



## Role Model for the Gas Sector

12 May 2016

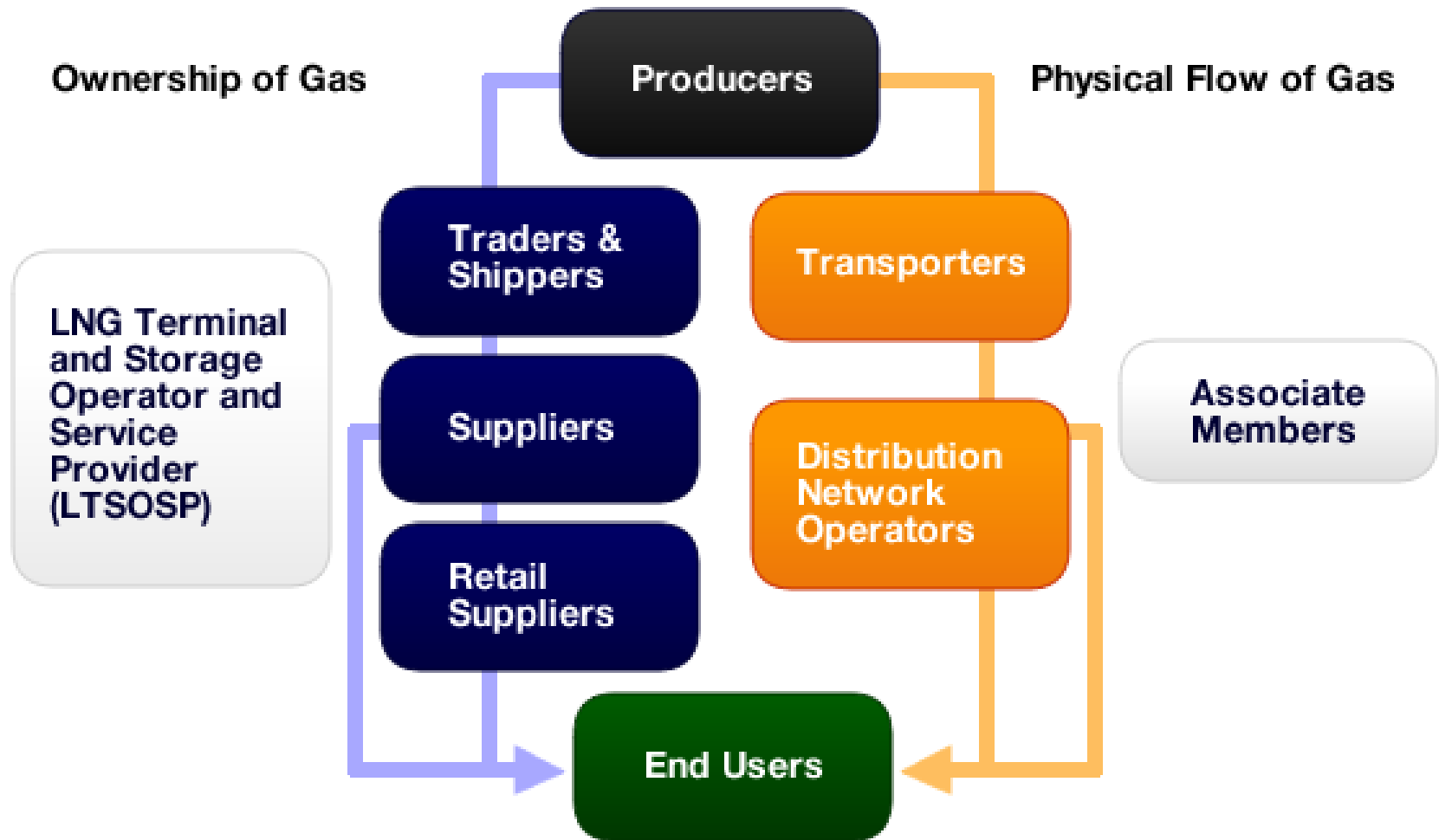
# AGENDA

- ➔ Welcome & Introduction
- ➔ Aim of the Workshop
- ➔ Approach of the development of the Role Model
- ➔ Explanation of the Project
- ➔ Roles and Parties
  - ➔ Common Roles
  - ➔ Parties with multiple roles
  - ➔ TSO Role
  - ➔ Duties of Balance / Capacity Responsible Party
  - ➔ Roles in the metering process
  - ➔ New Roles
- ➔ Next Steps
- ➔ ENTSOG Transparency Platform

# EASEE-gas

- EASEE-gas is a not-for-profit association registered in France (Law of 1901 Registration) and managed in Brussels, Belgium. The association's main purpose is to develop and promote common business practices (CBPs) to simplify and streamline the business processes between all the gas industry players, leading to a more efficient and effective European gas market.
- The creation of EASEE-gas was fully supported by the European Commission as well as the different national and European Regulators through what is known as the Madrid Forum. It was prompted by the success of the Gas Industry Standards Board (GISB) in the United States and has been modelled on it. Nowadays, the GISB also represents the power industry and is known as the North American Energy Standards Board (NAESB).

# EASEE-gas Membership Segments

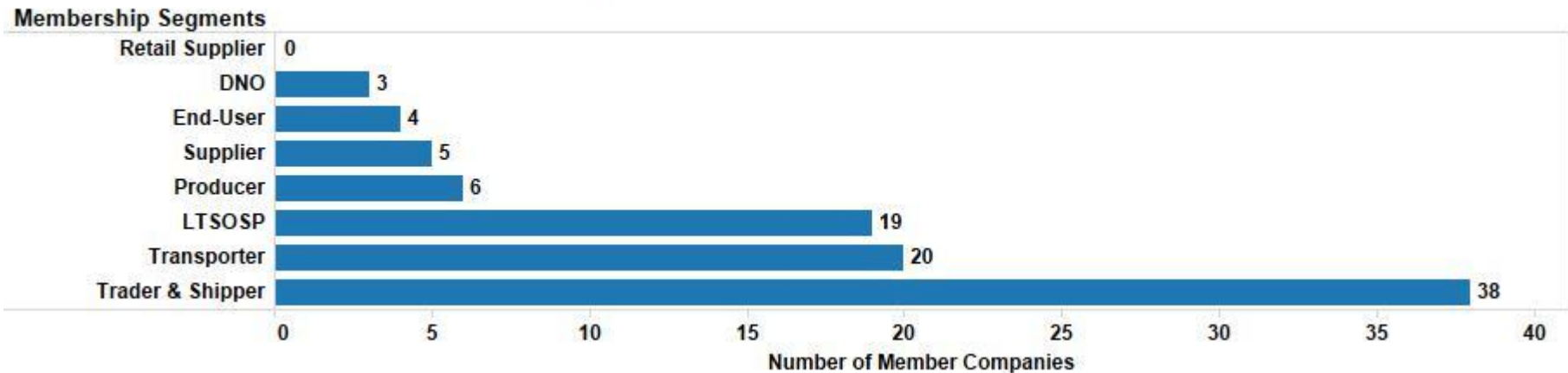


# EASEE-gas Members

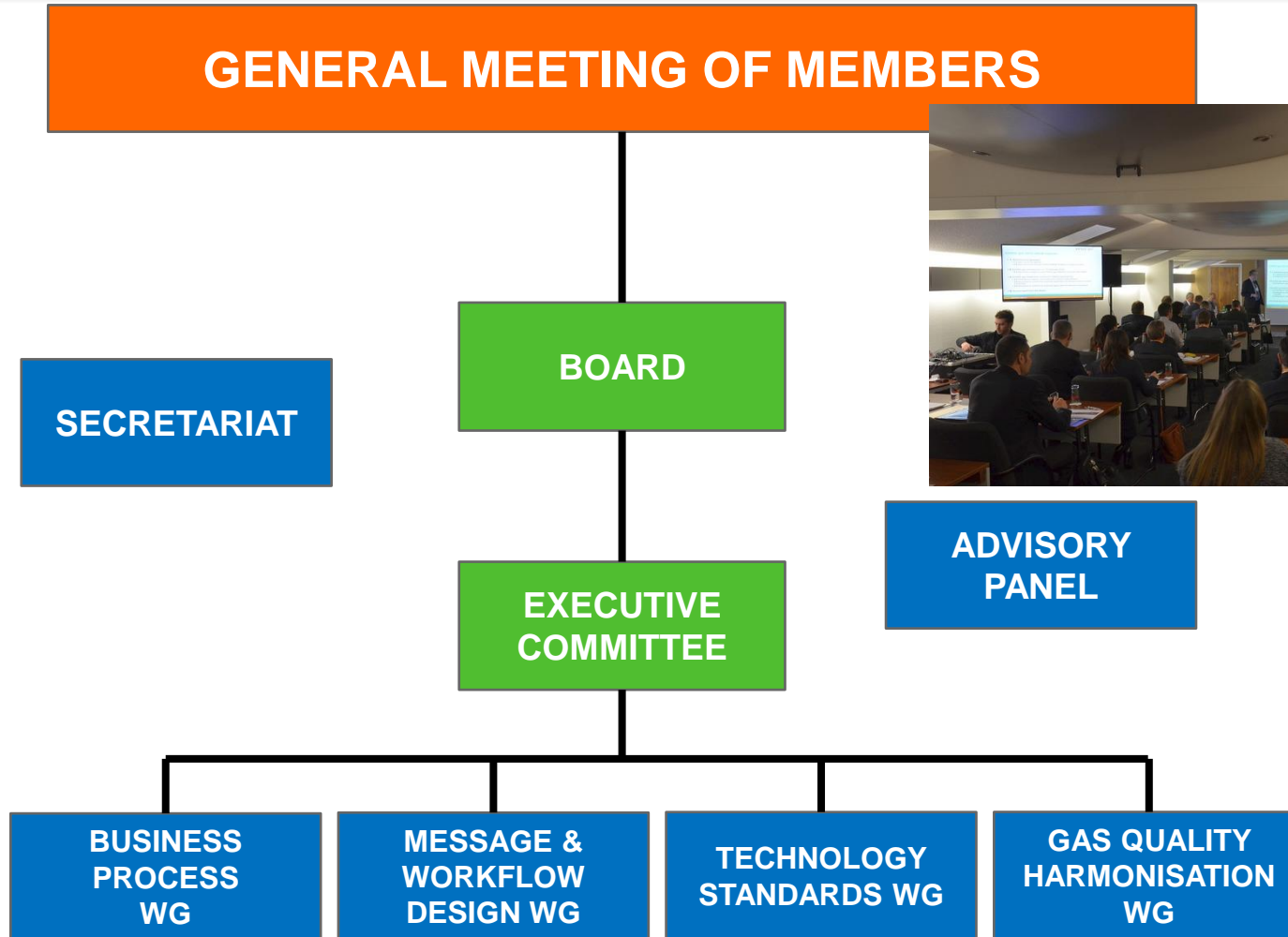
## ➔ EASEE-gas membership in 2016

95 Full Members

EASEE-gas Membership on 1 February 2016



# EASEE-gas Organisation Chart



## Activities of EASEE-gas

- ➔ Ad hoc expert group ACER for drafting FG Interoperability
- ➔ Active participant at FG and NC workshops
- ➔ Cooperation Agreement with ENTSOG (development of data exchange messages)
- ➔ Development of EDIG@S messages and Message Implementation Guidelines
  - ➔ Worked on messages around nomination & matching and on capacity auctions (request ENTSOG)
- ➔ REMIT TF created message/documents on requests from ENTSOG and ACER
  - ➔ Fundamental data, Nomination monitoring, Gas Transport Capacity
  - ➔ REMIT implementation guideline
- ➔ Gas quality
  - ➔ Cooperate on draft gas quality standard; participating at CEN TC 234 wg11
  - ➔ Organisation of Pilot Project together with Marcogaz
- ➔ Two representatives at Madrid Forum
- ➔ Common Business Practice
  - ➔ Presentations on CBPs at NC workshops
  - ➔ Review and development



Marin Zwetkow



## Common Business Practices (CBP)

- ➔ Common Business Practices (CBPs) are standards, procedures and/or protocols commonly used throughout the gas industry in Europe and which are recommended by EASEE-gas.
- ➔ Drafted by the association's different Working Groups, depending on the topic.
- ➔ The final text is submitted to the Executive Committee for final approval.
- ➔ Published on the EASEE-gas' website and sent to the membership as well as to the wider network of EASEE-gas.
- ➔ EASEE-gas members have two months to submit comments or suggestions to the CBPs.
- ➔ CBP can be submitted to the General Meeting of Members (GMoM) for final ratification by all members.

## CBP & BRS

- ➔ Business Requirements Specifications (BRS) are developed by ENTSOG
- ➔ Part of Common Network Operation Tools (CNOT)
- ➔ Available BRS:
  - ➔ BRS for Nomination & Matching
  - ➔ BRS Capacity Allocation (CAM) and Congestion Management (CMP)
- ➔ Cooperation between ENTSOG & EASEE-Gas
- ➔ MIG (Message Implementation Guidelines), CBP and BRS are brought inline

# CBP Implementation Survey 2015

- ➔ Full Membership consulted from 25 November until 18 December 2015
- ➔ 27 total responses
- ➔ Segments' participation reflects the association membership distribution
- ➔ The overall result is affected by this predominance

## Number of answers per segment

Answer Choices	Responses	
Distribution Operators	0.00%	0
Transporters	40.74%	11
Producers	0.00%	0
Suppliers	7.41%	2
Traders and Shippers	37.04%	10
LNG Terminal and Storage Operator and Service Providers	14.81%	4
End Users	0.00%	0

## Level of implementation

	Fully	Partly	Not implemented
CBP-2003-001/02 Harmonisation of Units (Issued in 2014)	80.00% 20	16.00% 4	4.00% 1
CBP-2003-002/03 Harmonisation of the Nomination and Matching Process (Issued in 2014)	76.00% 19	16.00% 4	0.00% 0
CBP-2003-003-02 EDIG@S	72.00% 18	16.00% 4	12.00% 3
CBP-2005-001-02 Harmonisation of Gas Qualities	24.00% 6	32.00% 8	12.00% 3
CBP-2005-002-03 Interconnection agreements (Issued in 2014)	36.00% 9	28.00% 7	4.00% 1
CBP-2005-003-01 Constraints	52.00% 12	12.00% 3	8.00% 2
CBP-2007-001-01 Message Transmission Protocol	68.00% 17	8.00% 2	16.00% 4
CBP-2007-002-01 Common Data Communications Network	72.00% 18	12.00% 3	12.00% 3
CBP-2007-003-01 Company's Identifier encoding	64.00% 16	32.00% 8	4.00% 1
CBP-2007-005-01 EDIG@S Release Periods	66.67% 16	16.67% 4	12.50% 3
CBP-2007-006-01 Harmonisation of the Allocation Information Exchange	56.00% 14	16.00% 4	12.00% 3
CBP-2008-001-01 Secondary Capacity Trading TSO	24.00% 6	32.00% 8	12.00% 3
CBP-2008-001-01 Secondary Capacity Trading SSO	12.00% 3	16.00% 4	16.00% 4
CBP-2008-001-01 Secondary Capacity Trading LNG Operators	4.00% 1	16.00% 4	12.00% 3
CBP-2009-001-01 Harmonisation of the operating of contracts	25.00% 6	20.83% 5	16.67% 4
CBP-2007-004-01 Connection point identifier encoding	48.00% 12	24.00% 6	12.00% 3
CBP-2014-001/01 Harmonisation of the Nomination and Matching Process for Double-Sided and Single-Sided Nomination	36.00% 9	32.00% 8	28.00% 7

- Older CBPs (which have been updated recently and are included in the Network Codes) on Harmonisation of Units and Harmonisation of the Nomination and Matching Process have the highest implementation rate.
- Older CBPs remain well implemented among the members.
- LTSOSP segment has the highest number of CBPs fully implemented

## Level of implementation (2)

	Fully	Partly	Not implemented
CBP-2003-001/02 Harmonisation of Units (Issued In 2014)	80.00% 20	16.00% 4	4.00% 1
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CBP-2014-001/01 Harmonisation of the Nomination and Matching Process for Double-Sided and Single-Sided Nomination	36.00% 9	32.00% 8	28.00% 7

- ➔ The level of implementation of the newest CBP Harmonisation of the Nomination and Matching process for Double-Sided and Single-Sided Nomination is still fragmented

## Recommendations for CBP related activities in 2016

- ➔ Possibility for the gas role model to become a CBP
- ➔ Integration of AS4 protocol in the current CBPs
- ➔ CBP on Edig@s as a prerequisite for Single-sided Nomination
- ➔ CBP on Integrated Data Exchange
- ➔ CBP on activities on terminals
- ➔ Push for a better compliance with units and measures, especially among TSOs
- ➔ Procedure for TSOs for the identification of cross-border interconnection points

## Highlights 2015/2016 (1/2)

- ➔ Development of a **Role Model** for the Gas Business
  - ➔ Joint TF of MWDWG & BPWG and in cooperation with representatives of Eurogas and ENTSOG
  - ➔ To be presented at the next Madrid Forum
  
- ➔ EASEE-gas certificates migration in November 2015
  - ➔ New certificates will be signed using SHA-2 !!
  
- ➔ Data exchange (NC INT&DE): AS4 and EDIG@S-XML
  - ➔ Review CBP Message Transmission Protocol
  - ➔ Add AS4 next to AS2 as long as AS2 is used within the industry; advise to implement AS4 when no messaging system is in place
  - ➔ Support implementation and maintenance of EDIG@S 5.1

## Highlights 2015/2016 (2/2)

- Cooperation with ENTSOG
  - Developing/implementing messages for CAM/CMP and Nomination & Matching
  - Contribution to the development of new CNOT (Common Network Operation Tools INT&DE) when identified by ENTSOG
  
- Cooperation with ACER
  - Developing/implementing messages for REMIT
  - Achieve MoU (Memo of Understanding)
  - Message Implementation Guideline
  
- Cooperation with EC, CEN and Marcogaz on Pilot Study
  - Harmonisation of the Wobbe index at European level



## Questions?



## AIM OF THE WORKSHOP

- ➔ Promotion of the Role Model for Gas
- ➔ Gain awareness about the development
- ➔ Explanation of the development process
- ➔ Overview about the existing roles as starting point
- ➔ Overview of the new roles
- ➔ Next Steps



Peter Meeuwis

# Why a role model?

## ...to define & assign responsibilities to parties

A role model contains a collection of roles that each represent a responsibility. Roles are assigned to parties.

### Usage

A role model is used to harmonise the **interactions** between the parties.

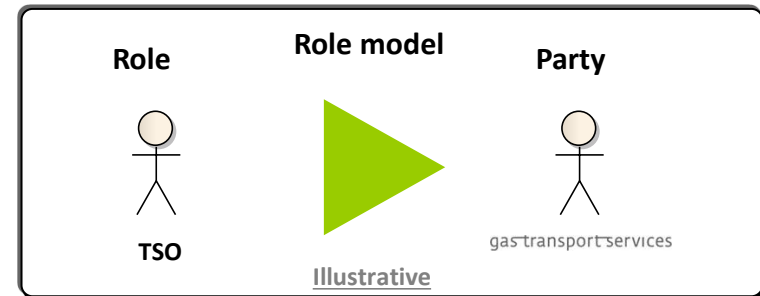
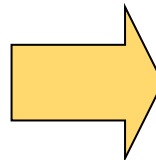
**Interactions** are the combination of the processes, transactions, messages and information services (interfaces and portals) required to deliver and receive (operational) information to and from a party

### Interoperability

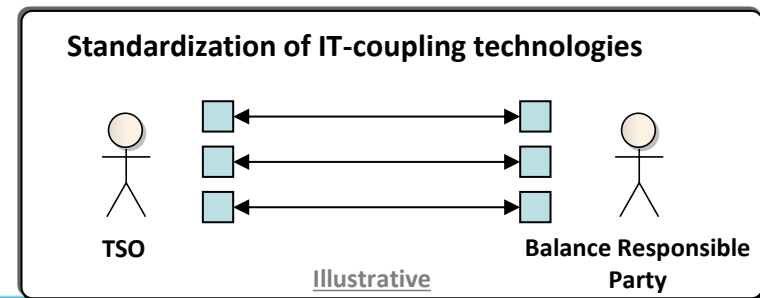
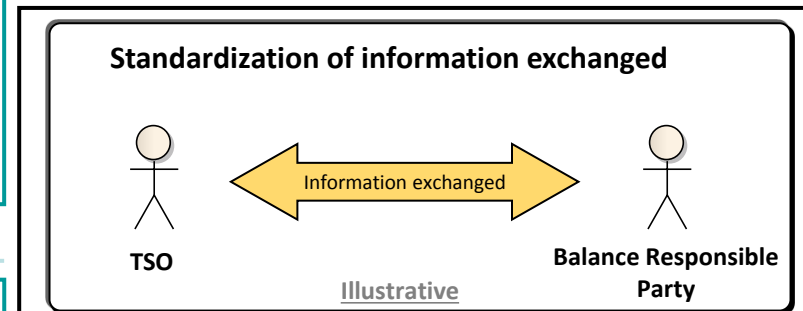
A role model is the first of three steps to minimise interoperability issues that prevent efficient cooperation, and synergies during and after mergers:

The three steps are:

- 1) standardisation of role model
- 2) standardisation of information exchanged,
- 3) standardisation of IT coupling technologies



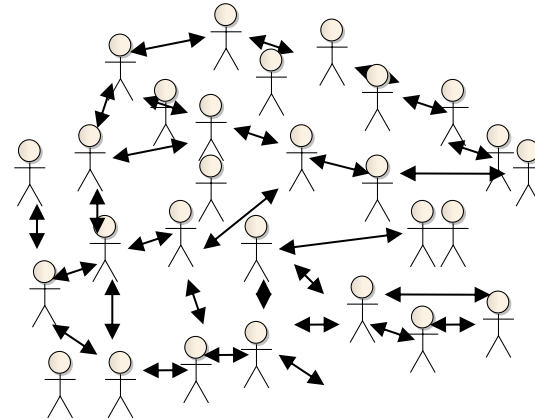
Input for



## Amount of roles determines (exponentially) the amount of interactions to be harmonized at EU level

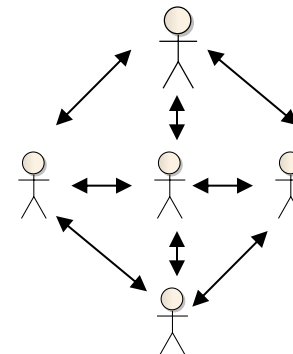
### Many roles means:

- Large amount of interactions to be harmonized with all parties in the EU
- Very limited room for individual differences in each region
- Focus will be on a mixture of minor and major (market) interactions



### Few roles means:

- Minimal amount of interactions to be harmonized with all parties in the EU
- Room for differences within each role in each region
- Focus will be on the major (market) interactions





Marin Zwetkow

## SUPPORTING BODIES

**EASEE-GAS**

In cooperation with

**EUROGAS**

**ENTSOG**

## EASEE-Gas Task Force members

DVGW

ECC

Engie

Fluxys

Gas  
Connect  
Austria

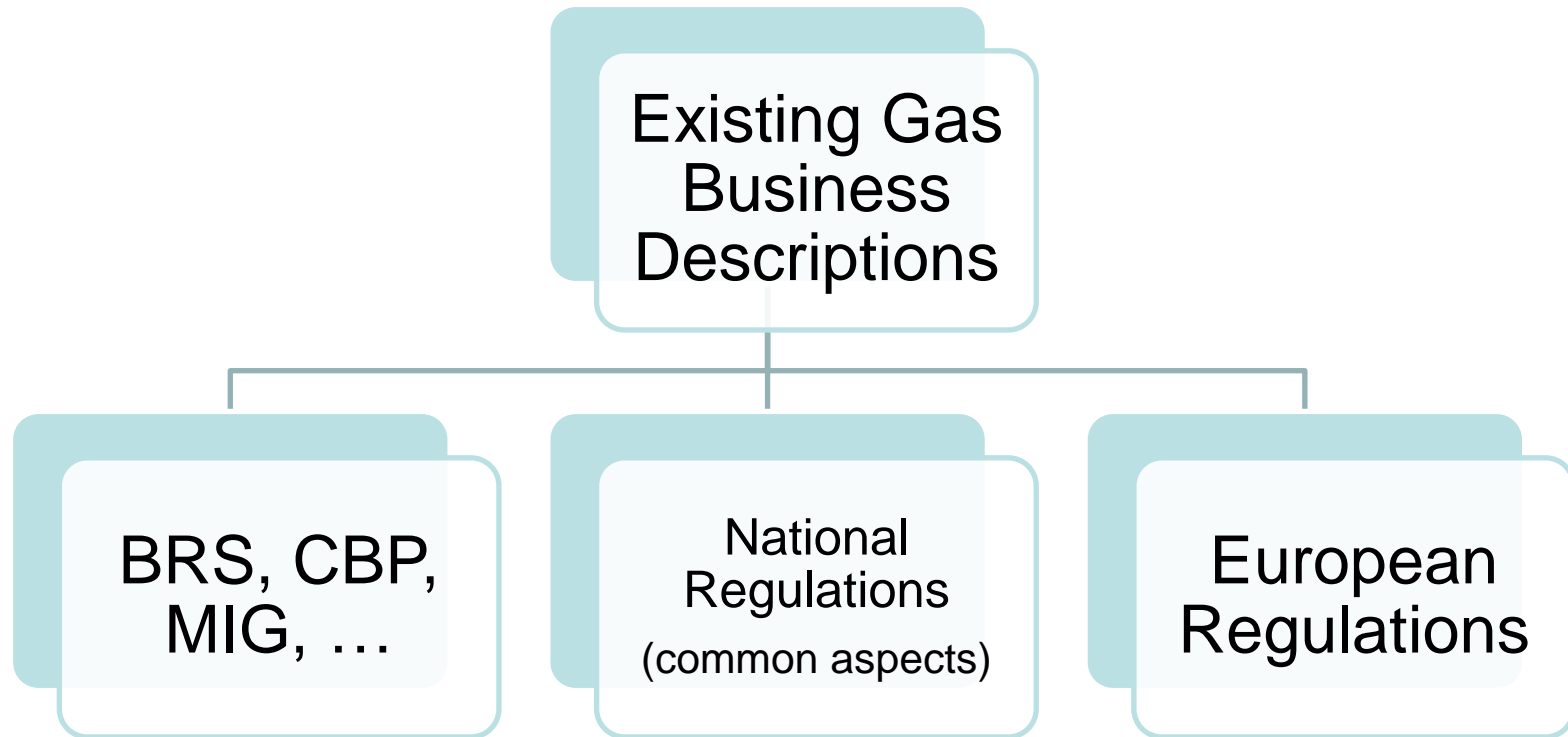
Open Grid  
Europe

Thyssengas

VNG



## SOURCES OF INFORMATION



## Current Status

- **Arrangement of the document**
  - Adding both interactions (active & passive) for each role
  - Detailed description how to read to document
  - Description of the aim of the Role Model for Gas
  - Simplification: e.g. removed parent roles
  - Addition of an overview chart
  
- **Comments received so far by:**
  - EASEE-Gas ExCom
  - TSWG (Technology Standard Working Group)
  - MWDWG (Message & Workflow Design Working Group)
  - BPWG (Business Process Working Group)
  - ENTSOG
  
- **Use the Role Model for the next major Edig@s release**

## Coffee Break

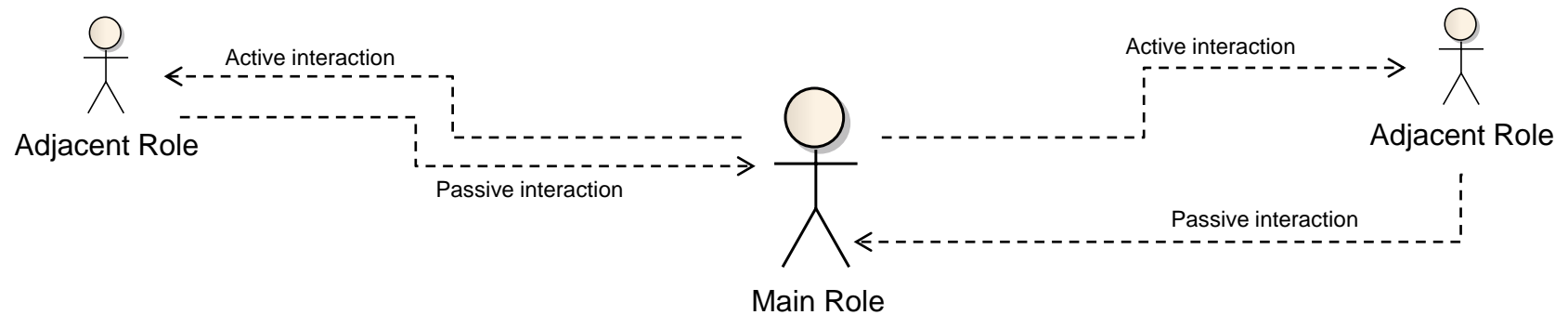




Jan Allofs

## Roles & Interactions (general description)

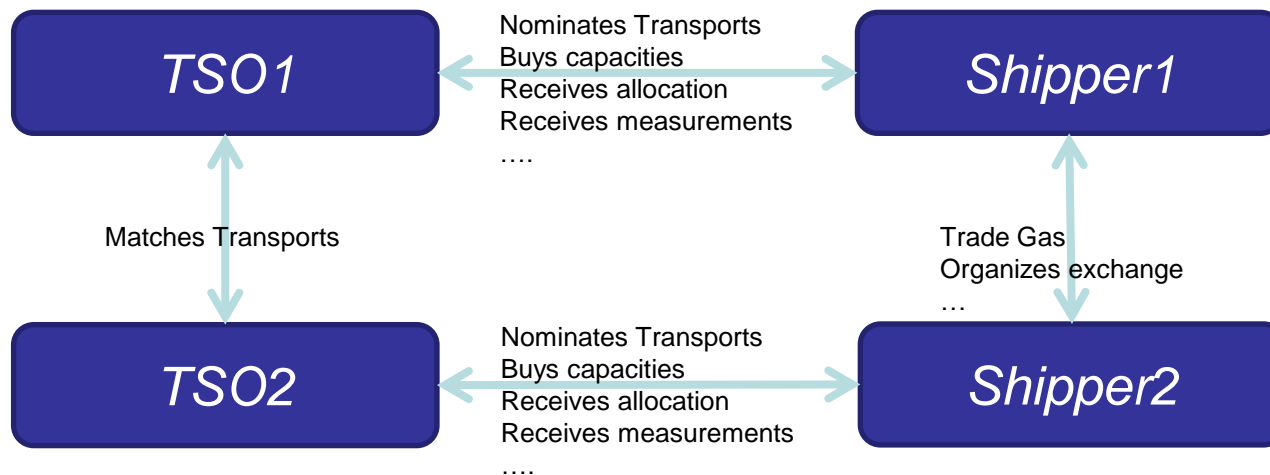
Role Description: Definition of the role and its field of operation



## How we started

### ➔ Where do we come from

- ➔ TSOs are a full service provider for transport demands and trading platforms (VTP)
- ➔ TSO customers are shipper



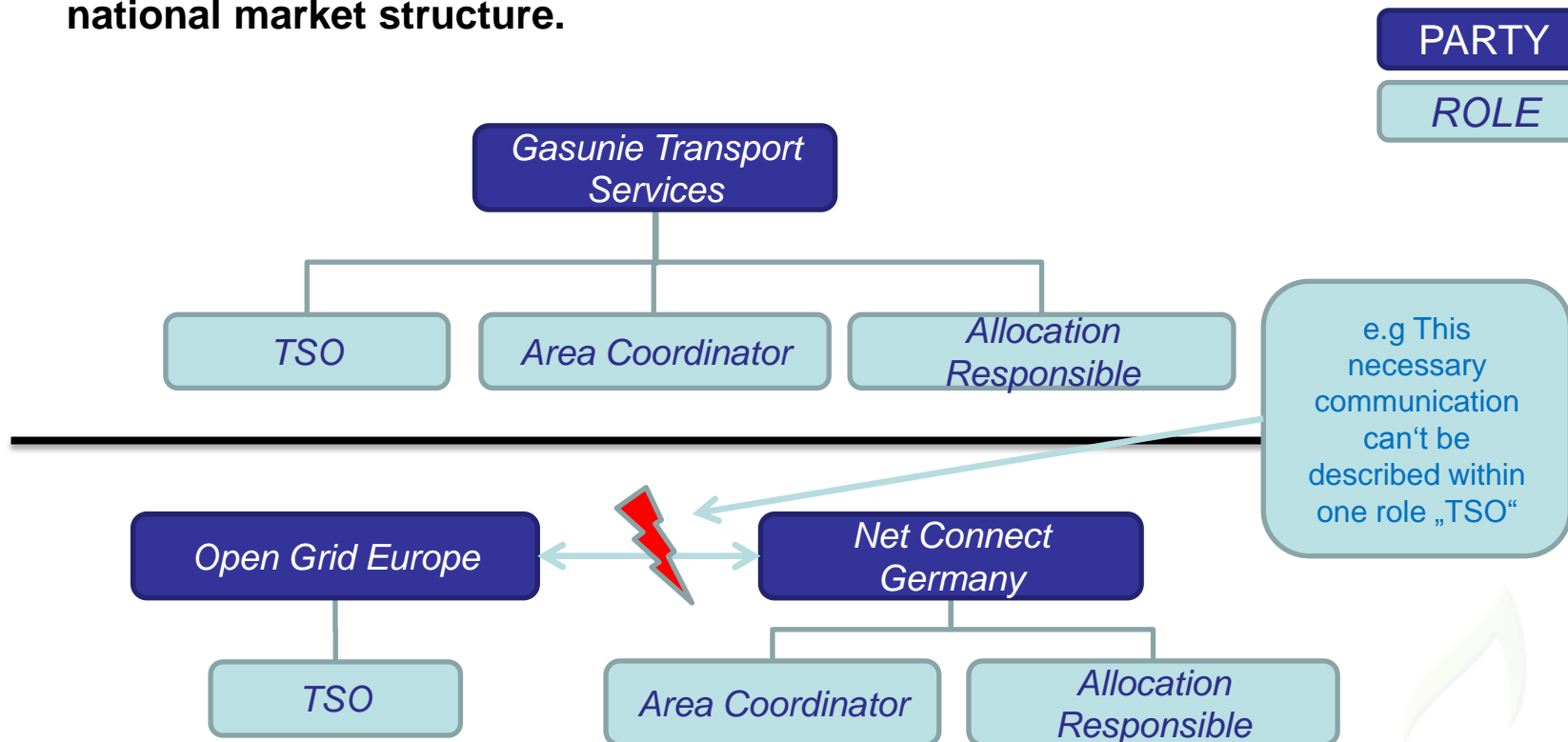
## Why did we split a role into several roles?

### ➔ Where are we today ?

- ➔ **Growing market areas and slightly dissenting national regulation create the need of coordinating instances (e.g. Area Coordinator)**
  - ➔ **Due to that duties and responsibilities of a “historic TSO role” might be fulfilled by several entities which are communicating with each other in order to meet a fully defined market**
- ➔ **In order to describe necessary business processes meeting most cases of regulation and asset structure we split the historic role of a TSO into several roles.**
  - ➔ **Among others:**
    - ➔ **TSO -> offers capacities, organizes Transports, provides matching results ....**
    - ➔ **Area Coordinator -> coordinates balancing groups, operates VTP ....**
    - ➔ **Allocation Responsible -> provides allocation data to BRP**
    - ➔ **Balancing Energy Responsible -> does set and provide balancing energy price for the market**
    - ➔ **Reconciliation Responsible -> does calculate imbalances within balancing groups**

## TSO in his several duties

- ⦿ Differing by country a party acting as TSO might have different or additional responsibilities and plays different roles in order to meet the national market structure.





## Two examples for classic “TSO” parties

### ➔ Dutch market:

#### ➔ Gasunie Transport Service is playing a lot of roles:

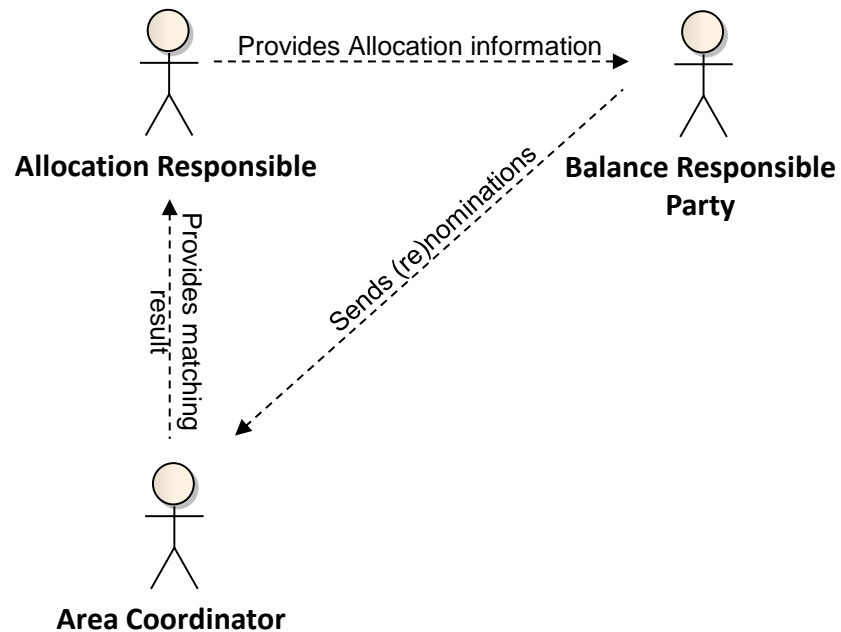
- ➔ Area Coordinator (Operates VTP, provides balancing groups ....)
- ➔ Metered Data responsible (is providing measured data for allocation purposes...)
- ➔ Allocation Responsible (is providing allocation information to BRP)
- ➔ Balancing Energy Responsible (is setting balancing price)
- ➔ Reconciliation Responsible (is calculating imbalances within balancing groups)

### ➔ German market:

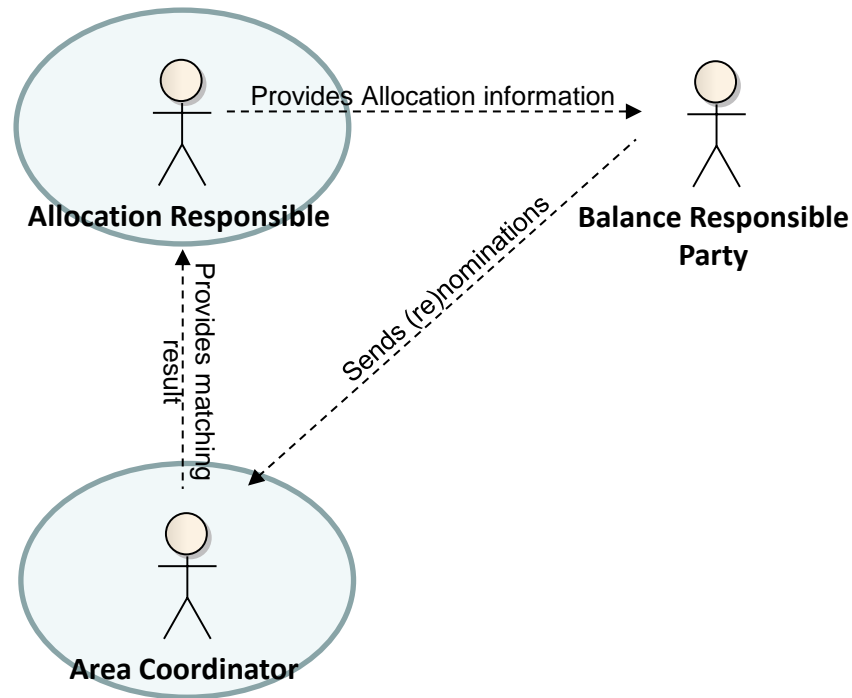
#### ➔ The transport service is offered by several TSOs within two market areas

- ➔ Therefore coordinating entities are needed and these entities need to communicate with several roles in order to fulfill their duties
  - ➔ Open Grid Europe, Gascade, GUD, Bayernnets ... are providing transport services , metered data ...-> TSO, Metered Data Responsible .....
  - ➔ Net Connect Germany and Gaspool do operate the VTPs and are responsible for managing Allocations and providing balancing energy to TSOs... -> Area Coordinator, Allocation/Reconciliation Responsible, Balancing Energy Responsible, Trader.....

## Use Case „Area Coordinator (OTC)“

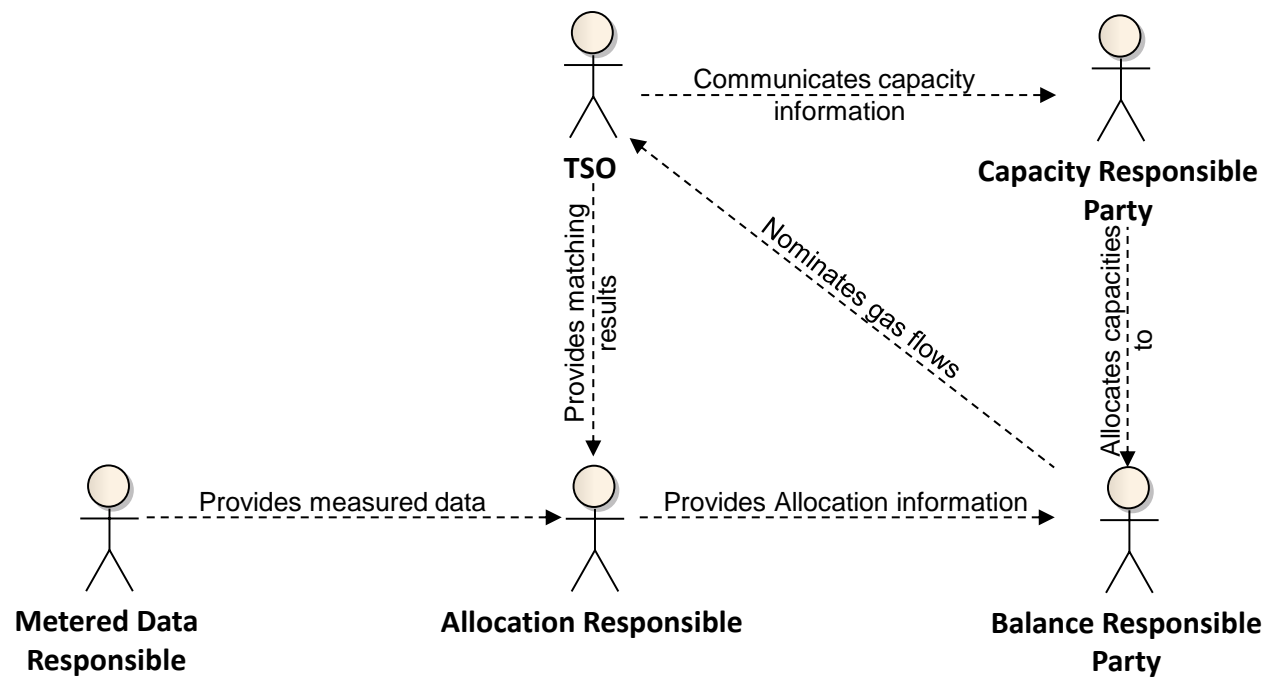


## Use Case „Area Coordinator (OTC)“

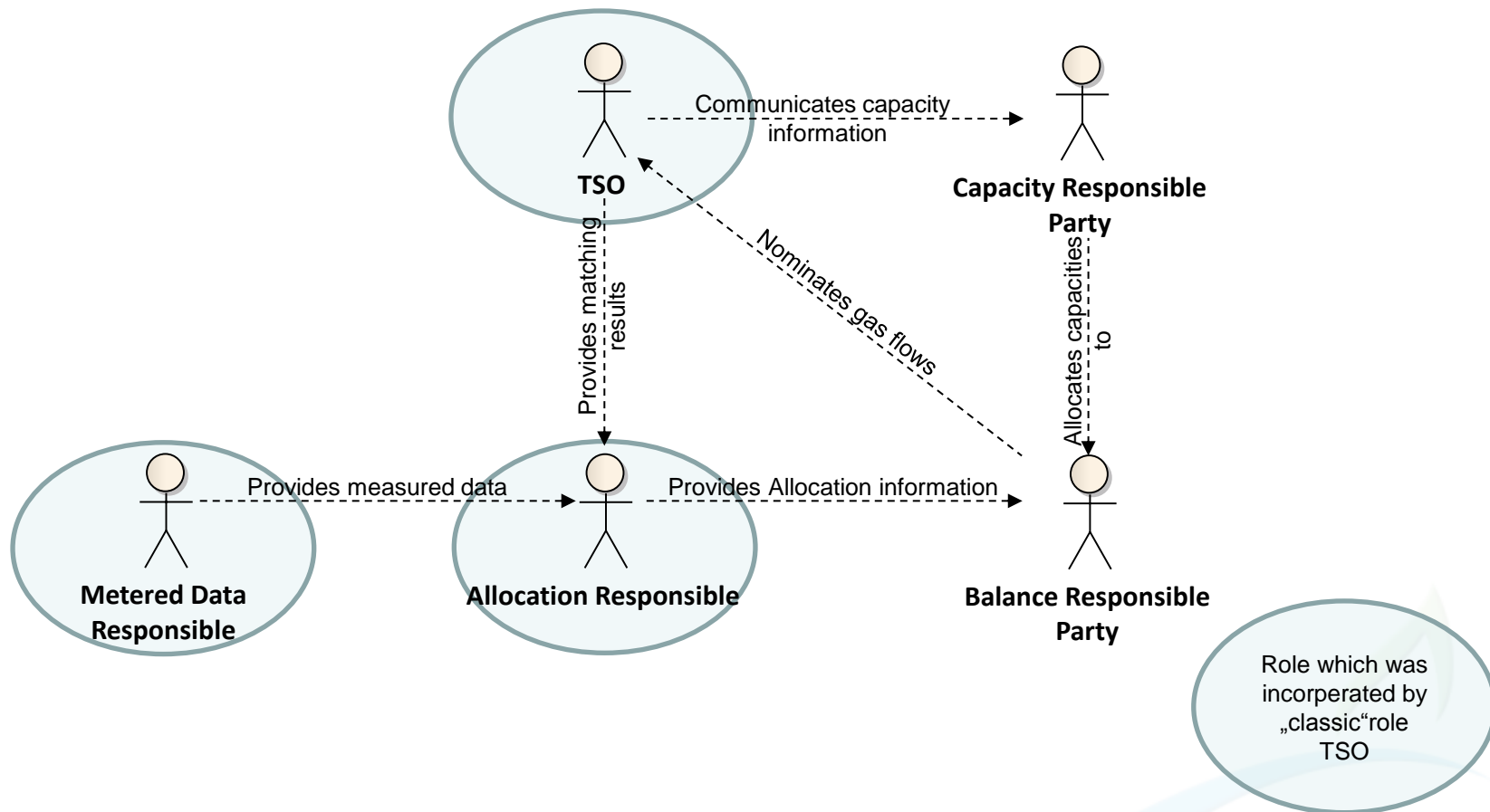


Role which was incorporated by „classic“ role TSO

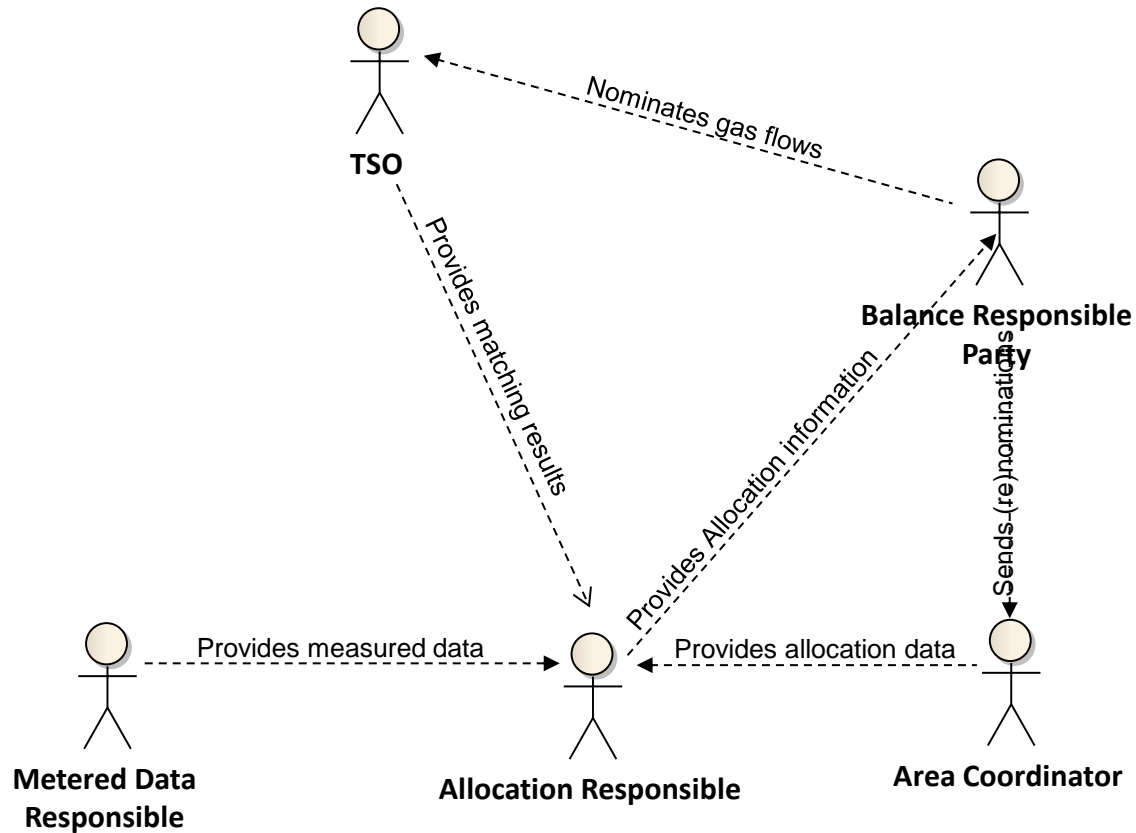
# Use Case “Transport”



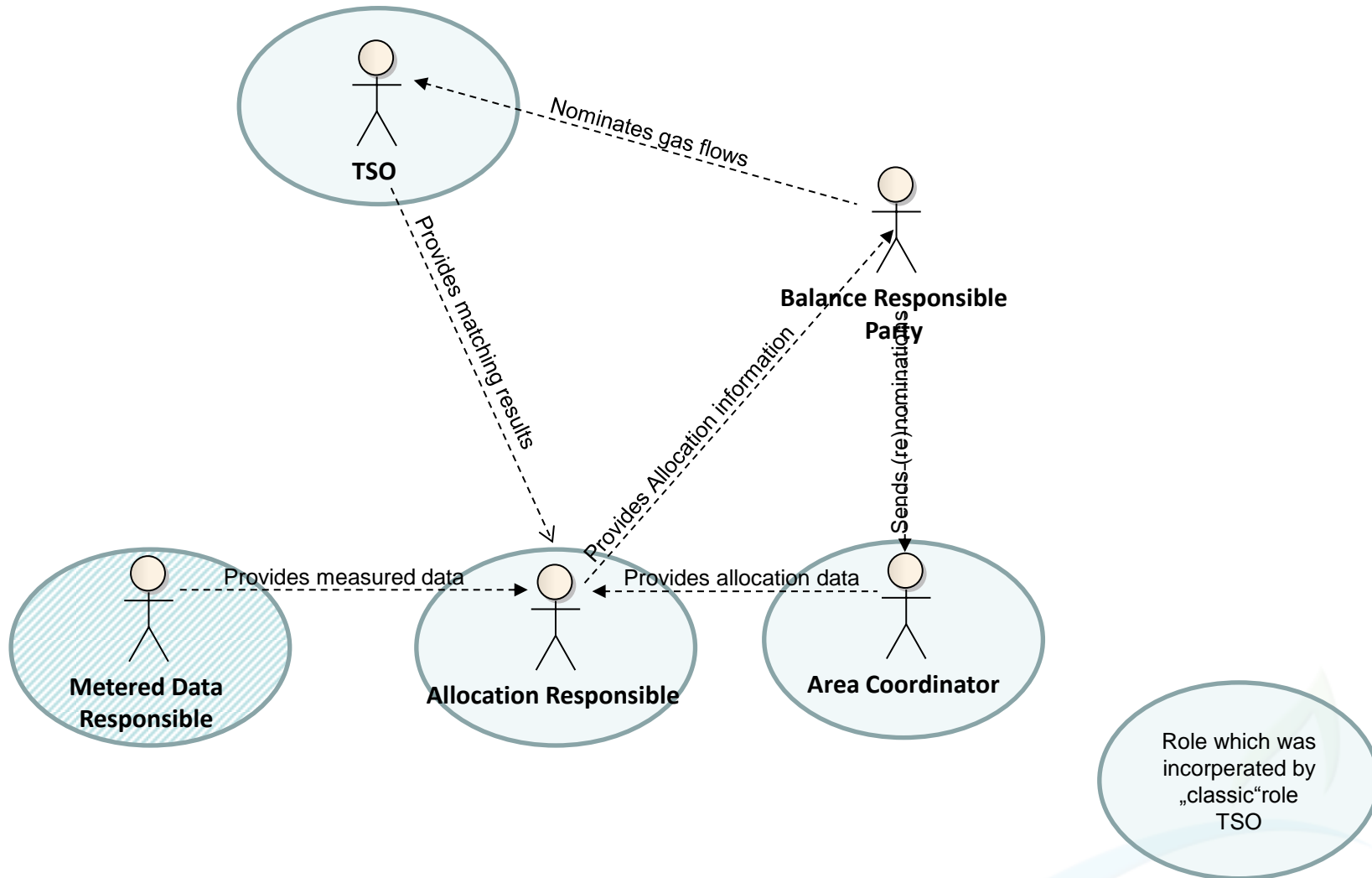
# Use Case “Transport”



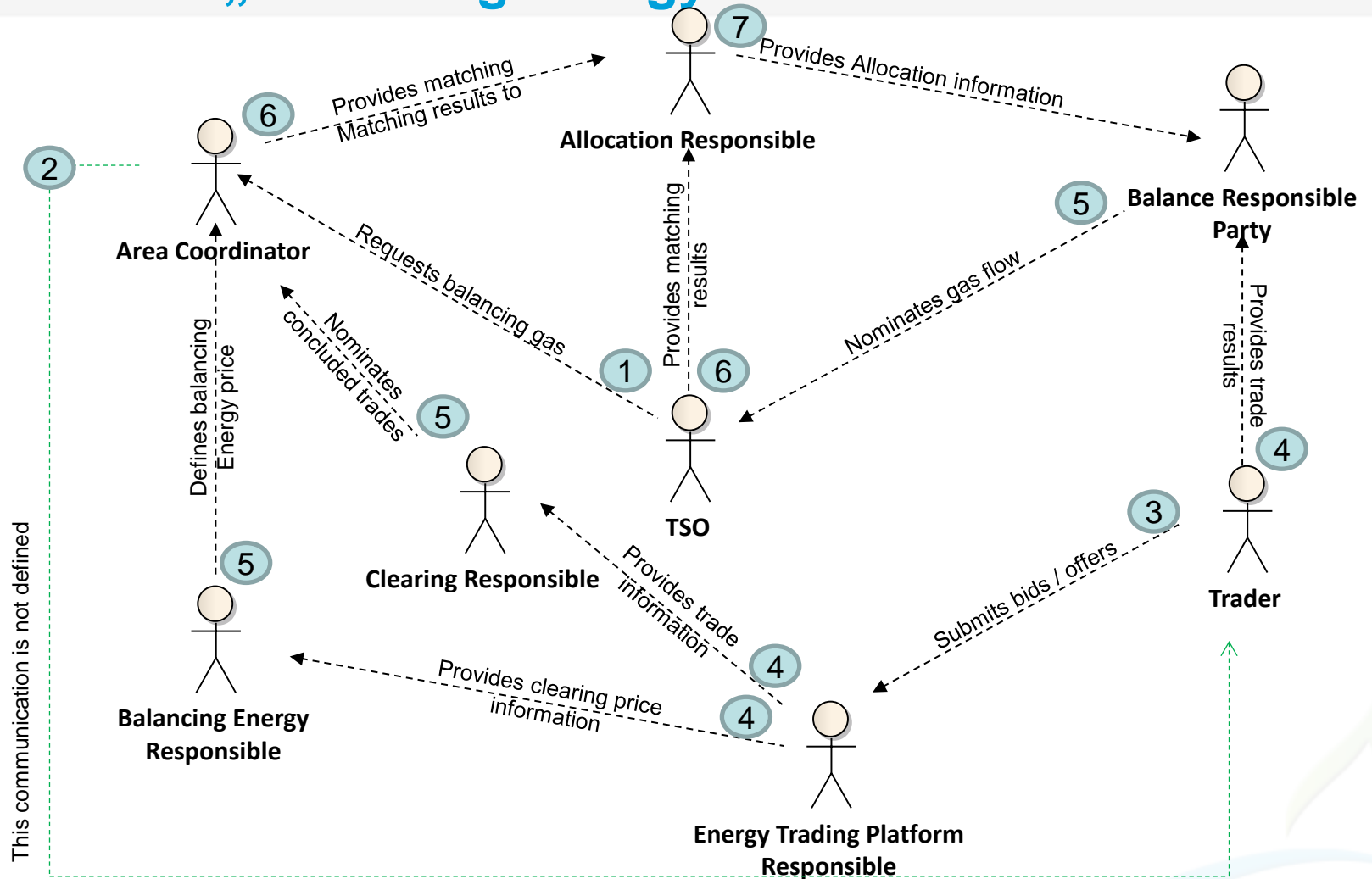
# Use Case „Allocation“



# Use Case „Allocation“

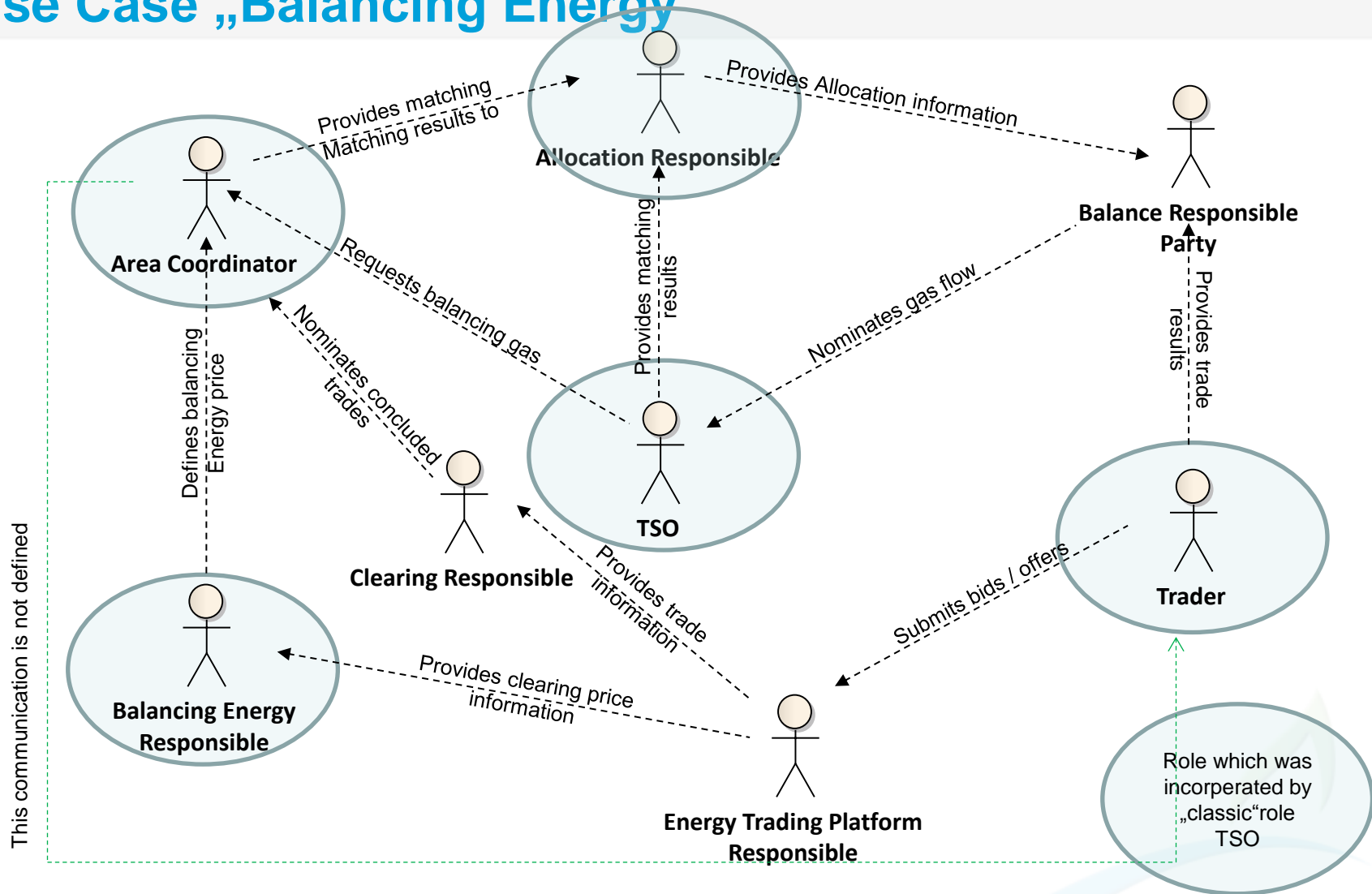


# Use Case „Balancing Energy“





# Use Case „Balancing Energy“



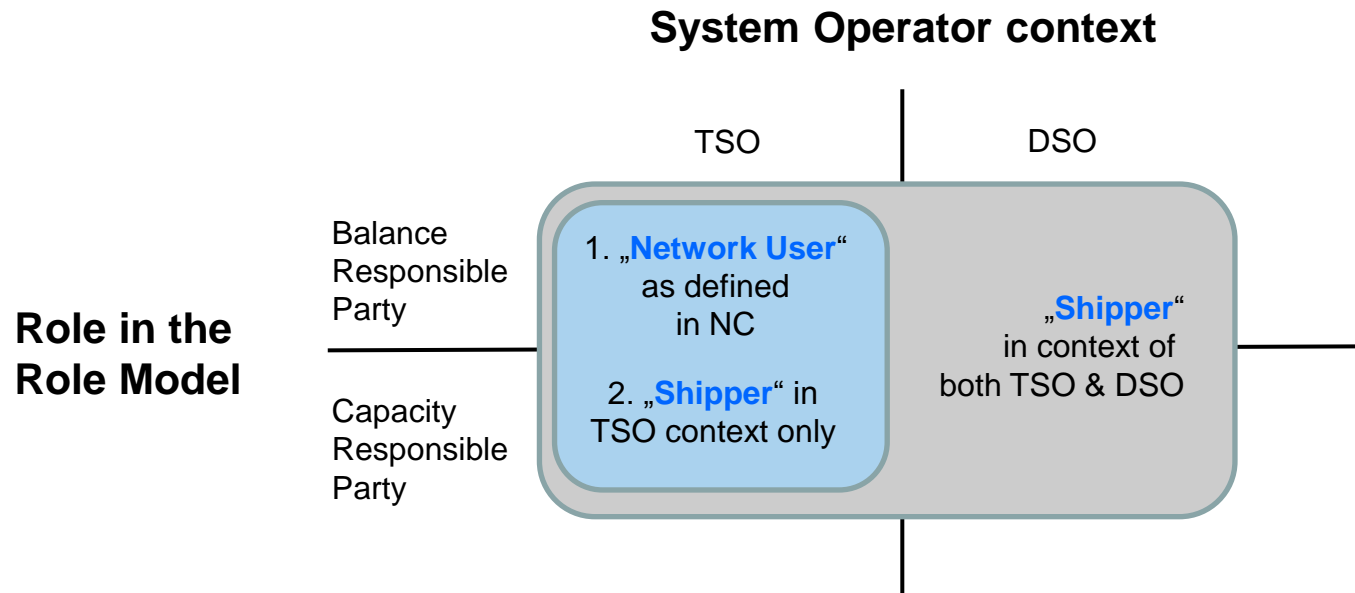
## Questions?





Oliver Schirok

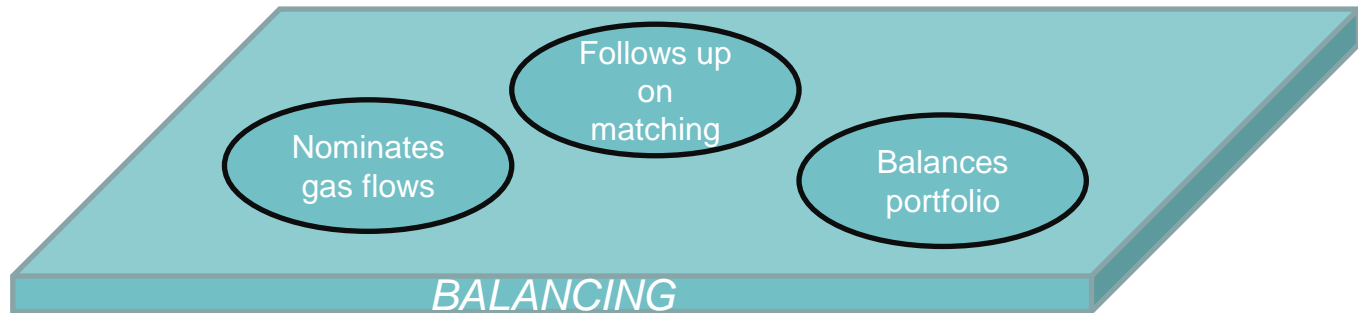
# Starting Point Shipper




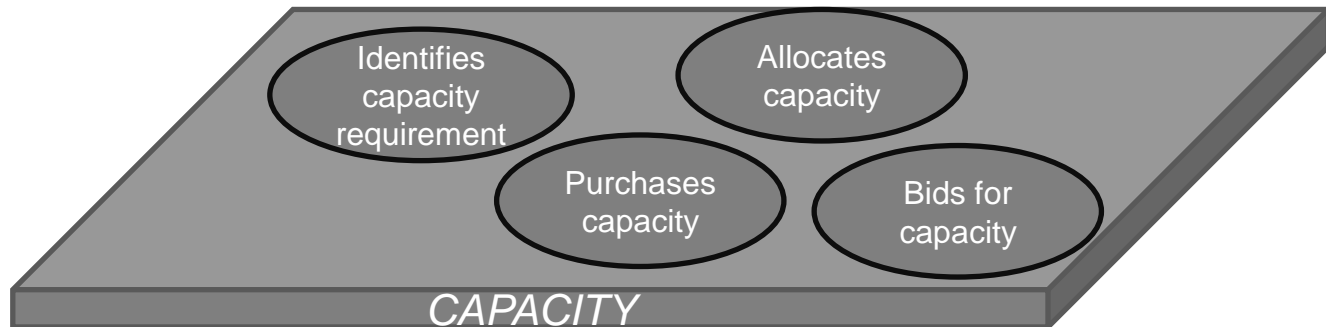
- ✓ Balancing Management
- ✓ Capacity Management
- > What about interactions at a virtual hub?
- > What about the interaction to the final customer?

## Duties of BRP and CRP

  
**Balance Responsible Party**



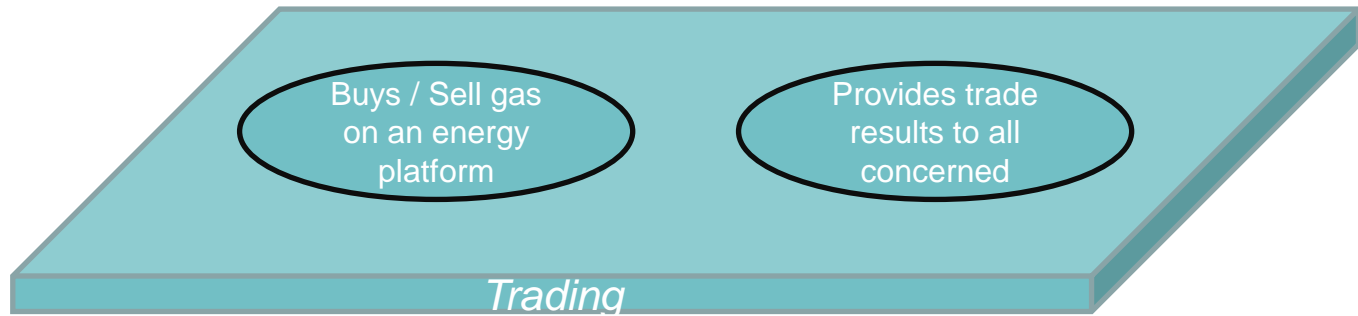
  
**Capacity Responsible Party**



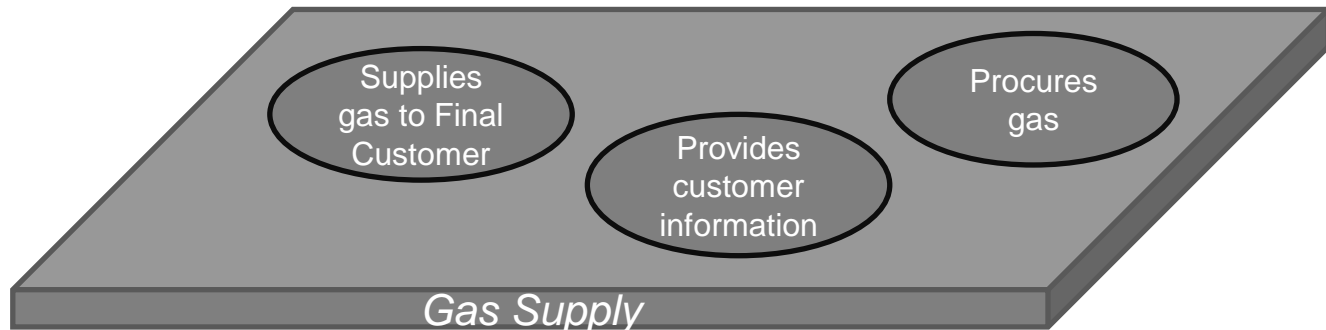
BRP: Balance Responsible Party  
CRP: Capacity Responsible Party

## Duties of Trader and Supplier

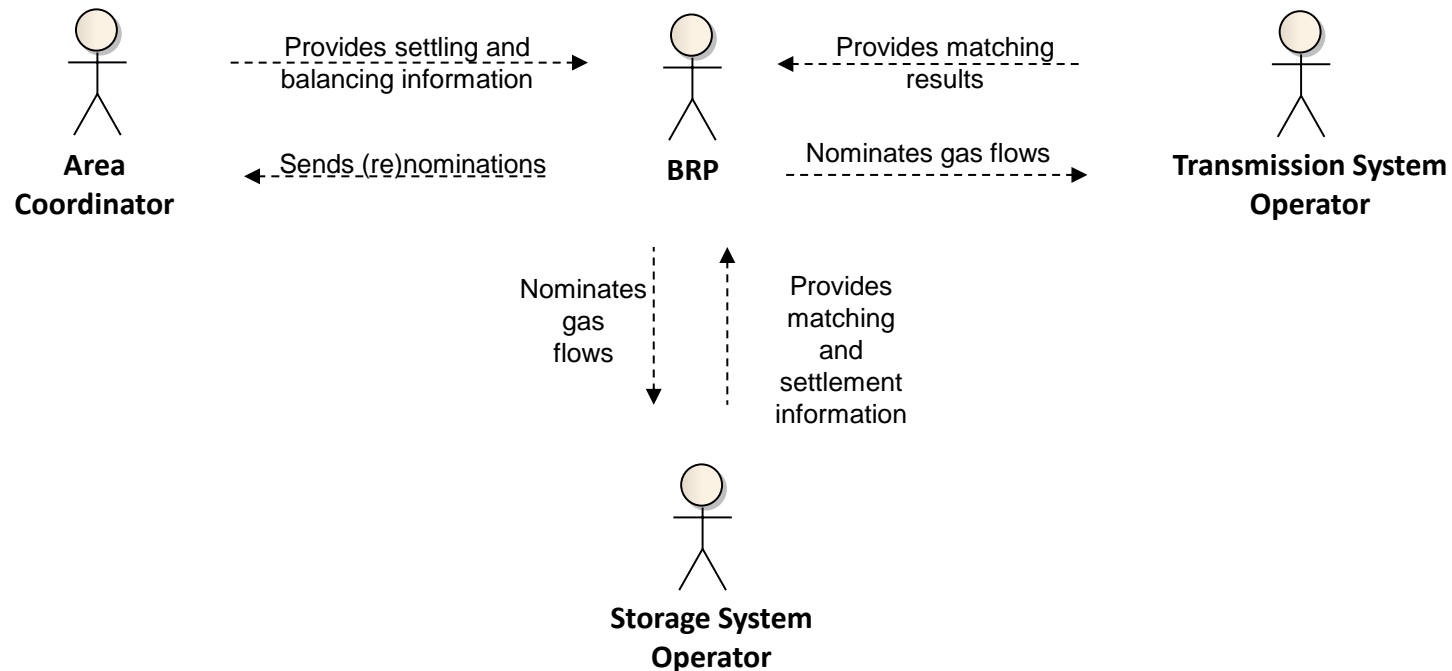
  
**Trader**



  
**Supplier**

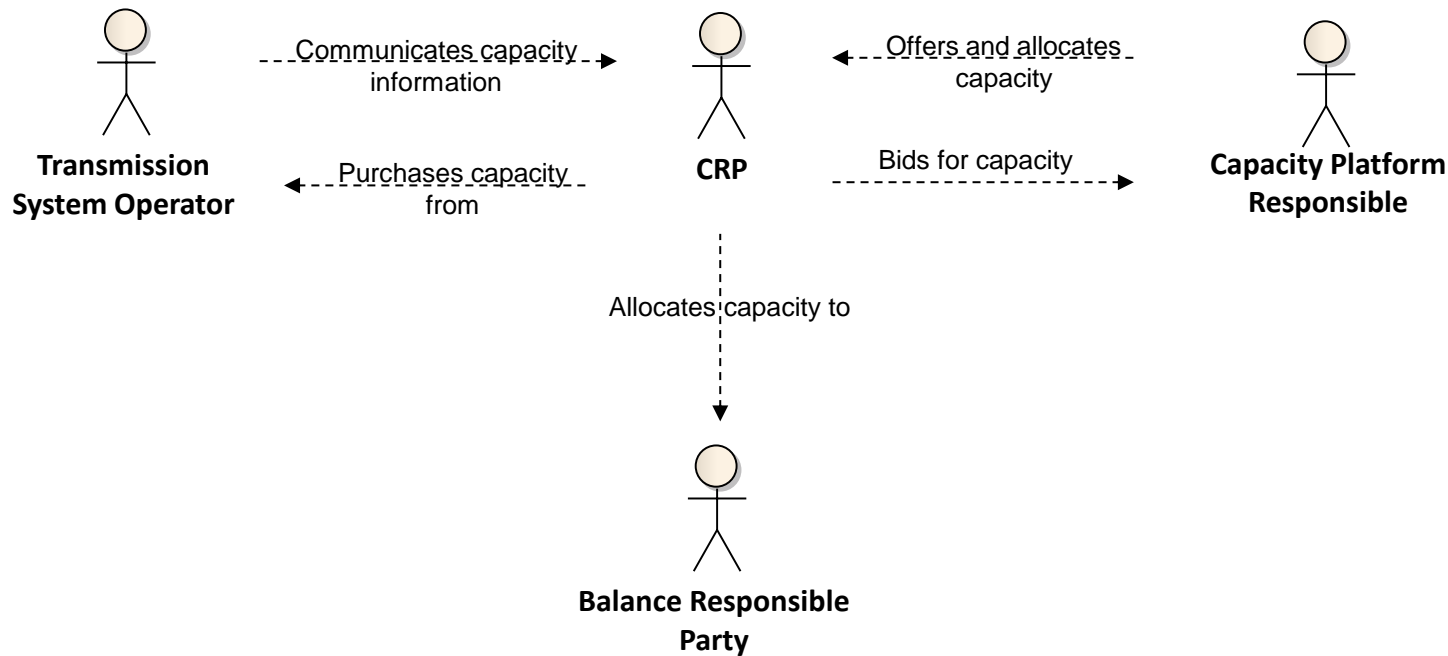


# Balance Responsible Party (BRP) Use Case



## Balancing Management

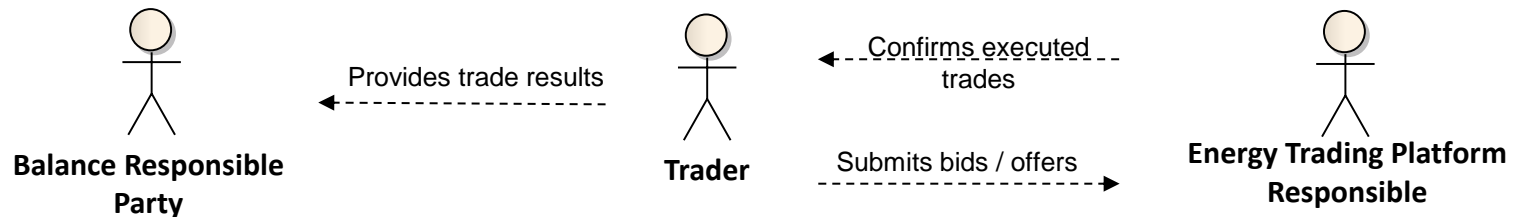
# Capacity Responsible Party (CRP) Use Case



Capacity Management

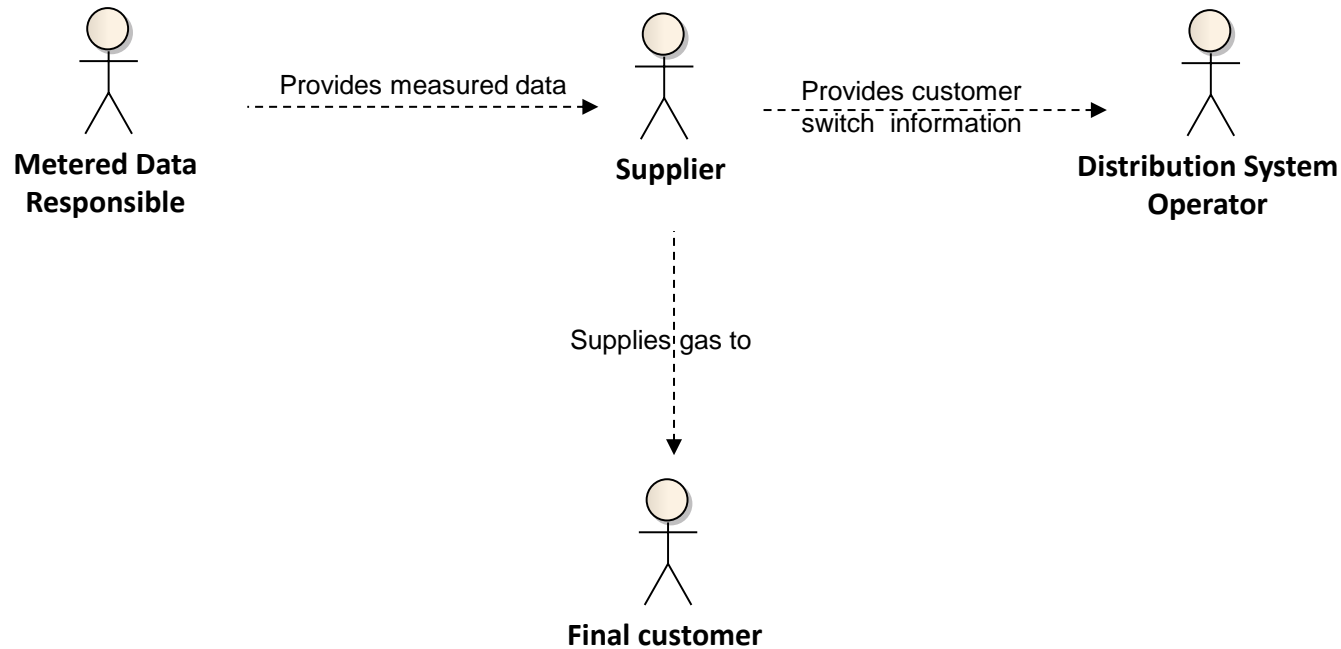


## Trader Use Case



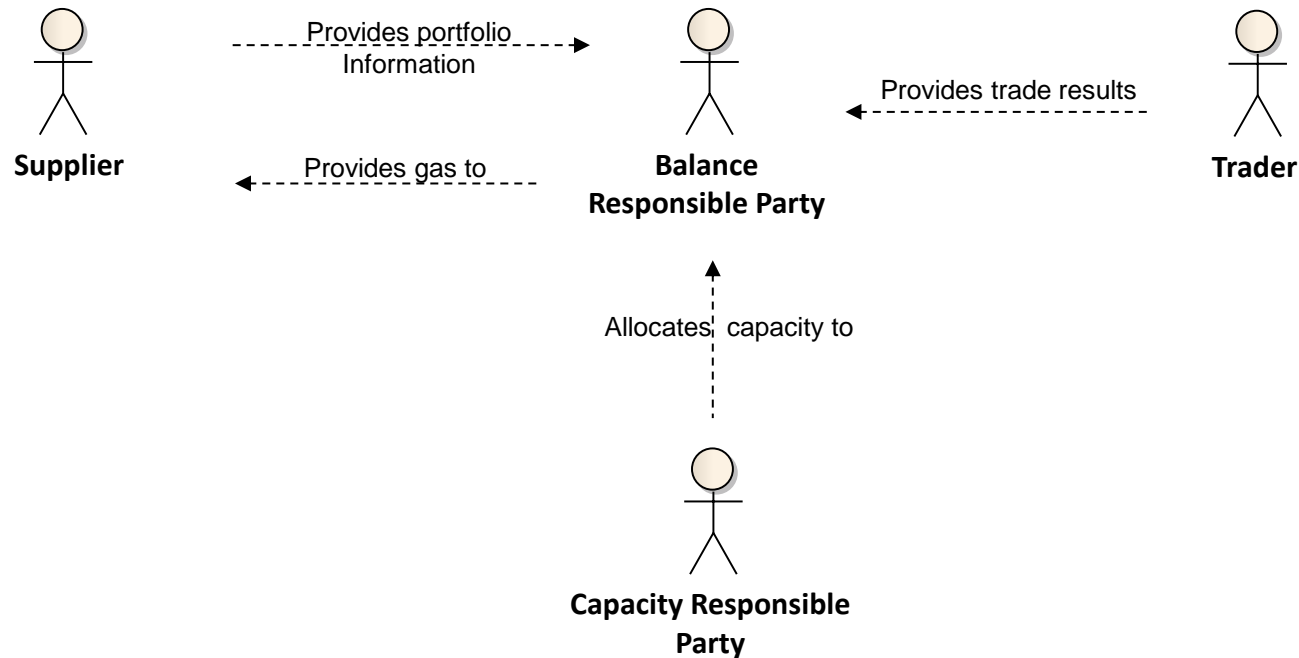
- No Interactions to TSO and Area Coordinator
- OTC deals will be covered later

# Supplier Use Case



Gas Supply

## 4 Roles – How are they connected



## Questions?



## Lunch Break





Eva Hennig



## The Role of the Distribution System Operator

- ➔ **Eurogas Distribution Committee very much welcomes the inclusion of roles at the retail and distribution level**
  - ➔ Allows a model which starts at the customer
  - ➔ Ensure consistent approach across system – future proof
  
- ➔ **Like the TSO, the exact roles a DSO carried out differs by Member State**
  - ➔ For example, in the UK the DSO is not the meter operator
  - ➔ The European balancing network code allows for third parties to be a “forecasting party” instead of the DSO
  - ➔ Focus has been to define roles and not create a “turf war”!

# Examples of Individual Roles

## 1. Metering

- ➔ In the role model, metering has been developed as a separate role to the DSO
- ➔ In most cases it is the DSO who carries out this process
- ➔ Originally considered 6 roles within metering, but have confined to two for simplicity

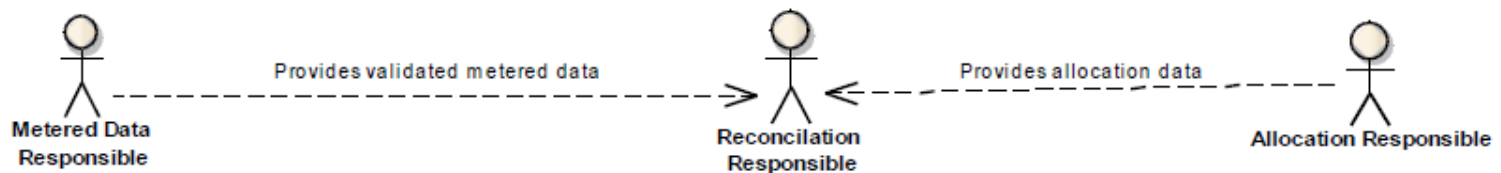
<b>Metered Data Responsible</b>	<b>Meter Operator</b>
A party responsible for the collection, validation, aggregation and making available metered data.	A party responsible for installing, maintaining, testing, certifying and decommissioning physical meters.



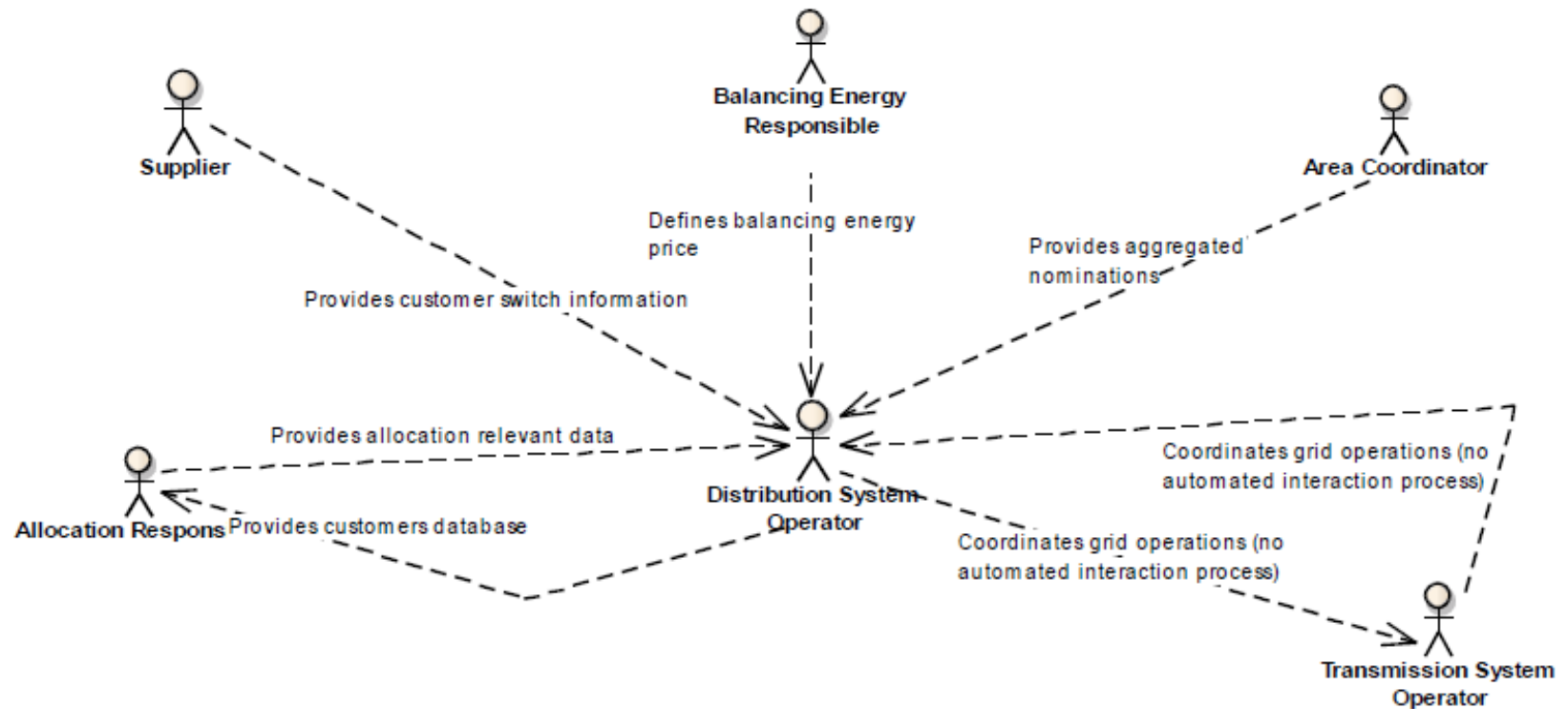
## Examples of Individual Roles

### 2. 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.



## And the core DSO business itself



## Questions?





Antonio Gómez Bruque

# New roles: Market information Aggregator

## ➔ Definition

A party that receives market related information from different actors in the market. This information may also be published or distributed for general use.

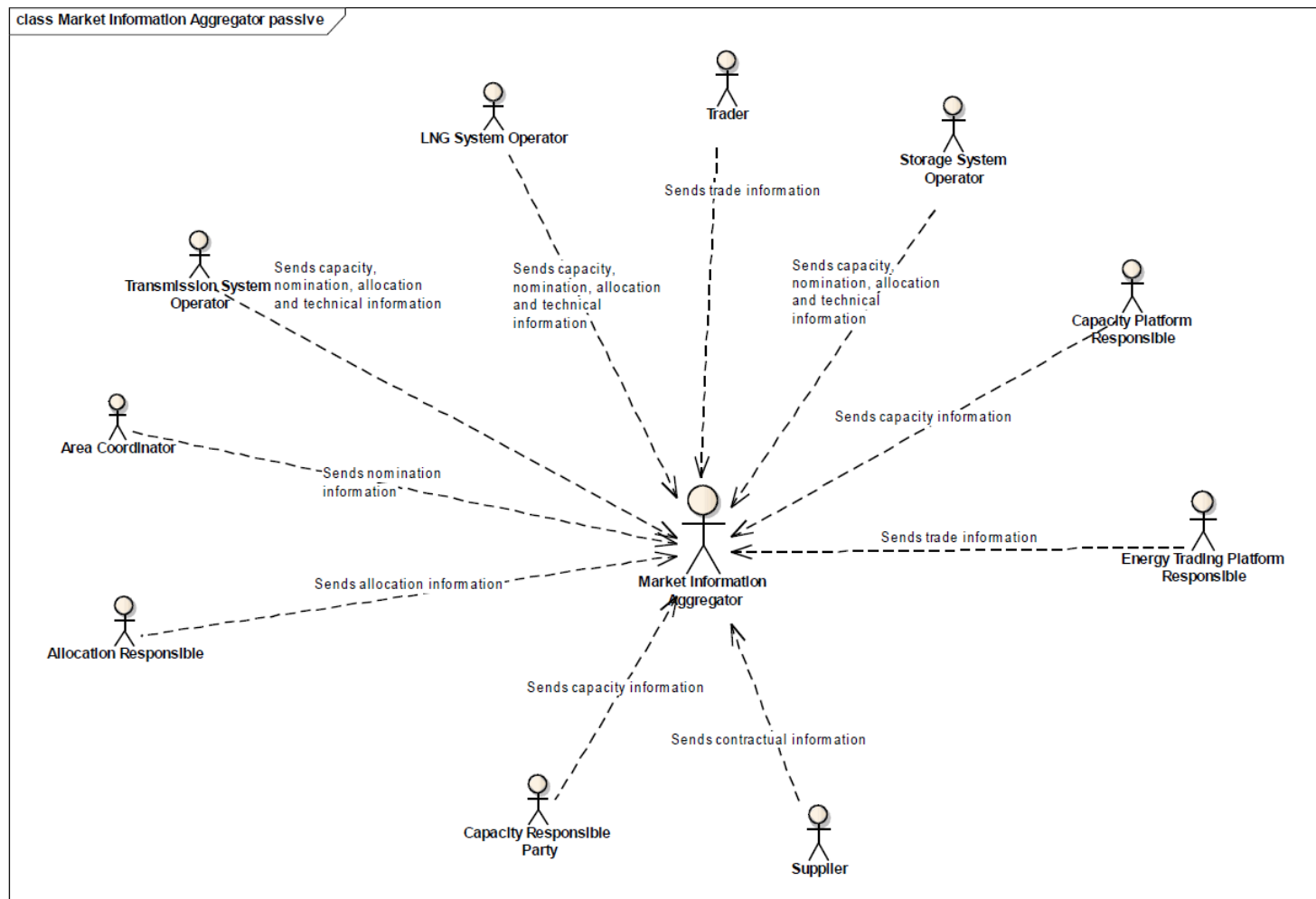
## ➔ This role can be played by:

- EU Regulator
- National Regulator
- ENTSOG as transparency platform responsible
- GIE as GSE and GLE transparency platforms responsible
- TSO / SSO / LSO's transparency platform, ....
- Third party RRM's

## ➔ In gas markets this information may be related to:

- Capacity
- Nominations
- Allocations
- Trades
- Contractual & technical information

# New roles: Market information Aggregator





Marin Zwetkow

## Next Steps

- ➔ **Role Model for Gas to become a CBP**
- ➔ **Creation of a second draft document including the business processes as one overview picture**
- ➔ **June 2016: Deadline for comments after the Workshop**
- ➔ **Oct. 6-7th 2016: Presentation at the Madrid Forum**
- ➔ **To be considered in the next major release of Edig@s**
- ➔ **CBPs will be updated in order to meet the definitions of the Role Model**



## Questions?





Antonio Gómez Bruque

## ENTSOG Presentation

Live Presentation of the transparency platform



**Questions?**

**Thank you for your attention**

For more information:

[www.easee-gas.eu](http://www.easee-gas.eu)

