EASEE-gas

European Association for the Streamlining of Energy Exchange – gas

Harmonised Gas Role Model Specification From the Business Process perspective

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Summary

This document identifies and defines the different roles carried out within the gas market and viewed from the role and business process perspectives.

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1 Harmonised Gas Role Model

1.1 Aims of the model

The Role Model has been developed to represent actions between different market participants in the gas industry. The main focus of this document is on information exchange between market participants (excluding legal matters). This document is not legally binding. The aim of the document, however, is to provide a common terminology for the roles that are used among most European countries.
The Model is only applicable for the Gas Market and not for other Energy segments. It has been developed by EASEE-gas with input from other associations.

- Focus has been set on generic roles and not on local and national particularities.
- In the current version of this document, the number of roles has been restricted in order to ensure a good understanding for the readers.
- Edigas version 6 and subsequent versions containing the Message Implementation Guidelines are going to use the roles and interactions defined in the role model.
- Existing and future EASEE-gas CBPs will be aligned with the role model.

1.2 How the role model was developed

Roles were selected based on the existing descriptions of business processes in the gas market (ENTSOG BRS; EASEE-gas CBP and MIG as well as Task Force participant input). European regulations and common aspects of national regulations were also considered.
For the identified roles, interactions were selected based on their need for common communication with other roles. Legal aspects (e.g. contractual relations) were not taken into account.
A concrete example is the relation between a Network User and a Shipper: Such roles are important within the gas market. However in many instances there is an overlap between them. In order to eliminate such confusion it was decided to employ the terms Balance Responsible Party and Capacity Responsible Party in their place (see also figure 1).
LNG / Storage / Production plants: The model stops at the level of LNG Operator / Storage Operator / Production Facility Operator and will not go behind this. If it appears necessary, detailing activities beyond these points should be kept for a future version of the role model.

1.3 Explanation of roles and parties

Roles describe external business interactions with other roles in relation to the goal of a given business transaction.
A party on the market may play several roles, for example a System Operator may play both the role of Area Coordinator and the role of TSO. However two different roles have been defined since these roles are not always played by the same party (see also figure 2).
The different roles and interactions have been identified within the current business process at a certain moment of time. Any evolution or change in these processes could lead to an update of the Role Model.

1.4 How to read the role model, how is it structured

Figure 3 provides an overview of the role model diagram. It presents all of the roles and, in order to facilitate readability, only some of the major interactions between them. The diagram should help to provide a general overview of the role model. For more detailed information, specific diagrams are provided that represent a view of each business process and the roles involved.

2 Where to find former “Shipper” / “Network User” in the role model

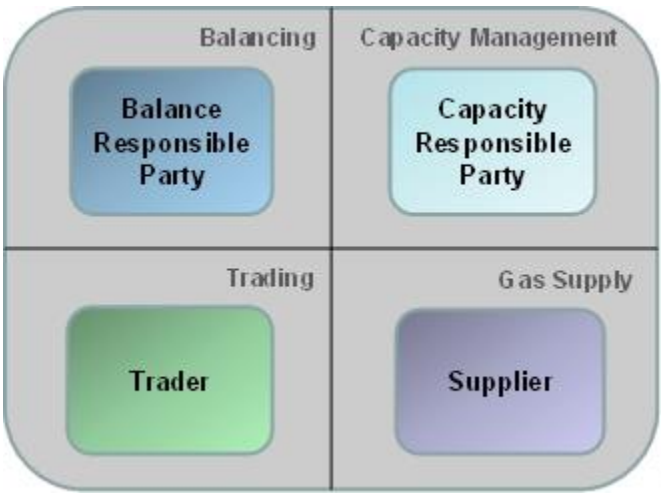

Figure 1: Former “Shipper” / “Network User” roles

3 Where to find former “TSO” in the role model

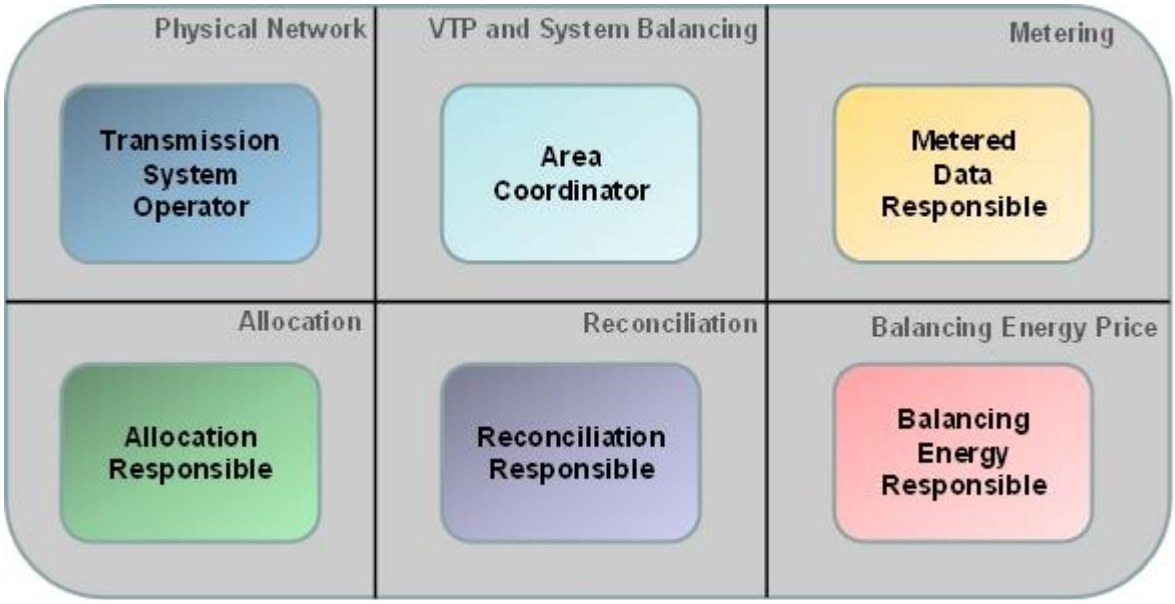

Figure 2: Former “TSO” roles

4 Harmonised role descriptions

Allocation Responsible	A party allocating energy to portfolios based on agreed procedures.
Area Coordinator	A party with coordinating functions in the transmission and/or distribution system and responsibilities for the management of balancing groups, system balancing activities and/or the provision of data (for example settlement and balancing information). Other duties and responsibilities might be stipulated in the respective national laws. Additional information: In some countries some additional duties might be assumed by the Area Coordinator, for instance: Coordination of infrastructure planning and maintenance activities, congestion management, ...
Balance Responsible Party	A party that manages its own portfolio and/or the portfolios on behalf of other parties and is financially responsible for the account imbalance.
Balancing Energy Responsible	A party responsible for the price formation for balancing energy in the network.
Capacity Platform Responsible	A party providing and operating a platform that implements the rules and processes for offering and allocation of all capacity products and/or may permit Capacity Responsible Parties to offer and obtain secondary capacity products.
Capacity Responsible Party	A party that employs the System Operator to transport the gas.
Clearing Responsible	A party being a Clearing House to settle trades concluded on the energy trading platform or trades registered directly at the Clearing House for clearing by means of special rights as single sided or on-behalf nominations. Additional information: A Clearing Responsible nominates gas based on concluded transactions on the energy trading platform for the relevant Traders to the relevant Area Coordinator via the Trader's chosen Balance Responsible Party.
Distribution System Operator	A party who carries out the function of distribution and is responsible for operating, ensuring the maintenance of, and, if necessary, developing the distribution 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 of

	gas (This definition can be found in the Directive 73/2009).
Energy Trading Platform Responsible	A party providing and operating a platform by means of which trading participants may post and accept bids and offers for gas in accordance with the terms and conditions applicable on the trading platform.
Final Customer	A party purchasing gas for its own use. (This definition can be found in the Directive 73/2009). Additional information: Includes gas consumers and electricity producer. Same as "end-user" in other documents.
LNG System Operator	A party who carries out the function of liquefaction of natural gas, or the offloading, and re-gasification of LNG and is responsible for operating a LNG facility. (This definition can be found in the Directive 73/2009).
Market Information Aggregator	A party that receives 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. It could be EU regulator, national regulator, ENTSOG as transparency platform responsible, TSO/SSO/LSO's transparency platform, ... Additional information: The Market Information Aggregator may receive information from any market participant that is relevant for publication or distribution, e.g. ACER may receive data from ENTSOG as transparency platform responsible or from a national regulator.
Meter Operator	A party responsible for installing, maintaining, testing, certifying and decommissioning physical meters.
Metered Data Responsible	A party responsible for the collection, validation, aggregation and making available metered data.
Production Facility Operator	A party that manages gas production within a production facility.
Reconciliation Responsible	A party that is responsible for reconciling, within a given network, the energy used in the imbalance settlement process for portfolios and the actual metered quantities.
Storage System Operator	A party who carries out the function of storage and is responsible for operating a storage facility. (This definition can be found in the Directive 73/2009).
Supplier	A party who carries out the function of supply (the sale, including resale, of gas to final customers).

System Operator	Parent role: A party that develops, operates, maintains and provides access to gas infrastructure such as transmission networks, underground storage, LNG terminals and distribution networks.
Trader	A party responsible for buying and selling gas at virtual or physical points on an energy trading platform or bilaterally with other Traders.
Transmission System Operator	A party who carries out the function of transmission and is responsible for operating, ensuring the maintenance of, and, if necessary, developing the transmission 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 transport of gas. (This definition can be found in the Directive 73/2009). Additional information: Roles which are not related to grid operation are covered elsewhere in the model.
Weather Data Provider	A party that determines the forecasted and validated weather data for a designated area and provides it to the roles that request the information.

5 Overview of the roles in the model

The overview provides a perspective of the role model making use of only one interaction between each pair of roles in order to avoid clutter in the diagram. The interaction chosen may not necessarily be significant to some but the objective is simply to place the roles in the diagram.

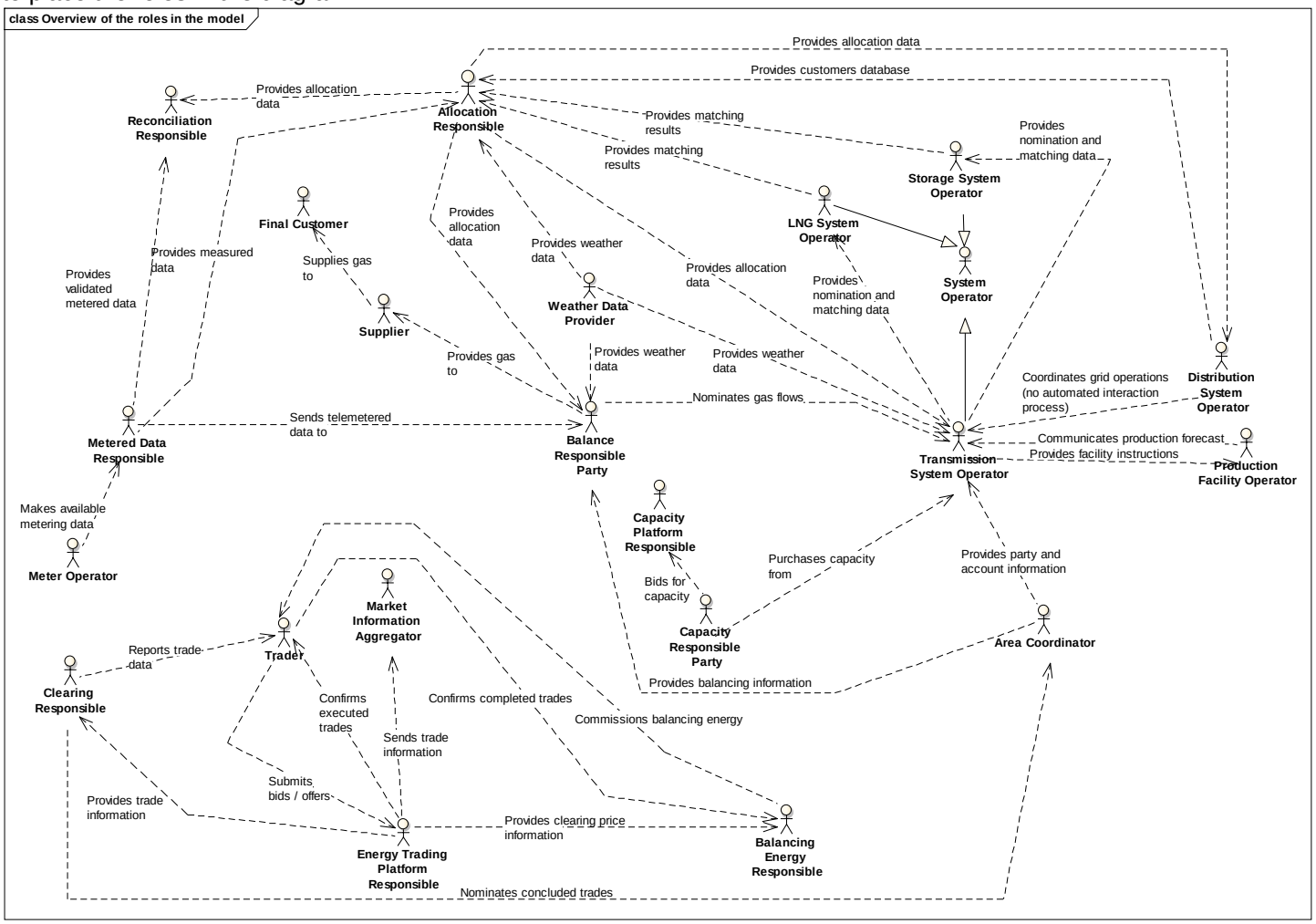

Figure 3: Overview of the roles in the model

6 Business Process Interactions

This chapter contains the complete list of processes as well as the interacting roles.

6.1 Capacity Allocation Process

The Capacity Allocation Process is necessary for the implementation of a transparent and non-discriminatory system of access to and allocation of gas networks transmission capacities for all Capacity Responsible Parties.

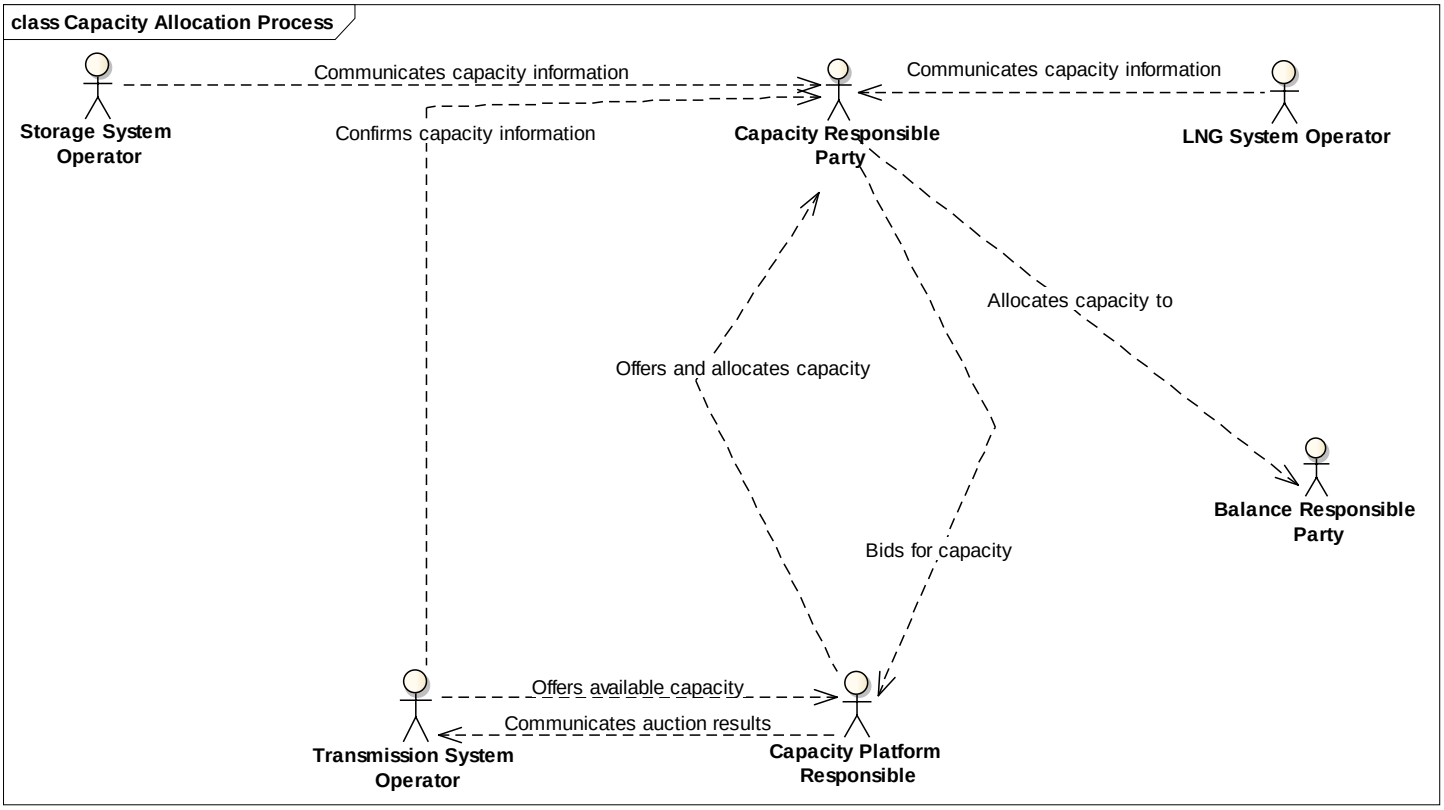

Figure 4: Capacity Allocation Process

6.2 Gas Trading Process

6.2.1 Exchange Gas Trading Process

The Exchange Gas Trading Process takes place at an energy trading platform where a Trader from party A offers a quantity of gas with a certain price for a specific delivery time and a Trader from another party B agrees to the offer. The offer and agreement lead to a trade which is executed by the Clearing Responsible Party of the Energy Trading Platform Responsible. This nomination to the virtual trading point of the Area Coordinator is done single sided (see Nomination & Matching process). The Balance Responsible Parties of party A and B will balance their portfolios in line with the traded quantities. Area Coordinators may use the process for Area Balancing purposes.

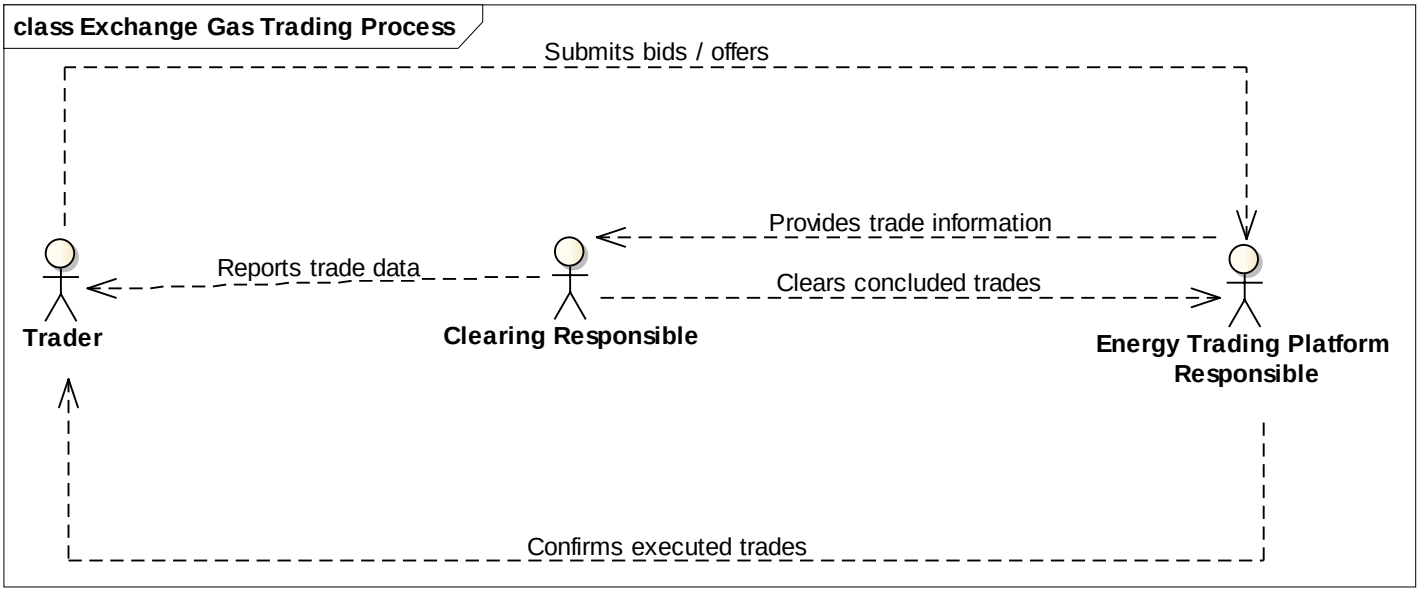

Figure 5: Exchange Gas Trading Process

6.2.2 OTC Gas Trading Process

In the OTC Gas Trading Process Balance Responsible Parties provide availability and offtake information for buying or selling gas based on bilateral contracts. These gas quantities will be used to balance the portfolio of the Balance Responsible Party.
To be able to operate gas trading contracts, Balance Responsible Parties receive input from Traders, Suppliers and Capacity Responsible Parties.

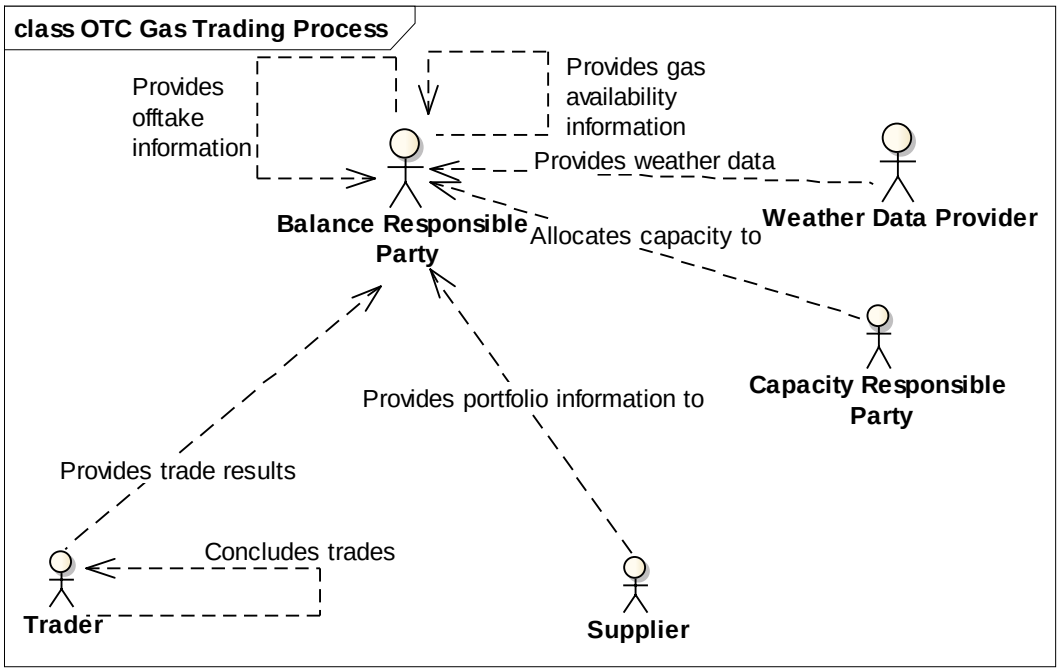

Figure 6: OTC Gas Trading Process

6.3 Nomination and Matching Process

The Nomination and Matching Process consists of two steps:

1. A nomination is the prior reporting by the Balance Responsible Party to the System Operator of the actual flow that the Balance Responsible Party wishes to inject into or withdraw from the system. Additionally, a nomination to the virtual trading point is done by the Balance Responsible Party to the Area Coordinator to indicate the traded quantities.
2. Matching is the process of comparing and aligning processed quantities of gas for Balance Responsible Parties at both sides of a connection point between systems, which results in confirmed quantities for the Balance Responsible Parties. The matching on the virtual trading point confirms the traded quantities.

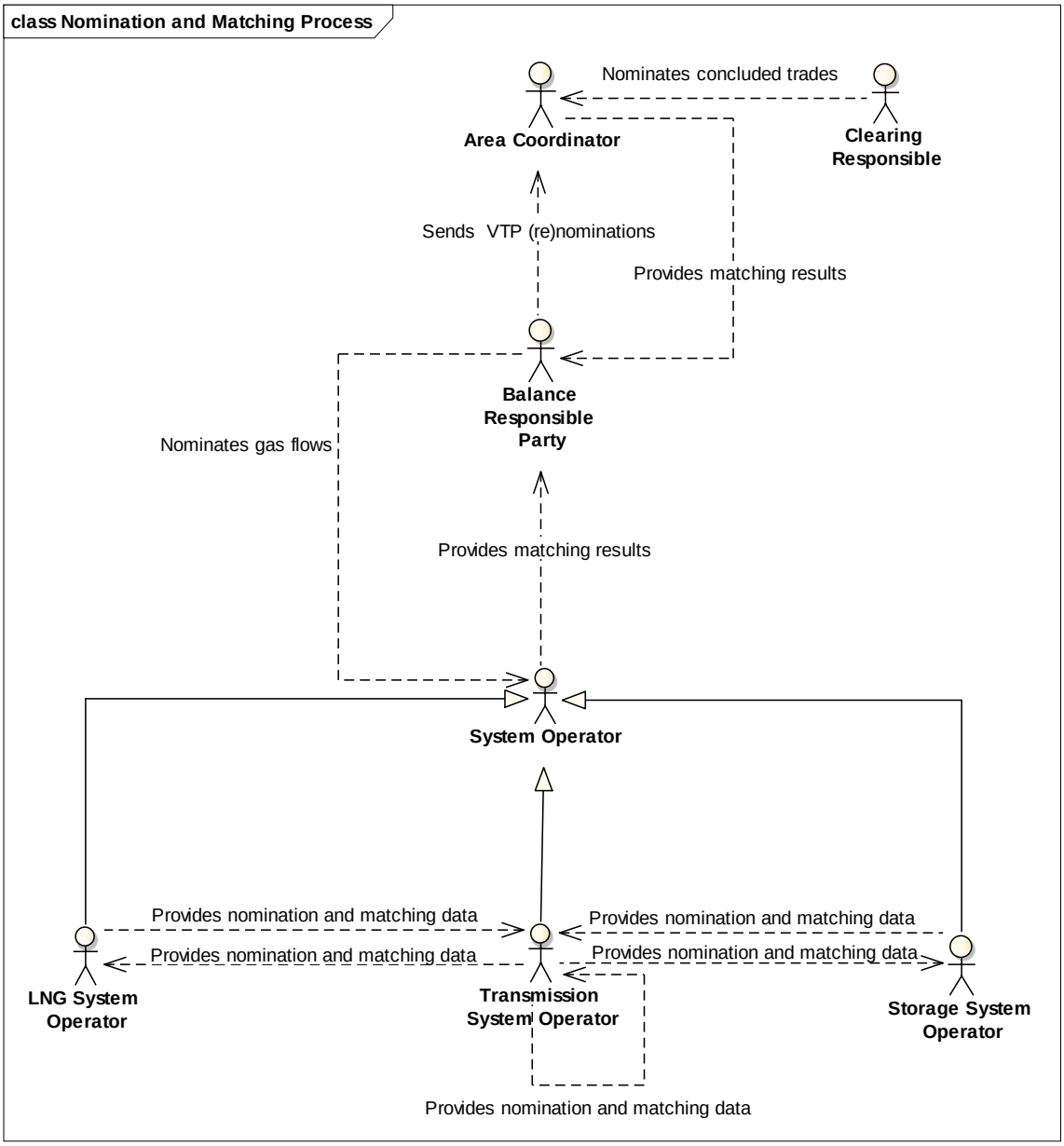

Figure 7: Nomination and Matching Process

6.4 Balancing and Settlement Process

6.4.1 Metering Process

The Metering Process describes the interactions necessary to obtain connection point metering information, compiling the information and providing it to all interested parties.

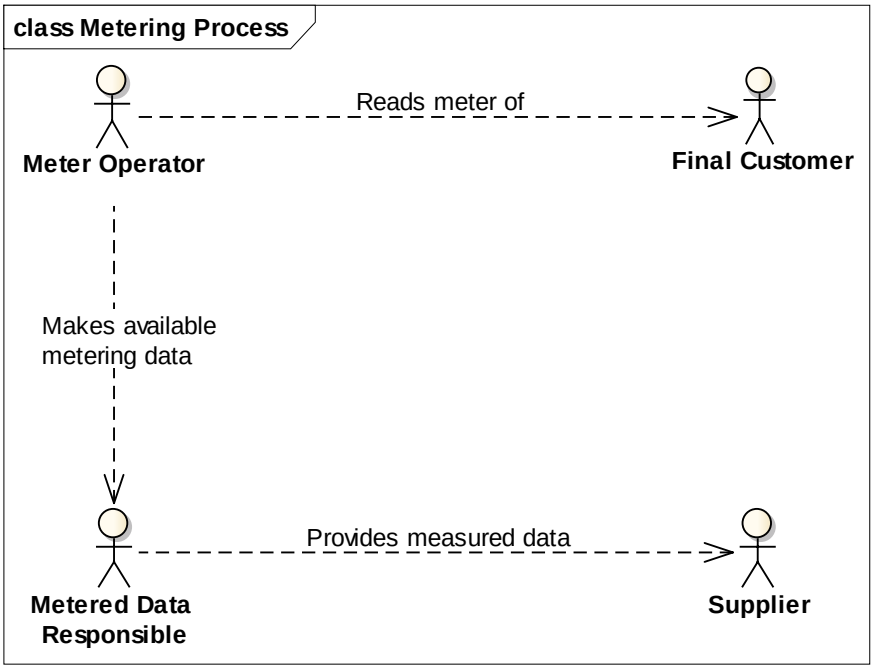

Figure 8: Metering Process

6.4.2 Allocation Process

The Allocation Process is carried out by an Allocation Responsible and consists in attributing amounts of energy to Balancing Responsible Parties at a connection point based on confirmed nominations' quantities, metering data and the agreed allocation rule. The allocation information is provided to all concerned parties. Provisional allocations are based on non-validated metering or replacement data. Final allocations are based on validated metering data.

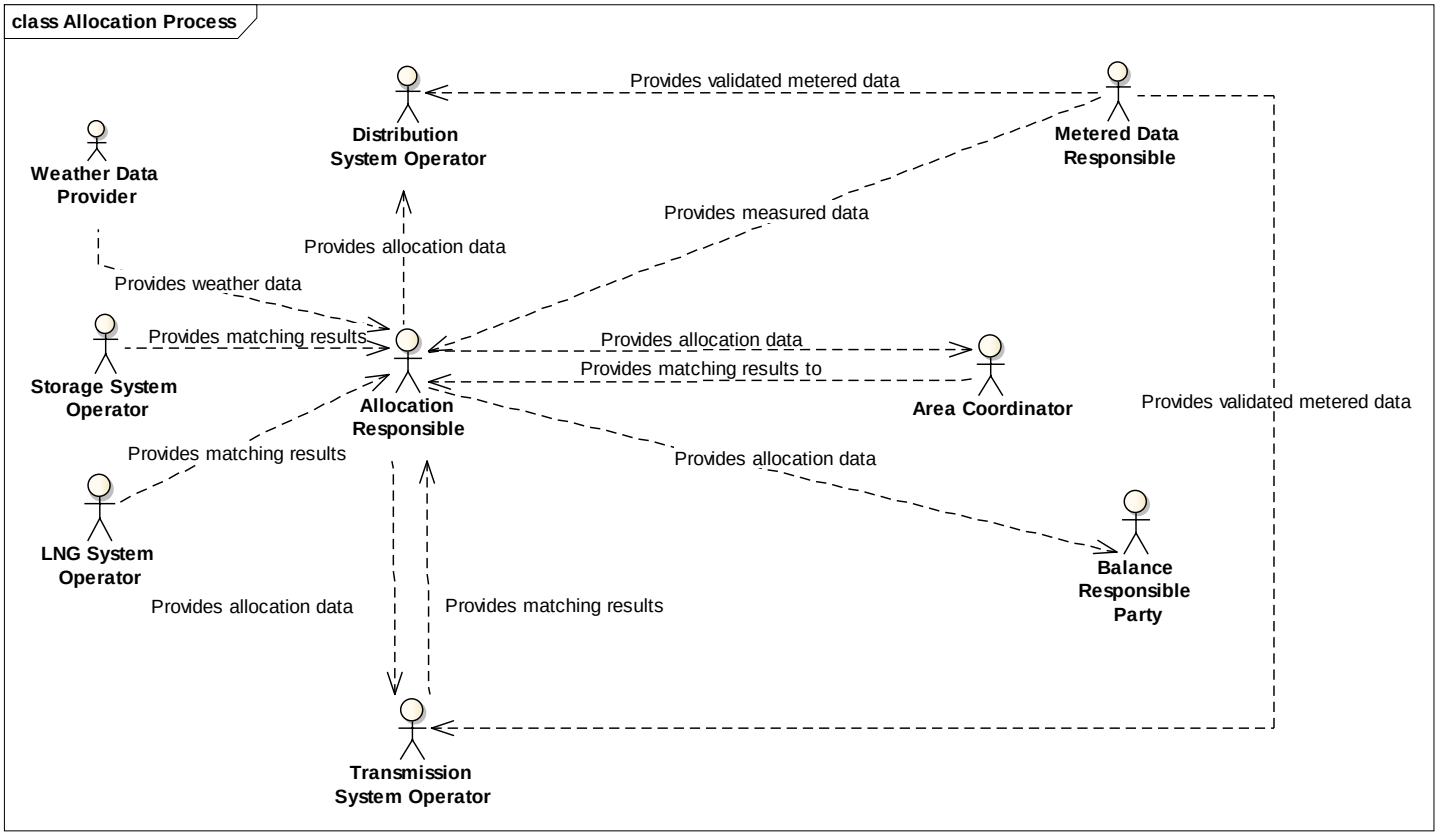

Figure 9: Allocation Process

6.4.3 Balancing Process

In a balancing area the Balancing Process applies the rules for Balancing Responsible Parties to balance their portfolio, for Area Coordinators to inform Balance Responsible Parties about their portfolio imbalance and for Area Coordinators to undertake balancing actions to keep the balancing area within its operational limits. The portfolio imbalance is calculated based on allocation data for connection points and concluded trades on the virtual trading point.

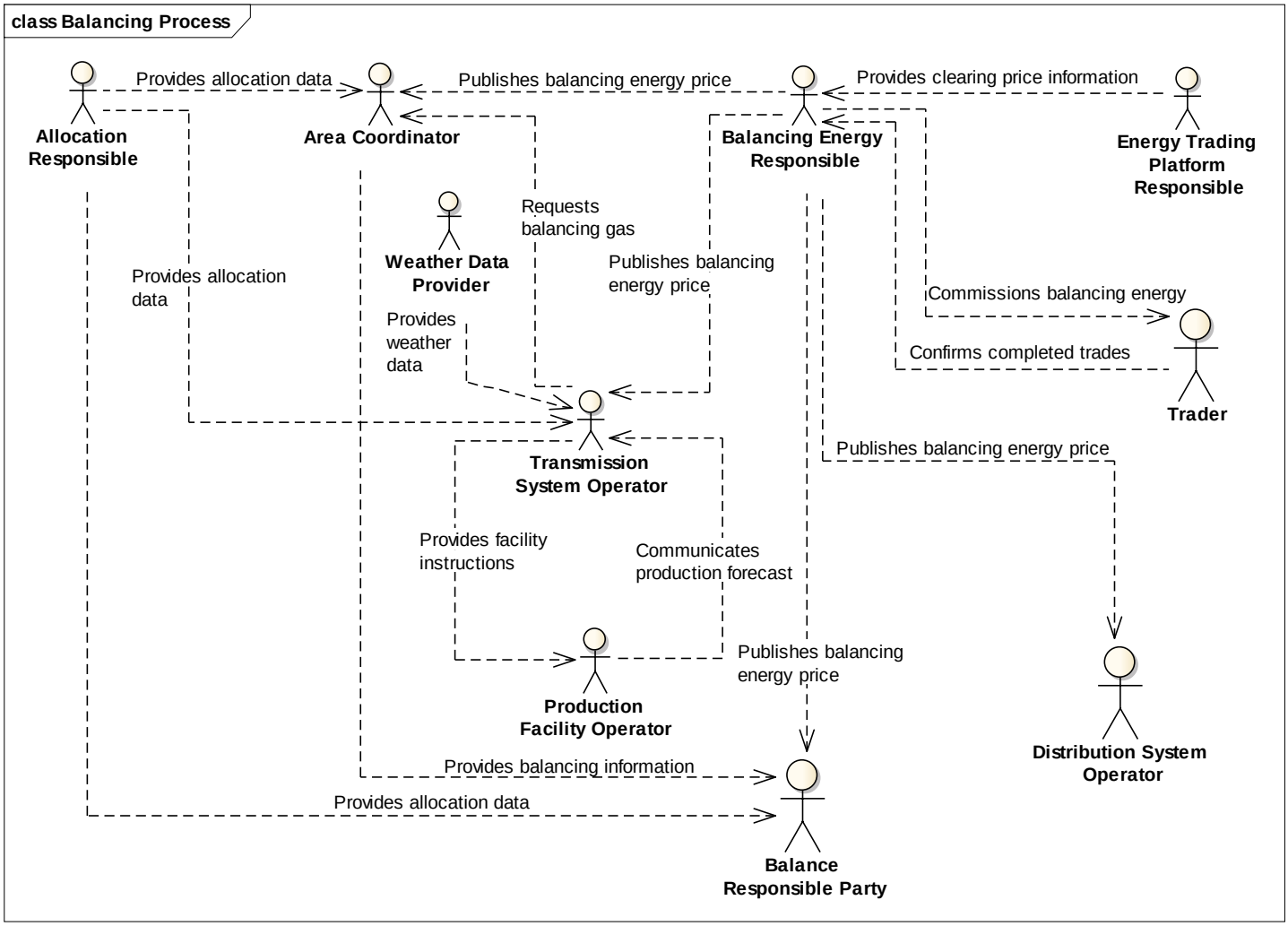

Figure 10: Balancing Process

6.4.4 Settlement Process

The Settlement Process is carried out to settle balancing actions and daily imbalance charges, to settle the difference between provisional and final allocations and also to settle reconciliation that would be necessary between the allocations and actual consumption subsequently derived from Final Customer meter readings when obtained. The Settlement Process includes the information flows between parties to perform such settlements.

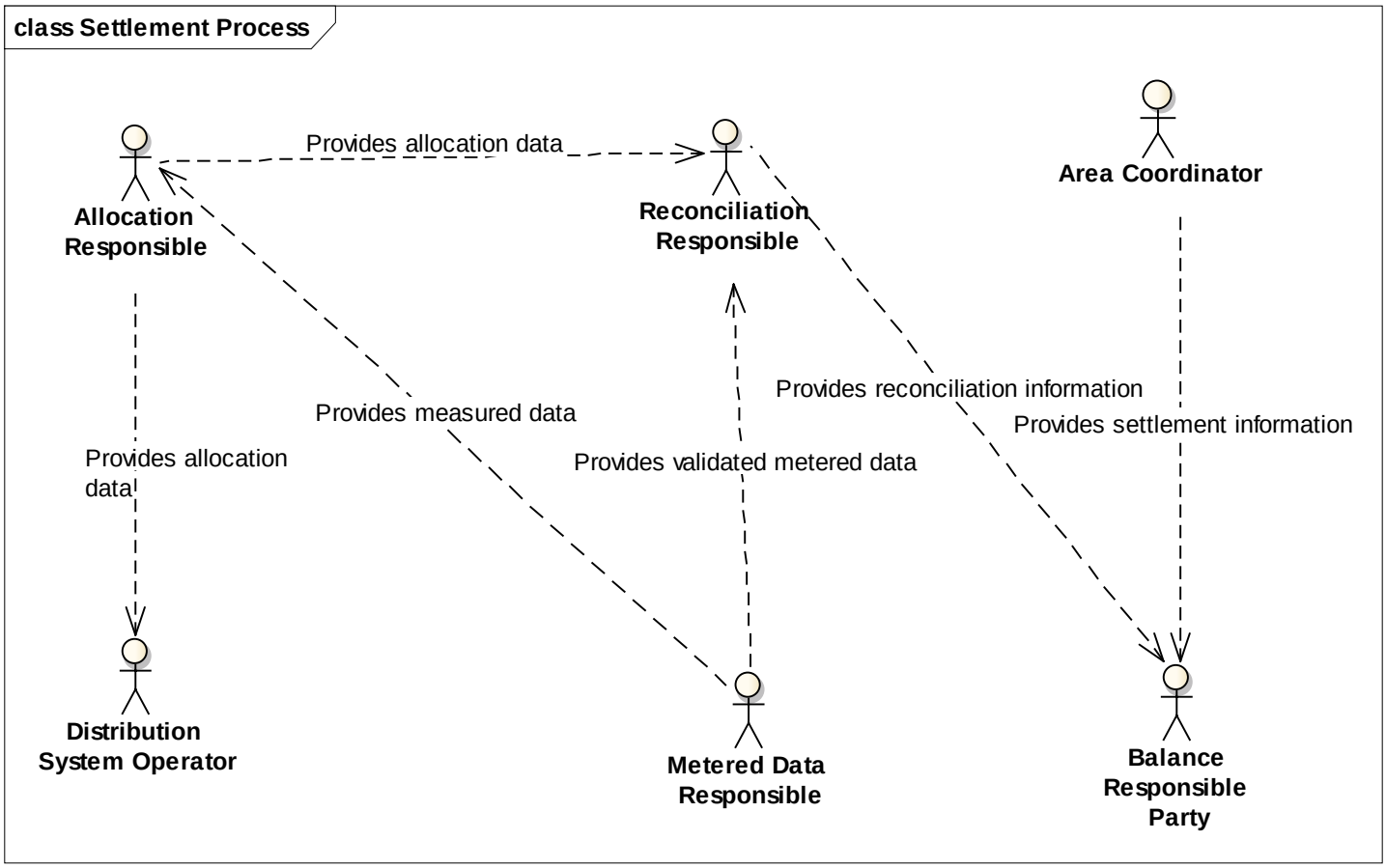

Figure 11: Settlement Process

6.5 REMIT and Transparency Process

The REMIT and Transparency Process defines the interactions between reportable market participants (like System Operators or Traders and including other platforms) and Market Information Aggregators for the information required for publication in order to ensure market transparency under Regulation (EC) 715/2009 and Regulation (EU) 1227/2011.

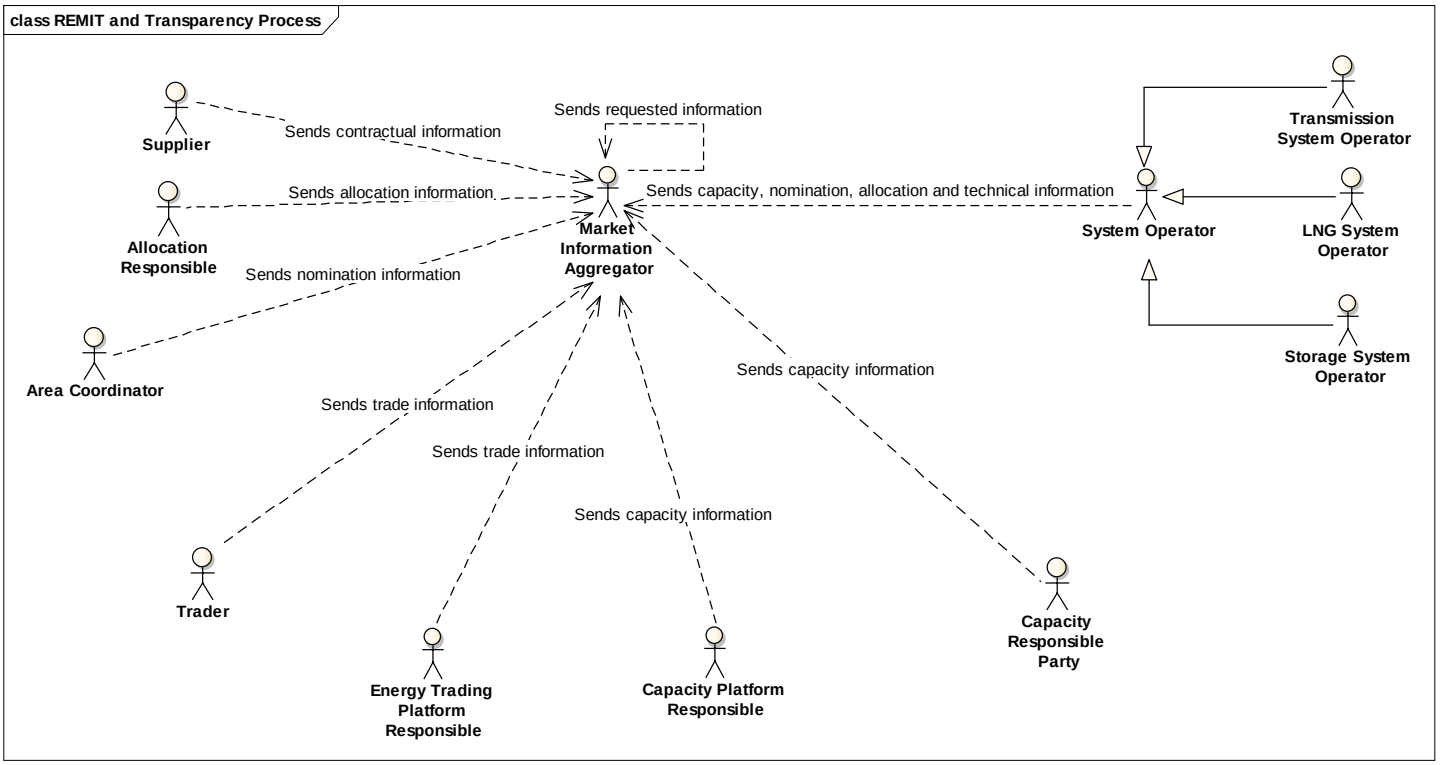

Figure 12: REMIT and Transparency Process

7 Document change log

Version	Date	Description
1	2016-10-11	First release of the Harmonised Gas Role Model after approval
1.1	2016-11-09	• Correction of additional interactions in figure 4 • Correction of missing interactions in figures 13, 19 • Correction of naming in figures 13, 19 • Correction of definition Clearing Responsible
2.0	2017-06-15	Draft release of the Harmonised Gas Role Model from a business process perspective
2.1	2017-07-13	Approved release of the Harmonised Gas Role Model from a business process perspective
Draft 01	2017-08-25	• Role perspective diagrams included • Breakdown of Settlement which includes Metering, Allocation and Balancing • Name change from “Transparency” to “REMIT and Transparency” • Include generic role “System Operator” in overview • Nomination and Matching and REMIT and Transparency • Definition of System Operator added
Draft 02	2017-10-11	• Added bullet point with CBPs in chapter 1.1 • Renamed role PSO to PFO – Production Facility Operator • Reworked generalizations diagram • Renamed chapter 7.1 to Capacity Allocation • Divided Gas Trading into 2 sub divisions “Exchange Gas Trading” and “OTC Gas Trading” • Renamed chapter 7.4 to Balancing and Settlement • Created 4 sub divisions – Metering, Allocation, Balancing, Settlement)
Draft 03	2017-12-18	• Added/Modified definitions for all business processes • Modified definition Trader • Added interaction AC->BRP • Added interaction Trader->Trader • Added interaction TSO->PFO

Draft 04	2018-01-30	• Introduction of the role Weather Data Provider
		• Impact on the processes:
		  ○ OTC gas trading
		  ○ Allocation
		  ○ Balancing

Stable Release	2018-05-30	• Modified business process names • Modified business process definitions • Process Capacity Allocation: Removed 2 interactions, added interaction • Ensured naming coherence in processes Allocation, Balancing and Settlement • Added loop interaction for role Market Information Aggregator • Modified definition for role Market Information Aggregator