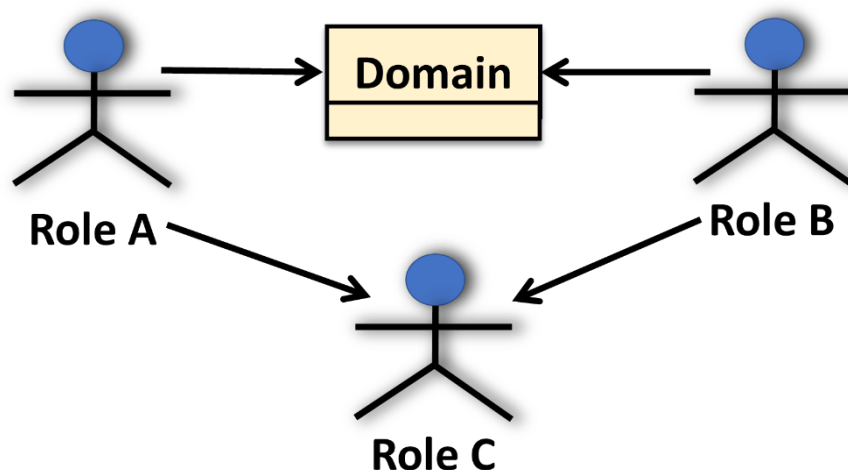


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THE HARMONISED ELECTRICITY MARKET ROLE MODEL

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VERSION: 2023-01

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REVISION HISTORY

| Version | Date | Change (compared to version 2022-01) |
|----------------|-------------|---|
| 2023-01 | 2023-09-21 | This version of the Harmonised Electricity Market Role Model (HEMRM) has among others two new roles (Alignment Agent and Flexibility Service Provider), addition of new associations and updates of definitions. The revision history is published at ENTSO-E and eBIX® web sites as referenced below. |

69

70 The Harmonised electricity market Role Model and the revision history can be found at:

71 ENTSO-E web site: [Harmonised Electricity Market Role Model](#) or

72 eBIX® web site: [Harmonised Electricity Market Role Model](#)

73 **1 INTRODUCTION**

74 The Harmonised electricity market Role Model (HEMRM) has been developed in order to facilitate
75 the dialogue between the market participants from different countries through the designation of a
76 common name for each role and associated responsibilities towards other roles and objects that are
77 prevalent within the European electricity market information exchange. It focuses essentially to
78 enable a common terminology for IT supported information exchange. The HEMRM has been
79 developed by ENTSO-E, EFET and eBIX®.

80 This document describes the roles that can be played for given objects within the European
81 electricity market. It covers both the wholesale and retail electricity markets. The document covers
82 the roles as identified in current development being carried out in information exchange. It will
83 naturally grow and evolve as this work progresses. The reader is therefore encouraged to ensure that
84 the document is the latest available version.

85 A role model of this nature shall be the formal means of identifying roles and objects that are used in
86 information exchange. It is important to stress that it is not a model of the electricity market but
87 rather a model of the roles related to information exchange.

88 The necessity for such a role model arises from the possibility that a single party in the market may
89 assume multiple roles, however in decentralised, competitive market every role can be played by a
90 different party. This implies that the roles need to be atomically decomposed where necessary in
91 order to satisfy the information flows for a given process required within the electricity market.

92 The HEMRM represents these abstract roles and objects used in information exchange on European
93 electricity market.

94

95 2 ABOUT THE ROLE MODEL

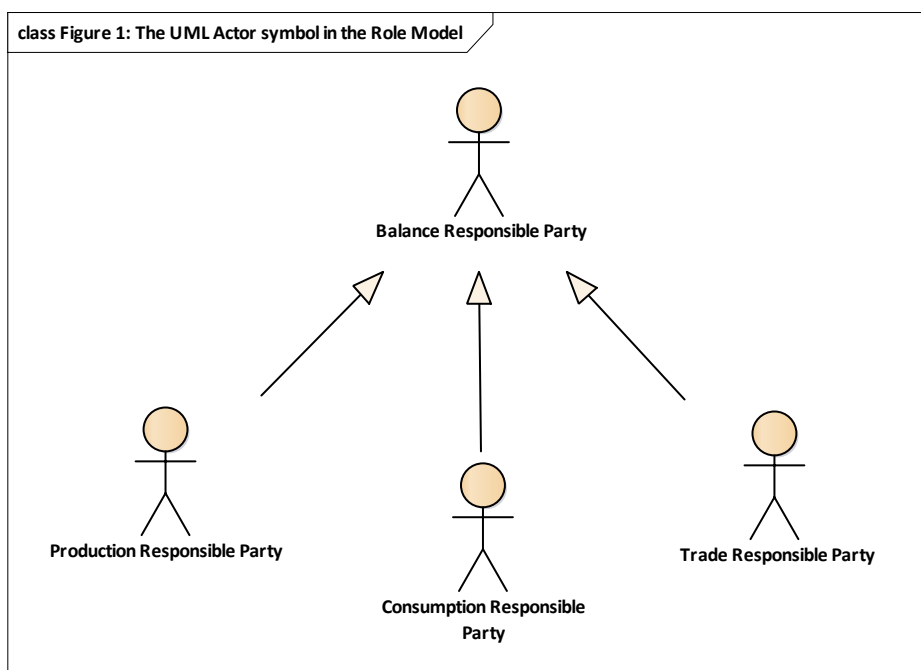
96 A party on the market may play several roles; for example, a TSO frequently plays the roles of a
97 System Operator, a LFC Operator and the role of an Imbalance Settlement Responsible. A DSO
98 frequently plays the role of a System operator, a Metering Point Administrator and the role of a Grid
99 Access Provider. However, different roles have been defined since these roles are not always played
100 by the same party in every electricity market. Consequently, it is necessary to clearly define the roles
101 in order to be in a position to correctly use them as required.

102 It is important to differentiate between the roles that can be found on a given marketplace and the
103 parties that can play such roles. ENTSO-E, EFET and eBIX[®] have identified a given role whenever it has
104 been found necessary to distinguish it in an information exchange process.

105 The HEMRM also identifies the different objects, described as UML classes, which are necessary in
106 the electricity market for information exchange. The term *Object* is a generic term covering domains,
107 points, resources, CIM objects and accounts.

108 To build a Role Model diagram the UML class diagramming technique has been used. The diagram
109 makes use of two UML symbols, the “actor” symbol (not to be confused with a party on a
110 marketplace) is used to represent a role and the “class” symbol is used to define an object.

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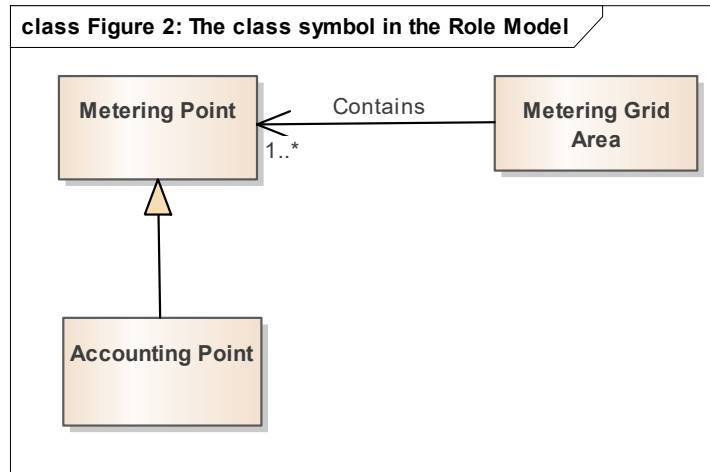
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Figure 1: The UML Actor symbol in the Role Model

114 The Role Model shown in figure 1 shows the actor symbol used to identify roles. It also introduces
115 the concept of a “generalisation” relationship. The generalisation relationships in the figure show
116 that three roles inherit the basic properties of a “Balance Responsible Party”.

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Figure 2: The class symbol in the Role Model

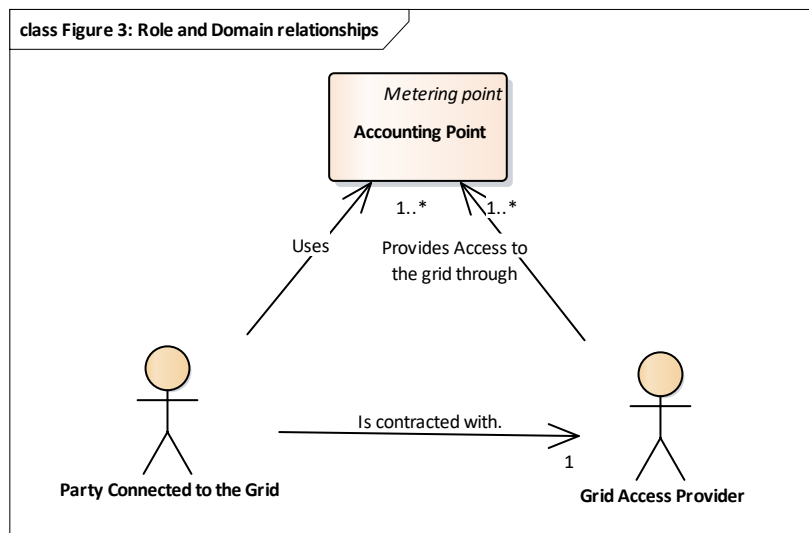
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The class symbols outlined in figure 2 show an example of objects and indicate that an Accounting Point is a specialisation of a Metering Point. One also sees that a Metering Grid Area contains one or more (1..*) Metering Points.

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Figure 3: Role and Object relationships

126

Figure 3 shows how roles may interact. The relationship that exists between the roles and objects are shown by the arrows drawn between them. For example, the Party Connected to the Grid uses an Accounting Point and is contracted with a Grid Access Provider, which provides access to an Accounting Point.

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Naturally enough the role model does not show all the relationships that may exist between the roles and the objects. The relationships in the model are there only to highlight the major relationship that justifies the presence of a role or an object. In other words, not all relationships are present in the role model.

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134 **3 PROCEDURES FOR THE USE OF THE ROLE MODEL**

135 **3.1 Introduction**

136 *An actor* represents a party that participates in a business transaction. Within a given business
137 transaction an actor assumes a specific role or a set of roles. An actor is a composition of one or
138 more roles and as such does not appear in the model.

139 *A harmonised role* represents the external intended behaviour of an actor. Actors, e.g. DSO, TSO,
140 Traders and Energy Suppliers carry out their activities by performing roles. A role cannot be split over
141 several actors. Roles are the main scope of the HEMRM.

142 *A harmonised domain* represents abstract objects used in the electricity market necessary for the
143 management of various processes, resources or areas, with the following characteristics:

- 144 • *A harmonised domain* is the composition of one or more Metering Points.
- 145 • A Metering Grid Area (MGA) consist of a set of Metering Points.
- 146 • A MGA is the corner stone of defining areas, since the flow out and in of an MGA can be
147 measured.
- 148 • Other Areas will normally be composed of one or more MGAs.
- 149 • An Area has a set of common characteristics (e.g. same price, no congestion, same rules...)
150 and one responsible role.
- 151 • Domains will only be added for clarification and only where the responsibility for the domain
152 is clear.
- 153 • There should be only one role responsible for creation, maintenance and deletion of a
154 Domain.

155 *A harmonised resource* represents a grid asset, a consumption resource or a production resource
156 used in the electricity market, necessary for the management of various processes.

157 *A harmonised account* represents a business object for aggregated reporting.

158 *A CIM Object* represents objects defined in IEC/CIM standards.

159 The objective of decomposing the electricity market model into a set of autonomous roles and
160 objects is to enable the construction of business processes where the relevant role participates to
161 satisfy a specific transaction. Business processes should be designed to satisfy the requirements of
162 the roles and not of the actors.

163 It is not the intent of the HEMRM to define the business processes and their transactions. Business
164 processes and their transactions shall be completely defined in a Business Requirements
165 Specification (BRS).

166 The definitions of roles, domains or other objects use the term “energy” to allow harmonised roles to
167 be used by other energy sectors than electricity e.g. gas or heat (especially the ones using
168 transmission or distribution grid to deliver energy from producers to consumers). For information
169 exchanges in electricity market “energy” shall be understood as “electricity”.

170 Similarly, the term “grid” is used to allow harmonised domains to be used by other energy sectors
171 than electricity, e.g. gas or heat. For information exchanges in electricity market “grid” shall be
172 understood as “electricity grid”.

173

174 **3.2 Role constraints**

175 A role must be able to stand alone within the model. In other words, it must represent a relatively
176 autonomous function. A good guide to determining the validity for the insertion of a role is to
177 determine whether it provides:

178 1. All the information relevant to interoperability. It must be able to participate in the development
179 of a business process by being a key factor in the construction of the allowable sequences of
180 information exchanges and satisfy the conditions in which it is allowed to send information. In
181 this respect, it has to be autonomous. That is to say it must have the business responsibility
182 which enables it to:

- 183 ➤ receive information from another role,
- 184 ➤ determine the actions to be carried out on the information in question,
- 185 ➤ terminate, if necessary, prematurely, the exchange with respect to predefined rules,
- 186 ➤ send information to the role in question or to another role,
- 187 ➤ manage error conditions.

188 2. Satisfy the process constraints in which the role participates. Such constraints impose restrictions
189 on how roles may or must react. These constraints will be defined within the business process
190 specification. Such constraints include:

- 191 ➤ demands on quality of service imposed by the business process requirements for a role,
192 such as network acknowledgement or security features,
- 193 ➤ constraints on the characteristics of the party that can play the role,
- 194 ➤ constraints on the preconditions that must be met before a role can be played,
- 195 ➤ constraints on the ability of a party to assign all or part of a role to another party.

196 The role shall be generic. The model is intended to be employed throughout the industry.
197 Consequently, roles that are specific or that are particular to only one European context shall not
198 appear in the model.

199 In essence, this means that a separate role shall be identified when it can be played by a third party
200 (= a party that can carry out the task on behalf of another party or as an independent entity). E.g. the
201 Transmission Capacity Allocator can carry out the capacity allocation on behalf of the System
202 Operator.

203

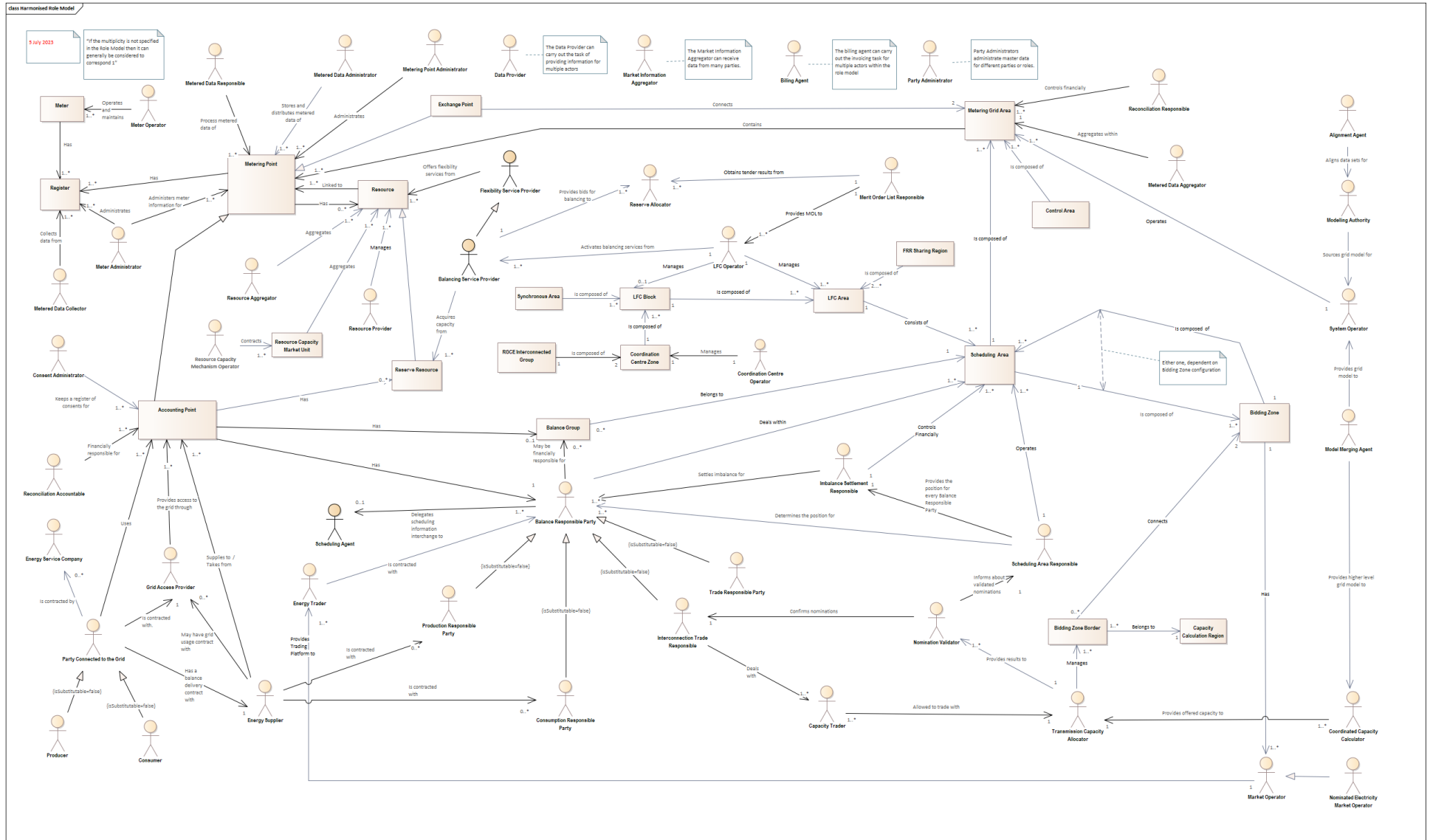
204 **3.3 HEMRM use**

205 The HEMRM shall be used as the basis for the construction of the information exchange processes
206 that are necessary for the electricity market. The generic nature of the HEMRM should cover all the
207 roles that can be used in a heterogeneous environment.

208 If, during the course of the construction of a process, a role is found to be missing from the HEMRM,
209 a maintenance request should be made requesting its inclusion in the model.

210

211 **4** THE ROLE MODEL



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Figure 4: The Harmonised European Electricity Market Role Model

214 **5 ROLE MODEL DEFINITIONS**

215 **5.1 Roles**

| ROLES | | |
|-------|----------------------------|--|
| TYPE | ROLE NAME | DESCRIPTION |
| Role | Alignment Agent | A party responsible for aligning the forecasts and/or the verification of the Bidding Zones net positions. |
| Role | Balance Responsible Party | <p>A party financially accountable for its imbalances.</p> <p>Based on: Consolidated text: Commission Regulation (EU) 2017/2195 - Art.2 Definitions.</p> <p>Additional information: A balance responsibility requires a contract proving financial security with the Imbalance Settlement Responsible of the Scheduling Area entitling the party to operate in the market.</p> <p>Imbalance means an energy volume calculated for a Balance Responsible Party and representing the difference between the allocated volume attributed to that Balance Responsible Party and the final position of that Balance Responsible Party, including any imbalance adjustment applied to that Balance Responsible Party, within a given imbalance settlement period.</p> |
| Role | Balancing Service Provider | <p>A party providing energy balancing services to the energy market.</p> <p>Additional information: Balancing services can be balancing energy and/or balancing capacity.</p> <p>This is a type of Flexibility Service Provider.</p> <p>Based on: Consolidated text: Commission Regulation (EU) 2017/2195 - Art.2 Definitions and Consolidated text: Regulation (EU) 2019/943.</p> |
| Role | Billing Agent | The party responsible for invoicing a concerned party. |

| ROLES | | |
|-------|---------------------------------|---|
| TYPE | ROLE NAME | DESCRIPTION |
| Role | Capacity Trader | <p>A party that has a contract to participate in the Capacity Market to acquire capacity through a Transmission Capacity Allocator.</p> <p>Additional information:</p> <p>The capacity may be acquired on behalf of an Interconnection Trade Responsible or for sale on secondary capacity markets.</p> |
| Role | Consumer | <p>A party that consumes energy.</p> <p>Additional information:</p> <p>This is a Type of Party Connected to the Grid.</p> |
| Role | Consumption Responsible Party | <p>A Consumption Responsible Party is responsible for its imbalances, meaning the difference between the energy volume physically withdrawn from the system and the final nominated energy volume, including any imbalance adjustment within a given imbalance settlement period.</p> <p>Additional information:</p> <p>This is a type of Balance Responsible Party.</p> |
| Role | Consent Administrator | <p>A party responsible for administrating a register of consents for a domain. The Consent Administrator makes this information available on request for entitled parties in the sector.</p> <p>Based on: The definition of the Permission Administrator from Commission Implementing Regulation (EU) 2023/1162.</p> |
| Role | Coordinated Capacity Calculator | <p>Coordinated Capacity Calculator is the entity or entities with the task of calculating transmission capacity, at regional level or above.</p> <p>Source: Consolidated text: Commission Regulation (EU) 2015/1222.</p> |
| Role | Coordination Centre Operator | <p>A party responsible for the coordination of its Coordination Centre Zone in respect of scheduling, load frequency control, time deviation and compensation of unintentional deviation.</p> |

| ROLES | | |
|-------|------------------------------|--|
| TYPE | ROLE NAME | DESCRIPTION |
| Role | Data Provider | <p>A party that has a mandate to provide information to other parties in the energy market.</p> <p>Additional information: For example, due to Consolidated text: Commission Regulation (EU) No 543/2013, a data provider may be a Transmission System Operator or a third party agreed by a TSO.</p> |
| Role | Energy Service Company | <p>A party offering energy-related services to the Party Connected to Grid, but not directly active in the energy value chain or the physical infrastructure itself. The Energy Service Company (ESCO) may provide insight services as well as energy management services.</p> |
| Role | Energy Supplier | <p>An Energy Supplier delivers energy to or takes energy from a Party Connected to the Grid at an Accounting Point.</p> <p>Additional information: An Accounting Point can have only one Energy Supplier. When additional suppliers (with firm (block) energy contracts) are involved, the Energy Supplier delivers/takes the difference between contracted and established (e.g. measured or calculated) production/consumption.</p> |
| Role | Energy Trader | <p>A party that is selling or buying energy.</p> |
| Role | Flexibility Service Provider | <p>A party that offers flexibility services based on acquired (aggregated) Resources.</p> <p>Additional information: Flexibility is used to meet the needs of System Operators or other energy market participants on different energy-, power- or capacity marketplaces. Flexibility Services may be balancing services, non-frequency ancillary services, congestion management services etc.</p> |

| ROLES | | |
|-------|-----------------------------------|---|
| TYPE | ROLE NAME | DESCRIPTION |
| Role | Grid Access Provider | <p>A party responsible for providing access to the grid.</p> <p>Additional information: The Grid Access Provider allows a Party Connected to the Grid to take energy from or put energy into the grid through an Accounting Point.</p> <p>The Grid Access Provider is also responsible for creating and terminating Accounting Points.</p> |
| Role | Imbalance Settlement Responsible | <p>A party that is responsible for settlement of the difference between the contracted quantities with physical delivery and the established quantities of energy products for the Balance Responsible Parties in a Scheduling Area.</p> <p>Additional information: The Imbalance Settlement Responsible may delegate the invoicing responsibility to a more generic role such as a Billing Agent.</p> |
| Role | Interconnection Trade Responsible | <p>Is a Balance Responsible Party or depends on one. He is recognised by the Nomination Validator for the nomination of already allocated capacity.</p> <p>Additional information: This is a type of Balance Responsible Party.</p> |
| Role | LFC Operator | <p>Responsible for the load frequency control for its LFC Area or LFC Block.</p> <p>Additional information: This role is typically performed by a TSO.</p> |
| Role | Market Information Aggregator | <p>A party that provides market related information that has been compiled from the figures supplied by different actors in the market. This information may also be published or distributed for general use.</p> <p>Additional information: The Market Information Aggregator may receive information from any market participant that is relevant for publication or distribution.</p> |

| ROLES | | |
|-------|------------------------------|--|
| TYPE | ROLE NAME | DESCRIPTION |
| Role | Market Operator | <p>A party that provides a service whereby the offers to sell energy are matched with bids to buy energy.</p> <p>Based on: Consolidated text: Regulation (EU) 2019/943.</p> <p>Additional information: This activity can be conducted in the forward, days-ahead and/or intraday timeframes, and can be combined with transmission capacity allocation in the context of market coupling.</p> <p>This is usually an energy/power exchange or platform.</p> |
| Role | Merit Order List Responsible | Responsible for the management of the available tenders for all Acquiring LFC Operators to establish the order of the reserve capacity that can be activated. |
| Role | Meter Administrator | A party responsible for keeping a database of meters. |
| Role | Meter Operator | A party responsible for installing, maintaining, testing, certifying and decommissioning physical meters. |
| Role | Metered Data Administrator | A party responsible for storing and distributing validated measured data. |
| Role | Metered Data Aggregator | A party responsible for the establishment and qualification of measured data from the Metered Data Responsible. This data is aggregated according to a defined set of market rules. |
| Role | Metered Data Collector | A party responsible for meter reading and quality control of the reading. |
| Role | Metered Data Responsible | A party responsible for the establishment and validation of measured data based on the collected data received from the Metered Data Collector. The party is responsible for the history of metered data for a Metering Point. |
| Role | Metering Point Administrator | A party responsible for administrating and making available the Metering Point characteristics, including registering the parties linked to the Metering Point. |

| ROLES | | |
|-------|---------------------------------------|--|
| TYPE | ROLE NAME | DESCRIPTION |
| Role | Model Merging Agent | A party responsible for establishing a merged grid model and ensuring its completeness, consistency and quality. |
| Role | Modelling Authority | A party accountable for the sourcing, consistency and quality of one or more model datasets. |
| Role | Nominated Electricity Market Operator | <p>An entity designated by the competent authority to perform tasks related to single day-ahead or single intraday coupling.</p> <p>Source: Consolidated text: Commission Regulation (EU) 2015/1222.</p> <p>Additional Information: A NEMO performs MCO (Market Coupling Operator) and CCP (Central Counter Party) functions. A NEMO runs a power exchange related to day-ahead or intraday market. A NEMO is a type of Market Operator.</p> |
| Role | Nomination Validator | Has the responsibility of ensuring that all capacity nominated is within the allowed limits and confirming all valid nominations to all involved parties. He informs the Interconnection Trade Responsible of the maximum nominated capacity allowed. Depending on market rules for a given interconnection the corresponding System Operators may appoint one Nomination Validator. |
| Role | Party Administrator | A party responsible for maintaining party characteristics for the energy sector. |
| Role | Party Connected to the Grid | A party that contracts for the right to take out or feed in energy at an Accounting Point. |
| Role | Producer | <p>A party that generates electricity.</p> <p>Additional information: This is a type of Party Connected to the Grid.</p> <p>Based on: Consolidated text: Directive (EU) 2019/944.</p> |

| ROLES | | |
|-------|--------------------------------------|---|
| TYPE | ROLE NAME | DESCRIPTION |
| Role | Production Responsible Party | <p>A Production Responsible Party is responsible for its imbalances, meaning the difference between the energy volume physically injected to the system and the final nominated energy volume, including any imbalance adjustment within a given imbalance settlement period.</p> <p>Additional information: This is a type of Balance Responsible Party.</p> |
| Role | Reconciliation Accountable | <p>A party that is financially accountable for the reconciled volume of energy products for a profiled Accounting Point.</p> |
| Role | Reconciliation Responsible | <p>A party that is responsible for reconciling, within a Metering Grid Area, the volumes used in the imbalance settlement process for profiled Accounting Points and the actual measured quantities.</p> <p>Additional information: The Reconciliation Responsible may delegate the invoicing responsibility to a more generic role such as a Billing Agent.</p> |
| Role | Reserve Allocator | <p>Informs the market of reserve requirements, receives bids against the requirements and in compliance with the prequalification criteria, determines which bids meet requirements and assigns bids.</p> |
| Role | Resource Aggregator | <p>A party that aggregates Resources for usage by other market participants.</p> <p>Additional information: The aggregation must be defined by market rules.</p> |
| Role | Resource Capacity Mechanism Operator | <p>A party responsible to operate the resource capacity mechanism in a member state.</p> <p>Additional information: It can either be the TSO or an independent party. A Resource Capacity Mechanism Operator can contract one or several Resource capacity market units, and a resource capacity market unit can only be contracted by one Resource Capacity Mechanism Operator.</p> |

| ROLES | | |
|-------|-----------------------------|---|
| TYPE | ROLE NAME | DESCRIPTION |
| Role | Resource Provider | A role that manages a resource and provides production/consumption schedules for it, if required. |
| Role | Scheduling Agent | <p>The entity or entities with the task of providing schedules.</p> <p>Source: Consolidated text: Commission Regulation (EU) 2017/1485.</p> <p>Additional information: A party that is responsible for the schedule information and its exchange on behalf of a Balance Responsible Party.</p> |
| Role | Scheduling Area Responsible | <p>A party responsible for the coordination of nominated volumes within a scheduling area.</p> <p>Additional information: This role is typically performed by a TSO.</p> |
| Role | System Operator | <p>A party responsible for operating, ensuring the maintenance of and, if necessary, developing the system in a given area and, where applicable, its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the distribution or transmission of energy.</p> <p>Based on: Consolidated text: Directive (EU) 2019/944</p> |
| Role | Trade Responsible Party | <p>A party who can be brought to rights, legally and financially, for any imbalance between energy nominated and consumed for all associated Accounting Points.</p> <p>Additional information: A power exchange without any privileged responsibilities acts as a Trade Responsible Party.</p> <p>This is a type of Balance Responsible Party.</p> |

| ROLES | | |
|-------|---------------------------------|--|
| TYPE | ROLE NAME | DESCRIPTION |
| Role | Transmission Capacity Allocator | <p>The Transmission Capacity Allocator manages, on behalf of the System Operators, the allocation of available transmission capacity for a Bidding Zone Border. He offers the available transmission capacity to the market, allocates the available transmission capacity to individual Capacity Traders and calculates the billing amount of already allocated capacities to the Capacity Traders.</p> <p>Additional Information: The single allocation platform established by all TSOs for Forward Capacity Allocation performs the role of a Transmission Capacity Allocator.</p> |

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5.2 Domains

| DOMAINS | | |
|---------|------------------|--|
| Type | DOMAIN NAME | DESCRIPTION |
| Domain | Accounting Point | <p>A domain under balance responsibility where Energy Supplier change can take place and for which commercial business processes are defined.</p> <p>Additional information: This is a type of Metering Point.</p> |
| Domain | Bidding Zone | <p>The largest geographical area within which market participants are able to exchange energy without capacity allocation.</p> <p>Source: Consolidated text: Commission Regulation (EU) No 543/2013.</p> |

| DOMAINS | | |
|---------|-----------------------------|--|
| Type | DOMAIN NAME | DESCRIPTION |
| Domain | Bidding Zone Border | <p>Defines the aggregated connection capacity between two Bidding Zones.</p> <p>A market area (Which defines the aggregated connection capacity between two Bidding Zones) where the transmission capacity between the Bidding Zones is given to the Balance Responsible Parties according to rules carried out by a Transmission Capacity Allocator. Trade between Bidding Zones is carried out on a bilateral or unilateral basis.</p> |
| Domain | Capacity Calculation Region | <p>The Capacity Calculation Region is the geographic area in which coordinated capacity calculation is applied.</p> <p>Based on: Consolidated text: Commission Regulation (EU) 2015/1222.</p> <p>Additional information:</p> <p>The transmission capacity between Bidding Zones, included in the Capacity Calculation Region, is given to the Balance Responsible Parties through an implicit capacity allocation process or through an explicit allocation auction.</p> |
| Domain | Control Area | <p>A coherent part of the interconnected system, operated by a single System Operator and shall include connected physical loads and/or generation units if any.</p> <p>Source: Consolidated text: Commission Regulation (EU) No 543/2013.</p> |
| Domain | Coordination Centre Zone | <p>The composition of a number of LFC Blocks under the responsibility of the same Coordination Centre Operator.</p> |
| Domain | Exchange Point | <p>A domain for establishing energy exchange between two Metering Grid Areas.</p> <p>Additional information:</p> <p>This is a type of Metering Point.</p> |

| DOMAINS | | |
|---------|---------------------------|--|
| Type | DOMAIN NAME | DESCRIPTION |
| Domain | FRR Sharing Region | <p>A set of LFC Areas of the same synchronous area, but not necessarily the same Bidding Zone. All LFC Areas of a FRR Sharing Region share a certain amount of FRR with each other.</p> <p>Based on: Consolidated text: Commission Regulation (EU) 2017/1485, Article 168.</p> |
| Domain | LFC Area | <p>A part of a synchronous area or an entire synchronous area, physically demarcated by points of measurement at interconnectors to other LFC Areas, operated by one or more TSOs fulfilling the obligations of load-frequency control.</p> <p>Source: Consolidated text: Commission Regulation (EU) 2017/1485.</p> |
| Domain | LFC Block | <p>A part of a synchronous area or an entire synchronous area, physically demarcated by points of measurement at interconnectors to other LFC Blocks, consisting of one or more LFC Areas, operated by one or more TSOs fulfilling the obligations of load-frequency control.</p> <p>Source: Consolidated text: Commission Regulation (EU) 2017/1485.</p> |
| Domain | Metering Grid Area | <p>A Metering Grid Area is a physical area where consumption, production and exchange can be measured. It is delimited by the placement of meters for continuous measurement for input to, and withdrawal from the area.</p> <p>Additional information: It can be used to establish volumes that cannot be measured such as network losses.</p> |
| Domain | Metering Point | <p>An entity where energy products are measured or computed.</p> |
| Domain | RGCE Interconnected Group | <p>The composition of a number of Coordination Centre Zones, operating under RGCE (Regional Group Continental Europe) rules, where the exchange and compensation programmes within the zone must sum up to zero.</p> |

| DOMAINS | | |
|---------|------------------|---|
| Type | DOMAIN NAME | DESCRIPTION |
| Domain | Scheduling Area | <p>An area within which the TSOs' obligations regarding scheduling apply due to operational or organisational needs.</p> <p>This area consists of one or more Metering Grid Areas with common market rules for which the settlement responsible party carries out an imbalance settlement and which has the same price for imbalance.</p> <p>Source: Consolidated text: Commission Regulation (EU) 2017/1485.</p> <p>Additional information: This covers both Imbalance Area and Imbalance Price Area from the Consolidated text: Commission Regulation (EU) 2017/2195.</p> |
| Domain | Synchronous Area | <p>An area covered by synchronously interconnected LFC blocks.</p> <p>Based on: Commission Regulation (EU) 2016/631, Art. 2 - Definitions.</p> <p>Additional information: Examples of Synchronous Areas are Continental Europe, Great Britain, Ireland-Northern Ireland, Nordic and the power systems of Lithuania, Latvia and Estonia, together referred to as 'Baltic' which are part of a wider synchronous area (IPS/UPS).</p> |

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5.3 Resources

| RESOURCES | | |
|-----------|------------------|---|
| Type | RESOURCE NAME | DESCRIPTION |
| Resource | Reserve Resource | <p>A resource technically pre-qualified using a uniform set of standards to supply reserve capabilities to a System Operator and is associated with one or more tele-measuring devices.</p> <p>Additional information: This is a type of Resource.</p> |

| RESOURCES | | |
|-----------|-------------------------------|---|
| Type | RESOURCE NAME | DESCRIPTION |
| Resource | Resource | <p>A market representation of an asset or a group of assets related to the energy industry.</p> <p>Additional information: A Resource represents for example grid assets, consumption assets or production assets, such as generating units, consumption units, energy storage units or virtual power plants.</p> |
| Resource | Resource Capacity Market Unit | <p>An aggregated Resource that can aggregate one or several Resources, and a Resource can form part of only one Resource Capacity Market Unit.</p> <p>Additional information: A Resource Capacity Market Unit may participate in the domestic Capacity Remuneration Mechanism and in the foreign Capacity Remuneration Mechanism if the direct cross border participation is applied. The Resource Capacity Market Operator together with the TSO where the Resource Capacity Market Unit is located is responsible for carrying out availability checks and maintaining data in the Registry.</p> |

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224 5.4 Accounts

| ACCOUNTS | | |
|----------|---------------|---|
| Type | ACCOUNT NAME | DESCRIPTION |
| Account | Balance Group | <p>An energy account under responsibility of a Balance Responsible Party used to determine imbalance considering predefined inputs and outputs within a specific Scheduling Area.</p> |

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5.5 CIM Objects

| CIM OBJECTS | | |
|-------------|-----------------|--|
| Type | CIM OBJECT NAME | DESCRIPTION |
| CIM Object | Meter | A physical device containing one or more registers. |
| CIM Object | Register | A physical or logical counter measuring energy products. |

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