
# Edig@s[1] Simplified Working Scenarios

***Target audience: IT implementors, Business analysts, management***

[1] *Edig@s = EASEE-Gas Message and Workflow design working group*

# Table of contents

# Table of Figures

# 1 Introduction

*The Edig@s Version 5.1 protocol manages 10 gas business processes in all. Each process is identified as follows:*

| *Process number* | *Process name* |
|---|---|
| *1* | *Capacity Trading Process* |
| *2* | *Gas Trading Process* |
| *3* | *Nomination and Matching Process* |
| *4* | *Settlement Process* |
| *5* | *Balancing Process* |
| *6* | *Transparency Process* |
| *7* | *Facility Setting Process* |
| *8* | *General Services Process* |
| *9* | *REMIT Process* |
| *10* | *Market Balancing Process* |

*In order to provide an overview of the use of the Edig@s protocol a number of classical scenarios have been developed to facilitate a newcomer to apprehend how the Edig@s protocol is used. The scenarios make use of the following six Edig@s business processes:*

- *Capacity Trading;*
- *Gas Trading;*
- *Nomination and Matching;*
- *Settlement;*
- *Balancing*
- *REMIT.*

Each scenario has been broken down into steps which refer to the Edig@s processes in a simplified manner that are necessary to satisfy the scenario requirements.

## 1.1 Simplified scenarios

The scenarios are outlined in the following table. The scenario name provides a short explanation of what has to be resolved. In addition the brackets are identified the Edig@s processes that have to be brought into play in order to resolve the scenario.

| N° | Scenario name |
|---|---|
| 1 | A market participant (Balance Responsible Party, Trader, Supplier or Final Customer) wants to buy gas from another market participant (Balance Responsible Party, Trader, Supplier or Final Customer) using OTC (*Involves the Gas Trading Process; Nomination and Matching Process*) |
| 2 | A Balance Responsible Party wants to buy gas from a counter party at a virtual trading point and transport it from area A to area B. (Involves the Capacity Trading Process; Gas Trading Process; Nomination and Matching Process) |
| 3 | A Balance Responsible Party wants to transport gas between two TSO areas to himself (*Involves the Nomination and Matching Process*) |
| 4 | A Balance Responsible Party wants to transport gas between two TSO areas to another Balance Responsible Party (Involves the Nomination and Matching Process) |
| 5 | A Balance Responsible Party wants to inject/withdraw gas with a storage facility (Involves the Nomination and Matching Process) |
| 6 | A Balance Responsible Party wants to verify his balancing situation (Involves the Settlement Process) |
| 7 | An Area Coordinator carries out a balancing action on the market (Involves the Balancing Process) |
| 8 | A Balance Responsible Party wants to buy gas at an energy trading platform in order to balance his position (Involves the Nomination and Matching Process) |
| 9 | A market participant (Capacity Responsible Party, Transmission System Operator) wants to report concluded transactions via the REMIT Process. (involves the REMIT Process) |

# 2 Roles used in the scenarios

For the definition of the roles outlined below please refer to the EASEE-Gas Gas Harmonised Role model.

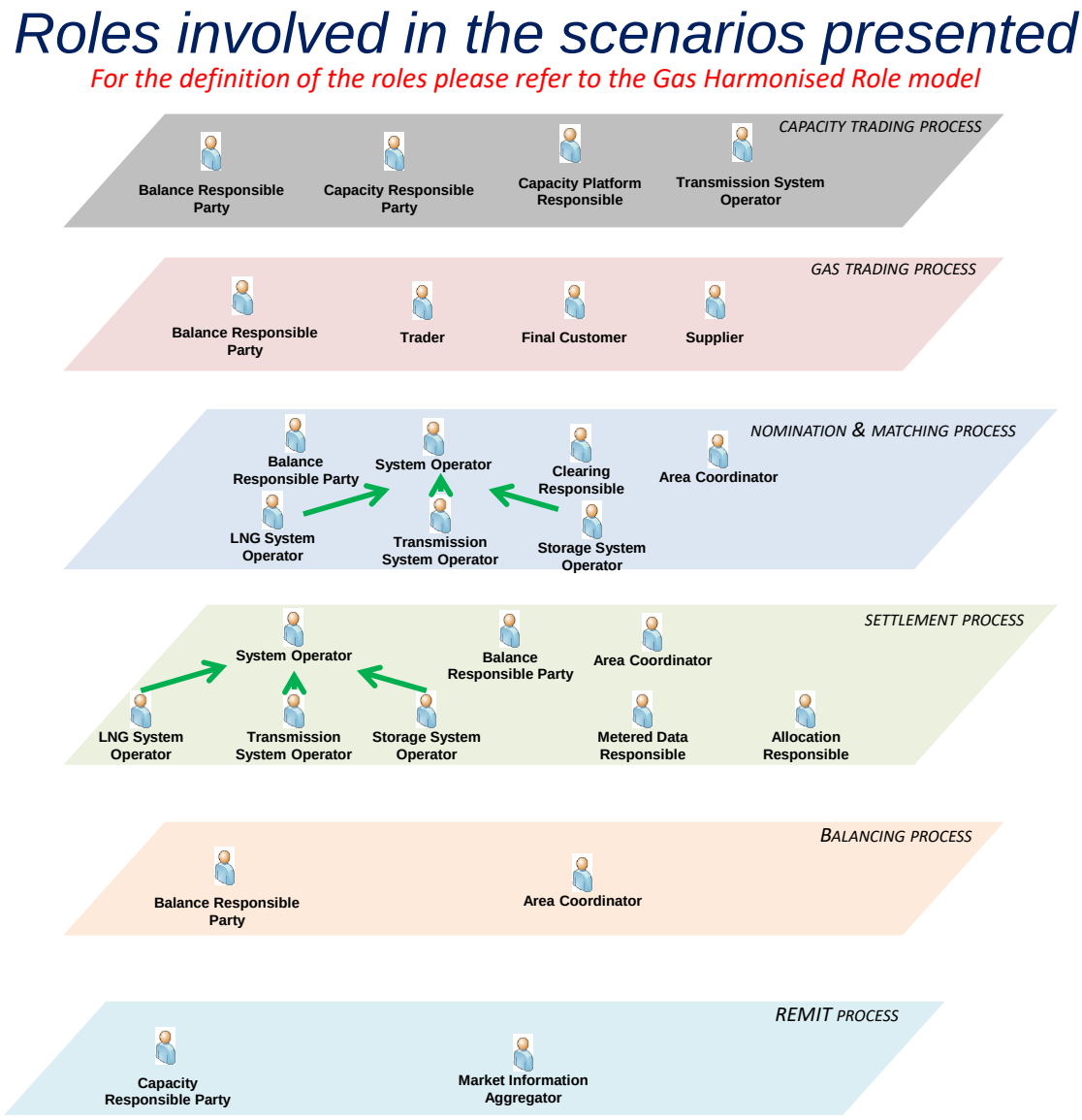


Figure 1: Roles used in the scenarios

# 3 Scenarios

## 3.1 Scenario 1: A market participant wants to buy gas from another market participant using OTC

### 3.1.1 Description

**Description:** A market participant (Balance Responsible Party, Trader, Supplier or Final Customer) wants to buy gas from another market participant (Balance Responsible Party, Trader, Supplier or Final Customer) using OTC (Over The Counter transactions).

**Edig@s processes required**: The Gas Trading Process; Nomination and Matching Process

In order to buy gas from another market participant (Balance Responsible Party, Trader, Supplier or Final Customer) the following action has to be carried out:

- Purchase the gas from a market participant

This involves the use of the following Edig@s process:

1. The Gas Trading Process (over the counter trading)

2A. Nomination and Matching Process at a VTP (or)

2B. Nomination and Matching Process at an IP

### 3.1.2 Simplified flow diagrams

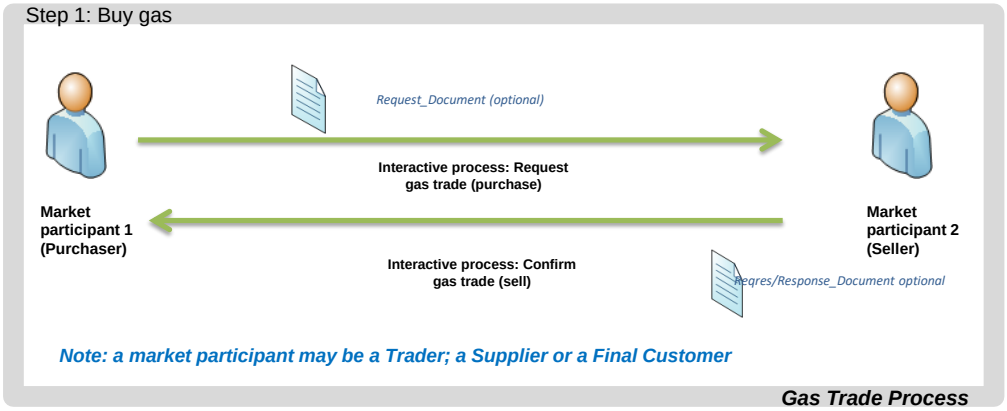


Figure 2: Buy gas

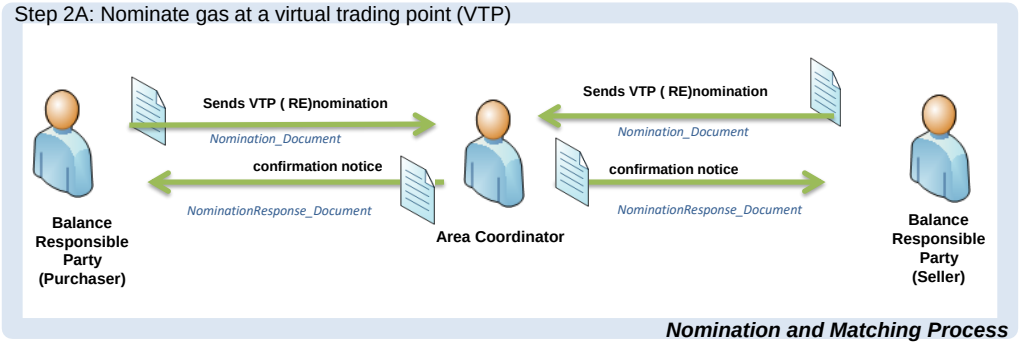


Figure 3: Nominate gas at a virtual trading point (VTP)

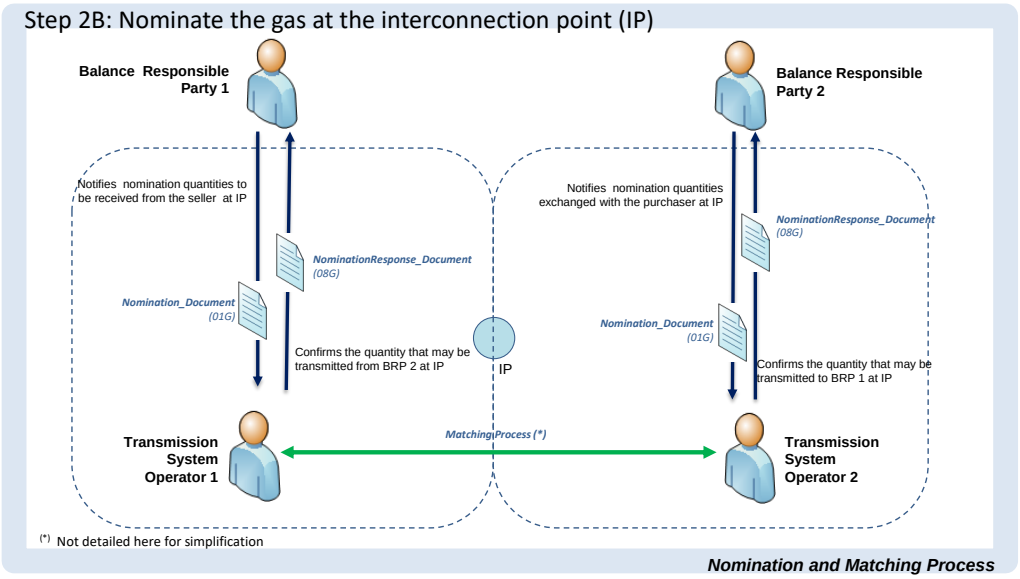


Figure 4: Nominate gas at an interconnection point (IP)

## 3.2 Scenario 2: A Balance Responsible Party wants to buy gas from a counter party at a virtual trading point and transport it from area A to area B

### 3.2.1 Description

**Description:** A Balance Responsible Party wants to buy gas from a counter party at a virtual trading point and transport it from area A to area B.

**Edig@s processes required**: Involves the Capacity Trading Process; Gas Trading Process; Nomination and Matching Process.

In order to buy gas the following actions have to be carried out:

1. Purchase capacity at the interconnection point between the areas A and B in order to reserve the space for the gas to be carried.
2. Purchase the gas to be carried at the virtual point of area A
3. Nominate at the VTP
4. Nominate the gas transport at the interconnection point to areas A and B.

This involves the use of the following Edig@s processes.

1. The Capacity Trading Process (gas auction).
2. The Gas Trading Process (to identify where the gas is coming from over the counter trading at a VTP).
3. The Nomination and Matching Process (VTP and IP).

### 3.2.2 Simplified flow diagrams

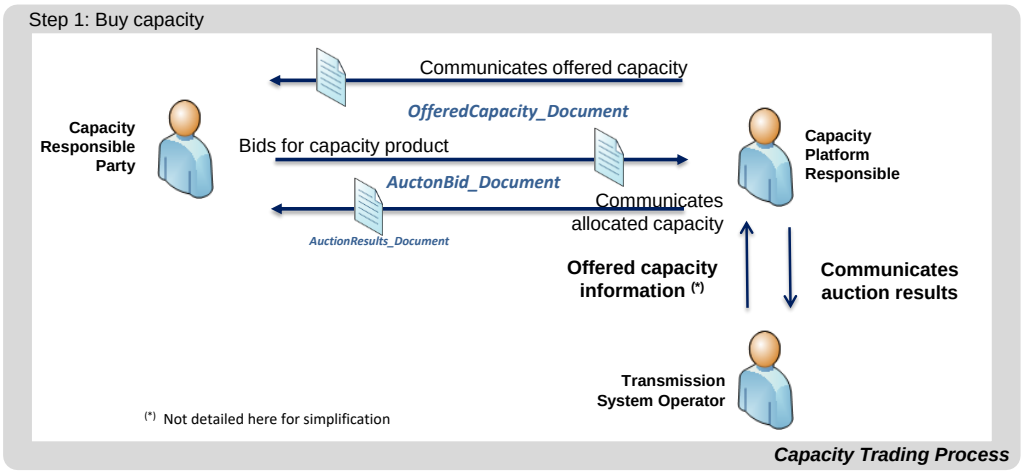


Figure 5: Buy capacity

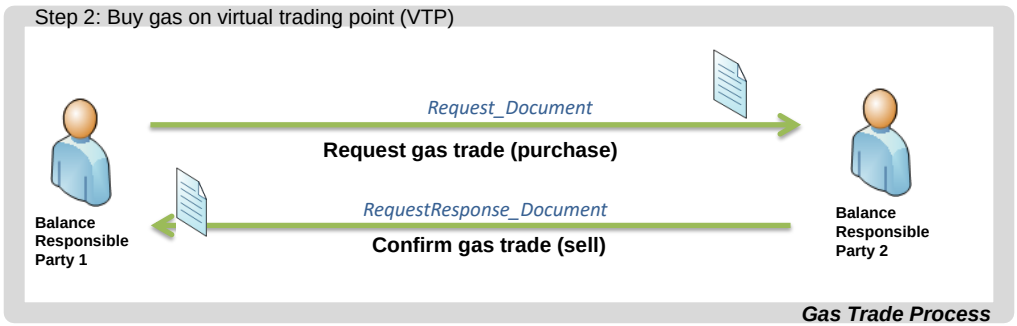


Figure 6: Buy gas on virtual trading point

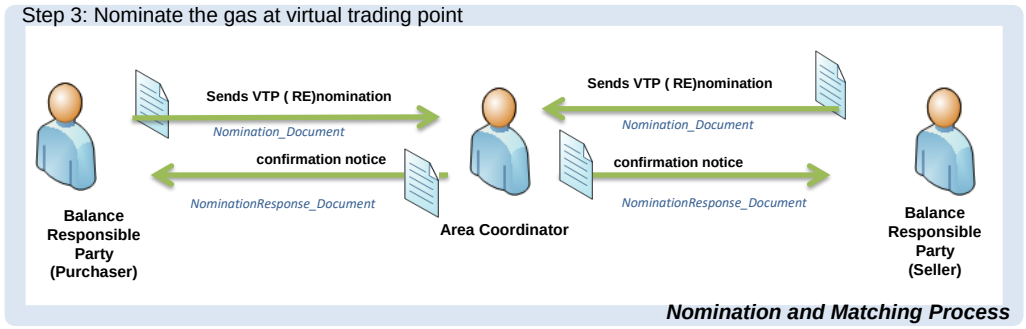


Figure 7: Nominate the gas at virtual trading point

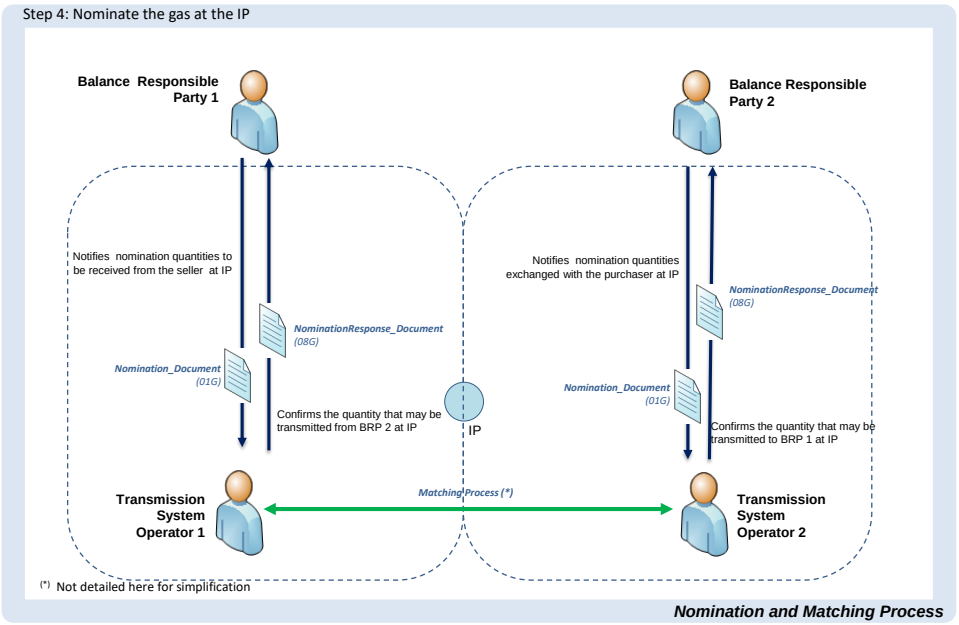


Figure 8: Nominate the gas at the interconnection point

## 3.3 Scenario 3: A Balance Responsible Party wants to transport gas between two TSO areas to himself

### 3.3.1 Description

**Description:** A Balance Responsible Party wants to transport gas between two TSO areas to himself.

**Edig@s processes required:** Involves the Nomination and Matching Process.

In order to transport gas between 2 market areas the following action has to be carried out:

1. Nominate the gas to be carried to each TSO (through 2 independent nominations or a single sided nomination)

This involves the use of the following Edig@s process.

1. The Nomination and Matching Process.

Note: The Balance Responsible Party already possesses the capacity.

### 3.3.2 Simplified flow diagram

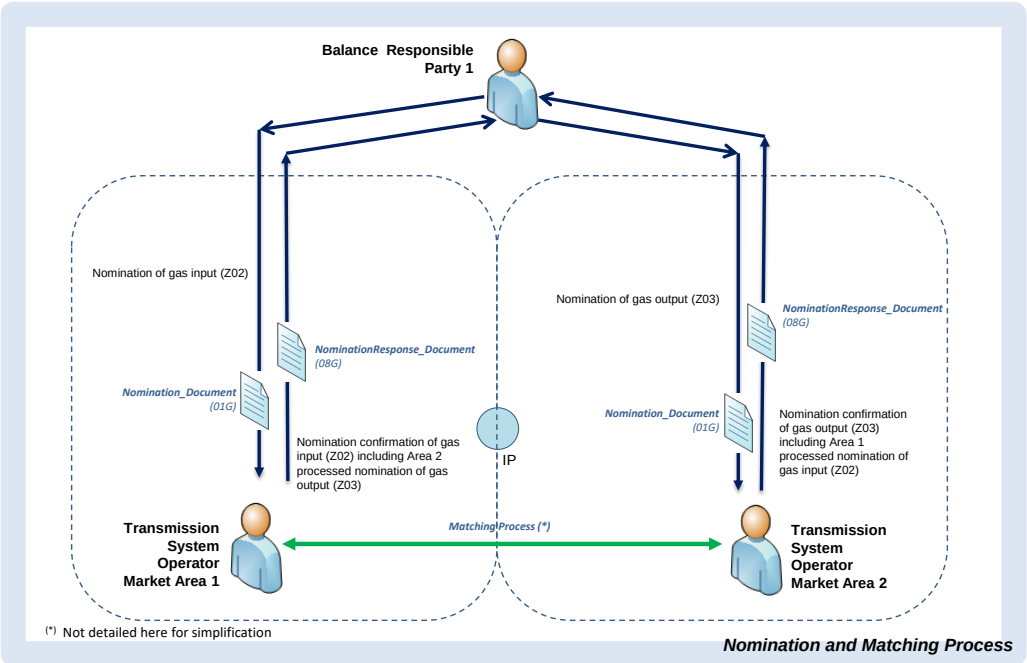


Figure 9: Nominate gas to himself

## 3.4 Scenario 4: A Balance Responsible Party wants to transport gas between two TSO areas to another Balance Responsible Party

### 3.4.1 Description

A Balance Responsible Party wants to transport gas between two TSO areas to another Balance Responsible Party.

**Edig@s processes required:** Involves the Nomination and Matching Process.

In order to transport gas between 2 Balance Responsible Parties in different Market Areas the following action has to be carried out:

1. Each Balance Responsible Party has to nominate the gas to be carried to TSO of the Market Area.

This involves the use of the following Edig@s process:

1. The Nomination and Matching Process.

Note: The Balance Responsible Parties already possess the capacity.

### 3.4.2 Simplified flow diagram

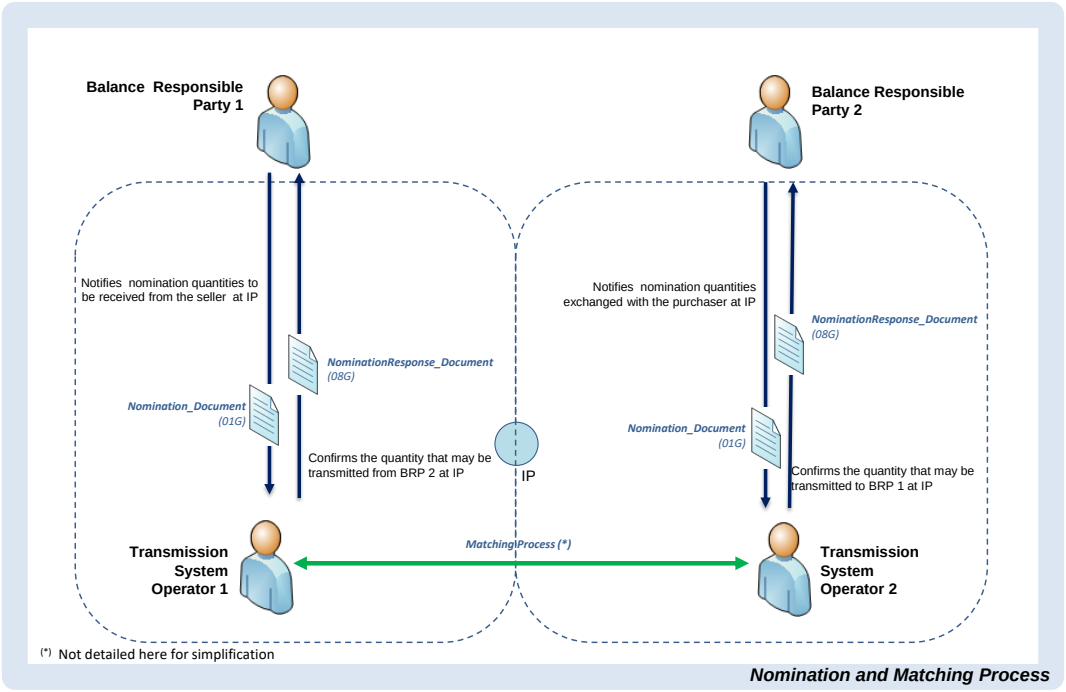


Figure 10: Nominate gas between different parties

## 3.5 Scenario 5: A Balance Responsible Party wants to inject/withdraw gas with a storage facility

### 3.5.1 Description

**Description:** Balance Responsible Party wants to inject/withdraw gas with a storage facility

**Edig@s processes required:** Involves the Nomination and Matching Process.

In order to inject or withdraw gas to or from a storage facility the following action has to be carried out:

1. Nominate the gas to be carried on a storage facility connection point to the TSO responsible for the connection point and to the Storage System Operator.

This involves the use of the following Edig@s process.

1. The Nomination and Matching Process.

Note: The Balance Responsible Party already possesses the capacity.

### 3.5.2 Simplified flow diagram

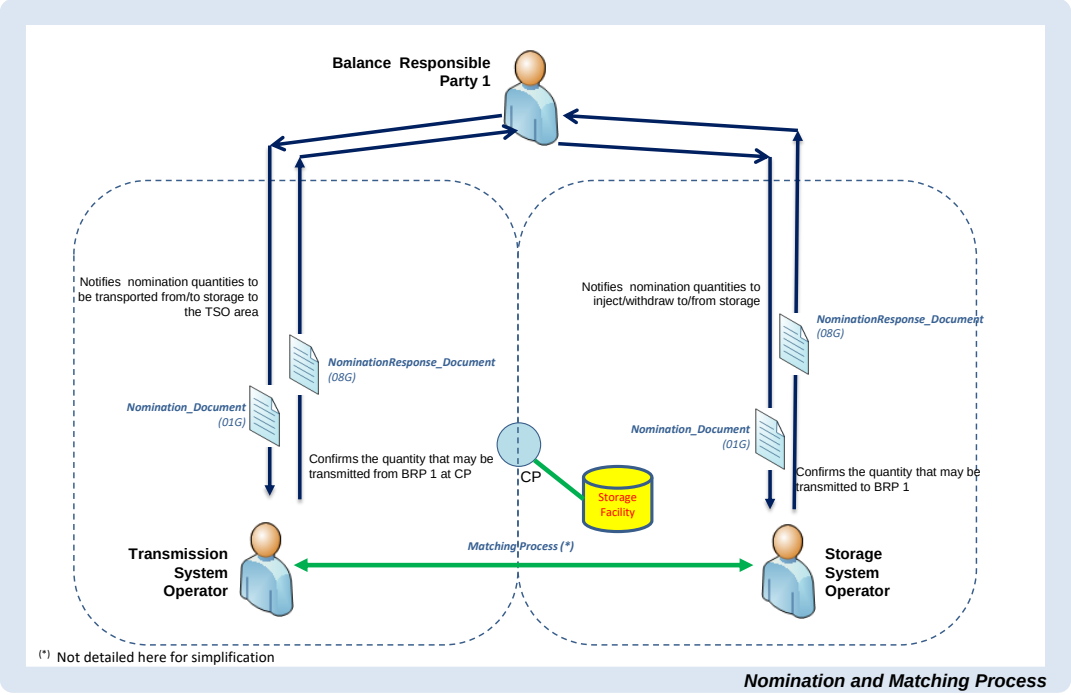


Figure 11: Nominate gas to or from a storage facility

## 3.6 Scenario 6: A Balance Responsible Party wants to verify his balancing situation

### 3.6.1 Description

**Description:** A Balance Responsible Party wants to verify his balancing situation.

**Edig@s processes required:** Involves the Settlement Process.

In order to verify a balancing situation the following actions have to be carried out:

1. The Allocation Responsible has to receive the metered data from the Metered Data Responsible and the matching data from the System Operators in order to calculate the allocation data.
2. The Area Coordinator has to receive the allocated data and determine the market situation for Balance Responsible Parties.
3. The Balance Responsible Party has to receive the various market situation documents from the Area Coordinator

This involves the use of the following Edig@s process.

1. The Settlement Process

### 3.6.2 Simplified flow diagram

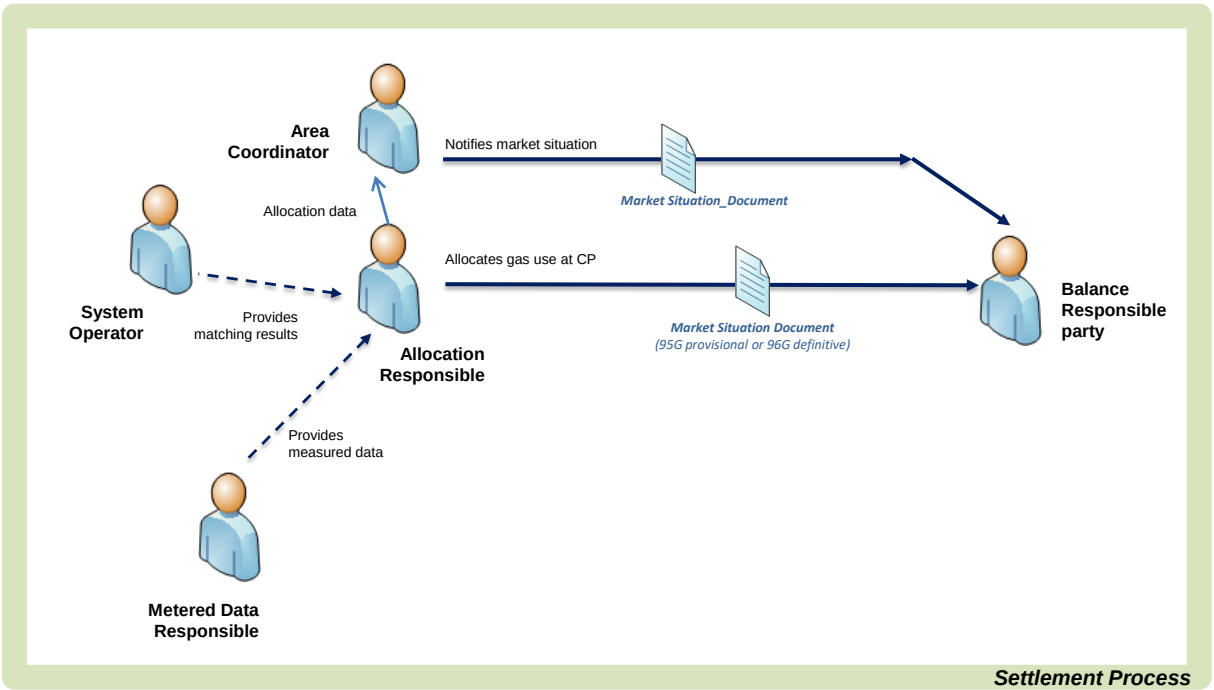


Figure 12: Settlement

## 3.7 Scenario 7: An Area Coordinator carries out a balancing action on the market

### 3.7.1 Description

**Description:** An Area Coordinator carries out a balancing action on the market.

**Edig@s processes required:** Involves the Balancing Process.

In order for an Area Coordinator to carry out a balancing action the following actions have to be carried out:

1. The Area Coordinator makes a request to buy or sell on the market through an energy trading platform.
2. Balance Responsible Parties make offers or bids on the market.
3. Trades are agreed between parties.
4. The energy trading platform informs the involved actors of the results of their actions.

This involves the use of the following Edig@s process.

1. The Balancing Process

### 3.7.2 Simplified flow diagram

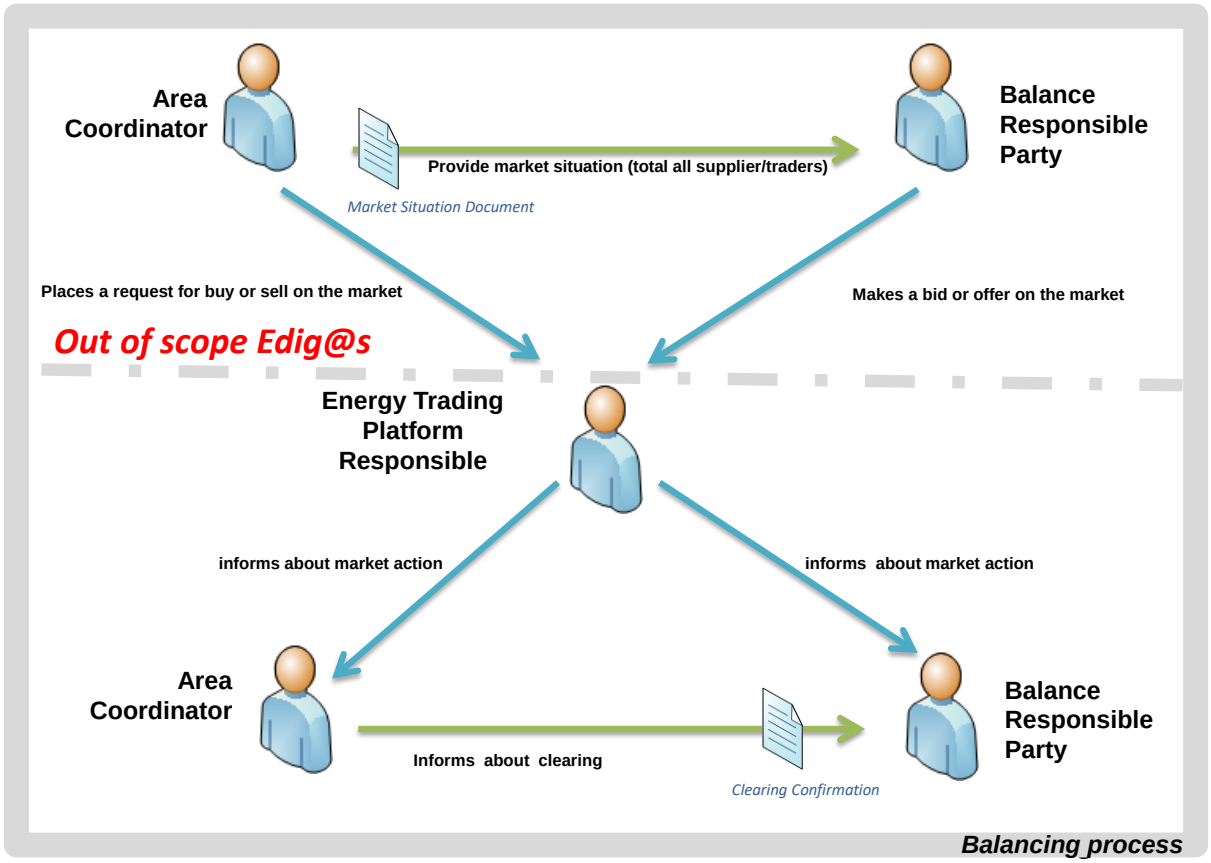


Figure 13: Balancing

## 3.8 Scenario 8: A Balance Responsible Party wants to buy gas at an energy trading platform in order to balance his position

### 3.8.1 Description

**Description:** A Balance Responsible Party wants to buy gas at an energy trading platform in order to balance his position.

**Edig@s processes required:** Involves the Nomination and Matching Process.

In order to buy gas the following action has to be carried out:

1. Task a Trader to purchase the gas from an energy trading platform

This involves the use of the following Edig@s process:

1. The Nomination and Matching Process

### 3.8.2 Simplified flow diagram

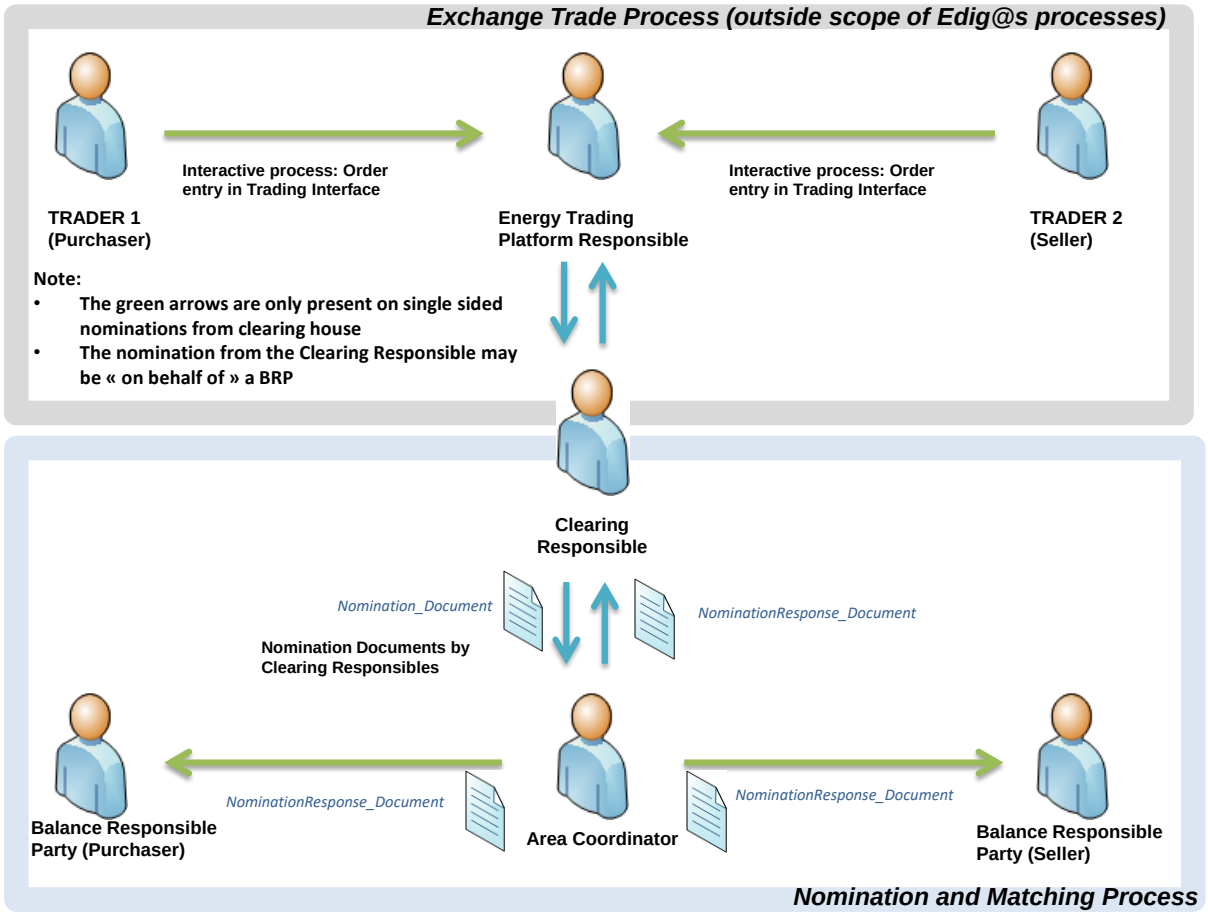


Figure 14: Nomination and matching

## 3.9 Scenario 9: A market participant wants to report concluded transactions via the REMIT Process

### 3.9.1 Description

**Description:** Market participant (Capacity Responsible Party, Transmission System Operator) wants to report concluded transactions via the REMIT Process.

**Edig@s processes required:** Involves the REMIT Process.

In order to report concluded transactions via the REMIT Process the following actions have to be carried out:

1. Report secondary market (FCFS, CFO and OTC) capacity trade results to the Market Information Aggregator
2. Report capacity auction results to the Market Information Aggregator

### 3.9.2 Simplified flow diagram

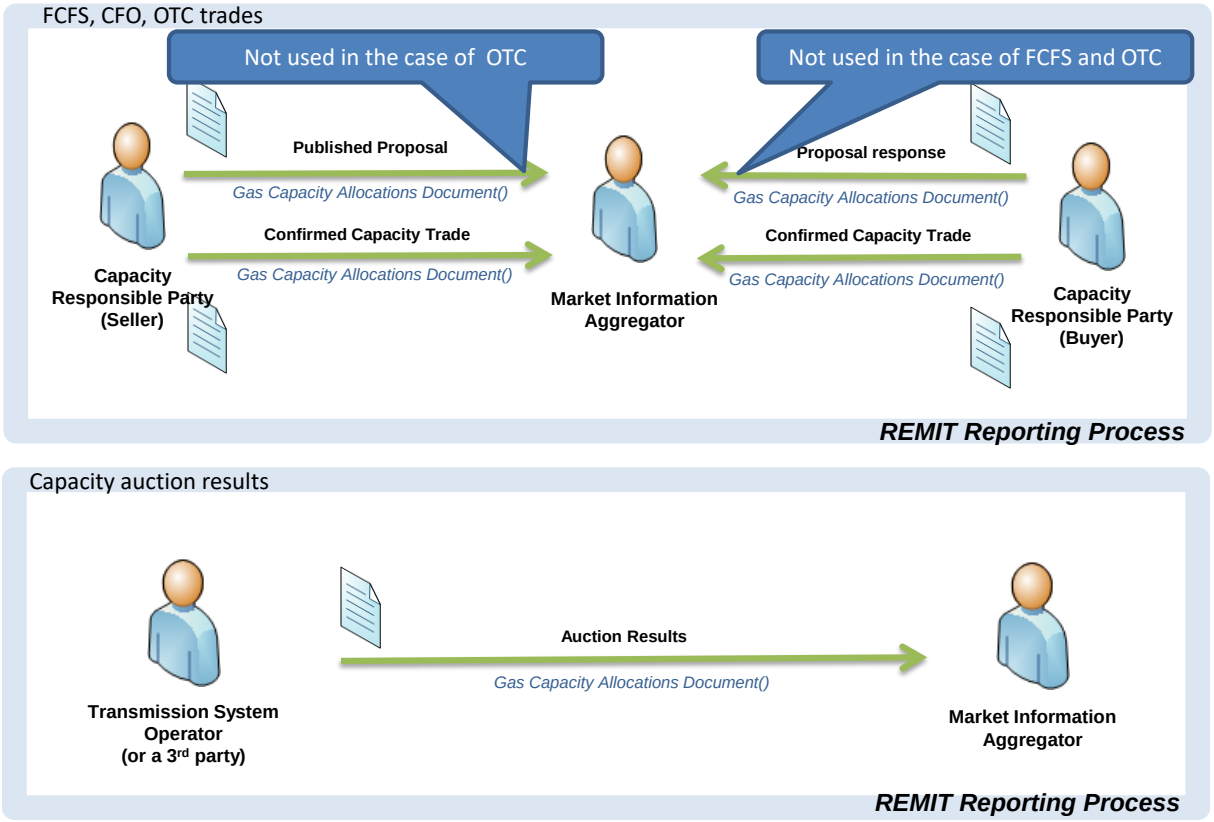


Figure 15: REMIT

246 # 4 Document change log

| Package | Version | Date | Description |
|---|---|---|---|
| **5.1** | 1 | 2018-02-15 | Initial release |

247