



THE ENTSO-E SCHEDULING SYSTEM (ESS) IMPLEMENTATION GUIDE

2012-11-21

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REVISION HISTORY

Version	Release	Date	Paragraphs	Comments
0	3	2001-08-04		Pilot test version.
1	0	2002-03-27		Initial release of document.
1	1	2002-05-14		General revision with clarifying text after Steering Committee comments.
2	0	2002-11-10	3.1, 3.2, 7.1, 7.2, 7.3, 7.4, 7.4.2 (new), 8.2.1	Added new text, modified flow diagram and added a message type to cater for intermediate confirmations.
			3.3	Revised ground rules 9 and 10 to cater for the addition of a resolution attribute. Added ground rule 11 to ensure the coherence of the time interval period. Other ground rules shifted down by 1.
			4.1, 5.1, 6.1, 7.1	Revised information model to incorporate size optimization and improvement changes and to make the sender identification key.
			4.2, 5.2, 6.2, 7.2	Incorporated model changes into DTD. Modified the constant attribute "value" to "v" for optimization. Separated DTD from data instance and created new sub-paragraph for the data instance.
			4.3.1, 4.3.3	Corrected business type names.
			4.3.4	Adjusted message acceptance and rejection criteria.
			4.3.5, 4.5	Added the case for treating an empty message.
			4.7, 4.8, 6.6, 6.7, 7.6 to 7.8	New paragraphs to explain the new model classes.
			5.3	Clarified text.
			5.5, 5.5.1, 6.4, 6.4.1, 7.4, 7.4.1	Clarified reason codes.
			5.6, 5.7	Introduced the case of imbalance global position.
			7.3	Introduced the notion of an imposed time series. Also realigned the confirmed series to indicate the complete time series information. Replaced the confirmed message identification information in the message header.

Version	Release	Date	Paragraphs	Comments
			8.2.4	Deleted non-preferred coding scheme codes. Introduced country coding scheme and the possibility to create bi-laterally agreed coding schemes.
			8.2.5	Corrected definitions.
			8.2.7	Clarified reason codes and added new codes.
			9	Updated the core components.
			10	Deleted paragraph 10 concerning the use if a DTD which made use exclusively of the UID. This is no longer relevant.
			11	Introduced relative addresses. Added file naming convention.
			12	Deleted the content of the Role model as it appears in a standalone document. Introduced uniquely the situation of the ESS within the role model.
			General	Removed all DTDs to separate section. Minor editorial corrections.
2	1	2002-12-22	4, 5, 6, 7	Corrected chapter titles.
			8	Correction of word “CodingScheme” to “codingScheme”. Change of “\” to “/”.
2	2	2003-02-12	3.2	Correct figure 7 to ensure that the transmission process can start.
			4.3.6	Clarify the significance of “sender” in the message header.
			6.1	Corrected model to show that “message sender identification” contained a coding scheme.
			7.1, 7.2	Removed constraint on imposed times series and time series confirmation.
			8.1, 8.3, 8.5, 8.7	Changed release number.
			8.2, 8.6, 8.8	Correct errors in examples (period of 1 hour).
			9	Delete section 9 (code lists) and reproduce it as a separate document.
			10.1 (now 9.1)	Corrected spelling errors
			11.3 (now 10.3)	Corrected directory references.
2	3	2003-04-29	6.3.1	Corrected erroneous mention of the reason code at the header level.
			8.1	Modified DTD to remove the code list from the process type. This will provide more flexibility to the message and version 2 Release 2 remains 100% upwards compatible.

Version	Release	Date	Paragraphs	Comments
3	0	2006-07-04	8.1 to 8.8	Changed Release number.
			8.6	Removed Reason code in header level from example.
			8.5, 8.7	Corrected “SubValue” to read “subValue.
			General	<p>Replaced the use of the word “message” by “document” or “electronic document” where applicable. (<i>Note: the names in the schemas have not been changed for “upwards compatibility” purposes</i>).</p> <p>Introduced a definition of Party and provided examples of Balance Responsible Party (Section 3.3).</p> <p>Revised the text concerning the “global position” (Section 3.4).</p> <p>Added some examples (Section 4.2.6).</p> <p>Some clarification has been added to the ETSO intra day specification (Section 4.2.2.2).</p> <p>Revised the Acknowledgement document to make use of version 4.0 to ensure compatibility throughout the ETSO processes and removed the section from the ESS document to make reference to the Acknowledgement document describing version 4.0 (Section 5).</p> <p>Revised document to put the accent on the use of Schemas (generated automatically from the UML diagram). (Section 8).</p> <p>Modified the transmission rules to allow document instances without reference to a DTD or Schema (Section 9).</p> <p>Removed ETSO core components paragraph from document since it can be found in a separate document.</p>
3	0	2006-07-04	8	Added 4 new attributes to the Schedule document header (<i>Domain, Subject Party, Subject Role, Matching Period</i>) to cater for the identification of the subject of the document and its scope within a schedule time series.
			10.3	<p>Added header information to cater for the transmission of schedules with historical information (Matching Period).</p> <p>Restructure section to Add information relative to schemas.</p> <p>Restructured to introduce modified transmission rules.</p>

Version	Release	Date	Paragraphs	Comments
				The General sequence diagram has been modified to identify the interaction between the ECAN process the ESS process, the ESP process and the UCTE process. The identified processes in question will no longer be covered in the ESS process itself.
3	1	2006-10-13	5.2.2.2	Introduced modifications of the Intraday group after agreement.
3	2	2009-03-27	General 2.1 2.2 3.1 3.2 3.3 3.4 3.5 3.6 3.7 5.2.1 5.2.2.1 5.2.2.2 5.2.4 5.2.6	<p>Changed TF 14 to TF EDI throughout Modified last sentence to make it more general and exclusively Day ahead.</p> <p>Deleted sentence concerning imbalance.</p> <p>Clarified cutoff of related processes.</p> <p>Deleted to definition of Acknowledgement document.</p> <p>Added sentence to clarify Subject party use.</p> <p>Clarified rule 1, 8, 13, added new rule (6).</p> <p>Revised complete section.</p> <p>Added new 3.6.</p> <p>Added new 3.7.</p> <p>Changed dependency table to ensure that A05 was deprecated and that the party identification was only mandatory if the Object Aggregation = A03.</p> <p>Revised first paragraph to clarify the meaning of document identification.</p> <p>Revised the Intraday description to clarify the use of the different Process Types.</p> <p>Revised table to reject document in all cases where a time series is incorrect.</p> <p>Moved examples to section 11.</p>
3	2	2009-03-27	5.3.1 5.3.12 5.3.13 5.3.14 5.4 8.2 8.2.9 8.3.1 9.1.3, 9.2.3, 9.3.3 10.3	<p>Removed global position indications and clarified identification.</p> <p>Revised dependency rule.</p> <p>Removed Global position indications and revised dependency rule.</p> <p>Revised dependency rule.</p> <p>Removed “global”.</p> <p>Removed “global position reference.</p> <p>Removed global position references.</p> <p>Removed global position references.</p> <p>Eliminated DTD.</p> <p>Changed to eliminate DTD use and to use only relative addresses.</p>
3	3	2009-04-23	5.1, 5.5, 5.5.1	Change to add the Reason Class to the Interval level and to add additional codes for curtailment.

Version	Release	Date	Paragraphs	Comments
4	0	2012-06-11	Sections 5, 7, 8 and 9	<p>Addition of the CurveType attribute in the Schedule Message, Anomaly Report and Confirmation Report.</p> <p>Change the term “Message” to “Document”.</p> <p>Change the Domain multiplicity to mandatory.</p> <p>Change the Period class multiplicity from “1” to “1..*”.</p> <p>Change the TimeSeriesConfirmation/Period multiplicity from “0” to “0..*”.</p> <p>Add the namespace function to the XSD schemas.</p> <p>Permit the extension and Restriction of codelists in the XSD.</p> <p>Remove the example of XML instances and delete the related chapters.</p> <p>Approved by the ENTSO-E Market Committee on 2012-06-28</p>
4	1	2012-11-21	8.1; 8.2.9; 9.3.1; 9.3.2	<p>To correct the model definition</p> <p>To add more dependency text</p> <p>Following correction of the model definition</p> <p>Following correction of the model definition</p> <p>Approved by the ENTSO-E Market Committee on 2012-12-11.</p>

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REFERENCE DOCUMENTS.

1. The Harmonised ENTSO-E Role Model.
2. A Common Identification System for the Energy Industry, The Energy Identification Coding Scheme – EIC.
3. The ENTSO-E Code List.
4. The ENTSO-E Acknowledgement Document.
5. The ENTSO-E Core Component document.
6. The ENTSO-E Modelling Methodology.
7. The ENTSO-E XML Syntax Implementation for the Automation of Data Interchange.
8. The ENTSO-E Settlement Process Document.
9. The ENTSO-E Capacity Allocation and Nomination Document.
10. The RGCE System Operator to System Operator Document.
11. The ENTSO-E XML Namespace Reference Document.

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NOTE CONCERNING WORDING USED IN THIS DOCUMENT

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

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

Note: The word “schedule” and the word “plan” may be used interchangeably in this document (Oxford: Schedule – a programme or plan of events).

1 OBJECTIVE

The principal objective of this implementation guide is the standardisation of the scheduling process information exchanges between Market Participants on the European Internal Electricity Market. It has a secondary objective to make it possible for software vendors to develop an IT application that can exchange electricity market schedules, such as day ahead or intraday schedules, between all related parties in all countries.

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

The initial conception of the guide has been based on the day ahead energy scheduling process in order to obtain a more generic specification of schedule process management.

This process is very closely related to other processes such as imbalance settlement, other scheduling processes, cross border tariffs, capacity allocation, etc. The procedures, electronic documents and methods described in the implementation guide may be partially or fully applicable to these processes.

This guideline can be used as a model for using XML (eXtended Markup Language) technology in all related processes.

The main concern of the TSOs is on the secure and reliable operation while facilitating electricity market procedures. The methods, components and procedures described in this guide can be the basis of including some operational requirements of RGCE and other constituents of ENTSO-E.

It is the intention of the ENTSO-E WG EDI to make this implementation guide as the platform to be used for as many as related processes as possible. The ENTSO-E WG EDI objective is that the different market participants and associations use this platform in a co-ordinated manner.

The guide is targeted basically towards business-to-business application interfaces using the full power of the acknowledgment process. However, it may be equally put into place in a more user-orientated fashion through a web-based service where the key elements of the acknowledgement process are implicit in the service itself.

2 THIRD PARTY ACCESS ENERGY MARKET – GENERAL OVERVIEW

The electricity market in Europe is now opening. Some countries have opened the market completely and others have started the process. A central part of any national legal requirements in the electricity market is that each market participant in the market shall be in balance. This means that the amount of electricity produced and consumed through bilateral agreements are balanced. The procedure to calculate this balance and the invoicing of any differences is called “balance settlement”.

The full balance management process can be broken down into three phases:

1. A planning phase, where balance responsible parties (e.g. trade responsible, production responsible, consumption responsible parties, etc.) calculate in advance the consumption of all involved parties for the day ahead. During or after this phase the system operator informs each balance responsible party of what has been accepted of their schedules and informs the entity responsible for imbalance settlement, called the “imbalance settlement responsible” of all the schedules in question.
2. An operation phase, where the schedule that has been determined during the planning phase is executed. The system operator, to ensure system balance at any moment, handles any deviations between production, consumption and unforeseen congestion.
3. A settlement phase, where following the date of operation, the metered data aggregator sends the data to the imbalance settlement responsible. The imbalance settlement responsible, along with complementary data received from other sources, then carries out the imbalance settlement itself.

The electronic documents defined in this document cover the first phase of the balance management process, the planning phase which is basically performed during day-ahead and intraday scheduling.

It provides a standard enabling a uniform layout for the transmission of scheduling data between the European electricity system operators, producers, suppliers and traders and all imbalance settlement responsible organizations. This shall ensure a common interface between different software solutions.

2.1 DEFINITION

The electronic documents defined in this document enable balance responsible parties (e.g. trade responsible, production responsible, consumption responsible parties) to send their schedules (consumption, production, interconnection, etc.) to the system operators for different scheduling processes such as long term, day ahead, intraday, etc.

2.2 OPERATIONAL SCENARIO

2.2.1 THE OVERALL CONTEXT

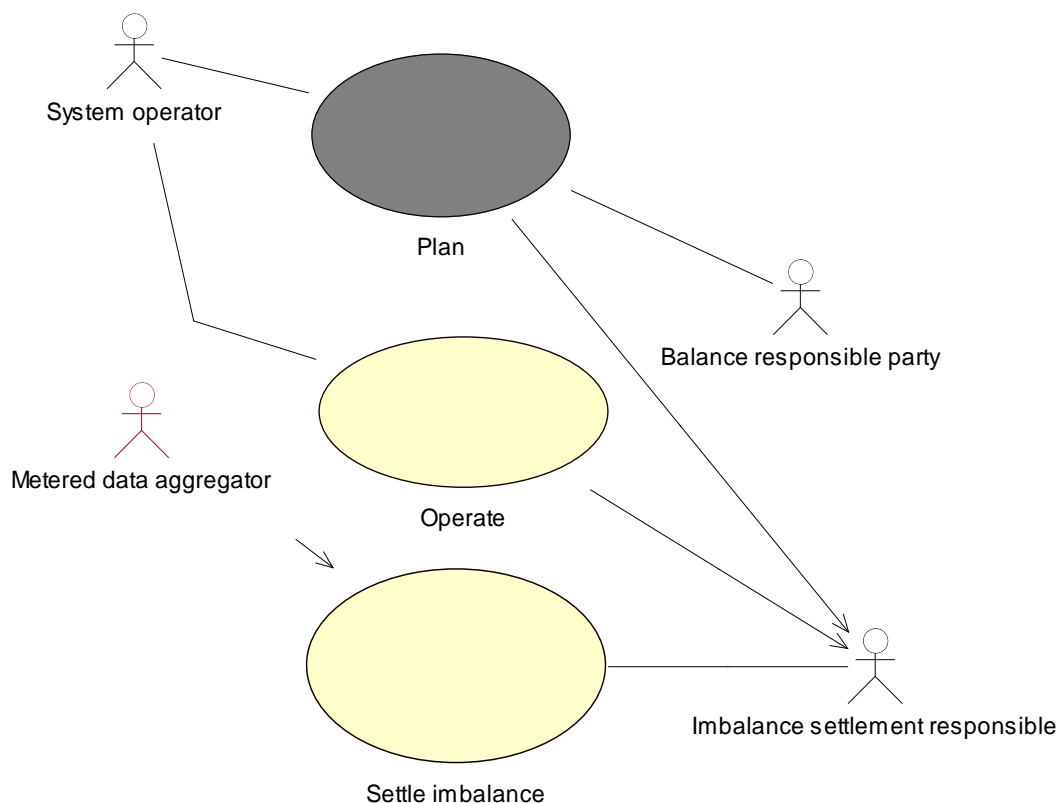


Figure 1: The balance management process perspective

Within this perspective there are three principal activities which can be identified. These, as shown in Figure 1 are:

1. **The planning activity that is the subject matter of this implementation guide and will be further detailed below.** The principal deliverable of this phase is a set of time series schedules that have gone through their validation process (conformity, matching, plausibility and acceptance).
2. The operational activity that ensures that the different schedules are correctly implemented. This means that the planned production is available to provide the planned consumption. It also has to ensure that any deviations from the various schedules (production, bilateral trades, consumption, etc.) are catered for.
3. The imbalance settlement activity that takes place once everything has been completed. It may be spread over a defined lapse of time. It is composed of three basic activities. The first activity receives all the schedules that have been agreed as well as market or agreed prices. The second activity recuperates the measured values and the measured deviations (ancillary services - regulation data) during operational phase of the delivered products. The final activity reconciles these values and identifies the imbalances.

In addition there is a pricing activity that is normally completely independent of the technical and the online processes. It is there to provide the rules to enable the involved parties to manage their financial risks. At the end of the day the same activity is used to determine the price of all deviations from the schedule. This activity has not been identified in Figure 1 since it is essentially an independent activity.

2.2.2 BREAKDOWN OF THE PLANNING PHASE

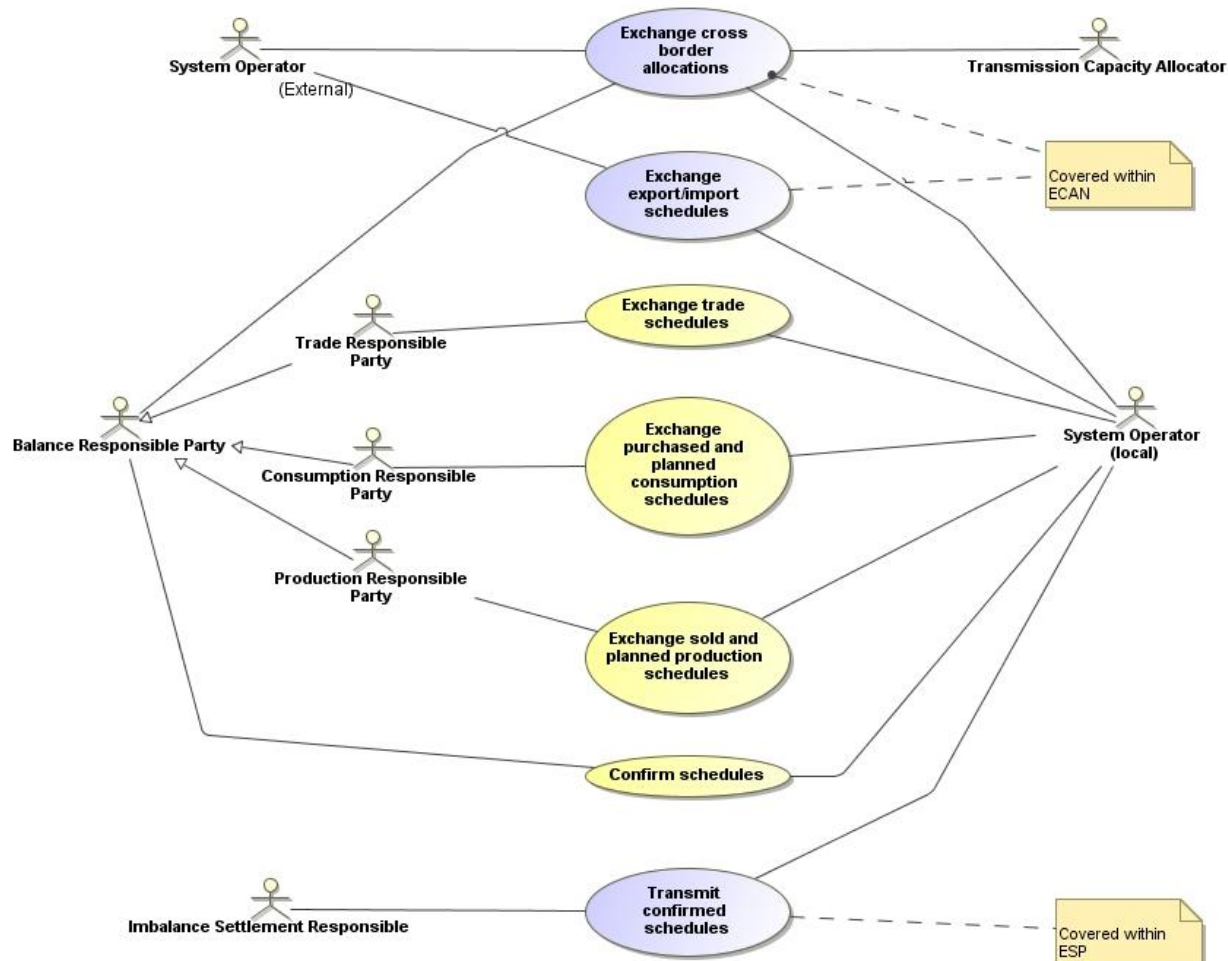


Figure 2: Information exchange during the planning phase

The planning phase, outlined in Figure 2, concerns principally the schedules supplied by the different balance responsible and system operator roles for a given balance area or a group of balance areas. It also deals with the exchange schedules between two balance areas via system operators and transmission capacity allocators which is outside of the scope of this Implementation Guide. The resulting schedules of all these information flows are transmitted to the imbalance settlement responsible after validation at the system operator level.

The diagram in Figure 3 outlines the different domains of responsibility of the principal actors that play a role within this guide. The balance responsible parties operate within one or several balance areas, a system operator ensures the correct operation of one or several

balance areas. Finally the transmission capacity allocator ensures the allocation of transmission capacity between balance areas.

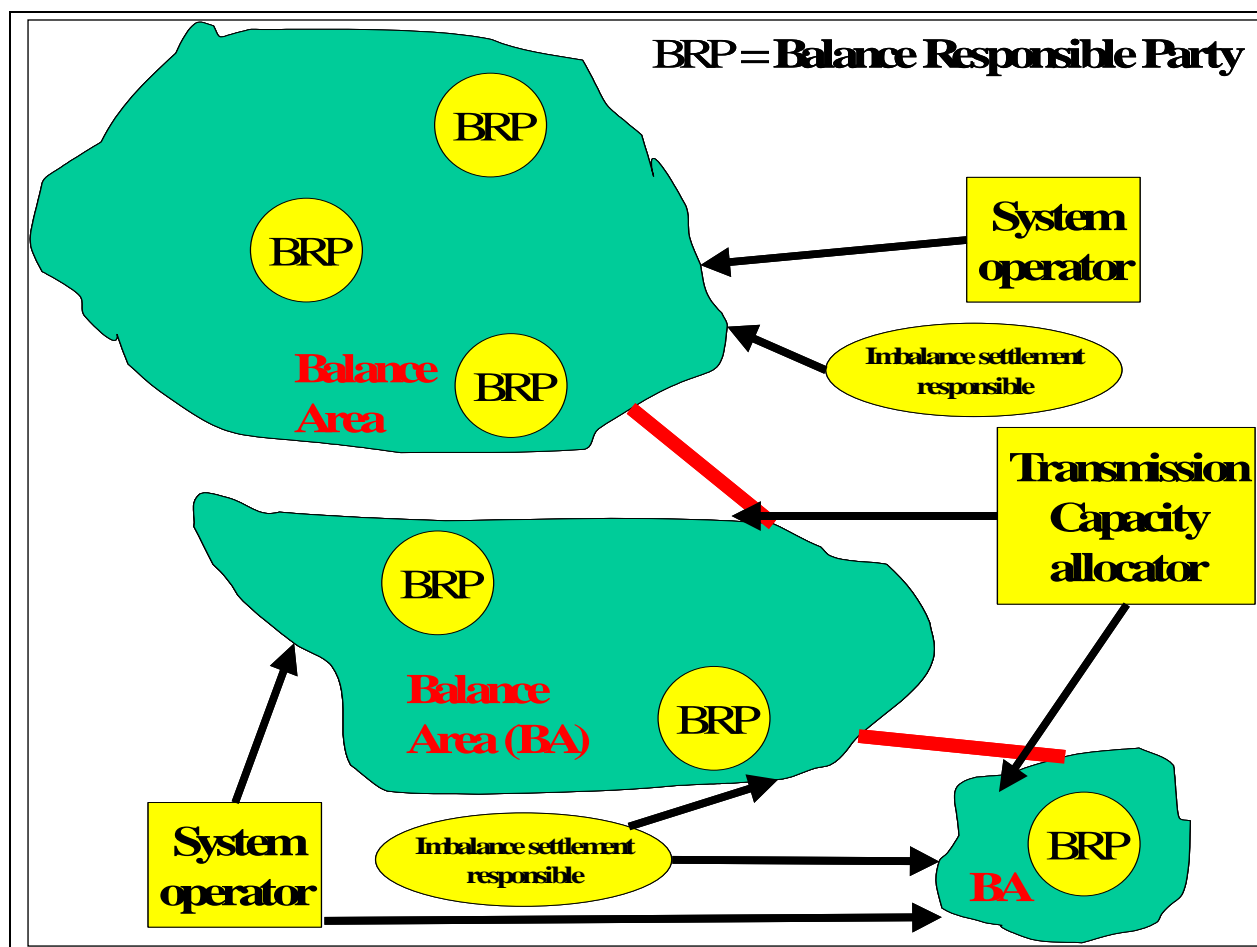


Figure 3: Domains of responsibility

The basic principle upon which this phase has been based is that all the trades between two balance responsible parties must be notified and coherent. For each balance area all the “in” flows should balance with all the “out” flows.

This guide covers the gathering of all the trade, production, consumption and other relevant schedules necessary for the planning phase.

The functions concerning the transmission of purchased and sold unit schedules and their acceptance are covered but are only partially described. The functions not completely covered refer to the imbalance settlement process where consumption or production under or overheads cannot be tied to an individual balance responsible party. However, at the macroscopic level these are completely covered.

The capacity allocation process description can be found in the ENTSO-E Capacity Allocation and Nomination process (ECAN) implementation guide. The detailed schedules for resources and reserves can be found in the ENTSO-E Reserve Resource Planning process (ERRP) implementation guide. The operational and imbalance settlement activities can be found in the ENTSO-E Settlement Process (ESP) implementation guide.

3 SCHEDULE SYSTEM INFORMATION REQUIREMENTS

3.1 PROCESS FLOW

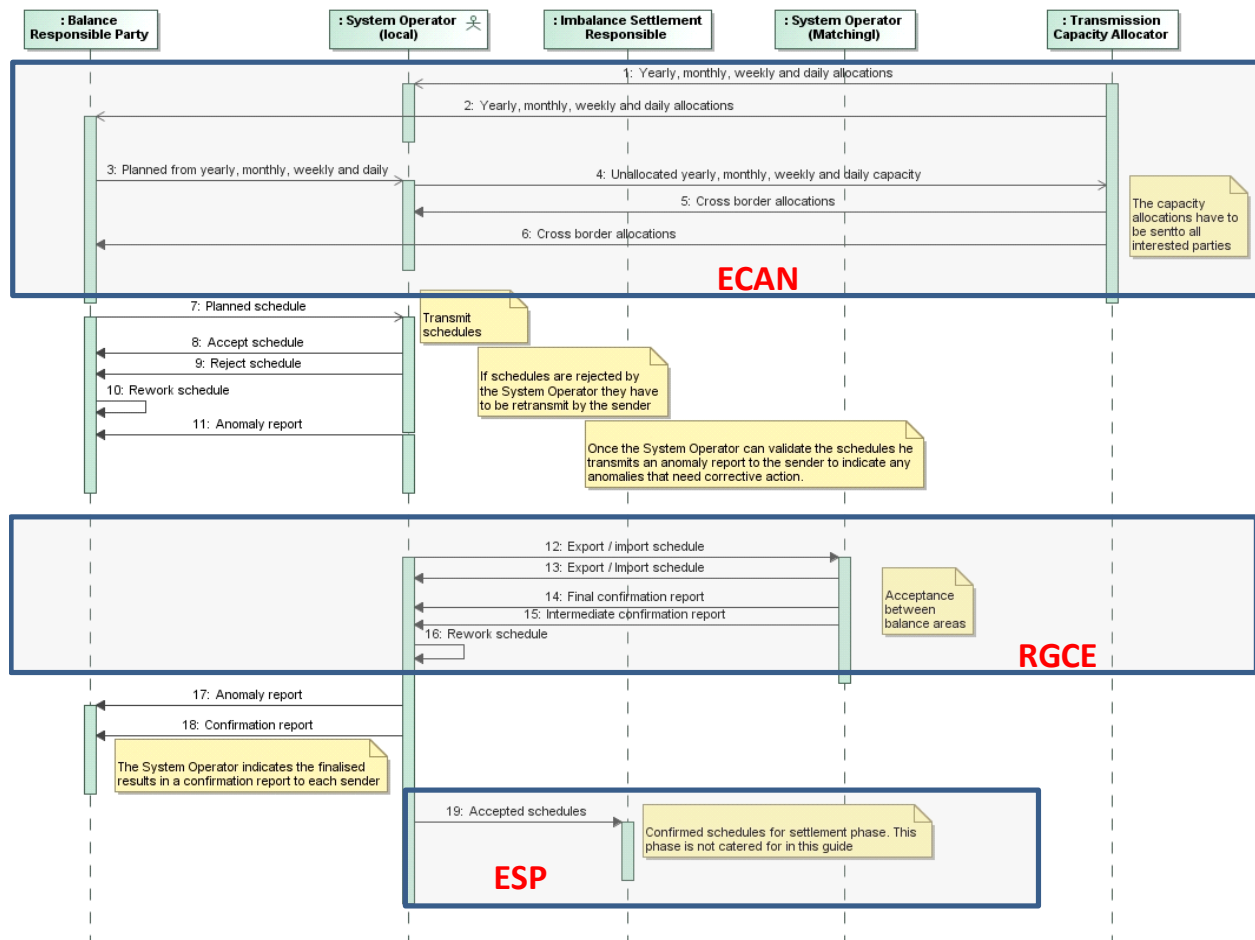


Figure 4: Typical sequence diagram of the information flow from the local system operator perspective

The sequence diagram in Figure 4 outlines the information that is exchanged between the different actors in the planning phase of the electricity market process. The information flows concern the day ahead and intraday scheduling process as seen from a balance area administered by a local system operator and connected to another balance area administered by an external System operator (as depicted in Figure 3). The shaded areas indicate phases within the process which are detailed within other implementation guides (ENTSO-E Capacity Allocation and Nomination process (ECAN); The System Operator-System Operator exchanges (RGCE); and ENTSO-E Settlement Process (ESP).

Trade can take place between the balance areas and the transmission capacity between the areas is allocated to the balance responsible parties by the transmission capacity allocator.

This is a typical market structure in Central Europe and requires a complicated set of information flows.

The Nordic market in comparison is relatively simple and requires a simple subset of the sequence diagram. In the Nordic market there is neither a transmission capacity allocator nor are there any interactions with external system operators. Consequently the information flows concerning these actors are not required. Without these flows therefore, the sequence diagram reflects the Nordic market.

Prior to allocation the system operators exchange an agreement of capacity between balance areas. The transmission capacity allocator is then informed of the capacity available for allocation. Allocation may be applied either through auctioning or through other market rules.

After the allocation the transmission capacity allocator will inform the balance responsible parties of the capacity that they have been allocated for inter area energy transmission. This information will also be sent to both system operators to enable them to have an indication of the cross border loading. This information also enables them to verify if a trader's energy schedules are within the limits of the allocated capacity. If not, the schedules in question are in deviation and market rules are applied.

The balance responsible will then inform their system operator of the trades that they have carried out. These purchases and sales will initially be controlled for coherence and if correct, they will be informed by the system operator that the schedule has been accepted for processing. If not, they will be informed of the schedules rejection.

The system operator may partially control the schedules as soon he has all the necessary information in his possession. In the case of error, he will inform the balance responsible party of the errors through an anomaly report. The balance responsible party may then resubmit the schedules with the necessary corrections.

As soon as cut-off occurs the system operator will finalise all controls respecting market rules. He will then send a confirmation report (or eventually an anomaly report) to the various parties informing them of the actions that will be taken into account for the day in question.

Depending on market rules, apart from the final confirmation report that is produced after cutoff of the related process, intermediate confirmation reports may be generated. The cutoff time refers not only to daily or intra daily markets as considered in this guide, but also to the different markets that cover imbalance adjustments, reserve allocation, etc. (ancillary services markets).

Any bypass procedures to be used after cutoff are market dependent and are not covered in this guide, but the scheduling documents defined in this document may be used.

To close the process all the confirmed schedules are sent to the imbalance settlement responsible party. This process is not covered in this guide. In some contexts the imbalance settlement responsible may receive the balance responsible schedules and inform the system operator of the confirmed schedules.

3.2 SCHEDULE SYSTEM INFORMATION FLOWS

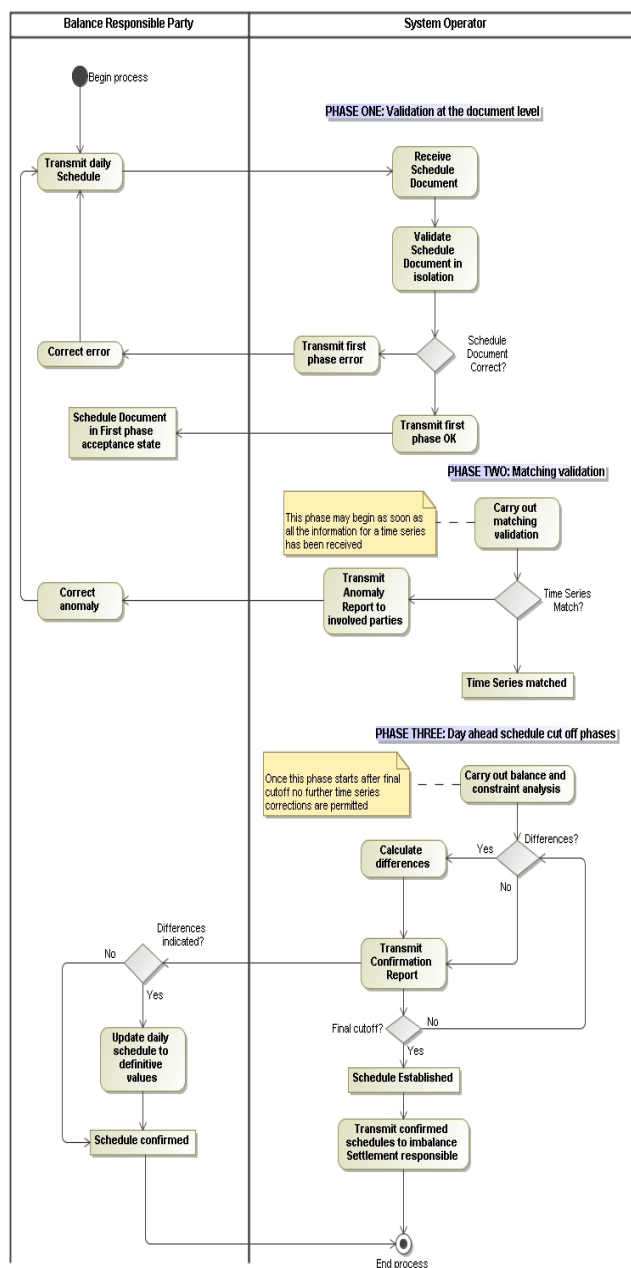


Figure 5: Schedule planning transmission process

A more precise decomposition of the interchange between balance responsible parties and the system operator is provided in Figure 5.

The schedule document transmission cycle is composed of three phases:

1. The initial transmission of the schedule document to the system operator. During this phase the document is verified for coherence independently of all the schedule documents that have been transmit by other parties. This phase verifies the coherence of the time series within the document. The phase ends with the transmission to the sender of a positive or negative acknowledgement of the time series received.

2. The matching validation can be carried out on the time series within a document once the time series from the complementary parties has been received. If a time series is found not to match, an anomaly document is transmitted to all the involved parties informing them of the problem. Time series found to be in error need to be retransmit via the retransmission of the applicable schedule document (with a new document version) containing the corrected time series (with the version number of the retransmit document). The retransmit schedule document will include all the non-erroneous time series that were sent with the document. These will maintain the version number of their last clean transmission.
3. The last phase occurs at the moment of cut-off or prior to it for the schedule type involved. A difference's analysis is then carried out, respecting market rules, between the set of time series that has been received and what has been accepted as the time series for the period in question. Each party that sent a schedule document is then informed via a confirmation report document of the situation that has been accepted at this stage of the process. Any differences will be highlighted in the report. The reception of this report after final cutoff ends the scheduling process.

The schedule document, the anomaly report document and the confirmation report document is defined within this guide. For the acknowledgement document definition refer to: [4] "The ENTSO-E Acknowledgement document".

3.3 BALANCE RESPONSIBLE PARTY DEFINITION

The term "Balance Responsible Party" is used throughout this implementation guide and has two meanings:

1. It identifies a Legal entity that has a contract within a Market Balance Area (as is defined in the Role Model).
2. It identifies the entity that a Balance Responsible Party must ensure is in balance in the scheduling system.

In general in the schedule document the first definition is used in the document header and the second definition is used in the time series header. These headers are defined later in this implementation guide. Local market rules use these definitions with different terms. The following examples will help clarify these definitions:

- Definition 1 will generally correspond to the identification of the entity behind the codes used in the "Sender Identification" attribute in the document header, for example:
 - A Balance Responsible Party.
 - A third party responsible for the transmission of schedules on behalf of a Balance Responsible Party.
 - A Balance Group Manager (as defined in the Austrian market).
 - A Market Subject (as defined in the Spanish market).
 - A Schedule Coordinator (as defined in the Polish market).
- Definition 2 will generally correspond to the identification of the entities behind the codes used in the "In Party" and "Out Party" attributes in the time series header, for example:
 - A Balance Responsible Party.
 - A Balance Group from a single Market Balance Area identified by a single code (Y coded EIC codes).

- A Balance Group over several Market Balance Areas identified by a single code (X coded EIC codes).
- A Power Exchange.

In order to ensure a common means of providing the Balance Responsible Party that is identified at the level of the time series, the Subject Party attribute has been introduced. Whenever a Schedule Document provides time series information with party granularity, the Subject Party attribute shall be used to identify the party referred to in all the time series in the document.

3.4 GENERAL GROUND RULES

The process flow assumes that a certain number of basic rules are respected. This does not include the specific rules that have been defined in an interchange agreement. These basic rules are:

1. A party must transmit a consistent Party position in compliance with market rules for a given process.
2. A time series shall be sent for each unique combination of the product, business type, object aggregation, in area, out area, metering point identification, in party, out party, capacity contract type and capacity agreement identification.
3. Every time a new version of a schedule document is retransmit all the time series contained in the previous transmission must appear in the new version. In the case where a time series is missing, or an existing time series is rejected, the complete document will be rejected.
4. All version numbers shall be positive integer values and leading zeros shall be suppressed.
5. All scheduling documents received shall have an acknowledgement (acceptance, rejection or errors).
6. An acknowledged version of a document replaces the previous version of the document in question.
7. All the time series information that has been validated in phase 1 (validation at document level) for formal correctness may be used to balance their complementary time series as soon as these become available.
8. All the times in the documents are expressed in Coordinated Universal Time (the acronym of which is UTC) in compliance with ISO 8601. This is restricted to YYYY-MM-DDTHH:MM:SSZ in order to remain in conformity with XML schema requirements.
9. All the time intervals in the documents are expressed in compliance with ISO 8601 This is restricted to YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ. The time interval has an inclusive start time and an exclusive end time and is expressed in minutes (i.e. 00:00Z to 00:00Z is exactly a 24 hour period).
10. The resolution of a time series period shall always be expressed in minutes.
11. The time interval defined in the period class shall always be a multiple of its resolution.

12. For a schedule document all the Time Intervals in all the Period classes shall cover the complete period of the Schedule Time Interval.
13. Negative quantities for a time series are only permitted for certain categories of netted time series.
14. A time series shall be suppressed by zeroing out all the time interval class quantities in the time series.
15. It is preferred that the quantity for a balance responsible time series in a day ahead and an intraday schedule is given in power units' as the average value over the time interval, i.e. MW (code MAW). If the quantity time interval does not correspond to a multiple of 60 minute intervals, converting average power to energy will often result in rounding errors. If this is the case, it is recommended that energy units of measure are used.
16. The quantity for an allocated capacity schedule is always given in maximum power units, i.e. MW (code MAW).
17. Whenever a coded value within a document is associated with a coding scheme, the coding scheme must always be supplied. The coding scheme is an independent attribute with a size of 3 alphanumeric characters.

3.5 POSITION OF A PARTY OR A DOMAIN

The ENTSO-E Scheduling System is based on the principle of the transmission of all the information relative to a **Party** or a **Domain** (i.e. the transmission of a summary of the Party information for a given domain) in a single Document for a given **Period** and a **Process** *providing the position of the party or the domain for the period and process in question*.

The terms in ***bold characters*** are defined as follows:

The **Party** is defined in the "SubjectParty" attribute of the document. It must appear in the In or Out Party attributes of each time series when the position for the party in question is being sent. A "SubjectRole" is mandatory with each SubjectParty to identify the role of the SubjectParty. In case where the document defines the position relative to a Domain, these attributes will not be present.

The **Domain** is defined in the "Domain" attribute of the document. The InArea or the OutArea shall be related to the Domain.

The **Domain** is in general the Market Balance Area that is the subject of the schedule plan. Other domains may also be used as required, for example ITC areas. The domain can also be a subset of the Market Balance Area which has to be identified separately depending on market rules (e.g. different market cut-off times). Some examples: "Internal trades + external trades of the Market x", "Only Internal trades of the Market x", "Only External trades border x", "Power exchange trades", "Trades for compensation of losses", etc.

The overall **Period** is defined in the "ScheduleTimeInterval" attribute of the document.

The **Process** used within the document is defined in the ProcessType attribute. Some examples are: intraday, day ahead, day ahead schedule associated to daily capacity contract, day ahead schedule associated to long term capacity contracts, etc.

It should be pointed out that different Documents, i.e. with different Document Identifications, can be issued for the same ProcessType to enable the management of different gate closures.

3.6 CURRENT POSITION

The *Current Position* of a *Party* within the *Domain* for a specific point in time is defined by the confirmed schedules for that party at that point in time.

A list of the different ways of calculating the current position of a party for a specific point in time is given in §5.2.2.2 dealing with the intraday process.

This list is not exhaustive; other processes such as Long Term Scheduling, Post Scheduling Adjustment, etc. exist and are not detailed in this document. These are local market dependent and should be described in the local market rule.

3.7 INCREMENTAL VALUES

The confirmed values need to be added to other confirmed values to compute the *Current Position* of the party. Thus in A02 process values are **incremental** in reference to the day ahead process and the previous intraday gates, but in A19 process values are **incremental** only in reference to the day ahead process.

3.8 ENERGY FLOW DIRECTION

Schedules are used for the determination of product imbalances for areas and market participants. To be able to do imbalance calculations it is always necessary to know the direction of the product flow.

In order to ensure that the direction of an energy flow can be established it is important to clearly establish a set of business rules concerning the content of a schedule. There is frequently confusion between the origin or destination of a flow and its direction. The use case shown in Figure 6 outlines what is necessary for the balancing process. In this diagram it is clear that a production responsible party, who is normally the source of the energy, from a balancing point of view, puts the energy into an area. In a similar fashion, a consumption responsible takes the energy out of an area.

In the case of trades between parties within an area the “out area” will always be the same as the “in area”. An error condition shall be raised if these values are not equal. The direction of the energy flow therefore can be determined as going from the “out party” (seller) to the “in party” (buyer).

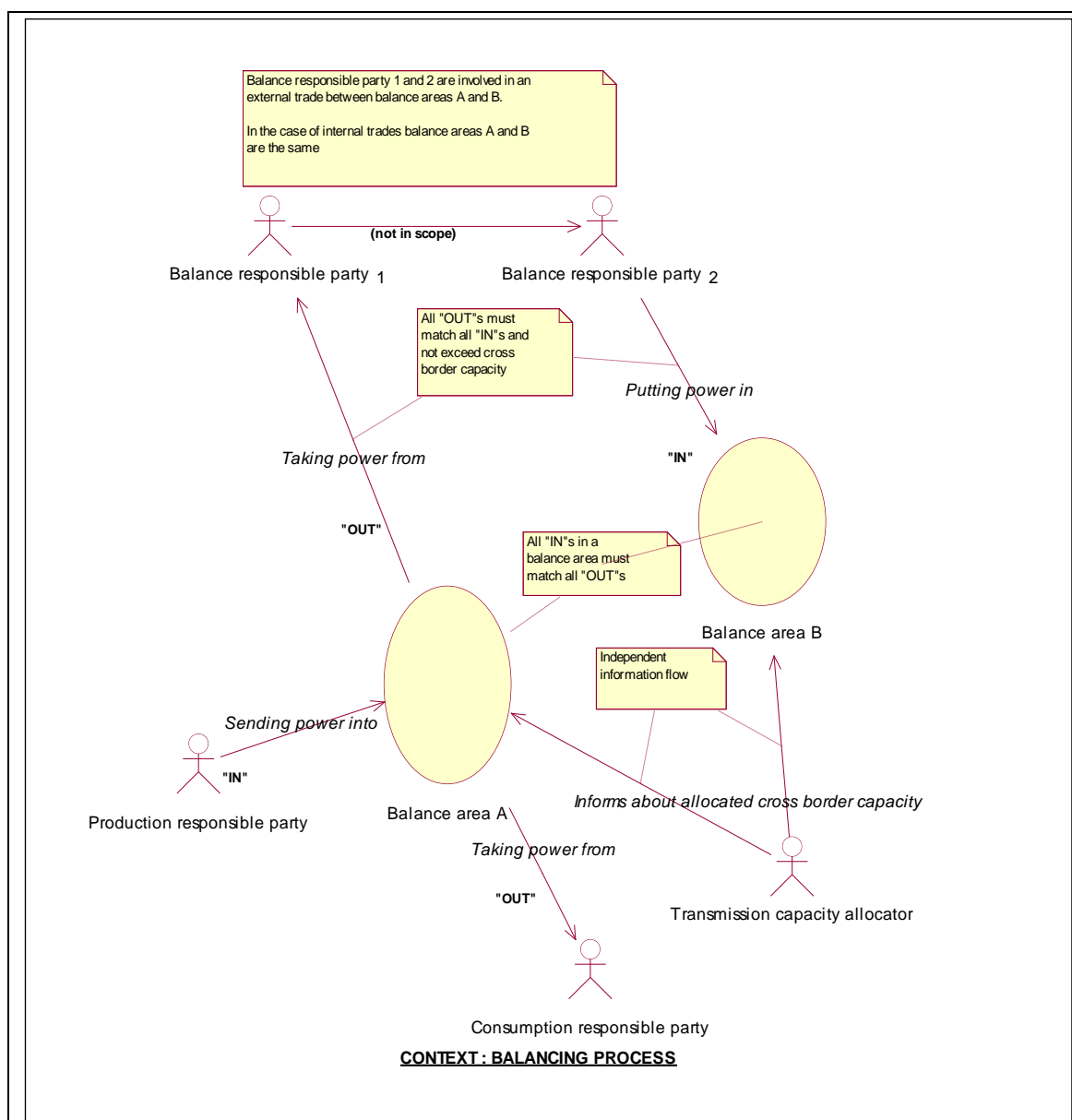


Figure 6: Energy flow use case.

In the case of trades between parties in different areas the “out area” shall always be different to the “in area”. If this is not the case then an error condition shall be raised. The energy flow shall always go from the “out area” to the “in area”.

With the application of these principles an area can be said to be balanced if all the “outs” are equal to all the “ins”.

In order to ensure that the areas and parties are clearly identified in the document, the terms “in” and “out” will be used in the area and party names.

4 SCOPE OF THE ESS WITHIN THE CONTEXT OF THE ROLE MODEL

The Role model details and definitions can be found in the document “the Harmonised Role Model”. This document is available on the ENTSO-E website.

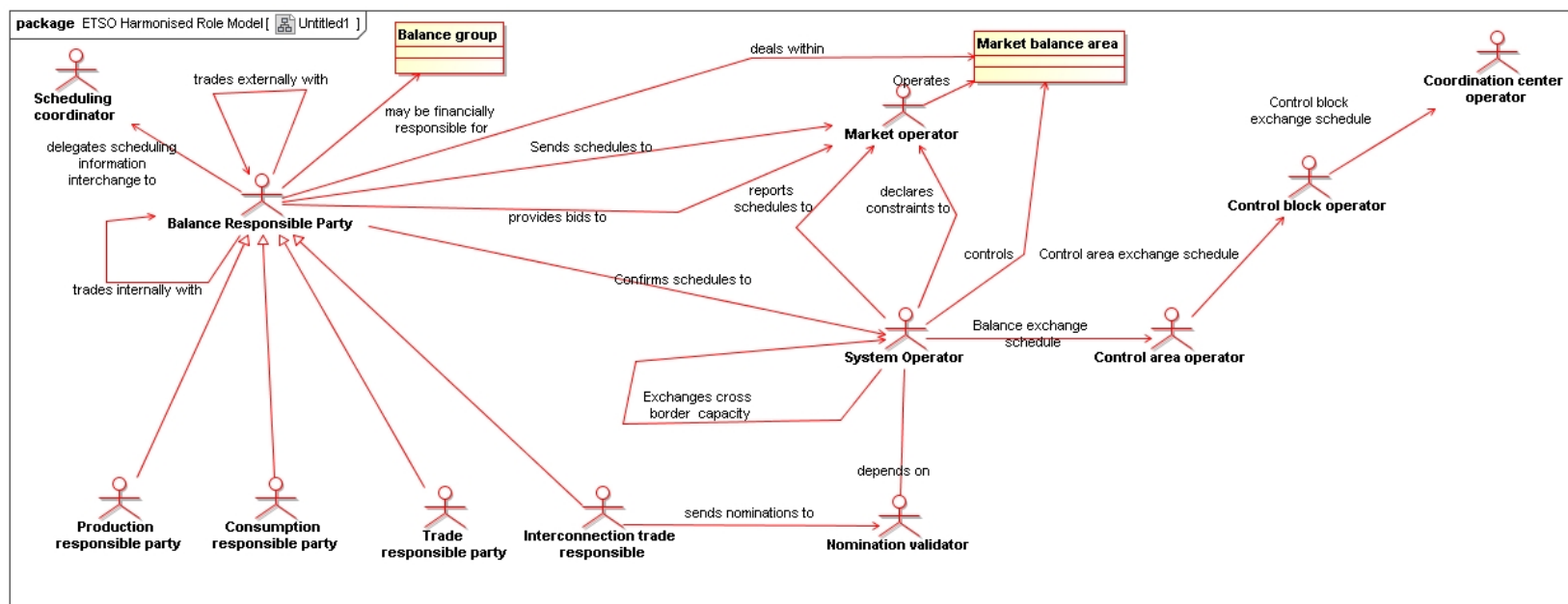


Figure 7: Scope of the ESS within the harmonised role model

5 SCHEDULE DOCUMENT IMPLEMENTATION

5.1 INFORMATION MODEL

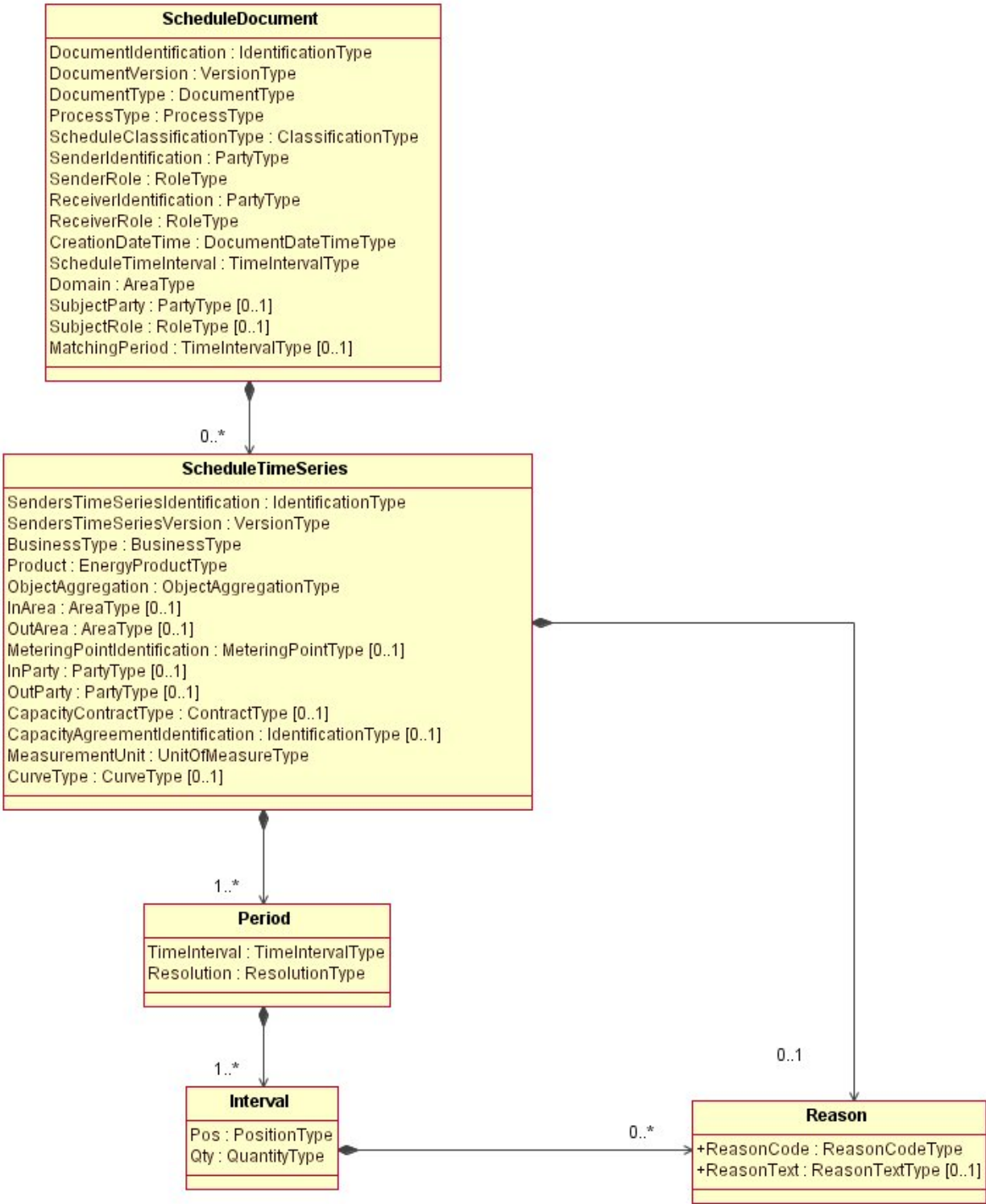


Figure 8: The Schedule Document information model

5.2 RULES GOVERNING THE SCHEDULE DOCUMENT IMPLEMENTATION

5.2.1 DEPENDENCY MATRIX

The matrix, outlined below, shows the mandatory requirement for dependant key attributes that appear in the schedule time series element. For example in the case where the business type is “A01” then the in area and in party are required.

Business type	Name	Area		Party ¹		Capacity Agreement identification	Capacity contract type
		IN	OUT	IN	OUT		
A01	Production	M		M			
A02	Internal trade	M	M	M	M		
A03	External trade explicit capacity	M	M	M	M	M	M
A04	Consumption		M		M		
A05	External trade total <i>Note:</i> the use of this Business Type has been deprecated ²	M	M				
A06	External trade non explicit capacity	M	M	M	M		
A07	Net Production / Consumption	M	M	M	M		
A08	Net internal trade	M	M	M	M		
A30	Internal inter area trade	M	M	M	M		

Object aggregation	Name	Metering point
A01	Area	
A02	Metering point	M
A03	Party	

M signifies mandatory; Blank signifies not used.

¹ Note: Party is only mandatory if ObjectAggregation = A03

² Note: the Business Type A06 with an Object Aggregation of A01 provides the same functionality

5.2.2 GENERAL RULES GOVERNING DOCUMENT CONTENT

5.2.2.1 DOCUMENT AND TIME SERIES VERSION NUMBERS.

A schedule document provides the position of a Party or a Domain related to some market information (i.e. DocumentType). It includes a set of time series schedules.

It is required that one schedule document is exchanged for a gate which means that if there are additions, modifications or suppressions to the set of time series within the schedule document, the document identification remains unchanged but the version number must be increased. Unique identification of a schedule document is therefore materialised by its sender identification and document identification.

The initial transmission of a schedule document should generally have a version number of “1”. However, in specific circumstances this may be different, but the initial transmission of a document should always have the lowest version number for that document. For each transmission of the schedule document the version number is increased. The receiver shall ensure that a retransmitted schedule document has a version number strictly higher than the previous version number. The document version number does not have to be in strict sequential order.

Each retransmission of the schedule document shall include all the time series associated with the document in question. Each time series has a version number that corresponds to the version number of the document in which the series has been added or changed. In other words it shall be “1” for the time series which has been sent in the initial transmission of a document whose version number is 1. Unchanged time series should keep the version number of their last valid transmission. The time series version number is mainly for information purposes and it is market rules that dictate its final method of use. For example, in some cases a market may require that all the time series version numbers are strictly the same as the document version, whereas in other cases markets may require that only those time series which have changed shall have their version number changed.

This principle allows all markets to transmit documents in a compatible fashion even though different market rules apply.

5.2.2.1.1 EXAMPLE WHERE MARKET RULES DICTATE THAT ONLY CHANGED TIME SERIES HAVE THEIR VERSION NUMBER CHANGED.

Example: an initial transmission of a document with 3 time series:

Document identification	Document version	Senders time series identification	Senders time series version
1234	1	TS01	1
		TS02	1
		TS03	1

630 A second transmission of the same document with a modification only to TS02:

Document identification	Document version	Senders identification	time series	Senders time series version
1234	5	TS01		1
		TS02		5
		TS03		1

631 A third transmission of the same document with the addition of TS04:

Document identification	Document version	Senders identification	time series	Senders time series version
1234	11	TS01		1
		TS02		5
		TS03		1
		TS04		11

632 **Note:** The three schedule documents above are the only ones that the TSO might
633 receive (i.e. the sequential increase of the document version is not required but it must
634 be superior to the preceding version received).

635 5.2.2.1.2 EXAMPLE WHERE MARKET RULES DICTATE THAT ALL TIME SERIES SHOULD HAVE THE 636 SAME VERSION IN THE DOCUMENT

637 Example: an initial transmission of a document with 3 time series:

Document identification	Document version	Senders identification	time series	Senders time series version
1234	1	TS01		1
		TS02		1
		TS03		1

638 A second transmission of the same document with a modification only to TS02:

Document identification	Document version	Senders identification	time series	Senders time series version
1234	5	TS01		5
		TS02		5
		TS03		5

639 A third transmission of the same document with the addition of TS04:

Document identification	Document version	Senders identification	time series	Senders time series version
1234	11	TS01		11
		TS02		11
		TS03		11
		TS04		11

5.2.2.2 INTRA DAY TRADING.

An intra-day document respects exactly the same rules as that of a day ahead document.

Intra-day scheduling can only take place within the scope of the hours already scheduled but not executed.

The table below outlines the characteristics that apply to intra-day trading:

<i>Process Type</i>	<i>Name</i>	<i>Number of unique Documents</i>	<i>Information (values)</i>	<i>Schedule TimeInterval</i>	<i>Matching Period</i>
A01³	Day Ahead	1	Current Position	Whole day	Whole day
A02	Intraday incremental	N (1 per gate)	Incremental values	Remaining hours	Remaining hours
A17	Schedule Day	1	Current Position	Whole day	Remaining hours
A18	Intraday total	N (1 per gate)	Current Position	Whole day	Remaining hours
A19	Intraday accumulated	1 (1 per gate)	Incremental values	Whole day	Remaining hours

Depending on the intraday process implemented in a market, there are different ways to calculate the **Current Position** for a party at a given point in time:

- **Intraday incremental** (A02): Current Position is the aggregation of the confirmed schedules, especially within Day Ahead (A01) and Intraday (A02) processes

$$CP = A01 + A02_{(1st\ intraday)} + A02_{(2nd\ intraday)} + A02_{(...)} + \dots$$
- **Schedule day** (A17): Current position is given by the last confirmed document

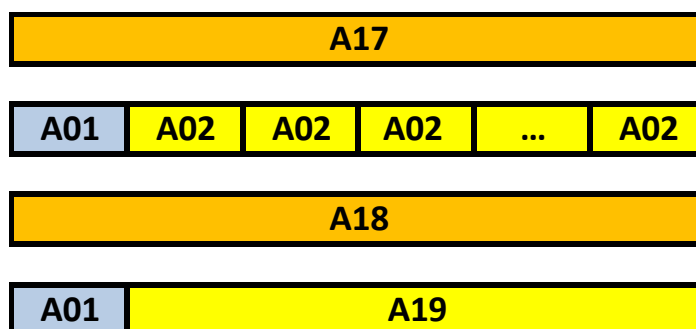
$$CP = A17$$
- **Intraday total** (A18): Current position is given by the last confirmed document

$$CP = A01, \text{ and at a latter point in time replaced by } A18$$
- **Intraday accumulated** (A19): Current Position is the aggregation of the confirmed schedules from the Day Ahead (A01) schedule document and the schedules from the last confirmed Intraday accumulated (A19) schedule document

$$CP = A01 + A19$$

As illustrated in the Figure 9 and Figure 10 below.

³A01 ProcessType has been included for completeness although the process it describes is not intraday.

**Figure 9: Scope of Process Types**

Document identification, values and calculation of the current position in relation to the intraday process type					
Schedule nomination for:	day ahead	intra day			
		gate 1	gate 2	...	gate n
Values:	Val0	Val1	Val2	...	Valn
Process type:	A17	A17	A17	...	A17
Document Identification:	ID0	ID0	ID0	...	ID0
Initial Document Version:	1	day ahead +1	gate1 +1	...	gate(n-1) +1
Schedule Time Interval	whole day	whole day	whole day	...	whole day
Matching Period	whole day	rest of day	rest of day	...	rest of day
Value interpretation:	Total	Total	Total	...	Total
Current position:	Val0	Val1	Val2	...	Valn
Process type:	A01	A02	A02	...	A02
Document Identification:	ID0	ID1	ID2	...	IDn
Initial Document Version	1	1	1	...	1
Schedule Time Interval	whole day	rest of day	rest of day	...	rest of day
Matching Period	whole day	rest of day	rest of day	...	rest of day
Value interpretation:	Total	Increment to day ahead	Increment to gate 1	...	Increment to gate(n-1)
Current position:	Val0	Val0 + Val1	Val0+Val1+Val2	...	Val0+Val1+Val2+ ... +Valn
Process type:	A01	A18	A18	...	A18
Document Identification:	ID0	ID1	ID2	...	IDn
Initial Document Version	1	1	1	...	1
Schedule Time Interval	whole day	whole day	whole day	...	whole day
Matching Period	whole day	rest of day	rest of day	...	rest of day
Value interpretation:	Total	Total	Total	...	Total
Current position:	Val0	Val1	Val2	...	Valn
Process type:	A01	A19	A19	...	A19
Document Identification:	ID0	ID1	ID1	...	ID1
Initial Document Version	1	1	gate1 +1	...	gate(n-1) +1
Schedule Time Interval	whole day	whole day	whole day	...	whole day
Matching Period	whole day	rest of day	rest of day	...	rest of day
Value interpretation:	Total	Increment to day ahead	Increment to day ahead	...	Increment to day ahead
Current position:	Val0	Val0+Val1	Val0+Val2	...	Val0+Valn
<i>Note on Document Version:</i> Version should normally start with 1. But there is no strict limitation on the initial version number and the increment.					

Figure 10: Examples of use of the different process types

Other possibilities for operating intraday trading and their corresponding schedules may be defined in local market rules, but this has not been taken into consideration in this implementation guide.

5.2.3 SPECIFIC RULES FOR ALLOCATED CAPACITY SCHEDULES

An allocated capacity schedule follows the same basic rules as for every other schedule document. In the case of this schedule the only possibilities available for the business type and object aggregation are as follows:

Business type	Name	Area		Party		Capacity agreement	Capacity contract
		IN	OUT	IN	OUT		
A03	External trade explicit capacity	M	M	M	M	M	M

Object aggregation	Name	Metering point
A01	Area	
A02	Metering point	M
A03	Party	

5.2.4 DOCUMENT ACCEPTANCE AND REJECTION CRITERIA

The schedule document is composed of four levels:

1. The document header providing the basic document identification, the identification of involved parties, and the schedule time interval and eventual matching period.
2. The time series identification level providing all the information that is necessary to uniquely identify a time series. It also provides some information relative to the time interval such as the measurement unit.
3. The period level that defines the time interval period and resolution that covers the quantities being reported. The number of periods depends on the CurveType defined at the time series level but in the case of CurveType "A01" and CurveType "A03" only one period is permitted.
4. The interval level that provides the time interval position (time interval period / resolution) and the quantity for the position in question.

In each of these cases an error condition may occur which can either cause the rejection of the document or the time series or the time interval quantities. The following conditions describe these possibilities:

ERROR	SECONDARY CONDITION	ACTION
1. A document header error.		The complete document is rejected.
2. A time series identification level error.	A: If it is the initial transmission of a document, or if it concerns the addition of a new time series.	The complete time series in question is rejected.

ERROR	SECONDARY CONDITION	ACTION
	B. If it is the retransmission of a document with a new version number then if it concerns an error at the time series level or if the time series is missing.	The complete document is rejected.
3 A period level error	An error concerning the time interval or the resolution	The complete time series is rejected
4. An interval level error.	If it is an error with the quantity.	The complete time series is rejected
	If the position doesn't exist.	The complete time series is rejected
	If the position is missing;	The complete time series is rejected.

5.2.5 A DOCUMENT WITHOUT ANY TIME SERIES INSTANCES

A document that contains no time series instances shall be considered to be a valid transmission from a market participant indicating that there is no time series information forthcoming. This is dependent on market rules that in some circumstances require the systematic transmission of a document from a market participant.

The market participant may at a later time transmit a new version of the document in question with time series information.

5.3 SCHEDULE DOCUMENT CLASS SPECIFICATIONS

5.3.1 DOCUMENT IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	Unique identification of the document for which the time series data is being supplied.
Description	<p>A schedule document must have a unique identification assigned by the sender of the document to be sent to a receiver.</p> <p>The party sending a time series can only send it within a single role (e.g. trade responsible, consumption responsible, etc.).</p> <p>If the sender plays multiple independent roles then, as many documents as the party plays roles must be sent. For example, in the case where the sender is a production responsible party who also acts as a trader, two documents may be sent to the system operator. One document will be sent in the sender's capacity as production responsible party and one in his capacity as trade responsible party.</p> <p>In cases where several roles are required in a single document a generic role must be used.</p>
Size	The identification of a schedule document may not exceed 35 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None

700 5.3.2 DOCUMENT VERSION

ACTION	DESCRIPTION
Definition of element	Version of the document being sent. A document may be sent several times, each transmission being identified by a different version number that starts at 1 and increases sequentially.
Description	<p>The schedule document version is used to identify a given version of a time series set for a given schedule time interval.</p> <p>The first version number for a given schedule document identification should normally be 1.</p> <p>The document version number must be incremented for each retransmission of a schedule document that contains changes to the previous version.</p> <p>The receiving system should ensure that the version number for a schedule document is superior to the previous version number received.</p>
Size	A version number may not exceed 3 numeric characters with no leading zeros.
Applicability	This information is mandatory.
Dependence requirements	None.

701 5.3.3 DOCUMENT TYPE

ACTION	DESCRIPTION
Definition of element	The coded type of the document being sent.
Description	<p>The schedule document type identifies the information flow characteristics.</p> <p>Refer to ENTSO-E code list document for the valid list of codes.</p>
Size	The schedule document type value may not exceed 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

702 5.3.4 PROCESS TYPE

ACTION	DESCRIPTION
Definition of element	The nature of the process that the document is directed at.
Description	<p>The process type identifies the process to which the information flow is directed.</p> <p>Refer to ENTSO-E code list document for the valid list of codes.</p>
Size	The process type value may not exceed 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

703 5.3.5 SCHEDULE CLASSIFICATION TYPE

ACTION	DESCRIPTION
Definition of element	A type that is used to classify the schedule by aggregation or classification.
Description	The schedule classification type identifies the aggregation or classification type of the schedule. In the case of normal day ahead schedules exchanged between the trader and the TSO, the code A01 (exchange) is used. The code A02 (summary) is generally only used for exchanges between TSOs. Refer to ENTSO-E code list document for the valid list of codes.
Size	The schedule classification type value may not exceed 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

704 5.3.6 SENDER IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who is sending the document.
Description	The sender of the document is identified by a unique coded identification. This code identifies the party that is the “owner” of the information being transmitted in the document. For example, a party who is responsible for the content of the document on behalf of a Balance Responsible Party. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a sender’s identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	Both the identification and the coding scheme are mandatory.
Dependence requirements	None.

705 5.3.7 SENDER ROLE

ACTION	DESCRIPTION
Definition of element	Identification of the role that is played by the sender.
Description	The sender role, which identifies the role of the sender within the document. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a sender role is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

706 5.3.8 RECEIVER IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who is receiving the schedules.
Description	The receiver of the document is identified by a unique coded identification. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a receiver's identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	Both the identification and the coding scheme are mandatory.
Dependence requirements	None.

707 5.3.9 RECEIVER ROLE

ACTION	DESCRIPTION
Definition of element	Identification of the role played by the receiver.
Description	The receiver role, which identifies the role of the receiver within the document. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a receiver role is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

708 5.3.10 CREATION DATE TIME

ACTION	DESCRIPTION
Definition of element	Date and time of transmission of the scheduling data.
Description	The date and time that the document was prepared for transmission by the application of the sender.
Size	The date and time must be expressed in UTC as: YYYY-MM-DDTHH:MM:SSZ.
Applicability	This information is mandatory.
Dependence requirements	None.

709 5.3.11 SCHEDULE TIME INTERVAL

ACTION	DESCRIPTION
Definition of element	The beginning and ending date and time of the period covered by the document containing the schedule.
Description	<p>This information provides the start and end date and time of the schedule time interval.</p> <p>The System Operator, or the Balance Settlement Responsible for which the Balance Responsible Parties (or their service providers) have to provide schedule information, defines the schedule time interval.</p> <p>Typically the Balance Responsible Parties have to provide schedules for the next local day.</p> <p>All time intervals for the time series in the document must be within the total time interval for the schedule.</p> <p>The receiver will discard any time intervals outside the schedule period.</p>
Size	<p>The start and end date and time must be expressed with a UTC time as follows:</p> <p>YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ.</p>
Applicability	This information is mandatory.
Dependence requirements	None.

710 5.3.12 DOMAIN - CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	The domain covered within the Schedule Document.
Description	<p>The identification of the domain that is covered in the Schedule Document. Refer to specific description in section 3. It is in general the Market Balance Area that is the subject of the schedule plan.</p> <p>Other domains may also be used as required, for example CBT areas.</p> <p>The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.</p>
Size	<p>The maximum length of this information is 18 alphanumeric characters.</p> <p>The maximum length of the coding scheme code is 3 alphanumeric characters.</p>
Applicability	This information is mandatory.
Dependence requirements	None.

711 5.3.13 SUBJECT PARTY – CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	The Party that is the subject of the Schedule Document.
Description	<p>The party that is the subject of the documents time series. This could identify a Balance Group or a market participant.</p> <p>In the context where a domain is further refined into Balance Groups this provides the identification of the Balance Group that is the subject of the Schedule Document.</p> <p>The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.</p>
Size	<p>The maximum length of this information is 16 alphanumeric characters.</p> <p>The maximum length of the coding scheme code is 3 alphanumeric characters.</p>
Applicability	This information is dependent.
Dependence requirements	For ESS V3.2 schedules, when all the time series in a document refer to a single party the SubjectParty shall be mandatory. For previous releases of the ESS V3, the SubjectParty attribute is dependent on local market rules.

712 5.3.14 SUBJECT ROLE

ACTION	DESCRIPTION
Definition of element	The Role of the SubjectParty.
Description	<p>Where the SubjectParty is described then the SubjectRole must be used to describe the role of the party.</p> <p>Refer to ENTSO-E code list document for the valid list of codes.</p>
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	If the SubjectParty is present the SubjectRole is mandatory.

713 **5.3.15 MATCHING PERIOD**

ACTION	DESCRIPTION
Definition of element	The beginning and ending date and time of the period that is to be matched within the schedule.
Description	<p>This information provides the start and end date and time of the period to be matched.</p> <p>The Matching Period start date and time must begin at the start of the Schedule time interval or be within the bounds of the Schedule Time Interval. The Matching Period end date and time must be the same as that of the Schedule Time Interval. It is this period that is being presented for matching.</p> <p>The period prior to the Matching Period is generally considered to be historical data and should correspond to the information received in previous transmissions.</p>
Size	<p>The start and end date and time must be expressed with a UTC time as follows:</p> <p>YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ.</p>
Applicability	This information is dependent.
Dependence requirements	Local market rules will determine the use of this attribute. If it is absent then the whole Schedule Time Interval is considered to be the matching period.

714 **5.4 RULES GOVERNING THE SCHEDULE TIME SERIES CLASS**

715 A Balance Responsible Party may transmit as many time series as necessary to establish his
716 position.

717 A document sent without any time series signifies that the sending party has no time series
718 information to transmit for the period in question at the moment of transmission. Market rules
719 may require such a context.

720 The sender assigns a unique identification to each occurrence of the product, business type,
721 object aggregation, in area, out area, metering point identification, in party, out party, capacity
722 contract type and capacity agreement identification.

723 A time series has a version number that has initially the value of “1”. If a given time series is
724 modified then its version number shall be assigned the same value of the version number of
725 the schedule document in which it is transmit.

726 If a version number of a time series has not changed between transmissions, it is the receiver’s
727 responsibility to ensure that this is correct.

728 A time series shall contain a period that will cover the complete schedule time interval. The
729 period shall also indicate the resolution of the periods within the time interval. The time
730 interval must be completely covered by a whole multiple of the resolution.

731 If a time series is suppressed in a later transmission the time series will be resent with all the
732 periods containing a zero value quantity.

Note: In the case of the one-to-one nomination principle the following is to be taken into consideration:

- Where the same party is on both sides of the border the same party code is used to identify it (i.e. typically in the case of an internal border).
- Where different parties are on either sides of the border (typically in the case of international borders), the parties must inform both system operators that their two codes should be considered the same from a one-to-one nomination perspective. This is generally implemented through a formal declaration.

5.4.1 SENDERS TIME SERIES IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	Sender's identification of the time series instance. This must be unique for the whole document and guarantee the non-duplication of the product, business type, object aggregation, in area, out area, metering point identification, in party, out party, capacity contract type and capacity agreement identification.
Description	A unique identification within the schedule document assigned by the sender. This identification shall guarantee the uniqueness of the product, business type, object aggregation, in area, out area, metering point identification, in party, out party, capacity contract type and capacity agreement identification.
Size	The maximum size of a time series identification is 35 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

5.4.2 SENDERS TIME SERIES VERSION

ACTION	DESCRIPTION
Definition of element	The time series version is changed only if a given time series has changed. The time series version must be the same as the document version number in which it has been added or changed. All time series, whether changed or not, must be retransmitted when a document is resent. In the case of the deletion of a time series, it is resent with all periods zeroed out.
Description	The version number assigned to the time series in question. The time series version shall be the same as the document version number for its initial transmission. Each time a time series is modified the version number is assigned the same value as the schedule document version number used to transmit the modified information.
Size	The maximum size of a time series version is 3 numeric characters with no leading zeros.
Applicability	This information is mandatory.
Dependence requirements	This data element is always associated with the sender's time series identification.

743 5.4.3 BUSINESS TYPE

ACTION	DESCRIPTION
Definition of element	Identifies the trading nature of an energy product.
Description	The nature of the time series for which the product is handled. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

744 5.4.4 PRODUCT

ACTION	DESCRIPTION
Definition of element	Identification of an energy product such as Power, energy, reactive power, transport capacity, etc.
Description	This identifies the product for which the time series is reporting. There is a different time series for each product. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 13 numeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

745 5.4.5 OBJECT AGGREGATION

ACTION	DESCRIPTION
Definition of element	Identifies how the object is aggregated.
Description	This identified to what extent the object is aggregated. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

746 5.4.6 IN AREA – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The area where the product is being delivered.
Description	The identification of the in area. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of the in area code is 18 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

747 5.4.7 OUT AREA – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The area where the product is being extracted.
Description	The identification of the out area. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of the out area code is 18 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

748 5.4.8 METERING POINT IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The identification of the location where one or more products are metered.
Description	The identification of the location where one or more products are metered. This may be one physical location or the combination of several points together. A metering point identification may be divided into a value and an optional sub-value. A metering point identification code may be divided into 3 parts: <ul style="list-style-type: none"> – A value. – An optional sub-value in order to satisfy the needs of more precise identification. The use or not of the sub-value is determined by market requirements. – A coding scheme. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of the identification value is 35 alphanumeric characters. If the identification sub value is used its maximum size is 35 characters. The coding scheme is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

749 5.4.9 IN PARTY – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The party that is putting the product into the area.
Description	The identification of the party putting the product into the in area. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

750 5.4.10 OUT PARTY – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The party taking the product out of the area.
Description	The identification of the party taking the product out of the out area. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 16 alpha-numeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

751 5.4.11 CAPACITY CONTRACT TYPE

ACTION	DESCRIPTION
Definition of element	The contract type defines the conditions under which the capacity was allocated and handled.
Description	This information defines the conditions under which the capacity was allocated and handled. e.g.: daily auction, weekly auction, monthly auction, yearly auction, etc. The significance of this type is dependent on the in area and out area specific coded working methods. The transmission capacity allocator responsible for the area in question auctions defines the contract type to be used. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

752 5.4.12 CAPACITY AGREEMENT IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	The identification of an agreement for the allocation of capacity to a party.
Description	This provides the identification of the allocated capacity by a capacity allocator. The same identification must be always used even when the same capacity is fully or partially resold.
Size	The maximum length of this information is 35 alpha-numeric characters.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

753 5.4.13 MEASUREMENT UNIT

ACTION	DESCRIPTION
Definition of element	The unit of measure which is applied to the quantities in which the time series is expressed.
Description	The unit of measurement used for the quantities expressed within the time series. <i>ENTSO-E recommends that time series use the “power” unit of measure (MAW). Refer to paragraph 3.4 for more details.</i> Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

754 5.4.14 CURVETYPE

ACTION	DESCRIPTION
Definition of element	The coded representation of the type of curve being described.
Description	This represents the coded identification of the curve that is described in the Period and Interval class. Refer to ENTSO-E Core Component Code list document for valid codes.
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	The CurveType may be used to provide profile information or reduced time interval content. If the CurveType attribute is not present the CurveType A01 is used by default.

755 5.5 RULES GOVERNING THE REASON CLASS

756 The reason class is used under the following conditions:

- 757 • It is used at the Time Series level during intra-day processing to provide the reason for
758 the modifications that are being carried out on the time series.

- It is used at the Interval level to provide an indication that the quantity specified has been changed from the original submission to satisfy a technical constraint of the network.

It is not currently considered for use in other contexts.

5.5.1 REASON CODE

ACTION	DESCRIPTION
Definition of element	A code indication that a textual reason for modification will be provided in the reason text.
Description	<p>At the Time series level the reason code is used to enable processing of the reason text which, depending on market conditions, should be provided in intra day trading. In this context only one reason code has been defined (A48). No other codes are permitted.</p> <p>At the Interval level the reason code is used to identify the nature of a curtailment that has been imposed on the specified quantity. Currently the following codes have been identified :</p> <p>At the Time Series level: A48: Modification reason.</p> <p>At the Interval level: A97: Force Majeure curtailment A98: Network security curtailment</p> <p>Refer to the ENTSO-E code list for other codes for this purpose.</p>
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is dependent on market conditions.
Dependence requirements	This information is mandatory for intra day trading or to provide curtailment information if market conditions so dictate.

5.5.2 REASON TEXT

ACTION	DESCRIPTION
Definition of element	Textual reason for a modification.
Description	The textual reason must be provided where the reason code A48 is present.
Size	The maximum length of this information is 512 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	None.

5.6 RULES GOVERNING THE PERIOD CLASS

There is at least one period class for a time series schedule.

The Time Intervals in all the Period classes shall cover the complete period of the Schedule Time Interval.

The number of time intervals within a time series as characterized by the resolution must completely cover the period's time interval.

770 If a time series is suppressed then the interval quantities are all zeroed out.

771 A senders minimal resolution must respect market rules.

772 Where a CurveType of “A01” or “A03” is provided in the time series then only one Period
773 instance is permitted.

774 5.6.1 TIME INTERVAL.

ACTION	DESCRIPTION
Definition of element	The start and end date and time of the time interval of the period in question.
Description	This information provides the start and end date and time of the period being reported.
Size	The start and end date and time must be expressed in UTC with the following format: YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ.
Applicability	This information is mandatory.
Dependence requirements	None.

775 5.6.2 RESOLUTION

ACTION	DESCRIPTION
Definition of element	The resolution defining the number of periods that the time interval is divided.
Description	This information the resolution of a single period. The time interval must contain a whole number of periods as expressed by the resolution.
Size	The resolution is expressed in compliance with ISO 8601 in the following format: PnYnMnDTnHnMnS. Where nY expresses a number of years, nM a number of months, nD a number of days. The letter “T” separates the date expression from the time expression and after it nH identifies a number of hours, nM a number of minutes and nS a number of seconds. For example PT15M expresses a 15 minute resolution.
Applicability	This information is mandatory.
Dependence requirements	None.

776 5.7 RULES GOVERNING THE INTERVAL CLASS

777 The interval class contains the relative position within a time interval period and the quantity
778 associated with that position.

779 The position must begin with 1 and increment by 1 for each subsequent position forming a
780 series of contiguous numbers covering the complete range of the period.

781 Any leading zeros in a position shall be suppressed.

782 Negative values are not allowed in schedule time series quantities except in the case where a
783 netted business type is employed. If the direction of the product flow changes during the
784 schedule period the two time series with opposite In area, Out area and parties are required.

785 Zero value periods must be sent.

786 Leading zeros in a quantity shall be suppressed before transmission.

787 If the direction of the product flow changes during the schedule time interval the two time
788 series with opposite in area, out area or parties are required.

789 5.7.1 Pos

ACTION	DESCRIPTION
Definition of element	The relative position of a period within a time interval.
Description	This information provides the relative position of a period within a time interval.
Size	The relative position must be expressed as a numeric integer value beginning with 1. All leading zeros must be suppressed. The maximum number of characters is 6.
Applicability	This information is mandatory.
Dependence requirements	None.

790 5.7.2 QTY

ACTION	DESCRIPTION
Definition of element	The quantity of the product scheduled for the position within the time interval in question.
Description	This information defines the quantity of energy scheduled for the position within the time interval period. A decimal point value may be used to express values that are inferior to the defined unit of measurement. The decimal mark that separates the digits forming the integral part of a number from those forming the fractional part. (ISO 6093) shall always be a period (“.”). All quantities are non-signed values except in the case where netted business types are used.
Size	The maximum length of this information is 17 numeric characters (decimal mark and sign, if used, included). All leading zeros are to be suppressed. The number of decimal places identifying the fractional part of the quantity depends on local market rules.
Applicability	This information is mandatory.
Dependence requirements	None.

6 ACKNOWLEDGEMENT DOCUMENT IMPLEMENTATION

The Acknowledgement document (see ENTSO-E Acknowledgement Process Document) shall be used in conjunction with the transmission of all electronic documents defined in the ESS process Information flow diagram as requiring it for application acknowledgement.

When a document is received it will be verified at the application level to ensure that there are no faults in it that could prevent its correct processing.

A document that is valid after this verification which necessitates the generation of an application acknowledgement shall require the transmission of an ENTSO-E Acknowledgement document accepting in its entirety the document in question.

A document that has an error in it which necessitates the generation of an application acknowledgement shall require the transmission of an ENTSO-E Acknowledgement document that completely or partially rejects the document in question.

Note: The Acknowledgement document should be at least from version 4.0. It can be downloaded from the ENTSO-E WG EDI page on the ENTSO-E website (www.entsoe.eu).

7 ANOMALY REPORT IMPLEMENTATION

7.1 INFORMATION MODEL

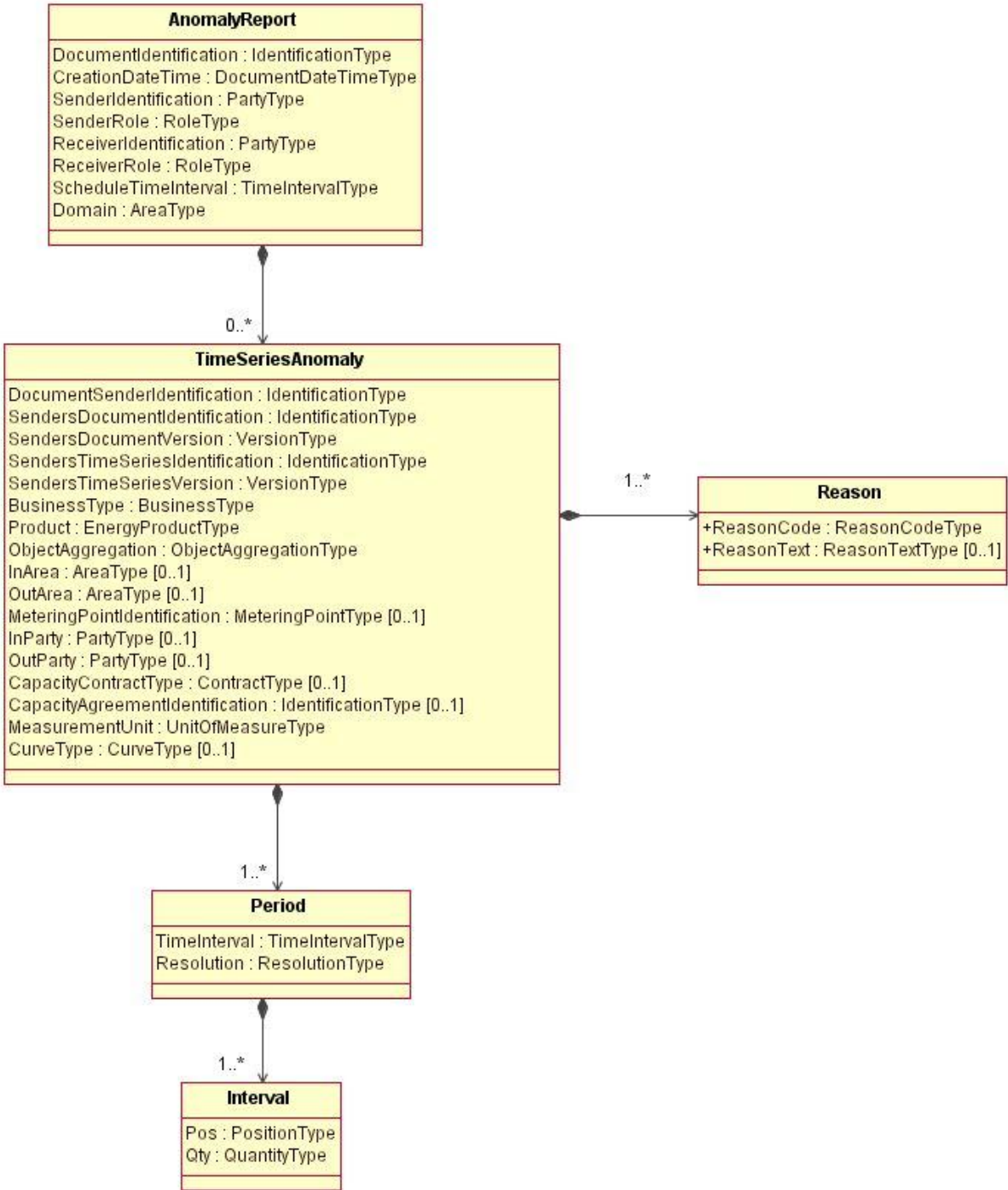


Figure 11: The Anomaly report

7.2 RULES GOVERNING THE ANOMALY REPORT CLASS

An anomaly report is generated as soon as all the information necessary to balance a party's time series becomes available. If there are any anomalies discovered during this phase, an anomaly report is sent to all involved parties. The anomaly contains only the time series that have been identified as being in error for the party in question.

Each party is responsible for ensuring that the problem is satisfactorily resolved prior to the schedule cut-off time. Corrective action by one of the parties requires the retransmission of the offending schedule document with the required corrections. If only one party is in error, that party alone will transmit his corrective schedule document.

7.2.1 DOCUMENT IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	Unique identification of the anomaly report that is sent to involved parties in phase 2 of the schedule process.
Description	An anomaly report is identified by a unique number generated by the sender to serve as the identification of the report in any further communication on the subject.
Size	An anomaly report identification may not exceed 35 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

7.2.2 CREATION DATE TIME

ACTION	DESCRIPTION
Definition of element	Date and time of transmission of the anomaly report.
Description	The date and time that the document was prepared for transmission by the sender.
Size	The date and time must be expressed in UTC as: YYYY-MM-DDTHH:MM:SSZ.
Applicability	This information is mandatory.
Dependence requirements	None.

821 7.2.3 SENDER IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who is sending the anomaly report.
Description	The sender of the document is identified by a unique coded identification. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a sender's identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

822 7.2.4 SENDER ROLE

ACTION	DESCRIPTION
Definition of element	Identification of the role played by the sender.
Description	The sender role, which identifies the role of the sender within the document. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a sender role is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

823 7.2.5 RECEIVER IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who is receiving the anomaly report.
Description	The receiver of the document is identified by a unique coded identification. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a receiver's identification is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

824 7.2.6 RECEIVER ROLE

ACTION	DESCRIPTION
Definition of element	Identification of the role played by the receiver.
Description	The receiver role, which identifies the role of the receiver within the document. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a receiver role is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

825 7.2.7 SCHEDULE TIME INTERVAL

ACTION	DESCRIPTION
Definition of element	The start and end date and time of the schedule period covered by the anomaly report.
Description	This information provides the start and end date and time of the schedule period for which the anomaly report is being generated.
Size	The start and end date and time must be expressed in UTC as follows: YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ.
Applicability	This information is mandatory.
Dependence requirements	None.

826 7.2.8 DOMAIN - CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	The domain covered within the Schedule Document.
Description	The identification of the domain that is covered in the Schedule Document. Refer to specific description in section 3. It is in general the Market Balance Area that is the subject of the schedule plan. Other domains may also be used as required, for example CBT areas. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 18 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

827 7.3 RULES GOVERNING THE REASON CLASS

828 In an anomaly report errors are detailed at the time series level to identify the anomalies that
829 have occurred.

830 The reason codes imply that certain elements are absent or present as detailed in the following
831 table:

Time series level elements	
M	A09
M	A27
M	A28
M	A29

832 **7.3.1 REASON CODE**

ACTION	DESCRIPTION
Definition of element	A code providing the status of the anomaly.
Description	<p>The reason code provides the status of the anomaly. As many reason elements as necessary may be used.</p> <p>Currently the following status's have been identified:</p> <p><u>At the timeseries level</u></p> <p>A09: Time series not matching</p> <p>A27: Cross border capacity exceeded</p> <p>A28: Counterpart time series missing</p> <p>A29: Counterpart time series quantity differences</p> <p>Refer to ENTSO-E code list document for additional possible codes.</p>
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	This information is at the time series level to provide related explanatory information.

833 **7.3.2 REASON TEXT**

ACTION	DESCRIPTION
Definition of element	Textual rejection of an anomaly.
Description	If the code does not provide all the information to clearly identify an error the reason text may be used.
Size	The maximum length of this information is 512 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Used only if the reason code is insufficient to identify an error.

834 **7.4 RULES GOVERNING THE TIME SERIES ANOMALY CLASS**

835 All the time series that are found to be in error for a particular party may be assembled
836 together in the anomaly report for transmission. The assembly of the time series depends on
837 the report's destination. Anomaly reports only concern errors requiring immediate action in
838 order to enable the time series in question to be taken into consideration for the planned
839 schedule. The errors that caused the rejection of the time series may be identified at this level,
840 if required.

841 7.4.1 DOCUMENT SENDER IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The identification of the party whose time series is in anomaly.
Description	A unique identification within the schedule system. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum size of an identification code is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

842 7.4.2 SENDERS DOCUMENT IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	The identification of the document where the time series is in error.
Description	The identification of the schedule document sent by the concerned party containing the time series in error.
Size	The maximum size of this information is 35 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

843 7.4.3 SENDERS DOCUMENT VERSION

ACTION	DESCRIPTION
Definition of element	The identification of the version of the document in question.
Description	The version number of the schedule document containing the time series in error.
Size	The maximum size of a time series version is 3 numeric characters.
Applicability	This information is mandatory.
Dependence requirements	This data element is always associated with the sender's time series identification.

844 The attributes Senders Time Series Identification, Senders Time Series Version,
845 BusinessType, Product, Object Aggregation, In Area, Out Area, Metering point Identification,
846 In Party, Out Party, Capacity Contract Type, Capacity Agreement Identification Measurement
847 Unit and CurveType as well as the corresponding Period and Interval information contain the
848 identical values of the time series in the referenced document.

8 CONFIRMATION REPORT IMPLEMENTATION

8.1 INFORMATION MODEL

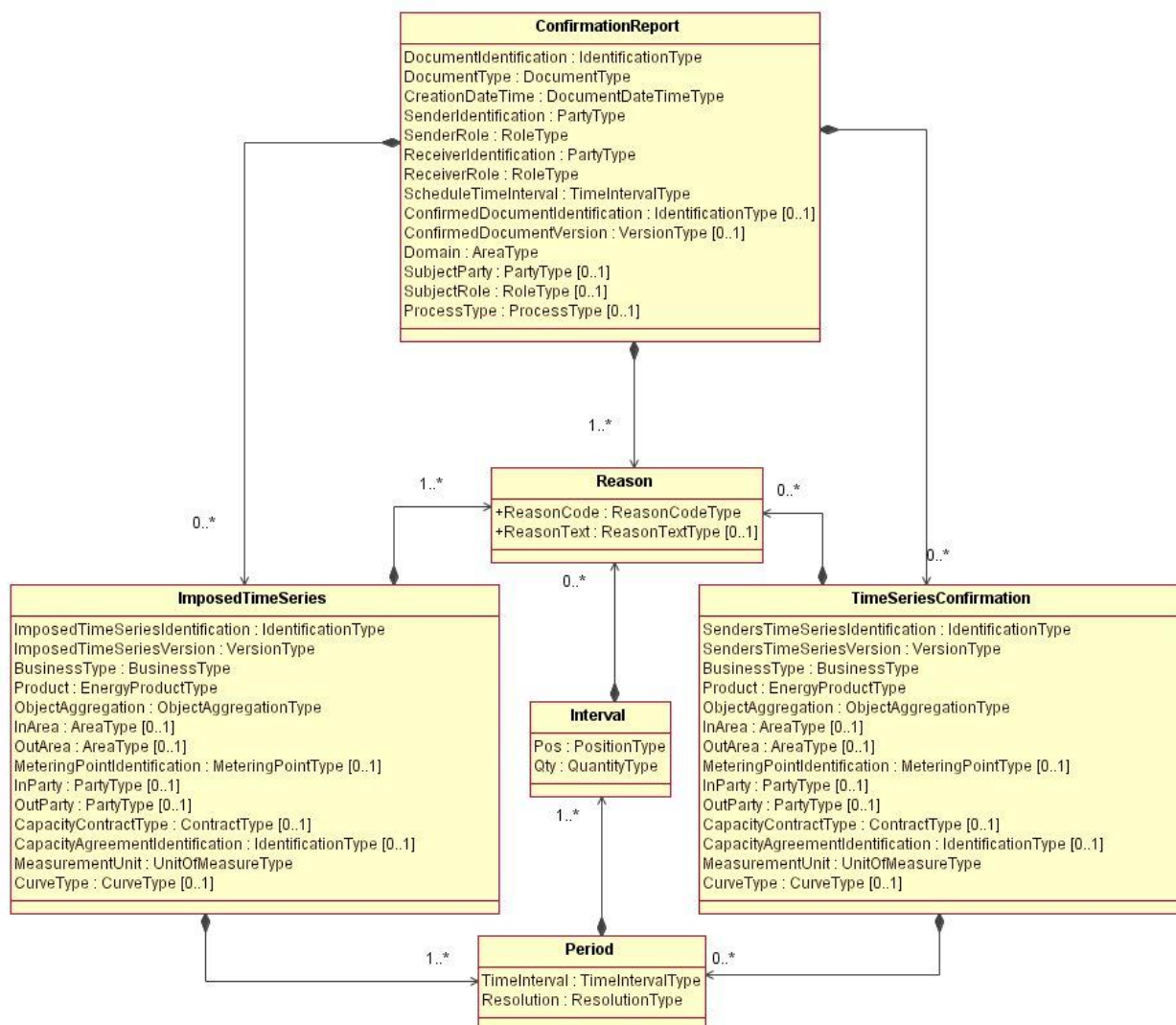


Figure 12: The Confirmation Report

8.2 RULES GOVERNING THE CONFIRMATION REPORT CLASS

A confirmation report is generated once a cut-off time has been reached for the schedule time interval in question. At that point in time the total schedule is balanced and all outstanding discrepancies are noted.

Depending on market rules, apart from a final confirmation report that is produced after cutoff, intermediate confirmation reports may be generated. The cut-off time refers not only to daily or intra daily markets as considered in this guide, but also to the different markets that cover imbalance adjustments, reserve allocation, etc. (ancillary services markets).

The system operator then informs all interested parties of the situation in respect to their schedule.

The confirmation report provides all the time series that have been provided in the schedule document for the schedule time interval in question. It may include one or several time series that the system operator has imposed on the market participant in compliance with market rules.

Their schedule can either be globally confirmed, or in the case of discrepancies, they will be informed of what aspects of their time series have been finally accepted.

A confirmation report may be sent to a market participant who has not sent beforehand a Schedule Document. This may occur for example whenever a time series has to be imposed on a market participant in order to confirm obligations that have been previously agreed and for which the market participant has not complied.

This document terminates the schedule planning process.

8.2.1 DOCUMENT IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	Unique identification of the confirmation report that is sent to all involved parties after phase 3 of the schedule process.
Description	A confirmation report is identified by a unique number generated by the sender to serve as the identification of the report in any further communication on the subject.
Size	A confirmation report identification code may not exceed 35 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

8.2.2 DOCUMENT TYPE

ACTION	DESCRIPTION
Definition of element	The coded type of the document being sent.
Description	The confirmation report document type identifies the information flow characteristics. Refer to ENTSO-E code list document for the valid list of codes.
Size	The confirmation report document type value may not exceed 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

8.2.3 CREATION DATE TIME

ACTION	DESCRIPTION
Definition of element	Date and time of the preparation for transmission of the confirmation report.
Description	The date and time that the document was prepared for transmission by the sender.
Size	The date and time must be expressed in UTC as: YYYY-MM-DDTHH:MM:SSZ.
Applicability	This information is mandatory.
Dependence requirements	None.

878 8.2.4 SENDER IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who is sending the confirmation report.
Description	The sender of the document is identified by a unique coded identification. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a sender's identification code is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

879 8.2.5 SENDER ROLE

ACTION	DESCRIPTION
Definition of element	Identification of the role played by the sender.
Description	The sender role, which identifies the role of the sender within the document. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a sender role is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

880 8.2.6 RECEIVER IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	Identification of the party who is receiving the confirmation report.
Description	The receiver of the document is identified by a unique coded identification. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a receiver's identification code is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

881 8.2.7 RECEIVER ROLE

ACTION	DESCRIPTION
Definition of element	Identification of the role played by the receiver.
Description	The receiver role, which identifies the role of the receiver within the document. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of a receiver role is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

882 8.2.8 SCHEDULE TIME INTERVAL

ACTION	DESCRIPTION
Definition of element	The beginning date and time and the ending date and time of the schedule period covered by the confirmation report.
Description	This information provides the beginning date and time and the ending date and time of the schedule period for which the confirmation report is being generated.
Size	The start and end date and time must respect the format: YYYY-MM-DDTHH:MMZ/YYYY-MM-DDTHH:MMZ. The time must be expressed in UTC.
Applicability	This information is mandatory.
Dependence requirements	None.

883 8.2.9 CONFIRMED DOCUMENT IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	The identification of the document that is being confirmed.
Description	The identification of the document being confirmed that was sent by the party.
Size	The maximum size of this information is 35 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	The confirmed document identification is only provided where the party has submitted a schedule. This is not supplied in cases where there is uniquely an imposed time series due to non-reception from the party of a schedule or in cases where the confirmation report is used to confirm the overall position of all domains for a party.

884 8.2.10 CONFIRMED DOCUMENT VERSION

ACTION	DESCRIPTION
Definition of element	The document version that was taken into consideration.
Description	The version of the document being confirmed.
Size	The maximum size of a time series version is 3 numeric characters.
Applicability	This information is dependent.
Dependence requirements	This data element is always associated with the confirmed document identification.

885 8.2.11 DOMAIN - CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	The domain covered within the document being confirmed.
Description	The identification of the domain that is covered in the document being confirmed. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

886 8.2.12 SUBJECT PARTY – CODINGSCHEME

ACTION	DESCRIPTION
Definition of element	The Party covered within the document being confirmed.
Description	The party that is the subject of the being confirmed. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	The SubjectParty attribute shall be the same as that of the Schedule Document when defined there.

887 8.2.13 SUBJECT ROLE

ACTION	DESCRIPTION
Definition of element	The Role of the Subject Party covered within the document being confirmed.
Description	Where the subject party is described then the SubjectRole must be used to describe the role of the party. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	The Subject Role attribute shall be the same as that of the Schedule Document when defined there.

888 8.2.14 PROCESS TYPE

ACTION	DESCRIPTION
Definition of element	The nature of the process defined in the document being confirmed.
Description	The process type of the document being confirmed. Refer to ENTSO-E code list document for the valid list of codes.
Size	The process type value may not exceed 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Usage is defined by local market rules.

889 8.3 RULES GOVERNING THE REASON CLASS

890 In a confirmation report reason codes can be detailed at three levels (the period class is
891 assimilated with the time series level):

- 892 1. At the header level to identify that all the schedules have been accepted, partially
893 accepted or rejected.
894 2. At the time series level to identify where differences have occurred.
895 3. At the interval level to indicate where quantities have been increased, decreased, or
896 where default quantities have been applied.

Reason code	Document level elements	Time series level elements		Interval level elements
A06	M	M		M
A07	M	M	A20	
		M	A26	
		M	A30 A63	M Blank, A43, A44 or A45
A08	M	M	A20	

897 The time series level and interval level can also be used in the case of imposed time series
898 (used exclusively in the case of reason code A30).

899 8.3.1 REASON CODE

ACTION	DESCRIPTION
Definition of element	A code providing the status of the information.
Description	<p>The reason code provides the status of the differences and confirmation. If the schedule is fully accepted then there is simply a reason code (A06) at the header part of the report. For errors as many reason elements as necessary may be used.</p> <p>Currently the following status's have been identified:</p> <p><u>At the document level:</u> A06: Schedule accepted A07: Schedule partially accepted A08: Schedule rejected</p> <p><u>At the time series level:</u> A20: Time series fully rejected A26: Default time series applied A30: Imposed Time series from nominated party's time series (party identified in reason text)</p>

	A63: Time series modified <u>At the time interval level:</u> A43: Quantity increased A44: Quantity decreased A45: Default quantity applied Refer to ENTSO-E code list document for additional possible codes.
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	This information is used either at the header level to give a general description of the error, at the time series or time interval quantities levels to provide more detailed information.

900 8.3.2 REASON TEXT

ACTION	DESCRIPTION
Definition of element	Textual explanation of an eventual difference.
Description	If the code does not provide all the information to clearly identify a difference the reason text may be used.
Size	The maximum length of this information is 512 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Used only if the reason code is insufficient to identify a difference.

901 8.4 RULES GOVERNING THE TIME SERIES CONFIRMATION CLASS

902 All the time series that have been sent by the concerned party are identified in the
903 confirmation report. If there are discrepancies these are identified with a reason code and
904 eventual text. A time series if being rejected in the confirmation report shall not contain any
905 period information.

906 The attributes Senders Time Series Identification, Senders Time Series Version,
907 BusinessType, Product, Object Aggregation, In Area, Out Area, Metering Point Identification,
908 In Party, Out Party, Capacity Contract Type, Capacity Agreement Identification Measurement
909 Unit and CurveType contain the identical values of the time series in the referenced
910 document.

911 8.5 RULES GOVERNING THE IMPOSED TIME SERIES CLASS

912 A time series may be imposed by the system operator on the market participant in respect to
913 specific market rules. For example, if market rules indicated that in case of mismatch one of
914 the party's time series would automatically be taken and imposed on the other party. Such a
915 condition could occur if a market participant had a document that was rejected due to syntax
916 errors and the document was never retransmit prior to cut-off. An imposed time series cannot
917 be provided if an equivalent time series has already been accepted.

918 Note: If the quantity values of an already accepted time series were changed, it is not an
919 imposed time series but a confirmed time series for instance with reason code A63 (modified
920 time series).

921 8.5.1 IMPOSED TIME SERIES IDENTIFICATION

ACTION	DESCRIPTION
Definition of element	The identification of the imposed time series assigned by the system operator.
Description	The identification of the time series imposed by the system operator on the market participant.
Size	The maximum size of this information is 35 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

922 8.5.2 IMPOSED TIME SERIES VERSION

ACTION	DESCRIPTION
Definition of element	The imposed time series version assigned by the system operator.
Description	The version of the imposed time series. This value s in general should be equal to 1.
Size	The maximum size of an imposed time series version is 3 numeric characters.
Applicability	This information is mandatory.
Dependence requirements	This data element is always associated with the imposed time series identification.

923 8.5.3 BUSINESS TYPE

ACTION	DESCRIPTION
Definition of element	The trading nature of the time series imposed.
Description	The nature of the time series that the system operator is imposing. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of the time series type is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

924 8.5.4 PRODUCT

ACTION	DESCRIPTION
Definition of element	The product of the imposed time series.
Description	This identifies the product for which the system operator is imposing the time series. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 13 numeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

925 8.5.5 OBJECT AGGREGATION

ACTION	DESCRIPTION
Definition of element	The aggregation of the imposed time series.
Description	The aggregation of the time series imposed by the system operator. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of the time series type is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

926 8.5.6 IN AREA – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The in area of the imposed time series.
Description	The identification of the in area of the time series that has been imposed by the system operator with the coding scheme used in the original transmission.
Size	The maximum length of this information is 18 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

927 8.5.7 OUT AREA – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The out area of the imposed time series.
Description	The identification of the out area of the time series that has been imposed by the system operator with the coding scheme used in the original transmission.
Size	The maximum length of this information is 18 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

928 8.5.8 METERING POINT IDENTIFICATION – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The identification of the metering point of the imposed time series.
Description	<p>The identification of the location where one or more products are metered of the time series that has been imposed by the system operator with the coding scheme used and sub-value if it was in the original transmission.</p> <p>The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.</p>
Size	<p>The maximum length of this information is 35 alphanumeric characters. The maximum length of the sub value, if used, is 35 alphanumeric characters.</p> <p>The maximum length of the coding scheme code is 3 alphanumeric characters.</p>
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

929 8.5.9 IN PARTY – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The identification of the in party of the imposed time series.
Description	The identification of the party, which is putting the product into the area, of the time series that has been imposed by the system operator with the coding scheme used in the original transmission.
Size	<p>The maximum length of this information is 16 alphanumeric characters.</p> <p>The maximum length of the coding scheme code is 3 alphanumeric characters.</p> <p>The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.</p>
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

930 8.5.10 OUT PARTY – CODING SCHEME

ACTION	DESCRIPTION
Definition of element	The identification of the out party of the imposed time series.
Description	The identification of the party, which is taking the product out of the area, of the time series that has been imposed by the system operator with the coding scheme used if it was in the original transmission.
Size	The maximum length of this information is 16 alphanumeric characters. The maximum length of the coding scheme code is 3 alphanumeric characters. The codification scheme used for the coded identification is indicated by the coding scheme attribute. It is a 3 character alphanumeric code. Refer to ENTSO-E code list document for the valid list of codes.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

931 8.5.11 CAPACITY CONTRACT TYPE

ACTION	DESCRIPTION
Definition of element	The capacity contract type of the imposed time series.
Description	This information defines the conditions under which the capacity was allocated and handled. It corresponds to the information that has been imposed by the system operator. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

932 8.5.12 CAPACITY AGREEMENT IDENTIFICATION.

ACTION	DESCRIPTION
Definition of element	The capacity agreement identification of the imposed time series in error.
Description	This information identifies the agreement made between the parties for the sale or purchase of capacity. It corresponds to the information that has been imposed by the system operator.
Size	The maximum length of this information is 35 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	Refer to the matrix in 5.2.1 for dependency requirements.

933 8.5.13 MEASUREMENT UNIT

ACTION	DESCRIPTION
Definition of element	The unit of measure that is applied to the quantities in which the imposed time series is expressed.
Description	The unit of measurement used for the quantities expressed within the time series that have been imposed by the system operator. Refer to ENTSO-E code list document for the valid list of codes.
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is mandatory.
Dependence requirements	None.

934 8.5.14 CURVETYPE

ACTION	DESCRIPTION
Definition of element	The coded representation of the type of curve being described.
Description	This represents the coded identification of the curve that is described in the Period and Interval class. Refer to ENTSO-E Core Component Code list document for valid codes.
Size	The maximum length of this information is 3 alphanumeric characters.
Applicability	This information is dependent.
Dependence requirements	The CurveType may be used to provide profile information or reduced time interval content. If the CurveType attribute is not present the CurveType A01 is used by default.

935 8.6 RULES GOVERNING THE PERIOD CLASS

936 The Period class Time Interval and Resolution attributes must be the same as those in the
 937 original document and must be sent in the confirmation report for all the time series that have
 938 been accepted or accepted with modification. In the case of imposed time series the resolution
 939 must be the same as the one for the market participant's time series.

940 8.7 RULES GOVERNING THE INTERVAL CLASS

941 All the interval quantities for the time series that has been accepted or those imposed by the
 942 system operator must be sent in the confirmation report.

943 8.7.1 Pos

ACTION	DESCRIPTION
Definition of element	The relative position of a period within the time interval defined in the Period class.
Description	The position that has been accepted or imposed.
Size	The relative position must be expressed as a numeric integer value beginning with 1. All leading zeros must be suppressed. The maximum number of characters is 6.
Applicability	This information is mandatory.
Dependence requirements	None.

944 8.7.2 QTY

ACTION	DESCRIPTION
Definition of element	The quantity of the product scheduled for the position within the time interval in question.
Description	The quantity that has been accepted or imposed.
Size	The maximum length of this information is 17 numeric characters (decimal point and sign, if used, included). The number of decimal places depends on local market rules.
Applicability	This information is mandatory.
Dependence requirements	None.

9 XML DEFINITIONS

9.1 SCHEDULE DOCUMENT

9.1.1 SCHEDULE DOCUMENT - SCHEMA STRUCTURE

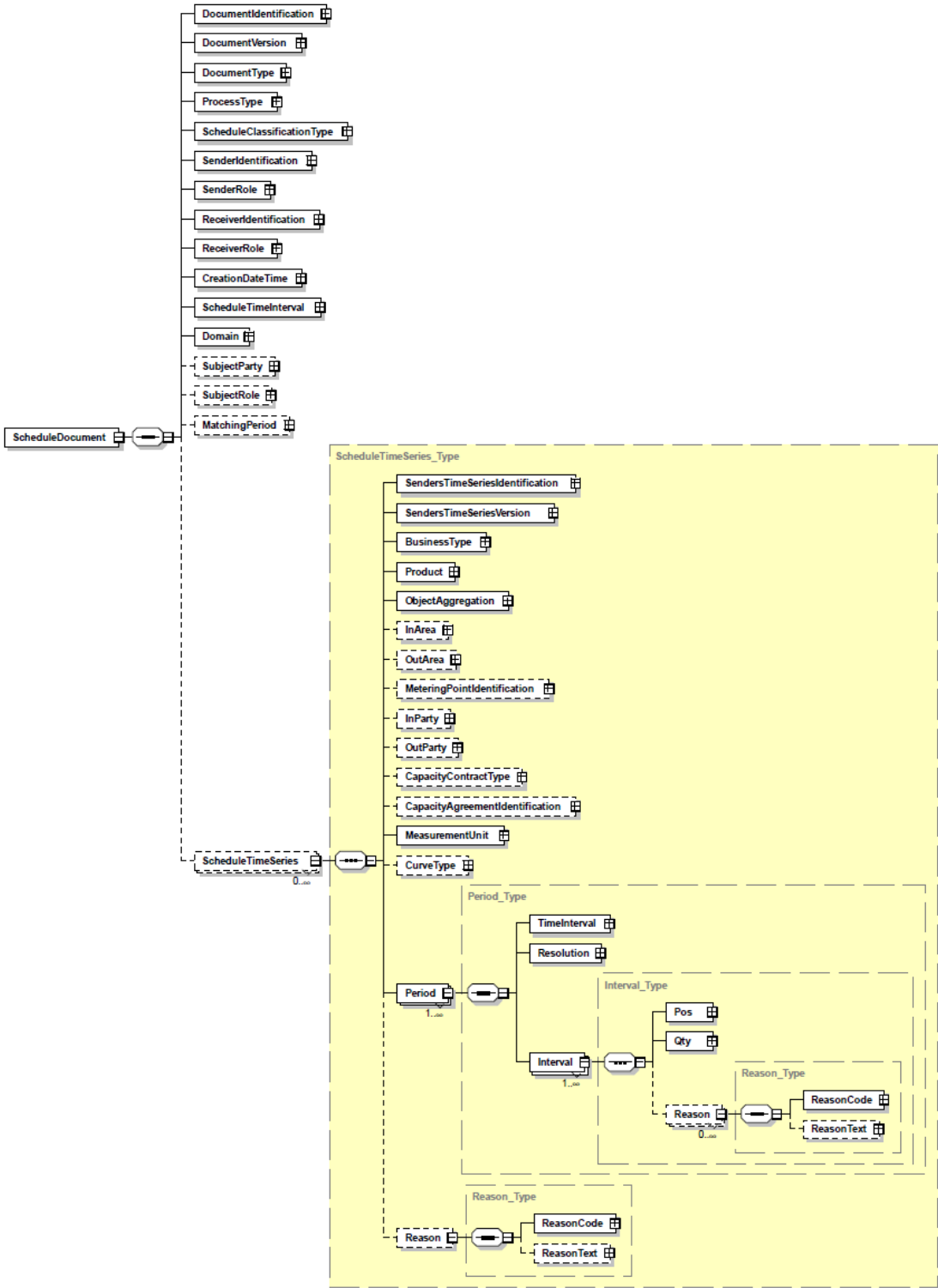


FIGURE 13: SCHEDULE DOCUMENT XML SCHEMA STRUCTURE

9.1.2 SCHEDULE DOCUMENT – SCHEMA DEFINITION

```

<?xml version="1.0" encoding="UTF-8"?>
<xsd:schema xmlns:ecc="urn:entsoe.eu:wgedi:components" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns="urn:entsoe.eu:wgedi:ess:scheduledocument:4:1" targetNamespace="urn:entsoe.eu:wgedi:ess:scheduledocument:4:1"
elementFormDefault="qualified" attributeFormDefault="unqualified" ecc:VersionRelease="18.0">
  <xsd:import namespace="urn:entsoe.eu:wgedi:components" schemaLocation="../../../core/urn-entsoe-eu-wgedi-
components.xsd"/>
  <xsd:include schemaLocation="urn-entsoe-eu-wgedi-ess-scheduledocument-4-1-restricted-codes.xsd"/>
  <!--
    ENTSO-E Document Automatically generated from a UML class diagram using XML.
    Generation tool version 2.0
  -->
  <xsd:element name="ScheduleDocument">
    <xsd:complexType>
      <xsd:annotation>
        <xsd:documentation/>
      </xsd:annotation>
      <xsd:sequence>
        <xsd:element name="DocumentIdentification" type="ecc:IdentificationType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="DocumentVersion" type="ecc:VersionType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="DocumentType" type="DocumentType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="ProcessType" type="ProcessType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="ScheduleClassificationType" type="ecc:ClassificationType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="SenderIdIdentification" type="ecc:PartyType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="SenderRole" type="ecc:RoleType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="ReceiverIdentification" type="ecc:PartyType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="ReceiverRole" type="ecc:RoleType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="CreationDateTime" type="ecc:DocumentDateTimeType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
        <xsd:element name="ScheduleTimeInterval" type="ecc:TimeIntervalType">
          <xsd:annotation>
            <xsd:documentation/>
          </xsd:annotation>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
  </xsd:element>

```

```

1023     <xsd:element name="Domain" type="ecc:AreaType">
1024         <xsd:annotation>
1025             <xsd:documentation/>
1026         </xsd:annotation>
1027     </xsd:element>
1028     <xsd:element name="SubjectParty" type="ecc:PartyType" minOccurs="0">
1029         <xsd:annotation>
1030             <xsd:documentation/>
1031         </xsd:annotation>
1032     </xsd:element>
1033     <xsd:element name="SubjectRole" type="ecc:RoleType" minOccurs="0">
1034         <xsd:annotation>
1035             <xsd:documentation/>
1036         </xsd:annotation>
1037     </xsd:element>
1038     <xsd:element name="MatchingPeriod" type="ecc:TimeIntervalType" minOccurs="0">
1039         <xsd:annotation>
1040             <xsd:documentation/>
1041         </xsd:annotation>
1042     </xsd:element>
1043     <xsd:element name="ScheduleTimeSeries" type="ScheduleTimeSeries_Type" minOccurs="0"
1044 maxOccurs="unbounded"/>
1045 </xsd:sequence>
1046 </xsd:complexType>
1047 </xsd:element>
1048 <xsd:complexType name="ScheduleTimeSeries_Type">
1049     <xsd:annotation>
1050         <xsd:documentation/>
1051     </xsd:annotation>
1052     <xsd:sequence>
1053         <xsd:element name="SendersTimeSeriesIdentification" type="ecc:IdentificationType">
1054             <xsd:annotation>
1055                 <xsd:documentation/>
1056             </xsd:annotation>
1057         </xsd:element>
1058         <xsd:element name="SendersTimeSeriesVersion" type="ecc:VersionType">
1059             <xsd:annotation>
1060                 <xsd:documentation/>
1061             </xsd:annotation>
1062         </xsd:element>
1063         <xsd:element name="BusinessType" type="BusinessType">
1064             <xsd:annotation>
1065                 <xsd:documentation/>
1066             </xsd:annotation>
1067         </xsd:element>
1068         <xsd:element name="Product" type="ecc:EnergyProductType">
1069             <xsd:annotation>
1070                 <xsd:documentation/>
1071             </xsd:annotation>
1072         </xsd:element>
1073         <xsd:element name="ObjectAggregation" type="ObjectAggregationType">
1074             <xsd:annotation>
1075                 <xsd:documentation/>
1076             </xsd:annotation>
1077         </xsd:element>
1078         <xsd:element name="InArea" type="ecc:AreaType" minOccurs="0">
1079             <xsd:annotation>
1080                 <xsd:documentation/>
1081             </xsd:annotation>
1082         </xsd:element>
1083         <xsd:element name="OutArea" type="ecc:AreaType" minOccurs="0">
1084             <xsd:annotation>
1085                 <xsd:documentation/>
1086             </xsd:annotation>
1087         </xsd:element>
1088         <xsd:element name="MeteringPointIdentification" type="ecc:MeteringPointType" minOccurs="0">
1089             <xsd:annotation>
1090                 <xsd:documentation/>
1091             </xsd:annotation>
1092         </xsd:element>
1093         <xsd:element name="InParty" type="ecc:PartyType" minOccurs="0">
1094             <xsd:annotation>
1095                 <xsd:documentation/>
1096             </xsd:annotation>
1097         </xsd:element>

```

```

1098     <xsd:element name="OutParty" type="ecc:PartyType" minOccurs="0">
1099         <xsd:annotation>
1100             <xsd:documentation/>
1101         </xsd:annotation>
1102     </xsd:element>
1103     <xsd:element name="CapacityContractType" type="ecc:ContractType" minOccurs="0">
1104         <xsd:annotation>
1105             <xsd:documentation/>
1106         </xsd:annotation>
1107     </xsd:element>
1108     <xsd:element name="CapacityAgreementIdentification" type="ecc:IdentificationType" minOccurs="0">
1109         <xsd:annotation>
1110             <xsd:documentation/>
1111         </xsd:annotation>
1112     </xsd:element>
1113     <xsd:element name="MeasurementUnit" type="ecc:UnitOfMeasureType">
1114         <xsd:annotation>
1115             <xsd:documentation/>
1116         </xsd:annotation>
1117     </xsd:element>
1118     <xsd:element name="CurveType" type="ecc:CurveType" minOccurs="0">
1119         <xsd:annotation>
1120             <xsd:documentation/>
1121         </xsd:annotation>
1122     </xsd:element>
1123     <xsd:element name="Period" type="Period_Type" maxOccurs="unbounded"/>
1124     <xsd:element name="Reason" type="Reason_Type" minOccurs="0"/>
1125 </xsd:sequence>
1126 </xsd:complexType>
1127 <xsd:complexType name="Period_Type">
1128     <xsd:annotation>
1129         <xsd:documentation/>
1130     </xsd:annotation>
1131 <xsd:sequence>
1132     <xsd:element name="TimeInterval" type="ecc:TimeIntervalType">
1133         <xsd:annotation>
1134             <xsd:documentation/>
1135         </xsd:annotation>
1136     </xsd:element>
1137     <xsd:element name="Resolution" type="ecc:ResolutionType">
1138         <xsd:annotation>
1139             <xsd:documentation/>
1140         </xsd:annotation>
1141     </xsd:element>
1142     <xsd:element name="Interval" type="Interval_Type" maxOccurs="unbounded"/>
1143 </xsd:sequence>
1144 </xsd:complexType>
1145 <xsd:complexType name="Interval_Type">
1146     <xsd:annotation>
1147         <xsd:documentation/>
1148     </xsd:annotation>
1149 <xsd:sequence>
1150     <xsd:element name="Pos" type="ecc:PositionType">
1151         <xsd:annotation>
1152             <xsd:documentation/>
1153         </xsd:annotation>
1154     </xsd:element>
1155     <xsd:element name="Qty" type="ecc:QuantityType">
1156         <xsd:annotation>
1157             <xsd:documentation/>
1158         </xsd:annotation>
1159     </xsd:element>
1160     <xsd:element name="Reason" type="Reason_Type" minOccurs="0" maxOccurs="unbounded"/>
1161 </xsd:sequence>
1162 </xsd:complexType>
1163 <xsd:complexType name="Reason_Type">
1164     <xsd:annotation>
1165         <xsd:documentation/>
1166     </xsd:annotation>
1167 <xsd:sequence>
1168     <xsd:element name="ReasonCode" type="ReasonCodeType">
1169         <xsd:annotation>
1170             <xsd:documentation/>
1171         </xsd:annotation>
1172 </xsd:element>

```

```
1173         <xsd:element name="ReasonText" type="ecc:ReasonTextType" minOccurs="0">
1174             <xsd:annotation>
1175                 <xsd:documentation/>
1176             </xsd:annotation>
1177         </xsd:element>
1178     </xsd:sequence>
1179 </xsd:complexType>
1180 </xsd:schema>
```

1181 9.1.3 SCHEDULE DOCUMENT - DATA INSTANCE

1182 Examples of the Schedule Document may be downloaded from the ENTSO-E website,
1183 <https://www.entsoe.eu/resources/edi-library/> under the ENTSO-E ESS section of the library.

9.2 ANOMALY REPORT

9.2.1 ANOMALY REPORT - SCHEMA STRUCTURE

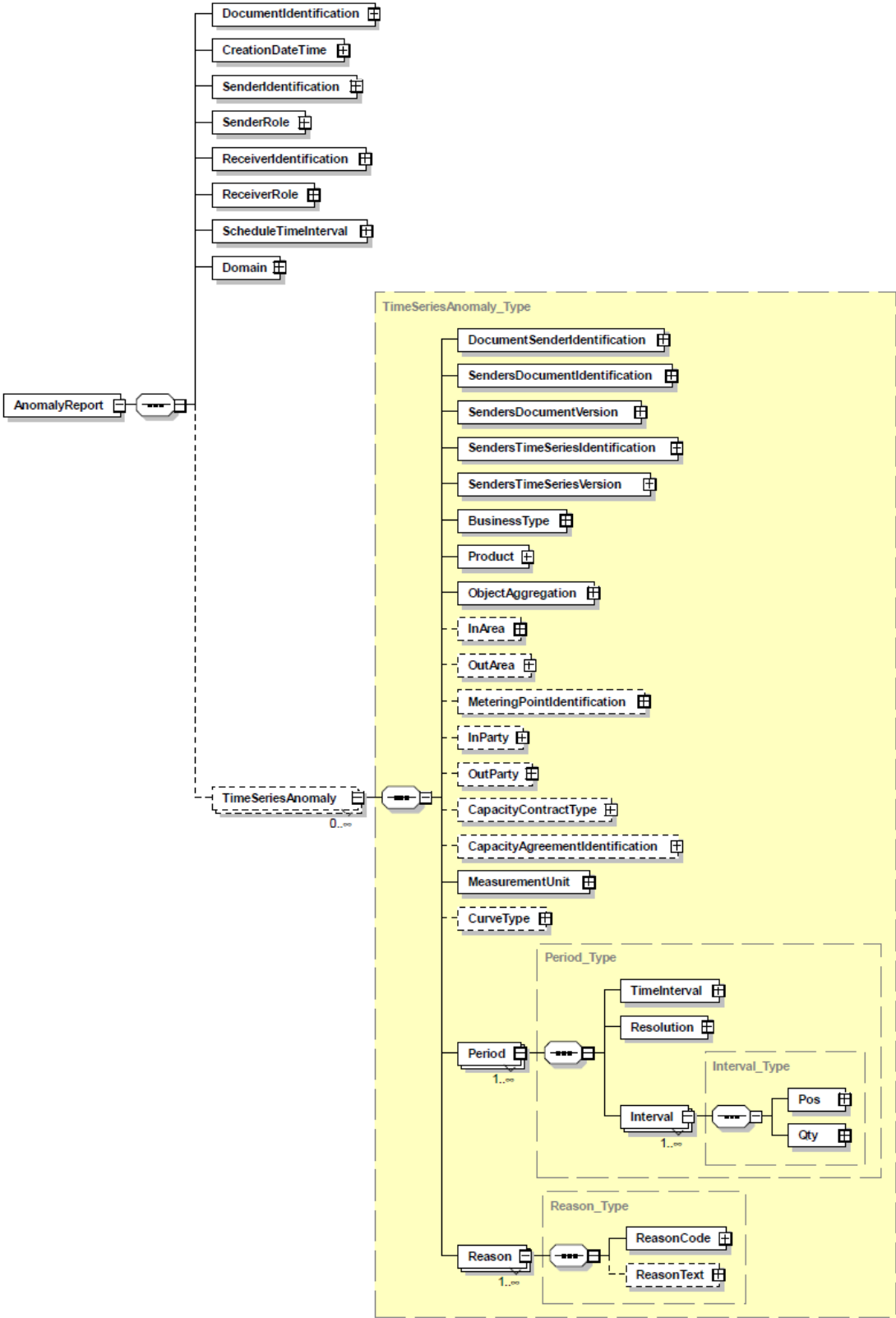


FIGURE 14: ANOMALY REPORT XML SCHEMA STRUCTURE

9.2.2 ANOMALY REPORT – SCHEMA DEFINITION

```

1188
1189 <?xml version="1.0" encoding="UTF-8"?>
1190 <xsd:schema xmlns:ecc="urn:entsoe.eu:wgedi:components" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
1191 xmlns="urn:entsoe.eu:wgedi:ess:anomalyreport:4:1" targetNamespace="urn:entsoe.eu:wgedi:ess:anomalyreport:4:1"
1192 elementFormDefault="qualified" attributeFormDefault="unqualified" ecc:VersionRelease="18.0">
1193   <xsd:import namespace="urn:entsoe.eu:wgedi:components" schemaLocation="../../../core/urn-entsoe-eu-wgedi-
1194 components.xsd"/>
1195   <xsd:include schemaLocation="urn-entsoe-eu-wgedi-ess-anomalyreport-4-1-restricted-codes.xsd"/>
1196   <!--
1197     ENTSO-E Document Automatically generated from a UML class diagram using XML.
1198     Generation tool version 2.0
1199   -->
1200   <xsd:element name="AnomalyReport">
1201     <xsd:complexType>
1202       <xsd:annotation>
1203         <xsd:documentation/>
1204       </xsd:annotation>
1205       <xsd:sequence>
1206         <xsd:element name="DocumentIdentification" type="ecc:IdentificationType">
1207           <xsd:annotation>
1208             <xsd:documentation/>
1209           </xsd:annotation>
1210         </xsd:element>
1211         <xsd:element name="CreationDateTime" type="ecc:DocumentDateTimeType">
1212           <xsd:annotation>
1213             <xsd:documentation/>
1214           </xsd:annotation>
1215         </xsd:element>
1216         <xsd:element name="SenderIdIdentification" type="ecc:PartyType">
1217           <xsd:annotation>
1218             <xsd:documentation/>
1219           </xsd:annotation>
1220         </xsd:element>
1221         <xsd:element name="SenderRole" type="ecc:RoleType">
1222           <xsd:annotation>
1223             <xsd:documentation/>
1224           </xsd:annotation>
1225         </xsd:element>
1226         <xsd:element name="ReceiverIdentification" type="ecc:PartyType">
1227           <xsd:annotation>
1228             <xsd:documentation/>
1229           </xsd:annotation>
1230         </xsd:element>
1231         <xsd:element name="ReceiverRole" type="ecc:RoleType">
1232           <xsd:annotation>
1233             <xsd:documentation/>
1234           </xsd:annotation>
1235         </xsd:element>
1236         <xsd:element name="ScheduleTimeInterval" type="ecc:TimeIntervalType">
1237           <xsd:annotation>
1238             <xsd:documentation/>
1239           </xsd:annotation>
1240         </xsd:element>
1241         <xsd:element name="Domain" type="ecc:AreaType">
1242           <xsd:annotation>
1243             <xsd:documentation/>
1244           </xsd:annotation>
1245         </xsd:element>
1246         <xsd:element name="TimeSeriesAnomaly" type="TimeSeriesAnomaly_Type" minOccurs="0"
1247 maxOccurs="unbounded"/>
1248       </xsd:sequence>
1249     </xsd:complexType>
1250   </xsd:element>
1251   <xsd:complexType name="TimeSeriesAnomaly_Type">
1252     <xsd:annotation>
1253       <xsd:documentation/>
1254     </xsd:annotation>
1255     <xsd:sequence>
1256       <xsd:element name="DocumentSenderIdIdentification" type="ecc:PartyType">
1257         <xsd:annotation>
1258           <xsd:documentation/>
1259         </xsd:annotation>
1260       </xsd:element>

```

```

1261      <xsd:element name="SendersDocumentIdentification" type="ecc:IdentificationType">
1262          <xsd:annotation>
1263              <xsd:documentation/>
1264          </xsd:annotation>
1265      </xsd:element>
1266      <xsd:element name="SendersDocumentVersion" type="ecc:VersionType">
1267          <xsd:annotation>
1268              <xsd:documentation/>
1269          </xsd:annotation>
1270      </xsd:element>
1271      <xsd:element name="SendersTimeSeriesIdentification" type="ecc:IdentificationType">
1272          <xsd:annotation>
1273              <xsd:documentation/>
1274          </xsd:annotation>
1275      </xsd:element>
1276      <xsd:element name="SendersTimeSeriesVersion" type="ecc:VersionType">
1277          <xsd:annotation>
1278              <xsd:documentation/>
1279          </xsd:annotation>
1280      </xsd:element>
1281      <xsd:element name="BusinessType" type="ecc:BusinessType">
1282          <xsd:annotation>
1283              <xsd:documentation/>
1284          </xsd:annotation>
1285      </xsd:element>
1286      <xsd:element name="Product" type="ecc:EnergyProductType">
1287          <xsd:annotation>
1288              <xsd:documentation/>
1289          </xsd:annotation>
1290      </xsd:element>
1291      <xsd:element name="ObjectAggregation" type="ecc:ObjectAggregationType">
1292          <xsd:annotation>
1293              <xsd:documentation/>
1294          </xsd:annotation>
1295      </xsd:element>
1296      <xsd:element name="InArea" type="ecc:AreaType" minOccurs="0">
1297          <xsd:annotation>
1298              <xsd:documentation/>
1299          </xsd:annotation>
1300      </xsd:element>
1301      <xsd:element name="OutArea" type="ecc:AreaType" minOccurs="0">
1302          <xsd:annotation>
1303              <xsd:documentation/>
1304          </xsd:annotation>
1305      </xsd:element>
1306      <xsd:element name="MeteringPointIdentification" type="ecc:MeteringPointType" minOccurs="0">
1307          <xsd:annotation>
1308              <xsd:documentation/>
1309          </xsd:annotation>
1310      </xsd:element>
1311      <xsd:element name="InParty" type="ecc:PartyType" minOccurs="0">
1312          <xsd:annotation>
1313              <xsd:documentation/>
1314          </xsd:annotation>
1315      </xsd:element>
1316      <xsd:element name="OutParty" type="ecc:PartyType" minOccurs="0">
1317          <xsd:annotation>
1318              <xsd:documentation/>
1319          </xsd:annotation>
1320      </xsd:element>
1321      <xsd:element name="CapacityContractType" type="ecc:ContractType" minOccurs="0">
1322          <xsd:annotation>
1323              <xsd:documentation/>
1324          </xsd:annotation>
1325      </xsd:element>
1326      <xsd:element name="CapacityAgreementIdentification" type="ecc:IdentificationType" minOccurs="0">
1327          <xsd:annotation>
1328              <xsd:documentation/>
1329          </xsd:annotation>
1330      </xsd:element>
1331      <xsd:element name="MeasurementUnit" type="ecc:UnitOfMeasureType">
1332          <xsd:annotation>
1333              <xsd:documentation/>
1334          </xsd:annotation>
1335      </xsd:element>

```

```

1336         <xsd:element name="CurveType" type="ecc:CurveType" minOccurs="0">
1337             <xsd:annotation>
1338                 <xsd:documentation/>
1339             </xsd:annotation>
1340         </xsd:element>
1341         <xsd:element name="Period" type="Period_Type" maxOccurs="unbounded"/>
1342         <xsd:element name="Reason" type="Reason_Type" maxOccurs="unbounded"/>
1343     </xsd:sequence>
1344 </xsd:complexType>
1345 <xsd:complexType name="Period_Type">
1346     <xsd:annotation>
1347         <xsd:documentation/>
1348     </xsd:annotation>
1349     <xsd:sequence>
1350         <xsd:element name="TimeInterval" type="ecc:TimeIntervalType">
1351             <xsd:annotation>
1352                 <xsd:documentation/>
1353             </xsd:annotation>
1354         </xsd:element>
1355         <xsd:element name="Resolution" type="ecc:ResolutionType">
1356             <xsd:annotation>
1357                 <xsd:documentation/>
1358             </xsd:annotation>
1359         </xsd:element>
1360         <xsd:element name="Interval" type="Interval_Type" maxOccurs="unbounded"/>
1361     </xsd:sequence>
1362 </xsd:complexType>
1363 <xsd:complexType name="Interval_Type">
1364     <xsd:annotation>
1365         <xsd:documentation/>
1366     </xsd:annotation>
1367     <xsd:sequence>
1368         <xsd:element name="Pos" type="ecc:PositionType">
1369             <xsd:annotation>
1370                 <xsd:documentation/>
1371             </xsd:annotation>
1372         </xsd:element>
1373         <xsd:element name="Qty" type="ecc:QuantityType">
1374             <xsd:annotation>
1375                 <xsd:documentation/>
1376             </xsd:annotation>
1377         </xsd:element>
1378     </xsd:sequence>
1379 </xsd:complexType>
1380 <xsd:complexType name="Reason_Type">
1381     <xsd:annotation>
1382         <xsd:documentation/>
1383     </xsd:annotation>
1384     <xsd:sequence>
1385         <xsd:element name="ReasonCode" type="ecc:ReasonCodeType">
1386             <xsd:annotation>
1387                 <xsd:documentation/>
1388             </xsd:annotation>
1389         </xsd:element>
1390         <xsd:element name="ReasonText" type="ecc:ReasonTextType" minOccurs="0">
1391             <xsd:annotation>
1392                 <xsd:documentation/>
1393             </xsd:annotation>
1394         </xsd:element>
1395     </xsd:sequence>
1396 </xsd:complexType>
1397 </xsd:schema>

```

9.2.3 ANOMALY REPORT - DATA INSTANCE

Examples of the Anomaly Report may be downloaded from the ENTSO-E website, <https://www.entsoe.eu/resources/edi-library/> under the ENTSO-E ESS section of the library.

9.3 CONFIRMATION REPORT

9.3.1 CONFIRMATION REPORT - SCHEMA STRUCTURE



FIGURE 15: CONFIRMATION REPORT XML SCHEMA STRUCTURE HEADER

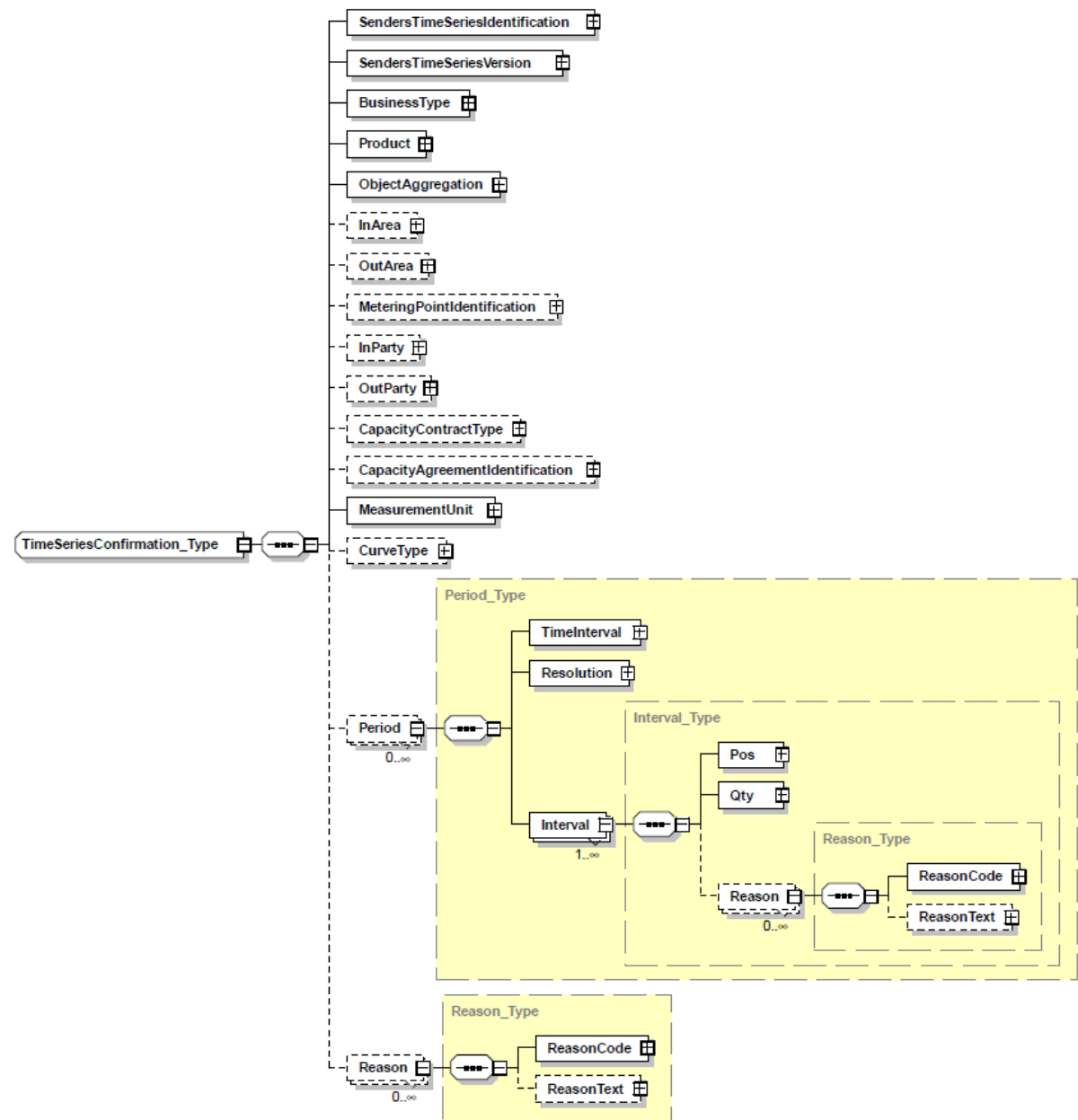


FIGURE 16: CONFIRMATION REPORT XML SCHEMA STRUCTURE CONFIRMED TS

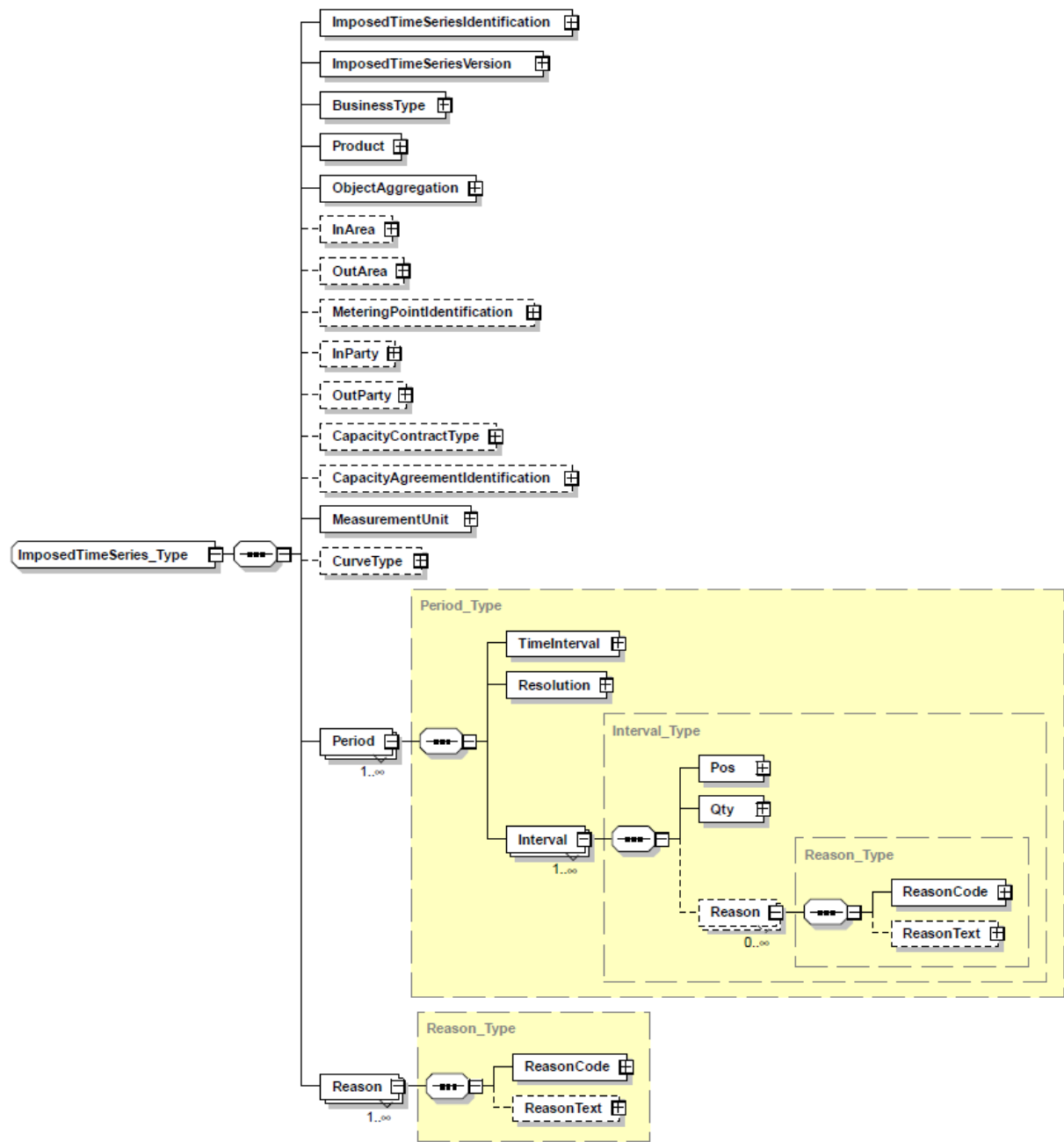


FIGURE 17: CONFIRMATION REPORT XML SCHEMA STRUCTURE IMPOSED TS

9.3.2 CONFIRMATION REPORT – SCHEMA DEFINITION

```

1409
1410
1411 <?xml version="1.0" encoding="UTF-8"?>
1412 <xsd:schema xmlns:ecc="urn:entsoe.eu:wgedi:components" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
1413 xmlns="urn:entsoe.eu:wgedi:ess:confirmationreport:4:1" targetNamespace="urn:entsoe.eu:wgedi:ess:confirmationreport:4:1"
1414 elementFormDefault="qualified" attributeFormDefault="unqualified" ecc:VersionRelease="15.0">
1415   <xsd:import namespace="urn:entsoe.eu:wgedi:components" schemaLocation="../../core/urn-entsoe-eu-wgedi-
1416 components.xsd"/>
1417   <xsd:include schemaLocation="urn-entsoe-eu-wgedi-ess-confirmationreport-4-1-restricted-codes.xsd"/>
1418   <!--
1419     ENTSO-E Document Automatically generated from a UML class diagram using XML.
1420     Generation tool version 2.0
1421   -->
1422   <xsd:element name="ConfirmationReport">
1423     <xsd:complexType>
1424       <xsd:annotation>
1425         <xsd:documentation/>
1426       </xsd:annotation>
1427       <xsd:sequence>
1428         <xsd:element name="DocumentIdentification" type="ecc:IdentificationType">
1429           <xsd:annotation>
1430             <xsd:documentation/>
1431           </xsd:annotation>
1432         </xsd:element>
1433         <xsd:element name="DocumentType" type="ecc:DocumentType">
1434           <xsd:annotation>
1435             <xsd:documentation/>
1436           </xsd:annotation>
1437         </xsd:element>
1438         <xsd:element name="CreationDateTime" type="ecc:DocumentDateTimeType">
1439           <xsd:annotation>
1440             <xsd:documentation/>
1441           </xsd:annotation>
1442         </xsd:element>
1443         <xsd:element name="SenderIdentification" type="ecc:PartyType">
1444           <xsd:annotation>
1445             <xsd:documentation/>
1446           </xsd:annotation>
1447         </xsd:element>
1448         <xsd:element name="SenderRole" type="ecc:RoleType">
1449           <xsd:annotation>
1450             <xsd:documentation/>
1451           </xsd:annotation>
1452         </xsd:element>
1453         <xsd:element name="ReceiverIdentification" type="ecc:PartyType">
1454           <xsd:annotation>
1455             <xsd:documentation/>
1456           </xsd:annotation>
1457         </xsd:element>
1458         <xsd:element name="ReceiverRole" type="ecc:RoleType">
1459           <xsd:annotation>
1460             <xsd:documentation/>
1461           </xsd:annotation>
1462         </xsd:element>
1463         <xsd:element name="ScheduleTimeInterval" type="ecc:TimeIntervalType">
1464           <xsd:annotation>
1465             <xsd:documentation/>
1466           </xsd:annotation>
1467         </xsd:element>
1468         <xsd:element name="ConfirmedDocumentIdentification" type="ecc:IdentificationType" minOccurs="0">
1469           <xsd:annotation>
1470             <xsd:documentation/>
1471           </xsd:annotation>
1472         </xsd:element>
1473         <xsd:element name="ConfirmedDocumentVersion" type="ecc:VersionType" minOccurs="0">
1474           <xsd:annotation>
1475             <xsd:documentation/>
1476           </xsd:annotation>
1477         </xsd:element>
1478         <xsd:element name="Domain" type="ecc:AreaType">
1479           <xsd:annotation>
1480             <xsd:documentation/>
1481           </xsd:annotation>

```



```

1482     </xsd:element>
1483     <xsd:element name="SubjectParty" type="ecc:PartyType" minOccurs="0">
1484         <xsd:annotation>
1485             <xsd:documentation/>
1486         </xsd:annotation>
1487     </xsd:element>
1488     <xsd:element name="SubjectRole" type="ecc:RoleType" minOccurs="0">
1489         <xsd:annotation>
1490             <xsd:documentation/>
1491         </xsd:annotation>
1492     </xsd:element>
1493     <xsd:element name="ProcessType" type="ecc:ProcessType" minOccurs="0">
1494         <xsd:annotation>
1495             <xsd:documentation/>
1496         </xsd:annotation>
1497     </xsd:element>
1498     <xsd:element name="Reason" type="Reason_Type" maxOccurs="unbounded"/>
1499     <xsd:element name="ImposedTimeSeries" type="ImposedTimeSeries_Type" minOccurs="0"
1500 maxOccurs="unbounded"/>
1501     <xsd:element name="TimeSeriesConfirmation" type="TimeSeriesConfirmation_Type" minOccurs="0"
1502 maxOccurs="unbounded"/>
1503     </xsd:sequence>
1504 </xsd:complexType>
1505 </xsd:element>
1506 <xsd:complexType name="TimeSeriesConfirmation_Type">
1507     <xsd:annotation>
1508         <xsd:documentation/>
1509     </xsd:annotation>
1510     <xsd:sequence>
1511         <xsd:element name="SendersTimeSeriesIdentification" type="ecc:IdentificationType">
1512             <xsd:annotation>
1513                 <xsd:documentation/>
1514             </xsd:annotation>
1515         </xsd:element>
1516         <xsd:element name="SendersTimeSeriesVersion" type="ecc:VersionType">
1517             <xsd:annotation>
1518                 <xsd:documentation/>
1519             </xsd:annotation>
1520         </xsd:element>
1521         <xsd:element name="BusinessType" type="ecc:BusinessType">
1522             <xsd:annotation>
1523                 <xsd:documentation/>
1524             </xsd:annotation>
1525         </xsd:element>
1526         <xsd:element name="Product" type="ecc:EnergyProductType">
1527             <xsd:annotation>
1528                 <xsd:documentation/>
1529             </xsd:annotation>
1530         </xsd:element>
1531         <xsd:element name="ObjectAggregation" type="ecc:ObjectAggregationType">
1532             <xsd:annotation>
1533                 <xsd:documentation/>
1534             </xsd:annotation>
1535         </xsd:element>
1536         <xsd:element name="InArea" type="ecc:AreaType" minOccurs="0">
1537             <xsd:annotation>
1538                 <xsd:documentation/>
1539             </xsd:annotation>
1540         </xsd:element>
1541         <xsd:element name="OutArea" type="ecc:AreaType" minOccurs="0">
1542             <xsd:annotation>
1543                 <xsd:documentation/>
1544             </xsd:annotation>
1545         </xsd:element>
1546         <xsd:element name="MeteringPointIdentification" type="ecc:MeteringPointType" minOccurs="0">
1547             <xsd:annotation>
1548                 <xsd:documentation/>
1549             </xsd:annotation>
1550         </xsd:element>
1551         <xsd:element name="InParty" type="ecc:PartyType" minOccurs="0">
1552             <xsd:annotation>
1553                 <xsd:documentation/>
1554             </xsd:annotation>
1555         </xsd:element>
1556         <xsd:element name="OutParty" type="ecc:PartyType" minOccurs="0">

```

```

1557         <xsd:annotation>
1558             <xsd:documentation/>
1559         </xsd:annotation>
1560     </xsd:element>
1561     <xsd:element name="CapacityContractType" type="ecc:ContractType" minOccurs="0">
1562         <xsd:annotation>
1563             <xsd:documentation/>
1564         </xsd:annotation>
1565     </xsd:element>
1566     <xsd:element name="CapacityAgreementIdentification" type="ecc:IdentificationType" minOccurs="0">
1567         <xsd:annotation>
1568             <xsd:documentation/>
1569         </xsd:annotation>
1570     </xsd:element>
1571     <xsd:element name="MeasurementUnit" type="ecc:UnitOfMeasureType">
1572         <xsd:annotation>
1573             <xsd:documentation/>
1574         </xsd:annotation>
1575     </xsd:element>
1576     <xsd:element name="CurveType" type="ecc:CurveType" minOccurs="0">
1577         <xsd:annotation>
1578             <xsd:documentation/>
1579         </xsd:annotation>
1580     </xsd:element>
1581     <xsd:element name="Period" type="Period_Type" minOccurs="0" maxOccurs="unbounded"/>
1582     <xsd:element name="Reason" type="Reason_Type" minOccurs="0" maxOccurs="unbounded"/>
1583 </xsd:sequence>
1584 </xsd:complexType>
1585 <xsd:complexType name="Period_Type">
1586     <xsd:annotation>
1587         <xsd:documentation/>
1588     </xsd:annotation>
1589     <xsd:sequence>
1590         <xsd:element name="TimeInterval" type="ecc:TimeIntervalType">
1591             <xsd:annotation>
1592                 <xsd:documentation/>
1593             </xsd:annotation>
1594         </xsd:element>
1595         <xsd:element name="Resolution" type="ecc:ResolutionType">
1596             <xsd:annotation>
1597                 <xsd:documentation/>
1598             </xsd:annotation>
1599         </xsd:element>
1600         <xsd:element name="Interval" type="Interval_Type" maxOccurs="unbounded"/>
1601     </xsd:sequence>
1602 </xsd:complexType>
1603 <xsd:complexType name="Interval_Type">
1604     <xsd:annotation>
1605         <xsd:documentation/>
1606     </xsd:annotation>
1607     <xsd:sequence>
1608         <xsd:element name="Pos" type="ecc:PositionType">
1609             <xsd:annotation>
1610                 <xsd:documentation/>
1611             </xsd:annotation>
1612         </xsd:element>
1613         <xsd:element name="Qty" type="ecc:QuantityType">
1614             <xsd:annotation>
1615                 <xsd:documentation/>
1616             </xsd:annotation>
1617         </xsd:element>
1618         <xsd:element name="Reason" type="Reason_Type" minOccurs="0" maxOccurs="unbounded"/>
1619     </xsd:sequence>
1620 </xsd:complexType>
1621 <xsd:complexType name="Reason_Type">
1622     <xsd:annotation>
1623         <xsd:documentation/>
1624     </xsd:annotation>
1625     <xsd:sequence>
1626         <xsd:element name="ReasonCode" type="ecc:ReasonCodeType">
1627             <xsd:annotation>
1628                 <xsd:documentation/>
1629             </xsd:annotation>
1630         </xsd:element>
1631         <xsd:element name="ReasonText" type="ecc:ReasonTextType" minOccurs="0">

```

```

1632         <xsd:annotation>
1633             <xsd:documentation/>
1634         </xsd:annotation>
1635     </xsd:element>
1636 </xsd:sequence>
1637 </xsd:complexType>
1638 <xsd:complexType name="ImposedTimeSeries_Type">
1639     <xsd:annotation>
1640         <xsd:documentation/>
1641     </xsd:annotation>
1642     <xsd:sequence>
1643         <xsd:element name="ImposedTimeSeriesIdentification" type="ecc:IdentificationType">
1644             <xsd:annotation>
1645                 <xsd:documentation/>
1646             </xsd:annotation>
1647         </xsd:element>
1648         <xsd:element name="ImposedTimeSeriesVersion" type="ecc:VersionType">
1649             <xsd:annotation>
1650                 <xsd:documentation/>
1651             </xsd:annotation>
1652         </xsd:element>
1653         <xsd:element name="BusinessType" type="ecc:BusinessType">
1654             <xsd:annotation>
1655                 <xsd:documentation/>
1656             </xsd:annotation>
1657         </xsd:element>
1658         <xsd:element name="Product" type="ecc:EnergyProductType">
1659             <xsd:annotation>
1660                 <xsd:documentation/>
1661             </xsd:annotation>
1662         </xsd:element>
1663         <xsd:element name="ObjectAggregation" type="ecc:ObjectAggregationType">
1664             <xsd:annotation>
1665                 <xsd:documentation/>
1666             </xsd:annotation>
1667         </xsd:element>
1668         <xsd:element name="InArea" type="ecc:AreaType" minOccurs="0">
1669             <xsd:annotation>
1670                 <xsd:documentation/>
1671             </xsd:annotation>
1672         </xsd:element>
1673         <xsd:element name="OutArea" type="ecc:AreaType" minOccurs="0">
1674             <xsd:annotation>
1675                 <xsd:documentation/>
1676             </xsd:annotation>
1677         </xsd:element>
1678         <xsd:element name="MeteringPointIdentification" type="ecc:MeteringPointType" minOccurs="0">
1679             <xsd:annotation>
1680                 <xsd:documentation/>
1681             </xsd:annotation>
1682         </xsd:element>
1683         <xsd:element name="InParty" type="ecc:PartyType" minOccurs="0">
1684             <xsd:annotation>
1685                 <xsd:documentation/>
1686             </xsd:annotation>
1687         </xsd:element>
1688         <xsd:element name="OutParty" type="ecc:PartyType" minOccurs="0">
1689             <xsd:annotation>
1690                 <xsd:documentation/>
1691             </xsd:annotation>
1692         </xsd:element>
1693         <xsd:element name="CapacityContractType" type="ecc:ContractType" minOccurs="0">
1694             <xsd:annotation>
1695                 <xsd:documentation/>
1696             </xsd:annotation>
1697         </xsd:element>
1698         <xsd:element name="CapacityAgreementIdentification" type="ecc:IdentificationType" minOccurs="0">
1699             <xsd:annotation>
1700                 <xsd:documentation/>
1701             </xsd:annotation>
1702         </xsd:element>
1703         <xsd:element name="MeasurementUnit" type="ecc:UnitOfMeasureType">
1704             <xsd:annotation>
1705                 <xsd:documentation/>
1706             </xsd:annotation>

```

```

1707         </xsd:element>
1708         <xsd:element name="CurveType" type="ecc:CurveType" minOccurs="0">
1709             <xsd:annotation>
1710                 <xsd:documentation/>
1711             </xsd:annotation>
1712         </xsd:element>
1713         <xsd:element name="Period" type="Period_Type" maxOccurs="unbounded"/>
1714         <xsd:element name="Reason" type="Reason_Type" maxOccurs="unbounded"/>
1715     </xsd:sequence>
1716 </xsd:complexType>
1717 </xsd:schema>
1718

```

9.3.3 CONFIRMATION REPORT - DATA INSTANCE

Examples of the Confirmation Report may be downloaded from the ENTSO-E website,
<https://www.entsoe.eu/resources/edi-library/> under the ENTSO-E ESS section of the library.

10 COMMUNICATIONS INFORMATION

10.1 TEST INDICATION (DIFFERENTIATION BETWEEN LIVE AND TEST TRANSMISSIONS)

Test indication information has not been built into the documents. The recommended method for testing is to obtain a separate communications address in order to ensure that testing is carried out in a specific test environment.

10.2 TRANSMISSION REQUIREMENTS

Schedule Document interchanges between market parties and a TSO will be determined by the TSO depending on its communications infrastructure.

10.3 IDENTIFICATION OF THE ESS SCHEMA IN AN XML DOCUMENT

This document respects the namespace naming conventions defined in the ENTSO-E XML Namespace Reference Document

1735 **11 ANNEX: EXAMPLES “EVOLUTION OF THE SAME CURRENT POSITION WITH DIFFERENT PROCESS TYPES”**1736 **11.1 A17 – SCHEDULE DAY**

	Values included in the TimeInterval but not in the MatchingPeriod
	Values included in the TimeInterval and in the MatchingPeriod

Publication	ProcessType	DocumentId	Version	1	2	3	4	...	20	21	22	23	24
ScheduleDay 1	A17	DocId001	1	100	200	300	400	...	100	110	120	130	140
Current position				100	200	300	400	...	100	110	120	130	140
ScheduleDay 2	A17	DocId001	2	100	205	305	405	...	105	115	125	135	145
Current position				100	205	305	405	...	105	115	125	135	145
ScheduleDay 3	A17	DocId001	3	100	205	310	410	...	115	125	135	145	155
Current position				100	205	310	410	...	115	125	135	145	155
...													
ScheduleDay 24	A17	DocId001	24	100	205	310	410	...	115	125	135	145	225
Current position				100	205	310	410	...	115	125	135	145	225

numbers represent the values exchanged in the schedule document

Evolution of current position is also shown

1738

11.2 A02 – INTRADAY

	Values included in the TimeInterval but not in the MatchingPeriod
	Values included in the TimeInterval and in the MatchingPeriod

Publication	ProcessType	DocumentId	Version	1	2	3	4	...	20	21	22	23	24
Day Ahead	A01	DocId001	1	100	200	300	400	...	100	110	120	130	140
Current position				100	200	300	400	...	100	110	120	130	140
Intraday 1	A02	DocId002	1		5	5	5	...	5	5	5	5	5
Current position				100	205	305	405	...	105	115	125	135	145
Intraday 2	A02	DocId003	1			5	5	...	10	10	10	10	10
Current position				100	205	310	410	...	115	125	135	145	155
...													
Intraday 24	A02	DocId024	1										70
Current position				100	205	310	410	...	115	125	135	145	225

numbers represent the values exchanged in the schedule document

Evolution of current position is also shown

The number of intradays may be less than 24

1739

1740

11.3 A18 – INTRADAY “TOTAL”

Values included in the TimeInterval but not in the MatchingPeriod

Values included in the TimeInterval and in the MatchingPeriod

Publication	ProcessType	DocumentId	Version	1	2	3	4	...	20	21	22	23	24
Day Ahead	A01	DocId001	1	100	200	300	400	...	100	110	120	130	140
Current position				100	200	300	400	...	100	110	120	130	140
Intraday 1	A18	DocId002	1	100	205	305	405	...	105	115	125	135	145
Current position				100	205	305	405	...	105	115	125	135	145
Intraday 2	A18	DocId003	1	100	205	310	410	...	115	125	135	145	155
Current position				100	205	310	410	...	115	125	135	145	155
...													
Intraday 24	A18	DocId024	1	100	205	310	410	...	115	125	135	145	225
Current position				100	205	310	410	...	115	125	135	145	225

numbers represent the values exchanged in the schedule document

Evolution of current position is also shown

The number of intradays may be less than 24

1741

1742

11.3.1 A19 – INTRADAY “ACCUMULATED”

Values included in the TimeInterval but not in the MatchingPeriod

Values included in the TimeInterval and in the MatchingPeriod

Publication	ProcessType	DocumentId	Version	1	2	3	4	...	20	21	22	23	24
Day Ahead	A01	DocId001	1	100	200	300	400	...	100	110	120	130	140
Current position				100	200	300	400	...	100	110	120	130	140
Intraday 1	A19	DocId002	1	0	5	5	5	...	5	5	5	5	5
Current position				100	205	305	405	...	105	115	125	135	145
Intraday 2	A19	DocId002	2	0	5	10	10	...	15	15	15	15	15
Current position				100	205	310	410	...	115	125	135	145	155
...													
Intraday 24	A19	DocId002	23	0	5	10	10	...	15	15	15	15	85
Current position				100	205	310	410	...	115	125	135	145	225

numbers represent the values exchanged in the schedule document

Evolution of current position is also shown

The number of intradays may be less than 24

1743