

for Electricity

ENTSO-E codelists

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113 1 Introduction

- 114 This document contains the description of the all the codes that may be used in the ENTSO-E
- 115 XML instances based either on the ENTSO-E core components or on the IEC 62325-351 core
- 116 components (CIM, common information model).
- 117 In order to know which codes are to be used in an electronic data interchange, reference to
- the appropriate ENTSO-E implementation guide is to be made or to the specific bilateral
- 119 agreement.

120 2 ENTSO-E codelist Current version 52 Release Date: 2017-11-08

121 2.1 AllocationModeType enumeration

- 122 The identification of the method of allocation in an auction.
- 123 Table 1 provides details of the Codelist AllocationModeType.

124 Table 1 - Codelist AllocationModeType

Code	Title	Description
	Order by price with pro rata	The allocation method is by price with eventual pro rata.
	Order by price with first come - first served	The allocation method is by price with eventual use of first come first served.
	First come - First served	The allocation method is first come first served.
A04	Pro rata	The allocation method is pro rata.
A 05	Continuous	The allocation method is continuous, i.e. there is no gate closure time when bids from the market participants are collected. Instead allocation procedure takes place immediately.

126 2.2 AnalogType enumeration

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- 127 The identification of an analog value.
- 128 Table 2 provides details of the Codelist AnalogType.

Table 2 - Codelist AnalogType

Code	Title	Description
A 0 1		This is the computed flow for the monitored element in the constraint situation ("N situation", "N-1 situation") after the capacity calculation. The flow is expressed in A, %, or MW.
	transmission limit	The permanent load of transmission system elements which is allowed for an unlimited period and which does not cause physical damage to the transmission system elements as long as the defined threshold is respected.
A03	, , ,	This is the flow reliability margin for a given critical network element. The amount of MW or A that is reserved for this critical network element and shall not be used for the computed outage situation, in order to secure the power network.
		This is the margin that is taken into account when spanning (fall-back process) is applied. Spanning marginal value is an historical based parameter which specifies the amount of MW that reduces the RAM when spanning is applied.
	Long term allocation margin	This is the amount of MW that is added to the capacity of the critical network element in order to automatically include the long term allocation domain into the flow based domain.



Code	Title	Description
	, and the second	This is the margin that is manually added or subtracted to the capacity of the critical network element. A negative value for final adjustment value simulates the effect of an additional margin due to complex remedial actions (RA) which cannot be modeled and so calculated in the flow based parameter calculation. A positive value for FAV as a consequence of the verification phase of the flow based domain, leading to the need to reduce the margin on one or more CBs for system security reasons.
	Transitory admissible transmission limit (TATL)	The temporary overload of transmission system elements which is allowed for a limited period and which does not cause physical damage to the transmission system elements as long as the defined duration and thresholds are respected.
A 08		This is the value, expressed in A or MW, that the overload flow in a network element shall not exceed for a duration no longer than the long duration. The long duration value depends on the TSO network operating rules.
	Negative Final adjustment margin value	This is the margin that is manually added to the capacity of the critical network element in order to simulate the effect of an additional margin due to complex remedial actions (RA) which cannot be modeled and so calculated in the flow based parameter calculation.
A10		This is the minimum voltage that can be supported by a network element without involving a risk for the security of supply.
A11	Maximum voltage level	This is the maximum voltage that can be supported by a network element without involving a risk for the security of supply.
		The Transitory admissible transmission limit (TATL) which is allowed after an automatic Remedial Action (RA) has been applied.
_	TATL after curative RA	The Transitory admissible transmission limit (TATL) which is allowed after a curative Remedial Action (RA) has been applied.

2.3 AssetType enumeration

- 132 The identification of the type of asset.
- Table 3 provides details of the Codelist AssetType. 133

Table 3 - Codelist AssetType

Code	Title	Description
A 0 1	Tieline	A high voltage line used for cross border energy interconnections.
A 02	Line	A specific electric line within a country.
A 03	Resource Object	A resource that can either produce or consume energy.
A 04	Generation	A resource that can produce energy.
A 05	Load	A resource that can consume energy.
	Phase Shift Transformer	An electrical device for controlling the power flow through specific lines in a power transmission network.
A07	Circuit Breaker	An electrical switch designed to protect an electrical circuit from damage caused by overcurrent/overload or short circuit.
A08	Busbar	A specific element within a substation to connect grid elements for energy distribution purposes.
A09	Capacitor	A transmission element designed to inject reactive power into the transmission network.
A10	Inductor	A transmission element designed to compensate reactive power in the transmission network.
	Pow er plant connection	All the network equipment that link the generating unit to the grid.
A12	FACTS	Flexible Alternating Current Transmission System



Code	Title	Description
B01	Biomass	A resource using biomass for energy.
B02	Fossil Brown coal/Lignite	A resource using Fossil Brown coal/Lignite for energy.
В03	Fossil Coal-derived gas	A resource using Fossil Coal-derived gas for energy.
B04	Fossil Gas	A resource using Fossil Gas for energy.
B05	Fossil Hard coal	A resource using Fossil Hard coal for energy.
B06	Fossil Oil	A resource using Fossil Oil for energy.
B07	Fossil Oil shale	A resource using Fossil Oil shale for energy.
B08	Fossil Peat	A resource using Fossil Peat for energy.
B09	Geothermal	A resource using Geothermal for energy.
B10	Hydro Pumped Storage	A resource using Hydro Pumped Storage for energy.
	Hydro Run-of-river and poundage	A resource using Hydro Run-of-river and poundage for energy.
	Hydro Water Reservoir	A resource using Hydro Water Reservoir for energy.
B13	Marine	A resource using Marine for energy.
B14	Nuclear	A resource using Nuclear for energy.
B15	Other renewable	A resource using Other renewable for energy.
B16	Solar	A resource using Solar for energy.
B17	Waste	A resource using Waste for energy.
B18	Wind Offshore	A resource using Wind Offshore for energy.
B19	Wind Onshore	A resource using Wind Onshore for energy.
B20	Other	A resource using other sources for producing energy.
B21	AC Link	Overhead line or cable which is used to transmit electrical power via Alternative Current.
B22	DC Link	Overhead line or cable which is used to transmit electrical power via Direct Current.
B23	Substation	An assembly of equipment in an electric power system through which electric energy is passed for transmission, transformation, distribution or switching.
B24	Transformer	Electrical device that transfers energy from one voltage level to another voltage level.

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AuctionType enumeration 2.4

The coded representation of different types of auction. 137

Table 4 provides details of the Codelist AuctionType. 138

Table 4 - Codelist AuctionType

Code	Title	Description
A 0 1	Implicit	The auction is an implicit auction.
A02	Explicit	The auction is an explicit auction.
A03	Rule Based	The auction is a rule based auction.
A 04	Mixed	The auction is partially implicit and partially explicit.



Code	Title	Description
A 05	Explicit/split	The auction concerns two explicit auctions on a split border.
A06	Shadow auction	An explicit auction carried out in the case of the failure of an implicit auction.
A 07	Flow -based	The allocation is an implicit auction using flow-based capacity calculation.

2.5 BusinessType enumeration

- The exact business nature identifying the principal characteristic of a time series. 142
- Table 5 provides details of the Codelist BusinessType. 143

Table 5 - Codelist BusinessType

Code	Title	Description
A 0 1	Production	The nature of the business being described is production details.
A 02	Internal trade	The nature of the business being described is internal trade details.
		The nature of the business being described is external trade details between two areas with limited capacity requiring a capacity agreement identification.
A04	Consumption	The nature of the business being described is consumption details.
A 05	External trade total	The nature of the business being described is external trade total.
		The nature of the business being described is external trade details between two areas without requiring capacity allocation information.
	Consumption	Net production/consumption - where signed values will be used. With the following rules: In area=Out area, In party=Out party, + means production and - means consumption.
A08		Net internal trade - where the direction from out party (seller) to in party (buyer) is positive and the opposite direction is negative (with minus signs).
	IPP (Independent Pow er Producer)	A time series concerning the production schedule from an IPP.
A10	Tertiary control	A time series concerning tertiary reserve.
A 1 1	Primary control	A time series concerning primary reserve.
A12	Secondary control	A time series concerning secondary reserve.
A13	Load profile	A time series concerning a load profile as calculated by a metered data aggregator.
		A time series concerning adjusted metered readings received from a metered data collector and aggregated and validated by a metered data aggregator.
A15	Losses	A time series concerning losses that have been calculated for a tieline or an area.
A16	Transits (CBT)	A time series concerning inter area transit flows determined for CBT requirements.
A 17	Settlement deviation	A time series concerning the imbalance energy calculated by an imbalance settlement responsible.
A18		A time series defining the imbalance between schedules accepted by the system operator due to technical constraints and schedules declared by the balance responsible party.
A19	deviation	A time series defining the imbalance between the schedule of a balance responsible party that has been corrected by the system operator after using balance energy bids and the schedule that was accepted by the system operator due to technical constraints.
A20		A time series defining the imbalance between the actual meter readings and the schedule of the balance responsible party corrected by the system operator after using balance energy bids.
A21	Inadvertent deviation	A time series concerning tieline deviation.



Code	Title	Description
A22		A time series concerning primary and secondary reserve (See ETSO TF Balance Management definition).
A23		A time series concerning energy balancing services (See ETSO TF Balance Management definition).
A24	Total trade	A time series concerning the total of both the internal and external trades.
	General Capacity Information	A time series providing the total capacity available on a TSO border.
_		Available transfer capacity as defined in the ETSO document "Definitions of Transfer Capacities in liberalised Electricity Markets" April 2001.
		Net transfer capacity as defined in the ETSO document "Definitions of Transfer Capacities in liberalised Electricity Markets" April 2001.
A28	Ç .	A time series providing the total exchanges between two TSOs (including the commercial transactions, the compensation program and the losses compensation program). Note this definition might change when UCTE brings forward its coding requirements.
	Already allocated	Already Allocated Capacity as defined in the ETSO document "Definitions of Transfer Capacities in liberalised Electricity Markets" April 2001.
	Internal inter area trade	A trade that occurs between internal areas within a market balance area.
A31	Offered Capacity	The time series provides the offered capacity.
A32		The time series provides information concerning the notification of the transfer of capacity to another market participant.
A33		The time series in question provides the amount of transmission capacity rights to be nominated.
A34	Capacity rights	The time series in question provides the capacity rights allocated for a given border.
		The time series in question provides the minimum amount of transmission capacity rights to be nominated.
		The time series in question provides the maximum amount of transmission capacity rights to be nominated.
A37	Installed generation	The time series in question provides the installed generation.
A38	Available generation	The time series in question provides the available generation.
		The Time series in question provides the designation of the ITR that may nominate the capacity in question.
A 41	Released AAC	The already allocated capacity (AAC) that has been released for resale.
A42		The time series in question provides information concerning the requested capacity including price information.
		The time series in question provides information concerning the requested capacity but excludes price information.
	program	Compensation of unintentional deviation is performed by exporting to / importing from the interconnected system during the compensation period by means of schedules as calculated during the accounting of unintentional deviations.
A 45		The cross border or internal reserves that are to be activated through schedule nomination.
		The cross border redispatching between System Operators that are to be activated through schedule nomination.
A 47	Market capacity price	The price of the capacity offered on a given market.
A48	differential	The difference between the price of capacity in a Market Balance Area receiving the capacity (In Area) and the price of capacity in a Market Balance Area providing the capacity (Out Area), i.e. In Area Price - Out Area price.



Unplanned outage Use it Or Sell it (UIOSI) pricing Compensation for auction cancellation where capacity is for resale	The volume of water that flows into a reservoir in a given interval. The volume of water that can be extracted from a reservoir in a given interval. The volume of water that can be turbined in a plant in a given interval. The volume of water that is not turbined going through the spillway in a given interval. Maintenance has been planned for the object in question with a forecast ending date. An unplanned outage has occurred on the object in question. The time series provides information on the capacity resold in the "use it or sell it" process and its corresponding price. The time series provides information on the compensation of the capacity for resale following an auction cancellation.
Turbined water Water spillage Planned maintenance Unplanned outage Use it Or Sell it (UIOSI) pricing Compensation for auction cancellation where capacity is for resale	The volume of water that can be turbined in a plant in a given interval. The volume of water that is not turbined going through the spillway in a given interval. Maintenance has been planned for the object in question with a forecast ending date. An unplanned outage has occurred on the object in question. The time series provides information on the capacity resold in the "use it or sell it" process and its corresponding price. The time series provides information on the compensation of the capacity for resale
Water spillage Planned maintenance Unplanned outage Use it Or Sell it (UIOSI) pricing Compensation for auction cancellation where capacity is for resale	The volume of water that is not turbined going through the spillway in a given interval. Maintenance has been planned for the object in question with a forecast ending date. An unplanned outage has occurred on the object in question. The time series provides information on the capacity resold in the "use it or sell it" process and its corresponding price. The time series provides information on the compensation of the capacity for resale
Planned maintenance Unplanned outage Use it Or Sell it (UIOSI) pricing Compensation for auction cancellation where capacity is for resale	Maintenance has been planned for the object in question with a forecast ending date. An unplanned outage has occurred on the object in question. The time series provides information on the capacity resold in the "use it or sell it" process and its corresponding price. The time series provides information on the compensation of the capacity for resale
Unplanned outage Use it Or Sell it (UIOSI) pricing Compensation for auction cancellation where capacity is for resale	An unplanned outage has occurred on the object in question. The time series provides information on the capacity resold in the "use it or sell it" process and its corresponding price. The time series provides information on the compensation of the capacity for resale
Use it Or Sell it (UIOSI) pricing Compensation for auction cancellation where capacity is for resale	The time series provides information on the capacity resold in the "use it or sell it" process and its corresponding price. The time series provides information on the compensation of the capacity for resale
(UIOSI) pricing Compensation for auction cancellation w here capacity is for resale	process and its corresponding price. The time series provides information on the compensation of the capacity for resale
auction cancellation w here capacity is for resale	
Resale pricing	
nosale priority	For each Physical Transmission Rights holder, this document contains the resold capacity and its corresponding price.
Curtailed capacity compensation	The time series provides information to compensate a party when curtailment is applied on the capacity obtained in a previous auction, resale or transfer.
	The time series provides information on the compensation for the capacity following an auction cancellation.
Minimum possible	The time series provides a schedule of minimum possible values for a Resource Object. The nature of the flow could be defined by the attribute Direction.
Maximum available	The time series provides a schedule of maximum available values for a Resource Object. The nature of the flow could be defined by the attribute Direction.
Spot price	The time series provides the market spot prices from an auction.
Minimum ATC	The Available Transmission Capacity that must be guaranteed because of regulatory constraints.
Meter Measurement data	The data as provided for a meter measurement source.
Accounting Point Relevant data	The metered data that is to be considered relevant for accounting purposes.
Energy flow	Energy flow information.
Pow er plant energy Schedule	Energy flow scheduled for a power plant.
	The time series provides the compensation requirements for a given compensation period.
Market coupling results	The time series provides the results of a market coupling auction.
	Production capacity that normally would be available, but due to maintenance or similar is temporarily unavailable.
Supplementary available generation	The supplementary generation that is available.
Interruptible consumption	The consumption that may be interrupted on request.
	A time series providing the total exchanges based on commercial transactions between two Market Balance Areas.
C PF E FS CF C Nr F U S S III	Accounting Point Relevant data Energy flow Pow er plant energy Schedule Compensation Requirements for the compensation period Market coupling esults Production, anavailable Coupplementary available generation Interruptible consumption Commarised Market Balance Area



Code	Title	Description
	Timeframe Independent Schedule	A time series providing the total exchanges of Timeframe Independent Schedules between two System Operators.
		A time series providing the amount of voluntary consumption curtailed by the energy supplier of an end-consumer.
		The nature of the business being described is dispatchable production details, i.e. generation output that can be changed by a request (activation order) of the TSO according with the applicable Market Rules.
	Consumption, dispatchable	The nature of the business being described is dispatchable consumption details, i.e. consumption output that can be changed by a request (activation order) of the TSO according with the applicable Market Rules.
	Production, non- dispatchable	The nature of the business being described is non-dispatchable production details, i.e. generation output that cannot be modified by an activation order.
	Consumption, non- dispatchable	The nature of the business being described is non-dispatchable consumption details, i.e. consumption output that cannot be modified by an activation order.
	Total Transfer Capacity (TTC)	The Total Transfer Capacity is the maximum exchange program between two areas compatible with operational security standards applicable at each system if future network conditions, generation and load patterns were perfectly known in advance.).
	Mutual Emergency Assistance Service (MEAS)	The cross border Mutual Emergency Assistance Service between System Operators that are to be activated through schedule nomination.
A83	Auction cancelation	The time series covers auction cancellation right.
_	Nomination curtailment	The time series covers nomination curtailment rights
A 85	Internal redispatch	Redispatch to relieve Market Balance Area internal congestion.
		A sum of secondary, tertiary control as well as other energy that was used to balance a control area.
	Balancing energy price	Price of energy used to balance.
	Economised secondary reserve	The activated secondary reserve that had been economised due to pooled reserve management.
A89	Spinning reserve	The extra generating capacity that is available by increasing the production of generators that are already connected to the power system.
A 90	Solar	The business being described concerns solar power.
	positive forecast margin	The business being described concerns a positive forecast margin.
	Negative forecast margin	The business being described concerns a negative forecast margin.
A 93	Wind generation	The business being described concerns wind generation.
A94	Solar generation	The business being described concerns solar generation.
A 95	Frequency containment reserve	The business being described concerns frequency containment reserve.
A 96	Automatic frequency restoration reserve	The business being described concerns automatic frequency restoration reserve.
A 97	Manual frequency restoration reserve	The business being described concerns manual frequency restoration reserve.
A 98	Replacement reserve	The business being described concerns replacement reserve.
A99	Financial information	The business being described concerns financial information.
	Interconnector network evolution	The business being described concerns interconnector network evolution.



Code	Title	Description
B02	Interconnector network dismantling	The business being described concerns interconnector network dismantling.
B03	Counter trade	The business being described concerns counter trades.
B04	Congestion costs	The business being described concerns congestion costs.
B05	Capacity allocated (including price)	The business being described concerns capacity allocation and includes price information.
B06	DC link constraint	The business being described concerns DC link constraints.
B07	Auction revenue	The business being described concerns auction revenue.
B08	Total nominated capacity	The business being described concerns the total nominated capacity.
B09	Net position	The business being described concerns net position.
B10	Congestion income	The business being described concerns congestion income.
B11	Production unit	The business being described concerns a production unit.
B12	Rounded market coupling results	Rounded outputs of the market coupling to be sent to TSOs and Market Participants.
B13	Allocation Revenue	The time series provides information on the revenue generated by the allocations.
B14	Production deviation	A time series concerning the imbalance energy between the metered production and the schedules calculated by an imbalance settlement responsible.
B15		A time series concerning the imbalance energy between metered consumption and the forecasted consumption calculated by an imbalance settlement responsible.
B16	Transmission asset	The business being described concerns a transmission asset.
B17	Consumption unit	The business being described concerns a consumption unit.
B18	In-feed ATC	Available Transfer Capacity at the in-feed side of a DC tieline.
B19	Out-feed ATC	Available Transfer Capacity at the out-feed side of a DC tieline.
B20	Balance up regulation price	A time series concerning balance regulation market prices for up regulation.
	Balance down regulation price	A time series concerning balance regulation market prices for down regulation.
B22	Main direction	A time series concerning the direction of balance regulations.
	Consumption imbalance price	A time series concerning imbalance prices for consumption.
	Production sales imbalance price	A time series concerning imbalance prices for production sales.
	Production purchase imbalance price	A time series concerning imbalance prices for production purchase.
B26	Average balance price between MBAs	A time series concerning the average prices between Market Balance Areas.
B27	Pumped	A time series concerning the electricity consumption related to pumping.
B28	Large installation consumption	A time series concerning consumption from large installation.
B29		A time series concerning imbalance between reported consumption, production and exchange in a Metering Grid Area.
B30	HV DC Link settings	The time series in question provides HVDC Link settings.
B31	Transmission Reliability Margin (TRM)	A time series concerning Transmission Reliability Margin (TRM).



Code	Title	Description
		This information is used to provide to a pool manager the combined imbalance of all the pool participants.
B33	(ACE)	The sum of the instantaneous difference between the actual and the set-point value of the measured total power value and Control Program including Virtual Tie-Lines for the power interchange of a LFC Area or a LFC Block and the frequency bias given by the product of the K-Factor of the LFC Area or the LFC Block and the Frequency Deviation.
		A time series concerning the Area Control Error after applying the imbalance netting energy correction.
		The sum of cross border schedules based on implicit and explicit trades including long term, yearly, monthly, weekly, daily processes.
	Production units own consumption	The consumption of one or more production units.
B37		The timeseries describes the constraint situation for a given TimeInterval. A constraint situation can be: - composed of a list of network elements in outage associated for each outage to a list of network elements on which remedial actions have been carried out accordingly to contingency process - or it can be an external constraint.
B38		The timeseries describe the full flow based domain for a given TimeInterval. Critical network elements are displayed in details and their impact on the market is quantified.
	schedules	The times eries describe the full flow based domain for a given TimeInterval adjusted to the latest update of the schedules. Critical network elements are displayed in details and their impact on the market is quantified.
	Network element constraint	The timeSeries describes limiting elements which are overloaded.
B41	Calculation opposition (Red Flag)	The timeSeries describes a party who is opposed to the calculation result and imposes its transfer capacity value.
	Base case proportional shift key	The GSK or LSK are proportional to the base case generation or load.
	Proportional to participation factors shift key	The GSK or LSK are proportional to the participation factors.
	Proportional to the remaining capacity shift key	The GSK is proportional to the remaining available capacity.
B45	Merit order shift key	The GSK is proportional to a merit order list.
B46	Wind speed	The TimeSeries provides information on the wind speed.
B47	Wind direction	The TimeSeries provides information on the wind direction.
B48	Solar irradiance	The TimeSeries provides information on the power per unit area produced by the sun in the form of electromagnetic radiation.
B49	Air temperature	The TimeSeries provides information on the air temperature.
B50	Cloudiness	The TimeSeries provides information on the cloudiness, i.e. the level of coverage of the sky with clouds.
B51	Air humidity	The TimeSeries provides information on the level of humidity of the air.
B52	Atmospheric pressure	The TimeSeries provides information on the atmospheric pressure.
B53	Precipitation	The TimeSeries provides information on the amount of rain, snow, etc. that falls on the ground.



Code	Title	Description
	Network constraint situation	The TimeSeries describes the network elements to be taken into account to simulate a network constraint during the network load flow studies. The network situation includes the contingencies, the remedial actions, the monitored network elements and the potential additional constraints.
B55	Contingency	The TimeSeries describes the network elements part of the contingency to be simulated for a given TimeInterval.
B56	Remedial Action	The TimeSeries describes a set of remedial actions for a given TimeInterval.
	Monitored Network Element	The TimeSeries describes the network elements to be monitored during the network load flow studies.
B58	Busbar	The TimeSeries describes the network elements that composed a busbar.
B59	Network Element	The TimeSeries describes network elements.
B60	SPS	The TimeSeries describes the network elements managed by a Special Protection System (automation).
	Aggregated netted external market schedule	The aggregated netted external market schedules for a given border.
	Aggregated netted external TSO schedule	The aggregated netted external TSO schedules for a given border.
	Aggregated netted external schedule	The aggregated netted external schedules for a given border.
-	Netted area AC position	The AC position for a given area.
B65	Netted area position	The AC and DC position for a given area.
	Interconnection shift key	The shift key series describes the amount of power to be shifted from a border area.
B67	DC flow with losses	DC flow with losses refers to the values at the importing end of the DC line.
B68	DC flow without losses	DC flow without losses refers to the values at the exporting end of the DC line.
	minimum value of netted area position	That value which a netted area position must not fall below for a given area.
	maximum value of netted area position	That value which a netted area position must not exceed for a given optimisation area.
		That value which a balanced DC flow must not exceed for a given DC line on exporting end. When aligning DC flows CGMA algorithm will respect this constraint.
	minimum value of DC flow	That value which a balanced DC flow must not fall below for a given DC line on exporting end. Currently this business type is only included for consistency reasons. It is always set to 0. This constraint might, however, be used in future. When aligning DC flows the CGMA algorithm will respect this constraint.
B73	indicative AC flow	It is the hypothetical flow on the aggregate of all AC tie lines of an electrical border between two optimisation areas. It results from the adjustments to the preliminary netted area positions of all optimisation areas made by the CGMA algorithm. Indicative AC flows are an artefact of the CGMA algorithm, and do not correspond to physical flows
B74	Offer	The time series provides an offer to provide reserves.
B75	Need	The time series provides a requirement for reserves.
	Opportunity costs or benefits	The time series describes any opportunity costs or benefits.
	Financial compensation or penalties	The time series describes any financial compensation or penalties



Code	Title	Description
B78	Global radiation	The total short-wave radiation from the Global radiation is the total short-wave radiation from the sky falling onto a horizontal surface on the ground. It includes both the direct solar radiation and the diffuse radiation resulting from reflected or scattered sunlight.
B79	Diffuse radiation	Radiation resulting from reflected or scattered sunlight.
B80	Direct solar radiation	Radiation resulting from direct sunlight
B81	Outage (OUT)	Outage process: Element is out of operation due to planned maintenance or due to an unplanned/forced outage. Outage may be used as a synonym for unavailability.
	Special switching state (SSS)	Outage Process: This state applies to grid elements which are in operation in an exceptional state (e.g. separated nodes operation).
B83	Testing (TEST)	Outage process: TESTING means any element status is possible - ON or OUT. This status applies either between first connection and final commissioning of the relevant asset, or directly following maintenance of the relevant asset.
	Auxiliary busbar operation	Outage process: Element is in operation but connected via auxiliary busbar
B85	Automatic reclosing	Outage process: Protection function Automatic reclosing is switched off for electric line
B86	Busbar protection	Protection function busbar protection is switched off
B87	Phase Shift Angle	The maximum phase shift angle allowed between two network elements.
	Base Case Network Situation	The TimeSeries describes the network elements to be taken into account to simulate a base case network situation during the network load flow studies, without any contingency.
B89	Inter-TSO assistance	Cross border assistance schedule between TSOs not interconnected directly.
B90	FlexibleNeed	The business type indicates that the need is optional.
B91	GLSK Limitation	A constraint related to a GLSK maximum or minimum limitation in the production or/and consumption shift.
B92	Capacity ramping limitation	A constraint related to a ramping limitation on the capacity offered at a given border.

2.6 CategoryType enumeration

- 147 The product category of an auction.
- 148 Table 6 provides details of the Codelist CategoryType.

149 Table 6 - Codelist CategoryType

Code	Title	Description
A 0 1	Base	The auction is for a base period.
A 02	Peak	The auction is for a peak period.
A03	Off peak	The auction is for an off peak period.
A 04	Hourly	The auction is for an hourly period.

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151 2.7 ClassificationType enumeration

- 152 Indicates the classification mechanism used to group a set of objects together. The grouping may be of a detailed or a summary nature.
- Table 7 provides details of the Codelist ClassificationType.



Table 7 - Codelist ClassificationType

Code	Title	Description
A 0 1	Detail type	The Time Series content provides detailed information.
A 02	Summary type	The Time Series content provides aggregated information.

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2.8 ${\bf Coding Scheme Type\ enumeration}$

- Codification scheme used to identify the coding scheme used for the set of coded values to identify specific objects.
- 160 Table 8 provides details of the Codelist CodingSchemeType.

Table 8 - Codelist CodingSchemeType

Code	Title	Description
A 0 1	EIC	The coding scheme is the Energy Identification Coding Scheme (EIC), maintained by ENTSO-E.
A02	ССВМ	The coding scheme used for Common Grid Model Exchange Standard (CGMES).
A10	GS1	The coding scheme for the preceding attribute is the Global Location Number (GLN 13) or Global Service Relation Number (GSRN 18), maintained by GS1.
NA D	Andorra National coding scheme	The National coding scheme of the country in question.
NAL	Albania National coding scheme	The National coding scheme of the country in question.
NA M	Armenia National coding scheme	The National coding scheme of the country in question.
	Austria National coding scheme	The National coding scheme of the country in question.
	Azerbaijan National coding scheme	The National coding scheme of the country in question.
	Bosnia and Herzegovina National coding scheme	The National coding scheme of the country in question.
NBE	Belgium National coding scheme	The National coding scheme of the country in question.
NBG	Bulgaria National coding scheme	The National coding scheme of the country in question.
NCH	Sw itzerland National coding scheme	The National coding scheme of the country in question.
	Serbia and Montenegro National coding scheme	The National coding scheme of the country in question.
	Czech Republic National coding scheme	The National coding scheme of the country in question.
	Germany National coding scheme	The National coding scheme of the country in question.
	Denmark National coding scheme	The National coding scheme of the country in question.
NEE	Estonia National coding scheme	The National coding scheme of the country in question.



Code	Title	Description
	Spain National coding scheme	The National coding scheme of the country in question.
	Finland National coding scheme	The National coding scheme of the country in question.
	France National coding scheme	The National coding scheme of the country in question.
	United Kingdom National coding scheme	The National coding scheme of the country in question.
	Georgia National coding scheme	The National coding scheme of the country in question.
	Gibraltar National coding scheme	The National coding scheme of the country in question.
	Greece National coding scheme	The National coding scheme of the country in question.
	Croatia National coding scheme	The National coding scheme of the country in question.
	Hungary National coding scheme	The National coding scheme of the country in question.
	Ireland National coding scheme	The National coding scheme of the country in question.
	Italy National coding scheme	The National coding scheme of the country in question.
	Kyrgyzstan National coding scheme	The National coding scheme of the country in question.
	Kazakhstan National coding scheme	The National coding scheme of the country in question.
	Liechtenstein National coding scheme	The National coding scheme of the country in question.
	Lithuania National coding scheme	The National coding scheme of the country in question.
NLU	Luxembourg National coding scheme	The National coding scheme of the country in question.
	Latvia National coding scheme	The National coding scheme of the country in question.
	Morocco National coding scheme	The National coding scheme of the country in question.
	Moldavia National coding scheme	The National coding scheme of the country in question.
	Macedonia National coding scheme	The National coding scheme of the country in question.
	Netherlands National coding scheme	The National coding scheme of the country in question.
		The coding scheme of the Nordic region which covers Denmark, Finland, Norway and Sweden.
	Norway National coding scheme	The National coding scheme of the country in question.
	Poland National coding scheme	The National coding scheme of the country in question.
	Portugal National coding scheme	The National coding scheme of the country in question.



Code	Title	Description
_	Romania National coding scheme	The National coding scheme of the country in question.
	Russian Federation National coding scheme	The National coding scheme of the country in question.
	Sw eden National coding scheme	The National coding scheme of the country in question.
	Slovenia National coding scheme	The National coding scheme of the country in question.
1	Slovakia National coding scheme	The National coding scheme of the country in question.
	Turkey National coding scheme	The National coding scheme of the country in question.
_	Ukraine National coding scheme	The National coding scheme of the country in question.

163

2.9 CoordinateSystemType enumeration

- 164 The identification of the coordinate system used for the location position.
- Table 9 provides details of the Codelist CoordinateSystemType.

166

Table 9 - Codelist CoordinateSystemType

Code	Title	Description
A01		ED 50 (European Datum 1950) is a geodetic datum which was defined after World War II for the international connection of geodetic networks.
A 02		Ordinance Survey Great Britain 1936. The Ordinance Survey (OS) devised the national grid reference system, and it is heavily used in their survey data, and in maps (whether published by the Ordinance Survey or commercial map producers) based on those surveys.
A 03		The World Geodetic System version 1984. for use in cartography, geodesy, and navigation including by GPS. It comprises a standard coordinate system for the earth, a standard spheroidal reference surface (the datum or reference ellipsoid) for raw altitude data, and a gravitational equipotential surface (the geoid) that defines the nominal sea level.
A 04	GTRF	Galileo Terrestrial Reference Frame

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2.10 ContractType enumeration

- The contract type defines the conditions under which the capacity is allocated and handled, e.g. daily auction, weekly auction, monthly auction, yearly auction, etc.
- 171 The significance of this type is dependent on area specific coded working methods.
- 172 Table 10 provides details of the Codelist ContractType.

173 Table 10 - Codelist ContractType

Code	Title	Description
A 0 1		The condition under which capacity is allocated and handled is by daily auction or a daily transmission allocation procedure.
A 02		The condition under which capacity is allocated and handled is by weekly auction or a weekly transmission allocation procedure.



Code	Title	Description
A03	Monthly	The condition under which capacity is allocated and handled is by monthly auction or a monthly transmission allocation procedure.
A04	Yearly	The condition under which capacity is allocated and handled is by yearly auction or a yearly transmission allocation procedure.
A 05	Total	This is the sum of all capacity contract types for the period covered.
A06	Long term contract	The condition under which capacity is allocated and handled is by long term trade agreements according to European regulations (EU Directive 1228/2003).
A07	Intraday contract	The condition under which the capacity is allocated and handled is through an intraday auction and allocation process.
A08	Quarter yearly	The condition under which capacity is allocated and handled is by quarter yearly auction or a quarter yearly transmission allocation procedure.
A09	Semestrial	The condition under which capacity is allocated and handled is by half yearly auction or a half yearly transmission allocation procedure.
A10	Multiple year	The condition under which capacity is allocated and handled is by multiple year auctions.
	Intraday balancing mechanism	The condition under which the capacity is allocated and handled is through intraday energy balancing services.
A12	Historical contract	A Contract established before the EU directive that are valid until the term of the contract.
A13	Hourly	The condition under which capacity is allocated and handled is by hourly auctions.

178

2.11 CurrencyType enumeration

The coded identification of legal tender using ISO 4217 3 alpha codes. 176

Table 11 provides details of the Codelist CurrencyType. 177

Table 11 - Codelist CurrencyType

Code	Title	Description
	Bosnian convertible marka	The Legal tender of Bosnia and Herzegovina.
BGN	Bulgarian lev	The Legal tender of Bulgaria.
CHF	Sw iss Franc	The Legal tender of Switzerland.
CZK	Czech Koruna	The legal tender of the Czech Republic.
DKK	Danish Kroner	The Legal tender of Denmark.
EUR	EURO	The European legal tender.
GBP	Pound Sterling	The Legal tender of the United Kingdom.
HRK	Croatian kuna	The legal tender of Croatia.
HUF	Hungarian Forint	The Legal tender of Hungary.
ISK	lcelandic krona	The Legal tender of Iceland.
LEK	Albanian lek	The Legal tender of Albania.
LTL	Lithuanian litas	The Legal tender of Lithuania
MKD	Macedonian denar	The Legal tender of FYROM.
NOK	Norwegian Kroner	The Legal tender of Norway.
PLN	Polish zloty	The Legal tender of Poland.



Code	Title	Description
RON	Romanian Leu	The Legal tender of Romania.
RSD	Serbian dinar	The Legal tender of Serbian Republic.
SAR	Saudi Arabian Riyal	The Legal tender of Saudi Arabia.
SEK	Sw edish kroner	The Legal tender of Sweden.
SKK	Slovak Koruna	The legal tender of Slovakia.
TRY	New Turkish Lira	The Legal tender of Turkey.
USD	US Dollar	The legal tender of the USA.

2.12 CurveType enumeration

- The type of curve being defined in the time series. 181
- Table 12 provides details of the Codelist CurveType. 182

183

Table 12 - Codelist CurveType

Code	Title	Description
	Sequential fixed size block	The curve is made of successive Intervals of time (Blocks) of constant duration (size), where the size of the Blocks is equal to the Resolution of the Period.
A02	Point	The curve is made of successive instants of time (Points).
A03	Variable sized Block	The curve is made of successive Intervals of time (Blocks) of variable duration (size), where the end date and end time of each Block are equal to the start date and start time of the next Interval. For the last Block the end date and end time of the last Interval would be equal to EndDateTime of TimeInterval.
	Overlapping breakpoint	The curve is made of successive Intervals of time of variable duration (size), where the end date and end time of each interval are equal to the start date and start time of the next Interval.
	Non-overlapping breakpoint	This curve is a restriction of the curve type A04, i.e. overlapping breakpoints. The restriction is that a single Period is allowed.

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2.13 DirectionType enumeration

- The coded identification of the direction of energy flow. 186
- 187 Table 13 provides details of the Codelist DirectionType.

188

Table 13 - Codelist DirectionType

Code	Title	Description
A 0 1		Up signifies that the available power can be used by the Purchasing area to increase energy.
A 02		Down signifies that the available power can be used by the Purchasing area to decrease energy.
A03	UP and DOWN	Up and Down signifies that the UP and Down values are equal.
A04	Stable	The direction at a given instant in time is considered to be stable.

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2.14 EicType enumeration

The coded identification of the type of an EIC code. 191



192 Table 14 provides details of the Codelist EicType.

193 Table 14 - Codelist EicType

Code	Title	Description
Α	Substation	An EIC code to substations.
Т	Tieline	An EIC code to identify tielines.
V	Location	An EIC code to identify locations.
W	Resource Object	An EIC code to identify resource objects.
Х	Party	An EIC code to identify parties.
Υ	Area or Domain	An EIC code to identify areas or domains.
Z	Measurement point	An EIC code to identify measurement points.

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2.15 EnergyProductType enumeration

196 The identification of the nature of an energy product such as power, energy, reactive power, 197 etc.

Table 15 provides details of the Codelist EnergyProductType. 198

Table 15 - Codelist EnergyProductType

Code	Title	Description
8716867000016	Active power	The product of voltage and the in-phase component of alternating current measured in units of watts and standard multiples thereof.
8716867000023	Reactive power	The product of voltage and current and the sine of the phase angle between them, measured in units of voltamperes reactive and standard multiples thereof. (not used for planned schedules).
8716867000030	Active energy	The electrical energy produced, flowing or supplied by an electrical circuit during a time interval, being the integral with respect to time of instantaneous active power, measured in units of watt-hours, or standard multiples thereof.
8716867000047	Reactive energy	The integral with respect to time of reactive power (not used for planned schedules).
8716867000115	Capacitive reactive power	Refer to the ETSO document "Energy product types Active - Reactive - Inductive - Capacitive".
8716867000122	Inductive reactive power	Refer to the ETSO document "Energy product types Active - Reactive - Inductive - Capacitive".
8716867000139	Capacitive Reactive energy	Refer to the ETSO document "Energy product types Active - Reactive - Inductive - Capacitive".
8716867000146	Inductive Reactive energy	Refer to the ETSO document "Energy product types Active - Reactive - Inductive - Capacitive".
8716867009911	Water	For hydro power stations, this enables the identification of the quantity of water stored behind a dam (volume, head level, etc.), or the constraints in the flow of water.

200 201

2.16 HVDCModeType enumeration

The coded identification of the HVDC mode. 202

Table 16 provides details of the Codelist HVDCModeType. 203



Table 16 - Codelist HVDCModeType

Code	Title	Description
A 0 1	Setpoint schedule	The code for the "power setpoint" mode of operation of the HVDC link.
	Proportional external signal	The code for the "Proportional external signal" mode of operation of the HVDC link.
A03	AC emulation	The code for the "AC emulation" mode of operation of the HVDC link.

205 206

2.17 IndicatorType enumeration

207 A boolean indicator to express Yes or No or True or False.

Table 17 provides details of the Codelist IndicatorType. 208

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Table 17 - Codelist IndicatorType

Code	Title	Description
A 0 1	YES	A positive indication.
A 02	NO	A negative indication.

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216

2.18 MessageType enumeration

212 The coded type of a document. The message type describes the principal characteristic of a 213 document.

214 This enumeration is used in the XML instances based on IEC 62325.

215 Table 18 provides details of the Codelist MessageType.

Table 18 - Codelist MessageType

Code	Title	Description
		A schedule which has been prepared by a balance responsible party providing planned schedule information.
		A schedule which has been prepared by a capacity allocator providing allocated capacity.
A03	Balance area schedule	A schedule that provides the planned schedule information for a balance area.
		A compilation of all external schedules concerning two System Operator areas of all balance responsible parties.
	Control block area schedule	A compilation of all the exchange programs of all control areas for one control block with all neighbouring control areas of a neighbouring control block.
		A compilation of the exchange programs of all exchange blocks divided into UCTE south and north.
	Intermediate confirmation report	An intermediate confirmation report that may be produced between final cutoffs.
	Final confirmation report	A final confirmation report that is produced after a final cutoff.
A 09	Finalised schedule	A compilation of a set of schedules that have been finalized after a given cutoff.
A10		A compilation of the time series employed on a given day to ensure the balance of the system.
		A compilation of the time series of all the meter readings or their equivalent for a given period.



Code	Title	Description
A12	Imbalance report	The report containing the complete situation of a given period for a party and including the schedules, regulation data and actual or calculated readings.
A13	Interconnection Capacity	Document for cross-border capacity exchanges.
A14		A document providing the schedules for resource objects submitted by a resource provider.
A15	Acquiring System Operator Reserve Schedule	A document providing reserve purchases submitted by an Acquiring System Operator.
A16	Anomaly Report	A document providing anomaly information for the receiving party to correct.
A 17	Acknowledgement Document	A document providing acknowledgement information.
A18	Confirmation report	A document providing confirmation information.
A19	Capacity for Resale	A document providing information about capacity for resale.
A20	Approved Capacity Transfer	A document to approve a capacity transfer.
A21	Capacity transfer notification	A document notifying a capacity transfer.
A22		A document providing the portfolio of the transmission capacity rights of a market participant.
A23	Allocations	A document providing the capacity allocations for a border.
A24	Bid document	A document providing bid information.
A 25	Allocation result document	A document providing the allocation results of an auction.
A26	Capacity document	A document providing capacity information.
A 27	Rights document	A document providing transmission capacity rights information.
A 28	Generation availability schedule	This document contains information related to energy availability.
A30		This document contains the cross border schedules for all the borders of a given country where energy is exchanged.
A31	Agreed capacity	The capacity agreed between parties.
A32	Proposed capacity	The capacity proposed for agreement between parties.
A33	System vertical load	The sum of all flows out of the transmission grid via directly connected transformers and lines to distribution grids and end consumers as known by the System Operator.
A34	Escalation document	A document which requesting the escalation of a situation.
A35	Trouble shooting document	A document providing trouble shooting information for the resolution of a problem.
A36	Deactivation document	The capacity proposed for agreement between parties.
A37	Reserve tender document	The document that is used for the tendering for reserves within the ERRP process.
A38	Reserve Allocation Result Document	The document used to provide the results of a Reserve auction.
A39	SATCR activation	The document is used to provide the activation of reserves through the SATCR process.
A40	DATCR activation	The document is used to provide the activation of reserves through the DATCR process.
A41	Activation response	The document is used to provide a response to a request to activate reserves.



Code	Title	Description
A42	Tender reduction	The document is used to provide information concerning the reduction of a previously submitted tender.
A43	MOL Document	The document is used to provide Merit Order List information.
A44	Price Document	The document is used to provide market spot price information.
A 45	Measurement Value Document	The document is used to provide measurement information from measurement devices.
A46	SOAM Document	The document is used to provide system operator accounting data for matching.
A 47	SOVA Document	The document is used to provide system operator validated accounting data.
A48	CCVA Document	The document is used to provide coordination center validated accounting data.
A49	Daily settlement document	The document is used to provide daily settlement information.
	Weekly settlement document	The document is used to provide weekly settlement information.
A51	Capacity Auction Specification Document	The document is used to provide capacity auction specification information.
	Market Coupling Results Document	The document is used to provide the results of a market coupling auction.
A53	Outage publication Document	The document is used to provide the outage information for publication.
	Forced generation outage Document	A document providing information on forced generation outages.
A55		A compilation of all external schedules concerning two Market Balance Areas of all balance responsible parties.
A56	Compensation Program Schedule	A schedule that provides the schedule information for the compensation of unintended deviation.
A57		A schedule that provides the schedule information for the Load Frequency Control Program of a Control Area or a Control Block.
A58		A compilation of all external Timeframe Independent Schedules concerning two System Operators.
		A status request being made concerning the status of information within the context of a specific ongoing process.
		A status request concerning the position of an object independently of any ongoing processes.
A 61	Estimated Net Transfer Capacity	The estimated net transfer capacity for a given border.
A62	Compensation rights	The capacity rights that have been allocated as compensation.
A 63		A notice to confirm the actions agreed between System Operators to resolve a congestion situation through redispatch.
A 64	Tender reduction response	A response to a tender reduction request that provides corrections to the initial document.
A65	System total load	Total load', including losses without power used for energy storage, is equal to generation deducted with exports, added with imports and deducted with power used for energy storage.
A66		A document providing the information concerning the situation of the MOL at the end of an activation period.
		A document providing the schedules for production/consumption for resource objects submitted by a resource provider.



Code	Title	Description
	Installed generation per type	A document providing the installed generation per generation type.
A69	Wind and solar forecast	A document providing the forecast of wind and solar generation.
A70	Load forecast margin	A document providing the load forecast margin for a period.
A71	Generation forecast	A document providing the generation forecast for a period.
	Reservoir filling information	A document providing information concerning the filling of reservoirs.
A73	Actual generation	A document providing the actual generation for a period.
	Wind and solar generation	A document providing the generation of wind and solar energy for a period.
A75	Actual generation per type	A document providing the actual generation per generation type for a period.
A76	Load unavailability	A document providing the unavailability of units providing load on the network.
		A document providing the unavailability of production units providing energy to the network.
_	Transmission unavailability	A document providing the unavailability of transmission capacity on the network.
		A document providing the unavailability of an offshore grid infrastructure to the network.
		A document providing the unavailability of generation units providing energy to the network.
A81	Contracted reserves	A document providing the reserves contracted for a period.
A82	Accepted offers	A document providing the offers of reserves that have been accepted for a period.
		A document providing the quantities of reserves that have been activated for balancing.
A84	Activated balancing prices	A document providing the prices of the reserves that have been activated for balancing.
A85	Imbalance prices	A document providing the prices of reserves due to imbalance for a period.
A86	Imbalance volume	A document providing the volume of the imbalance for a period.
A87	Financial situation	A document providing the financial situation for reserves.
A88	Cross border balancing	A document providing the cross border balancing requirements for a period.
	Contracted reserve prices	A document providing the price of reserves contracted for a period.
	Interconnection network expansion	A document providing information on the expansion of the interconnection network.
A91	Counter trade notice	A document providing information on counter trades for a period.
A 92	Congestion costs	A document providing the cost of congestion for a period.
A 93	DC link capacity	A document providing the DC links for a period.
A 94	Non EU allocations	A document providing allocations made to non EU member states.
A 95	Configuration document	A document providing configuration information.
	Redispatch activation document	A document enabling the activation of a redispatch notice.
	Detailed activation history document	A document enabling a detailed history of activations.



Code	Title	Description
	Aggregated activation history document	A document enabling an aggregated history of activations.
A 99	HV DC Link constraints	A document providing the information concerning the maximum and minimum active power flow through each link can limited.
B01		A document providing the information concerning the power set point. The mode in w hich the HVDC is managed.
B02	HV DC Schedule	A document providing the information for operating DC links.
B03	EIC code request	A document providing the information requesting a new EIC code.
B04		A document providing EIC information in a central registry exchange or information to an EIC participant.
B05		A document providing EIC publication information in a web site publication of a limited set of information.
		A document providing all the elements necessary for the capacity coordinator to determine the transfer capacity and the associated critical network elements.
-	element publication	A document providing all the elements necessary for the market information aggregator and TSOs to know the critical network elements which limit the transfer capacity.
B08	Flow based domain	A document providing the capacity domain and its limits available for the TSO.
	Flow based domain publication	A document providing the capacity domain and its limits available for the market.
		A document providing the capacity domain and its impacts on the market to be published.
B11	Anonymized flow based parameters publication	A document providing all the relevant flow based parameters in case of flow based capacity allocation.
	Critical network element market impact publication	A document providing the critical network elements and its impacts on the market to be published.
B13		An estimation or prediction in advance of the weather by analysis of meteorological data and the results of what actually happened with the weather.
	Energy prognosis document	A document to provide the prognosis of energy production/load for a given period.
B15	document	A document providing the network constraint situations used for the load flow studies. A network constraint situation includes contingencies, monitored elements and remedial actions.
		A document used to report aggregated netted external market schedules for a given border.
	Aggregated netted external TSO schedule document	A document used to report aggregated netted external TSO schedules for a given border.
B18	market document	A document used to report the status of aggregated netted external market schedules, aggregated netted external TSO schedules and compensation program schedules on a given border.
B19	market document	A document used to report the information concerning aggregated netted external schedules, aggregated netted external market schedules, aggregated netted external TSO schedules, compensation program schedules, netted area position schedules and netted area AC position schedules to an interested party.
	Status request for a reporting information market document	A document requesting the provision of a reporting information document.
	Reserve need document	Used by a TSO to send its reserve needs.



Code	Title	Description
		A document providing the values of the generation and load shift keys to be used on network model.
B23	Offers to be activated	A document containing the outcome of the process, with the list of offers that are to be activated by the TSO concerned and the results for its reserve needs.
B24	0 1	A document containing the outcome of the process, with the clearing prices for a period.
B25	Security analysis report	A document providing a report on a performed security analysis.

2.19 ObjectAggregationType enumeration

- The identification of the domain that is the common dominator used to aggregate a time series.
- Table 19 provides details of the Codelist ObjectAggregationType.

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Table 19 - Codelist ObjectAggregationType

Code	Title	Description
A 0 1	Area	The object being described concerns an area.
A02	Metering point	The object being described concerns a metering point.
A03	Party	The object being described concerns a party.
	Agreement Identification	The object being described concerns an agreement identification.
A 05	Accounting point	The object being described concerns an accounting point.
A06	Resource Object	The object being described concerns a resource object.
A 07	Tieline	The object being described concerns a tieline.
A08	Resource type	The object being described concerns a resource type.
A 0 9	DC link	The object being described concerns a DC link.
A 10	AC link	The object being described concerns an AC link.
A 11	Merchant line	The object being described concerns a merchant line.

223

224

2.20 PaymentTermsType enumeration

- The identification of the different terms of payment.
- Table 20 provides details of the Codelist PaymentTermsType.

227

Table 20 - Codelist PaymentTermsType

Code	Title	Description
A 0 1	Pay as bid	The amount to be paid shall correspond to the amount bid.
A 02	Pay as cleared	The amount to be paid shall correspond to the amount calculated for clearing.
A 03	No payment terms	There are no payment terms to be used.

228229

2.21 PriceCategoryType enumeration

230 Indicates the category of the calculation to be applied to a price.



231 Table 21 provides details of the Codelist PriceCategoryType.

Table 21 - Codelist PriceCategoryType

Code	Title	Description
A 0 1	Category 1	A category one price calculation is to be applied.
A 02	Category 2	A category two price calculation is to be applied.
A 03	Category 3	A category three price calculation is to be applied.
A 04	Excess balance	The category concerns excess balance.
A 05	Insufficient balance	A category concerns insufficient balance.
A06	Average bid price	The average bid price for a given product.
		The downwards activated bid price or the upwards activated bid price for activated balancing reserves.

233 234

232

2.22 Price Direction Type enumeration

235 The nature of a price, i.e. an impacted area system operator pays to internal market parties or 236 inverse.

Table 22 provides details of the Codelist PriceDirectionType.

238

237

Table 22 - Codelist PriceDirectionType

Code	Title	Description
A01	· •	Expenditure, i.e. the Impacted Area System Operator pays to the internal Market Parties.
A02		Income, i.e. The Impacted Area System Operator receives from the internal Market Parties.

239

240

241

2.23 ProcessType enumeration

Indicates the nature of process that the document addresses.

Table 23 provides details of the Codelist ProcessType. 242

243 Table 23 - Codelist ProcessType

Code	Title	Description
A 0 1	Day ahead	The information provided concerns a day ahead process.
A02	Intra day incremental	The information provided concerns an intra day schedule.
A03	Inter-area transit	The information provided concerns an inter area transit schedule. The rules governing this process are market dependent
	System operation closure	The information provided concerns the closure of a given period of both scheduled and regulation information.
	Metered data aggregation	The information provided concerns the aggregation process of metered information.
A06	Imbalance settlement	The information provided concerns the imbalance settlement for a given period for a balance responsible party or parties.
A 07	Capacity allocation	The information provided concerns the capacity allocation process.
A08	Central reconciliation	The process carried out to finalise the imbalance settlement based on actual metered values against provisional values from profiled metering points.



Code	Title	Description
A 09	Released capacity allocation	The process concerns the notification of capacity rights that are being released.
A10	Proposed capacity allocation	The process concerns the proposed capacity to be allocated for a given border.
A11	Agreed capacity allocation	The process concerns the capacity that has been agreed for allocation for a border.
A12	Long term	The process concerns scheduling all schedules except daily and intraday contracts.
	Post scheduling adjustment	The process concerns the adjustments made to previous schedules after the period of execution.
A14	Forecast	The data contained in the document are to be handled in short, medium, long term for ecasting process.
A15	Capacity determination	The process of determining the capacity for use.
A16	Realised	The process for the treatment of realised data as opposed to forecast data.
A17	Schedule day	The process concerns the day ahead, intraday and eventually ex-post scheduling in a single document. The schedule will be transferred within the total position including historic information.
A18	Intraday total	This process concerns an intraday schedule which contains the accumulated day ahead and intraday current position.
A19		This process concerns a single intraday schedule process where only intraday evolutions occur through version changes.
A20	SOMA process	System Operator meter alignment process.
A21	SOVMprocess	System Operator validated measurement process.
A22	RGCE accounting process	The document provides ENTSO-E Regional Group Continental Europe accounting process information.
A23	CCSR RGCE Settlement	The process concerns the control center settlement report for the whole of the ENTSO-E Regional Group Continental Europe.
A24	CBSR Settlement	The process concerns the control block settlement report.
A 25	CASR Settlement	The process concerns the control area settlement report.
A26	Outage information	The process concerns TSO publication of outages on its power system.
A27	Reserve resource process	The process being described is for general reserve resources.
A28	Primary reserve process	The process being described is for primary reserves.
A29	Secondary reserve process	The process being described is for secondary reserves.
A30	Tertiary reserve process	The process being described is for tertiary reserves.
A31	Week ahead	The process being described is for the week ahead.
A32	Month ahead	The process being described is for the month ahead.
A33	Year ahead	The process being described is for the year ahead.
A34	Contracted	The process being described is for contracted information.
A35	Network information	The process being described is for network information.
A36	Creation	The process being described is for the creation of information.
A37	Modification	The process being described is for the modification of information.
A38	Deactivation process	The process being described is for deactivation of information.



Code	Title	Description
A39	Synchronisation process	The process being described is for the synchronisation of information.
A40	Intraday process	The process being described is for intraday process.
A 4 1	Redispatch process	The process being described is for redispatch activation.
	Activation history process	The process being described is for the provision of an activation history.
_	Flow based domain constraint day-ahead	The information provided concerns the flow-based process in day ahead.
	Flow based domain constraint intraday	The information provided concerns the flow-based process in intraday.
A 45	Tw o days ahead	Tw o days ahead.
A46	Replacement reserve	A process being described is for replacement reserves (RR) to restore or support the required level of frequency restoration reserves.
A 47	Manual frequency restoration reserve	A process being described is for manual frequency restoration reserves (mFRR).
	Day-ahead capacity determination	The process run at the day-ahead timeframe to determine the capacity for use.
	Intraday capacity determination	The process run at the intraday timeframe to determine the capacity for use.
	Long term capacity determination	The process run at the long term timeframe to determine the capacity for use.

245 2.24 QualityType enumeration

246 The quality of an object.

247 Table 24 provides details of the Codelist QualityType.

248

Table 24 - Codelist QualityType

Code	Title	Description
A 0 1	Adjusted	The contents of the object have been adjusted.
A02	Not available	The contents of the object are not available.
A03	Estimated	The contents of the object are estimated.
A04	As provided	The contents of the object are as provided.
A 05	Incomplete	The contents of the object are calculated based on incomplete data.

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250

2.25 ReasonCodeType enumeration

The coded motivation of an act. 251

Table 25 provides details of the Codelist ReasonCodeType. 252

Table 25 - Codelist ReasonCodeType

Code	Title	Description
	identified	This code is used to identify errors that have not been specifically addressed in the Reason code list. It can be used at any level and refers to the level for which it has been identified.



Code	Title	Description
	Message fully accepted	The message has been fully accepted for application processing.
A02	Message fully rejected	No part of the message has been accepted for application processing, e.g. Global position incomplete.
A03	Message contains errors at the time series level	Part of the message contents, i.e. certain time series, has been accepted for application processing. It is necessary to look at the time series level to determine the time series that have been rejected. The time series is excluded from the global position.
A04	Time interval incorrect	The schedule time interval is not within the contractual agreement or the period does not agree with the schedule time interval.
A 05	Sender without valid contract	The sender has no current valid contract with the TSO. The message consequently will be fully rejected.
A06	Schedule accepted	The schedule of the recipient as presented has been completely accepted.
A 07	Schedule partially accepted	The schedule of the recipient as presented has been partially accepted. It is necessary to look at the time series level to determine the changes (time series rejected, modified, etc.).
A08	Schedule rejected	The schedule of the recipient as presented has been totally rejected. The cause could be the non presentation of a counter part for the involved trades.
A 09	Time series not matching	Time series mismatches.
A10	Credit limit exceeded	The contractual credit limit has been exceeded and as such the message has been rejected.
A20	Time series fully rejected	The time series has been fully rejected. In the case of a confirmation report, this reason code is used in conjunction with either A26 or A30.
	Time series accepted with specific time interval errors	The time series has been accepted but some time interval quantities have been rectified or zeroed out.
A 22	In party/Out party invalid	There is no contract for the parties indicated or the rules for cross border nominations are not being respected. The time series has been rejected.
A23	Area invalid	The area is unknown or not allowed. The time series has been rejected.
A24	A 24 not applicable	This code is no longer applicable.
A 25	A 25 not applicable	This code is no longer applicable.
	Default time series applied	The time series has been rejected and replaced with a default time series profile. This reason code may not be used in conjunction with A30.
A 27		The cross border capacity has been exceeded. The time series has been rejected or adjusted.
	Counterpart time series missing	This provides an indication that the time series has not got a counterpart time series. In the case of an Intermediate Confirmation Report this is advising the recipient that the time series may be rejected at nomination closure if the counterpart time series is not received. In the case of a Final Confirmation Report this is informing the recipient that the time series has been rejected because the counterpart time series has not been forthcoming.
A29	Counterpart time series quantity differences	The time series has been rejected as it does not match that of the counterpart who is considered by market rules to be correct.
A30	Imposed Time series from nominated party's time series (party identified in reason text)	The nominated party's time series has replaced the current time series. This reason code may not be used in conjunction with A26.
	Resolution inconsistency	The resolution is not coherent with the time interval, or resolution not valid.



Code	Title	Description
A42		The quantity is not coherent. For example a time period with the same version number but different quantities or an non permitted number of digits after the decimal point, etc.
A43	Quantity increased	The quantity has been increased in order to satisfy minimum constraints.
A44	Quantity decreased	The quantity has been decreased in order to satisfy congestion constraints.
	Default quantity applied	The default quantity has been applied as the current quantity does not satisfy contractual obligations.
		The quantity proposed is illegal since signed values are only permitted in specific circumstances.
A 47	A 47 not applicable	This code is no longer applicable.
A48	Modification reason	In an intraday transmission, the reason for the modification is as follows (in the reason text).
A49	Position inconsistency	A position is missing or too many.
	Senders time series version conflict	There is an error in the sender time series version, i.e. it could be superior to the message version or is inconsistent with the existing data. The time series has been rejected.
		The message identification is already in the receiving system. Or a higher version already exists. Message rejected.
A52	Time series missing from new version of message	A time series is not contained in a new version of the message. Message rejected.
A53	Receiving party incorrect	The receiving party is incorrect. Message rejected.
A54		The message does not balance out to zero. Market rules might require that the message is rejected.
A55	Time series identification conflict	The identification of the time series is duplicated or incorrect. Time series will be rejected.
A56	Corresponding Time series not netted	All corresponding time series must be netted. Time series rejected.
	Deadline limit exceeded/Gate not open	The deadline for receiving schedule messages has passed. Message or time series rejected.
A58	One to one nomination inconsistency	There is a one to one nomination inconstancy with the in/out parties or areas. Time series rejected.
A59		The level in which this is identified is not in compliance with local market rules. The level in question has been rejected.
A60	Inter-area transit schedule exceeds nominated schedule	The inter-area transit schedule exceeds the nominated schedule for the same time interval. The inter-area transit schedule is rejected.
A 61	Currency invalid	The currency is not in compliance with ISO 4217.
A 62	Invalid business type	The business type does not belong to the valid set of business types for the process in question.
A63	Time Series modified	The time series has been modified.
A 64	Resource Object Invalid	The Resource Object defined in the document is not valid.
A65	Reserve object Technical limits exceeded	Reserve objects aggregated values are not within technical/prequalified limits



Code	Title	Description
	Planned reserves do not correspond with contractual data	Planned reserves do not correspond with contractual data.
_	Limit Data is not available	Limit Data is not available.
	Reserve Object not qualified for reserve type	Reserve Object is not qualified for reserve type.
A69	Mandatory attributes missing	Mandatory attributes missing.
A70	Curtailment	The capacity in question has been curtailed.
A71		The bid in question has been rejected because an associated bid has been unsuccessful.
	Original bid divided to permit acceptance	The original bid quantity has been divided to enable it to be accepted.
A73	Bid accepted	The bid in question has been accepted.
A74	Auction Status	The information in the Reason Text provides auction status information.
	Right status information	The information in the Reason Text provides status information concerning the transmission rights in question.
	Agreement identification inconsistency	There is an inconsistency between the contract type and the agreement identification.
		There is an inconsistency between the document contents and the dependency matrix.
_	Sender identification and/or role invalid	The identification of the sender or the sender/role combination is invalid.
A79	Process type invalid	The process type does not figure in the list of valid process types for this document.
A80	Domain invalid	The domain does not figure in the list of valid domains for this document and process.
	Matching period invalid	The period is not within the expected limits.
	In/Out area inconsistent with domain	The in and out area does not figure within the domain specified.
A83	Disagree with matching results	The matching results provided are not consistent.
	Confirmation ignored due to higher version already received	The report has been ignored since a higher version has been received.
	Confirmation without adjustment (time series have been matched without change)	The report has been successfully matched without any changes.
	Confirmation with adjustment (time series have been modified)	The report has been matched but required adjustment.
	For action (only in intermediate confirmation - time series need mutual agreement and action)	The report in question is only for action in an intermediate stage.



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(intermediate confirmation)		(note: this can only apply to time series that are set to zero - see matching	
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R10 Initiator area problem The problem concerns the initiator area	B09	Bid not accepted	The bid in question has not been accepted.
pro finitiator area problem fine problem concerns the initiator area.	B10	Initiator area problem	The problem concerns the initiator area.



Code	Title	Description
B11	Cooperating area problem	The problem concerns the cooperating area.
		The status within the system indicates that the communication capability is currently active.
		The status within the system indicates that the communication capability is currently inactive.
	Communication status currently restricted	The status within the system indicates that the communication capability is currently restricted.
-	Problem associated w ith both areas	The problem concerns both areas.
	Tender unavailable in MOL list	A tender that has been requested is no longer available in the MOL.
	Price based on preliminary exchange rate	The price is based on a preliminary exchange rate.
B18	Failure	A failure has occurred.
	Foreseen maintenance	Maintenance is foreseen.
B20	Shutdown	A shutdown has occurred.
	Official exchange rate approved	The official exchange rate has been approved.
B22	System regulation	The information provided regards a regulation for system purposes.
B23	Frequency regulation	The information provided regards a regulation for frequency purposes.
B24	Load flow overload	Situation in the grid, where loading of a certain grid element, e.g. overhead line, is above defined technical limits.
	adjustment	A TSO activity to maintain an acceptable voltage profile throughout the network. This is achieved by balancing of the respective reactive power requirements of the network and the customers.
B26		Curtailment due to emergency situation. A code that enables the identification of the curtailment reason for settlement purposes.
	Calculation process failed	The calculation has not been performed.
B28	No capacity constraint impact on the market	The market position is such as no capacity constraint is applied to limit the cross border exchanges.
B29	Special Condition	Special condition need to be fulfilled.
B30	Unverified	Missing or not validated data.
B31	Verified	Data has successfully passed the verification process.

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2.26 RightsType enumeration

The rights of use that is accorded to what is acquired in an auction.

257 Table 26 provides details of the Codelist RightsType.

Table 26 - Codelist RightsType

Code	Title	Description
A 0 1	Use It Or Lose It	Any rights not nominated shall be lost.
A 02	Use It Or Sell It	Any rights that are not nominated shall be sold.



Code	Title	Description
	Allocation curtailment possible	Rights acquired may be curtailed.
	Nomination curtailment possible	Rights acquired may be curtailed at nomination.
A 05	Resale possible	A cquired rights may be resold.
A06	Transfer possible	A cquired rights may be transferred.

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2.27 RoleType enumeration

- Identification of the role played by a party. 261
- 262 Table 27 provides details of the Codelist RoleType.

Table 27 - Codelist RoleType

Code	Title	Description
A 0 1	Trade responsible party	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A02	Consumption responsible party	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A03	Combined power exchange (not to be used)	This role is no longer in the ENTSO-E Harmonised Role Model Document.
A 0 4	System operator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A 05	Imbalance settlement responsible	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
	Production responsible party	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A 07	Transmission capacity allocator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A08	Balance responsible party	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A 09	Metered data aggregator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A10	Billing agent	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A11	Market operator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A12	Balance supplier	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A13	Consumer	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A14	Control area operator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A15	Control block operator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A16	Coordination center operator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A17	Grid access provider	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A18	Grid operator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A19	Meter administrator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A20	Party connected to grid	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A21	Producer	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.



Code	Title	Description
A22	Profile maintenance party	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A23	Meter operator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A24	Metered data collector	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
	Metered data responsible	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
	Metering point administrator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A27	Resource Provider	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
	Scheduling coordinator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A29	Capacity Trader	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
	Interconnection Trade Responsible	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
A31	Nomination Validator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document.
	aggregator	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document. A party that collects information from different sources and assembles it to provide a summary of the market.
A33		Refer to role model definitions in the ENTSO-E Harmonised Role Model Document. A party, not necessarily a market participant, which receives information about the market.
A34		Refer to role model definitions in the ENTSO-E Harmonised Role Model Document. A party that informs the market of reserve requirements, receives tenders against the requirements and in compliance with the prequalification criteria, determines what tenders meet requirements and assigns tenders.
A35	·	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document. A party that Informs the market of reserve requirements, receives tenders against the requirements and in compliance with the prequalification criteria, determines what tenders meet requirements and assigns tenders.
A36	, ,	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document. A party, acting on behalf of the SOs involved, responsible for establishing a coordinated Offered Capacity and/or NTC and/or ATC between several Market Balance Areas.
A37	Accountable	Refer to role model definitions in the ENTSO-E Harmonised Role Model Document. A party that is financially accountable for the reconciled volume of energy products for a profiled local metering point.
	Responsible	A party that is responsible for reconciling, within a metering grid area, the volumes used in the imbalance settlement process for profiled metering points and the actual metered quantities.
A39	Data provider	A party that is responsible for providing information to a central authority.
A40	Local Issuing Office (LIO)	A party that is responsible for operating a Local Issuing Office (LIO).
A41	Central Issuing Office (CIO)	A party that is responsible for operating a Central Issuing Office (CIO).
A42	EIC Participant	A party that participates in the EIC environment.
A43		A party that analyses the current and forecast weather situation and establishes a prognosis of its impact on the renewable energy environment as well as the overall load.
	Regional Security Coordinator (RSC)	The RCS as defined in the System Operation guideline.

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2.28 StatusType enumeration

The condition or position of an object with regard to its standing. 266

Table 28 provides details of the Codelist StatusType. 267

Table 28 - Codelist StatusType

Code	Title	Description
A01	Intermediate	The document is in a non finalized state.
A02	Final	The document is in a definitive state.
A03	Deactivated	The object being reported has been deactivated.
A04	Reactivated	The object being reported has been reactivated.
A 05	Active	The object being reported is currently active.
A06	Available	The tender indicated in the time series has the indicated quantities available.
A 07	Activated	The quantities in the time series have been activated.
A08		The quantities in the time series are in the process of activation (an activation request has been made).
A09		The tender indicated in the time series has been completely cancelled. In this case the resources are no longer available to all Acquiring System Operators
A10	Ordered	The quantities in the time series are to be activated.
A11	ŭ	The tender indicated in the time series is no longer available (in the case where this is in an activation response document the resources are no longer available to the Acquiring System Operator).
A12		The information has been agreed within the ENTSO-E Regional Group Continental Europe process.
A13	Withdrawn	The information has been withdrawn by the submitter.
A14	Creation	The action requested to be carried out is the creation of a new object.
A15	Update	The action requested to be carried out is the update an existing object.
A16	Deactivation	The action requested to be carried out is to deactivate an existing object.
A17	Reactivation	The action requested to be carried out is to reactivate a previously deactivated object.
A18	Preventive	The remedial action is applied to prevent an outage.
A19		The remedial action is applied after an outage has occurred, in order to maintain the operational security.
A20	Automatic	The remedial action being described is applied by an automation when an outage occurs.
A21		The action being described consists of disconnecting the network element to the transmission network.
A22		The action being described consists of connecting the network element to the transmission network.
A23	Stop	The action being described consists of stopping the production or consumption connected to a network element.
A24		The action being described consists of starting the production or consumption connected to a network element.
A 25	Relative	The quantity being described is a relative value to an initial state.
A26	Absolute	The quantity being described is an absolute value.
A27		The remedial action can be applied to prevent an outage or after an outage has occurred in order to maintain the operational security.
A28	Unshared bid	Used to indicate that the bid cannot be shared.



Code	Title	Description
A29	Pre Processed	to be process
A30	Substituted	Substituted pre-processing data by Pan European Verification Function.
A31	Modified	Modified pre-processing data by RSC or CGMA platform.
A32	Result	Result
A33	Not satisfied	The need described in the time series cannot be satisfied.
A34	Rejected	The document rejected by one or more parties.
A35	Preliminary	Indicative information only for initial planning purposes.
A36	Planned	Is planned.
A37	Confirmed	The status is confirmed.
A38	Shall Be Used	The object defined in the series shall be used.
A39	Cloud Be Used	The object defined in the series could be used.
A40	Proposed	The status of the information is proposed.
	Individual Network Data	The network data provided in the document or series concerns the the unique TSO area describes by the document or series.
	Common Network Data	The network data provided in the document or series concerns the whole area describes by the document or series.
A43	Setpoint schedule	The code for the power setpoint mode of operation of the HVDC link.
	Proportional external signal	The code for the proportional external signal mode of operation of the HVDC link.
A 45	AC emulation	The code for the AC emulation mode of operation of the HVDC link.

2.29 TarifTypeType enumeration

- 271 The standard tariff types as defined in the RGCE policies.
- Table 29 provides details of the Codelist TarifTypeType. 272

Table 29 - Codelist TarifTypeType 273

Code	Title	Description
A 0 1	Winter HT	Winter HT tariff.
A02	Winter HHT	Winter HHT tariff.
A03	Winter NT	Winter NT tariff.
A04	Summer HT	Summer HT tariff.
A 05	Summer HHT1	Summer HHT1 tariff.
A06	Summer HHT2	Summer HHT2 tariff.
A07	Summer NT	Summer NT tariff.

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2.30 UnitMultiplier enumeration

- 276 The unit multipliers defined for the CIM.
- 277 Table 30 provides details of the Codelist UnitMultiplier.



Table 30 - Codelist UnitMultiplier

Code	Title	Description
1	none	No multiplier or equivalently multiply by 1.

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2.31 UnitOfMeasureType enumeration

(synonym MeasurementUnit) The unit of measure that is applied to a quantity. The measurement units shall be in compliance with UN/ECE Recommendation 20.

Table 31 provides details of the Codelist UnitOfMeasureType.

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Table 31 - Codelist UnitOfMeasureType

Code	Title	Description
A59	OKTA unit	A unit of measurement of the cloudiness expressed in OKTA or OCTA, i.e. A unit of count defining the number of eighth-parts as a measure of the celestial dome cloud coverage.
A 90	giga w att	GW unit as per UN/CEFACT recommendation 20.
A 97	hectopascal	A unit of measurement of the pressure expressed in hectopascal.
A MP	ampere	The unit of electrical current in the International system of Units (SI) equivalent to one Coulomb per second.
C62	One	A unit for dimensionless quantities, also called quantities of dimension one.
CEL	Celsius	A unit of measurement of temperature expressed in degree Celsius.
D54	w att per square meter	A unit of measurement of the density of heat flow rate expressed in watt per square meter.
DD	degree (unit of angle)	A unit of measurement of angles expressed in a 0 to 360 degree gradient.
GWH	gigaw att hour	GWh unit as per UN/CEFACT recommendation 20.
HMQ	cubic hectometres	A unit of volume equal to one million cubic metres.
KEL	K (Kelvin)	Temperature unit refer ISO 80000-5 (Quantities and units, Part 5: Thermodynamics).
KMT	kilometre	km unit as per UN/CEFACT recommendation 20.
KVR	kilovolt ampere reactive	A unit of electrical reactive power represented by a current of one thousand amperes flowing due to a potential difference of one thousand volts where the sine of the phase angle between them is 1. The unity power factor is expressed in thousands of a volt ampere reactive.
KVT	kilovolt	kV unit as per UN/CEFACT recommendation 20.
KWH	kilowatt hour	A total amount of electrical energy transferred or consumed in one hour.
KWT	kilow att	A unit of bulk power flow, which can be defined as the rate of energy transfer /consumption when a current of 1000 amperes flows due to a potential of 1000 volts at unity power factor expressed in thousands of a watt.
МАН	megavolt ampere reactive hours	Total amount of reactive power across a power system.
MAR	megavolt ampere reactive	A unit of electrical reactive power represented by a current of one thousand amperes flowing due to a potential difference of one thousand volts where the sine of the phase angle between them is 1.
MA W	megawatt	A unit of bulk power flow, which can be defined as the rate of energy transfer /consumption when a current of 1000 amperes flows due to a potential of 1000 volts at unity power factor expressed in millions of a watt.
MMT	millimeter	A unit of measurement of length expressed in millimeter.
MQS	cubic metres per second	The volume flow rate of cubic metre per second.



Code	Title	Description
MTQ	cubic metre	A Cubic metre.
MTR	metre	The length of a metre.
MTS	meter persecond	A unit of measurement of the speed expressed in m/s.
MVA	megavolt-ampere	MVA unit as per UN/CEFACT recommendation 20.
MWH	megawatt hours	The total amount of bulk energy transferred or consumed.
P1	percent	A unit of proportion equal to 0.01.
WTT	w att	The watt is the International System of Units (SI) standard unit of power (energy per unit time), the equivalent of one joule per second.

2.32 UnitSymbol enumeration

287 The coded representation of different units from IEC 61970.

Table 32 provides details of the Codelist UnitSymbol.

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Table 32 - Codelist UnitSymbol

Code	Title	Description
A MP	Ampere	The unit of electrical current in the International system of Units (SI) equivalent to one Coulomb per second.
C62	One	A unit for dimensionless quantities, also called quantities of dimension one.
KVT	kV	The symbol of kV
MAR	MV A r	The symbol of MVAr
MA W	MW	The symbol of MW
ОНМ	Ohm	The symbol of Ohm Unit
P1	Percent	A unit of proportion equal to 0.01.

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2.33 DocumentType enumeration

The DocumentTypeList is only used in XML instances using deprecated ENTSO-E schema; otherwise for XML instances based CIM, the codelist is MessageTypeList.

Therefore, you are kindly advised to refer to the MessageType enumeration, which includes the same enumeration codes.