BAL NC SJWS5 7 March 2012 10:30-17:30 8 March 2012 9:30-16:00



ENTSO conference centre (ground floor), 100 Av. de Cortenbergh, B-1000 Brussels, Belgium

#### AGENDA

#### DAY 1 – Wednesday, 7 March 2012

No.	Description	Presenter	Time
	Registration and pre-workshop coffee		from 10:00
0.	ENTSOG welcome	N. Sisman	10:30-10:35
1.	Process update	T. Gerus	10:35-10:50
2.	<ul> <li>Balancing Target Model – " a day of regime operation"</li> <li>How the draft BAL NC business rules fit together</li> <li>Interactive balancing example</li> <li>Discussion &amp; Conclusions</li> </ul>	N.Sisman, N. Regan & co.	10:50-13:00
3.	<ul> <li>Balancing zone</li> <li>Portfolio</li> <li>VTP, as market foundation</li> <li>Discussion &amp; Conclusions</li> </ul>	R.Van der Meer	13:00-13:30
	Lunch		13:30-14:15
4.	<ul> <li>Operational balancing</li> <li>Operational balancing</li> <li>A minimal standardised short term product set</li> <li>Integrating the wholesale market via platforms</li> <li>Discussion &amp; Conclusions</li> </ul>	L. De Wulf, Fluxys	14:15-15:45
	Coffee break		15:45-16:00
5.	<ul> <li>Nominations</li> <li>Presentation of key elements of proposed scheme</li> <li>Discussion &amp; Conclusions</li> </ul>	C. Hamilton, National Grid	16:00 -17:00
6.	<ul> <li>Reaction to Day 1</li> <li>Discussion &amp; Conclusions</li> <li>Agenda management for Day 2</li> </ul>	Stakeholders	17:00-17:30



#### DAY 2 – Thursday, 8 March 2012

No.	Description	Presenter	Time
	Pre-workshop coffee		from 9:00
7.	<ul> <li>Within-day obligations (WDOs)</li> <li>Ensuring alignment between commercial model and physical</li> <li>'Only where necessary'</li> <li>Encouraging competitive market in short-term flexibility</li> <li>Discussion &amp; Conclusions</li> </ul>	S. Egberts, GTS	9:30-11:00
	Coffee break		11:00-11:15
8.	<ul> <li>Information provision</li> <li>Approach to information provision</li> <li>Consideration of stakeholder feedback to date</li> <li>Discussion &amp; Conclusions</li> </ul>	J. Quainon, GRTgaz	11:15-12:30
	Lunch		12:30-13:30
9.	<ul> <li>Transitional "roadmaps" and interim measures</li> <li>Exploring the transition framework guidelines elements</li> <li>Discussion &amp; Conclusions</li> </ul>	N. Sisman	13:30-15:00
	Coffee break		15:00-15:15
10.	Conclusions     Observations on SJWS consultation process	Stakeholders	15:15-15:45
11.	Process next steps and closing	N. Sisman	15:45-16:00





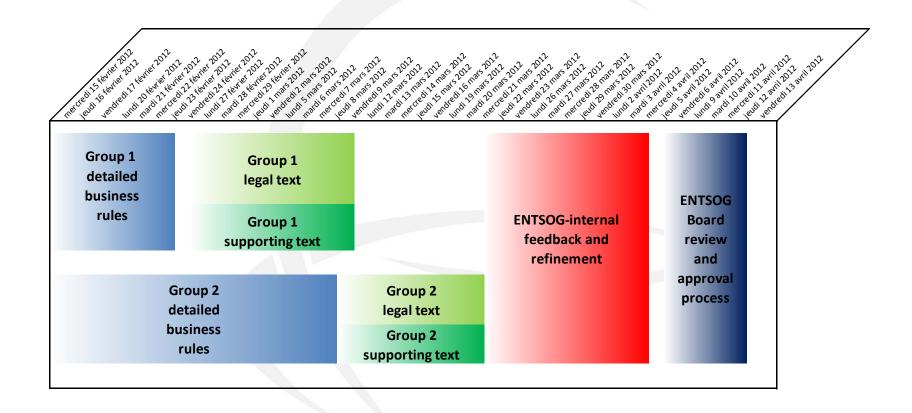
## **Process update**

### **BAL NC SJWS5**

### Tori Gerus Adviser

ENTSO conference area, Brussels -- 07 March 2012

### **Delivering draft NC: thru to formal consultation**





### Group 1 DBRs on website; Group 2 next week

#### http://www.entsog.eu/publications/balancing.html

#### **Publications**



ENTSOG > Balancing

2008 2009 2010 2011 2012

ENTSOG will be actively working on balancing. A pilot project to test the Third Package framework guideline/network code process will start during 2009.

ENTSOG will actively participate in the framework guideline develop process and will lead the network code development.

This section of the ENTSOG website will be used to keep stakeholders of plans, news and developments as we progress towards a balancing network code.

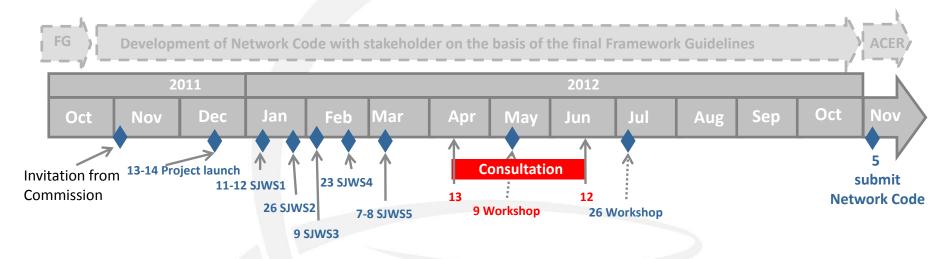
For further information please contact:

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T +32 (0)2 894 51 01	T +32 (0)2 894 51 01

WATCH THIS SPACE!

	lusiness Rules				
•	Business Rules for Chapter VII - Daily Imbalance Charges (BAL0207-12)	0	29	Feb	2012 🏂 0.26 МЬ
•	Business Rules for Chapter VIII - Neutrality Arrangements (BAL0208-12)	•	29	Feb	2012 🥦 0.30 мь
۲	Business Rules for Chapter XIII - Linepack Flexibility Service (BAL0213-12)	0	29	Feb	2012 🏂 0.25 МЬ
•	Business Rules for Chapter XVI (part of VII) - End of Day Tolerances / Interim Step Rules (BAL0214-12 - formerly BAL207b)	0	29	Feb	2012 🥦 0.26 МЬ
•	Information Flows to Network Users Part 1 BAL0210-12	0	29	Feb	2012  0.43 Mb
•	Glossary for BAL NC (Draft Rev.5.1) (BAL200-12 / Rev5.1)		21	Feb	2012 0,45 Mb

### **BAL NC project – transition to feedback stage**



Main activities of ENTSOG and stakeholders during BAL NC development phase

ENTSOG	Development of launch documentation	in cooperation with stakeholders	Refinement of network code based on the feedback by stakeholders
Stakeholder		SIMS SIMS SIMS SIMS	Feedback on drafted Network Code by ENTSOGWork shop

Critical role for stakeholders in this stage

### 2-part public consultation document

					ILLUSTRATIV
entsog neurona	BAL NC – draft Code supp	orting document BAL241-12 13 April 2012		entsog	BAL NC draft for public consultation BAL175-12 13 04 2012
					DRAFT BALANCING NETWORK CODE
	Supporting Document <sup>1</sup>				
	<sup>and</sup> Consultation Document		Ð		
F	<sup>for the</sup> Balancing Network Code				
	Summering Network Code				

#### Precise consultation questions to yield focused responses



# Concise, evidence-based arguments sought – not assertions or high-level statements

- Country case studies, highlighting the unexpected effects with the adoptions of ENTSOG-proposed policy options: under-estimated direct effects; spill-over effects; others;
- Confidential) Analyses of the technical feasibility of implementing a proposed requirement in the ENTSOG proposed policy option vs. stakeholder-preferred option
- > (Confidential) Analyses of the commercial viability of implementing a requirement in the ENTSOGproposed policy option vs. stakeholder-preferred option
- Scenario 'testing' policy alternatives, leading to a preferred policy options different from that proposed by ENTSOG
- Other qualitative and quantitative evidence to provide insight on policy options considered to date or NEW arguments

Don't rewind, replay and repeat unsubstantiated arguments from previous consultations or the SJWS consultation



### **Stakeholder engagement during consultation period - 1**

Eastern European Workshop 18 April Vienna (TBC)

- to reach stakeholders not yet active
- to raise awareness and encourage participation for rest of project
- Identification of participants
  - network users (by TSOs)
  - NRAs (by ACER)
  - Member States (by Commission)
  - End-user groups (via associations, such as Eurelectric, IFIEC)

Go-ahead decision will be made on 19 March



### **External engagement during consultation period - 2**

Mid-consultation Workshop: May 9th, Brussels

- Long enough after launch so respondents will have taken initial views/response on draft BAL NC and related questions
- early enough to influence responses with workshop insights gained
- Opportunity for
  - clarifications (in addition to those raised in bilateral exchanges with ENTSOG)
  - 'Testing' of initial views and arguments on policy and industry stakeholders exposition
  - exploration of interaction understanding

Further effort to facilitate high-quality, focussed responses



### **Thank You for Your Attention**

Victoria Gerus Adviser ENTSOG -- European Network of Transmission System Operators for Gas Avenue de Cortenbergh 100, B-1000 Brussels

EML:victoria.gerus@entsog.euWWW:www.entsog.eu







# **The Balancing Target Model**

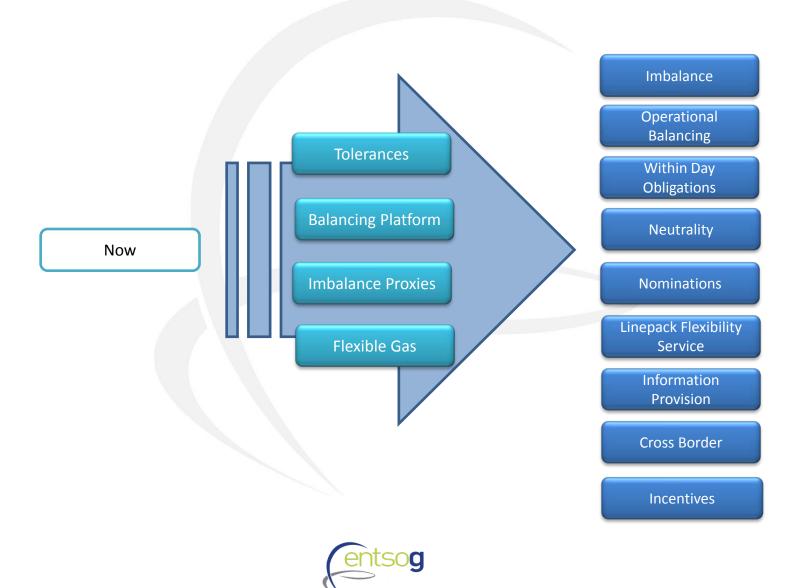
SJWS5 Advisory Kernel Group

### Introduction

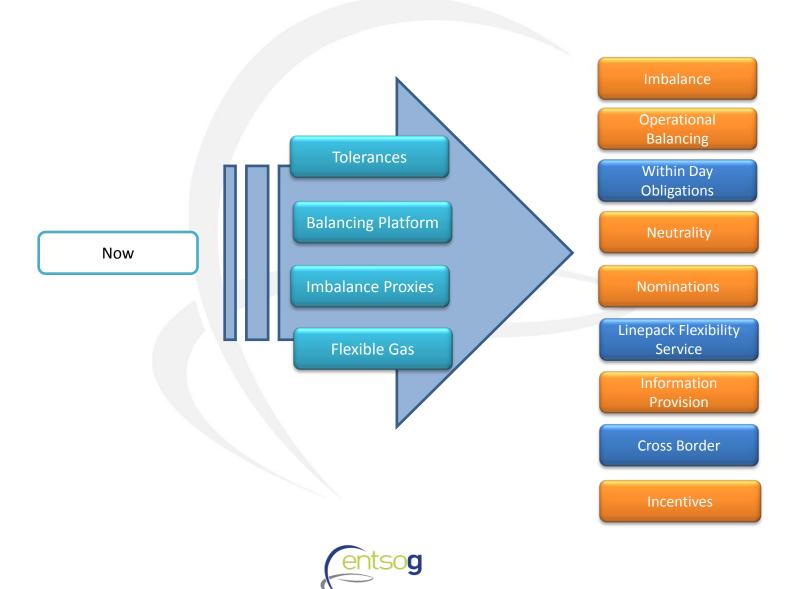
- Go through a worked example of the Balancing Target Model
- Intended to piece together some of the different elements through use of an example
- Will hopefully help inform discussions for the rest of the session
- Important to note it is just one set of scenarios somewhat exaggerated to demonstrate effects.
- Have some volunteers to help us out



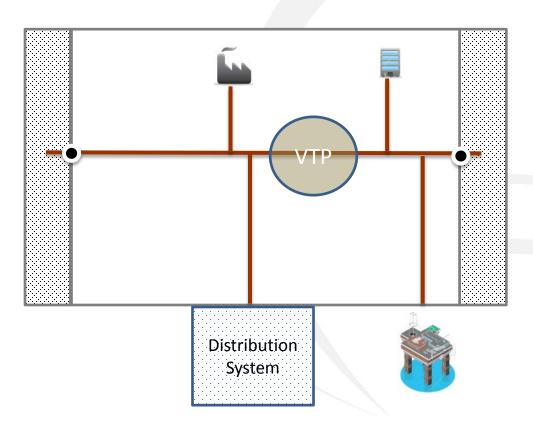
### The Topics



### **The Topics Covered**



### **The Scenario**



- Balancing Zone consisting on a Transmission System
- 2 Cross Border IPs
- Balancing Zone offtakes

> IDM

- > DM
- Distribution System
  - > IDM
  - > DM
  - > NDM
- Liquid Market at VTP
- Production Field



### **The Actors**





Network User - Beta

• Kees Bouwens



Transmission System Operator (TSO)

• Noel Regan, ENTSOG

Distribution System Operator (DSO)

• Joost Gottmer



### **The Scenario**

In the Interest of simplicity the following actors have been omitted

- > NRA
- > ACER
- Market Operator
- Producer
- Others



### **The Scenario**

### Assumptions:

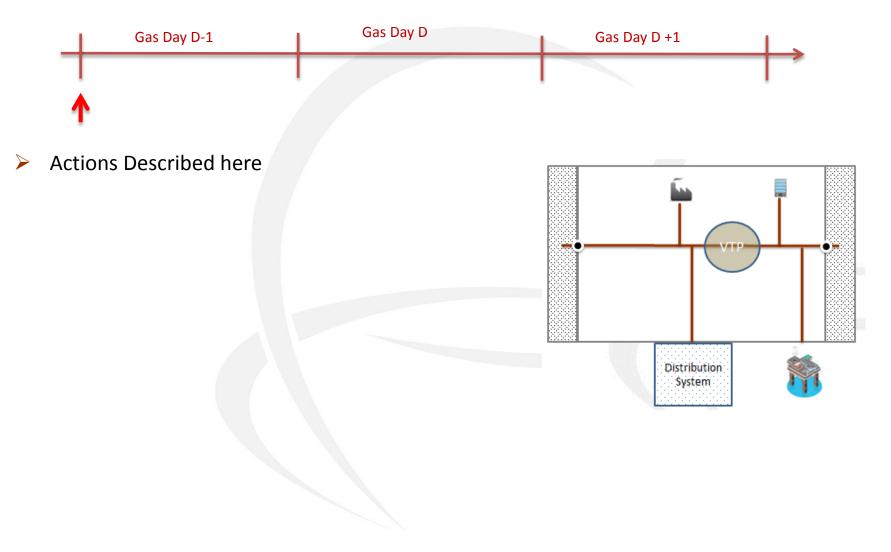
- Base Case Information Flows (2 others types possible)
- No Within Day Obligations
- Small adjustment of 1
- A functioning liquid market is in place
- DSO has role of Forecasting Party responsibility (need not be DSO)
- Allocation equals confirmed nomination at IP
- Allocation does not equal confirmed nomination at Production entry
- There are Network Users other than Alpha and Beta on the system
- All related to "Day D"

### A scenario to demonstrate issues – not the only interpretation of

FGs

### **The Actor**





### Summary



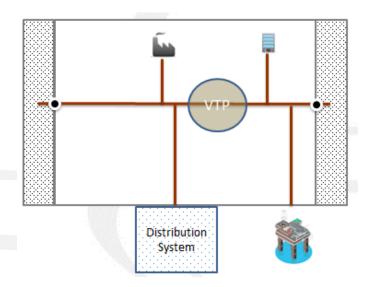




#### **Information Flows to Network Users**

- The DSO Provides the TSO with:
- Offtakes from previous day (D-2)

Туре	Alpha	Beta
IDM	40	0
DM	20	30
NDM	45	55



Forecast for following day NDM Offtakes Day D

Туре	Alpha	Beta
NDM	55	60

#### Incentives

Potential incentive on accuracy of NDM Derived Forecast

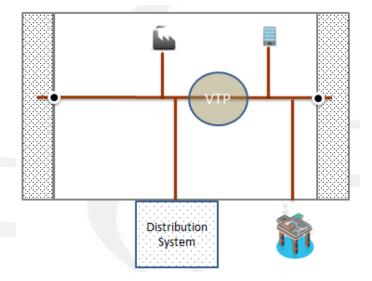
#### DSO Provides Information to TSO



#### Information Flows to Network Users

- TSO Provides Alpha and Beta individually:
- Offtakes from previous day

Туре`	Alpha	Beta
IDM	120	40
DM	40	45
NDM	45	55



Includes info from DSO

Forecast for following day NDM Offtakes, DayD

Туре	Alpha	Beta
NDM	55	60

**TSO Provides Information Network Users** 

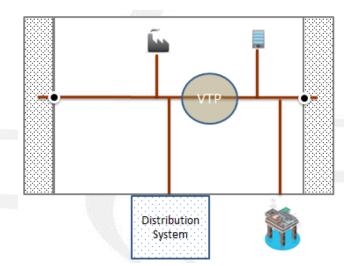
### Alpha





Alpha estimates its offtakes for Day D:

Туре	Qty	Note
IDM	160	CCGT on
DM	40	Predictable
NDM	55	Forecast
Total	255	



Alpha has the following gas in place

Туре	Alpha
Prdn'	100
Imports	100
Total	200

Alpha organises its portfolio

### Alpha

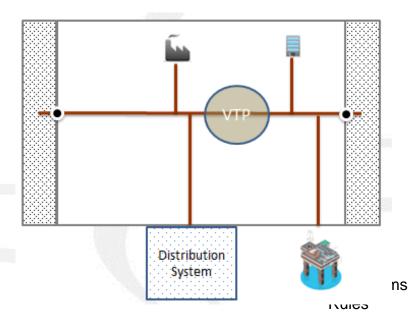




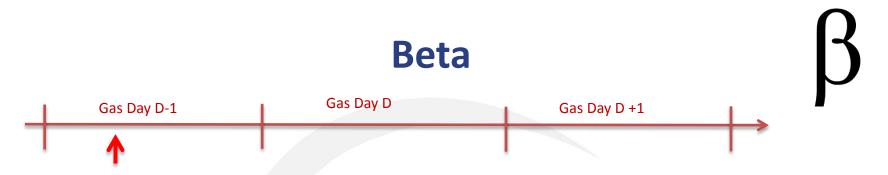
- Alpha is 55 short
- Market Prices are 18
- It decides not to balance on the basis it expect prices to fall

#### Nominations

- Alpha nominates its Day D flows to the TSO before the Nomination Deadline
  - 100 at IP
- Harmonised Rules
- 100 at prod'n
- > 255 Offtakes
- National Rules



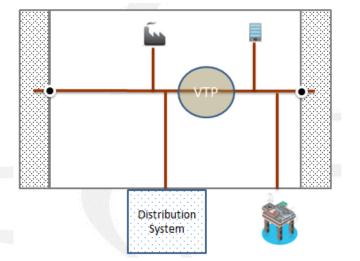
#### Alpha goes short, Nominates Day Ahead



Beta estimates its offtakes for Day D:

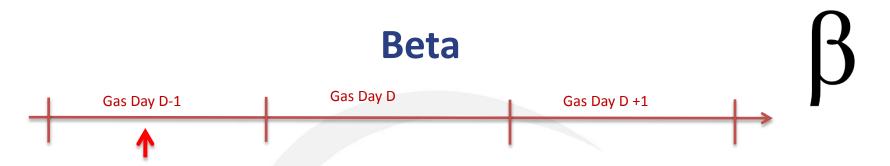
Туре	Qty	Note
IDM	35	CHP off
DM	45	Predictable
NDM	60	Forecast
Total	140	

Beta has the following gas



Туре	Qty
VTP	30
Imports	100
Total	130

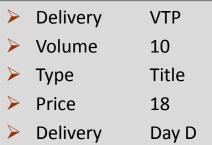
Beta organises its portfolio

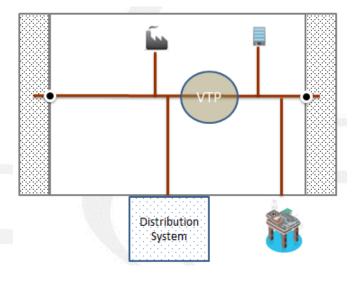


- Beta is 10 short, Market Prices are 18
- It decides to purchase on the VTP

#### **Standard Short Term Products**

It purchases a short term product





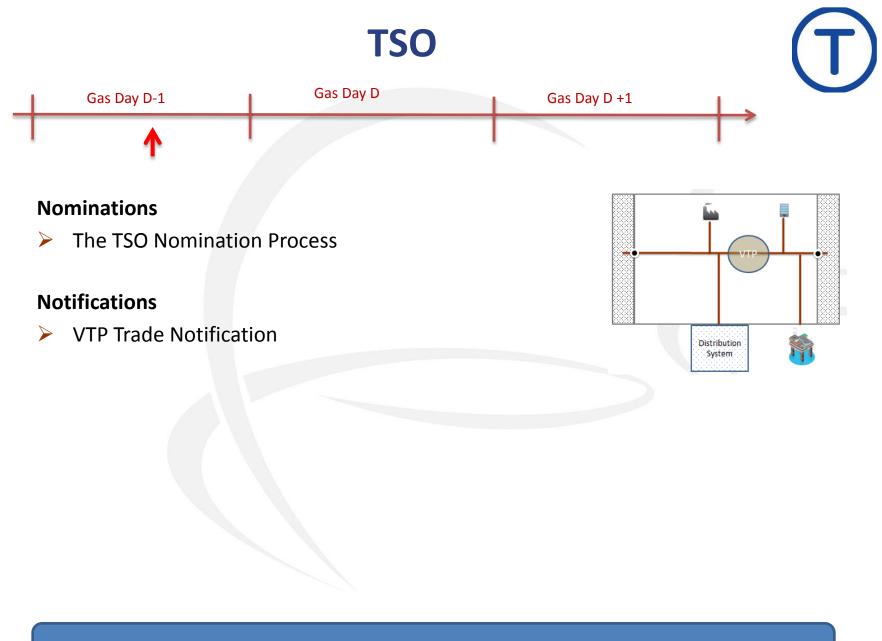
#### Nominations

Beta nominates its Day D flows to the TSO before the Nomination Deadline

#### Notifications

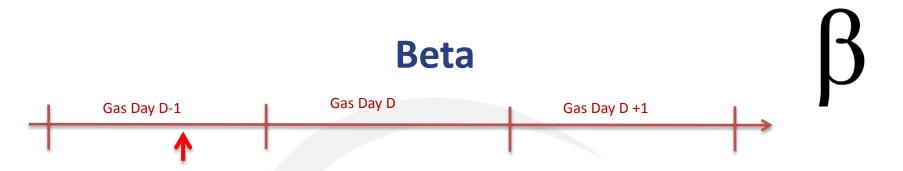
VTP Trade Notification

Beta trades at VTP, Notifications, Nominates



TSO Nominations, Notifications

 $\overline{\mathcal{A}}$ 



Beta has a new overall forecast position for Day D:

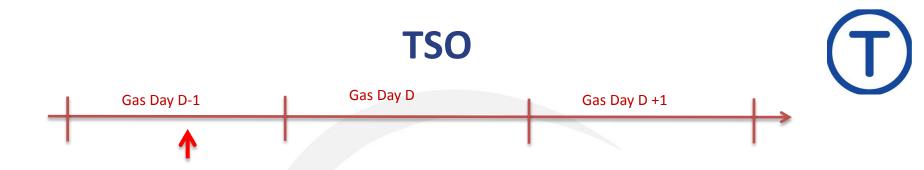
Туре	Qty	Note
IDM	35	CHP off
DM	45	Predictable
NDM	60	Forecast
Total	140	

Beta has the following gas

Туре	Qty
VTP	30 + 10 = 40
Imports	100
Total	140

Distribution System

Beta is now fore casted to be Balanced



#### **Operational Balancing**

- The TSOs operational team require a balancing action day ahead.
- Taking account of 'merit order' it purchases a short term product

$\succ$	Delivery	Day D
$\succ$	Price	20
$\succ$	Туре	Title
$\succ$	Volume	5
≻	Delivery	VTP

#### **Information Flows to Network Users**

The TSO publishes a new day Ahead Marginal Buy of 20 (>18+1)



#### Incentives

- Potential incentive on selection of balancing product
- Potential incentive on minimising balancing costs

Balancing Action, Standard Products, Publishing Marginal Price, incentives

### Alpha





#### **Daily Imbalance Charge**

- Alpha expect to be 55 short
- Exposed to new Marginal Buy Price of 20 versus average price of 18

#### **Standard Short Term Products**

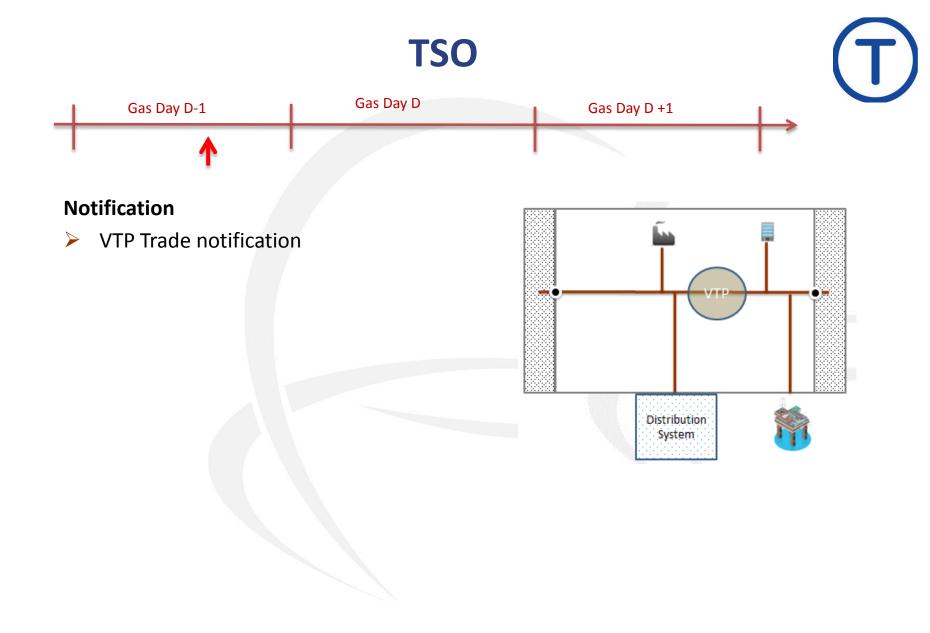
It purchases a short term product

≻	Delivery	VTP
	Volume	40
	Туре	Title
	Price	20.5
$\succ$	Delivery	Day D
		<ul><li>Volume</li><li>Type</li><li>Price</li></ul>

Distribution System

Alpha enters Day D 15 short

Alpha trades due to Marginal Buy Price change



#### Trade Notification

### Recap

### Illustrations demonstrated:

- Day Ahead Information Flows
- Nominations
- Incentives
- Notifications
- Daily Imbalance Charge

### **Questions?**











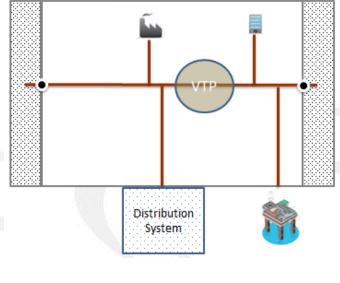
## The DSO



#### Information Flows to Network Users

The DSO Provides the TSO with Updated Within Day Information

Туре`	Alpha	Beta	
IDM	10	0	Flows
DM	-	-	
NDM	49	45	Revised EOD Forecast



#### 2. Incentives

 Potential incentive on accuracy of NDM Derived Forecast

Beta's NDM Derived Forecast has changed more than Alpha's

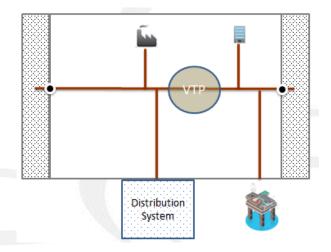
## The TSO



#### Information Flows to Network Users

The TSO Provides the Network User with updated Within Day Information

Туре`	Alpha	Beta	Comment
IDM	38	9	Actual Flow
DM	-	-	
NDM	49	45	End of Day
IP In	100	100	Confirmed Nom
Prod'n	26	N/A	Actual Flow



- System Information (Transparency Guidelines)
  - TSO published Linepack information throughout the day

TSO Provides Updated Information to Network User

## Alpha



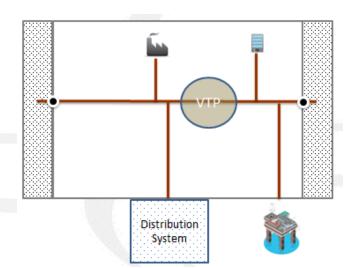


Alpha reassess its EOD position

Туре	Qty	Note
IDM	140	Based on flow info
DM	40	Predictable
NDM	49	Forecast
Total	229	

Alpha has the following gas

Total	240
VTP Buys	40
Imports	100
Prdn'	100
Туре	Alpha



The information revealed its IDM Offtakes were less than expected

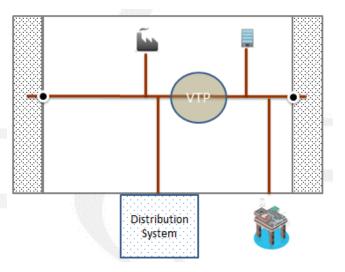
## Alpha



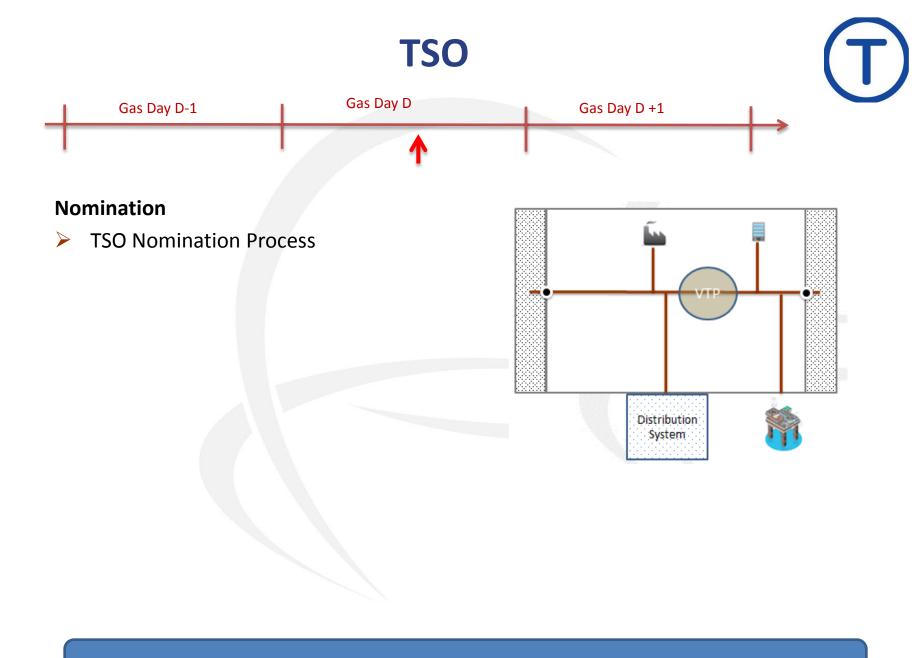


#### Renominations

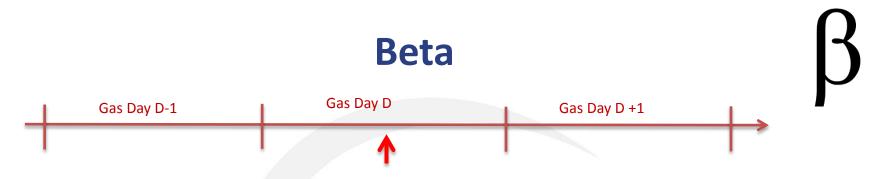
Alpha renominates down 11 units at its imports to balance within day



### Alpha Renominates at the IP



### Nomination

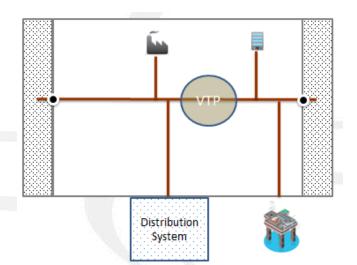


Beta reassess its eod position

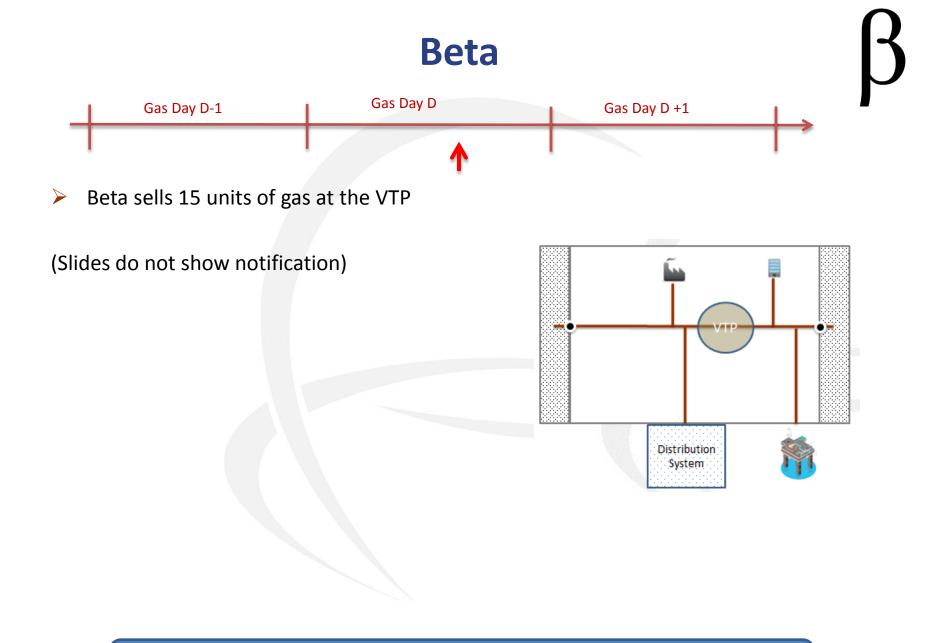
Туре	Qty	Note
IDM	35	Based on flow info
DM	45	Predictable
NDM	45	Revised EOD Forecast
Total	125	

Beta has the following gas

Туре	Qty
Imports	100
VTP Buys	40
Total	140



Drop in NDM Derived Forecast leaves Beta long

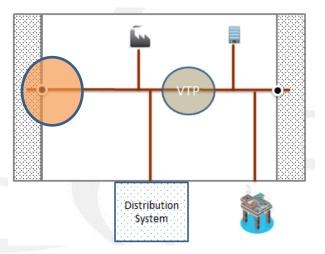


Beta sells gas to balance its forecasted position

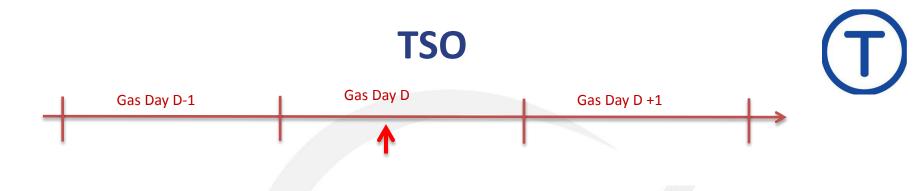


### 1. Operational Balancing

- The TSOs operational team requires additional gas (a balancing action) within day.
- The issue is a local one in the area highlighted



#### Balancing Action requirement



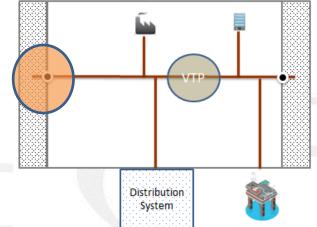
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### 1. Operational Balancing

- The TSO has the following options:
  - Short Term Products
    - Title Market Transaction
    - Locational Market Transaction
    - Temporal Title Market Transaction
    - Temporal Locational Market Transaction
  - Balancing Services
    - Can be delivered in this area



#### 2. Merit Order

- Informs selection of Product
- 3. Incentive
- Potentially influences selection of product

### Standard Products, Merit Order, Incentives



#### **Operational Balancing**

The TSOs purchases its requirements on the trading platform

> Delive	ery Specified IP	
🕨 Volum	ne 3	
> Туре	Locational	
> Price	22 (best offer	ed price)
Delive	ery Day D	

#### Nominations

The TSO requires a revised Renomination at the specific entry point to ensure delivery

#### **Information Flows to Network Users**

The TSO does not alter the SMP as it is not price effecting

Distribution System

May effect linepack information when published

### Standard Products, Publishing SMP, Nominations

## Recap

### Illustrations Demonstrated

- Within Day Information Flows
- Renominations
- Incentives
- Operational Balancing
- Merit order
- Daily Imbalance Charge

### **Questions?**







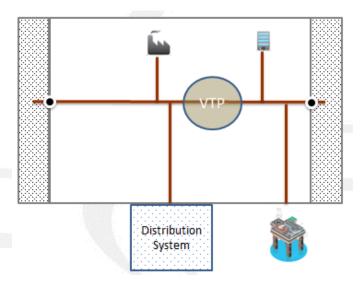
## The DSO



#### Information Flows to Network Users

The DSO Provides the TSO with Initial Allocation Information

Туре`	Alpha	Beta
IDM	42	0
DM	21	28
NDM	47	43



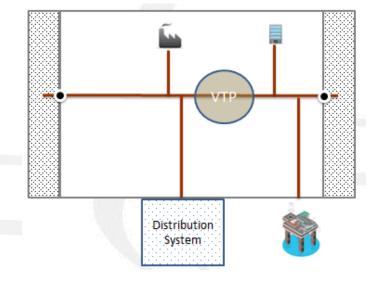
### **DSO Provides Information**



#### Information Flows to Network Users

TSO Provides Alpha and Beta individually Offtakes and Inputs for Day D

Туре`	Alpha	Beta
IDM	(141)	(34)
DM	(42)	(46)
NDM	(47)	(43)
VTP	40	25
Prodn	98	0
Imports	89	100
Imbalance	3 short	2 Long



**Initial Allocation** 

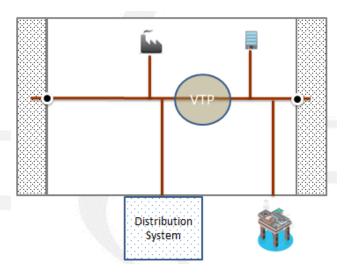
## Alpha





#### **Daily Imbalance Charge**

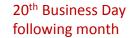
Alpha queries an Allocation – can be several reasons



### Alpha challenges an Imbalance

### TSO

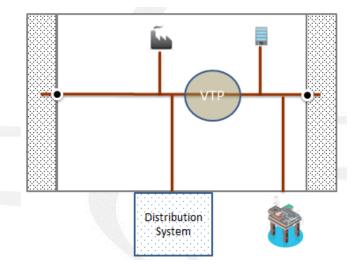




#### **Daily Imbalance Charge**

- TSO checks it and finds a meter issue and reallocates this figure.
- TSO issues final allocations

Туре`	Alpha	Beta
IDM	(143)	(34)
DM	(42)	(46)
NDM	(47)	(43)
VTP	40	25
Prodn	98	0
Imports	89	100
Imbalance	5 short	2 Long



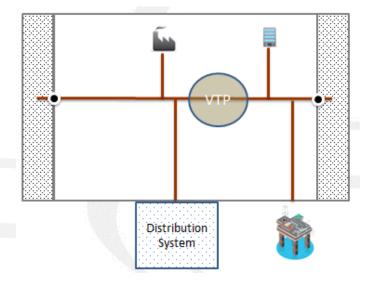
### **Final Allocation**



#### **Daily Imbalance Charge**

TSO derives Alpha and Betas Charges

Туре	Alpha	Beta
Qty	(5)	2
Price	20	17
Value	Pays 100	Paid 34



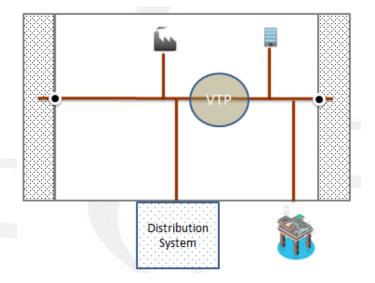
### Daily Imbalance Charge



#### Neutrality

TSO assesses its costs versus incomes

Туре	
Daily Imbalance	+66
Balancing Actions	(166)
Value	(100)



- NB THERE ARE OTHER NETWORK USERS THAN ALPHA AND BETA
- The shortfall charge must be recovered though neutrality (assuming other Network Users are perfectly balanced)

Neutrality

### Recap

### **Illustrations Demonstrated**

- Daily Imbalance Charge
- Settlement / Neutrality

### **Questions?**



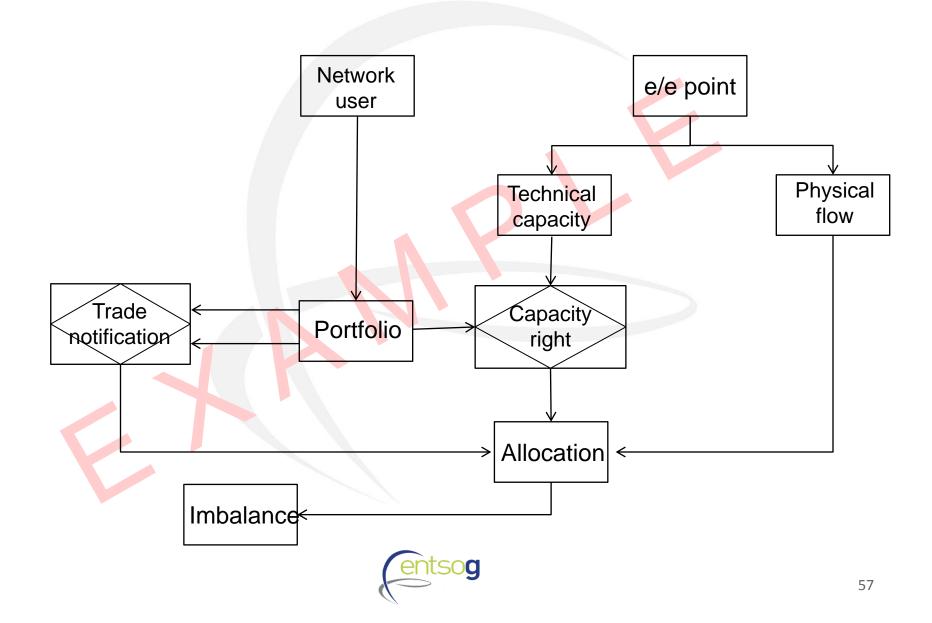




# **Balancing system**

Ruud van der Meer

## **Entry/exit system – an overview**



## **Trade notification**

- Where two network users agree to do so, they may make in respect of any Day corresponding notifications (respectively a "Disposing Trade Notification" and an "Acquiring Trade Notification").
- If the TSO has received a corresponding set Trade Notifications and the quantities are matched
- Then the TSO will allocate the Trade Notification Quantity to the portfolio of the two network users:
  - (a) an exit allocation to the portfolio of the network user making the Disposing Trade Notification; and
  - (b) an entry allocation to the portfolio of the network user making the Acquiring Trade Notification.



## Trade notifications - 2

A network user may make a Trade Notification irrespective of whether the network user makes any Nomination for the day in respect of which the Trade Notification is made.

A Trade Notification shall specify:

(a) the Gas Flow Day;

(b) the identification of the network user's portfolio;

(c) the identification of the network user's portfolio for which the corresponding Trade Notification is to be made;

(d) whether it is a Disposing Trade Notification or an Acquiring Trade Notification;

(e) the Trade Notification Quantity in kWh:

i. Daily Notification Quantity; or

ii. Within-day Notification Quantity for each within-day period in the day (e.g. hourly Notification Quantity).



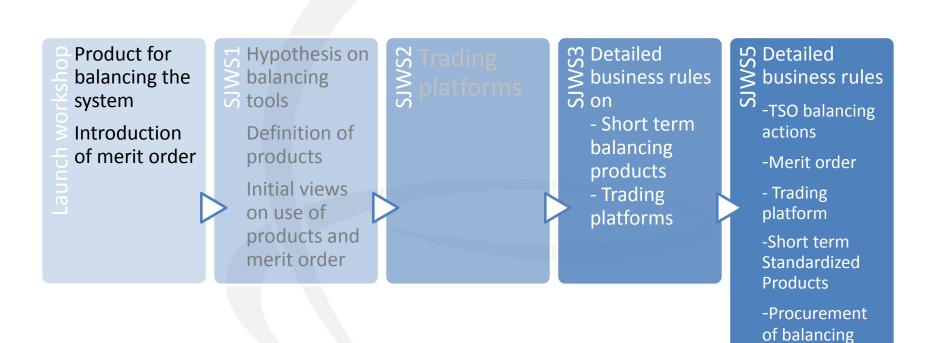




# **Operational balancing**

**Detailed business rules** 

## **Evolution of topic**





services

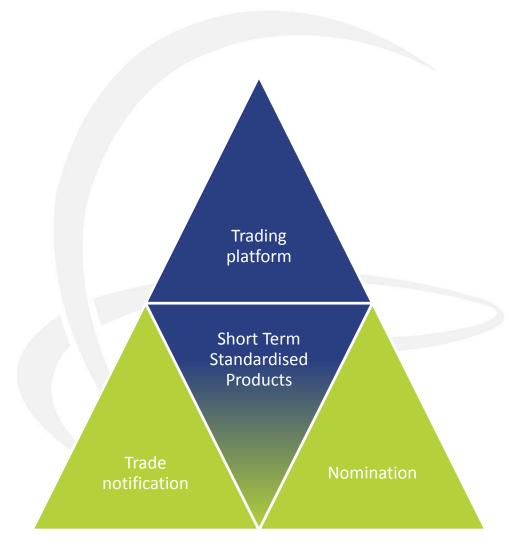
## **TSO balancing actions**

TSO will take balancing actions either

- through buying or selling of flexible gas
  - trading day-ahead or intra-day
  - in short term standardized products
  - on a Trading Platform
  - on an equal basis with network users
    - with possibly a balancing platform as an interim step
- through the use of a balancing service

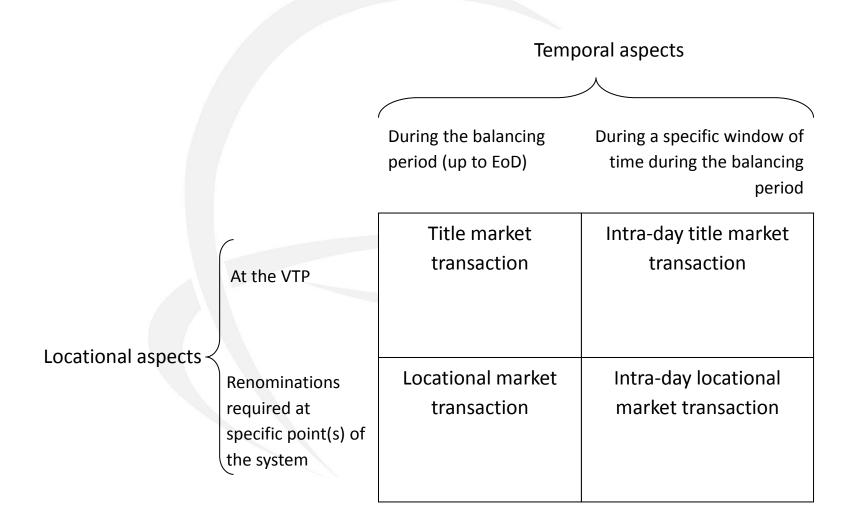


## **TSO's balancing action - overview**





## **Overview – short term standardized products**





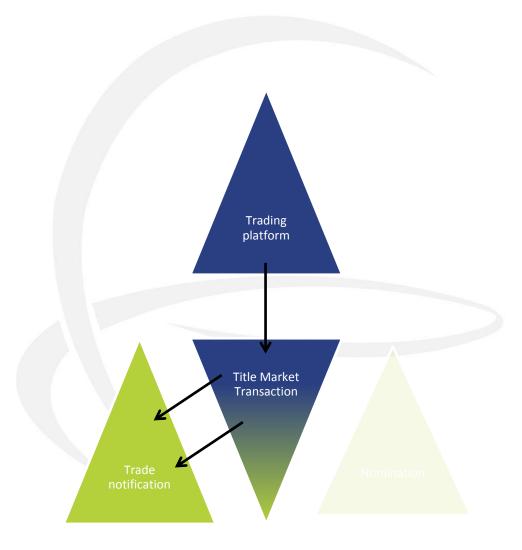
## **Title Market Transaction**

A Title Market Transaction is a transaction effected

- between two Trading Participants
- each of the Participants agrees to make Trade Notifications



## **Title Market Transaction**





## **Attributes of Title transaction**

The Originating Participant will specify a quantity in its bid or offer. The Notification Quantity will be:

- A Daily Notification Quantity equal to the quantity included in the trade
- An Hourly Notification Quantity
  - equal to the hourly quantity included in the trade, for all hours of the day from the specified Transfer Start Time
  - zero for all hours before the Transfer Start Time
- A Daily Notification Quantity is used in Daily nominated regimes an hourly notification quantity is used in hourly nominated regimes

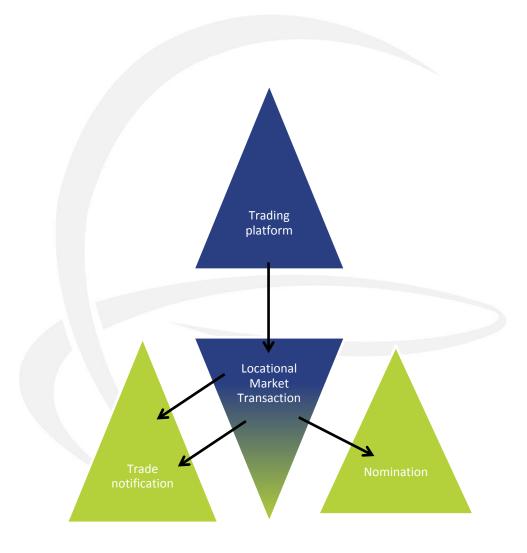


## **Locational market transaction - definition**

- A Locational market transaction is a Title Market Transaction pursuant to which the Originating Party agrees:
  - to modify the quantity of gas to be delivered to and/or off taken from the System by the network user in aggregate on the gas Day by an amount equal to the Trade Notification Quantity (and to modify the rate of such delivery and/or off take accordingly); and
  - accordingly to make a Nomination(s) or Renomination(s) in respect of the specified system point(s) (in the bid or offer) in accordance with the Nomination rules.



### **Locational Market Transaction**



# **Attributes of Locational transaction**

The Originating Participant will specify in its bid or offer

- A quantity
- A Transfer Start Time

The Notification Quantity will be:

- A Daily Notification Quantity equal to the quantity included in the trade
- An Hourly Notification Quantity
  - equal to the hourly quantity included in the trade, all hours of the day from the specified Transfer Start Time
  - zero for all hours before the Transfer Start Time

The associated (re)nomination will

- Be made for the entry/exit point(s) specified
- Take effect at the specified Transfer Start Time
- In line with the amount in the Trade Notification Quantity



# **Temporal market transaction - definition**

A Temporal market transaction:

- Title Market Transaction
- with the transfer of gas during a specific period of time within the day

Only relevant is systems with hourly trade notifications



#### **Temporal Market Transaction**



# **Temporal market transaction - attributes**

The Hourly Notification Quantity in the Trade Notifications will be:

- Equal to zero for all hours before the Transfer Start Time
- Equal to zero for all hours beyond the Transfer End Time
- Equal to the specified quantity for all other hours during the Gas Day

This product shall only be used when it's assessed as more efficient than of using a set of two Title Market Transactions (a buy and a sell)



# **Temporal Locational market transaction -**

A Temporal Location market transformition

- Locational Market Transaction
- with the transfer of gas during a specific period of time within the day

Only relevant in systems with hourly trade notifications



# **Trading Platform**

- Trading Platform is
  - an electronic platform
  - provided and operated by a Trading Platform Operator
  - by means of which registered Network Users and TSO may post and accept (and revise and withdraw) bids and offers for flexible gas
- TSOs shall trade Short Term Standardised Products on a Trading Platform
- The TSO shall ensure that
  - relevant Short Term Standardized Products can be traded at a Trading Platform.
  - the Trading Platform supports network users and TSOs to take appropriate balancing actions
  - where necessary on a close to 24/7 basis, or as defined by the TSO



# **Information flows**

#### Trading Platform operator

•will inform Network users of the trades they have undertaken

•on a real-time basis

#### Network users

will inform the TSO of the trades they have undertaken (Trade Notifications)
unless an agent performs that role on their behalf.

#### •The Trading Platform Operators will either

(a) publish the evolution of settlement prices following each completed transaction as soon as reasonably practicle: evolution of average price and Marginal Buy and Sell Prices

(b) provide the TSO with the relevant information necessary for the evolution of settlement prices following each completed transaction as soon as reasonably practicle



# **Merit order**

TSO's decisions on the products to use in taking balancing actions:

- consider those product that will be most efficient
- TSO will trade Title Market Products wherever possible
- Locational products where
  - the genuine system needs require a clear physical response (flow reduction or increase)
  - at a particular system point or sub-system with a specific lead-time
- Temporal products where
  - the genuine system needs of the TSO require a physical response
  - to be addressed in a particular time period
  - The benefits of a temporal product would outweigh the benefits of using a set of two Title Market Transactions (a buy and a sell) or two Locational Market Transactions
- Short term standardised balancing products in preference to balancing services
  - Use of balancing services to manage those situations in which the buying/selling of standardised short term products are not sufficient to meet the TSOs needs

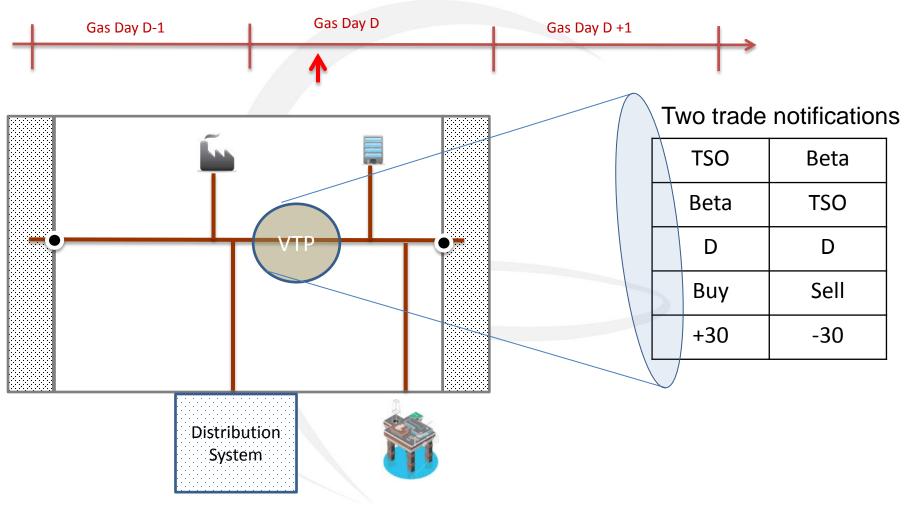


# **Operational Balancing tools**

#### Some examples

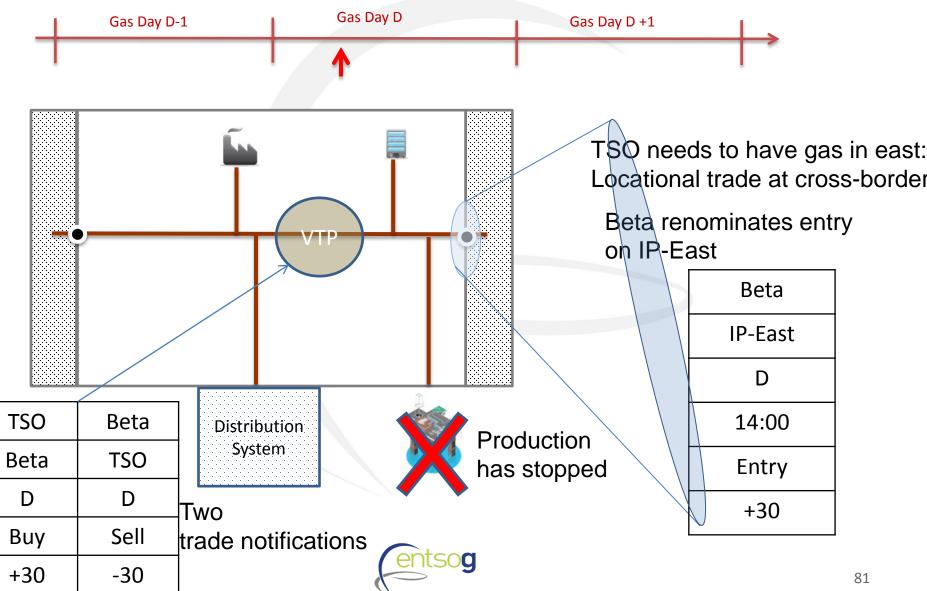


# **Title market transaction**

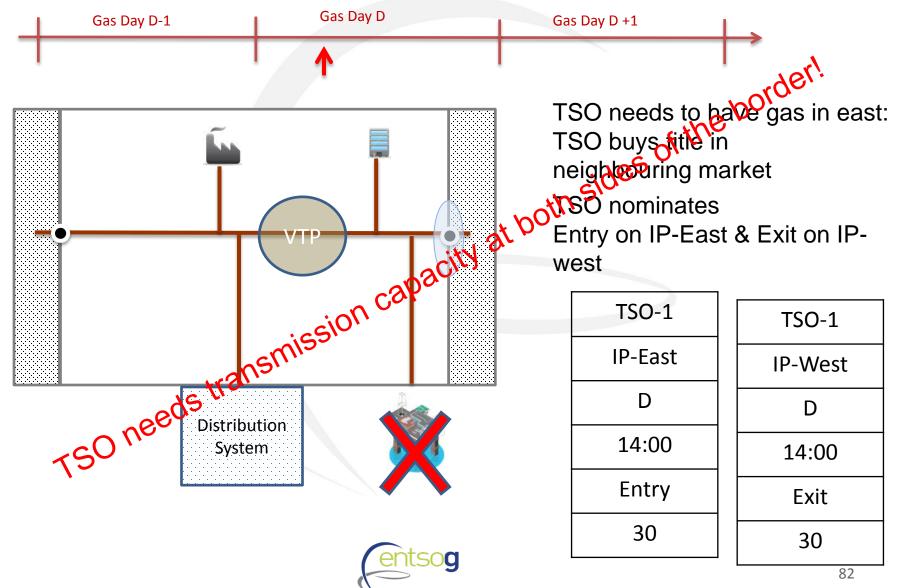




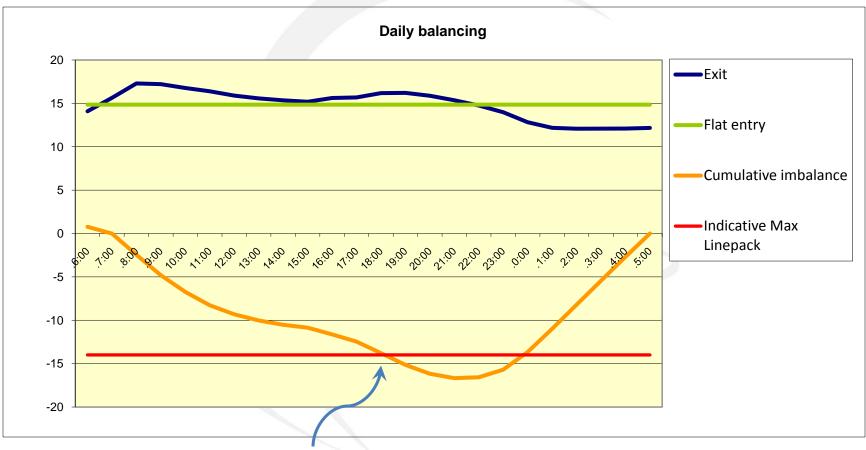
### **Locational market transaction**



# **Neighboring market transaction**



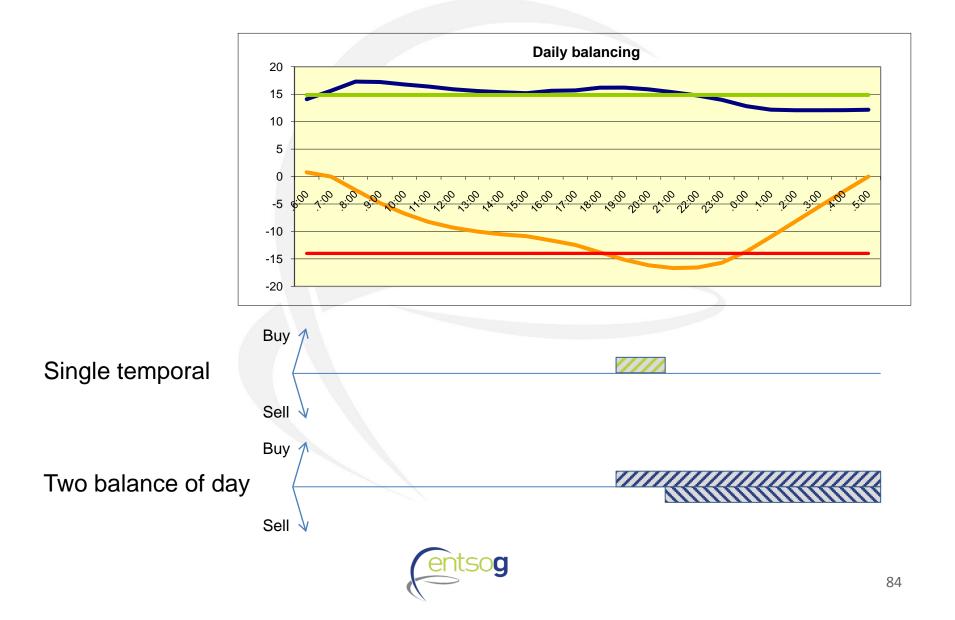
# Managing within-day position - scenario



TSO needs to steer cumulative imbalance back within operational envelope



# Managing within-day position - options



# **Procurement of balancing services**

- The TSO shall procure balancing services for those situations in which Short Term Standardised Products will not or are not likely to provide the response necessary to keep the system within accepted operational envelope.
- In this context TSO will consider at least
  - Liquidity in the relevant wholesale market
  - Lead-time of balancing actions relative to response time of the Short Term Standardised Products
  - Frequency with which a balancing action needs to be taken
  - Location at which the flexible gas is needed
  - Gas quality in different subsystems



# **Balancing services - transparency**

- TSO shall regularly review the use it has made of its balancing services
  - in order for the TSO to determine the extent to which balancing servcies have to be bought for the next period.
- TSO shall publish the value of the balancing services it has procured and the use it has made of these services







# Nominations in the Balancing Network Code

Colin Hamilton Information Flows Kernel Group

88

#### Context

- Guidance from ACER on treatment of nominations in Balancing Network Code
  - a proposal for harmonised Nomination and Renomination rules and lead times
- Today we set out the key features of the nomination rules and are seeking stakeholder feedback on these features



# Harmonised Nomination and Renomination Rules at IPs

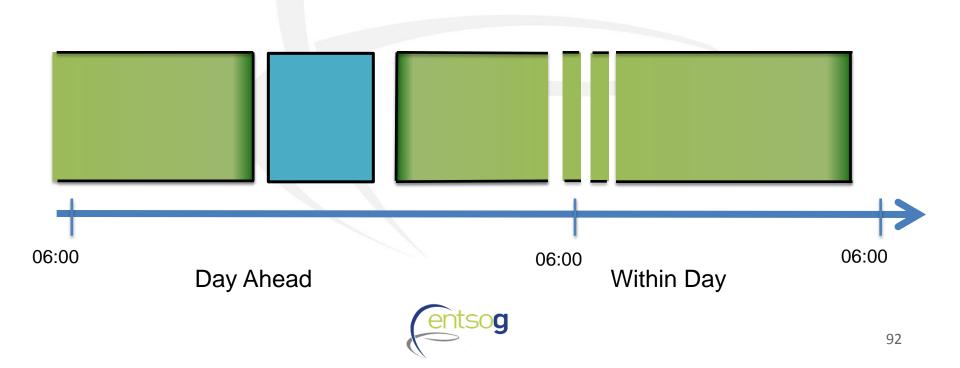


### Harmonisation

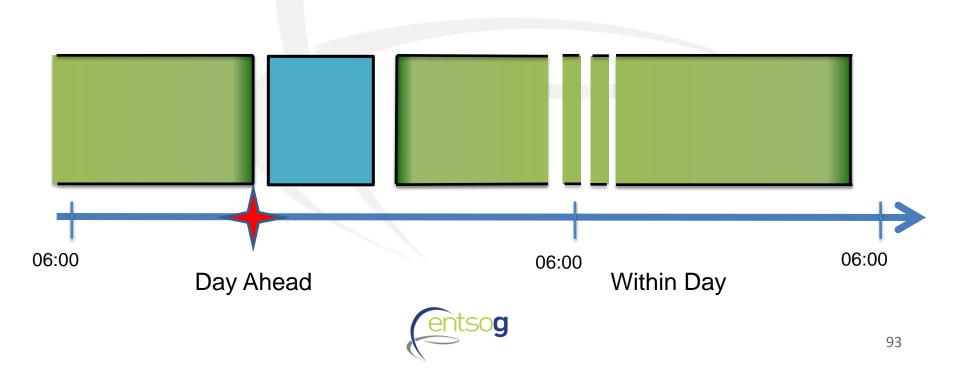
- Different schemes currently used across Europe
  - EASEE gas has led to a degree of harmonisation
- ENTSOG proposing new rules to apply at all IP's
  - Including Virtual Interconnection Points
  - Full harmonisation
- Must support CAM, CMP, Balancing requirements and of course Network Users and TSO needs



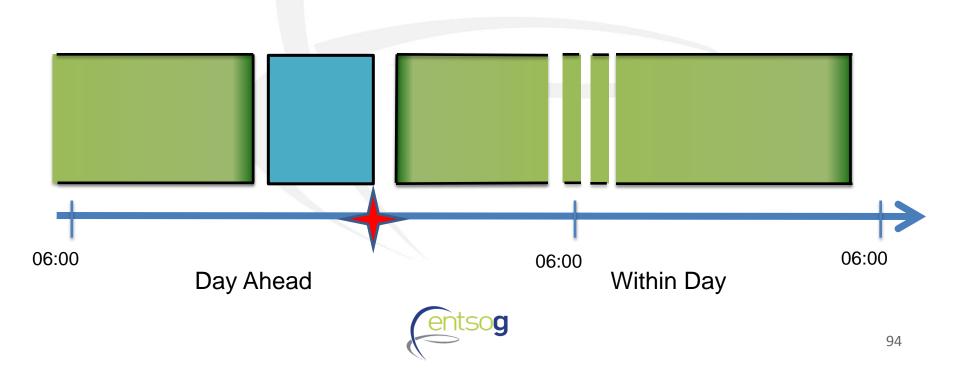
• In designing nomination rules there are a number of key elements which must be considered



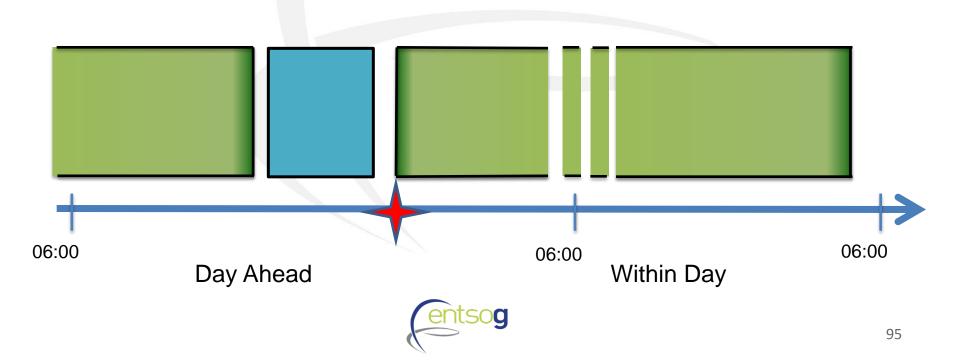
- In designing nomination rules there are a number of key elements which must be considered
- 1. The 'Nomination Deadline'



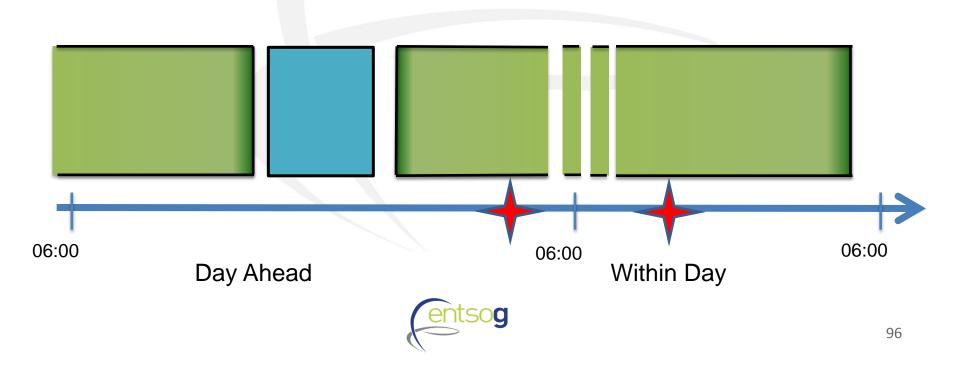
- In designing nomination rules there are a number of key elements which must be considered
- 2. The 'Confirmation Deadline'



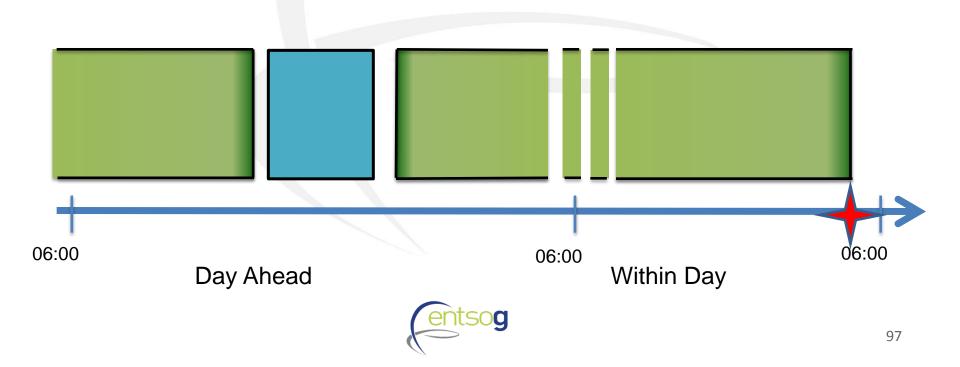
- In designing nomination rules there are a number of key elements which must be considered
- 3. The 'Time Day Ahead Renominations Commence'



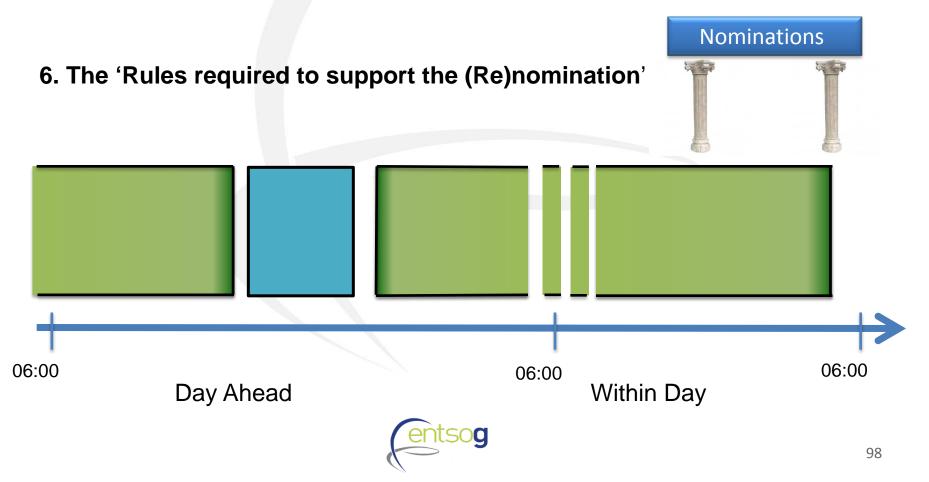
- In designing nomination rules there are a number of key elements which must be considered
- 4. The 'Structure of the Renomination Cycle'



- In designing nomination rules there are a number of key elements which must be considered
- 5. The 'Deadline for Within Day Renominations'



 In designing nomination rules there are a number of key elements which must be considered



- In designing nomination rules there are a number of key elements • which must be considered
- 7. The 'Information to be contained in (Re)nomination' Information 06:00 06:00 06:00 Day Ahead Within Day 500

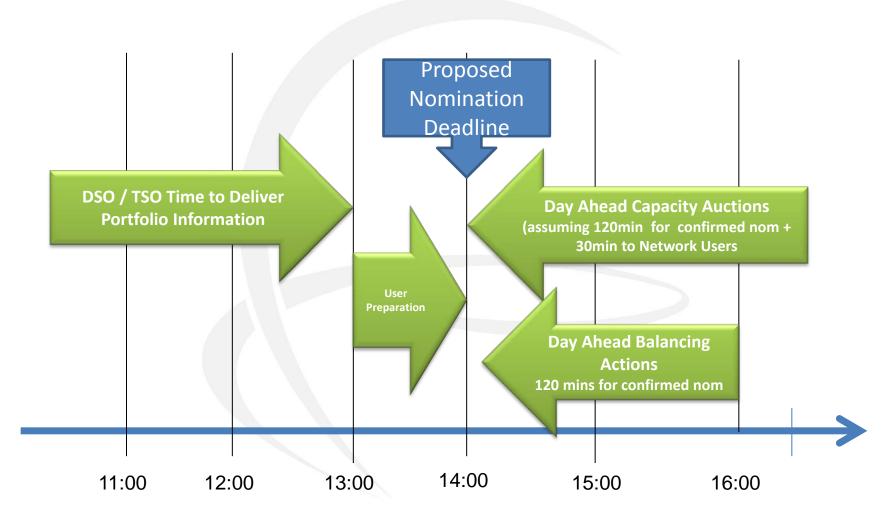
### The Gas Day

Its worth taking a look at the CAM Network Code to set out what the Gas Day is exactly:

	WINTER	SUMMER
UTC	05:00	04:00
Local Time Central Europe	06 :00	06:00
Local Time UK / Ire /Portugal	05:00	05:00
Local Time further East .e.g. Greece	07 :00	07:00

• For simplicity in this presentation we use CET (including day light saving when in place.) Business Rules and Codes in UTC.

### **1. Day Ahead Nomination Deadline**



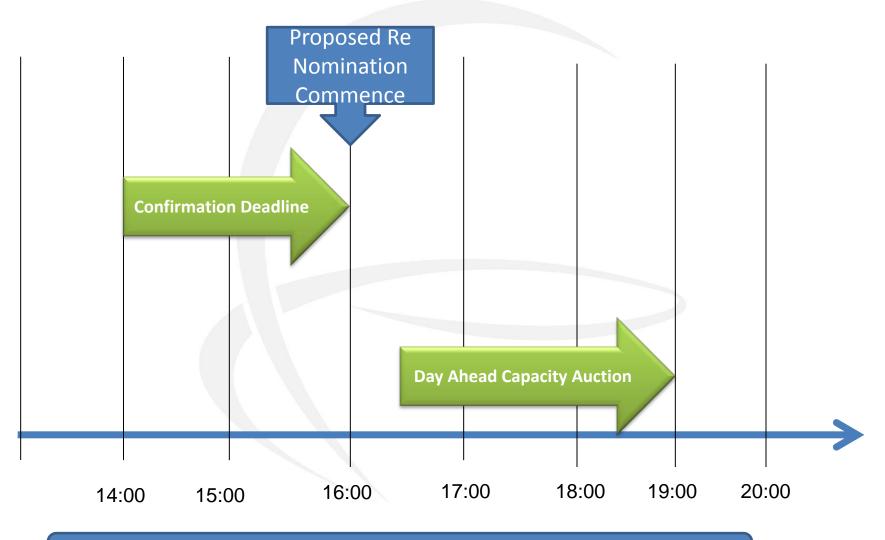
Proposed Nomination Deadline at [14:00]

# **2. Confirmation Deadline**

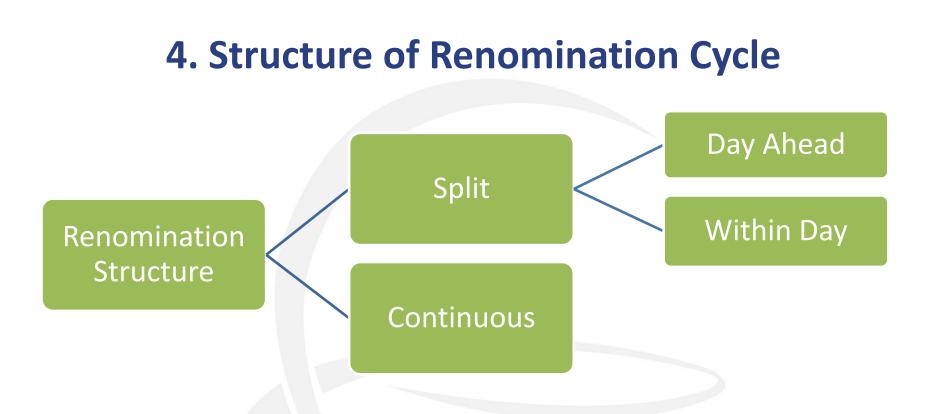
- Up-to two hours are required to complete a Nomination or Renomination Cycle
- The last Nomination received by the TSO before the Nomination Deadline will be taken into account.
- The last Renomination received by the TSO before the start of the hour will be taken into account in the Renomination cycle.
- TSOs shall start a Renomination cycle at the start of every hour.



### **3. Time Day Ahead Renominations Commence**



Proposed Renomination Process commences at [16:00]

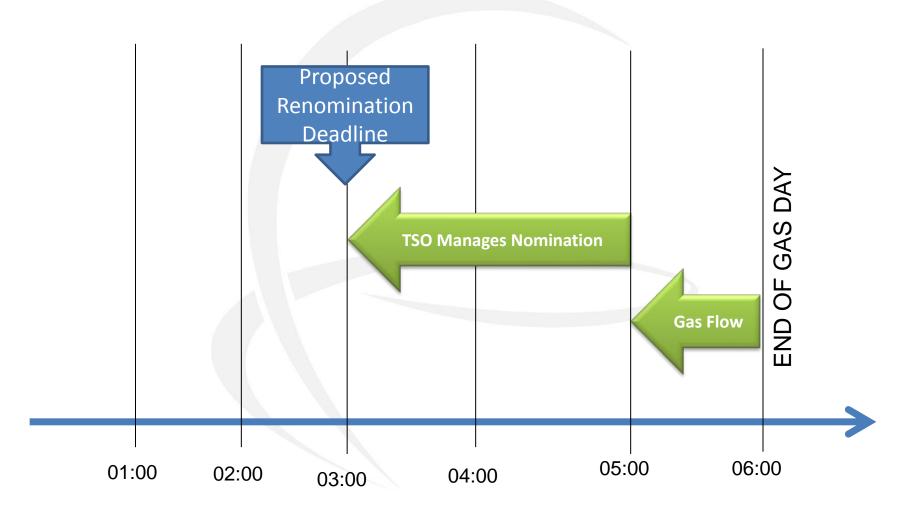


- Must comply with needs of CAM, CMP, Balancing
- Does continuous Renomination cycle offer greater flexibility?

Stakeholder views sought



## 5. Deadline for Within Day Renominations



Proposed Renomination Deadline: [03:00]

# 6. Supporting Rules

#### Nomination

• Nominations should be provided for the Gas Day and expressed in kWh/d, or if on an hourly basis in kWh/h where required.

#### **Bundled Capacity**

• The Nomination and Renomination timings and deadlines defined for Interconnection Points shall also be applicable where a single nomination is used.

#### Forecast

 The TSO may require Network Users to provide, prior to Day Ahead Nominations, a good quality forecast (for example a monthly or weekly Nomination) of expected quantities (consistent with the Nomination procedure applied) that the network user wishes to inject into or withdraw at the IP in order to optimise the operation of the transmission system and ensure the security of supply.



## 6. Supporting Rules

#### **Hourly Nominations**

• Renominations for which the deadline has passed are not allowed.

#### **Daily Nominations**

Implied Flow Rate Concept

#### Hourly Daily Nomination Interface

- Where daily and hourly (Re)nominations co-exist at an IP, the (Re)nomination procedures could be reviewed in order to consider if harmonised (Re)nomination regimes should be applicable at both sides of the IP. In this case a common public consultation (shared with relevant NRAs and TSOs) should be carried out, where the following potential consequences on each individual regime will be at least considered:
  - Financial impact;
  - Impact on cross border flows;
  - That any changes do not undermine the daily balancing regime.
- The final proposal shall be approved by the relevant NRAs.



## 7. Information to be contained in (Re)nomination

The information contained within Nominations and Renominations shall be harmonised and shall at least contain:

- Interconnection Point identification;
- Direction of contractual gas flow;
- Network User identification (or portfolio if applicable);
- Counterparty(s) Network User Identification (where capacity is not bundled) (or portfolio if applicable);
- Start (and end) time for which the (re)nomination is made;
- Delivery period (Gas Day);
  - In case of daily nominations, an end of day quantity, expressed in kWh/d
  - In case of hourly Nominations, hourly quantities for all the hours of the gas day expressed in kWh/h.



#### **Interim Measures**

- The framework guidelines took a high level approach to Nomination – criteria at IP's: have moved to nomination rules beyond framework guidelines development
- No specific consideration was given to whether Interim Measures would be needed in context of criteria
- They may be necessary in some cases:
  - requires considerable development for both TSOs and Network Users in terms of:
  - adaptation of regulatory and market arrangements
  - amending Interconnection Agreements and putting in place the associated systems and other infrastructure to support such arrangements.



### **Interim Measures**

- Where interim measures have been approved by the NRA, the rules to be applied must at least contain:
  - A day ahead Nomination window;
  - A day ahead Renomination window;
  - A within day Renomination window
- Must also be considered within roadmap for other transitional measures







### **Principles at Non IP Points**

- The information the TSO requires in the Nominations and Renominations at Non IP Nominated Points, shall be determined in the context of the National rules, but the following principles shall apply:
  - The TSO may require Network Users to provide, prior to Day Ahead nominations a good quality forecast (such as a monthly or weekly Nomination) of the expected quantities that the network user wishes to inject into or withdraw at the Non IP Points
  - Network Users shall have the ability to Renominate for the Gas Day, considering the technical flexibility of this point.
  - The TSO shall minimise the response time to confirm or reject Nominations and Renominations after the start of the Renomination Process.
  - Nominations should be provided for the Gas Day and expressed in kWh/d, or if on an hourly basis in kWh/h where required.



### **Balancing Zone**



### **Balancing Zone**

#### **FGs states**

"The network code on gas balancing shall prevent TSOs from requiring that network users nominate input volumes which match their output volumes or vice versa."

#### **ENTSOG Conversion into rule**

 "The TSO shall not have the ability to reject a Network User's Nomination or Renomination for reasons of the Network User's intended Inputs not being equal to the Network User's intended Offtakes."

# Concern regarding network Users balancing in <u>interim phases</u> where the imbalance price proxy is not providing the correct signals:

- Additional assurances required in interim phases? For example
  - "Such a Nomination can be rejected only if the system integrity would be endangered and the TSO will be not able not prevent the system integrity endangerment by balancing actions due to the extent of the difference between the nominated or renominated Input and Offtake."



### Summary

- 1. The 'Nomination Deadline' [14:00]
- 2. The 'Confirmation Deadline' [16:00]
- 3. The 'Time Day Ahead Renominations Commence' [16:00]
- 4. The 'Structure of the Renomination Cycle'
  - Continuous
  - Split
- 5. The 'Deadline for Within Day Renominations' [03:00]
- 6. The 'Rules required to support the (Re)nomination'
- 7. The 'Information to be contained in (Re)nomination'







### Conclusions

- ENTSOG have proposed a harmonised nomination scheme to apply across all European IPs – we believe this is a significant and fundamental step in harmonisation
- Non IPs rules determined at national level and supported by common principles outlined
- Balancing zone rules





# Seeking your feedback.....

