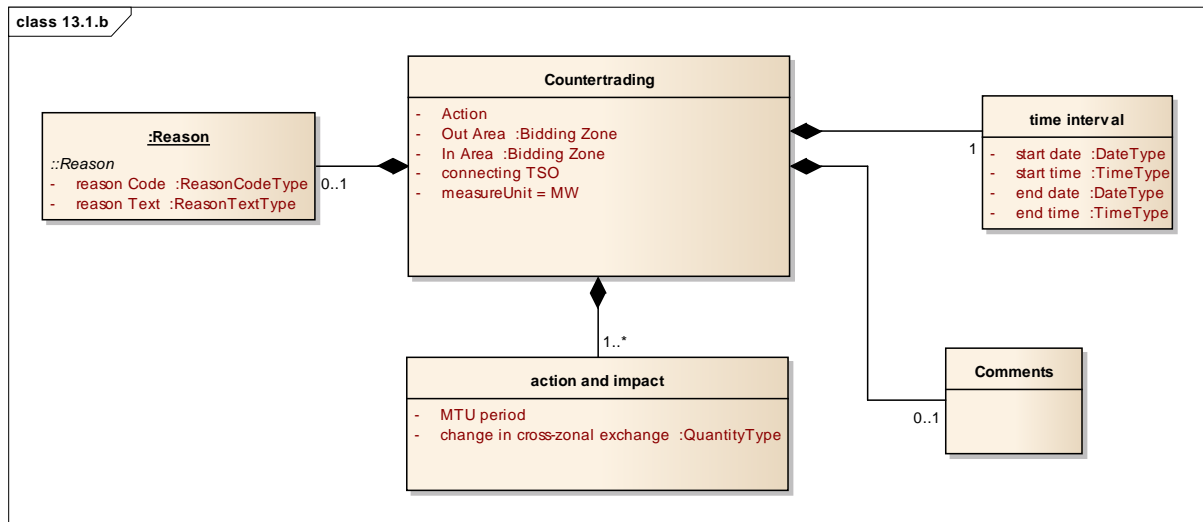
2950
2951 - A list of concerned resource objects, if available, with links to pages on central platform
2952 providing more details on the resource objects.

2953
2954 Data shall be published as a table and as a chart.
2955

8.3 COUNTERTRADING [13.1.B]

8.3.1 DATA DESCRIPTION

This item can be described by the following class diagram:



Countertrading between start and end dates and times is described for an In Area and an Out Area with indication of the connecting TSO. Optionally, a reason is included. Optionally, comments are included.

For each Market Time Unit (MTU) period during the time interval, the change in exchange expressed in MW and the Action taken is specified.

The change in cross-zonal exchange is always a positive value.

8.3.2 PRE-CONFIGURATION

For this data item there is no specific pre-configuration.

8.3.3 ASSUMPTIONS

An update including the reason may be submitted after initial submission of document.

Data should be submitted at the latest one hour after the end of the MTU period (H+1). However no monitoring can be performed, due to the nature of the data.

Data Provider may choose to include in one single data submission values for a time interval longer than one MTU. The time interval would in this case necessarily be a multiple of the MTU.

2981 8.3.4 INTEGRATION

- 2982 - Bidding Zones are recognised by platform
- 2983
- 2984 - Data Provider is consistent with at least one of the In and Out Areas
- 2985
- 2986 - Connecting TSO is consistent with master data and at least one of the In and Out Areas
- 2987
- 2988 - Action is among the values prescribed by pre-configuration [C-CGT-4]
- 2989
- 2990 Reason, if provided, is among the values prescribed by pre-configuration [C-CGT-9]
- 2991
- 2992 - Document should not be submitted before the end of the MTU. Reason being that this is ex-
- 2993 post information. This validation shall trigger a warning only.
- 2994
- 2995 The time interval in the submitted document is of one MTU at least and is a multiple of the
- 2996 MTU identified for the Bidding Zone as per [C-CGT-2].

2997 8.3.5 MONITORING

- 2998 Due to the nature of the data, frequency of submission is not fixed and hence no monitoring
- 2999 is performed. Submission deadlines are not relevant to this data item.

3000 8.3.6 PROCESSING

- 3001 No processing is performed on this data item.

3002 8.3.7 PUBLICATION

3003 8.3.7.1 FILTERING AND SORTING CRITERIA

- 3004 Data shall be visually accessed by selecting the following:
- 3005 - Country (selection is optional: If selected, couple of Bidding Zones will be filtered to include
- 3006 only those that partially or completely cover the Country)
- 3007 - Bidding Zone couple (selection is mandatory)
- 3008 - Day or date range (selection is mandatory)

3009 8.3.7.2 DISPLAY

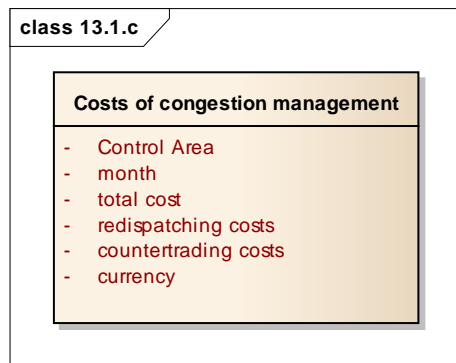
- 3010 This data shall be displayed in the following section:
- 3011 - **Congestion Management / Countertrading**
- 3012 The following attributes of data shall be displayed:

- 3013 - In and Out Areas
- 3014 - Connecting TSO
- 3015 - Market Time Unit
- 3016 - Start and end dates and times
- 3017 - Measurement Unit
- 3018 - Reason, if available
- 3019 - Comments, if available
- 3020 - For each MTU period during the matching countertrading time intervals, the Action and
- 3021 change in cross-zonal exchange
- 3022
- 3023 Data shall be published as a table and as a chart.
- 3024

8.4 COSTS OF CONGESTION MANAGEMENT [13.1.c]

8.4.1 DATA DESCRIPTION

This item can be described by the following class diagram:



Per Control Area and month there is a report on the costs of congestion management. Report contains separate details for the total costs, costs due to redispatching and costs due to countertrading. Platform will calculate costs for other remedial action by subtracting costs of redispatching and countertrading from the total cost.

Document shall cover one single Control Area only.

8.4.2 PRE-CONFIGURATION

For this data item there is no specific pre-configuration.

8.4.3 ASSUMPTIONS

No monitoring is performed, due to the nature of the data. Hence, no submission deadlines will be configured.

8.4.4 INTEGRATION

- Control Area is recognised by platform
- Data Provider is consistent with Control Area
- Currency is consistent with Bidding Zone (indirectly through Control Area), as per pre-configuration [C-CGT-6]

3051 **8.4.5 MONITORING**

3052 Due to the nature of the data, frequency of submission is not fixed and hence no monitoring
3053 is performed. Submission deadlines are not relevant to this data item.

3054 **8.4.6 PROCESSING**

3055 Platform will per Control Area and month calculate costs for other remedial action, by
3056 subtracting from total cost the costs of redispatching and countertrading.

3057 **8.4.7 PUBLICATION**

3058 **8.4.7.1 FILTERING AND SORTING CRITERIA**

3059 Data shall be visually accessed by selecting the following:

3060 - Country (selection is optional: If selected, Control Area will be filtered to include only those
3061 that partially or completely cover the Country)

3062 - Control Area (selection is mandatory)

3063 - Month range (selection is mandatory)

3064 **8.4.7.2 DISPLAY**

3065 This data shall be displayed in the following section:

3066 - **Congestion Management / Costs**

3067 The following attributes of data shall be displayed:

3068 - Control Area

3069 - Currency

3070 - Selected month range

3071 - For each month, the total cost, costs of redispatching, costs of countertrading and costs for
3072 other remedial actions

3073 Data shall be published as a table and chart.

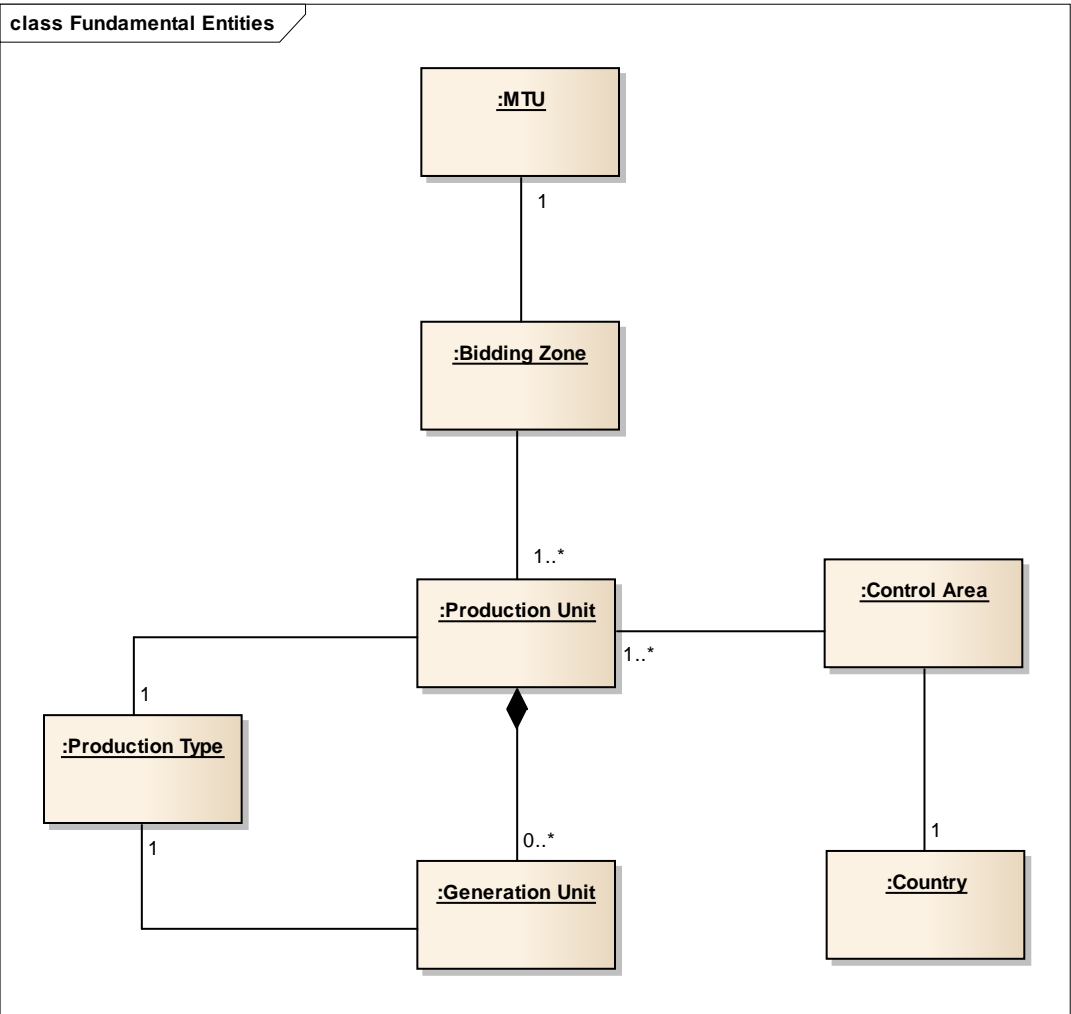
3074

9 GENERATION

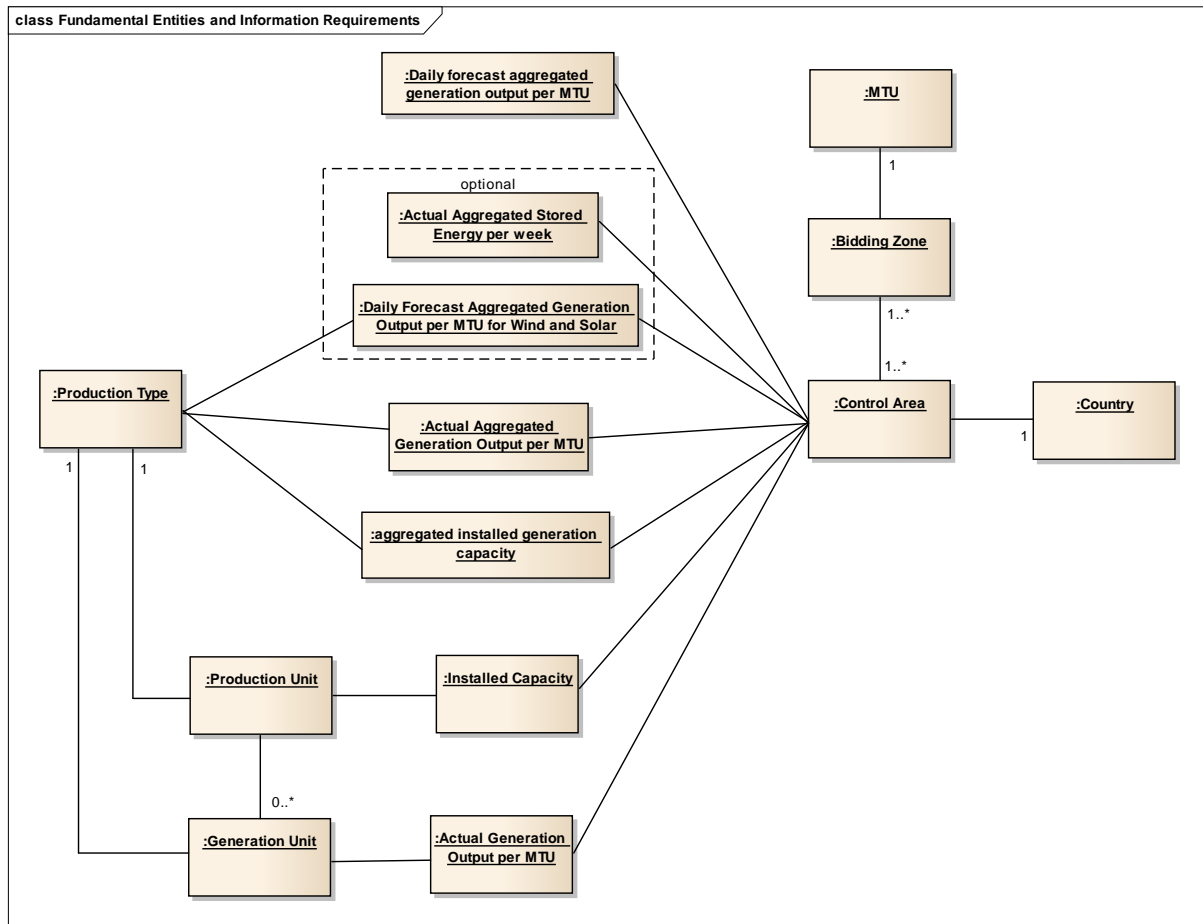
9.1 REQUIREMENTS COMMON TO ALL DATA ITEMS

9.1.1 FUNDAMENTAL ENTITIES

The following class diagram describes the fundamental entities to be taken into account within the scope of this document in order to pre-configure the platform.



- For a given Bidding Zone, there will be a Market Time Unit
- For a given Bidding Zone, there will be a list of Production and Generation Units. Every Production and Generation Unit is of exactly one Production Type
- Country will be deduced based on Control Area



3085

3086 Optional means here that submission of data is necessary only when power from
3087 corresponding Production Types exceed certain thresholds, as stipulated in [1].

3088 It must be possible to determine to which bidding zone and control area that generation data
3089 contained in submitted documents refer to¹⁹.

3090 9.1.2 PRE-CONFIGURATION

3091 The platform administrator at ENTSO-E shall pre-configure application with the following
3092 reference data:

3093 - [C-GNR-1] a list of Bidding Zones

3094 - [C-GNR-2] a list of Production Types

3095 - [C-GNR-3] for each Bidding Zone the Market Time Unit, expressed as duration

¹⁹ If format of data does not permit explicit declaration of Control Area it may be deduced from Sender.

- 3096 - [C-GNR-4] for each Bidding Zone, Control Area and data item subject to publication, the
3097 allowed Data Providers, identified by unique Codes²⁰
- 3098 - [C-GNR-7] a percentage tolerance that indicates how much scheduled or actual capacity
3099 may exceed installed capacity. This is a single value common to all Generation Units and will
3100 be set to 25%. If tolerance is exceeded, only a warning will be triggered.
- 3101 The following reference data will be managed by Data Providers:
- 3102 - [C-GNR-5] a list of Production and Generation Units, refer to chapter **Error! Reference**
3103 **source not found.** for further details. This will be used for validation during the integration
3104 step.
- 3105 - [C-GNR-8] a list of Control Areas
- 3106 - [C-GNR-9] a list of countries and for each country, the corresponding Control Area(s)
- 3107 **9.1.3 PUBLICATION**
- 3108 For data items that do not require aggregation, data is published as soon as received, except
3109 for data item [16.1.a] where publication will be pending a specified delay.
- 3110 For data items that require aggregation, aggregated values only shall be published. Data is
3111 being published as soon as it is complete, i.e. when all relevant Data Providers have submitted
3112 their contributions. However, if by the submission deadline data is still pending from one or
3113 several Data Providers, the aggregated value shall be published with a clear indication that the
3114 final value is pending further data submissions.

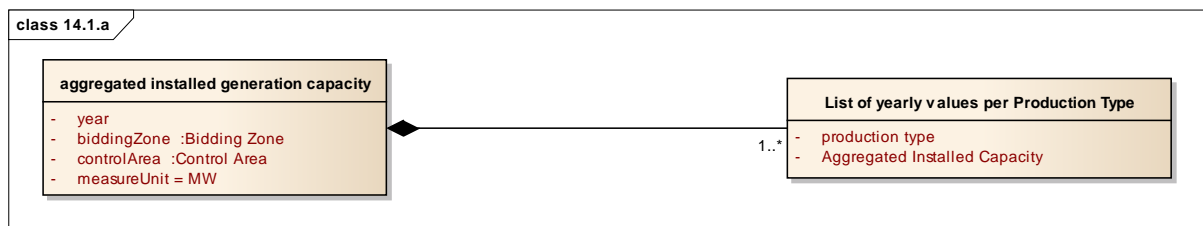
²⁰ Whether EIC code or some other code will be used is left for the Implementation Guide to determine.

9.2 INSTALLED GENERATION CAPACITY AGGREGATED

[14.1.A]

9.2.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone and Control Area, the Aggregated Installed Generation Capacity shall be recorded for all Production Types. Values are to be provided for 1 year. The fixed measure Unit is MW.

9.2.2 PRE-CONFIGURATION

[PC14.1.A-1] This data item shall be configured as expected.

[PC14.1.A-2] For every Bidding Zone, there is a yearly submission deadline. Submission must be performed one week before the year for which data is provided.

Example: if the first year for which data is provided is year 2013, the document must be submitted before December 25th, 00:00 UTC, 2012.

9.2.3 ASSUMPTIONS

Note that in a given Bidding Zone, there may be multiple Data Providers and submission is not coordinated.

9.2.4 INTEGRATION

- Bidding Zone and Control Area shall be recognised by the platform

- Production Type shall be recognised by the platform

- The Data Provider shall be consistent with the identified Control Area

Note that no validation is possible on the combinations, inclusions or exclusions of Production Types in a given Bidding Zone.

3138 9.2.5 MONITORING

3139 For a given Bidding Zone and year data is expected. This is controlled by pre-configuration
3140 [PC14.1.A-1]. For every Bidding Zone and year at least one Capacity Value is expected for at
3141 least one Production Type. The submission deadline [PC14.1.A-2] will be monitored for
3142 compliance.

3143 For a given Bidding Zone, data is not considered complete before all Data Providers declared
3144 per pre-configuration [C-GNR-4] have submitted their data contributions. If by the deadline only
3145 some Data Providers have submitted data, the data will be considered “missing”.

3146 9.2.6 PROCESSING

3147 Submitted Capacity values shall be aggregated per Country, Bidding Zone, Production Type
3148 and year. Aggregation here means simply adding up the submitted Capacity values.

3149 Submitted Capacity values shall also be aggregated per Country, Bidding Zone and year for
3150 the purpose of calculating a grand total value for the whole Country or Bidding Zone, common
3151 to all Production Types.

3152 Aggregated values per country are determined with the help of pre-configuration [C-GNR-9].

3153 9.2.7 DATA CONTAINER STATUS / DATA STATUS

3154 This data item follows the “None / Ready for publication / Missing” scheme.

3155 9.2.8 PUBLICATION

3156 9.2.8.1 FILTERING AND SORTING CRITERIA

3157 Data shall be visually accessed by selecting the following:

- 3158 - Country or Bidding Zone: selection is mandatory
- 3159 - Production Type: selection is optional, one or several may be chosen
- 3160 - Year: selection is mandatory, single year or a range may be chosen

3161 9.2.8.2 DISPLAY

3162 This data shall be displayed in the following section:

3163 - **Generation / Aggregated Installed Capacity**

3164 The following attributes of data shall be displayed:

- 3165 - Country or Bidding Zone name

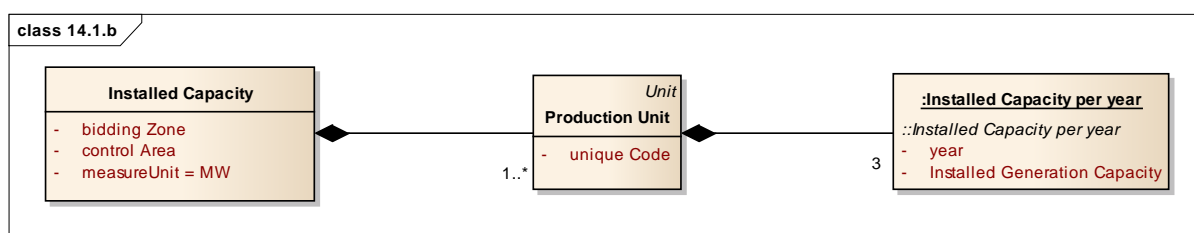
- 3166 - Capacity per Production Type for each year
- 3167 Grand total Capacity for each year shall also be displayed.
- 3168 User shall have the choice between displaying data in a Table, Map or Pie Chart.
- 3169

9.3 INSTALLED GENERATION CAPACITY PER UNIT

[14.1.B]

9.3.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For every Production Unit in a given Bidding Zone and Control Area, Installed Generation Capacity ≥ 100 MW shall be recorded. Values are to be provided for 3 years, with one value per year. The fixed measure Unit is MW.

Production Unit is identified by a unique Code²¹.

9.3.2 PRE-CONFIGURATION

Since installed capacities will be recorded with Master Data (see following section), no specific pre-configuration for this data item is foreseen.

9.3.3 ASSUMPTIONS

Installed capacity has been recorded in Master Data, as described in section **Error! Reference source not found..** There is no additional data submission foreseen.

9.3.4 INTEGRATION

Not applicable, since covered by Master Data described in section **Error! Reference source not found..**

9.3.5 MONITORING

Since installed capacities are recorded in Master Data, technically monitoring is not feasible for this data item.

²¹ Whether EIC code or some other code will be used is left for the Implementation Guide to determine.

3191 **9.3.6 PROCESSING**

3192 No processing performed on this data item.

3193 **9.3.7 DATA CONTAINER STATUS / DATA STATUS**

3194 Not applicable since installed capacities are recorded in Master Data.

3195 **9.3.8 PUBLICATION**

3196 **9.3.8.1 FILTERING AND SORTING CRITERIA**

3197 Data shall be visually accessed by selecting the following:

3198 - Country or Bidding Zone: selection is mandatory

3199 - Production Type: selection is optional, one or several may be chosen

3200 - Year: selection is mandatory, single year or a range to be chosen

3201 **9.3.8.2 DISPLAY**

3202 This data shall be displayed in the following section:

3203 - **Generation / List of Production Units and Installed Capacity**

3204 The following attributes of data shall be displayed:

3205 - Country or Bidding Zone name

3206 - Production Type, unique Code and Name

3207 - For every Production Unit and selected year(s), the installed capacity value(s)

3208 - For every Production Unit, the commissioning date and, if available, decommissioning date

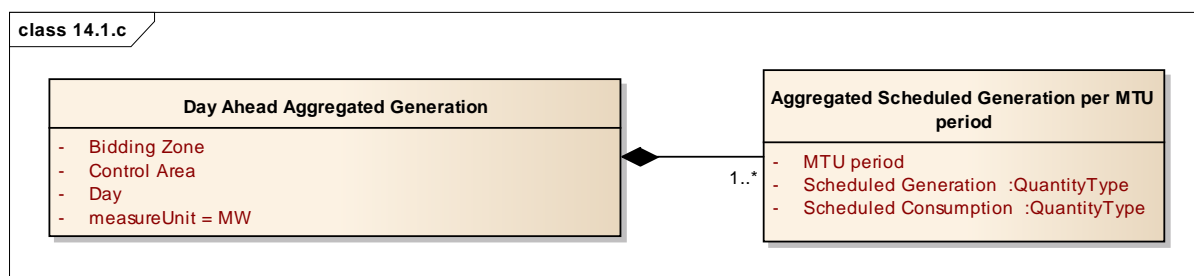
3209 Data shall be displayed in a Table.

3210 Links to pages on platform with more details on each Production Unit shall be provided.

3211 9.4 DAY AHEAD AGGREGATED GENERATION [14.1.c]

3212 9.4.1 DATA DESCRIPTION

3213 This item can be described by the following class diagram:



3214
3215 For a given Bidding Zone and Control Area the Scheduled Generation for the day-ahead shall
3216 be recorded. The number of values corresponds to the number of Market Time Unit periods in
3217 one day. The fixed measure Unit is MW.

3218 Optionally, power consumed by production/generation units may be included.

3219 9.4.2 PRE-CONFIGURATION

3220 [PC-14.1.c-1] This data item shall be configured as expected.

3221 [PC-14.1.c-2] There is a daily submission deadline, common to all Bidding Zones.

3222 Submission must be performed not later than D-1 at 18:00 CET.

3223 9.4.3 ASSUMPTIONS

3224 No specific assumptions apply to this data item.

3225 9.4.4 INTEGRATION

3226 - Bidding Zone and Control Area shall be recognised by the platform

3227 - The Data Provider shall be consistent with the identified Control Area

3228 9.4.5 MONITORING

3229 For a given Bidding Zone and day, data is expected. This is controlled by pre-configuration

3230 [PC-14.1.c-1]. Compliance with the submission deadline [PC-14.1.c-2] will be monitored.

3231 9.4.6 PROCESSING

3232 Submitted Scheduled Generation values shall be aggregated per Country, Bidding Zone and
3233 Market Time Unit period. Aggregation here means simply adding up the submitted Scheduled
3234 Generation values.

3235 Aggregated values per country are determined with the help of pre-configuration [C-GNR-9].

3236 9.4.7 DATA CONTAINER STATUS / DATA STATUS

3237 This data item follows the “None / Ready for publication / Missing” scheme.

3238 9.4.8 PUBLICATION

3239 9.4.8.1 FILTERING AND SORTING CRITERIA

3240 Data shall be visually accessed by selecting the following:

3241 - Country or Bidding Zone: selection is mandatory

3242 - Day: selection is mandatory, one or two consecutive days may be chosen

3243 - Start and end time: selection is mandatory, start and end time within the selected day

3244 9.4.8.2 DISPLAY

3245 This data shall be displayed in the following section:

3246 - **Generation / Day Ahead Aggregated Generation**

3247 The following attributes of data shall be displayed:

3248 - Country or Bidding Zone name

3249 - Measure Unit

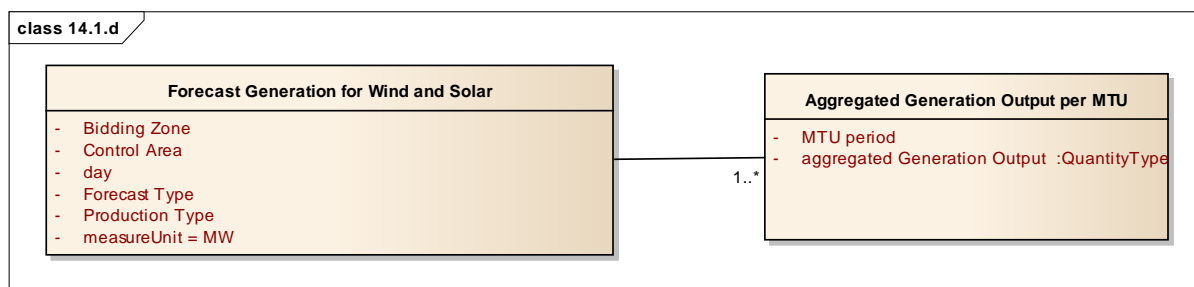
3250 - Selected Day(s)

3251 - For every MTU period within the selected day(s), the scheduled generation values, and
3252 consumption values (if available). User shall have the choice between displaying data in a
3253 Table or in a Chart.

9.5 DAY-AHEAD GENERATION FORECASTS FOR WIND AND SOLAR [14.1.D]

9.5.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone and Control Area there shall be a Forecast Aggregated Generation for wind onshore, wind offshore and solar power, respectively. Three separate forecasts may be submitted and published: Day-ahead at 1800 on day D-1, intraday at 0800 on day D and current forecast. Values are provided with a value per Market Time Unit (MTU) period. There is a fixed measure Unit (MW).

Forecasts for wind onshore, wind offshore and solar may be provided in the same or in separate data submissions.

Note that duration of MTU depends on Bidding Zone.

9.5.2 PRE-CONFIGURATION

[PC-14.1.d-1] For a given Bidding Zone, Data Providers shall be able to indicate whether data is expected or not for wind onshore, wind offshore and solar, respectively. By default it is not expected.

[PC-14.1.d-2] There is a daily submission deadline for the day-ahead forecast, common to all bidding zones. Submission must be performed not later than D-1 at 18:00 CET. This submission deadline will apply only if data is expected, as per [PC-14.1.d-1].

[PC-14.1.d-3] There is a daily submission deadline for the intraday forecast, common to all bidding zones. Submission must be performed no later than D at 08:00 CET. This submission deadline will apply only if data is expected, as per [PC-14.1.d-1].

There is no submission deadline for the current forecast since submissions cannot be predicted.

3279 9.5.3 ASSUMPTIONS

3280 No specific assumptions apply to this data item.

3281 9.5.4 INTEGRATION

3282 - Bidding Zone and Control Area shall be recognised by the platform

3283 - The Data Provider shall be consistent with the identified Control Area

3284 9.5.5 MONITORING

3285 If for a given Bidding Zone and Production Type the data item has been configured as expected
3286 per [PC-14.1.d-1], compliance with submission deadlines [PC-14.1.d-2] and [PC-14.1.d-3] will
3287 be monitored.

3288 Monitoring of the submissions of current forecast at 1800 on day D-1 and at 0800 on day D
3289 are covered by the monitoring of the day-ahead and intraday forecasts. Any other submissions
3290 of current forecast cannot be predicted. Hence, no monitoring of current forecast will be
3291 undertaken.

3292 For a given Bidding Zone, data is not considered complete before all Data Providers have
3293 submitted their data contributions. If by the deadline only some Data Providers have submitted
3294 data, the data will be considered “missing”.

3295 9.5.6 PROCESSING

3296 Submitted Scheduled Values shall be aggregated per Country, Bidding Zone, Forecast type,
3297 Production Type (wind onshore, wind offshore and solar, respectively) and Market Time Unit
3298 period. Aggregation here means simply adding up the submitted Scheduled Values.

3299 Aggregated values per country are determined with the help of pre-configuration [C-GNR-9].

3300 9.5.7 DATA CONTAINER STATUS / DATA STATUS

3301 This data item follows the “None / Ready for publication / Missing” scheme.

3302 9.5.8 PUBLICATION

3303 9.5.8.1 FILTERING AND SORTING CRITERIA

3304 Data shall be visually accessed by selecting the following:

3305 - Country or Bidding Zone: selection is mandatory

3306 - Production Type: wind onshore, wind offshore or solar, selection is mandatory, one or several
3307 may be chosen. By default all are chosen

3308 - Day: selection is mandatory, one or two consecutive days may be chosen

3309 - Start and end time: must be within the selected day(s) and selection is mandatory

3310 9.5.8.2 DISPLAY

3311 This data shall be displayed in the following section:

3312 - **Generation / Day Ahead Generation Forecasts for Wind and Solar**

3313 The following attributes of data shall be displayed:

3314 - Country or Bidding Zone name

3315 - Measure Unit

3316 - Selected day(s)

3317 - Forecast type

3318 - For the selected Production Type(s), generation forecast values for each MTU period within
3319 the selected start and end dates and times

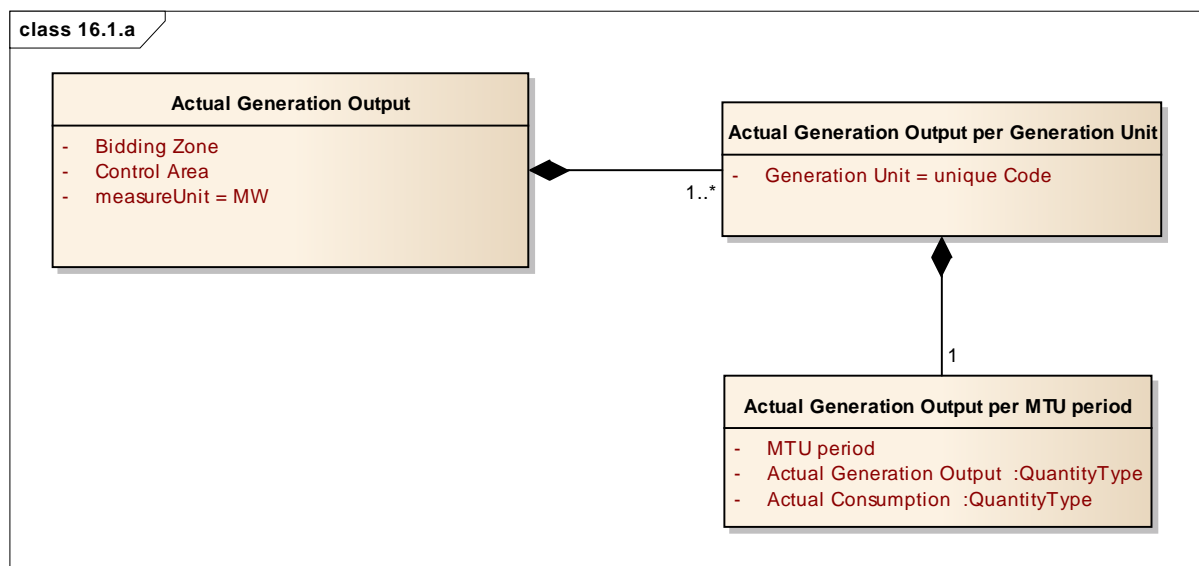
3320 User shall have the choice between displaying data in a Table or in a Chart.

3321

9.6 ACTUAL GENERATION OUTPUT PER GENERATION UNIT [16.1.A]

9.6.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone, Control Area and Market Time Unit (MTU) period, the Actual Generation Output shall be recorded per Generation Unit having installed generation capacity ≥ 100 MW. Common to all Generation Units there is a fixed measure Unit (MW).

Optionally, power consumed by the generation unit may be included.

Note that duration of MTU depends on Bidding Zone.

9.6.2 PRE-CONFIGURATION

[PC-16.1.a-1] This data item shall be configured as expected.

[PC-16.1.a-2] For every Bidding Zone and MTU period there is a submission deadline. Submission must be performed not later than five days after the end of the MTU period.

Example: If the MTU duration in the Bidding Zone is 15 minutes, then the document that covers the time March 12 from 14:00 until 14:15 must be submitted by March 17 at 14:15.

9.6.3 ASSUMPTIONS

Installed Capacity must have been submitted and validated for the Generation Unit and the year as per chapter 9.3. This is necessary in order to succeed in the validation and monitoring

3341 described in the next sections. If installed capacity has not been recorded in the platform, the
3342 validation will trigger a warning and monitoring will not produce any notification about missing
3343 data.

3344 Data Provider may choose to include in one single data submission values for a time interval
3345 longer than one MTU. The time interval would in this case necessarily be a multiple of the
3346 MTU.

3347 9.6.4 INTEGRATION

3348 - Bidding Zone and Control Area shall be recognised by the platform

3349 - The Data Provider shall be consistent with the identified Control Area and Generation Unit

3350 - Document should not be submitted before the end of the MTU period. Reason being that this
3351 is ex-post information. This validation shall trigger a warning only. The warning may be
3352 suppressed completely by changing configuration.

3353 - The Codes that identify Generation Units must already exist in the platform. This is
3354 controlled by pre-configuration [C-GNR-5].

3355 - Generation Unit must be within the Control Area. This shall be validated against the
3356 Generation Unit reference data described in chapter **Error! Reference source not found..**

3357 - For each Generation Unit, it shall be validated that the actual generation output does not
3358 exceed the Installed Capacity, recorded for the same year, by more than the percentage
3359 tolerance expressed in [C-GNR-7]. Tolerance currently set to 25%. This validation will trigger
3360 a warning only.

3361 The time interval in the submitted document is of one MTU at least and is a multiple of the
3362 MTU identified for the Bidding Zone as per [C-GNR-3].

3363 9.6.5 MONITORING

3364 For a given Bidding Zone and MTU period, actual generation output is expected. This is
3365 controlled by pre-configuration [PC-16.1.a-1]. This data is expected for all Generation Units
3366 with an installed generation capacity ≥ 100 MW and that are in status Commissioned during
3367 the MTU period. The submission deadline [PC-16.1.a-2] will be monitored for compliance.

3368 9.6.6 PROCESSING

3369 No further processing is performed on this data item.

3370 9.6.7 DATA CONTAINER STATUS / DATA STATUS

3371 The ex-post data item applies the “none / waiting for publication x 2 / ready for publication /
3372 missing” scheme.

3373 9.6.8 PUBLICATION

3374 9.6.8.1 FILTERING AND SORTING CRITERIA

3375 Data shall be visually accessed by selecting the following:

- 3376 - Country or Bidding Zone: selection is mandatory
- 3377 - Production Type: selection is optional, one or several may be chosen.
- 3378 - Production or Generation unit, selection is optional
- 3379 - Day: selection is mandatory, one or two consecutive days may be chosen
- 3380 - Start and end time: selection is mandatory and must be within the selected day(s)

3381 9.6.8.2 DISPLAY

3382 This data shall be displayed in the following section:

3383 - **Generation / Actual Generation per Generation Unit**

3384 The following attributes of data shall be displayed:

- 3385 - Country or Bidding Zone name
- 3386 - Production Type, Code and Name of every Generation Unit
- 3387 - selected day(s)
- 3388 - For every Generation Unit, the actual generation output and actual consumption, if available,
- 3389 per MTU period within the selected start and end dates and times

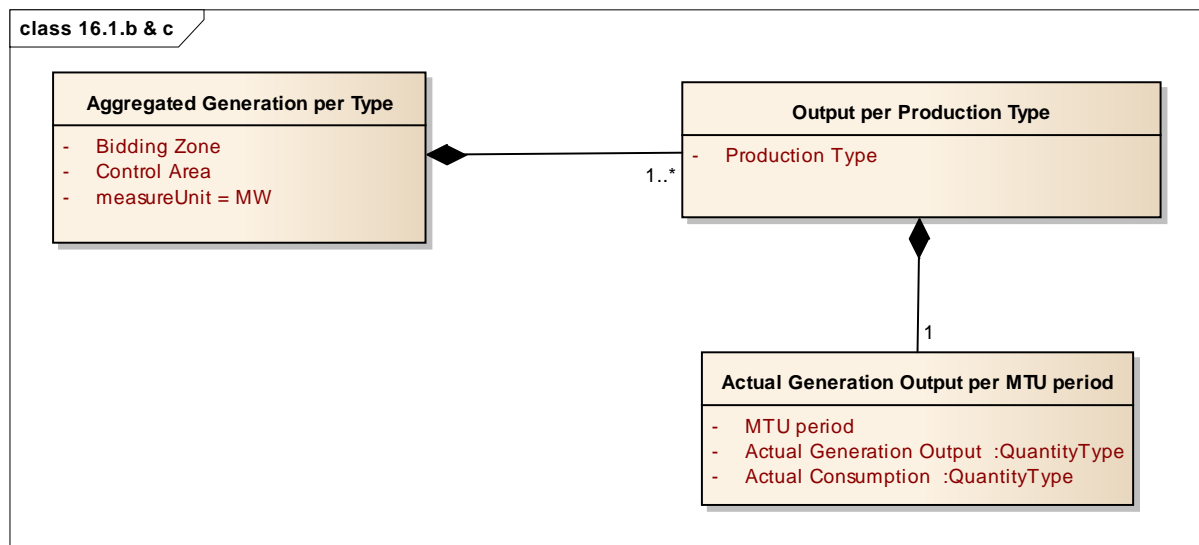
3390 Data shall be displayed in a Table.

3391 Links shall be provided to pages on central platform that provide additional details on each
3392 Generation Unit.

9.7 AGGREGATED GENERATION PER TYPE [16.1.B&C]

9.7.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone, Control Area and a given Production Type, there shall be an Aggregated Generation Output per Market Time Unit (MTU) period. Common to all Production Types there is a fixed measure Unit (MW).

Optionally, power consumed by production/generation units may be included.

Note that duration of MTU depends on Bidding Zone.

For the purpose of providing input to the statistical data publication Net generation & consumption of pumps (see chapter 13.4), data providers may optionally make a supplementary submission in monthly resolution.

9.7.2 PRE-CONFIGURATION

[PC-16.1.bc-1] This data item shall be configured as expected.

[PC-16.1.bc-2] For every Bidding Zone and MTU period there is a submission deadline. Submission must be performed not later than one hour after the end of the MTU period.

Example: If the MTU duration in the Bidding Zone is 15 minutes, then the document that covers the time 14:00-14:15 must be submitted by 15:15.

3411 9.7.3 ASSUMPTIONS

3412 There is no requirement to configure per production type whether data is expected or not.

3413 Data Provider may choose to include in one single data submission values for a time interval
3414 longer than one MTU. The time interval would in this case necessarily be a multiple of the
3415 MTU.

3416 9.7.4 INTEGRATION

3417 - Bidding Zone and Control Area shall be recognised by the platform

3418 - Production Type shall be recognised by the platform

3419 - The Data Provider shall be consistent with the identified Control Area

3420 - Document may not be submitted before the end of the MTU period. Reason being that this is
3421 ex-post information. This validation shall trigger a warning only. The warning may be
3422 suppressed completely by changing configuration.

3423 The time interval in the submitted document is of one MTU at least and is a multiple of the
3424 MTU identified for the Bidding Zone as per [C-GNR-3].

3425 9.7.5 MONITORING

3426 For this data item, data is expected. This is controlled by pre-configuration [PC-16.1.bc-1]. For
3427 a given Bidding Zone and MTU period an actual aggregated generation output value is
3428 expected for at least one Production Type. The submission deadline [PC-16.1.bc-2] will be
3429 monitored for compliance.

3430 For a given Bidding Zone, data is not considered complete before all Data Providers declared
3431 per pre-configuration [C-GNR-4] have submitted their data contributions. If by the deadline only
3432 some Data Providers have submitted data, the data will be considered “missing”.

3433 9.7.6 PROCESSING

3434 Submitted actual generation values shall be aggregated per Country, Bidding Zone, Production
3435 Type and MTU period. Aggregation here means simply adding up the submitted actual
3436 generation values.

3437 Aggregated values per country are determined with the help of pre-configuration [C-GNR-9].

3438 9.7.7 DATA CONTAINER STATUS / DATA STATUS

3439 The ex-post data item applies the “none / waiting for publication / ready for publication /
3440 missing” scheme.

3441 9.7.8 PUBLICATION

3442 9.7.8.1 FILTERING AND SORTING CRITERIA

3443 Data shall be visually accessed by selecting the following:

- 3444 - Country or Bidding Zone: selection is mandatory
- 3445 - Production Type: selection is optional, one or several may be chosen
- 3446 - Production and Consumption or Production only: selection is optional, by default Production
- 3447 and Consumption are both displayed
- 3448 - Day: selection is mandatory, one or two consecutive days may be chosen
- 3449 - Start and end time: selection is mandatory and must be within the selected day(s)

3450 9.7.8.2 DISPLAY

3451 This data shall be displayed in the following section:

3452 - **Generation / Actual Aggregated Generation Output per Production Type**

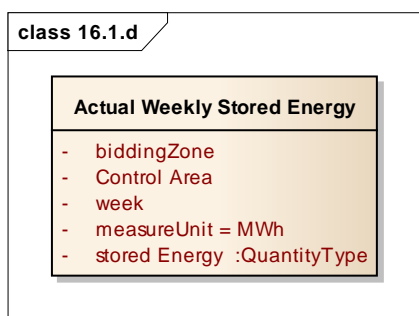
3453 The following attributes of data shall be displayed:

- 3454 - Country or Bidding Zone name
- 3455 - Selected day(s)
- 3456 - For the selected Production Type(s), for each MTU period within the selected start and end
- 3457 dates and times, the actual aggregated generation output and consumption, if available
- 3458 Data shall be displayed in a Table and in a Chart.

9.8 AGGREGATED FILLING RATE OF WATER RESERVOIRS AND HYDRO STORAGE PLANTS [16.1.D]

9.8.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For a given Bidding Zone and Control Area there shall be a weekly Stored Energy Value. The Measure Unit is fixed to "MWh".

Note: Regulation prescribes that value for same week during previous year shall also be made available. Values corresponding to the year prior to go-live of central platform could be loaded into platform separately, on a voluntary basis as part of initial data population.

9.8.2 PRE-CONFIGURATION

[PC-16.1.d-1] For a given Bidding Zone, Data Providers shall be able to indicate whether data is expected or not. By default it is not expected.

[PC-16.1.d-2] For a given bidding zone, there is a weekly submission deadline. Submission must be performed not later than at the end of Wednesday of W+1. This submission deadline will apply only if data is expected, as per [PC-16.1.d-1].

9.8.3 ASSUMPTIONS

No specific assumptions apply for this data item.

9.8.4 INTEGRATION

- Bidding Zone and Control Area shall be recognised by the platform

- The Data Provider shall be consistent with the identified Bidding Zone

3480 - Submission shall not be performed before the end of the week W. This validation shall trigger
3481 a warning only. The warning may be suppressed completely by changing configuration.

3482 9.8.5 MONITORING

3483 If for a given Bidding Zone the data item has been configured as expected as per [PC-16.1.d-
3484 1], compliance with submission deadline [PC-16.1.d-2] will be monitored. For a given Bidding
3485 Zone, data is not considered complete before all Data Providers have submitted their data
3486 contributions. If by the deadline only some Data Providers have submitted data, the data will
3487 be considered “missing”.

3488 9.8.6 PROCESSING

3489 Submitted Stored Energy Values shall be aggregated per Country and Bidding Zone.
3490 Aggregation here means simply adding up the submitted Stored Energy Values.

3491 Aggregated values per country are determined with the help of pre-configuration [C-GNR-9].

3492 9.8.7 DATA CONTAINER STATUS / DATA STATUS

3493 This is an ex-post data item that applies the “none / waiting for publication x 2 / ready for
3494 publication / missing” scheme.

3495 9.8.8 PUBLICATION

3496 9.8.8.1 FILTERING AND SORTING CRITERIA

3497 Data shall be visually accessed by selecting the following:

3498 - Country or Bidding Zone: selection is mandatory

3499 - Week: selection is mandatory, a single week or a range (from – to) may be chosen

3500 9.8.8.2 DISPLAY

3501 This data shall be displayed in the following section:

3502 - **Generation / water reservoirs and hydro storage plants**

3503 The following attributes of data shall be displayed:

3504 - Country or Bidding Zone name

3505 - Measure Unit

3506 - selected week(s)

3507 - Stored Energy Values for the selected week(s) and the same week(s) during previous year

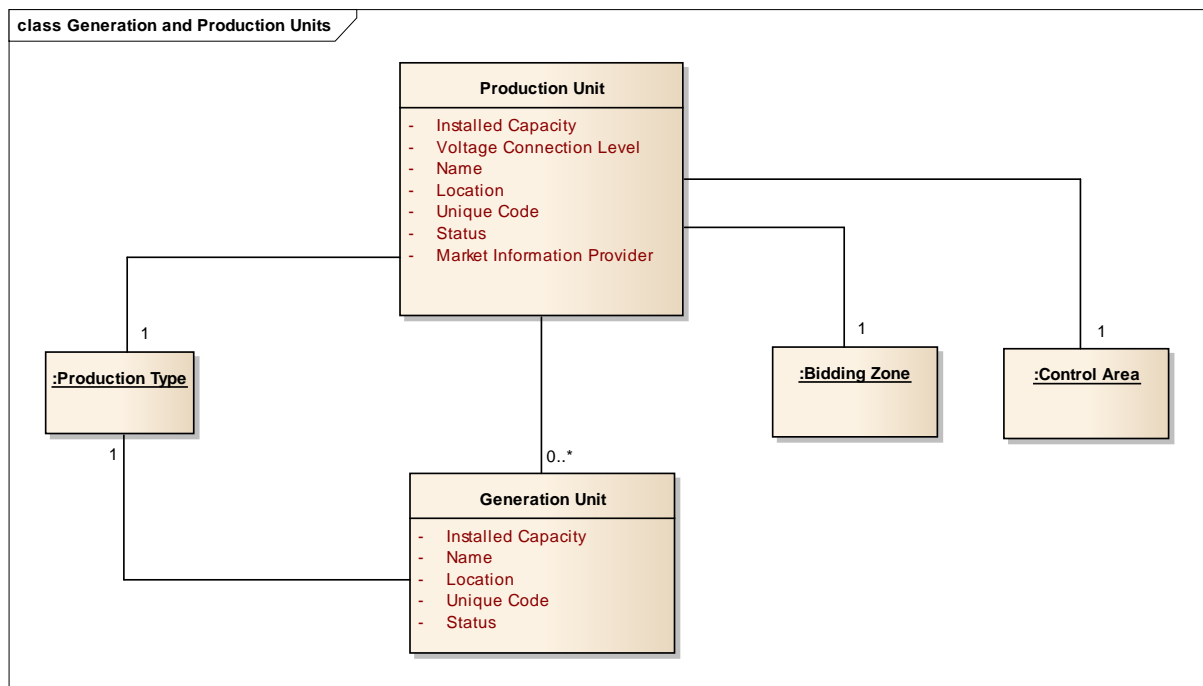
3508 User shall have the choice between displaying data in a Table or in a Chart.

3509

9.9 GENERATION AND PRODUCTION UNITS

9.9.1 DATA DESCRIPTION

Generation and Production Units can be described by the following class diagram:



A Production Unit may have zero, one or several Generation Units. A Generation Unit may not be defined on its own, without the corresponding Production Unit.

Status describes whether a Generation or Production Unit is commissioned or decommissioned. If Unit is no longer relevant, its status should be changed to Cancelled²². All attributes listed above in diagram are mandatory.

The unique code may never be modified once a Generation or Production Unit has been created. Data representing Generation and Production Units will be effective dated, since in particular Status may change over time.

9.9.2 ASSUMPTIONS

Although a Production Unit always has at least one Generation Unit, there is no obligation for Data Providers to register Generation Units with an installed capacity smaller than 100 MW.

²² This could be useful in a scenario where a project to deploy a Unit is curtailed.

3525 Alignment of Production Type or Status between Production Unit and its Generation Unit(s)
3526 will not be enforced by the platform.

3527 Data Provider is assumed to be the same for the Production Unit and its Generation Unit(s).

3528 Location is a free text field – guidelines regarding its content to be specified by [3].

3529 Platform will not aggregate installed capacity for generation units.

3530 Platform will not validate installed capacity of production unit against installed capacity of its
3531 generation units.

3532 9.9.3 CREATION OF GENERATION AND PRODUCTION UNITS

3533 Generation and Production Units may be created one by one or several in one go. There shall
3534 be a webpage to this end, where creation or modification of Generation and Production Units
3535 will require authentication. Additionally, a machine-to-machine interface shall be available,
3536 based on EDI mechanism.

3537 Platform administrator in ENTSO-E shall be able to create and modify Generation and
3538 Production Units on behalf of Data Providers.

3539 When Generation or Production Unit is created, the uniqueness of the Code shall be verified
3540 by checking that no other Generation or Production Unit on platform with same Code already
3541 exists.

3542 Note that the assignation of unique Code assumes a manual procedure that is outside the
3543 scope of the central platform.

3544 Bidding Zone shall be validated against the list of recognised Bidding Zones [C-GNR-1].

3545 Production Type shall be validated against the list of Production Types [C-GNR-2].

3546 Control Area shall be validated against the list of recognised Control Areas [C-GNR-8]

3547 9.9.4 UPDATES TO GENERATION AND PRODUCTION UNITS

3548 The Data Provider associated with the Generation or Production Unit may update the data at
3549 any time. Code will be used to match updated data to Generation or Production Unit.

3550 Platform shall validate that Generation or Production Unit with quoted Code already exists. If
3551 not, update will be rejected.

3552 Platform will validate that Data Provider performing update is consistent with the Data Provider
3553 recorded for the Production Unit.

3554 Bidding Zone shall be validated against the list of recognised Bidding Zones [C-GNR-1].

- 3555 Production Type shall be validated against the list of Production Types [C-GNR-2].
- 3556 Control Area shall be validated against the list of recognised Control Areas [C-GNR-8].
- 3557 Deletions are not foreseen under normal circumstances, but could be performed in exceptional
3558 situations by platform administrator in ENTSO-E.

3559 9.9.5 QUERIES OF REFERENCE DATA FOR GENERATION AND PRODUCTION 3560 UNITS

- 3561 Data on Generation and Production Units shall be made available for visual inspection and
3562 download via web page.

3563 9.9.5.1 FILTERING AND SORTING CRITERIA

- 3564 It shall be possible to search for Generation or Production Unit by using Code as search
3565 criterion.

- 3566 Also, it shall be possible to retrieve several Generation and Production Units at the same time,
3567 by specifying the following filtering and sorting criteria:

- 3568 - Country or Bidding Zone: selection is mandatory
- 3569 - Production Type: selection is optional, one or several may be chosen
- 3570 - Status: selection is optional, by default set to Commissioned
- 3571 - Effective Date: selection is optional, one day or from-to range may be chosen. By default the
3572 current date shall be used

3573 9.9.5.2 DISPLAY

- 3574 This data shall be displayed in the following section, accessible to all registered users:

3575 - **Generation / Generation and Production Units**

- 3576 The following attributes of data shall be displayed:

- 3577 - Country or Bidding Zone
- 3578 - Effective Date
- 3579 - List of Production Units, with their Installed Capacity, Production Type, Voltage Connection
3580 Level, Name, Location, Unique Code and Status.
- 3581 - For each Production Unit, the associated Generation Unit(s) with their Installed Capacity,
3582 Production Type, Name, Location, Unique Code and Status.

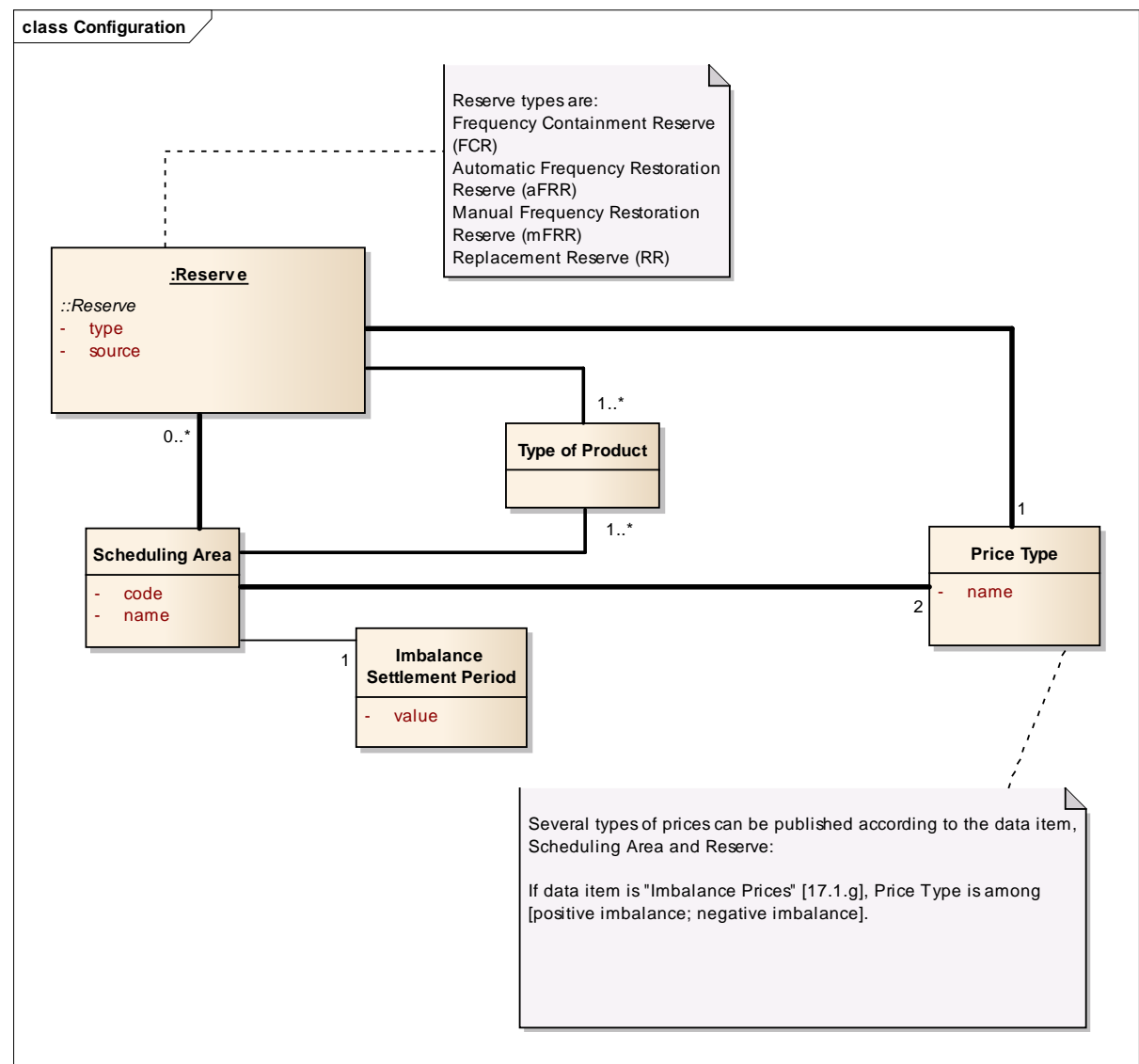
3583 Data shall be displayed in a Table.

10 BALANCING

10.1 REQUIREMENTS COMMON TO ALL DATA ITEMS

10.1.1 FUNDAMENTAL ENTITIES

The following class diagram describes the fundamental entities to be taken into account within the scope of this document in order to pre-configure the platform.



- Except for “Financial Expenses and Income for Balancing” [17.1.i] which is provided per control area, all information regarding Balancing is by default given per **Scheduling Area**,

however balancing energy prices [17.1.f] and imbalance prices [17.1.g] may in some cases be published per imbalance price area and imbalance volume [17.1.h] and current balancing state [12.3.a] per imbalance area. For most data items, there is a set of applicable Reserves in each Scheduling Area. But in the cases of the data items “Imbalance Prices” [17.1.g], “Total Imbalance Volumes” [17.1.h] and “Financial Expenses and Income for Balancing” [17.1.i] the Reserves are not relevant.

- The **Reserve** is of different **Types**. Reserve may be further differentiated by **source**; load, generation or mixed load/generation. However the latter distinction is relevant only for data item “Contracted Balancing Reserves” [17.1.b&c]. For mFRR, the reserve type may further distinguish between scheduled and direct activation, when applicable.
- The **Imbalance Settlement Period (ISP)** is dependent on the Scheduling Area
- The **Type of Price** depends on the Scheduling Area and for some data items additionally also on the Reserve
- For the data item “Imbalance Prices” [17.1.g], the price in question is an imbalance price.
- The **Type of Product** depends on the Reserve Type and the Scheduling Area. Initially only three types of products are foreseen; Standard, Specific and Local. As the implementation of the EB GL progresses, further granularity (i.e. different standard or specific products) may be introduced.

10.1.2 PRE-CONFIGURATION

- The platform administrator at ENTSO-E shall pre-configure the platform with the following reference data:

- [C-BLC-1] a list of Reserves

- [C-BLC-3] for each data item a separate list of relevant Scheduling Areas, imbalance areas, imbalance price areas or control areas

- [C-BLC-4] for select data items, a list of applicable Reserves in each Scheduling Area

- [C-BLC-5] a list of Price Types and their dependencies with the data item or combination of data item, Scheduling Area and reserve²³

- [C-BLC-6] a list of Imbalance Settlement Periods and their dependencies with the Scheduling Area

- [C-BLC-8] a list of Contract Types. The same list as for Transmission applies, refer to chapter 7.1.6

- [C-BLC-9] for each Scheduling Area or imbalance price area, the currency

²³ Dependency on Scheduling Area and reserve is relevant for data item “Prices of Procured Balancing Reserves” [17.1.c] only.

3624 - [C-BLC-11] for each Scheduling Area, imbalance area and imbalance price area, the country
3625 or list of countries that it covers, to facilitate publication of data per country

3626 - [C-BLC-12] a list of Product Types

3627 10.1.3 ASSUMPTIONS

3628 No specific assumptions apply to the data items in the Balancing domain.

3629 10.1.4 INTEGRATION

3630 Data Provider shall in one single data submission be able to provide data for a time interval
3631 longer than one Imbalance Settlement Period. The time interval would in this case necessarily
3632 be a multiple of the Imbalance Settlement Period. Similarly, for data item Financial Expenses
3633 and Income for Balancing [17.1.i], the time interval may encompass several months.

3634 10.1.5 DATA CONTAINER STATUS / DATA STATUS

3635 All structured data items, with the exception of [17.1.b&c], [12.3.b&c], [12.3.f], 12.3.h] and
3636 [12.3.i] follow the “none / waiting for publication / published / missing” scheme if properly
3637 declared as expected and if the submission deadline has been configured.

3638 10.1.6 PUBLICATION

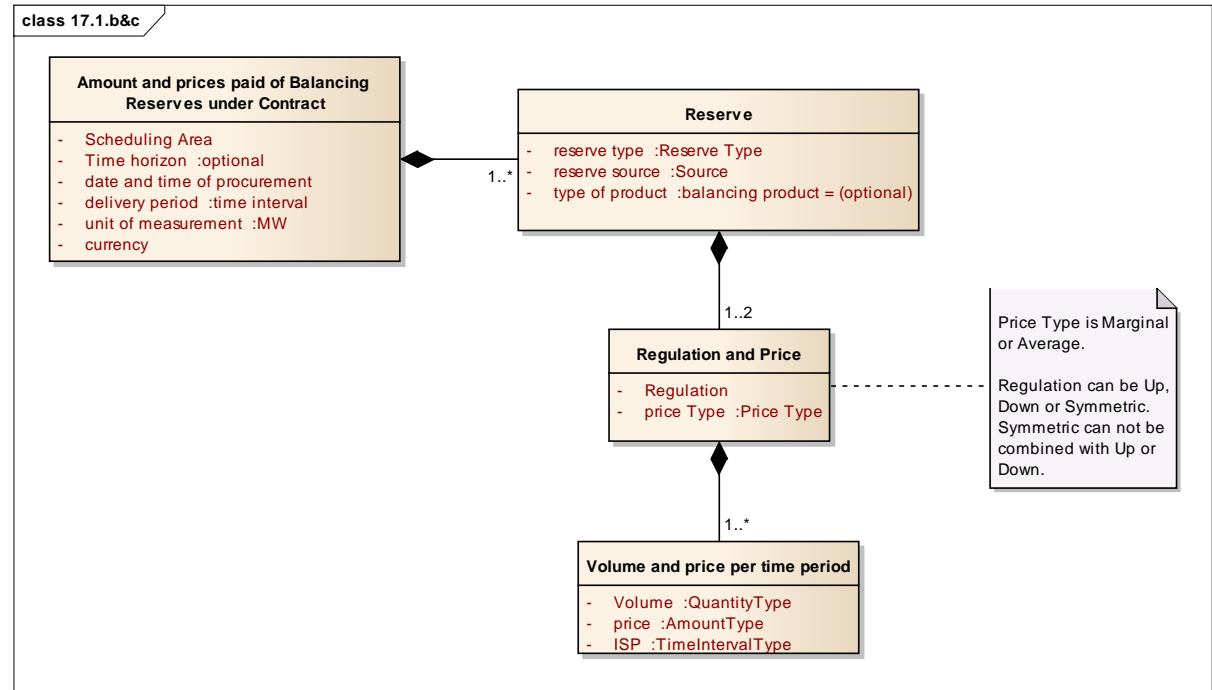
3639 For all data items except [12.3.g, 12.3.j-l], data shall be available on web site in both formats;
3640 table and chart.

3641

10.2 AMOUNT AND PRICES PAID OF BALANCING RESERVES UNDER CONTRACT [17.1.B&C]

10.2.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For this data item, the submitted document shall contain values pertaining to only one Scheduling Area at a time. Not all Reserves have to be submitted in the same document. They could be submitted in separate documents, depending on local process.

This item describes for the applicable Reserves in the considered Scheduling Area and contracted delivery period, the quantity and prices paid of contracted balancing reserves per Regulation in a given fixed measure Unit (MW). For this data item, it is mandatory to qualify Reserve by Source. Date and time of procurement shall be specified.

The following two data consistency rules must be applied by the data provider. The platform will not validate or enforce them:

- 1) Type of product shall be specified when more than one exists in the given scheduling area
 - 2) Time horizon is specified when applicable.
- Volume and prices are described with resolution equivalent to ISP.

3660 The applicable price type is specified in reference data.

3661 If no volume was contracted for a given Reserve, the Reserve shall not be included in the
3662 submission.

3663 In case data describing prices and volumes are not available for publication at the same time,
3664 the prices shall be submitted as an update to the document containing the volumes, or vice
3665 versa.

3666 10.2.2 PRE-CONFIGURATION

3667 - For each applicable Scheduling Area, the unique allowed Data Provider~

3668 - For each applicable scheduling area and reserve, the price type: Average or Marginal

3669 10.2.3 INTEGRATION

3670 - The Scheduling Area shall be recognised by the platform

3671 - The Reserve shall be recognised by the platform

3672 - Time horizon and type of product, if provided, shall be recognised by the platform

3673 - The provided Scheduling Area and Reserve shall be associated together with the data item
3674 [17.1.b&c] in the pre-configuration of reference data, as in [C-BLC-4]

3675 - The Data Provider shall be consistent with the identified Scheduling Area

3676 10.2.4 MONITORING

3677 Contracted time intervals and dates and times for procurement processes vary significantly
3678 among scheduling areas, hence monitoring will not be performed on this data item.

3679 10.2.5 PROCESSING

3680 No processing is performed on this data item.

3681 10.2.6 DATA CONTAINER STATUS / DATA STATUS

3682 Data follows the "None / Ready for publication" scheme.

3683 10.2.7 PUBLICATION

3684 10.2.7.1 FILTERING AND SORTING CRITERIA

3685 Data shall be visually accessed by selecting the following:

- 3686 - Country (selection is optional: If selected, Scheduling Areas will be filtered to include only
- 3687 those that partially or completely cover the Country)
- 3688 - Scheduling Area (selection is mandatory)
- 3689 - Reserve (selection is optional)
- 3690 - Source (selection is optional)
- 3691 - Time horizon (selection is optional)
- 3692 - Type of product (selection is optional)
- 3693 - Regulation (selection is optional)
- 3694 - Date or date range (selection is mandatory)

3695 10.2.7.2 DISPLAY

3696 This data shall be displayed in the following section:

3697 - **Balancing / Capacity / Volumes and prices of Contracted Reserves**

3698 The following attributes of data shall be displayed:

- 3699 - Title
- 3700 - Scheduling Area name
- 3701 - Selected date or date range
- 3702 - Measurement Unit
- 3703 - Currency
- 3704 - For reserves with contracted delivery period partially or completely within the selected date
- 3705 or date range, the following attributes:
 - 3706 - Reserve Type, Source, price type, Regulation and the contracted delivery period, date
 - 3707 and time of procurement
 - 3708 - If available: Type of product, time horizon
 - 3709 - Contracted volumes and prices with ISP resolution

3710 If volumes and/or prices vary during the contracted delivery period, it shall be possible to

3711 expand the view so that values are displayed as a curve and a table.

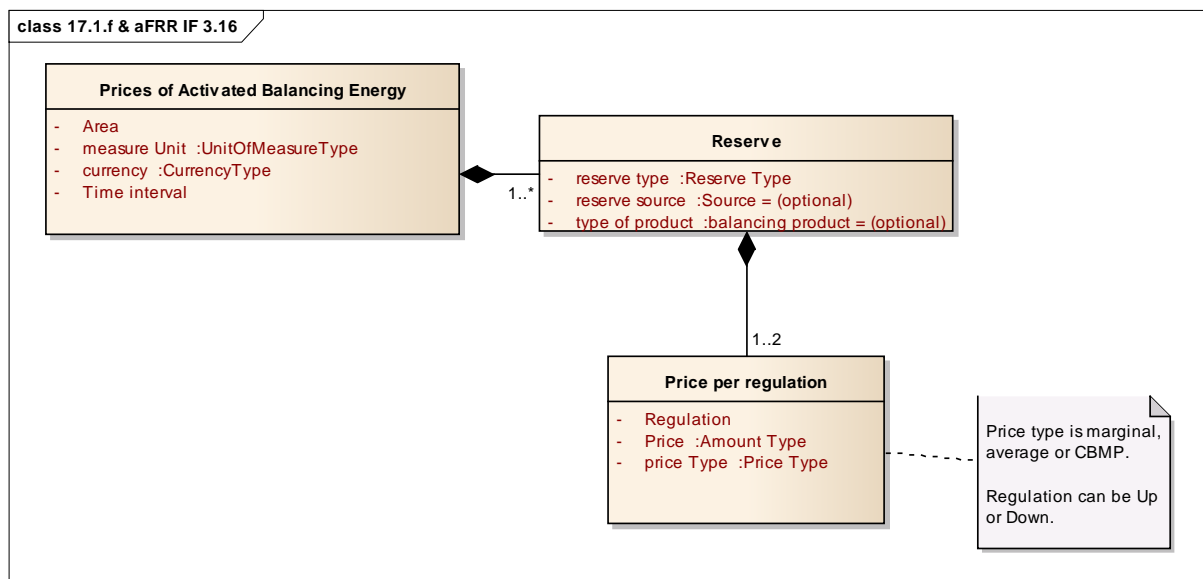
3712

3713

10.5 PRICES OF ACTIVATED BALANCING ENERGY [17.1.F] & AFRR CBMPs [AFRR IF 3.16]

10.5.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For this data item, the submitted document shall contain values pertaining to only one area, which may be either a scheduling area or an imbalance price area. For aFRR standard product additionally LFC area may apply.

This item describes for a time interval, by default equal to one ISP, for the applicable Reserves in the considered area, the price of activated balancing energy per Regulation in a given currency and fixed measure Unit (MWh). Price may be positive as well as negative. For aFRR standard product with bids selected for activation centrally by the European platform, a time interval of initially four seconds will be supported.

Source of Reserve and/or Type of Product are optionally included.

If no energy was activated for a given Reserve, no price shall be submitted for that Reserve.

For mFRR standard product, separate prices will be published for scheduled and direct activation, based on reserve type. For aFRR standard product, separate prices will be published for bids selected for activation locally and centrally, respectively, based on reserve type.

3733 10.5.2 PRE-CONFIGURATION

- 3734 - For each applicable area and reserve type, the unique allowed Data Provider
- 3735 - For each applicable area, reserve type and optionally also product, the price type
- 3736 - For each applicable area and reserve type, the submission deadline:
- 3737 • For a given ISP, submission must be done at the latest one hour (H+1) after the end of
 - 3738 the ISP.
- 3739 *Example: if the ISP is 30 min for a given Area and Reserve, and the time interval being*
- 3740 *described is January 15th [08:00; 08:30] UTC, values for this time interval must be*
- 3741 *submitted before January 15th, 09:30 UTC.*

3742 10.5.3 INTEGRATION

- 3743 - The Area shall be recognised by the platform
- 3744 - The Reserve shall be recognised by the platform
- 3745 - If included, the Type of Product shall be recognised by the platform
- 3746 - The provided Area and Reserve shall be associated together with the data item [17.1.f] in the
- 3747 pre-configuration of reference data, as in [C-BLC-4]
- 3748 - The time interval in the submitted document is of one ISP at least and is necessarily a multiple
- 3749 of the ISP, this ISP being identified for the Area as in [C-BLC-6].
- 3750 - The Data Provider shall be consistent with the identified Area and Reserve
- 3751 - Currency shall be consistent with pre-configuration [C-BLC-9]

3752 10.5.4 MONITORING

- 3753 For a given Area, the submission deadline described above shall be monitored for each time
- 3754 interval. If a non-zero activated volume was submitted under GL EB article 12.3.e (refer to
- 3755 chapter 10.12), price is expected for the given reserve²⁴.
- 3756 For aFRR standard products selected for activation centrally by the European platform, prices
- 3757 with initially four second resolution will be expected for the entire ISP whenever a non-zero

²⁴ Direct activation ("DA") of mFRR standard product is an exception to this rule, since direct activation stretches until the end of the subsequent MTU period. As a consequence, monitoring of prices for mFRR DA is not feasible.

3758 activated volume was reported under GL EB article 12.3.e. Due to technical limitations,
3759 monitoring is performed per entire ISP also for aFRR standard products.

3760 10.5.5 PROCESSING

3761 Platform determines Price Type based on Area and Reserve, using pre-configuration [C-BLC-
3762 5].

3763 10.5.6 PUBLICATION

3764 10.5.6.1 FILTERING AND SORTING CRITERIA

3765 Data shall be visually accessed by selecting the following:

3766 - Country (selection is optional: If selected, Areas will be filtered to include only those that
3767 partially or completely cover the Country)

3768 - Area (selection is mandatory)

3769 - Reserve Type (selection is optional)

3770 - Type of Product (selection is optional)

3771 - Day (selection is mandatory)

3772 - Time Window (Start time and end time) (selection is mandatory)

3773 10.5.6.2 DISPLAY

3774 This data shall be displayed in the following section:

3775 - **Balancing / Energy / Prices of Activated Balancing Energy**

3776 However for aFRR standard product with bids selected for activation centrally by the European
3777 platform, data shall be displayed in a dedicated section:

3778 - **Balancing / Energy / CBMPs for aFRR standard product [aFRR IF 3.16]**

3779 The following attributes of data shall be displayed:

3780 - Title

3781 - Area name

3782 - Reserve: Type and Source (if provided)

3783 - Type of Product (if provided)

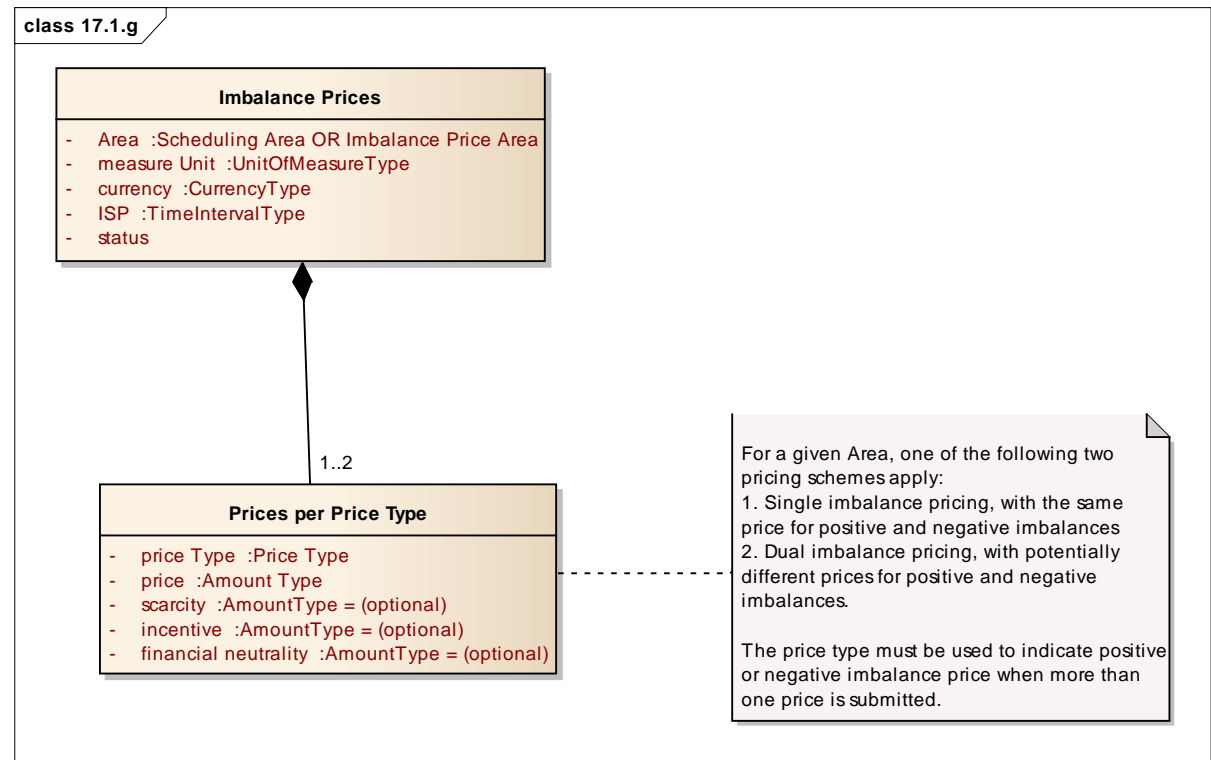
3784 - ISP for the given Area

- 3785 - Day
- 3786 - Measurement Unit
- 3787 - Currency
- 3788 - For each Reserve and product (if provided), the Regulation and Price Type
- 3789 - Prices per ISP within the Time Window, however for aFRR standard product with bids
- 3790 selected for activation centrally by the European platform prices are published with four
- 3791 seconds resolution
- 3792 For data with four seconds resolution (i.e. aFRR standard product with bids selected for
- 3793 activation centrally by the European platform), data shall by default be displayed in a chart.

10.6 IMBALANCE PRICES [17.1.G]

10.6.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For each applicable area, which may be a scheduling are or an imbalance price area the positive and negative imbalance prices shall be published. For this data item, the submitted document shall contain values pertaining to only one Area.

If the data provider submits a price without distinction between positive and negative imbalance (typically being the case when TSO applies single imbalance pricing), the platform shall publish the same values for positive and negative imbalances.

Optionally, the data provider may supplement the price with one or several of the following three components: Scarcity, incentive and financial neutrality.

For a time interval, equal to one ISP, this publication consists of the imbalance prices (and optionally their components) in a given currency and fixed measure unit (MWh). Prices may be negative, positive or zero. The status of the data (intermediate or final) shall also be indicated.

3810 10.6.2 PRE-CONFIGURATION

3811 - For each applicable Area, the unique allowed Data Provider

3812 - For each applicable Area, the submission deadline:

- 3813 • Data shall be submitted as soon as possible. The specific submission deadline will
3814 depend on Area.

3815 *Example: ISP is 30 min for a given Area where submission deadline is H+2. The time*
3816 *interval in question is January 15th [08:00; 08:30] UTC. Values for this time interval must*
3817 *be submitted before January 15th, 10:30 UTC.*

3818 10.6.3 INTEGRATION

3819 - The Area shall be recognised by the platform

3820 - If provided, the Price Types shall be recognised by the platform

3821 - The provided Area shall be associated with the data item [17.1.g] in the pre-configuration of
3822 reference data, as in [C-BLC-3]

3823 - The time interval in the submitted document is of one ISP at least and is necessarily a multiple
3824 of the ISP, this ISP being identified for the Area as in [C-BLC-6]

3825 - The Data Provider shall be consistent with the identified Area

3826 - Currency shall be consistent with pre-configuration [C-BLC-9]

3827 10.6.4 MONITORING

3828 For a given Area, the submission deadline described above shall be monitored for each time
3829 interval.

3830 10.6.5 PROCESSING

3831 No processing is performed on this data item.

3832 10.6.6 PUBLICATION

3833 10.6.6.1 FILTERING AND SORTING CRITERIA

3834 Data shall be visually accessed by selecting the following:

- 3835 - Country (selection is optional: If selected, Areas will be filtered to include only those that
3836 partially or completely cover the Country)

- 3837 - Area (selection is mandatory)
- 3838 - Day (selection is mandatory)
- 3839 - Time window within selected day (Start time and end time) (selection is optional)

3840 10.6.6.2 DISPLAY

3841 This data shall be displayed in the following section:

3842 - **Balancing / Imbalance / Imbalance Prices (together with 17.1.h)**

3843 The following attributes of data shall be displayed:

- 3844 - Title
- 3845 - Area name
- 3846 - Day
- 3847 - Measurement Unit
- 3848 - Currency

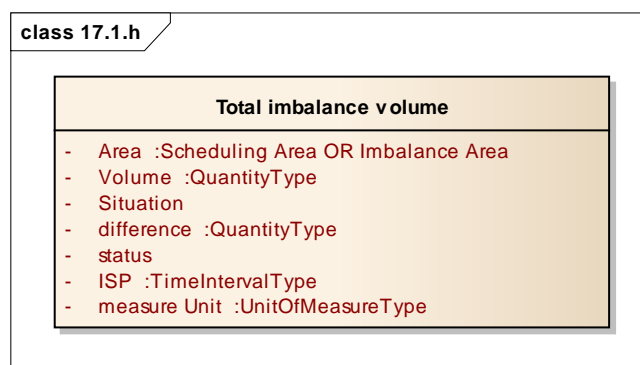
3849 For every ISP within the selected time window and for the selected area:

- 3850 - Status of the data (intermediate or final)
- 3851 - the price separately for positive and negative imbalances
- 3852 - If provided, the component(s) separately for positive and negative imbalances

10.7 TOTAL IMBALANCE VOLUME [17.1.H]

10.7.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For each applicable Market Balance Area, there should be a given ISP value. For this data item, the submitted document shall contain values pertaining to only one area, which may be a scheduling area or an imbalance area.

This item describes for a time interval, equal to one ISP, the total imbalance volume in a given fixed measure Unit (MWh). The volume represents either a surplus or a deficit. The difference between measured and scheduled flows over all interconnectors shall be published separately. The status of the data (Intermediate or final) shall also be indicated. Data shall be submitted as absolute values.

10.7.2 PRE-CONFIGURATION

- For each applicable area, the unique allowed Data Provider

- For each applicable area, the submission deadline:

- For a given time interval, submission must be done at the latest 30 minutes after the end of the time interval.

Example: if the ISP is 30 min for a given area, and the time interval in question is January 15th [08:00; 08:30] UTC, values for this time interval must be submitted before January 15th, 09:00 UTC.

10.7.3 INTEGRATION

- The area shall be recognised by the platform

3876 - The provided area shall be associated together with the data item [17.1.h] in the pre-
3877 configuration of reference data, as in [C-BLC-3]

3878 - The time interval in the submitted document is of one ISP at least and is necessarily a multiple
3879 of the ISP, this ISP being identified for the area as in [C-BLC-6]

3880 - The Data Provider shall be consistent with the identified area

3881 10.7.4 MONITORING

3882 For a given area, the submission deadline described above shall be monitored for each time
3883 interval.

3884 10.7.5 PROCESSING

3885 No processing is performed on this data item.

3886 10.7.6 PUBLICATION

3887 10.7.6.1 FILTERING AND SORTING CRITERIA

3888 Data shall be visually accessed by selecting the following:

3889 - Country (selection is optional: If selected, areas will be filtered to include only those that
3890 partially or completely cover the Country)

3891 - area (selection is mandatory)

3892 - Day (selection is mandatory)

3893 - Time Window (Start time and end time) (selection is mandatory)

3894 10.7.6.2 DISPLAY

3895 This data shall be displayed in the following section:

3896 - **Balancing / Imbalance** (same section as for "Imbalance prices / 17.1.g")

3897 The following attributes of data shall be displayed:

3898 - Title

3899 - Area name

3900 - Balancing Time Unit for the given area

3901 - Day

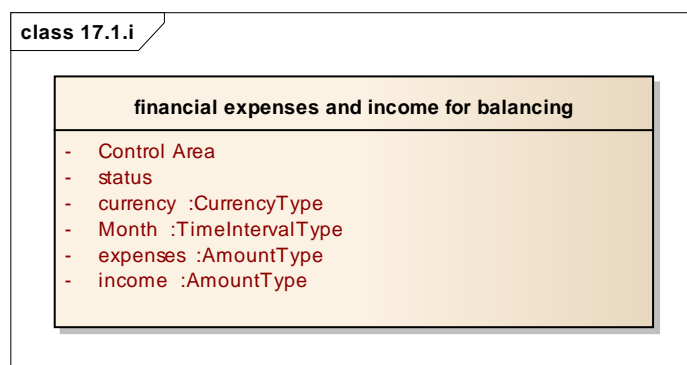
- 3902 - Measurement Unit (MWh)
- 3903 - Deficit or surplus for each ISP within the Time Window for the given area
- 3904 - Status of data (Intermediate or Final) for each ISP within the Time Window for the given area
- 3905 - The total imbalance volume and difference per ISP within the Time Window for the given area

10.8 FINANCIAL EXPENSES AND INCOME FOR BALANCING

[17.1.i]

10.8.1 DATA DESCRIPTION

This item can be described by the following class diagram:



For each applicable Control Area, this item describes for each month the expenses and income, in a given currency, together with a status of this financial information (Intermediate or final).

Note: Amounts (whether expense or income) can be both positive and negative.

For this data item, the submitted document shall contain values pertaining to only one Control Area.

10.8.2 PRE-CONFIGURATION

- For each applicable Control Area, the unique allowed Data Provider

- For each applicable Control Area, the submission deadline:

- For a given month, submission must be done at the latest at the end of the last calendar day of M+3, where M is the month to which submitted values pertain.

Example: if the considered month is January 2012, values for this month must be submitted before 30th April, 24:00 UTC.

10.8.3 INTEGRATION

- The Control Area shall be recognised by the platform

3926 - The provided Control Area shall be associated with the data item [17.1.i] in the pre-
3927 configuration of reference data, as in [C-BLC-3]

3928 - The time interval in the submitted document is of one month at least and is necessarily a
3929 multiple of one month

3930 - The Data Provider shall be consistent with the identified Control Area

3931 - Document is submitted after the end of the month described in the document, reason being
3932 that this is ex-post data. This validation shall trigger a warning only.

3933 - Currency shall be consistent with pre-configuration [C-BLC-9]

3934 10.8.4 MONITORING

3935 For this item, the monthly submission deadline shall be monitored.

3936 10.8.5 PROCESSING

3937 The following processing is performed by the platform:

3938 - calculate the difference between the income and the expense

3939 10.8.6 PUBLICATION

3940 10.8.6.1 FILTERING AND SORTING CRITERIA

3941 Data shall be visually accessed by selecting the following:

3942 - Country (selection is optional: If selected, Control Areas will be filtered to include only those
3943 that partially or completely cover the Country)

3944 - Control Area (selection is mandatory)

3945 - Time Window (from one month to a year) (selection is mandatory)

3946 10.8.6.2 DISPLAY

3947 This data shall be displayed in the following section:

3948 - **Balancing / Financial Balance / Financial expenses and income**

3949 The following attributes of data shall be displayed:

3950 - Title

3951 - Control Area name

- 3952 - Time Window
- 3953 - Currency
- 3954 - For each month, the status of data (Intermediate or Final)
- 3955 - For each month, the income
- 3956 - For each month, the expenses
- 3957 - For each month, the calculated difference between the expenses and income

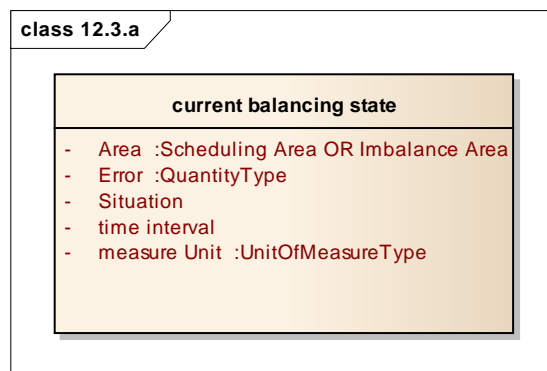
3958

3959

10.9 CURRENT BALANCING STATE [GL EB 12.3.A]

10.9.1 DATA DESCRIPTION

This item can be described by the following class diagram:



The submitted document describes for a given area, which may be of type scheduling area, load frequency control area or imbalance area, the open loop control area error, expressed in MW per minute. The volume of this error represents either a surplus or a deficit, as indicated by the Situation attribute. If the system is balanced, a zero volume shall be submitted. Data shall be submitted as absolute values.

10.9.2 PRE-CONFIGURATION

- For each applicable area, the unique allowed Data Provider

- For each applicable area, the submission deadline:

- For a given time interval, submission must be done at the latest 30 minutes after the end of the minute being described by the data.

Example: if the document describes the time interval January 15th [08:00; 08:01] UTC, values for this time interval must be submitted before January 15th, 08:31 UTC.

10.9.3 INTEGRATION

- The area shall be recognised by the platform

- The provided area shall be associated together with the data item [GL EB 12.3.a] in the pre-configuration of reference data, as in [C-BLC-3]

- The time interval in the submitted document is of one minute at least and is necessarily a multiple of minutes

- The Data Provider shall be consistent with the identified area

3983 10.9.4 MONITORING

3984 For a given area, the submission deadline described above shall be monitored for each time
3985 interval.

3986 10.9.5 PROCESSING

3987 No processing is performed on this data item.

3988 10.9.6 PUBLICATION

3989 10.9.6.1 FILTERING AND SORTING CRITERIA

3990 Data shall be visually accessed by selecting the following:

3991 - Country (selection is optional: If selected, Areas will be filtered to include only those that
3992 partially or completely cover the Country)

3993 - Area (selection is mandatory)

3994 - Day (selection is mandatory)

3995 - Time Window (Start time and end time) (selection is mandatory)

3996 10.9.6.2 DISPLAY

3997 This data shall be displayed in the following section:

3998 - **Balancing / Imbalance / Current balancing state**

3999 The following attributes of data shall be displayed:

4000 - Title

4001 - Area

4002 - Day

4003 - Measurement Unit (MW)

4004 - Indicator of deficit or surplus per minute within the Time Window for the given area

4005 - The open loop control area error per minute within the Time Window for the given area

4006 10.10 BALANCING ENERGY BIDS [GL EB 12.3.B&C]

4007 10.10.1 DATA DESCRIPTION

4008 This data item contains the balancing energy bids for the Scheduling area. The data
4009 submissions to the central transparency platform shall distinguish the reserve type, the
4010 direction, the validity and delivery periods, offered volume and price.

4011
4012 For standard products, it is mandatory to indicate whether the bid is available or
4013 unavailable. For unavailable bids that were activated locally, it will be possible to declare
4014 the activation purpose. A free text comment may optionally accompany an unavailable
4015 bid to provide further explanation and justification.

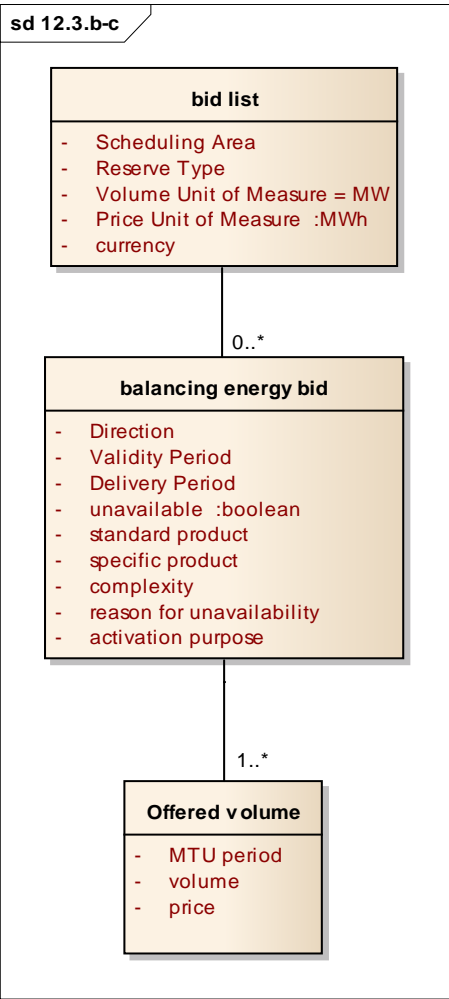
4016
4017 For RR standard product bids, the reason for unavailability must be declared. For
4018 standard product aFRR and mFRR bids, a cross-reference is provided to the detailed
4019 reason for changes to availability which are published separately.

4020
4021 A complexity indicator will express whether the bid is linked, exclusive or multipart.

4022 The standard product attribute will be used when the bid refers to a standard product or a
4023 specific product has been converted into a standard product. The specific product attribute will
4024 be used when the bid refers to a specific product, when the bid has been converted into a
4025 standard product or when the bid originates from an integrated scheduling process. The
4026 specific product attribute shall be used when the bid refers to a local product²⁵.

4027
4028

²⁵ Applicable only during the transition period until standard and specific products have been defined as foreseen by EB GL articles 25 and 26



4029

4030 For some scheduling areas and reserve types, the offer price is not available. Hence, the

4031 central transparency platform shall deem it as an optional attribute.

4032 **10.10.2 PRE-CONFIGURATION**

- 4033 - For each applicable scheduling area: The applicable reserve types
- 4034 - For each applicable scheduling area and reserve type: The allowed data providers²⁶

4035 **10.10.3 VALIDATION**

- 4036 - The scheduling area and data provider shall be recognised by the platform

²⁶ For example: TSO submits data for one or several specific products, while common platform submits data for standard product.

4037 - The provided scheduling area and reserve type shall be consistent with the platform's pre-
4038 configured reference data

4039 - The data provider shall be consistent with the identified scheduling area and reserve type

4040 - Only standard product bids may be declared unavailable

4041 - Activation purpose may optionally be declared for unavailable bids. If declared, the purpose
4042 shall be validated.

4043 Reason for unavailability is mandatory for RR standard product bids

4044 10.10.4 MONITORING

4045 Gate closure times vary significantly among scheduling areas and reserve types. Further, bids
4046 are not guaranteed to be submitted, hence monitoring will not be performed on this data item.

4047 10.10.5 PROCESSING

4048 No processing is performed on this data item.

4049 10.10.6 PUBLICATION

4050 10.10.6.1 FILTERING AND SORTING CRITERIA

4051 Data shall be visually accessed by selecting the following:

4052 - Country (selection is optional: If selected, scheduling areas will be filtered to include only
4053 those that partially or completely cover the country)

4054 - scheduling area (selection is mandatory)

4055 - reserve type (selection is mandatory)

4056 - date, to be matched against the bids' delivery periods

4057 10.10.6.2 DISPLAY

4058 This data shall be displayed in the following section:

4059 - **Balancing / Energy / Bids**

4060 The following attributes of data shall be displayed:

4061 - scheduling area

4062 - reserve type

- 4063 - selected date
- 4064 - unit of measurement
- 4065 - For bids with delivery time interval that fall within the selected date, the following data is
- 4066 displayed:
 - 4067 - validity period
 - 4068 - delivery period
 - 4069 - direction
 - 4070 - offered volumes and prices per MTU period during the delivery period
 - 4071 - standard and/or specific type of product, as applicable
 - 4072 - if applicable, complexity indicator
 - 4073 - Indicator whether the bid is available or unavailable
 - 4074 - Reason for unavailability (when applicable)
 - 4075 - Cross-reference to published detailed reason for changes to bid availability
 - 4076 - Activation purpose (when applicable and available)
 - 4077 - Free text comment (when applicable and available)
 - 4078
 - 4079

10.11 INFORMATION ON CONVERSION INTO STANDARD PRODUCTS [GL EB 12.3.D]

10.11.1 DATA DESCRIPTION

This data item consists of a PDF file per Scheduling Area or Control Area, providing a description of how specific products or bids from an integrated scheduling process are converted into standard products. This information complements the data published under GL EB articles 12.3.b&c. No monitoring will be performed.

10.11.2 PRE-CONFIGURATION

ENTSO-E administrator shall be able to manage the reference data that indicates the single allowed Data Provider per Area for this data item.

10.11.3 INTEGRATION

Data Provider shall on the platform's web site, on the same page where these reports are published, be able to select an Area, upload a PDF file and indicate the date as of which the uploaded document entries into force.

Platform shall validate combination of Area and Data Provider.

10.11.4 PUBLICATION

10.11.4.1 PUBLICATION BEHAVIOUR

Documents are published immediately after upload.

All versions shall be published.

10.11.4.2 FILTERING AND SORTING CRITERIA

End user shall be able to select data for display by specifying:

- Country (selection is optional: If selected, Areas will be filtered to include only those that partially or completely cover the Country)

- Area (mandatory)

10.11.4.3 DISPLAY

This data shall be displayed in the following section:

4106 **Balancing / Rules and Reports / Information on conversion into standard products**

4107 The following attributes of data shall be displayed:

4108 - Area name

4109 - A link to download each uploaded PDF document

4110 - For each document, the effective date

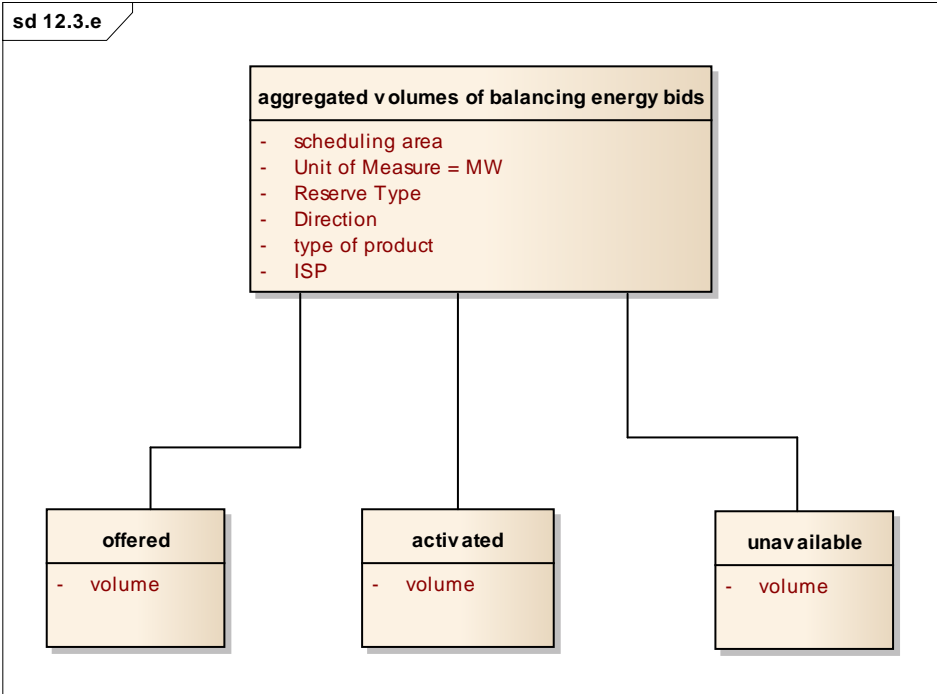
4111

10.12 AGGREGATED BALANCING ENERGY BIDS [GL EB 12.3.E]

10.12.1 DATA DESCRIPTION

This data item contains the aggregated volumes of activated, offered and unavailable balancing energy, respectively, per scheduling area. The data submissions to the central transparency platform shall distinguish the reserve type, direction, type of product and the ISP.

Offered, activated and unavailable volumes are accounted for separately.



Unavailable volumes are applicable for standard products only.

For reserve type FCR no publication is applicable. For mFRR, separate values of activated volumes will be published for scheduled and direct activation, based on reserve type. For aFRR, separate values of activated volumes will be published for central and local selection of bids, respectively, based on reserve type.

Even when for a given reserve type and scheduling area there was no offered or unavailable volume (and hence no activated volume), the data provider shall still submit a document with zero values, indicating the ISP. Purpose is to enable effective monitoring of the data item.

4130 10.12.2 PRE-CONFIGURATION

- 4131 - For each applicable scheduling area: The applicable reserve types
- 4132 - For each applicable scheduling area and reserve type: The allowed data providers²⁷
- 4133 - The submission deadline: 30 minutes after every ISP

4134 10.12.3 VALIDATION

- 4135 - The scheduling area and data provider shall be recognised by the platform
- 4136 - The provided scheduling area and reserve type shall be consistent with the platform's pre-
- 4137 configured reference data
- 4138 - The data provider shall be consistent with the identified scheduling area

4139 10.12.4 MONITORING

- 4140 For every applicable combination of scheduling area, reserve type and type of product, the
- 4141 designated data provider shall submit a document for every ISP.

4142 10.12.5 PROCESSING

- 4143 Platform shall for every scheduling area, direction and ISP aggregate totals separately for
- 4144 standard and specific products by summing up the values for all reserve types taken together.
- 4145 Platform shall for every scheduling area, reserve type, direction and ISP aggregate totals for
- 4146 offered and activated volumes, by summing up the values provided per type of product.
- 4147 Platform shall aggregate the grand totals for all reserve types taken together, summing up for
- 4148 every scheduling area, direction and ISP the offered, activated and unavailable volumes.

4149 10.12.6 PUBLICATION

4150 10.12.6.1 FILTERING AND SORTING CRITERIA

- 4151 Data shall be visually accessed by selecting the following:
- 4152 - Country (selection is optional: If selected, scheduling areas will be filtered to include only
- 4153 those that partially or completely cover the country)

²⁷ For example: TSO submits data for one or several specific products, while common platform submits data for standard product.

4154 - scheduling area (selection is mandatory)

4155 - date (selection is mandatory)

4156 - reserve type (selection is optional)

4157 - direction (selection is optional)

4158 10.12.6.2 DISPLAY

4159 This data shall be displayed in the following section:

4160 - **Balancing / Energy / Aggregated bids**

4161 The following attributes of data shall be displayed:

4162 -- scheduling area

4163 - selected date

4164 - unit of measurement (MW)

4165 - For all ISP during the selected day, the following data is displayed:

4166 - offered, activated and unavailable volumes per direction

4167 - offered and activated volumes for standard, specific and local products per direction,
4168 respectively

4169 - offered, activated and unavailable volumes per reserve type and direction

4170 - offered and activated volumes for standard and specific products per direction and reserve
4171 type, respectively

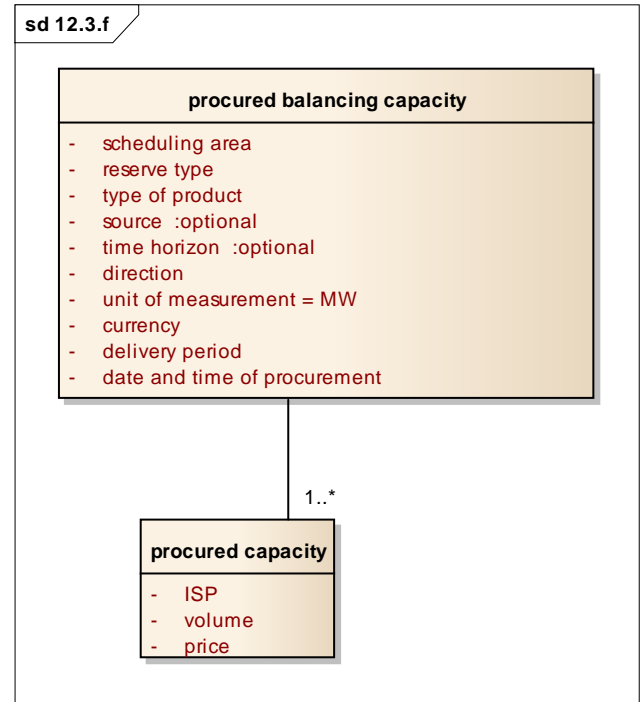
4172

4173

10.13 PROCURED BALANCING CAPACITY [GL EB 12.3.F]

10.13.1 DATA DESCRIPTION

This data item contains the procured balancing capacity per scheduling area. For every accepted bid, data provider shall submit to the central transparency platform the reserve type, type of product, delivery period and direction. Source may optionally be included as well. When applicable, time horizon may be specified. Date and time of procurement shall be specified. Offered volume and price are provided for every ISP of the delivery period.



Type of Product shall at least distinguish between standard, specific and local products.

Assumptions:

- Data describes individual, accepted bids/offers. Data provider does not perform any aggregation.

10.13.2 PRE-CONFIGURATION

- For each applicable scheduling area: The applicable reserve types
- For each applicable scheduling area and reserve type: The single allowed data provider

4190 10.13.3 VALIDATION

- 4191 - The scheduling area and data provider shall be recognised by the platform
- 4192 - The provided scheduling area and reserve type shall be consistent with the platform's pre-
- 4193 configured reference data
- 4194 - The data provider shall be consistent with the identified scheduling area

4195 10.13.4 MONITORING

- 4196 Dates and times for procurement processes vary significantly among scheduling areas and
- 4197 there is no guarantee that bids will be accepted, hence monitoring will not be performed on
- 4198 this data item.

4199 10.13.5 PROCESSING

- 4200 Not applicable.

4201 10.13.6 PUBLICATION

4202 10.13.6.1 FILTERING AND SORTING CRITERIA

- 4203 Data shall be visually accessed by selecting the following:
- 4204 - Country (selection is optional: If selected, scheduling areas will be filtered to include only
- 4205 those that partially or completely cover the country)
- 4206 - scheduling area (selection is mandatory)
- 4207 - date or date range (selection is mandatory)
- 4208 - reserve type (selection is optional)
- 4209 - type of product (selection is optional)
- 4210 - source (selection is optional)
- 4211 - time horizon (selection is optional)
- 4212 - direction (selection is optional)

4213 10.13.6.2 DISPLAY

- 4214 This data shall be displayed in the following section:
- 4215 - **Balancing / Capacity / Procured bids**

- 4216 The following attributes of data shall be displayed:
- 4217 - scheduling area
- 4218 - reserve type
- 4219 - unit of measurement (MW) for capacity
- 4220 - unit of measurement (currency/MW/ISP) for prices
- 4221 - For all procured capacity offers whose delivery periods partially or completely fall within the
4222 select date or date range, the following data is displayed:
- 4223 - type of product
- 4224 - source (if available)
- 4225 - direction
- 4226 - time horizon (if available)
- 4227 - date and time of procurement
- 4228 - delivery period
- 4229 - offered capacity and price per ISP

4230 10.14 TERMS AND CONDITIONS [GL EB 12.3.G]

4231 10.14.1 DATA DESCRIPTION

4232 This data item consists of a PDF file per Control Area or load frequency control area (consisting
4233 of two or more control areas). No monitoring will be performed.

4234 Note: Published document also covers the requirements of TR article 17.1.a.

4235 10.14.2 PRE-CONFIGURATION

4236 ENTSO-E administrator shall be able to manage the reference data that indicates the single
4237 allowed Data Provider per Area for this data item.

4238 10.14.3 INTEGRATION

4239 Data Provider shall on the platform's web site, on the same page where these reports are
4240 published, be able to select a Area, upload a PDF file and indicate the date as of which the
4241 uploaded document entries into force.

4242 Platform shall validate combination of Area and Data Provider.

4243 10.14.4 PUBLICATION

4244 10.14.4.1 PUBLICATION BEHAVIOUR

4245 Documents are published immediately after upload.

4246 All versions shall be published.

4247 10.14.4.2 FILTERING AND SORTING CRITERIA

4248 End user shall be able to select data for display by specifying:

4249 - Country (selection is optional: If selected, Areas will be filtered to include only those that
4250 partially or completely cover the Country)

4251 - Area (mandatory)

4252 10.14.4.3 DISPLAY

4253 This data shall be displayed in the following section:

4254 **Balancing / Rules and reports / Terms and conditions**

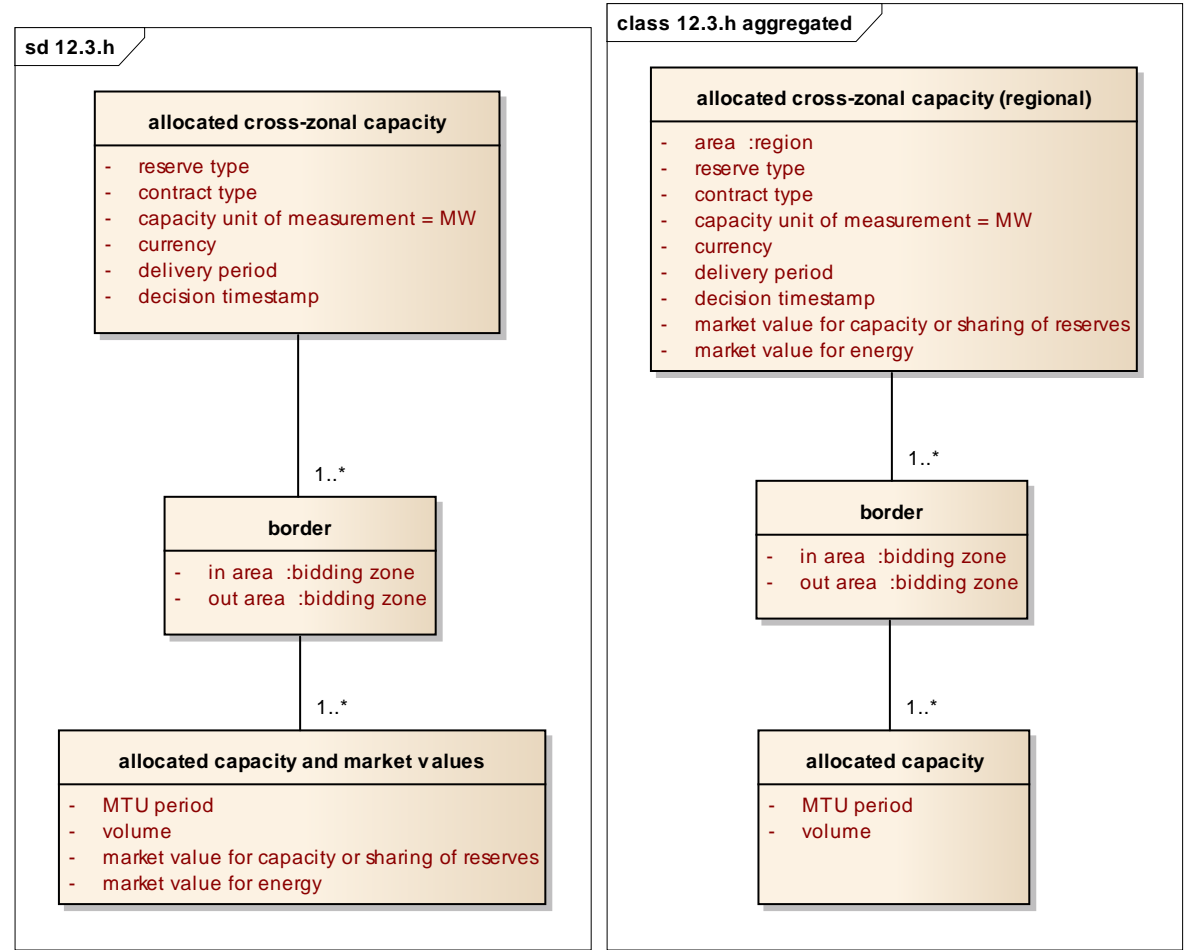
- 4255 The following attributes of data shall be displayed:
- 4256 - Area name
- 4257 - A link to download each uploaded PDF document
- 4258 - For each document, the date of entry into force
- 4259

10.15 ALLOCATED CROSS-ZONAL BALANCING CAPACITY

[GL EB 12.3.H]

10.15.1 DATA DESCRIPTION

This data item describes the allocation of cross-zonal balancing capacity per border. The data submissions to the central transparency platform shall indicate the In and Out bidding zones (or technical profile), reserve type, contract type, delivery period and the date and time when the allocation decision was taken. The allocated capacity volume is provided per MTU period.



Depending on the applicable allocation mechanism, the market values may either be provided as a time series per direction across a border or as single values for the entire region and delivery period.

Contact type may be long-term, week-ahead or day-ahead. Capacity is expressed in MW. Market values are expressed in currency.

- 4274 As a transitory measure, until the prescribed methodologies have been fully implemented, a
4275 single market value per MTU period may be submitted and published. Refer to
4276 implementation guide [13] for details.
- 4277 Note: The allocations described in this data item are the same as the ones covered by GL
4278 EB article 12.3.i.
- 4279 **10.15.2 PRE-CONFIGURATION**
- 4280 - For each applicable region or bidding zone couple and reserve type, the allowed data provider
- 4281 **10.15.3 VALIDATION**
- 4282 - The In and Out bidding zones and data provider shall be recognised by the platform
- 4283 - The In and Out bidding zones, reserve type and data provider shall be consistent with the
4284 platform's pre-configured reference data
- 4285 - Region, if applicable, shall be recognised by the platform and consistent with pre-configured
4286 reference data
- 4287 **10.15.4 MONITORING**
- 4288 Timelines of allocation processes may vary significantly depending on border and contract
4289 type. Further, there is no guarantee that capacity will be allocated. Hence, no monitoring will
4290 be performed.
- 4291 **10.15.5 PROCESSING**
- 4292 No aggregation or other processing is performed on the central transparency platform.
- 4293 **10.15.6 PUBLICATION**
- 4294 **10.15.6.1 FILTERING AND SORTING CRITERIA**
- 4295 Data shall be visually accessed by selecting the following:
- 4296 - Country (selection is optional: If selected, bidding zones or region will be filtered to include
4297 only those that partially or completely cover the country)
- 4298 - In and Out bidding zones (selection is mandatory)
- 4299 - Reserve type (selection is mandatory)
- 4300 - Date or date range (selection is mandatory)
- 4301 - Contract type (selection is mandatory)

4302 10.15.6.2 DISPLAY

4303 This data shall be displayed in the following section:

4304 - **Balancing / Cross-border / Allocation and use of cross-zonal capacity** (shared with GL
4305 EB article 12.1.i)

4306 The following attributes of data shall be displayed:

4307 - In and Out bidding zones

4308 - Region, if applicable

4309 - Reserve type

4310 - unit of measurements: MW and currency

4311 - contract type

4312 - For all allocations whose delivery periods fall, entirely or partially, within the selected date or
4313 date range, the following data is displayed:

4314 - delivery period

4315 - date and time of allocation decision

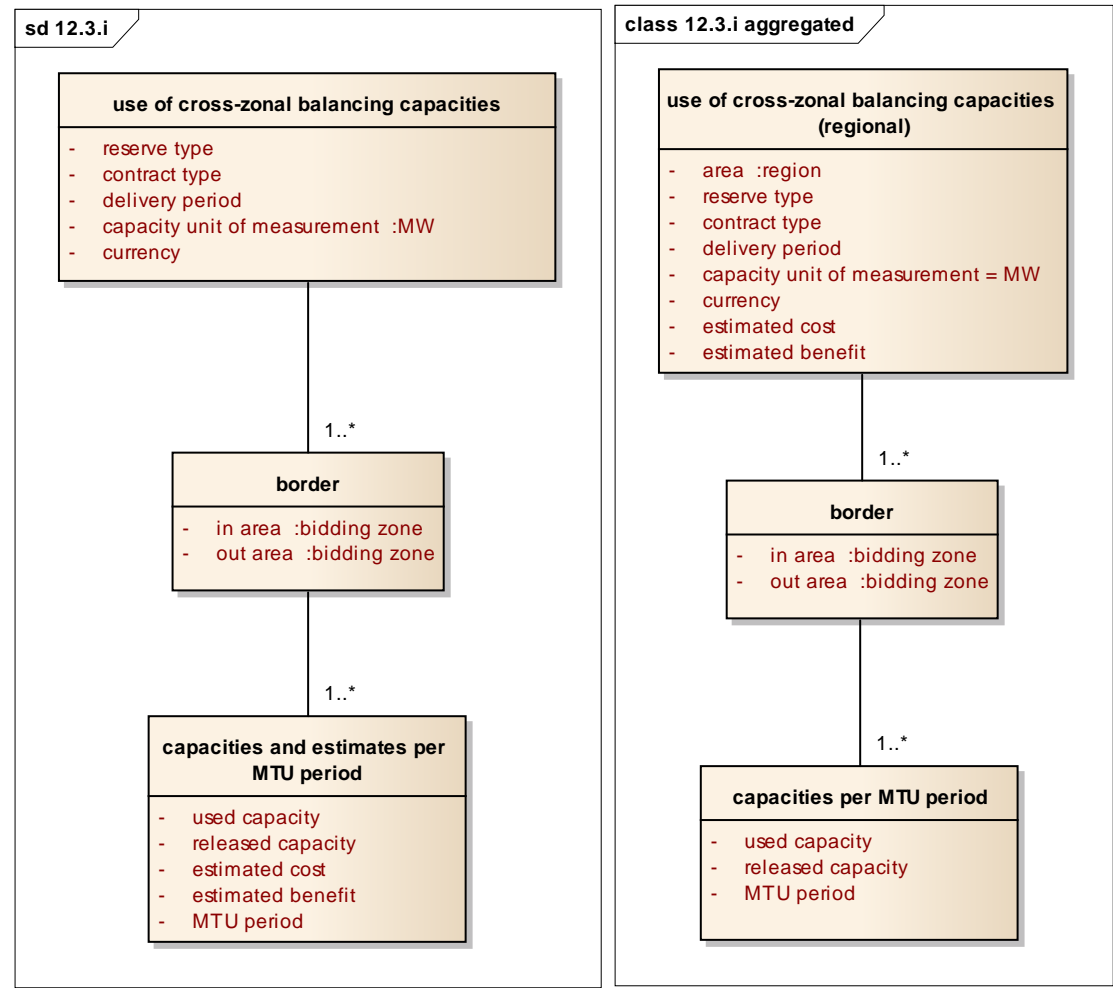
4316 - allocated capacity volume per MTU period

4317 - market values per MTU period and direction across borders or as single values for the
4318 entire region and delivery period

10.16 USE OF ALLOCATED CROSS-ZONAL BALANCING CAPACITY [GL EB 12.3.i]

10.16.1 DATA DESCRIPTION

This data item describes the use of cross-zonal balancing capacity per border. The data submissions to the central transparency platform shall indicate the In and Out bidding zones (or technical profile), reserve type, contract type and delivery period of the allocation process.



Contract type may be long-term, week-ahead or day-ahead.

Volumes of used and released capacities are provided with MTU resolution for the whole delivery period.

4329 Depending on the applicable allocation mechanism, the estimated costs and benefits may
4330 either be provided as a time series per direction across a border or as single values for the
4331 entire region and delivery period.

4332 Note: The allocations described in this data item are the same as the ones covered by GL EB
4333 article 12.3.h. Data required under this GL EB article 12.3.i shall be submitted as an update to
4334 the document containing the allocated capacity, previously submitted under GL EB article
4335 12.3.h.

4336 10.16.2 PRE-CONFIGURATION

4337 - For each applicable region or bidding zone couple and reserve type, the allowed data provider

4338 10.16.3 VALIDATION

4339 - The In and Out bidding zones and data provider shall be recognised by the platform

4340 - The bidding zone couple, reserve type and data provider shall be consistent with the
4341 platform's pre-configured reference data

4342 - Region, if applicable, shall be recognised by the platform and consistent with pre-configured
4343 reference data

4344 10.16.4 MONITORING

4345 Timelines of allocation processes may vary significantly depending on border and contract
4346 type. Further, there is no guarantee that capacity will be allocated. Hence, no monitoring will
4347 be performed.

4348 10.16.5 PROCESSING

4349 No aggregation or other processing is performed on the central transparency platform.

4350 10.16.6 PUBLICATION

4351 10.16.6.1 FILTERING AND SORTING CRITERIA

4352 Data shall be visually accessed by selecting the following:

4353 - Country (selection is optional: If selected, region or bidding zones will be filtered to include
4354 only those that partially or completely cover the country)

4355 - In and Out bidding zones (selection is mandatory)

4356 - reserve type (selection is mandatory)

4357 - date or date range (selection is mandatory)

4358 - contract type (selection is mandatory)

4359 10.16.6.2 DISPLAY

4360 This data shall be displayed in the following section:

4361 - **Balancing / Cross-border / Allocation and use of cross-zonal capacity** (shared with GL
4362 EB article 12.3.h)

4363 The following attributes of data shall be displayed:

4364 - In and Out bidding zones

4365 - Region, if applicable

4366 - reserve type

4367 - unit of measurements: MW and currency

4368 - contract type

4369 - For all allocations whose delivery period fall, entirely or partially, within the selected date or
4370 date range, the following data is displayed:

4371 - contract type

4372 - delivery period

4373 - volumes of used and released capacity per MTU period during the delivery period

4374 - estimated realised costs and benefits per MTU period and direction across borders or
4375 as single values for the entire region and delivery period

4376

4377 10.17 APPROVED METHODOLOGIES [GL EB 12.3.J]

4378 10.17.1 DATA DESCRIPTION

4379 This data item consists of a PDF file per Region. No monitoring will be performed.

4380 10.17.2 PRE-CONFIGURATION

4381 ENTSO-E administrator shall be able to manage the reference data that indicates the single
4382 allowed Data Provider per Region for this data item.

4383 10.17.3 INTEGRATION

4384 Data Provider shall on the platform's web site, on the same page where these reports are
4385 published, be able to select a Region, upload a PDF file and indicate the date as of which the
4386 uploaded document entries into force.

4387 Platform shall validate combination of Region and Data Provider.

4388 10.17.4 PUBLICATION

4389 10.17.4.1 PUBLICATION BEHAVIOUR

4390 Documents are published immediately after upload.

4391 All versions shall be published.

4392 10.17.4.2 FILTERING AND SORTING CRITERIA

4393 End user shall be able to select data for display by specifying:

4394 - Country (selection is optional: If selected, Regions will be filtered to include only those that
4395 partially or completely cover the Country)

4396 - Region (mandatory)

4397 10.17.4.3 DISPLAY

4398 This data shall be displayed in the following section:

4399 **Balancing / Rules and Reports / Approved methodologies**

4400 The following attributes of data shall be displayed:

4401 - Region name

- 4402 - A link to download each uploaded PDF document
- 4403 - For each document, the date of entry into force
- 4404

4405 10.18 ALGORITHM [GL EB 12.3.K]

4406 10.18.1 DATA DESCRIPTION

4407 This data item consists of a PDF file per process (RR, mFRR, aFRR, IN, FCR). No
4408 monitoring will be performed.

4409 10.18.2 PRE-CONFIGURATION

4410 ENTSO-E administrator shall be able to manage the reference data that indicates the single
4411 allowed Data Provider per reserve type for this data item.

4412 10.18.3 INTEGRATION

4413 Data Provider shall on the platform's web site, on the same page where these reports are
4414 published, be able to select a reserve type, upload a PDF file and indicate the date as of
4415 which the uploaded document entries into force.

4416 Platform shall validate combination of reserve type and Data Provider.

4417 10.18.4 PUBLICATION

4418 10.18.4.1 PUBLICATION BEHAVIOUR

4419 Documents are published immediately after upload.

4420 All versions shall be published.

4421 10.18.4.2 FILTERING AND SORTING CRITERIA

4422 End user shall be able to select data for display by specifying:

4423 - Process type (mandatory)

4424

4425 10.18.4.3 DISPLAY

4426 This data shall be displayed in the following section:

4427 **Balancing / Rules and reports / Algorithm**

4428 The following attributes of data shall be displayed:

4429 - Process type

- 4430 - A link to download each uploaded PDF document
- 4431 - For each document, the date of entry into force
- 4432

4433 10.19 COMMON ANNUAL REPORT [GL EB 12.3.L]

4434 10.19.1 DATA DESCRIPTION

4435 This data item consists of a PDF file per year. No monitoring will be performed.

4436 10.19.2 PRE-CONFIGURATION

4437 ENTSO-E administrator shall be able to manage the reference data that indicates the single
4438 allowed Data Provider: ENTSO-E.

4439 10.19.3 INTEGRATION

4440 Data Provider shall on the platform's web site, on the same page where these reports are
4441 published, be able to upload a PDF file and indicate the year that the uploaded document
4442 refers to.

4443 10.19.4 PUBLICATION

4444 10.19.4.1 PUBLICATION BEHAVIOUR

4445 Documents are published immediately after upload.

4446 All versions shall be published.

4447 10.19.4.2 FILTERING AND SORTING CRITERIA

4448 End user shall be able to select data for display by specifying:

4449 - Year (optional)

4450 10.19.4.3 DISPLAY

4451 This data shall be displayed in the following section:

4452 **Balancing / Rules and reports / Common annual report**

4453 The following attributes of data shall be displayed:

4454 - A link to download each uploaded PDF document

4455 - For each document, the year it refers to

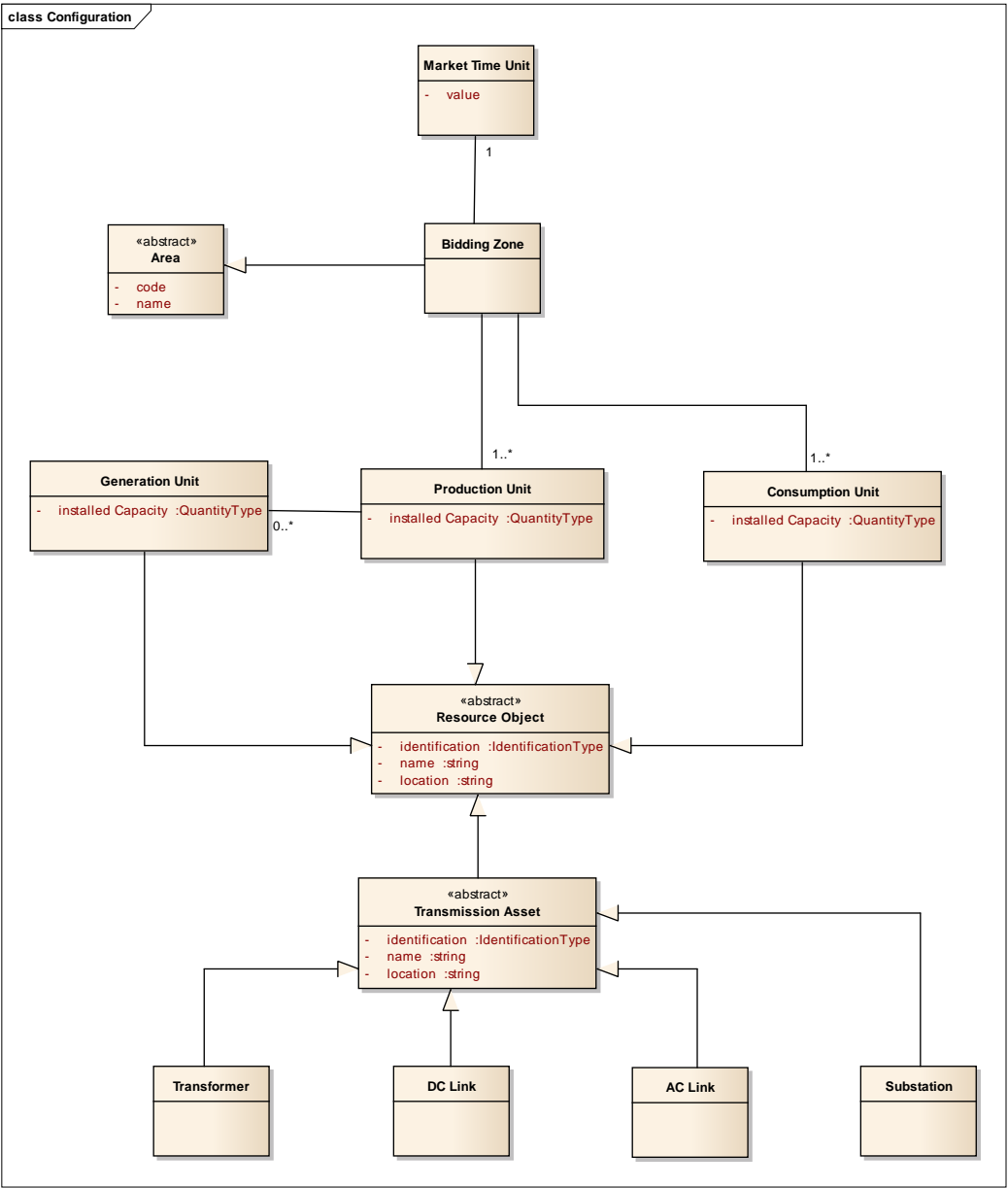
4456

11 OUTAGES

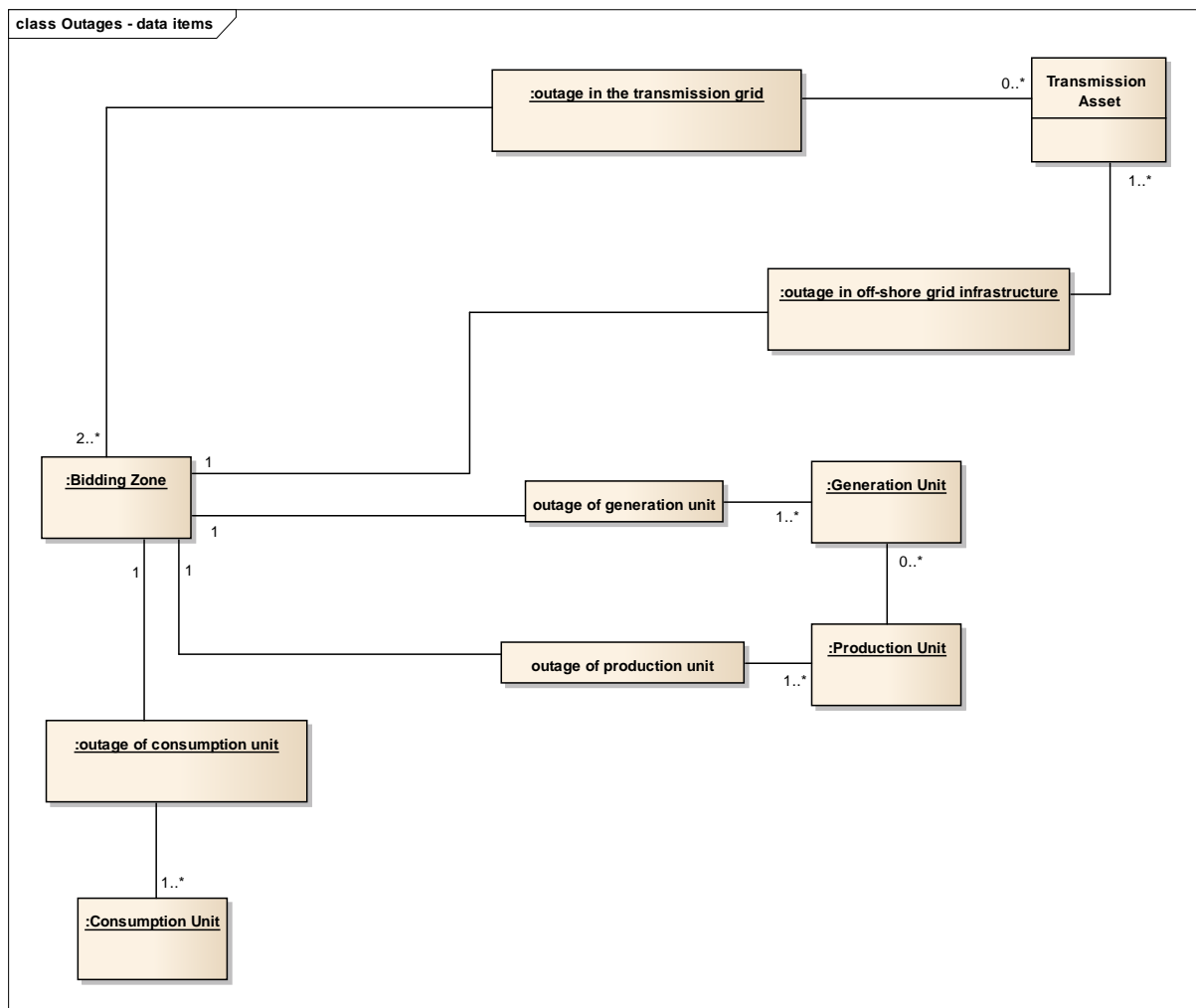
11.1 REQUIREMENTS COMMON TO ALL DATA ITEMS

11.1.1 FUNDAMENTAL ENTITIES

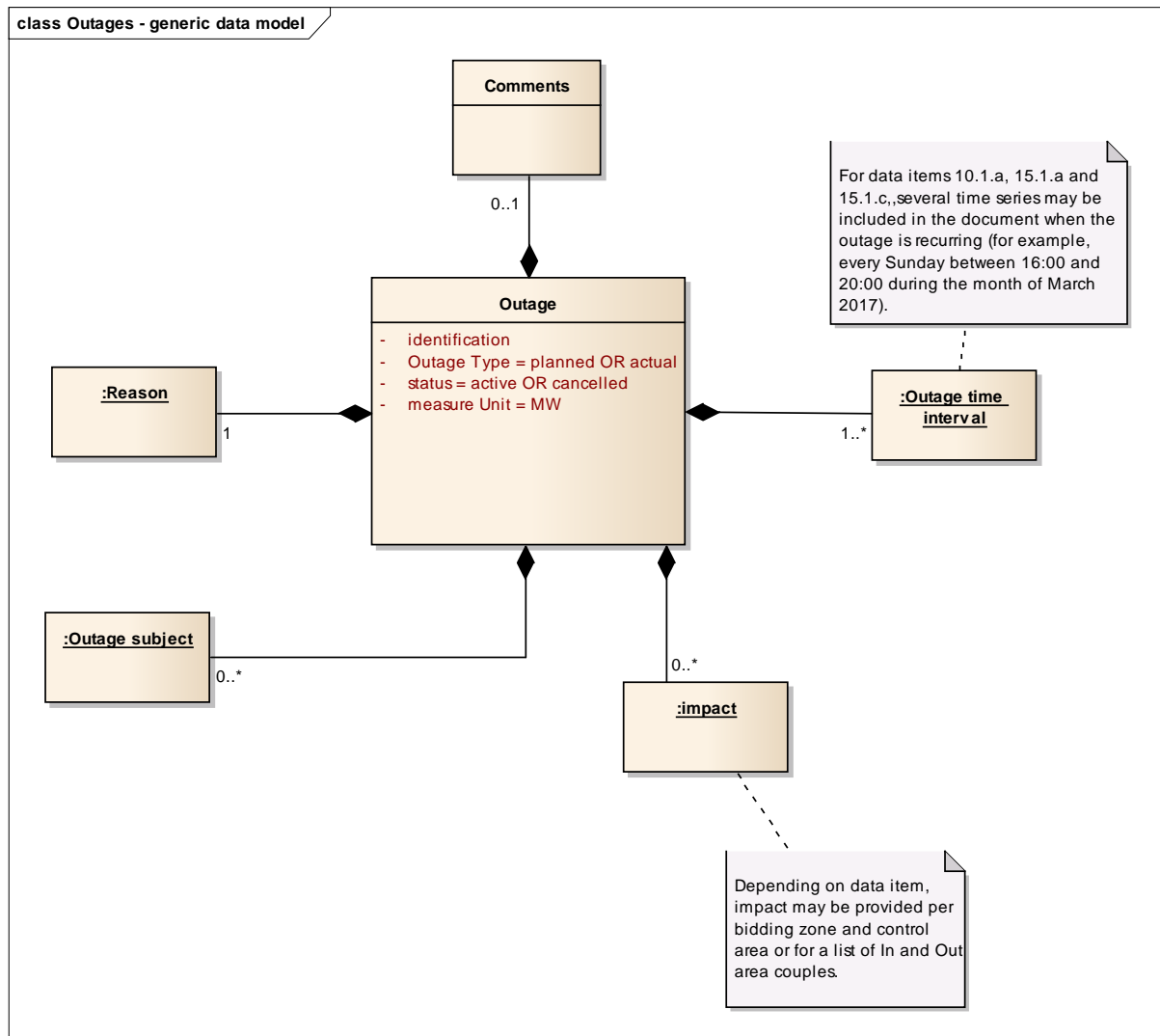
The following class diagram describes the fundamental entities to be taken into account within the scope of this document in order to pre-configure the platform.



- 4463 • For a given Bidding Zone, there is a Market Time Unit
- 4464 • There are four types of assets subject to outages: Transmission Assets, Generation Units,
- 4465 Production Units and Consumption Units. They are special types of Resource Objects
- 4466 • All assets have an identification a name and a location
- 4467 • A Generation or Production Unit has a Production Type and an Installed Capacity and sits
- 4468 in a given Bidding Zone. Generation and Production Units are described in chapter **Error!**
- 4469 **Reference source not found.**
- 4470 • A Consumption Unit sits in a given Bidding Zone



- 4471
- 4472 The submitted document shall contain one Outage only, which may be recurring. The following
- 4473 generic data model is suggested:



4474

4475 11.1.2 PRE-CONFIGURATION

4476 The ENTSO-E platform administrator shall pre-configure the following data, before collecting
4477 information, for the purpose of validation:

4478 - [C-OTG-1] a list of Areas. Areas may be Bidding Zones and Bidding Zone Aggregations.
4479 The list of Bidding Zones is the same as for Generation, Load and Transmission domains.
4480 The Bidding Zone Aggregations are the same as for Transmission domain.

4481 - [C-OTG-8] for each Bidding Zone and Control Area, the allowed Data Provider, identified by
4482 a unique code. If need be, additionally the granularity of data item could be applied. This
4483 reference data is used also for the data items in the Load and Generation domains.

4484 - [C-OTG-2] values of Market Time Unit for a given Bidding Zone. This reference data is the
4485 same as for Generation, Load and Transmission domains.

- 4486 - [C-OTG-6] a list of In and Out Area couples. The In and Out Area couples are also used in
4487 the Transmission domain²⁸.
- 4488 - [C-OTG-7] for each In and Out Area couples, the allowed Data Providers, identified by
4489 unique codes.
- 4490 - [C-OTG-9] a list of countries and for each country, the corresponding Control Area(s). This
4491 is the same reference data as in Generation and Load domains. It will be used to facilitate
4492 search and filtering of published data by country and to aggregate capacity values for
4493 Outages of Consumption Units.
- 4494 - [C-OTG-10] for each Bidding Zone the country or countries that it covers. This is the same
4495 reference data as in Load domain. It will be used to facilitate search and filtering of published
4496 data by country.
- 4497 Data Providers shall record the following pre-configuration on the platform for the purpose of
4498 validation of submitted information:
- 4499 - [C-OTG-3] a list of Generation and Production Units in a given Bidding Zone, with their
4500 characteristics, refer to chapter **Error! Reference source not found.** for details. This is the
4501 same reference data as for the Generation domain.
- 4502 - [C-OTG-4] a list of Consumption Units in a given Bidding Zone, with their characteristics.
4503 Refer to chapter 11.12 for further details.
- 4504 - [C-OTG-5] a list of Transmission Assets with their characteristics. Refer to chapter 11.11
4505 for further details. This is the same reference data as for the Transmission domain.
- 4506 - [C-OTG-11] a list of Reasons for Outages: Maintenance, Failure, Shutdown and Other.

4507 11.1.3 ASSUMPTIONS

- 4508 Data can be submitted for correction or update at any time, even after the end of the
4509 outage/unavailability.
- 4510 Planned unavailability can be cancelled at any time.
- 4511 The frequency of submission is not fixed.
- 4512 No monitoring is performed. For this data domain, submission deadlines are irrelevant to the
4513 platform.

²⁸ Technical Profiles (where one of the Areas is a Bidding Zone Aggregation) constitute a subset of this list.

4514 11.1.4 INTEGRATION

4515 A change in actual availability cannot be transformed into a planned unavailability, and vice
4516 versa. A change in actual availability remains until the affected asset becomes
4517 available/operational.

4518 Planned unavailability may be cancelled, which is reflected as a status update. This is not
4519 permitted for changes in actual unavailability though. If a document has been submitted by
4520 mistake it may be withdrawn/revoked as outlined in chapter 5.1.2.

4521 Reason “Failure” is permitted for changes in actual availability only. Reason “Shutdown” is
4522 permitted for planned unavailability and changes in actual availability of Consumption,
4523 Production and Generation Units.

4524 ENTSO-E administrator may suppress all warnings triggered during validation by changing
4525 configuration.

4526

4527 11.1.5 PUBLICATION RULES

4528 Data items are displayed in table format only.

4529 Latest version of outage will be displayed. Previous versions will be available online, for
4530 example by expanding the view. If there is more than one version of the document, i.e. an
4531 update has been submitted, all versions shall be available with clear indication of version
4532 number.

4533 Submission date and time of each version will be available online, for example by expanding
4534 the view.

4535 11.1.6 DATA CONTAINER STATUS / DATA STATUS

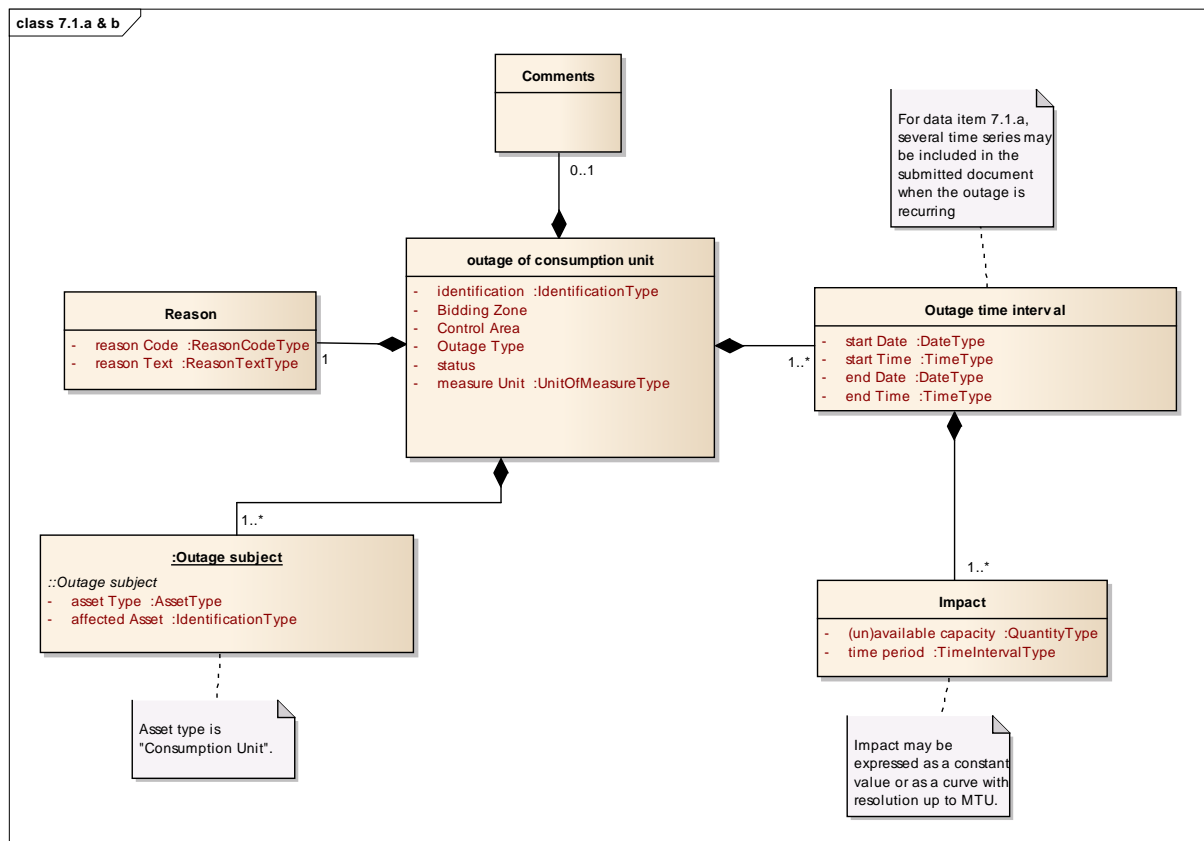
4536 All data follows the “none / ready for publication” scheme.

4537

11.2 PLANNED UNAVAILABILITY OF CONSUMPTION UNITS

[7.1.A]

11.2.1 DATA DESCRIPTION



A planned unavailability on consumption unit is described by the following:

- An identification of the outage, having a status (active or cancelled)
- Bidding Zone and Control Area
- The outage subject, defined by the asset Type (Consumption Unit) and its unique code
- The estimated unavailability time interval
- For each outage subject, the available or unavailable consumption capacity in Measure Unit
- The reason for the planned unavailability
- Optionally, a free-text comment may be provided
- Measure Unit is fixed to megawatt (MW)

4551 - Type of outage is “planned”

4552 11.2.2 PRE-CONFIGURATION

4553 For each data provider, an indicator whether available or unavailable capacity is being
4554 submitted.

4555 11.2.3 ASSUMPTIONS

4556 Unavailability of consumption units is submitted per Bidding Zone and Control Area.

4557 For a given unavailability, there will be only one Data Provider.

4558 Platform shall calculate unavailable capacity in bidding zone per market time unit, based on
4559 the submitted available or unavailable capacity values.

4560 Available or unavailable consumption capacity may vary during the outage time interval.

4561 11.2.4 INTEGRATION

4562 - The outage subject (asset) described in the document shall be recognised by the platform

4563 - Data Provider shall be consistent with the identified outage subject.

4564 - The Bidding Zone and Control Area described in the document shall be recognised by the
4565 platform

4566 - Data Provider shall be consistent with the identified Bidding Zone and Control Area

4567 - For a given consumption unit there may not be more than one active planned unavailability
4568 at any point in time

4569 11.2.5 PROCESSING

4570 Unavailability marked for cancellation shall be marked as cancelled in the platform database.

4571 Platform establishes unavailable consumption capacity per MTU period based on the
4572 submitted available or unavailable capacity during the outage time interval and the installed
4573 capacity of the Consumption Unit (as recorded per chapter 11.12). In case MTU period only
4574 partially coincides with outage start or end time, the submitted available or unavailable
4575 consumption capacity will apply also for those MTU periods.

4576 The platform aggregates the unavailable consumption capacity in each Bidding Zone and
4577 Country by Market Time Unit period. A single value per Country, Bidding Zone and MTU period
4578 shall be calculated, taking all planned unavailability into account.

4579 Likewise, a single value shall be established per Country, Bidding Zone and MTU period taking
4580 all changes in actual availability into account (refer to chapter 11.3 regarding changes in actual
4581 availability of consumption units).

4582 Finally, a grand total per Country, Bidding Zone and MTU period shall be calculated, taking
4583 both planned unavailability and changes in actual availability into account.

4584 The unavailability marked for cancellation is marked as such in the platform database and not
4585 taken into account in the aggregation calculation.

4586 Pre-configuration [C-OTG-9] will be used to aggregate values per Country.

4587 11.2.6 PUBLICATION

4588 11.2.6.1 PUBLICATION BEHAVIOUR

4589 Aggregated values only shall be published, not individual unavailabilities.

4590 11.2.6.2 FILTERING AND SORTING CRITERIA

4591 Data shall be visually accessed by selecting the following:

4592 For all options:

4593 - Date or date range (selection is mandatory)

4594 - Country or Bidding Zone (selection is mandatory – if Country is selected, pre-configuration
4595 [C-OTG-9] will be used to identify the corresponding Control Area and filter Outages
4596 accordingly)

4597 - Type of unavailability: planned, actual or both, selection is optional

4598 Unavailability for which time interval is either completely or partially on the selected date (or
4599 possibly date range) will be displayed.

4600 11.2.6.3 DISPLAY

4601 This data shall be displayed in the following section:

4602 - Load / Unavailability

4603 The following attributes of data shall be displayed:

4604 - Title

4605 - Measure Unit

4606 - MTU

- 4607 The following details are displayed for the selected date range:
- 4608 - Country or Bidding Zone
- 4609 - Start date and time
- 4610 - End date and time
- 4611 - The aggregated unavailable consumption capacity per MTU period, by country or Bidding
- 4612 Zone: Separate values for planned unavailability, changes in actual availability and a grand
- 4613 total
- 4614
- 4615

11.3 CHANGES IN ACTUAL AVAILABILITY OF CONSUMPTION UNITS [7.1.B]

11.3.1 DATA DESCRIPTION

Data description is almost identical to data item “Planned unavailability of consumption units [7.1.a]”, refer to chapter 11.2. The differences are:

- outage type is “actual”
- status is always “active”
- not more than one outage subject is permitted
- only one time interval is permitted

11.3.2 PRE-CONFIGURATION

Same pre-configuration as for planned unavailability of consumption units [7.1.a] applies to this data item, refer to chapter 11.2.2.

11.3.3 ASSUMPTIONS

Unavailability of consumption units is submitted per Bidding Zone and Control Area.
For a given unavailability, there will be only one Data Provider.

11.3.4 INTEGRATION

- The document date and time of the submitted document should be posterior to the start date and time of the unavailability. This will trigger a warning only.

- For a given consumption unit there may not be more than one active change in actual availability at any point in time.

All other validations are the same as for planned outages of consumption units, refer to chapter 11.2.4.

11.3.5 PROCESSING

Same processing as for planned outages of consumption units, refer to chapter 11.2.5.

4640 11.3.6 PUBLICATION

4641 11.3.6.1 PUBLICATION BEHAVIOUR

4642 Same processing as for planned outages of consumption units, refer to chapter 11.2.6.

4643 11.3.6.2 FILTERING AND SORTING CRITERIA

4644 Data shall be displayed together with planned unavailability on the same page. Filter and
4645 sorting criteria are the same as for planned unavailability. It shall be possible to use type of
4646 unavailability (planned or actual) as a criterion. Refer to section 11.2.6.2.

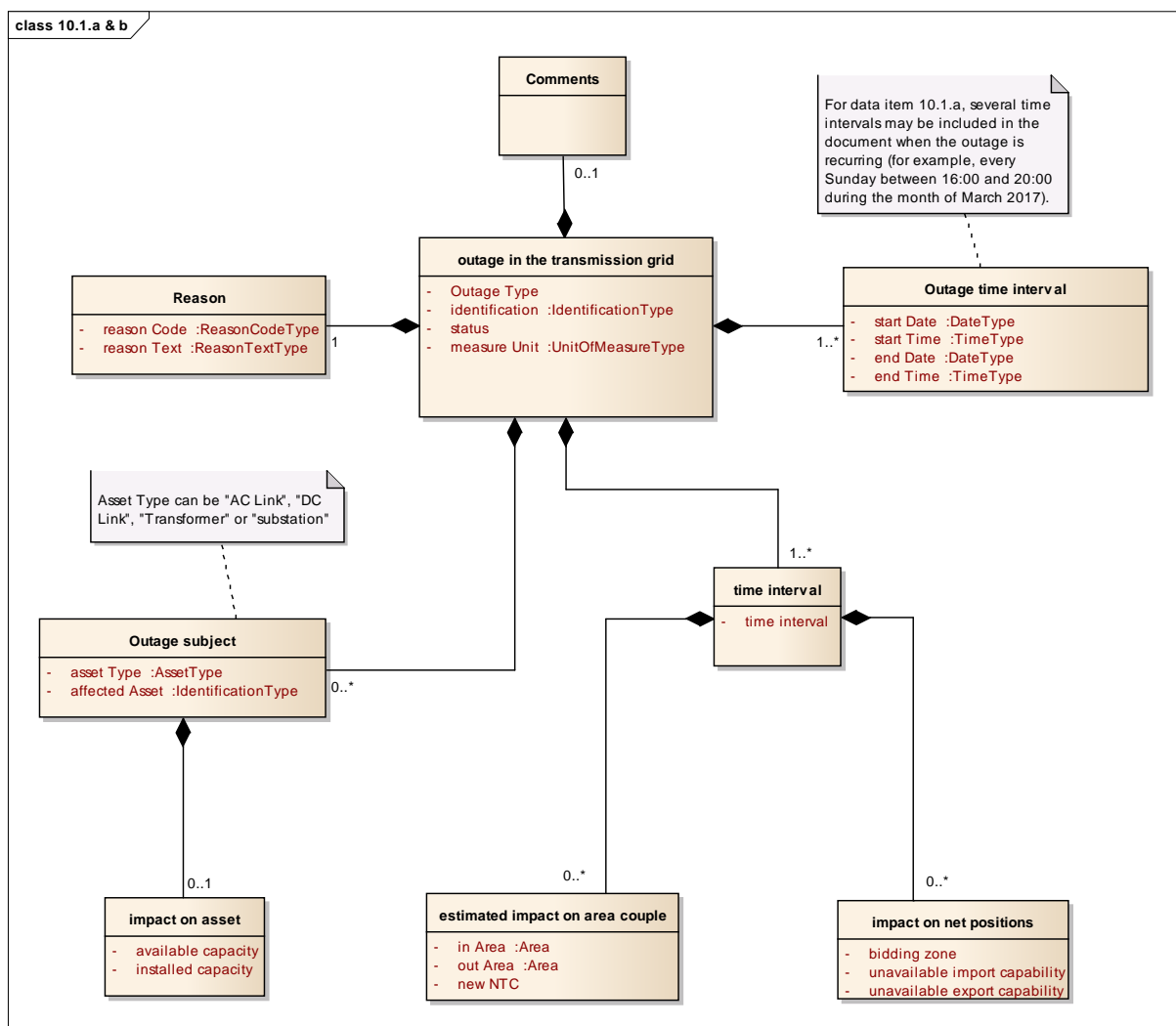
4647 11.3.6.3 DISPLAY

4648 Data shall be displayed together with planned unavailability on the same page. The type of
4649 unavailability (planned or actual) shall be displayed. Refer to section 11.2.6.3.

11.4 PLANNED UNAVAILABILITY IN THE TRANSMISSION GRID [10.1.A]

11.4.1 DATA DESCRIPTION

This item can be described by the following class diagram:



A planned outage in the transmission grid is described by the following:

- An identification of the outage, having a status (active or cancelled)
- A list of outage subjects, each one defined by the asset Type and the identification of the affected Asset. As per article 10(4) of Transparency Regulation (see reference [1]), Data Provider may exceptionally choose not to include any outage subject at all

4660 - The estimated outage time intervals, possibly given in a repeated pattern manner (e.g. every
4661 day of a given week, from 20:00 to 22:00). This implies that an arbitrary number of time series
4662 may be included in the document.

4663 The reason for the planned outage

4664 - Optionally, a free-text comment may be included²⁹

4665 The impact of the outage is expressed in exactly one of the following ways, at the discretion of
4666 the data provider:

4667 a) One or several In and Out Area couples that are impacted, along with the new NTC

4668 b) The available and installed capacity per outage subject

4669 c) The impact on net positions of each bidding zone in the region. The impact is expressed as
4670 unavailable import and export capabilities. This practice may only apply in regions with flow-
4671 based allocations.

4672

4673 .Measure Unit is fixed to megawatt (MW).

4674 For this data item, outage type is "planned".

4675 11.4.2 PRE-CONFIGURATION

4676 For this data item, there is no additional pre-configuration.

4677 11.4.3 ASSUMPTIONS

4678 For outages on interconnectors, there is a memorandum of understanding between Data
4679 Providers that governs who submits data to central platform, to avoid a situation with more
4680 than one data provider submitting data referring to the same outage.

4681 Not more than one outage may be included in a given document. The platform is not technically
4682 able to enforce this, hence the responsibility to ensure compliance lies with the data provider.

4683 11.4.4 INTEGRATION

4684 - If included in the document, the list of outage subjects (assets) shall be recognised by the
4685 platform.

²⁹ This includes the explanation of the case when two parallel AC Links are given in the list of affected assets

- 4686 - The list of In and Out Area couples described in the document shall be recognised by the
4687 platform, as per pre-configuration [C-OTG-6]
- 4688 - Data Provider shall be consistent with the In and Out Area couples, as per pre-configuration
4689 [C-OTG-7]
- 4690 - Data Provider shall be consistent with the outage subject(s).
- 4691 - The outage time intervals may not overlap
- 4692 - The time interval describing the impact must fall within the outage time interval
- 4693 - For a transmission asset, there may not be more than one active planned unavailability at
4694 any point in time for a specific direction on a specific border
- 4695 - When outages are reported using mode b) as per chapter 11.4.1, the available capacity must
4696 be provided for all asset types except substations.

4697 11.4.5 PROCESSING

- 4698 Outages marked for cancellation shall be marked as cancelled in the platform database.
- 4699 When outages are reported using mode b) as per chapter 11.4.1, the installed capacity is
4700 retrieved from master data applicable at the start date of the unavailability for all asset types
4701 except substations.

4702 11.4.6 PUBLICATION

4703 11.4.6.1 PUBLICATION BEHAVIOUR

- 4704 [PR-91a-4] An outage marked for cancellation at submission shall be accessible on the
4705 platform but marked explicitly as cancelled

4706 11.4.6.2 FILTERING AND SORTING CRITERIA

- 4707 Data shall be visually accessed by selecting the following:
- 4708 - Date or date range (selection is mandatory)
- 4709 - Country (selection is optional: If selected, In and/or Out Areas that at least partially cover the
4710 Country will be used as filtering criteria)
- 4711 - In Area (selection is optional)
- 4712 - Out Area (selection is optional)
- 4713 - Type of Asset (selection is optional)

- 4714 - Type of outage: planned or actual, selection is optional
- 4715 Outages for which outage time interval falls either completely or partially on the selected date
4716 (or possibly date range) will be displayed.
- 4717 **11.4.6.3 DISPLAY**
- 4718 This data shall be displayed in the following section:
- 4719 **- Transmission Grid / Unavailability**
- 4720 The following attributes of data shall be displayed:
- 4721 - Title
- 4722 For each outage that falls within the selected date or date range, the following details are
4723 displayed:
- 4724 - Measure Unit
- 4725 - Status (active or cancelled)
- 4726 - Type of outage (planned or actual)
- 4727 - If provided, the outage subjects with links to pages on central platform that provide full details;
4728 type, name and location. This is displayed in a list if more than one asset has been declared.
- 4729 - The reason for the outage
- 4730 - Comments, if available
- 4731 The following information is provided for each declared time interval that falls within the
4732 selected date or date range:
- 4733 - Start date and time
- 4734 - End date and time
- 4735 - The In and Out Area(s) and the new NTC
- 4736 OR
- 4737 - The bidding zones and the unavailable import and export capabilities
- 4738 OR
- 4739 - The available and installed capacity of the outage subject(s) except for substations.
- 4740 It shall be possible to expand the view so that time periods and values are displayed in a table
4741 and in a chart.

4742

11.5 CHANGES IN ACTUAL AVAILABILITY IN THE TRANSMISSION GRID [10.1.B]

11.5.1 DATA DESCRIPTION

Data description is almost identical to data item “Planned unavailability in the transmission grid [10.1.a]”, refer to chapter 11.2. The differences are:

- outage type shall be “actual”
- only one time interval is permitted
- status is always “active”

Note that several outage subjects are permitted though, also for this data item.

11.5.2 PRE-CONFIGURATION

For this data item, there is no additional pre-configuration.

11.5.3 ASSUMPTIONS

Reasons for the outage can be updated D+1 after the start of the outage, at the discretion of the data provider.

For outages on interconnectors, there is a memorandum of understanding between Data Providers that governs who submits data to central platform, to avoid a situation with more than one data provider submitting data referring to the same outage.

Not more than one outage may be included in a given document.

11.5.4 INTEGRATION

- The document date and time of the submitted document should be posterior to the start date and time of the outage. This validation will trigger a warning only.

- For a transmission asset, there may not be more than one change in actual availability at any point in time for a specific direction on a specific border.

All other validations are the same as for planned unavailability of transmission infrastructure, refer to chapter 11.4.4.

11.5.5 PROCESSING

No processing is performed on this data item.

4770 **11.5.6 PUBLICATION**

4771 **11.5.6.1 PUBLICATION BEHAVIOUR**

4772 No specific publication behaviour applies to this data item.

4773 **11.5.6.2 FILTERING AND SORTING CRITERIA**

4774 Data shall be displayed together with planned outages on the same page. Filter and sorting
4775 criteria are the same as for planned outages. It shall be possible to use type of outage
4776 (planned or actual) as a criterion. Refer to section 11.4.6.2.

4777 **11.5.6.3 DISPLAY**

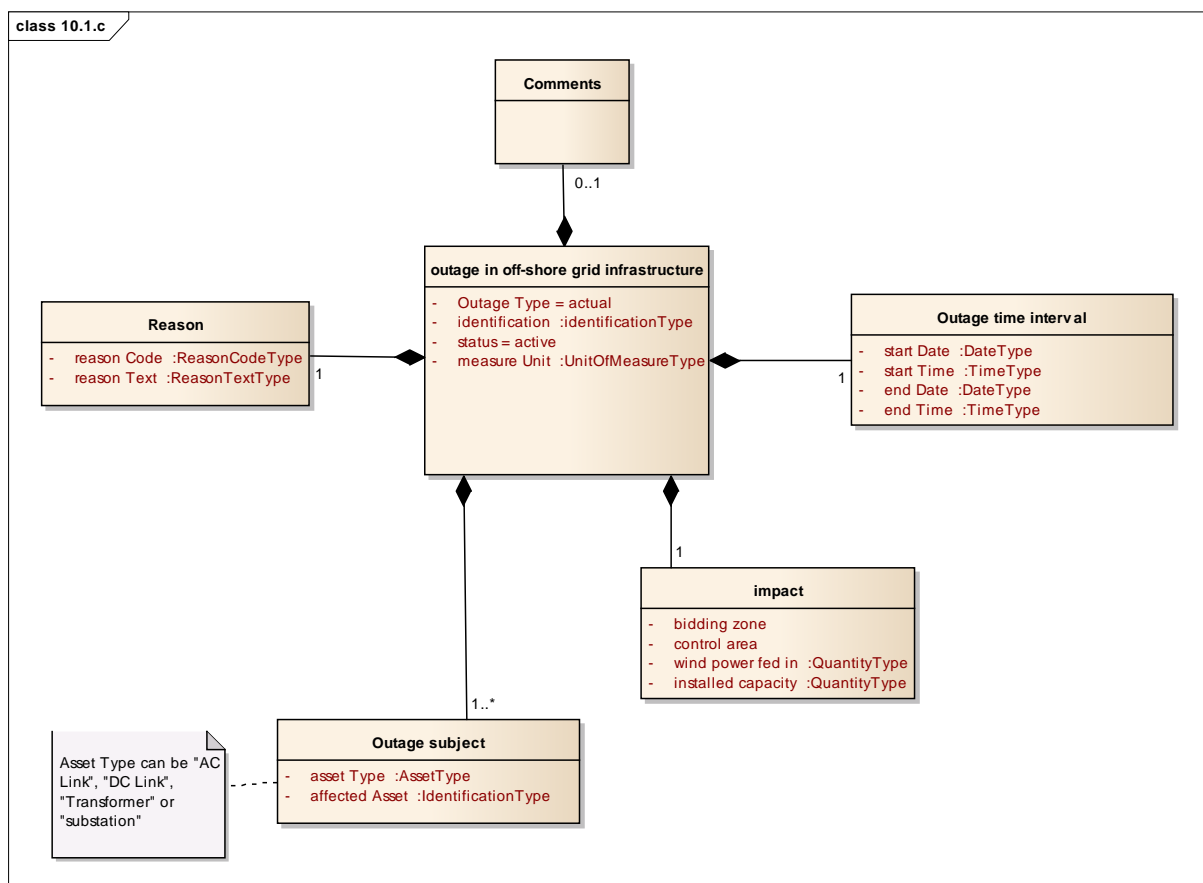
4778 Data shall be displayed together with planned outages on the same page. The type of outage
4779 (planned or actual) shall be displayed. Refer to section 11.4.6.3.

4780

11.6 CHANGES IN ACTUAL AVAILABILITY OF OFF-SHORE GRID INFRASTRUCTURE [10.1.C]

11.6.1 DATA DESCRIPTION

This item can be described by the following class diagram:



A change in the actual availability of off-shore grid infrastructure is described by the following:

- An identification of the outage
- A list of outage subjects, defined by the asset Type and the identification of the affected Asset
- The outage time interval
- Bidding Zone and Control Area
- Installed generation capacity
- Wind power fed in at the time of the change in the availability

- 4793 - Measure Unit is fixed to megawatt (MW)
- 4794 - Outage type is fixed to "actual"
- 4795 - Status is fixed to "active"
- 4796 - The reason for the outage
- 4797 - Optionally, a free-text comment may be provided

4798 11.6.2 PRE-CONFIGURATION

4799 For this data item, there is no additional pre-configuration.

4800 11.6.3 ASSUMPTIONS

4801 Outage of Generation units and Production Units will be accounted for in separate document,
4802 as per chapters 11.8 and 11.10.

4803 11.6.4 INTEGRATION

- 4804 - The outage subjects (assets) described in the document shall be recognised by the platform.
- 4805 - The Data Provider shall be consistent with the identified outage subjects.
- 4806 - The document date and time of the submitted document should be posterior to the start date
- 4807 and time of the outage. This validation will trigger a warning only.

4808 11.6.5 PROCESSING

4809 No processing is performed on this data item.

4810 11.6.6 PUBLICATION

4811 11.6.6.1 PUBLICATION BEHAVIOUR

4812 No specific publication behaviour applies to this data item.

4813 11.6.6.2 FILTERING AND SORTING CRITERIA

4814 Data shall be visually accessed by selecting the following:

- 4815 - Date or date range (selection is mandatory)
- 4816 - Country or Bidding Zone (selection is mandatory); if Country is selected, pre-configuration
- 4817 [C9] will be used to identify the corresponding Control Area and filter Outages accordingly)

4818 Outages for which time interval falls either completely or partially on the selected date (or
4819 possibly date range) will be displayed.

4820 11.6.6.3 DISPLAY

4821 Data shall be displayed in the following section:

4822 - **Transmission Grid / Unavailability of off-shore grid**

4823 The following attributes of data shall be displayed:

4824 - Title

4825 - Measure Unit

4826 For each outage that falls within the selected date or date range, the following details are
4827 displayed:

4828 - Country or Bidding Zone

4829 - Status (always “active”)

4830 - Type of outage (always “actual”)

4831 - The outage subjects with links to pages on central platform that provide full details; asset
4832 type, name, location. This is provided in a list if more than one asset has been declared.

4833 - The reason for the outage

4834 - Comments, if available

4835 - Start date and time

4836 - End date and time

4837 - installed generation capacity

4838 - Wind power fed in

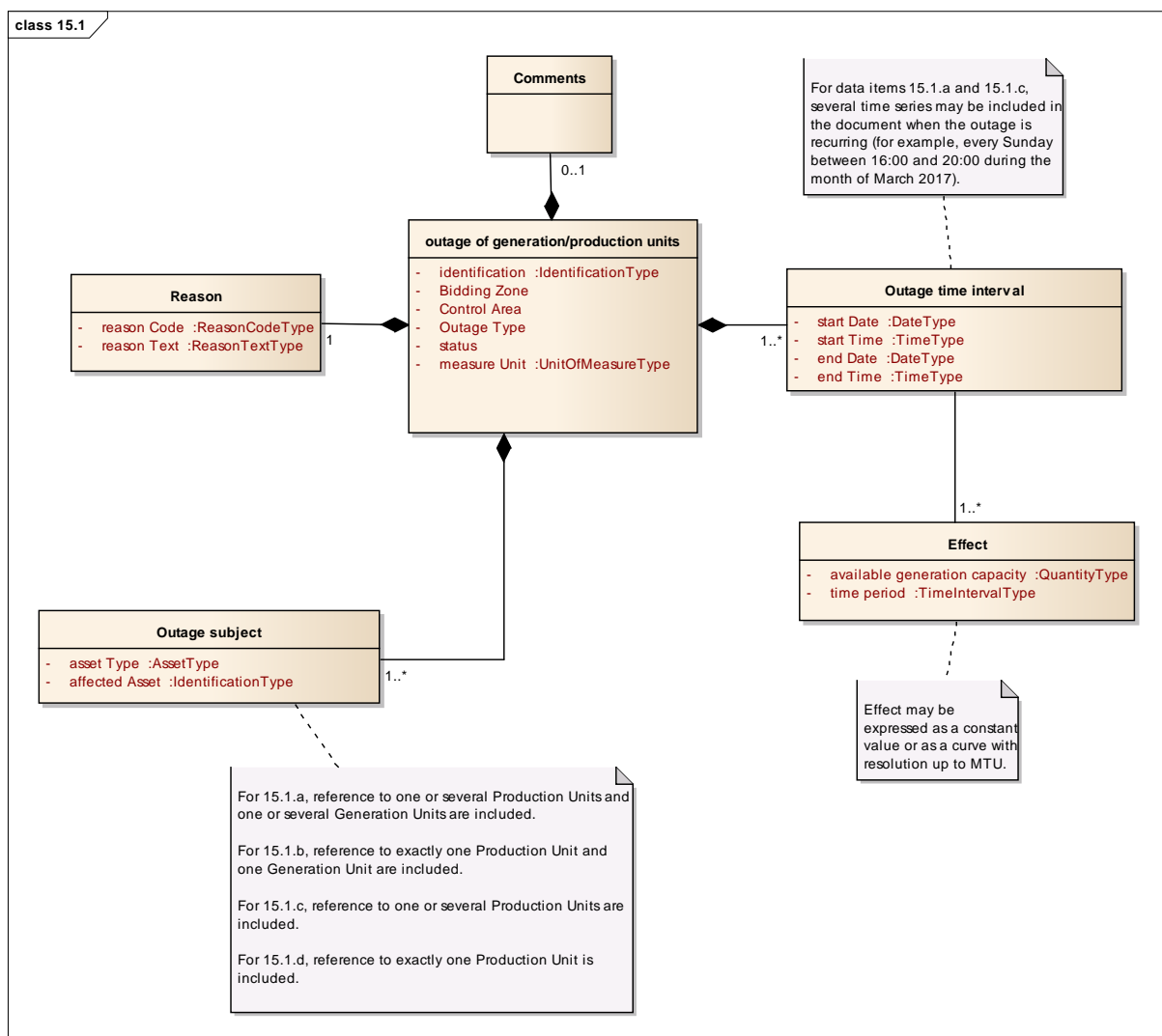
4839

11.7 PLANNED UNAVAILABILITY OF GENERATION UNITS

[15.1.A]

11.7.1 DATA DESCRIPTION

This item can be described by the following class diagram:



A planned unavailability on generation unit is described by the following:

- An identification of the outage, having a status (active or cancelled)
- Bidding Zone and Control Area
- Type of outage is planned

- 4849 - The outage subject, defined by the asset Type (Generation Unit) and its Unique Code
- 4850 - The Production Unit that the Generation Unit belongs to, defined by the asset Type
- 4851 (Production Unit) and its Unique Code
- 4852 - The estimated outage time intervals, possibly given in a repeated pattern manner (e.g. every
- 4853 day of a given week, from 20:00 to 22:00). This implies that an arbitrary number of time series
- 4854 may be included in the document.
- 4855 - The estimated available generation capacity in Measure Unit
- 4856 - The reason for the planned outage
- 4857 - Measure Unit is fixed to megawatt (MW)
- 4858 - Optionally, a free-text comment may be provided

4859 11.7.2 PRE-CONFIGURATION

4860 For select control areas, the validation against overlapping outages may be disabled.

4861 11.7.3 ASSUMPTIONS

- 4862 Unavailability of generation units is submitted per Bidding Zone and Control Area. For a given
- 4863 unavailability, there will be only one Data Provider.
- 4864 Installed capacity of generation unit is recorded in Master Data.

4865 11.7.4 INTEGRATION

- 4866 - The outage subject (asset) described in the document shall be recognised by the platform
- 4867 - Outage subject shall be consistent with Bidding Zone and Control Area
- 4868 - Data Provider shall be consistent with Bidding Zone and Control Area
- 4869 - Data Provider shall be consistent with the identified outage subject
- 4870 - For a given generation unit there may not be more than one active planned unavailability at
- 4871 any point in time.

4872 11.7.5 PROCESSING

- 4873 Unavailability marked for cancellation shall be marked as cancelled in the platform database.
- 4874 Platform deduces Name of Generation Unit, location, production type and installed generation
- 4875 capacity based on the submitted Unique Code.

4876 Platform deduces Name of Production Unit based on the submitted Unique Code of the
4877 Production Unit.

4878 11.7.6 PUBLICATION

4879 11.7.6.1 PUBLICATION BEHAVIOUR

4880 An outage marked for cancellation at submission shall be accessible on the platform but
4881 marked explicitly as cancelled

4882 11.7.6.2 FILTERING AND SORTING CRITERIA

4883 Data shall be visually accessed by selecting the following:

4884 - Date or date range (selection is mandatory)

4885 - Country or Bidding Zone (selection is mandatory – if Country is selected, pre-configuration
4886 [C-OTG-9] will be used to identify the corresponding Control Area and filter Outages
4887 accordingly)

4888 - Type of unavailability: planned or actual, selection is optional

4889 - Production or Generation unit, selection is optional

4890 Unavailability for which time interval falls either completely or partially on the selected date (or
4891 possibly date range) will be displayed.

4892 11.7.6.3 DISPLAY

4893 This data shall be displayed in the following section:

4894 - **Generation / Unavailability**

4895 There shall be a link to the section Generation / List of Production Units and Installed Capacity,
4896 refer to 9.3.8.2.

4897 - Title

4898 - Measure Unit (MW)

4899 For each outage that falls within the selected date or date range, the following details are
4900 displayed:

4901 - Status (active or cancelled)

4902 - The outage subject(s) with link to page on central platform that provide full details; Production
4903 Type, Production and Generation Unit names and installed capacity.

- 4904 - The reason for the outage
- 4905 - Comments, if available
- 4906 - Country or Bidding Zone
- 4907 - Type of unavailability (planned or actual)
- 4908 The following information is provided for each declared time interval that falls within the
- 4909 selected date or date range:
- 4910 - Start date and time
- 4911 - End date and time
- 4912 - The available generation capacity per MTU period
- 4913

4914 11.8 CHANGES IN ACTUAL AVAILABILITY OF GENERATION 4915 UNITS [15.1.B]

4916 11.8.1 DATA DESCRIPTION

4917 Data description is almost identical to data item "Planned unavailability of generation units
4918 [15.1.a]", refer to chapter 11.6. The differences are:

- 4919 - outage type shall be "actual"
- 4920 - only one time interval is permitted
- 4921 - status is always "active"
- 4922 - not more than one generation unit and production unit included

4923 11.8.2 PRE-CONFIGURATION

4924 For select control areas, the validation against overlapping outages may be disabled.

4925 11.8.3 ASSUMPTIONS

4926 Unavailability of generation units is submitted per Bidding Zone and Control Area.

4927 For a given unavailability, there will be only one Data Provider.

4928 Installed capacity of generation unit is recorded in Master Data.

4929 11.8.4 INTEGRATION

4930 The document date and time of the submitted document should be posterior to the start date
4931 and time of the unavailability. This validation shall trigger a warning only.

4932 -For a given generation unit there may not be more than one active change in actual availability
4933 at any point in time.

4934 All other validations are the same as for planned unavailability of generation units, refer to
4935 chapter 11.7.4.

4936 11.8.5 PROCESSING

4937 Platform deduces Name of Generation Unit, location, production type and installed generation
4938 capacity based on the submitted Unique Code.

4939 Platform deduces Production Unit and retrieves its Name based on reference data described
4940 in **Error! Reference source not found..** The submitted Unique Code of Production Unit is
4941 used as key.

4942 11.8.6 PUBLICATION

4943 11.8.6.1 PUBLICATION BEHAVIOUR

4944 No specific publication behaviour applies to this data item.

4945 11.8.6.2 FILTERING AND SORTING CRITERIA

4946 Data shall be displayed together with planned unavailability on the same page. Filter and
4947 sorting criteria are the same as for planned unavailability. It shall be possible to use type of
4948 unavailability (planned or actual) as a criterion. Refer to section 11.7.6.2.

4949 11.8.6.3 DISPLAY

4950 Data shall be displayed together with planned unavailability on the same page. The type of
4951 unavailability (planned or actual) shall be displayed. Refer to section 11.7.6.3.

4952

11.9 PLANNED UNAVAILABILITY OF PRODUCTION UNITS

[15.1.c]

11.9.1 DATA DESCRIPTION

Data description is almost identical to data item “Planned unavailability of generation units [15.1.a]”, refer to chapter 11.6. The difference is that Asset Type is Production Unit.

11.9.2 PRE-CONFIGURATION

For select control areas, the validation against overlapping outages may be disabled.

11.9.3 ASSUMPTIONS

Unavailability of Production Units is submitted per Bidding Zone and Control Area.

For a given unavailability, there will be only one Data Provider.

Installed capacity per Production Unit has been recorded in Master Data.

11.9.4 INTEGRATION

- The outage subject (asset) described in the document shall be recognised by the platform

- Outage subject shall be consistent with Bidding Zone and Control Area

- Data Provider shall be consistent with Bidding Zone and Control Area

- Data Provider shall be consistent with the identified outage subject

- For a given production unit there may not be more than one active planned unavailability at any point in time. Validation shall be carried out separately for production unit and its generation units, i.e. overlaps between outages of a production unit and any of its generation units are permitted.

11.9.5 PROCESSING

Unavailability marked for cancellation shall be marked as cancelled in the platform database.

Platform deduces Name of Production Unit, location, production type and installed generation capacity based on the submitted Unique Code.

4977 11.9.6 PUBLICATION

4978 11.9.6.1 PUBLICATION BEHAVIOUR

4979 An outage marked for cancellation at submission shall be accessible on the platform but
4980 marked explicitly as cancelled.

4981 11.9.6.2 FILTERING AND SORTING CRITERIA

4982 Data shall be visually accessed by selecting the following:

4983 - Date or date range (selection is mandatory)

4984 - Country or Bidding Zone (selection is mandatory – if Country is selected, pre-configuration
4985 [C-OTG-9] will be used to identify the corresponding Control Area and filter Outages
4986 accordingly)

4987 - Type of unavailability: planned or actual, selection is optional

4988 - Production unit, selection is optional

4989 Unavailability for which time interval falls either completely or partially on the selected date (or
4990 possibly date range) will be displayed.

4991 11.9.6.3 DISPLAY

4992 This data shall be displayed in the following section:

4993 - **Generation / Unavailability**

4994 There shall be a link to the section Generation / List of Production Units and Installed Capacity,
4995 refer to 9.3.8.2.

4996 - Title

4997 - Measure Unit (MW)

4998 For each outage that falls within the selected date or date range, the following details are
4999 displayed:

5000 - Status (active or cancelled)

5001 - The outage subject(s) with link to page(s) on central platform that provide full details;
5002 Production Type, Production Unit name and installed capacity.

5003 - The reason for the outage

5004 - Comments, if available

- 5005 - Country or Bidding Zone
- 5006 - Type of unavailability (planned or actual)
- 5007 The following information is provided for each declared time interval that falls within the
- 5008 selected date or date range:
- 5009 - Start date and time
- 5010 - End date and time
- 5011 - The available generation capacity per MTU period
- 5012

5013 11.10 CHANGES IN ACTUAL AVAILABILITY OF PRODUCTION 5014 UNITS [15.1.D]

5015 11.10.1 DATA DESCRIPTION

5016 Data description is almost identical to data item “Planned unavailability of production units
5017 [15.1.c]”, refer to chapter 11.9. The differences are:

- 5018 - outage type shall be “actual”
- 5019 - only one time interval is permitted
- 5020 - status is always “active”
- 5021 - not more than one production unit included

5022 11.10.2 PRE-CONFIGURATION

5023 For select control areas, the validation against overlapping outages may be disabled.

5024 11.10.3 ASSUMPTIONS

5025 Installed capacity per Production Unit has previously been recorded in Master Data.

5026 Unavailability of production units is submitted per Bidding Zone and Control Area.

5027 For a given unavailability, there will be only one Data Provider.

5028 11.10.4 INTEGRATION

5029 The document date and time of the submitted document should be posterior to the start date
5030 and time of the unavailability. This validation shall trigger a warning only.

5031 For a given production unit there may not be more than one active change in actual availability
5032 at any point in time. Validation shall be carried out separately for production unit and its
5033 generation units, i.e. overlaps between outages of a production unit and any of its generation
5034 units are permitted.

5035 All other validations are the same as for planned unavailability of generation units, refer to
5036 chapter 11.7.4.

5037 11.10.5 PROCESSING

5038 Platform deduces Name of Production Unit, location, production type and installed generation
5039 capacity based on the submitted Unique Code.

5040 **11.10.6 PUBLICATION**

5041 **11.10.6.1 PUBLICATION BEHAVIOUR**

5042 No specific publication behaviour applies to this data item.

5043 **11.10.6.2 FILTERING AND SORTING CRITERIA**

5044 Data shall be displayed together with planned unavailability on the same page. Filter and
5045 sorting criteria are the same as for planned unavailability. It shall be possible to use type of
5046 unavailability (planned or actual) as criteria. Refer to section 11.9.6.2.

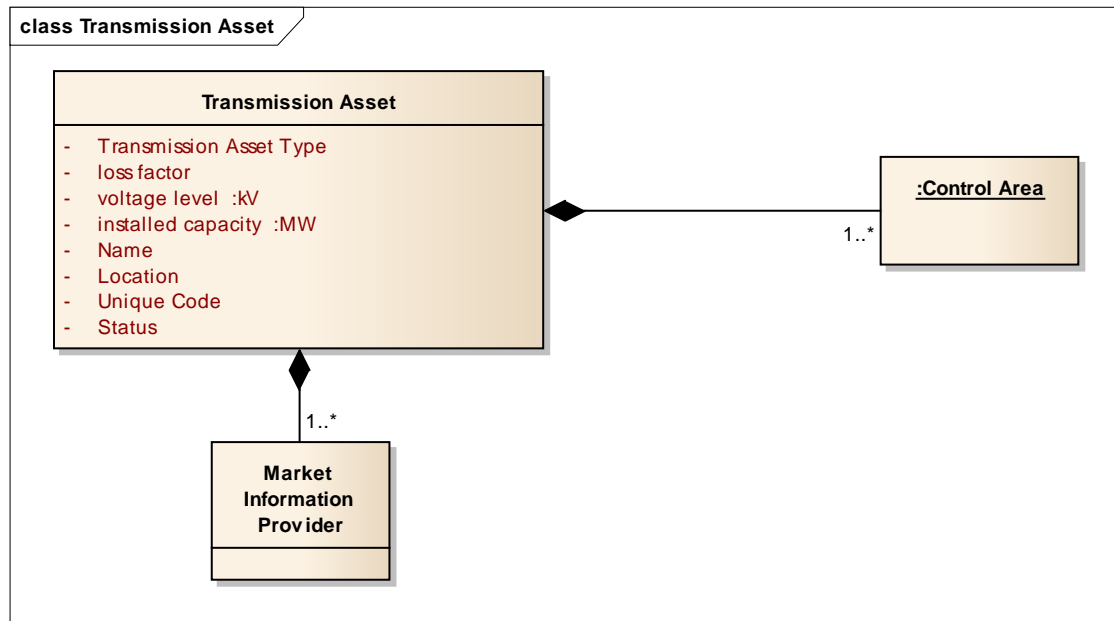
5047 **11.10.6.3 DISPLAY**

5048 Data shall be displayed together with planned unavailability on the same page. The type of
5049 unavailability (planned or actual) shall be displayed. Refer to section 11.9.6.3.

5050

5051

11.11 TRANSMISSION ASSETS



5052

5053 Reference data for transmission assets will have similar structure and maintenance
5054 mechanism as generation and production units, refer to chapter **Error! Reference source**
5055 **not found..**

5056 Just like generation units, transmission assets will have a status (commissioned,
5057 decommissioned or cancelled), a unique code, name and location. Additionally, transmission
5058 assets will have the attribute transmission asset type (AC Link, DC Link, Transformer,
5059 Substation or Converter). Assets of type AC or DC link will have additional attributes for their
5060 voltage level and optionally a loss factor. Assets of all types except substation will have an
5061 additional attribute for their installed capacity.

5062 As opposed to generation units, a transmission asset may have several Data Providers.

5063 Note that Bidding Zone is *not* an attribute of transmission asset.

5064 Note that more than one Control Area may be associated with a transmission asset.

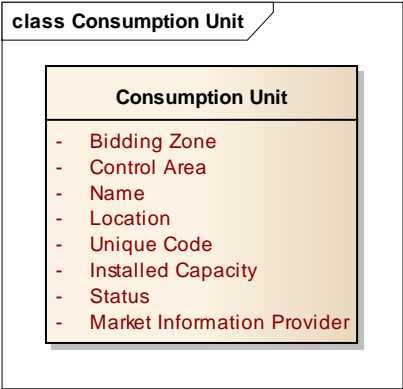
5065 Platform shall validate that voltage level is situated between 0 and 999 kV.

5066 Transmission assets of type DC link associated with two or more control areas shall be
5067 visible for all registered users. All transmission assets shall be visible for the Data Provider.
5068 The data shall be available in the following section on the website:

5069 - **Transmission / Transmission Assets**

5070 It shall be possible to filter the transmission assets by Control Area or Country. Further, there
5071 shall be optional filters for voltage level (see chapter 13.6.2), AC or DC links, links associated
5072 with more than one control area and links associated with more than one country.

5073 11.12 CONSUMPTION UNITS

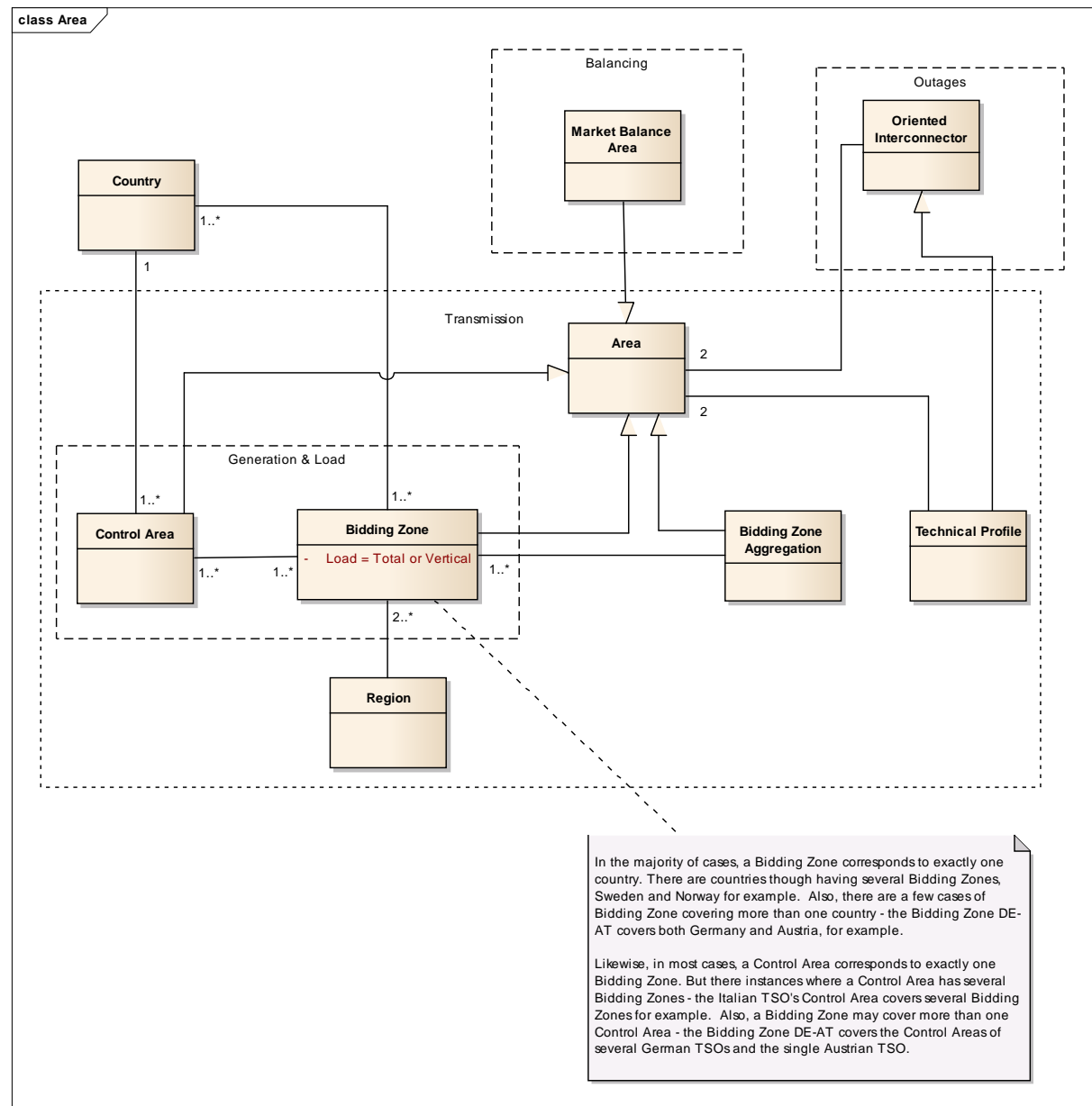


- 5074
- 5075 Reference data for consumption units will have similar structure and maintenance
- 5076 mechanism as generation units, refer to chapter **Error! Reference source not found..** Just
- 5077 like generation units, consumption units will have a status (commissioned, decommissioned
- 5078 or cancelled), bidding area, control area, a unique code, name and location. Installed
- 5079 capacity is mandatory.
- 5080 Similar to generation units, a consumption unit will have only one Data Provider.
- 5081 Consumption Units shall be displayed toward Data Providers in the following section on the
- 5082 website:
- 5083 - Load / Consumption Units
- 5084 It shall be possible to filter the consumption units by Control Area, Bidding Zone or Country.
- 5085

12REFERENCE DATA

The purpose of this chapter is to provide a consolidated view of the reference data that have been considered in the six domains Generation, Load, Transmission, Balancing, Outages and Congestion Management. No distinctions are being made between master, configuration or reference data.

12.1 AREAS



- 5093 Bidding Zone is used in all domains except Balancing, where Market Balance Area is used
5094 instead.
- 5095 A Control Area never overlaps another Control Area. Likewise, a Bidding Zone never
5096 overlaps another Bidding Zone.
- 5097 In the Transmission domain, there are Regions and aggregation of Bidding Zones. An Area
5098 may consist of either a single Bidding Zone or a Bidding Zone Aggregation. Also in
5099 Transmission domain, a Technical Profile consists of two Areas with a direction. See section
5100 7.1 for further details.
- 5101 For Outages, there are Oriented Interconnectors that consist of two Areas with a direction.
5102 See also section 11.1.2.

5103 12.2 ASSETS

- 5104 There are four types of assets: Generation Units, Production Units, Consumption Units and
5105 Transmission Assets. Refer to diagram in section 11.1.1.
- 5106 More information on Generation and Production Units is available in section **Error!**
5107 **Reference source not found.** Consumption Units are detailed in 11.12. Transmission
5108 Assets are described in section 11.11.

5109 12.3 TRANSMISSION CAPACITY ALLOCATIONS AND 5110 CAPACITY PRODUCTS

- 5111 Capacity Allocations and products are relevant to the Transmission domain. Capacity
5112 Allocations can be either explicit or implicit. Capacity products are associated with Capacity
5113 Allocations and are characterised by two Areas with a direction and a Contract Type, and
5114 additionally for explicit allocations a Classification Category and a Classification Sequence.
- 5115 Further details on Transmission Capacity Allocations and Capacity Products are available in
5116 chapters 7.1.1 and 7.27.

5117 12.4 PROCESSES, RESERVES AND PRICE TYPES

- 5118 In the Balancing domain, there are constraints on the valid combinations of Market Balance
5119 Area, Reserves and Price Type. Full details are available in chapters 10.1.1 and 10.1.2. For
5120 some data items also Contract Types may be relevant. Contract Types are the same as in
5121 Transmission domain.

5122 12.5 TIME UNITS

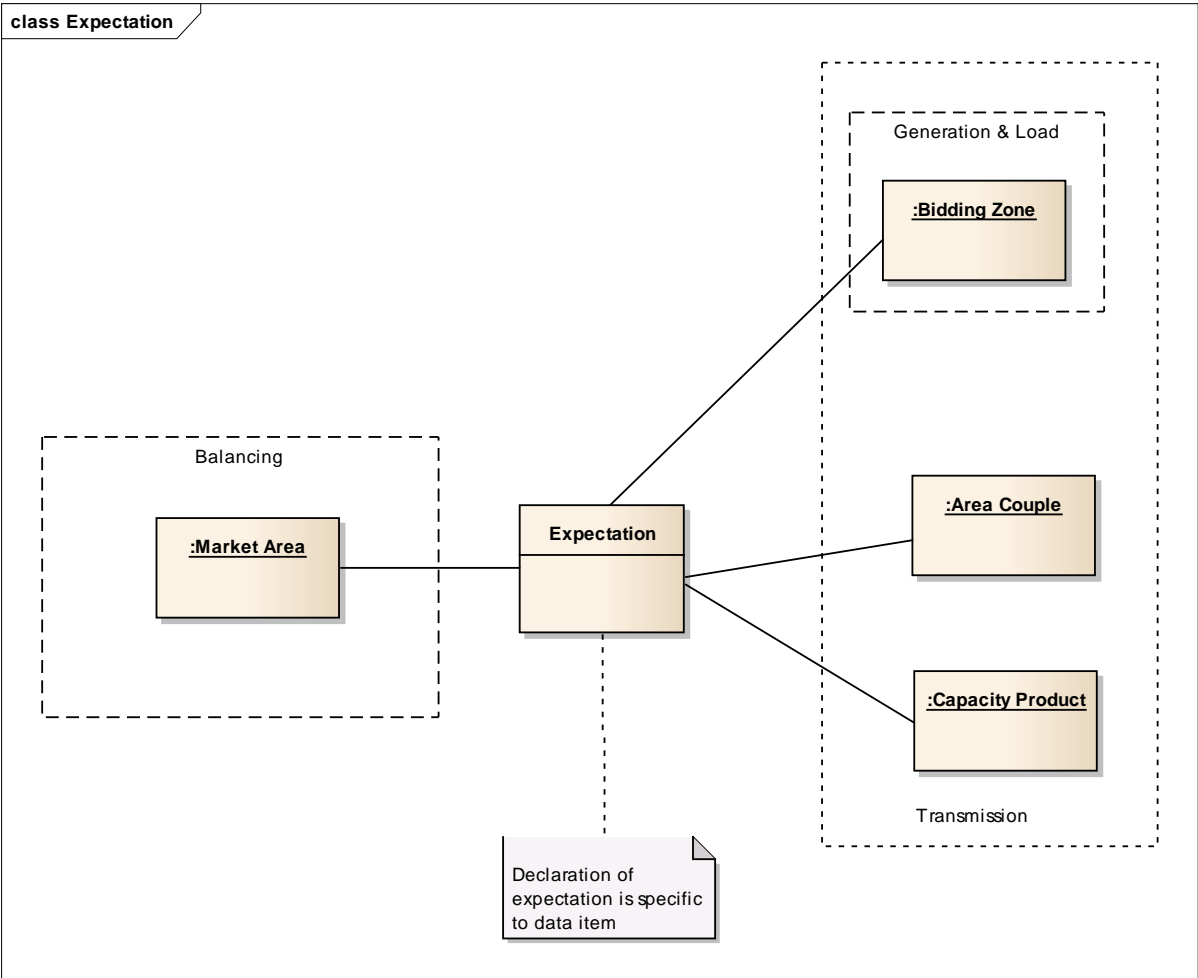
- 5123 In all domains except Balancing, Market Time Units are used and depend on Bidding Zone or
- 5124 Bidding Zone Aggregation. For Balancing, Balancing Time Units are used and depend on
- 5125 Market Balance Area.

5126 12.6 ACTIONS AND REASONS

- 5127 For Congestion Management, different sets of actions are foreseen. Further details provided
- 5128 in chapter 8.1.2.
- 5129 For Outages, a single set of reason codes is foreseen, common to all kinds of Outages.
- 5130 Details are provided in chapter 11.1.2.

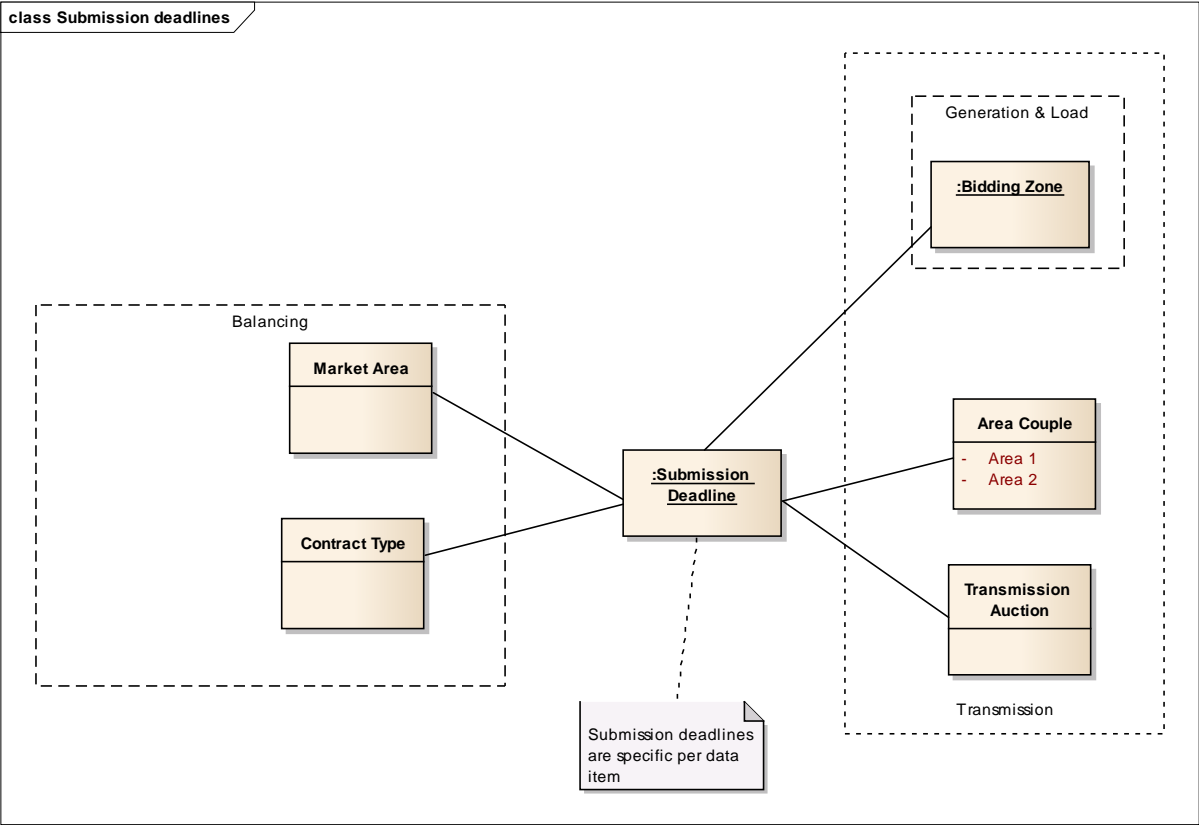
5131 12.7 DATA ITEMS

5132 12.7.1 EXPECTATION OF DATA



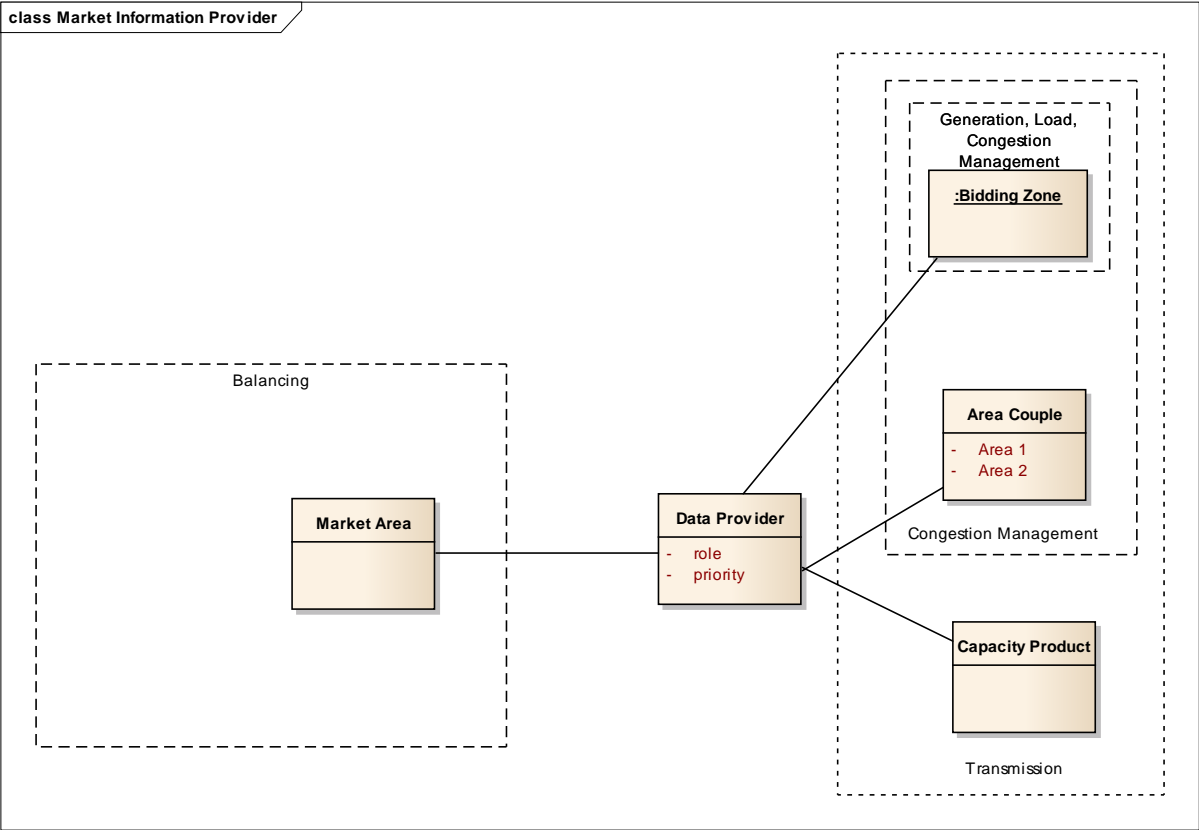
- 5133
- 5134 Whether data is expected or not is declared per Bidding Zone for data items in the domains
- 5135 Generation and Load. In the Transmission domain, expectation is declared per Bidding Zone,
- 5136 Bidding Zone couple or per Technical Profile. For some Transmission data items related to
- 5137 capacity allocations, expectation is determined per capacity product.
- 5138 For data items in the Balancing domain, expectation is declared per Market Balance Area.

5139 12.7.2 SUBMISSION DEADLINES



- 5140
- 5141 For data items in Generation and Load domains, submission deadlines are determined by
- 5142 Bidding Zone.
- 5143 In Transmission domain, deadlines are defined per Bidding Zone or couple of Bidding Zones.
- 5144 For some Transmission data items related to capacity allocations, submission deadlines are
- 5145 set per capacity allocation instance.
- 5146 For data items in the Balancing domain, submission deadlines are defined per Market
- 5147 Balance Area and for some data items also per Contract Type.

5148 **12.7.3 ALLOWED DATA PROVIDERS**



- 5149
- 5150 Data Providers have a priority and a role – those attributes are relevant in the Transmission
- 5151 domain only.
- 5152 In the domains Generation and Load, the allowed Data Providers are associated with the
- 5153 Control Area and Bidding Zone.
- 5154 In the Transmission and Congestion Management domains, the allowed Data Providers are
- 5155 associated with Bidding Zone, a couple of Bidding Zones or a Technical Profile. For some
- 5156 data items related to Transmission capacity allocations, allowed Data Providers are identified
- 5157 per Capacity Allocation.
- 5158 In the Balancing domain, the allowed Data Provider is associated with Market Balance Area.
- 5159

13 STATISTICAL DATA PORTAL

The statistical data portal has its own section within the transparency platform. It is dedicated to the publication of various statistical reports, generated based on data submitted to the transparency platform. The majority of these publications are based on data reported due to legal obligations stemming from the Transparency Regulation [1]. Yet, for some additional ones, dedicated data collections have been defined.

Data is published per calendar year, with increments and possibly also updates every quarter. *An example with monthly values: National consumption (see chapter 13.3) may be submitted with MTU or monthly resolution. There will be a first quarterly publication covering the months January through March and data providers are granted three months after the end of the quarter to complete and validate their submissions. Hence the first quarterly publication will occur on July 1. The second quarterly publication, adding the months of April through June to the same yearly report, possibly also with corrections for the January – March period, happens on October 1.*

An example with yearly values: Characteristics of cross-border links is based on master data. A publication describing 2024 will be available to data providers for review as of January 1 2025 and released to the general public for the first time on April 1 of 2025. Hence data providers will have three months to validate the yearly publication. The data will be published again on July 1 of 2025, October 1 of 2025 and January 1 of 2026.

The portal also offers a yearly consolidated report in PDF format, referred to as the “statistical factsheet”. Within this report, the separate statistical publications outlined below in chapters 13.2 through 13.7, supplemented by data published under TR. art. 14.1.a (see chapter 9.2 on aggregated installed generation capacity), are provided for all countries with some further yearly aggregations. This factsheet is described in chapter 13.8.

13.1 GENERAL CHARACTERISTICS

For a given publication, the statistical data is collected for a specific reporting time interval, which is either per month or per year. Data is submitted per control area.

13.1.1 AGGREGATION TO COUNTRY LEVEL

In case there is more than one control area in a given country, platform will aggregate the data to country level.

13.1.2 CONFIGURATION OF DATA EXPECTATION

For all publications underpinned by data provided for transparency purposes, the configuration regarding data expectation and data provider already in place for the transparency submissions will automatically apply also to the statistical publications. The

5194 corresponding transparency data must be expected for the entire reporting time interval –
5195 otherwise, no statistical publication will occur.

5196 13.1.3 GATE OPENINGS AND CLOSURES

5197 For each publication and time interval, there are gate openings that must be respected by the
5198 data providers. There is a common gate closure by default at December 31 Y+1³⁰ for all
5199 submissions describing year Y, both monthly and yearly ones. For any given year, the default
5200 gate closure may be modified by manual configuration. The initial submissions and any
5201 updates must be lodged within those gates. These gates will apply only to the
5202 supplementary, optional data submissions in monthly resolution (see chapters 7.26.1, 6.2.1
5203 and **Error! Reference source not found.**) and to the submission of transmission inventory
5204 (see chapter 13.7).

5205 13.1.4 MONITORING

5206 For each publication and time interval, the transparency platform will monitor adherence to
5207 the submission deadline and completeness of data, respectively.

5208
5209 Data submitted with MTU resolution will be used in calculations and published only if its
5210 completeness is situated above 99%.

5211
5212 For the given publication, country and reporting time interval, incomplete data shall be
5213 explicitly indicated as “not available”.

5214 13.1.5 SCHEDULED RELEASE OF PUBLICATIONS

5215 For each publication and time interval, submitted, successfully validated and complete data
5216 will be immediately available for inspection and, if need be, correction by the data providers
5217 on the transparency platform. In a subsequent step, data will be released for consultation by
5218 the general public in yearly reports with quarterly increments. Even after the entire data set
5219 for the given year has been published, there will be additional quarterly publications of
5220 revisions, if any, up until January 1 on Y+2.

5221
5222 It is foreseen that the data will be released to the general public on April 1, July 1, October 1
5223 and January 1.

5224 13.1.6 CONTINUOUS REFRESH OF DATA

5225 For each publication and time interval, no later than by the gate opening the data available
5226 for inspection by data providers will be continuously updated whenever there is a submission
5227 of any data underpinning the publication; submission of actual total load, for example.
5228

³⁰ The reason for this common yearly deadline is that data is published on the Statistical Data Portal per calendar year. There are no publications spanning the end of year.

5229 13.1.7 EXPLANATORY NOTES

5230 For each publication, platform administrator shall be able to record generic explanatory notes
5231 applicable to all countries.

5232
5233 For each publication and country, data providers shall be able to record an explanatory note.

5234
5235 These explanatory notes shall be visible on the data view for the given publication and
5236 country, for all time intervals.

5237
5238 By default, all these explanatory notes will be visible for all years. At his discretion, platform
5239 administrator may for a given explanatory note specify a first year and optionally also a last
5240 year for which the note shall be visible.

5241 13.1.8 DISPLAY

5242 The publications related to statistical data portal shall have their own domain on the platform:
5243 "statistical data portal". Data will be displayed in tabular format only. Charts or maps are not
5244 supported.

5245 13.1.9 DOWNLOADS

5246 Data will be available for download per publication and year. It shall be possible to download
5247 data for a single as well as for several or all countries.

5248
5249 Data providers will be able to download all data available on the platform for their
5250 consultation (and potential correction). General public will only be able to download
5251 published data.

5252
5253 Data will be available for download in csv and excel formats. Xml will not be supported.

5254 13.1.10 SUBSCRIPTIONS

5255 Data consumers may subscribe to each publication. At the time of the scheduled release of
5256 the publication (see chapter 13.1.5), data will be sent to consumer via the already
5257 implemented mechanisms of the transparency platform. Subscribed data is made available in
5258 csv and excel format. Xml will not be supported.

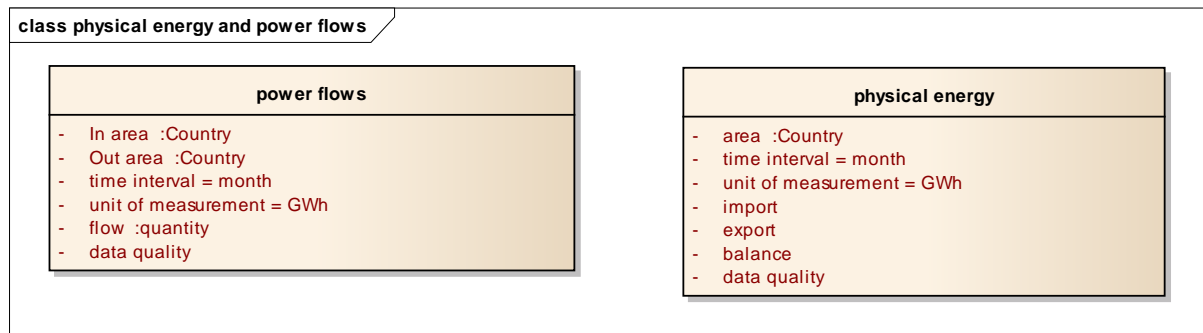
5259 13.1.11 UPDATES

5260 A data provider that wishes to correct some statistical data publication must submit a higher
5261 version of the underlying data. No amendments will be possible directly via the GUI.

13.2 PHYSICAL ENERGY AND POWER FLOWS

13.2.1 DATA DESCRIPTION

This publication can be described by the following class diagram:



For a given In and Out area couple and month, the gross power flow shall be published as a single value, expressed in GWh. In and Out areas are countries. Values shall be published separately for both directions across the given border.

For a given country, the total import, export and balance expressed in GWh shall be published.

Data submitted under TR art. 12.1.g Physical flows (see chapter 7.26) will be used as source. Data submitted with monthly resolution shall take precedence over data submitted in MTU resolution.

For each published value the type of data used for calculating it shall be indicated by the platform: Transparency regulation publication (in MTU resolution), settlement (in monthly resolution) or mixed.

13.2.2 PRE-CONFIGURATION

No specific pre-configuration applies.

13.2.3 ASSUMPTIONS

There are no assumptions specific to this publication.

13.2.4 INTEGRATION

No specific integration applies.

13.2.5 MONITORING

No specific monitoring applies.

5284 13.2.6 PROCESSING

5285 Data provided in monthly resolution will take precedence, no matter the priority of the data
5286 provider. In case both data providers provide data in monthly resolution, prioritisation for 12.1.g
5287 as per chapter 7.26.2 will apply. The monthly data is provided as an average MW value for the
5288 entire month and the platform must therefore convert it into GWh by multiplication with the
5289 number of hours in the month and division by 1000.

5290 If data in MTU resolution has to be used, platform shall in a first step convert it into hourly
5291 netted values. Values shall be summed up if there are more than one bidding zone border
5292 between two countries. The monthly gross values in GWh per direction across the border shall
5293 then be established by summing up the hourly values in MW and dividing by 1000.

5294 In first hand, the total import, export and balance shall be established based on the gross flows
5295 per border provided in monthly resolution. If data in MTU resolution has to be used, the total
5296 import, export and balance shall be determined based on the hourly netted values per border.
5297 Balance is calculated by subtracting export from import (sic!).

5298 The platform shall determine the type of data for each published value. Mixed may apply for
5299 power flows if there are two different bidding zone borders on the same country border and
5300 data is submitted in MTU resolution for one of those borders and in monthly resolution for the
5301 other. Similarly, if the physical energy is aggregated from a country border for which data in
5302 MTU resolution was submitted and from another country border for which data in monthly
5303 resolution was submitted, then "mixed" shall be indicated.

5304 13.2.7 PUBLICATION

5305 13.2.7.1 FILTERING AND SORTING CRITERIA

5306 Data shall be visually accessed by selecting the following criteria:

- 5307 - Country (selection is mandatory)
- 5308 - Year (selection is mandatory)
- 5309 - Month: One or several consecutive ones up to one year, selection is optional

5310 Data for which either In or Out area coincides with the selected country shall be selected for
5311 display.

5312 13.2.7.2 DISPLAY

5313 This data shall be displayed in the following section:

5314 - Statistical Data Portal / Physical energy and power flows

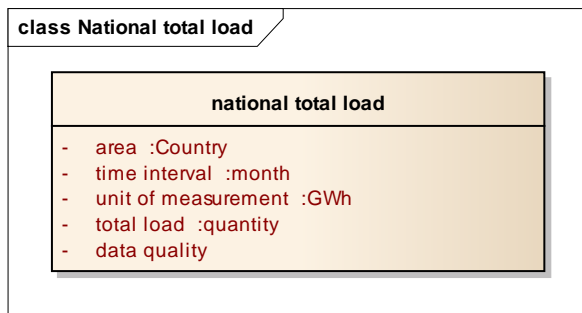
5315 The following attributes of data shall be displayed:

- 5316 - Country
- 5317 - Year
- 5318 - For each In/Out area couple and month, the gross flows in GWh
- 5319 - For each month, the total import, export and balance in GWh
- 5320 For both cross-border and area values, the data quality (transparency regulation publication,
5321 settlement or mixed) is indicated

13.3 NATIONAL TOTAL LOAD

13.3.1 DATA DESCRIPTION

This publication can be described by the following class diagram:



For a given country and month, the national total load shall be published as a single value, expressed in GWh.

Data submitted under TR art. 6.1.a Actual total load (see chapter 6.2.1) will be used as source. Data submitted with monthly resolution shall take precedence over data submitted in MTU resolution.

For each published value the type of the data used for calculating it, i.e. transparency regulation publication (in MTU resolution) or statistical (in monthly resolution), shall be indicated by the platform. Mixed shall be indicated in case there is more than one control area in the country and values were provided with different resolutions – at least theoretically this may occur in the case of Germany.

13.3.2 PRE-CONFIGURATION

No specific pre-configuration applies.

13.3.3 ASSUMPTIONS

No specific assumptions apply.

13.3.4 INTEGRATION

No specific integration applies.

13.3.5 MONITORING

No specific monitoring applies.

5344 13.3.6 PROCESSING

5345 Data provided in monthly resolution will take precedence. Data in monthly resolution is
5346 expressed as an average MW value for the entire month. When provided, it will be converted
5347 into GWh by multiplying with the number of hours during the month and divided by 1000.

5348 If data in MTU resolution has to be used, it shall be converted into MWh for each MTU period.
5349 Values shall then be summed up for the entire month and finally be divided by 1000 to establish
5350 the GWh value.

5351 13.3.7 PUBLICATION

5352 13.3.7.1 FILTERING AND SORTING CRITERIA

5353 Data shall be visually accessed by selecting the following criteria:

- 5354 - Country (selection is mandatory)
- 5355 - Year (selection is mandatory)
- 5356 - Month: One or several consecutive ones up to one year, selection is optional

5357 13.3.7.2 DISPLAY

5358 This data shall be displayed in the following section:

5359 - **Statistical Data Portal / National total load**

5360 The following attributes of data shall be displayed:

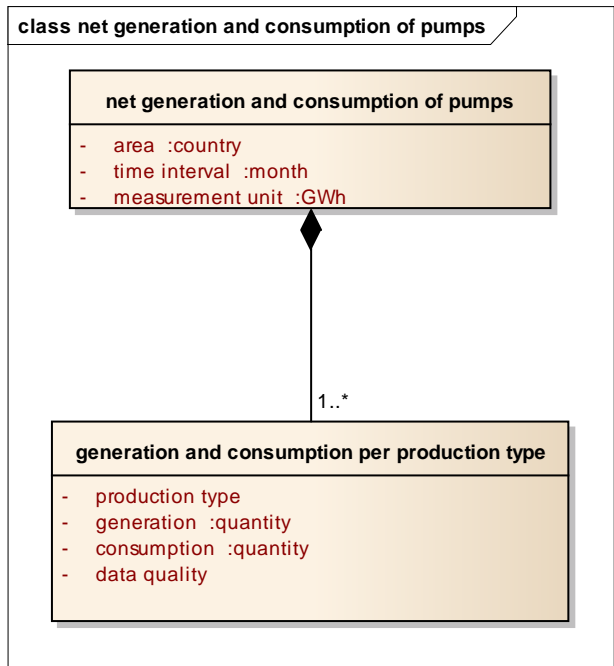
- 5361 - Country
- 5362 - Year
- 5363 - Measurement Unit
- 5364 - For each month, the total load value and the data quality (transparency regulation
5365 publication, statistical or mixed)

5366

13.4 NET GENERATION AND CONSUMPTION OF PUMPS

13.4.1 DATA DESCRIPTION

This publication can be described by the following class diagram:



For a given country and month, the net generation shall be published per production type. For a configurable set of production types, additionally also the consumption shall be published. Values are expressed in GWh.

Data submitted under TR art. 16.1.b&c Aggregated generation per type (see chapter **Error! Reference source not found.**) will be used as source. Data submitted with monthly resolution shall take precedence over data submitted in MTU resolution.

For each published value the type of the data used for calculating it, i.e. transparency regulation publication (in MTU resolution) or statistical (in monthly resolution), shall be indicated by the platform. Mixed shall be indicated in case there is more than one control area in the country and values were provided with different resolutions – at least theoretically this may occur in the case of Germany.

13.4.2 PRE-CONFIGURATION

By default, consumption values will not be published. For each production type it shall optionally be possible though to indicate that consumption values shall also be published: Initially this is foreseen for hydro-pumped storage and energy storage only.

5386 13.4.3 ASSUMPTIONS

5387 No distinction between net and gross values is required.

5388 13.4.4 INTEGRATION

5389 No specific integration applies.

5390 13.4.5 MONITORING

5391 No specific monitoring applies.

5392 13.4.6 PROCESSING

5393 Data provided in monthly resolution will take precedence. Data in monthly resolution is
5394 expressed as an average MW value for the entire month. When provided, it will be converted
5395 into GWh by multiplying with the number of hours during the month and divided by 1000.

5396 If data in MTU resolution has to be used, it shall be converted into MWh for each MTU period.
5397 Values shall then be summed up for the entire month and finally be divided by 1000 to establish
5398 the GWh value.

5399 13.4.7 PUBLICATION

5400 13.4.7.1 FILTERING AND SORTING CRITERIA

5401 Data shall be visually accessed by selecting the following criteria:

- 5402 - Country (selection is mandatory)
- 5403 - Year (selection is mandatory)
- 5404 - Production type (selection is optional)
- 5405 - Month: One or several consecutive ones up to one year, selection is optional

5406 13.4.7.2 DISPLAY

5407 This data shall be displayed in the following section:

5408 - **Statistical Data Portal / Net generation and consumption of pumps**

5409 The following attributes of data shall be displayed:

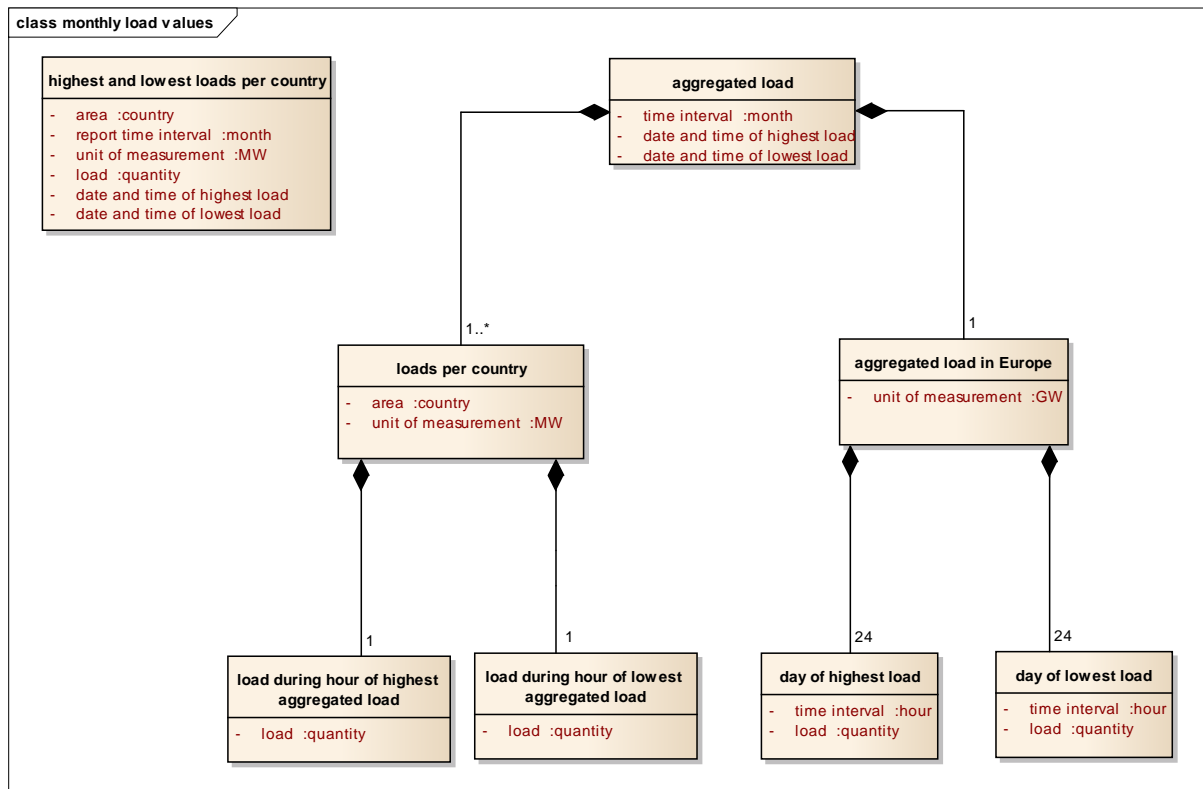
- 5410 - Country
- 5411 - Year

- 5412 - Measurement Unit
- 5413 - For each month and production type, the generation and, when applicable as per pre-
- 5414 configuration, the consumption values
- 5415 For each month, production type and generation or consumption value, the data quality
- 5416 (transparency regulation publication, statistical or mixed) is indicated.

13.5 MONTHLY LOAD VALUES

13.5.1 DATA DESCRIPTION

This publication can be described by the following class diagram:



Data submitted under TR art. 6.1.a Actual total load (see chapter 6.2.1) will be used as source.

For each country and month, the hours with the highest and lowest loads, respectively, will be published in MW.

For the aggregation of all countries, the dates with the highest and lowest loads, respectively, will be identified. For those two days, the aggregated load of all countries is published per hour in GW. For the same two days but for each country, the load during the hours of the aggregated highest and lowest loads, respectively, shall be published in MW.

Note: For this publication, no supplementary data submission in monthly resolution is applicable.

13.5.2 PRE-CONFIGURATION

No specific pre-configuration applies.

5433 13.5.3 ASSUMPTIONS

5434 There is no requirement to publish the highest or lowest load itself for all ENTSO-E countries³¹.

5435 13.5.4 INTEGRATION

5436 No specific integration applies.

5437 13.5.5 MONITORING

5438 No specific monitoring applies.

5439 13.5.6 PROCESSING

5440 Any values submitted in 15- or 30-minute resolution shall in a first step be converted to 60-
5441 minute resolution by time-averaging.

5442 For each country and month, the platform shall identify the hours with the highest and lowest
5443 loads, respectively.

5444 The aggregated load for all countries per hour is calculated by simple summation and division
5445 by 1000 (the latter to convert to GW). Using this aggregated time series, platform identifies the
5446 dates and hours with the highest and lowest loads, respectively.

5447 13.5.7 PUBLICATION

5448 13.5.7.1 FILTERING AND SORTING CRITERIA

5449 Data shall be visually accessed by selecting the following criteria:

5450 - Country (selection is optional)

5451 - Year (selection is mandatory)

5452 - Month: One or several consecutive ones up to one year, selection is optional

5453 13.5.7.2 DISPLAY

5454 This data shall be displayed in the following section:

5455 - **Statistical Data Portal / Monthly load values**

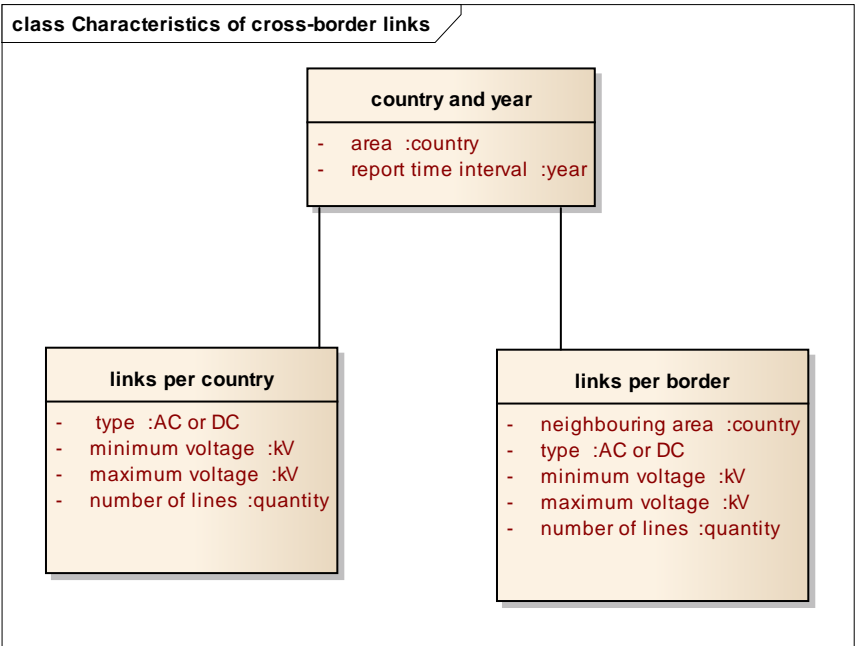
³¹ There is no such requirement for this statistical publication. However, those two values are published in the factsheet (see chapter 0).

- 5456 The following attributes of data shall be displayed:
- 5457 - Year
- 5458 - Measurement Units
- 5459 For each month:
- 5460 - The date and time of the highest aggregated load in all ENTSO-E countries and the
5461 aggregated load per hour on that day
- 5462 - The date and time of the lowest aggregated load in all ENTSO-E countries and the
5463 aggregated load per hour on that day
- 5464 If country has been selected:
- 5465 - Country
- 5466 - Highest load and the date and hour when it occurred
- 5467 - Lowest load and the date and hour when it occurred
- 5468 - The load during the hour when the highest aggregated load in all ENTSO-E countries
5469 occurred
- 5470 - The load during the hour when the lowest aggregated load in all ENTSO-E countries
5471 occurred
- 5472

13.6 CHARACTERISTICS OF CROSS-BORDER LINKS

13.6.1 DATA DESCRIPTION

This publication can be described by the following class diagram:



Master data on transmission assets submitted as per chapter 11.11 will be used as source. For each country, the following totals will be published:

- 1) total number of cross-border links per type (AC or DC) and voltage category
- 2) total number of cross-border links per neighbouring country, type (AC or DC) and voltage category.

13.6.2 PRE-CONFIGURATION

Platform administrator shall be able to configure voltage categories for AC and DC links. The minimum and maximum voltage are always expressed in kV and may be freely chosen as an integer number in the range from 0 to 999 kV. Either only minimum, only maximum or both limits may be specified. The categories may theoretically overlap, however in practice they are not expected to do so. The following set of categories are currently foreseen:

Minimum	Maximum
110	219
220	379

380	400
401	

5488

5489 To match a given category, the voltage level (x) must be situated $\min \leq x \leq \max$.

5490 These voltage categories will be used for AC as well as DC links.

5491 13.6.3 ASSUMPTIONS

5492 All links are assumed bi-directional, hence there is no necessity to distinguish direction across
5493 borders.

5494 There is no requirement to publish aggregations across all ENTSO-E countries – publication
5495 per country is deemed sufficient³².

5496 Only non-zero total values will be published. Hence, no data will be published for countries
5497 without cross-border links and countries that did not submit any matching master data (the
5498 latter theoretically possible but very unlikely in practice).

5499 No distinction between lines and cables will be made.

5500 13.6.4 INTEGRATION

5501 No specific requirements apply. Validations of underpinning master data is described in
5502 chapter 11.11

5503 13.6.5 MONITORING

5504 No specific requirements apply. No monitoring of master data submissions is foreseen.

5505 13.6.6 PROCESSING

5506 Only transmission assets of type AC link or DC link being in status commissioned on January
5507 1 of the year covered by the report shall be considered. Further, the AC or DC link must be
5508 associated with two or more control areas situated in different countries³³.

³² It should be noted though that the factsheet indeed contains such aggregation, see chapter 0.

³³ Hence, links between control areas situated in the same country (being the case of Germany) will not be included in the publication. In the uncommon case that a line is associated with three control areas situated in three different countries, it shall count twice; once per border. For such links, there shall be additional master data indicating the applicable borders.

5509 For each country, the platform shall determine the following aggregations:

5510 1) Total number of cross-border links per type (AC or DC) and voltage category

5511 2) Total number of cross-border links per neighbouring country, type (AC or DC) and
5512 voltage category.

5513 Only non-zero totals shall be published.

5514 13.6.7 PUBLICATION

5515 13.6.7.1 FILTERING AND SORTING CRITERIA

5516 Data shall be visually accessed by selecting the following criteria:

5517 - Country (selection is mandatory)

5518 - Year (selection is mandatory)

5519 13.6.7.2 DISPLAY

5520 This data shall be displayed in the following section:

5521 - **Statistical Data Portal / Characteristics of cross-border links**

5522 The following attributes of data shall be displayed:

5523 - Country

5524 - Year

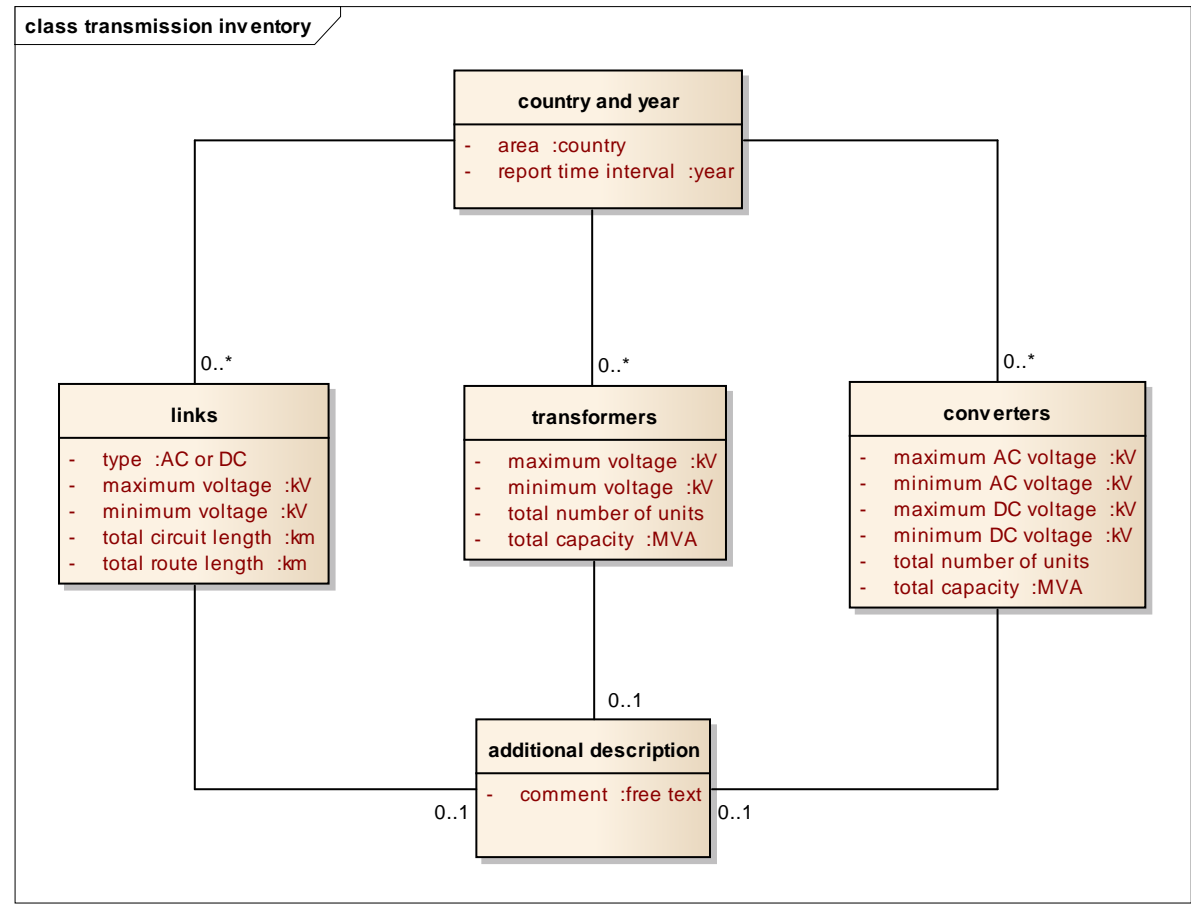
5525 - For each combination of voltage category and link type (AC or DC), the total number of cross-
5526 border links

5527 - For each neighbouring country and combination of voltage category and link type (AC or DC),
5528 the total number of cross-border links

13.7 TRANSMISSION INVENTORY

13.7.1 DATA DESCRIPTION

This item can be described by the following class diagram:



A dedicated data submission, as detailed by the Transmission implementation guide, will be used as source. For each country, the following aggregated values will be published:

1) for links, distinguishing type (AC or DC) and voltage category, the total circuit and route lengths

2) for transformers, distinguishing voltage category, the total number of units and total capacity

3) for converters, distinguishing AC and DC voltage categories, the total number of units and total capacity

Optionally a free text comment may be provided per reported category.

Note: The submitted data is assumed to reflect assets in use on January 1 of the year covered by the report.

5543 13.7.2 PRE-CONFIGURATION

5544 Platform administrator shall be able to configure a single data provider per control area and a
5545 yearly submission deadline that applies to all data providers.

5546 Platform administrator shall be able to configure voltage categories applicable to
5547 transformers and converters. The minimum and maximum voltage may be freely chosen as
5548 an integer number in the range from 0 to 999 kV. Either only minimum, only maximum or
5549 both limits may be specified. The categories may theoretically overlap.

5550 The following set of categories are currently foreseen for transformers:

Minimum value of secondary voltage level	Maximum value of primary voltage level	Example of assets (secondary to primary voltage levels)
110	219	In the network $110\text{kV} \leq x < 220\text{kV}$ (e.g. 110kV) to $110\text{kV} \leq x < 220\text{kV}$ (e.g. 150kV)
110	379	In the network $110\text{kV} \leq x < 220\text{kV}$ (e.g. 220kV) to $220\text{kV} \leq x < 380\text{kV}$ (e.g. 330kV)
220	379	In the network $220\text{kV} \leq x < 380\text{kV}$ (e.g. 220kV) to $220\text{kV} \leq x < 380\text{kV}$ (e.g. 330kV)
110	400	In the network $110\text{kV} \leq x < 220\text{kV}$ to $380\text{ kV} \leq x \leq 400\text{ kV}$
220	400	In the network $220\text{kV} \leq x < 380\text{kV}$ to $380\text{ kV} \leq x \leq 400\text{ kV}$
220		In the network $220\text{kV} \leq x < 380\text{kV}$ (e.g. 220/300/330kV) to $x > 400\text{ kV}$
380		In the network $380\text{ kV} \leq x \leq 400\text{ kV}$ to $x > 400\text{ kV}$
380	400	In the network $380\text{kV} \leq x \leq 400\text{ kV}$ to $380\text{kV} \leq x \leq 400$

5551

5552 *Examples:*

5553 *A transformer between a 150 kV grid and a 110 kV grid will be accounted for by the category*
5554 *“Minimum=110 and Maximum=219”.*

5555 *A transformer in the 400kV grid, which is needed to connect a power plant operated in 110kV*
5556 *grid, will be accounted for by the category “Minimum=110 and Maximum=400”.*

5557 *A phase shifting transformer within the 380/400kV grid, will be accounted for by the category*
5558 *“Minimum=380 and Maximum=400”.*

5559 The following set of categories are currently foreseen for converters:

AC side		DC side		Example of assets (secondary to primary voltage levels)
Minimum value of voltage level	Maximum value of voltage level	Minimum value of voltage level	Maximum value of voltage level	
401		401		AC: $x > 400\text{kV}$ to DC: $x > 400\text{kV}$
401		380	400	AC: $x > 400\text{kV}$ to DC: $380\text{ kV} \leq x \leq 400\text{ kV}$
401		220	379	AC: $x > 400\text{kV}$ to DC: $220\text{ kV} \leq x < 380\text{ kV}$
401		110	219	AC: $x > 400\text{kV}$ to DC: $110\text{kV} \leq x < 220\text{kV}$
380	400	401		AC: $380\text{ kV} \leq x \leq 400\text{ kV}$ to DC: $x > 400\text{kV}$
380	400	380	400	AC: $380\text{ kV} \leq x \leq 400\text{ kV}$ to DC: $380\text{ kV} \leq x \leq 400\text{ kV}$
380	400	220	379	AC: $380\text{ kV} \leq x \leq 400\text{ kV}$ to DC: $220\text{ kV} \leq x < 380\text{ kV}$
380	400	110	219	AC: $380\text{ kV} \leq x \leq 400\text{ kV}$ to DC: $110\text{kV} \leq x < 220\text{kV}$
220	379	401		AC: $220\text{ kV} \leq x < 380\text{ kV}$ to DC: $x > 400\text{kV}$
220	379	380	400	AC: $220\text{ kV} \leq x < 380\text{ kV}$ to DC: $380\text{ kV} \leq x \leq 400\text{ kV}$
220	379	220	379	AC: $220\text{ kV} \leq x < 380\text{ kV}$ to DC: $220\text{ kV} \leq x < 380\text{ kV}$
220	379	110	219	AC: $220\text{ kV} \leq x < 380\text{ kV}$ to DC: $110\text{kV} \leq x < 220\text{kV}$
110	219	401		AC: $110\text{kV} \leq x < 220\text{kV}$ to DC: $x > 400\text{kV}$
110	219	380	400	AC: $110\text{kV} \leq x < 220\text{kV}$ to DC: $380\text{ kV} \leq x \leq 400\text{ kV}$

110	219	220	379	AC: $110\text{kV} \leq x < 220\text{kV}$ to DC: $220\text{kV} \leq x < 380\text{kV}$
110	219	110	219	AC: $110\text{kV} \leq x < 220\text{kV}$ to DC: $110\text{kV} \leq x < 220\text{kV}$

5560

5561 For AC and DC links the same voltage categories as in Characteristics of cross-border links
5562 (see chapter 13.6.2) will apply.

5563 13.7.3 ASSUMPTIONS

5564 There is no requirement to publish aggregations across all ENTSO-E countries – publication
5565 per country is deemed sufficient³⁴.

5566 Only non-zero total values will be published.

5567 No distinction between cables and lines will be made.

5568 No distinction will be made of transformers connected to the grid versus to production units.

5569 Submissions per control area only will be supported. Data providers must aggregate the data
5570 for all their bidding zones before submitting. Transparency platform will aggregate to country
5571 level in case there is more than one control area within the country.

5572 Capacity values for transformers and converters will be published in MVA.

5573 13.7.4 INTEGRATION

5574 Platform shall reject data if the lower or upper voltage limit does not match the pre-configured
5575 values.

5576 Platform shall reject data if configurable sanity checks on length, total number of units or
5577 capacity fail.

5578 13.7.5 MONITORING

5579 Platform shall monitor that data provider has successfully delivered a document by the
5580 submission deadline and that this document has been successfully validated.

³⁴ In the factsheet though aggregations of the total length of links within ENTSO-E are indeed published, see chapter 0.

5581 There is no requirement on higher granularity of monitoring to distinguish whether AC links,
5582 DC links, transformers and/or converters shall be reported, neither of applicable voltage
5583 categories.

5584 13.7.6 PROCESSING

5585 Only non-zero totals shall be published.

5586 13.7.7 PUBLICATION

5587 13.7.7.1 FILTERING AND SORTING CRITERIA

5588 Data shall be visually accessed by selecting the following criteria:

5589 - Country (selection is mandatory)

5590 - Year (selection is mandatory)

5591 13.7.7.2 DISPLAY

5592 This data shall be displayed in the following section:

5593 - **Statistical Data Portal / Transmission inventory**

5594 The following attributes of data shall be displayed:

5595 - Country

5596 - Year

5597 - Units of measurements: km, kV and MVA, respectively

5598 - For each combination of voltage category and link type (AC or DC), the total circuit and route
5599 lengths

5600 - For each voltage category, the total number of units and total capacity of transformers

5601 - For each combination of AC and DC voltage categories, the total number of units and total
5602 capacity of converters

5603

5604 13.8 STATISTICAL FACTSHEET

5605 13.8.1 GENERAL REQUIREMENTS

5606 This subchapter conveys the general requirements applicable to the entire statistical factsheet.
5607 The subchapters 0 through 13.8.70 below outline the additional requirements specific to each
5608 section of the report.

5609 13.8.1.1 DATA COVERAGE

5610 The factsheet is intended to contain complete data for the preceding year, unless explicitly
5611 stated otherwise in the subchapters below.

5612 The list of countries included in the factsheet shall be configurable.

5613 The generation of the factsheet may not take longer than 2 hours.

5614 13.8.1.2 GENERATION, REVIEW AND RELEASE TO GENERAL PUBLIC

5615 Starting on January 1 each year (configurable, could be set to a later date to cater for overdue
5616 data and internal reviews by TSOs, say to April 1 for example), the factsheet describing the
5617 previous year shall be generated/refreshed at least once per day, preferably in an overnight
5618 process. Data providers shall be able to consult these daily generated factsheets.

5619 The release of the statistical factsheet toward the general public shall be triggered
5620 automatically at configurable dates either once per year or up to four times per year. Platform
5621 administrator shall be able to modify these dates up until the moment that the release is
5622 scheduled. For each release, it shall be mandatory for the platform administrator to specify the
5623 cut-off date, a sub-header³⁵ and a publication date. The factsheet automatically generated on
5624 the cut-off day will be used as baseline for the release. As a last resort, platform administrator
5625 shall be able to replace this automatically generated factsheet by a manually edited version³⁶.
5626 There shall be visibility toward TSO users and administrators, but not toward general public,
5627 that a version was manually uploaded.

5628 It is foreseen that the release of the factsheet to the general public may not occur earlier than
5629 on April 1, given the provisions of chapter 13: At the end of the year, data providers are granted
5630 3 months to submit and validate data describing the last month of the year³⁷.

³⁵ Such as "Provisional values as of April 2024", for example.

³⁶ This may become necessary if a decision is taken to reutilise data from previous years, for example.

³⁷ Although any data contained within the report may be updated as well.

5631 13.8.1.3 UPDATES

5632 It should be noted that the data published in the factsheet is entirely based on the values
5633 submitted to the transparency platform, as outlined in chapters 13.2 through 13.7 and in
5634 chapter 9.2. Any correction to the data content of the factsheet will require a resubmission of
5635 the underlying data. Revised data will be reflected in the factsheet after the refresh described
5636 in previous subchapter.

5637 13.8.1.4 RENDERING AND EXPLANATORY NOTES

5638 The order in which each section appears in the factsheet shall be configurable.

5639 The literal abbreviation used to represent each country shall be configurable.

5640 Tables containing data per country shall list the countries in ascending order based on their
5641 literal abbreviation.

5642 Generic and country-specific explanatory notes (see chapter 13.1.7) shall be supported by the
5643 factsheet. For country-specific notes the country shall be indicated. A superscript number (or
5644 some other graphical representation to be agreed in solution specification) shall be visible at
5645 the row/column dedicated to the given country. For tables containing grand totals for ENTSO-
5646 E and EU, it shall be possible to include explanatory notes for those aggregations as well.

5647 Each section of the factsheet may have its own additional explanatory note as configured by
5648 platform administrator.

5649 Further, there shall be a general explanatory notes section for the entire factsheet. Such
5650 section may for example contain a modification history, providing details about corrections from
5651 previous version, new data content, etc.

5652 Incomplete data shall be explicitly indicated using “not available”, white space or some other
5653 literal – exact details to be agreed upon drafting of the solution specification.

5654 There shall be effective dated, configurable templates for the PDF that will contain static text
5655 and images. The copyright year shall automatically be populated with the year of publication.

5656 13.8.1.5 PUBLICATION

5657 On the publication date of each release, the factsheet shall become available in the following
5658 section of the platform:

5659 - Statistical Data Portal / Factsheet

5660 End users shall be able to select a year, publication date (if more than one publication occurred
5661 for the given year) and download the factsheet. The factsheet shall be downloadable in PDF
5662 format only.

5663 Data consumers may subscribe to the factsheet.

5664

5665

5666 13.8.2 CROSS-BORDER EXCHANGES

5667 This section consists of three different parts and is based upon the data collected under
5668 chapter 13.2:

5669 a) a map exposing the gross flows in GWh in each direction across every border with
5670 title "Physical energy flows" – referred to as "sheet 8, figure 1" of the factsheet

5671 b) a table with the exchange balance of each ENTSO-E member country in GWh with
5672 title "Exchange Balance" – referred to as "sheet 8, figure 2" of the factsheet

5673 c) a table and a graph exposing the evolution of the aggregated energy exchange (with
5674 title "Development of exchanges") over the three last years, expressed in GWh and
5675 TWh respectively – referred to as "sheet 7, figure 2" and "sheet 7, figure 1" of the
5676 factsheet.

5677 13.8.2.1 CONFIGURATION

5678 For each country it shall be configurable whether it is member of ENTSO-E or not. It will be
5679 used for the purpose of determining the aggregated external exchange.

5680 The following countries shall be considered as non-ENTSO-E members: Andorra, Armenia,
5681 Azerbaijan, Belarus, Georgia, Iraq, Iran, Morocco, Russia, Syria and UK.

5682 13.8.2.2 CALCULATIONS

5683 b) Exchange Balance:

5684 The values per country for total import, export and balance as determined in chapter
5685 13.2.6 shall be used to populate the table. Additionally, aggregated values for all of ENTSO-E
5686 shall be calculated.

5687 c) Development of exchanges:

5688 The platform shall establish total exchange values within ENTSO-E and toward
5689 neighbouring countries, respectively. For each border, values in both directions are summed
5690 up. The grand totals for ENTSO-E internal and external exchanges are summed up to single
5691 values.

5692 The grand totals for ENTSO-E internal and external exchanges shall be converted to
5693 TWh by dividing by 1000 and rounding to integer value. For years preceding the year covered
5694 by the report, the most recently published data in preceding factsheets shall be used.

5695 13.8.2.3 DISPLAY

5696 a) Physical energy flows: Values shall be provided for each direction across the
5697 borders. The thickness of the arrow in each direction shall be proportional to the size of the
5698 exchange.

5699 The map shall distinguish different synchronous areas and between ENTSO-E
5700 members (including observers) and non-members.

5701 There is a general requirement that it shall be possible to display separately a sub-set
5702 of the map by zooming in on a select part of the geography. The specific requirement is that
5703 there shall be two separate maps for the borders in the Balkans and between TR, GE, AM, AZ,
5704 respectively.

5705 b) Exchange Balance:

5706 There shall be a table with separate columns for Imports, Exports and Balance per
5707 country. The aggregated totals for all of ENTSO-E shall be provided on an additional row at
5708 the bottom.

5709 c) Development of exchanges:

5710 There shall be a table with separate rows for each year and columns for year, sum of
5711 ENTSO-E and external exchanges, ENTSO-E exchanges only and external exchanges only.

5712 There shall be a graph with separate stacked bar charts per year. Values are provided
5713 separately for ENTSO-E exchanges only and external exchanges only.

5714

5715 13.8.3 AGGREGATED GENERATION AND CONSUMPTION

5716 This section consists of five different items and is based upon data collected under chapters
5717 13.3 and 13.4:

5718 a. A table exposing generation and consumption per production type and country –
5719 referred to as “sheet 2” of the factsheet.

5720 b. A table and a percentage pie chart exposing generation aggregated into customisable
5721 categories – referred to as “sheet 4, figure 1” of the factsheet.

5722 c. A table and a bar chart exposing renewable generation aggregated into customisable
5723 categories – referred to as “sheet 4, figure 2” of the factsheet. The evolution of the
5724 values during the past three years is published.

5725 d. A table and a bar chart exposing non-renewable generation aggregated into categories
5726 – referred to as “sheet 4, figure 3” of the factsheet. The evolution of the values during
5727 the past three years is published.

5728 e. A horizontal, stacked bar chart exposing per country the percentages of generation
5729 aggregated into categories – referred to as “sheet 4, figure 4” of the factsheet.

5730 13.8.3.1 CONFIGURATION

5731 For all five items:

5732 For each production type, it shall be configurable whether it is considered renewable or non-
5733 renewable. For non-renewable production type, it shall be configured whether it is considered
5734 fossil fuel or not.

5735 For each country, it shall be configurable (with effective dating) whether it is member of the EU
5736 or not.

5737 The configuration described in chapter 13.8.2.1 is also used here.

5738 For each category of production type as well for production types not being aggregated, the
5739 color in the table and/or graph shall be configurable. Per item, the same category or production
5740 type might have a different color or order.

5741 For item b):

5742 The production types that shall be aggregated into the category “other” shall be configurable;
5743 the production types hydro-pumped storage and other non-renewable are currently foreseen
5744 to be used.

5745 Assumption: The literal “other” rather than “net generation not identified” shall be used, for the
5746 purpose of making figures 1 and 4 coherent.

- 5747 For item c):
- 5748 Some production types considered as renewable shall be grouped into the following categories
5749 as per configuration:
- 5750 - Hydro: Hydro run of river and pondage, hydro water reservoir, marine
 - 5751 - Wind: Wind offshore, wind onshore
 - 5752 - Other renewable: Geothermal, other renewable
- 5753 For item d):
- 5754 Some production types considered as non-renewable shall be grouped into the following sub-
5755 categories as per configuration:
- 5756 - Gas: Fossil coal-derived gas, fossil gas
 - 5757 - Oil: Fossil oil, fossil oil shale
- 5758 For item e):
- 5759 The configuration of renewable and fossil fuels for item a) shall apply also to this item.
- 5760 The configuration of "other" for item b) shall apply also to this item.
- 5761 **13.8.3.2 CALCULATIONS**
- 5762 For item a):
- 5763 For each production type and country, the monthly generation values shall be summed up to
5764 a single value for the entire year, converted to TWh by dividing by 1000 and rounded to one
5765 decimal. The same calculation shall be performed for the consumption of the production type
5766 "hydro pumped storage".
- 5767 Aggregated totals of renewable, non-renewable and fossil fuel generation shall be calculated
5768 per country.
- 5769 Aggregated grand total of generation per country shall be calculated.
- 5770 For each country, the monthly values of national consumption shall be summed up to a single
5771 value for the entire year, converted to TWh by dividing by 1000 and rounded to one decimal.
- 5772 Grand totals for ENTSO-E and the EU shall be calculated, respectively. For generation, those
5773 grand totals shall also be calculated as percentages, with one decimal precision. No
5774 percentages shall be calculated for consumption.
- 5775 For items c) and d):

5776 Aggregated grand total of generation per country shall be calculated for the configured sub-
5777 categories (see chapter 13.8.3.1).

5778 Values shall be converted to TWh by dividing by 1000 and rounded to one decimal. Percentage
5779 values shall also be calculated and rounded to integer.

5780 13.8.3.3 DISPLAY

5781 For item a):

5782 In the table, the countries are listed twice; in both the left-most and right-most columns.

5783 The grand totals and percentages for ENTSO-E and EU are provided in rows at the bottom of
5784 the table.

5785 The explanatory notes per country shall appear consolidated together with the explanatory
5786 notes for Net Generation Capacity (see following chapter 13.8.4.3). The enumeration shall be
5787 unique across both tables.

5788 For item b):

5789 The aggregated totals for all ENTSO-E countries of the following categories shall be exposed
5790 in a table with TWh values and in a percentage pie chart, both with one decimal precision:
5791 Fossil fuel, renewable, nuclear, hydro pumped storage and “other”.

5792 For items c) and d):

5793 The aggregated totals for all ENTSO-E countries of the following renewable sub-categories
5794 and production types shall be exposed in a table with TWh and percentage values. The TWh
5795 values shall also be presented in a bar chart: Hydro, wind, other renewable, biomass and solar.
5796 The table shall have a configurable header text “ENTSO-E renewable generation”.

5797 The aggregated totals for all ENTSO-E countries of the following non-renewable sub-
5798 categories and production types shall be exposed in a table with TWh and percentage values.
5799 The TWh values shall also be presented in a bar chart: Gas, oil, fossil hard coal, fossil brown
5800 coal/lignite and fossil peat. The table shall have a configurable header text “ENTSO-E fossil
5801 fuels generation”.

5802 Values are provided for the past three years. For years preceding the year covered by the
5803 report, the most recently published data in preceding factsheets shall be used. Values for the
5804 year covered by the factsheet is presented in bold.

5805 For item e):

5806 The aggregated totals for all ENTSO-E countries of the following categories and production
5807 types shall be exposed in a horizontal stacked bar chart with percentage values: Renewable,
5808 fossil fuel, “other”, hydro pumped storage and nuclear.

5809

5810 13.8.4 NET GENERATION CAPACITY

5811 This section consists of a table based upon data collected under TR art. 14.1.a aggregated
5812 installed generation capacity (see chapter 9.2). The data effective for January 1 of the given
5813 factsheet year shall be used when generating the factsheet. *For example: On 1 January 2026*
5814 *the generation of the factsheet for 2025 is automatically triggered. The data normally submitted*
5815 *one week before end of 2024 and published under TR art. 14.1.a as effective as of 1 January*
5816 *2025 will be used.*

5817 This is referred to as “sheet 3” of the factsheet.

5818 13.8.4.1 CONFIGURATION

5819 The configuration per production type and country foreseen for Net Generation and
5820 Consumption, item a), as per previous chapter 13.8.3.1 shall apply also to this section.

5821 13.8.4.2 CALCULATIONS

5822 Aggregated totals of renewable, non-renewable and fossil fuel installed capacity shall be
5823 calculated per country.

5824 Aggregated grand total of installed capacity per country shall be calculated.

5825 Grand totals for ENTSO-E and the EU shall be calculated, respectively. Those grand totals
5826 shall also be calculated as percentages, with one decimal precision.

5827 13.8.4.3 DISPLAY

5828 In the table, the countries are listed twice; in both the left-most and right-most columns.

5829 For each production type and country, the installed capacity values shall be published with
5830 integer precision.

5831 The grand totals and percentages for ENTSO-E and EU are provided in rows at the bottom of
5832 the table.

5833 The explanatory notes per country shall appear consolidated together with the explanatory
5834 notes for Aggregated Generation and Consumption (see preceding chapter 13.8.3.3). The
5835 enumeration shall be unique across both tables.

5836

5837

5838 13.8.5 LOAD PEAKS AND VALLEYS

5839 This section consists of three different items and is based upon data collected under chapter
5840 13.5:

5841 a. A graph exposing the aggregated load of all ENTSO-E countries per hour on the days
5842 of the highest and lowest load, respectively – referred to as “sheet 5, figure 1” of the
5843 factsheet

5844 b. A table exposing the load in each country during the hour with the highest aggregated
5845 load and during the hour with the lowest aggregated load, as identified in item a) above
5846 – referred to as “sheet 5, figure 2” of the factsheet

5847 c. A table exposing per country the date and hour with the highest and lowest load,
5848 respectively, along with the load values during those two hours – referred to as “sheet
5849 6, figure 1” of the factsheet.

5850 13.8.5.1 CONFIGURATION

5851 No specific pre-configuration applies.

5852 13.8.5.2 CALCULATIONS

5853 The values already calculated as per chapter 13.5 shall be used. The only additional
5854 calculations are the following ones for items a) and c):

5855 Item a): For the year covered by the factsheet, platform shall identify the day during which the
5856 aggregated load of all ENTSO-E countries was the highest and lowest, respectively.

5857 Item c): For the year covered by the factsheet, for each country the platform shall identify the
5858 day and hour with the highest and lowest load, respectively.

5859 13.8.5.3 DISPLAY

5860 All times are displayed in UTC only.

5861 For item a):

5862 A graph with the load curves in hourly resolution for the days with highest and lowest load.
5863 Values are expressed in GW. Below the graph, the dates and hours of the highest and lowest
5864 load, respectively, shall be indicated.

5865 For item b):

5866 A table with column headers indicating the dates and hours with the highest and lowest load,
5867 respectively, of all ENTSO-E countries. For each country, there is a row in the table with the

5868 literal of the country and the load during the hour with the highest aggregated load and the
5869 load during the hour with the lowest aggregated load.

5870 Note: The table may be split in three columns to preserve space on the page.

5871 At the bottom of the table, the aggregated load of all ENTSO-E countries on those days and
5872 hours are displayed.

5873 For item c):

5874 A table providing separate columns for the highest and lowest load, respectively, with sub-
5875 headers indicating date, time and load value. For each country there is a row in the table with
5876 the country literal and the dates, times and load values.

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5879 13.8.6 GRID INFORMATION

5880 This section consists of three different items:

5881 a) A map exposing the different categories and numbers of links per border, referred to
5882 as “sheet 9, figure 1” of the factsheet. This is based upon data collected as per chapter
5883 13.6 Characteristics of cross-border links.

5884 b) A table exposing the total circuit length per category of links within the entire ENTSO-
5885 E area, referred to as “sheet 9, figure 3” of the factsheet. This is based upon data
5886 collected as per chapter 13.7 Transmission inventory.

5887 c) A table exposing the total number of cross-border links per category for the entire
5888 ENTSO-E area, referred to as “sheet 9, figure 2” of the factsheet. This is based upon
5889 data collected as per chapter 13.6 Characteristics of cross-border links.

5890 Assumptions:

5891 - Also links crossing the external borders of the ENTSO-E area shall be included in item
5892 c).

5893 - For item a), the area currently appearing as “British area” will appear as “Other areas”.
5894 The special colour codes indicating “Former member” and “Observer member” and
5895 “Other synchronous with Continental Europe” will be deprecated.

5896 13.8.6.1 CONFIGURATION

5897 For item a): Each country shall be configured as belonging to one of the following regions:
5898 Continental Europe, Nordic, Baltic, Ireland and Northern Ireland, Other. Alternatively, it may
5899 be configured as an isolated area.

5900 Solution must be able to handle the special cases of Denmark (which is part of both continental
5901 Europe and Nordic areas) and Northern Ireland (which is part of the Ireland and Northern
5902 Ireland area while at the same time part of United Kingdom).

5903 13.8.6.2 CALCULATIONS

5904 For item a): For each border between countries, the number of DC links shall be calculated,
5905 without distinction of voltage categories. The number of AC links shall be calculated per voltage
5906 category listed in chapter 13.6.2. It is foreseen that the data calculated as per chapter 13.6.6,
5907 item 2), shall be used for these purposes.

5908 For item b): For the entire ENTSO-E area, the total circuit lengths shall be calculated per type
5909 (AC or DC) and voltage category. Voltage categories are listed in chapter 13.6.2. It is foreseen
5910 that the data calculated as per chapter 13.7 shall be used for these purposes. Grand totals per
5911 type (AC or DC) shall be established.

5912 For item c): For the entire ENTSO-E area, the total number of cross-border links shall be
5913 calculated per type (AC or DC) and voltage category. Voltage categories are listed in chapter
5914 13.6.2. It is foreseen that the data calculated as per chapter 13.6.6, item 1), shall be used for
5915 these purposes. Grand totals per type (AC or DC) shall be established.

5916 13.8.6.3 DISPLAY

5917 For item a): A map supplemented by colour legend for AC voltage categories and colour/border
5918 legend for regions. The country of Iceland shall appear in a dedicated part of the map.

5919 For items b) and c): A table with separate columns AC links and DC links and separate rows
5920 for voltage categories. Grand total per AC and DC links at the bottom of the table.

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5923 13.8.7 MEMBERS OF ENTSO-E

5924 This section consists of a table, listing the members of ENTSO-E. A distinction is made
5925 between members and observer members.

5926 13.8.7.1 CONFIGURATION

5927 The pre-configuration described in 13.8.2.1 shall apply, with additional distinction between
5928 members and observer members.

5929 13.8.7.2 DISPLAY

5930 A table exposing the members of ENTSO-E, followed by the observer members. The tables
5931 shall have separate rows per country. The columns shall contain the following: Country
5932 abbreviation, country, list of TSOs with their short names, list of TSOs with their full names.

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