

Thon Hotel Bristol Stephanie, Avenue Louise 91-93, B-1050 Brussels, Belgium

AGENDA

No.	Description	Presenter	Time
	Registration and pre-workshop coffee		from 9:30
1.	Welcome and opening	Nigel Sisman	10:00 – 10:05
2.	Process update	Tori Gerus	10:05 – 10:15
3.	Operational balancing <ul style="list-style-type: none"> Business rules (basic) <ul style="list-style-type: none"> Trading platforms Short-term standardised products 	Ruud van der Meer	10:15 – 11:20
	Coffee break		11:20 – 11:30
4.	Information provision <ul style="list-style-type: none"> Business rules (basic) <ul style="list-style-type: none"> System status TSO balancing actions Offtake information Topic exploration <ul style="list-style-type: none"> Input information 	Julien Quainon	11:30 – 12:45
5.	Linepack <ul style="list-style-type: none"> Business rules (basic) 	Noel Regan	12:45 – 13:00
	Lunch		13:00 – 13:45
6.	Daily imbalance charge <ul style="list-style-type: none"> Business rules (refined) 	Markus Sammut	13:45 – 14:45
7.	Nominations <ul style="list-style-type: none"> Topic exploration 	Noel Regan	14:45 – 15:10
8.	Cross-border cooperation <ul style="list-style-type: none"> Topic exploration 	Ruud van der Meer	15:10 – 15:30
	Coffee break		15:30 – 15:45
9.	Tolerances <ul style="list-style-type: none"> Business rules (basic) 	Julien Quainon	15:45 – 16:30
10.	Transition topics / interim measures <ul style="list-style-type: none"> Topic exploration 	Nigel Sisman	16:30 – 16:45
11.	Next steps	Nigel Sisman	16:45 – 17:00



39 Members and 1 Associated Partner
in 23 EU countries

3 Observers from EU affiliate countries
 - Gassco AS (Norway)
 - Plinacro Ltd (Croatia)
 - Swissgas AS (Switzerland)



Balancing network code (BAL NC) – SJWS3

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Process update

9 February 2012 – Thon Hotel Bristol Stephanie, Brussels

Session agenda

Liaison with ACER/Commission

Consultation workshop+ in Eastern Europe

Business rules status and feedback process

Business rules status

	Topic exploration
	Business rules (basic)
	Business rules (refined)

EXTRACT

CHAPTER			Launch	SJWS1	SJWS2	SJWS3	SJWS4	SJWS5
BALANCING SYSTEM	System definition	Main		■	■	■		
		VTP				■	■	
OPERATIONAL BALANCING	TSO balancing actions							
	Merit order			■	■			
	Short-term standardised products		■					
	Trading platforms						■	■
WDOs	Criteria			■	■			
	Assessment process				■			
IMBALANCE CHARGES	Daily imbalance charges	Main						■
		Imbalance price proxy	■	■		■		
	Imbalance cash-out	Main		■		■		
		Tolerances						■
INFORMATION PROVISION	Nominations		■				■	
	System status (aggregate info.)		■	■		■		
	Individual NU info, incl. NDM der.			■	■			
	DSO information				■			
	Info from exchanges and platforms			■	■			
	Offtake information		■	■				
	Input information		■	■				

Feedback



Topic exploration

Basic business rules

Refined business rules

SJWS
t+1

Stakeholder feedback

by Feb. 15th

to victoria.gerus@entsog.eu



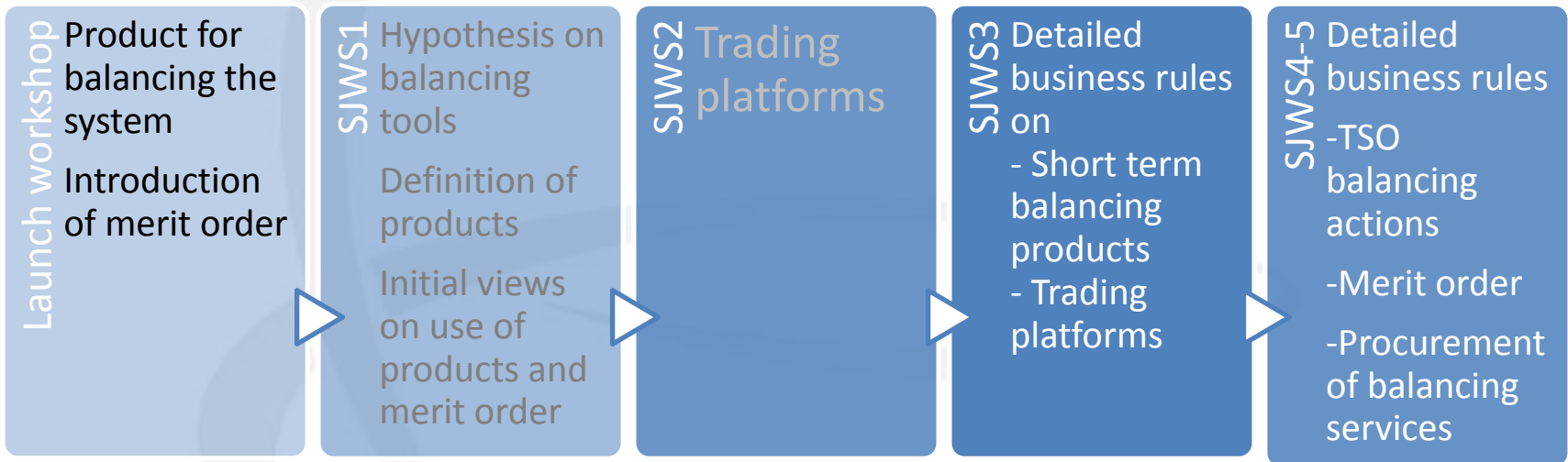
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Operational balancing

Refined business rules

Evolution of topic



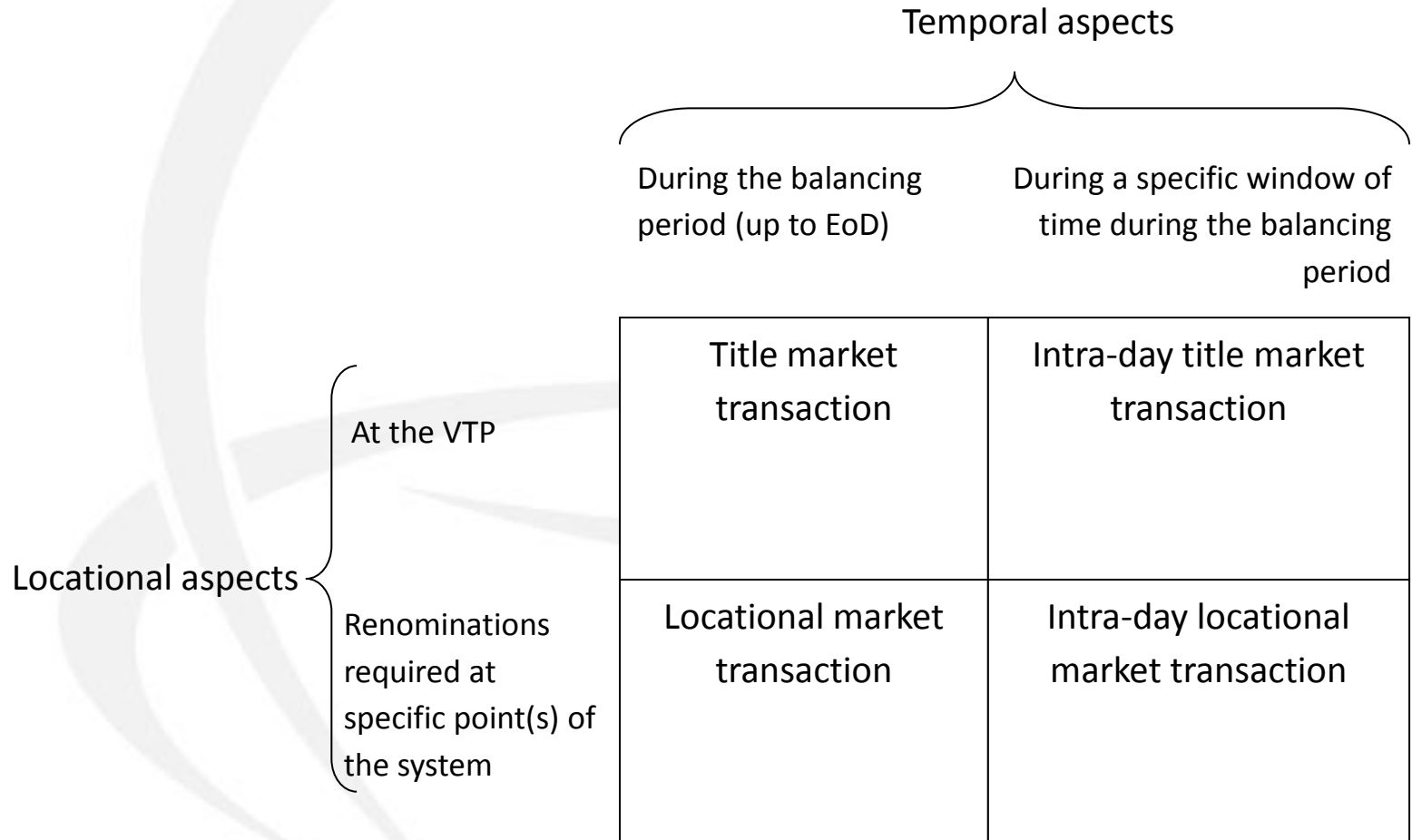
Selected topics

- Objective of network code for trading platforms
- Overview of short term standardized balancing product
- Specifying quantity in a Title Market Transaction
- Locational and temporal products
 - Renominating party
 - Renomination incentive
- Additional topics?

Objective of network code

- The standardized short term balancing products need to be traded on an electronic platform, offering transparency non-discrimination in TSOs market based balancing actions
- On such a platform the TSO trades on an equal basis with network users and is not necessarily counter-party to all trades
- Network code is to provide essential provisions to establish this

Overview – short term standardized balancing products



Definition of Title Market Transaction

A Title Market Transaction is a transaction effected (by means of the Trading System) between two Trading Participants, pursuant to which

- the Trading Participants agree to make equivalent Trade Notifications, or
- Platform operator, or its agent, agrees with each of the Trading Participants separately to make equivalent Trade Notifications (so that the Platform Operator, or its agent, agrees with one such participant to make an Acquiring Trade Notification and with the other such participant to make a Disposing Trade Notification)

Quantity - Two Methodologies

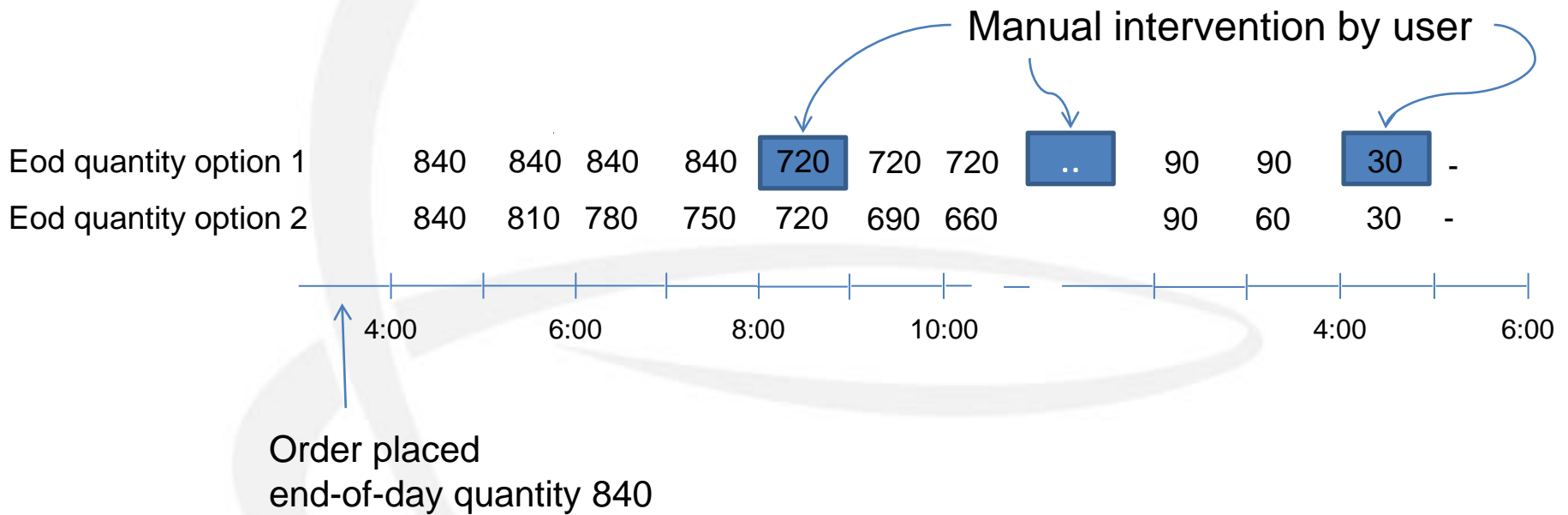
Properties of a Trade Notification includes

- Quantity to be exchanged between balancing accounts

Quantity can be specified on the platform in two ways

1. Fixed amount, not changing while bid/offer exist, until user actively changes the amount
2. Hourly rate, reducing eod quantity as bid/offer matures

Graphical example



Deciding on methodology

- Both methods can be used
- Both in systems with within-day obligations
AND in systems without within-day obligations
- Network code will not make this choice
- Choice is left to market
 - Support one or both
 - TSO in consultation with platform operator and market to decide

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 offtaken 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 offtake accordingly); and
 - accordingly to make a Nomination(s) or Renomination(s) in respect of the specified system point (in the bid or offer) in accordance with the Nomination rules.

Role of TSO as Originating Party

- TSO informing its interest in trading locational products
 - Not possible by originating a trade: unable to amend flows onto/off the system
 - Need other channel
 - Two are available
 1. Publish on its website
 2. Publish message on the trading platform
- TSO as Originating Party
 - renomination requirement moves to Accepting Party
 - Market needs to be aware of that
 - Choice to TSO in consultation with platform operator and market

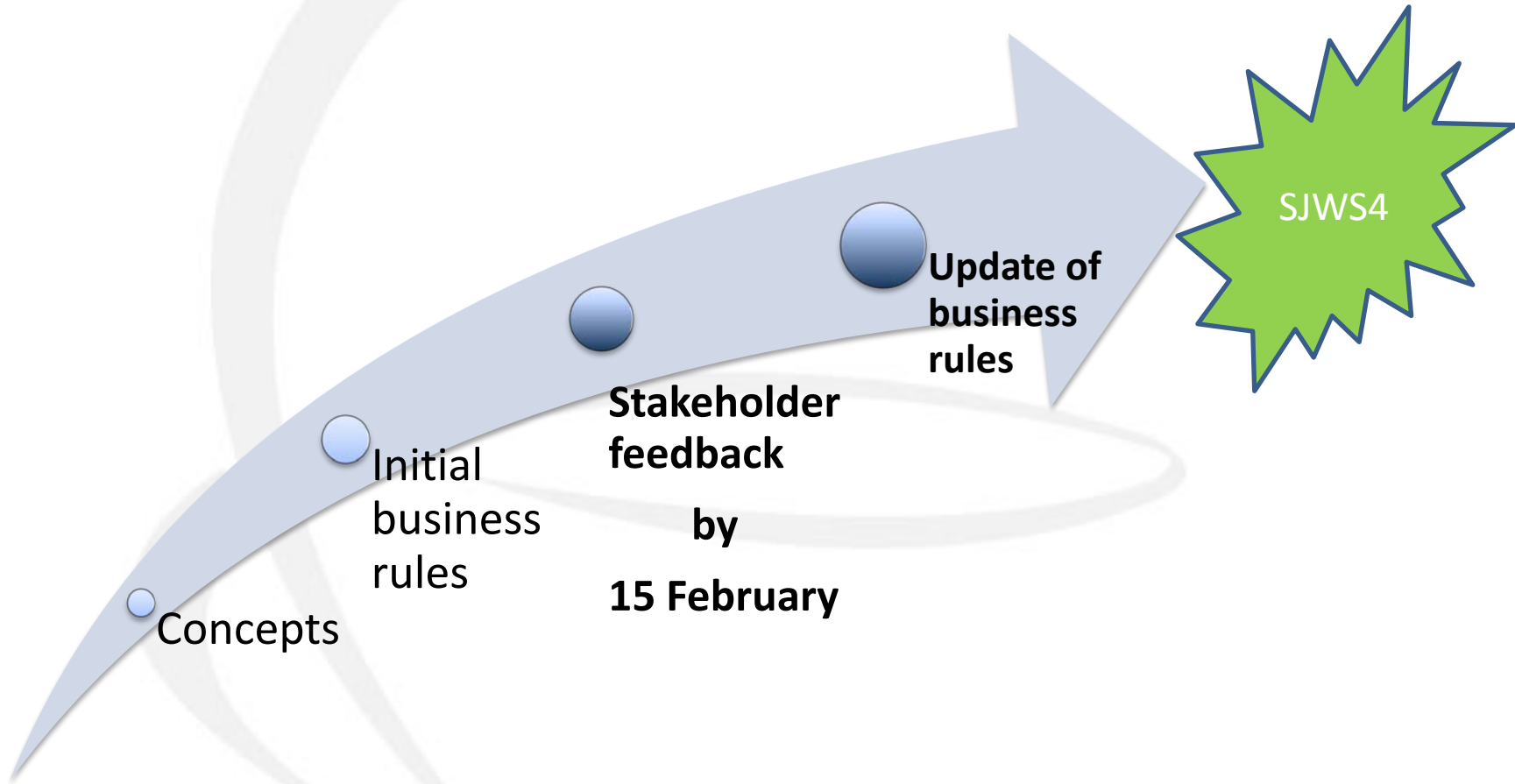
Renomination incentive

Where a Locational market transaction is effected, in the event the Originating Participant's Renomination(s) does not comply with the above requirements the Originating Participant shall pay a charge ("Renomination Incentive Charge") as defined by the TSO and approved by the relevant NRA.

Additional to financial incentive

- Current business rules propose a (small) financial incentive
- Additionally: option to report when Originating Party defaults on obligation to NRA
- Are there additional incentives?

Feedback



Concepts

Initial
business
rules

**Stakeholder
feedback
by
15 February**

**Update of
business
rules**

SJWS4



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Information Flows to Network Users

Information Flows KG



Business Rules

Introduction

- These slides summarise the business rules in the Business Rules document released
- Not all rules are included
- Happy to take questions on those that are not included also

Information Flows

- The information flows to Network Users are designed to support a daily balancing regime.
- The information flows provided are intended to be a suite of information to support Network Users in balancing their portfolios.
 - It should be noted this draft does not contain rules on input flow information
- The Reconciliation process which compares final Allocations and final actual offtakes is out of scope of the gas balancing network code.

System Information

System Information

- The network code will not explicitly refer to the requirements on publishing the overall status of the system required under Chapter 3 to Annex 1 to Regulation 715 (hereafter called “Transparency Guidelines”), which are legally binding on TSOs separately.

TSO Actions

TSO Actions

- These rules apply to trading of standardised short-term products which can influence the Marginal Buy Price or Marginal Sell Price, whether procured on a wholesale market or balancing platform.
- Where the TSO has access to the necessary information available it shall update and make publically available as soon as practicable the Marginal Buy Price and Marginal Sell Price throughout the Balancing Period.
- In cases the TSO does not have real time access to the weighted average price, the TSO will publish details of those trades used in setting the Marginal Buy Price and Marginal Sell Price as soon as practicable.

Offtake Information

- Day Ahead Information
 - The TSO shall provide Network Users with a forecast aggregate end of day quantity for non-daily metered offtakes (NDM Derived Forecast), expressed in energy per balancing period;
 - Except in the case of Variant 1 where measured information is provided within the Balancing Period.
 - The NDM Derived Forecast should be provided within business hours and [need to be considered versus nomination timelines being considered]

Offtake Information

o Within Day Information

- For Intraday metered offtakes the following information will be available as a minimum:
 - Two updates of Network Users aggregate IDM offtake, expressed in energy, for its metered consumption from the start of the Balancing Period up to [xx:xx] no later than [xx:xx] and up to [xx:xx] no later than [xx:xx], unless the Network User has direct access to the information;

Prime-mover: Does defining specific times causes difficulties in these cases where the information is published more than twice?

Offtake Information

Within Day Information

- Base Case: in this instance the Network User is provided with at least two updates of its NDM Derived Forecast within the Balancing Period.
- Variant 1: In this case the NDM demand is provided within the day as an apportionment of measured flows from the start of the balancing period up to a defined time and is not an end of day forecast.
- Variant 2: In this case Network Users Allocation for its NDM offtakes is set at the NDM Derived Forecast provided Day Ahead.

Offtake Information

After the Day

- For Intraday metered offtakes and Daily Metered Offtakes, the Network User is provided with all the individual measured flows expressed in energy, for that balancing period;
- For Non Daily Metered Offtakes:
 - For the Base Case the Network User is provided with aggregate estimate of the end of day quantity, expressed in energy balancing period;
 - This will comprise the total flows to the distribution system less those offtakes above, taking into account all further inputs and offtakes, such as shrinkages, connected Distribution Systems, etc., where appropriate.
 - For Non Daily Metered offtakes Variant 1: the allocation data equals the information provided within the Balancing Period.
-
- For Variant 2: the Network Users Allocation for its NDM offtakes is set at the NDM Derived Forecast provided day ahead.

Input and Offtake Information

Cost Benefit Analysis

- Within 2 years of adoption of the network code, TSOs shall assess the costs and benefits of more frequent information provision and shall consult stakeholders on this assessment, in cooperation with DSOs where they are affected.
- Based on this assessment, the relevant NRA may require more frequent information provision from the TSOs to the network users. Until such an assessment has been completed and any changes implemented, **network users may be subject to less onerous balancing obligations if transitional arrangements are agreed by the relevant NRA** (for example through the application of interim measures as set out in section 5.2).

Offtake Information

Cost Benefit Analysis

Initial Interpretation of Clause

- 1st paragraph linked to 'end of day regime' and 'within day regime'
- Less onerous obligations refers to 'within day regime'?



Input Information

Framework Guidelines

The network code on gas balancing shall provide that **aggregate network user input** and off-take information is made available by the TSO in a clear, timely manner and on the same timescale to all network users in order for them to be able to take necessary actions to correct their imbalances.

The network code on gas balancing shall require TSOs to provide, free of charge, to each network user the available information **regarding its inputs on to** and off-takes from **the balancing zone** at appropriate intervals **during the balancing period** in order for network users to be able to balance their portfolios. Appropriate intervals **shall be at least twice a day** or more frequently if necessary to enable network users to meet their balancing requirements, and to comply with any within-day obligations (as set out in Section 4.1).

Context

- Under the model envisaged Network Users are responsible for managing their inputs and offtakes of the system
- In taking this role they are provided with information on their inputs and offtakes onto the system

Input Information

So what input information does a Network User need in order to balance its portfolio



Initial
Consideration

It can differ depending on the allocation methodology at the entry point

There are three key scenarios:

1. The Network Users Allocation equals its Confirmed Nomination
2. The allocation is done by the TSO on a different basis (for example physical flow pro-rata to nomination or with balancing Network User)
3. The allocation is done by a third party (e.g. storage operator, producer)

Input Information

1. Allocation = Confirmed Nomination

Consideration 1: At these entry points access to the confirmed nomination will allow Network Users to balance their portfolios.

Input Information

2. The allocation is done by the TSO on a different basis (for example physical flow pro-rata to nomination or with balancing Network User)

Consideration 2: in this case aggregate flows at the entry point with a split per network user, based on the agreed allocation methodology, allow Network Users to balance their portfolios

Input Information

3. The Allocation is done by a third party

Consideration 3: At these entry points the information required will be the aggregate flows at the entry point.

Discussion Issues

Issues:

- The input flows over the gas day is very unlikely to be flat and therefore could be misleading
 - Historic data may help
- Sensible threshold for points included
- Allocating within the day feasible?
- Confidentiality issues have already been treated at relevant points defined In Regulation 715 and in Annex 1

Regulation 715

(25)

Confidentiality requirements for commercially sensitive information are, however, particularly relevant where data of a commercially strategic nature for the company are concerned, where there is only one single user for a storage facility, or where data are concerned regarding exit points within a system or subsystem that is not connected to another transmission or distribution system but to a single industrial final customer, where the publication of such data would reveal confidential information as to the production process of that customer.

Article 18 :

4. The relevant points of a transmission system on which the information is to be made public shall be approved by the competent authorities after consultation with network users.



Thank You



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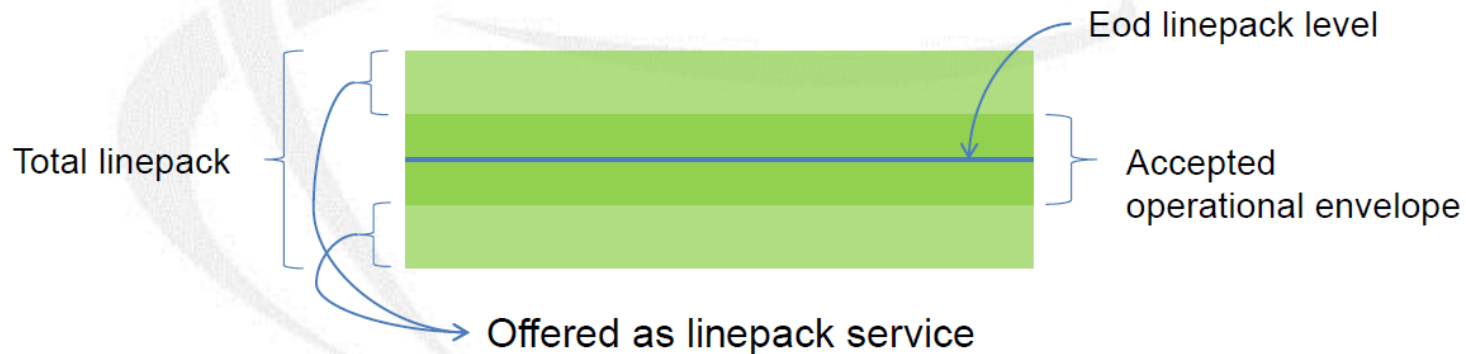


Linepack Flexibility Service

Commercial Framework KG

Recap SJWS 2

- Linepack Flexibility Service explored at SJWS 2
- What is it?



Key Conclusion: Daily balancing is primary objective of the BAL NC. Accordingly, a linepack flexibility service should not undermine this or create significant redistributions among network users;

Recap SJWS 2

The Framework Guidelines

*The network code on gas balancing **shall not prevent** TSOs from allocating linepack to network users if approved by the relevant NRA. Where linepack is sold, TSOs shall allocate the linepack to network users as a commercial product on a transparent and non-discriminatory basis and it shall be offered at a cost reflective price. The price may also be determined through competitive mechanisms.*

The decision by the relevant NRA to allocate linepack shall be based on objective criteria, including

- the physical characteristics of the networks,*
- whether the provision is consistent with Section 4 of these Framework Guidelines*
- whether offering a linepack product would facilitate a more efficient use of the system.*

Based on Stakeholder feedback, ENTSOG have designed more prescriptive objective criteria for consideration



Business Rules

Linepack Flexibility Service

Product Features

- The Linepack Flexibility Service shall be offered to Network Users as a commercial product.
 - Competitive mechanisms can be used as means to selling the Linepack Flexibility Service.
- The Linepack Flexibility Service shall be offered to Network Users in a transparent and non-discriminatory manner.
- The Linepack Flexibility Service shall be offered at a cost reflective price.

Linepack Flexibility Service

Objective Criteria for NRA Approval

- The TSO shall not need to contract any other infrastructure (e.g. storage or terminals) to provide this service;
- The amount of Linepack Flexibility Service available shall be limited to the amount which is not required to manage imbalances in flow rates on the system;
- It does not undermine the principles that :
 - the balancing period is a standardized daily interval
 - that network users shall take primary responsibility for balancing their individual portfolios
 - TSOs' balancing actions are minimized.

Linepack Flexibility Service

Objective Criteria for NRA Approval

- A Linepack Flexibility Service shall not lead to more stringent within-day obligations;
- Where nominations are required nominations will be consistent with local rules (for example, storage)
- The use of the Linepack Flexibility Service shall not increase the overall cost of operating the transmission system;
- The use of the Linepack Flexibility Service shall not place any additional costs on those Network Users which do not avail of the product;
- Its impact on cross border trade is considered.

Linepack Flexibility Service

Stakeholder Feedback is sought on new objective criteria



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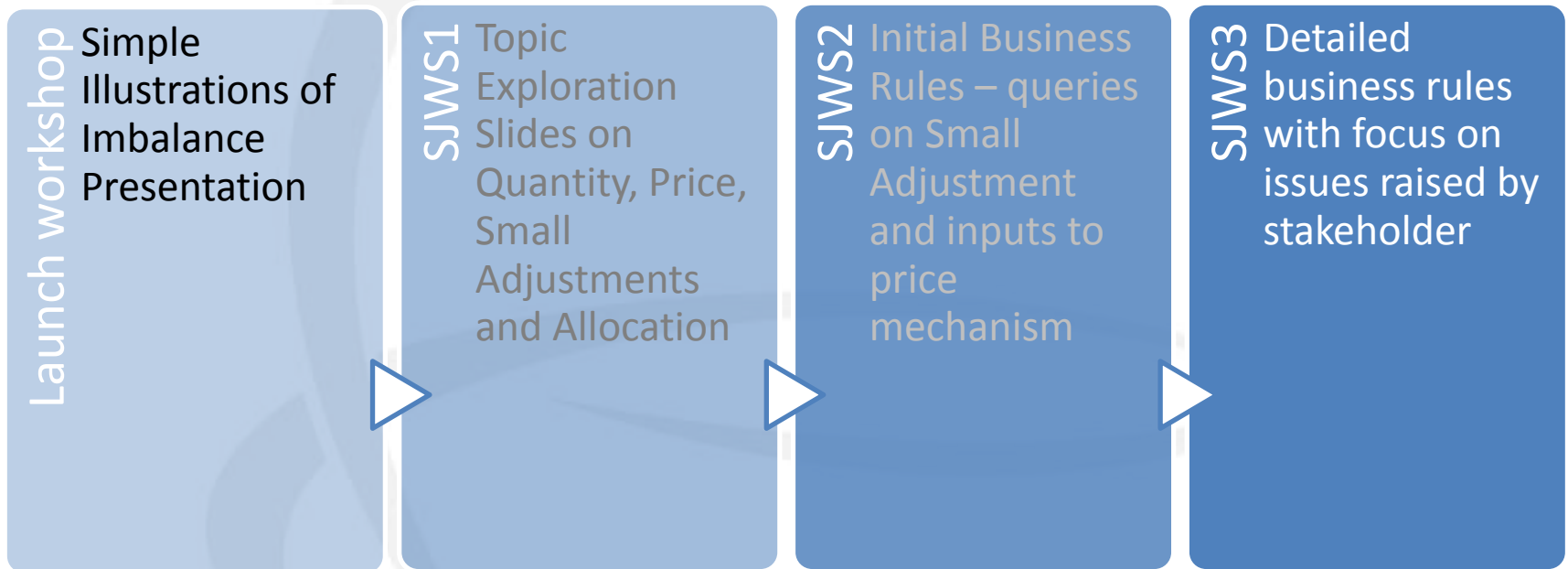


Daily Imbalance Charge Refined Business Rules

Imbalance Price Determination – Issues for discussion

Commercial Framework Kernel Group

Background



The focus of today's slides are two of the key issues raised by Stakeholders at the last SJWS

Daily Imbalance Price Rules

- A Marginal Buy Price and a Marginal Sell Price shall be calculated for each Gas Day:
- A Marginal Buy Price is calculated as the higher of:
 - The highest price of any gas balancing trade to which the TSO is a party in respect of a balancing period (excluding locational or temporal products), or
 - The weighted average price of gas traded in respect of that day, plus a small adjustment to incentivise Network Users to balance.
- A Marginal Sell Price is calculated as the lower of:
 - The lowest price of any gas balancing trade to which the TSO is a party in respect of a balancing period (excluding locational or temporal products), or
 - The weighted average price of gas traded in respect of that day, minus a small adjustment to incentivise Network Users to balance.

Daily Imbalance Price

- A Marginal Buy Price and a Marginal Sell Price shall be calculated for each Gas Day:

- A Marginal Buy Price is calculated as the higher of:

- The highest price of any gas balancing trade to which the TSO is a party in respect of a balancing period (excluding locational or temporal products), or the weighted average price of gas traded in respect of that day, plus a small adjustment to incentivise Network Users to balance.

MAXIMUM of { TSO Traded Price, market price + a small adjustment }

- A Marginal Sell Price is calculated as the lower of:

- The lowest price of any gas balancing trade to which the TSO is a party in respect of a balancing period (excluding locational or temporal products), or the weighted average price of gas traded in respect of that day, minus a small adjustment to incentivise Network Users to balance.

MINIMUM of { TSO Traded Price, market price – a small adjustment }

Cashout price formation

- Policy objective
- Prices to be based upon a fair reflection of daily “market” value for short term flexible gas
- Prices to reflect TSO activity in the market
- -> Price uncertainty and differentials to provide sufficient incentives to users

Rules finalisation requires



decision on two key issues:

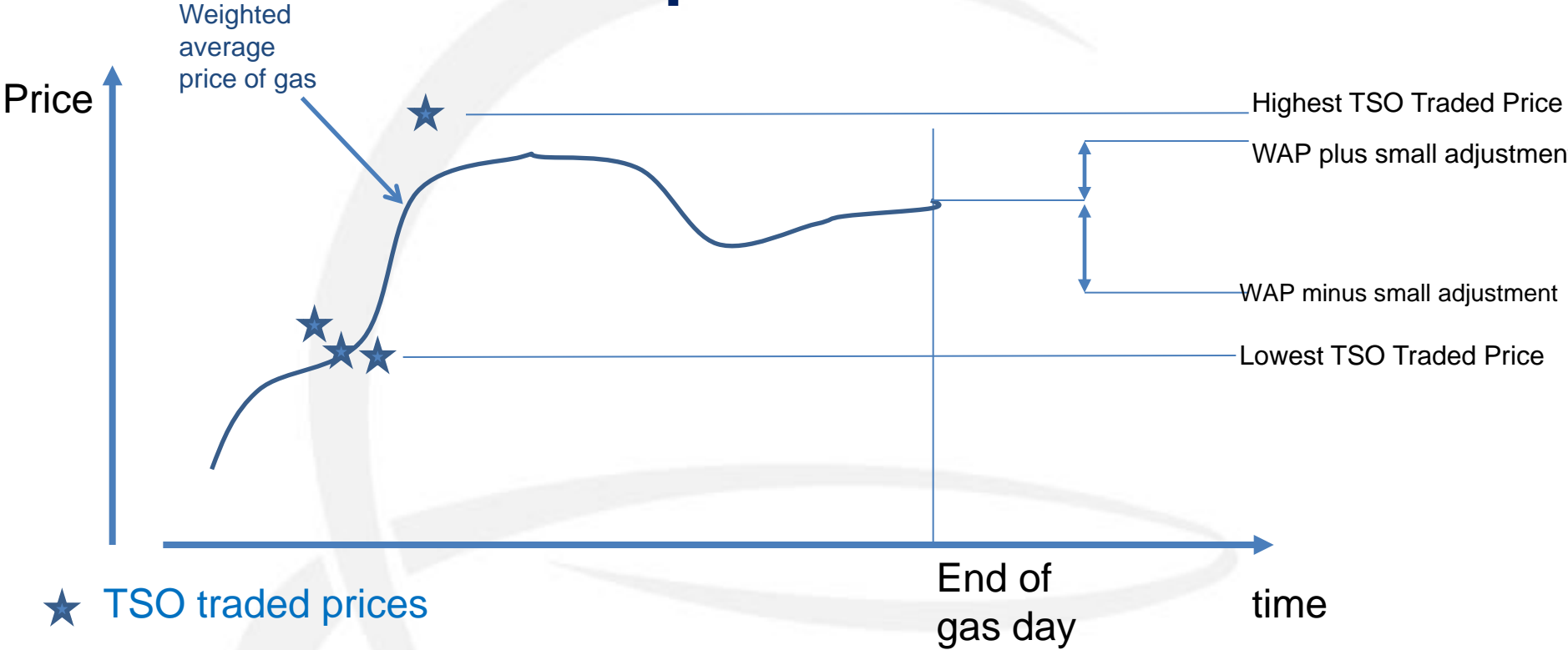
Which trades influence price setting?

For TSO trades
-“marginal”
component

For market trades
-“average”
component

How to determine the small adjustment(s)?

Cashout price formation



... cash-out differentials can be no smaller than average price +/-small adjustment

.... but can be much wider

Cashout price determination

Which trades influence price setting?

For TSO trades
- "marginal"
component

For market
trades
- "average"
component

Pricing contributes to:		Day D-1	Day D
Marginal component (TSO trades only)	Temporal (Short term)	Prohibited by framework guidelines (costs covered by neutrality mechanism)	
	Locational (Short term)		
	Title (short term)	Yes	Yes
	"Balancing services"	No?	No?
Weighted average price (market trades)	Temporal (Short term)	?	?
	Locational (Short term)	?	?
	Title (short term)	Yes?	Yes
	"Balancing services"	No?	No?

Sources of Short Term trades:	Recognized exchange used by TSO	Recognised exchanges used by TSO	All exchanges accessible to market	Former plus other "market platforms"
Which to apply:	?	?	?	?

Cashout price formation – more requirements

Derivation of Small Adjustment

- The small adjustment(s) used in calculating the marginal price calculation shall be proposed by the TSO and assessed for approval by the NRA.
- In designing the small adjustment(s) the TSO will consider the following criteria:
 - It shall incentivise Network Users to balance their portfolio;
 - It shall be designed and applied in a non-discriminatory manner;
 - It shall not deter market entry;
 - It shall not impede the development of competitive markets;
 - Its impact on cross border trade;
- Should there be evidence that the criteria are not satisfied, the TSO may seek and the NRA may approve an immediate change of the small adjustment.

Alternative approaches to determine small adjustments

Approaches		Stakeholder views
Euro rule - mandatory	Prescriptive rules or methodology defined in network code	
Euro rule – guidance	Guidance provided for local determination – perhaps indicating preferred methodologies and ranges beyond which stringent justification might be required	
Local rules	Small adjustments to be defined locally	

Alternative approaches to determine small adjustments

Methodologies		Stakeholder views
Absolute Value	<p>Adjustment defined in (say) Euros/Mwh) – perhaps based upon a methodology that references storage or other valuation approaches</p> <p>Possible proxies derived from:</p> <ul style="list-style-type: none"> • storage withdrawal/injection prices? • theoretical use of storage bundled units? • TSO cost based approaches of inherent transmission system flexibility? • Buy/sell spreads observed in mature markets? 	?
Percentage	Adjustment defined in % terms – similarly methodology based	?

Term		Stakeholder views
Dynamic	Different Adjustments for each Day	?
Static	Set based on a methodology and applicable for say, 1 year with annual review?	?

Which trades influence price setting?

For TSO trades
- "marginal"
component

For market
trades
- "average"
component

How to determine the small adjustment(s)?

Conclusions and next steps

- Definition of trades that feeds into average / Marginal Price methodology need careful consideration
- Establishing expectations about levels of anticipated target Marginal Price differentials and small adjustments may help assess aspirations
- Any other issues from business rules – feedback welcome

Further feedback sought by Wednesday 15 February to inform final formulation



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Nominations

SJWS3

Information Flows Kernel Group

Information Flows

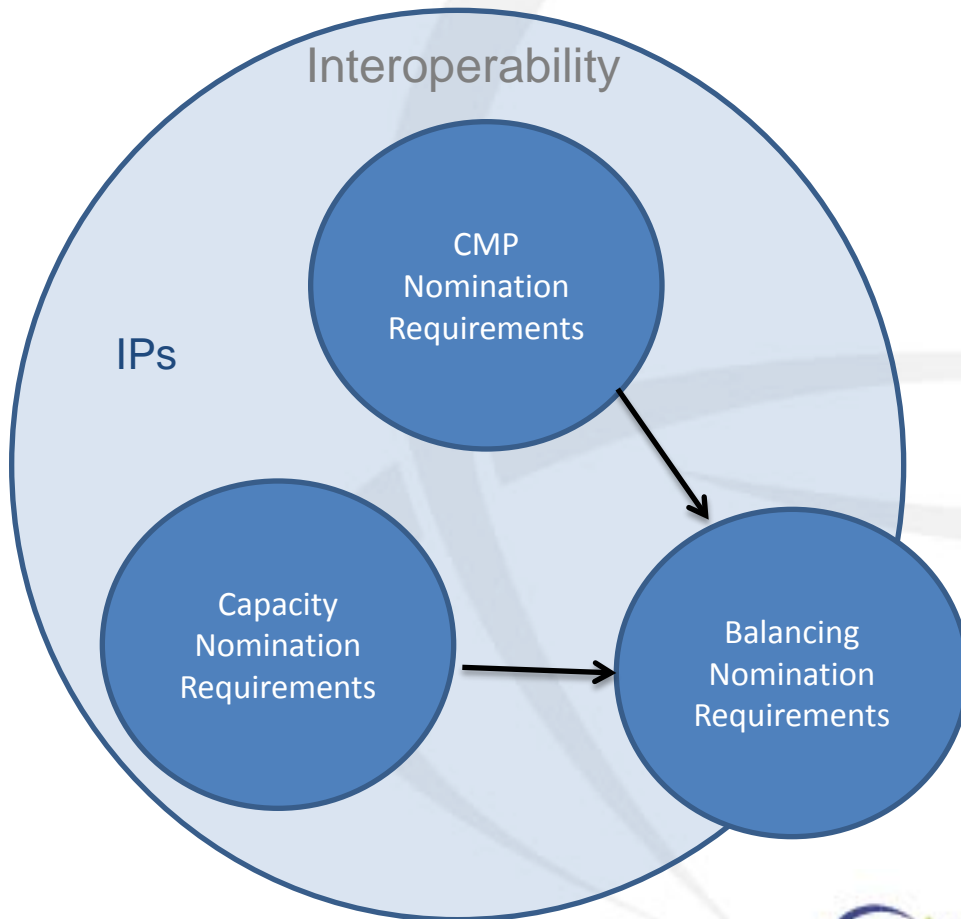
- ENTSOG presented a ‘topic exploration’ on Nominations in SJWS1
- The materials presented closely related to the text of the framework guidelines
 - “Criteria for harmonisation at IP”
- Stakeholder feedback was that Balancing Network Code should include more detailed provisions on nominations
- ENTSOG is progressing identifying those business rules required to support balancing network code
- ACER Gas Working Group on 31st January 2011

Note – when we refer to Nominations here we include Re-nominations

Nominations

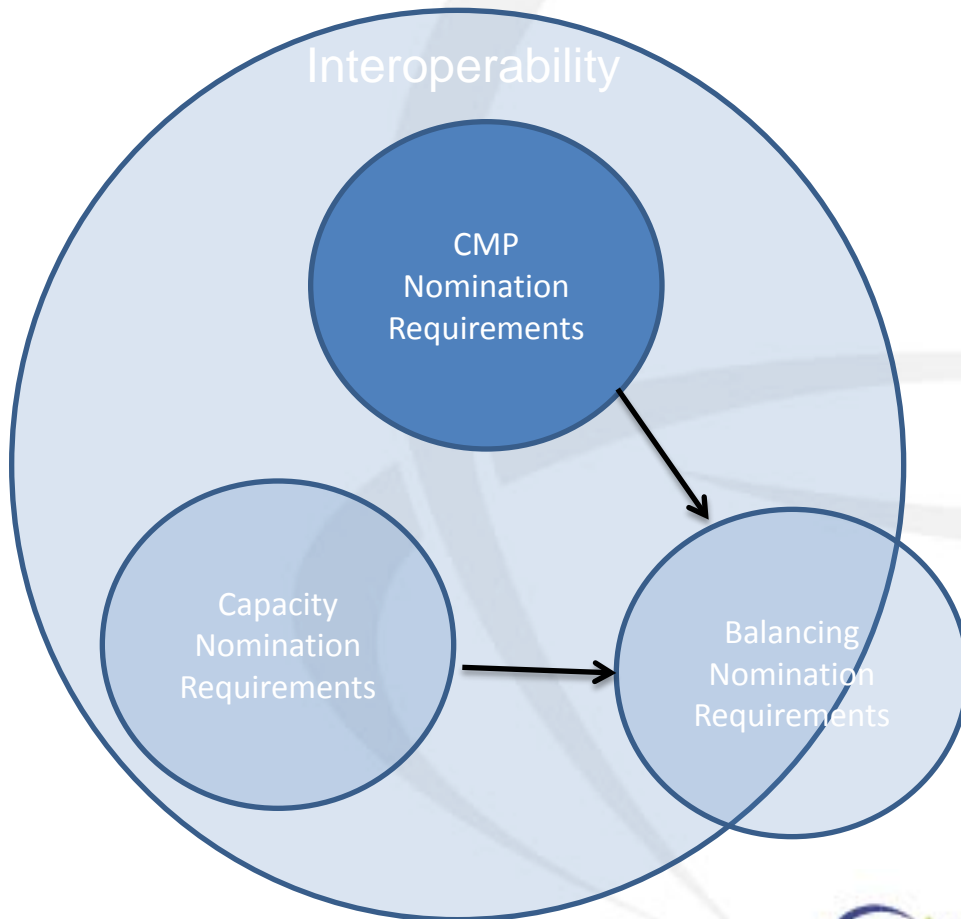
- Guidance from ACER Gas Working Group:
 - invite ENTSOG to include nomination rules in the Balancing NC
 - expect this to result in a proposal for harmonised renomination and nomination rules and lead times
- This is a more comprehensive approach and will put pressure on the work programme
 - Including significant interaction and dependency on Interoperability Working Area
- Focus for today is to present considerations on what is included in Balancing Network Code
 - Not looking at VTPs

Nominations at IPs



- Recent ACER Guidance has requested the Balancing NC to consider 'Nomination Rules'
- ENTSOGs work since ACER feedback has focused on 'Balancing Requirements' on basis that the Interoperability Network Code would cover 'Nomination Rules'
- Interoperability colleagues will continue to have a key role

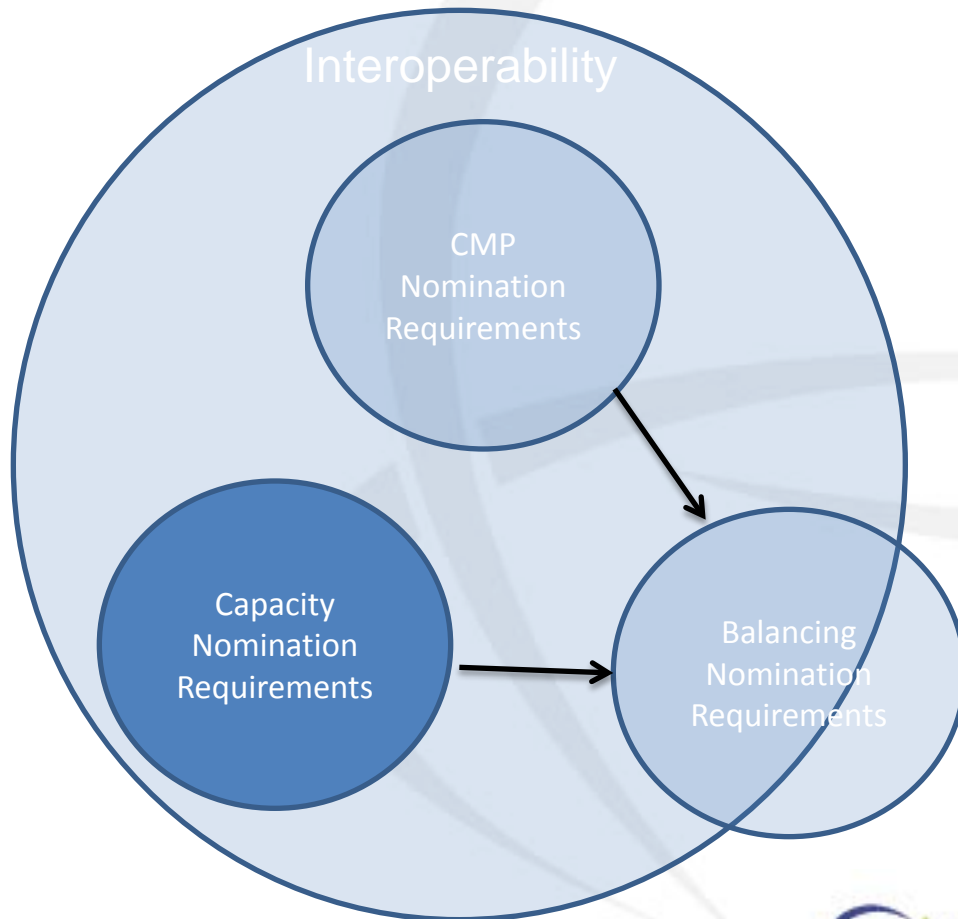
Nominations at IPs



CMP

- Means need for confirmed nomination before Day Ahead Capacity Auctions
 - Capacity released by Re-nomination restrictions used in Day Ahead capacity Auction
- Restricts Re-nomination rights of Network Users

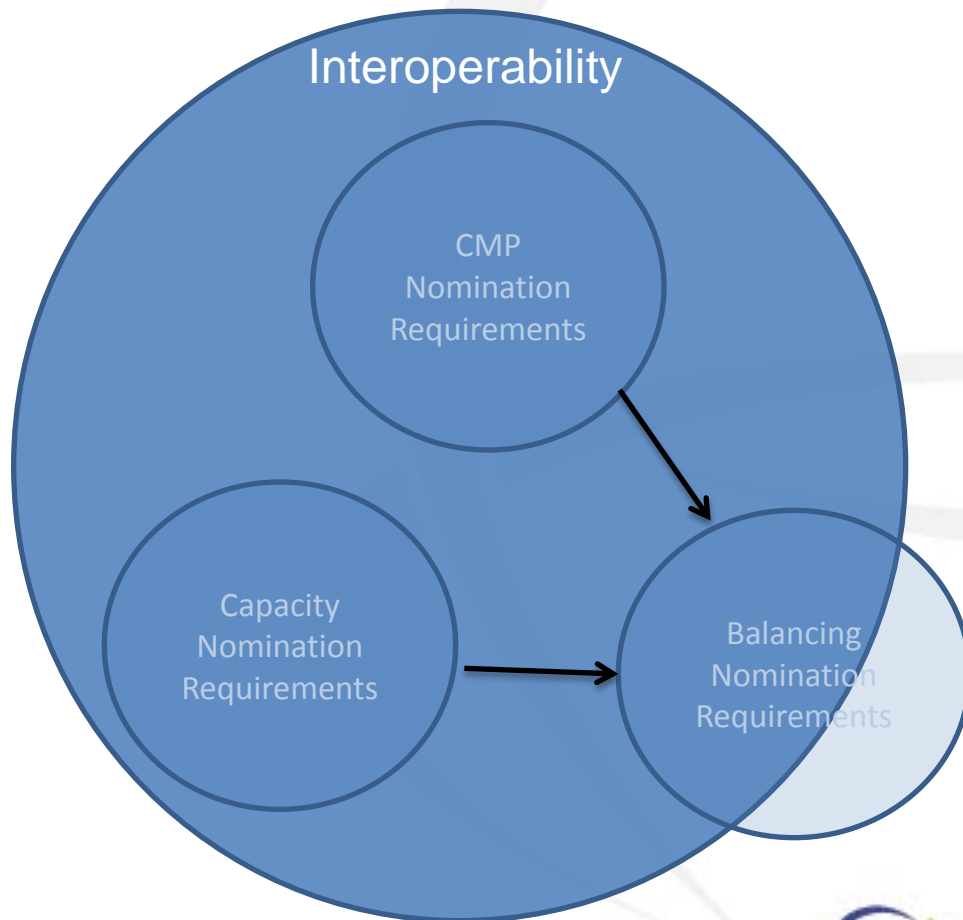
Nominations at IPs



CAM

- New Concept of Bundled Capacity at IPs
 - Single Nominations
- Over-nomination for within day interruptible capacity

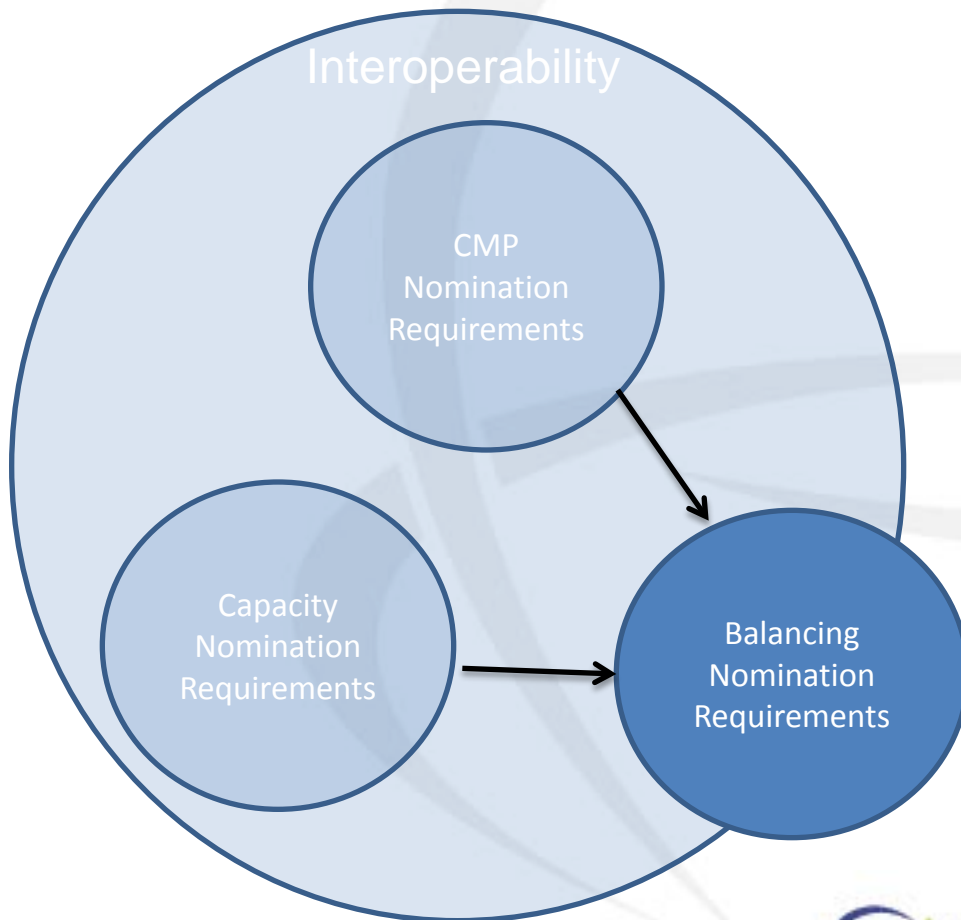
Nominations at IPs



Interoperability

- Nomination and Re-nomination scheme (timings, deadlines, lead-times, etc)
- Data exchange, e.g. Communication Procedures
- Operational Ruleset, e.g. conformatting, default value, matching, confirmation

Nominations at IPs



Balancing

1. TSO information on flows
 - 1.1 Delivery of Balancing Products
 - 1.2 Within Day Obligations
2. Network User Flexibility
 - 2.1 Influences timing of flows to Network users
3. Link to Allocation Process



Balancing Requirements

Balancing Requirements

TSO
Information
on Flows

TSO needs to understand Network users intentions to operate system

Network Users responsible to balance their position

Delivery of
Balancing
Products

Facilitate delivery of Locational Products

Facilitate delivery of Temporal Products

Balancing Requirements

Balancing

Facilitate delivery of End of Day Quantities to balance

Facilitate use of Within Day Obligations

Network User Flexibility

Re-nomination process helps Network Users balance their portfolio

Re-nomination should not unduly restrict flow changes

Balancing Requirements

Interaction
with
Information
Flows to
Network
Users

Effects timing of information flows to Network Users



Nomination Rules

Nomination Rules at IP

Proposed Approach

Part A: Deliver suite of Business Rules essential to the functioning of the Balancing Regime

Business Rule	Deliverable	Comment
Definitions	New definitions as required	In addition to CAM, CMP, Regulation 715, etc
General Rules	Any high level rules to apply	
Nomination Information	Details of information to be provided in Nomination	E.g. quantities, flows, temporal products, etc
Timing Requirements	Time parameters that must be met to support balancing regime	

Nomination Rules at IP

Proposed Approach

Part B: Harmonised nomination scheme - together with Interoperability

- Taking Business rules from Balancing
 - Taking Business rules from CAM
 - Taking Business rules from CMP
- Propose common timings and structure of Nomination and Re-nomination scheme and Leadtimes



Other Considerations

Nominations Non IPs

For Non IP Points there are some business rules that will be needed to support the balancing regime:

- TSO shall determine Non IP points it requires nominations for in order to ensure efficient operation of the system and specifically to ensure the TSO has adequate information to manage its balancing activities
- The information the TSO requires in the nominations at Non IP Points shall be determined in the context of the local regime, but the following principles should apply:
 - The TSO may require a weekly forecast
 - Network Users shall have the ability to Re-nominate provided they have the associated rights to access the gas flexibility.
 - TSO minimise the response time to process a nomination and /or a Re-nomination
 - May be requirement for hourly nomination

Nominations Non IPs

There are other “system-wide” rules

- Network Users nominations for Inputs are not required to match their nominations for Offtakes
 - The network code shall define a “network user forecast imbalance” to be determined using the imbalance equation with the best information available at any point before or during the Gas Day as predictors for each component that features in the imbalance calculation.
 - The network code will prohibit a requirement that at any time the “network user forecast imbalance” shall be zero.

Discussions

Feedback is sought from Stakeholders on:

- Framework Guidelines scope quite limited to simply criteria
- New proposals a significantly deeper level of harmonisation
 - Puts significant pressure on Balancing NC (and our interoperability colleagues) and stakeholders
 - Seeking support for such an approach



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Cross-border cooperation

Topic Exploration

Introduction of the concept

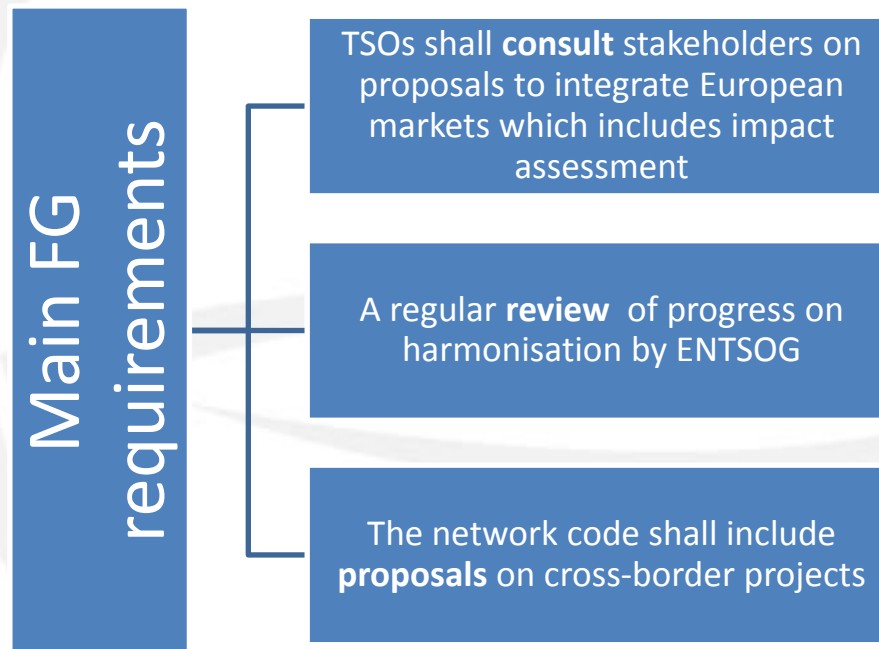
- Currently a number of balancing zones exist throughout Europe
- The balancing zones differ in size and structure with regards to:
 - Technical characteristics
 - Historical developments of the systems
 - Interconnection between zones
 - Gas quality
- However...
 - Markets have opened up and become more integrated over the last couple of years
 - Some balancing zones already show high level of integration
- Need for further development

The Framework Guidelines

General purpose of the FGs:

“The network code on gas balancing shall require relevant TSOs to cooperate in order to integrate European gas markets by merging entry and exit zones or create cross-border balancing zones wherever this is technically feasible and economically reasonable or through other means such as market coupling.”

Framework Guidelines



Consultation process

Step 1

- Relevant TSOs shall consult stakeholders on proposals that should include impact assessment of the expected costs and benefits

Step 2

- ENTSOG shall share the result of this consultation with relevant NRA's and ACER

Step 3

- Any final proposal shall be submitted for approval to the relevant NRAs and ACER

Consultation process

- In developing the network code ENTSOG will have to consider:
 - Role allocation on respectively ENTSOGs and TSOs – more details on the process needed in the Network Code
 - Exact role of NRAs and ACER in the process needs to be defined
 - Participation of stakeholders in the consultation process should be identified

Review process

- ENTSOG is to review the progress of the harmonisation of rules in order to identify opportunities for the creation of cross-border balancing zones and market coupling
- The review should also consider whether there are additional measures needed to harmonise rules, which may help achieve cross-border balancing zones

Review process

The review process could be based on:

- Regular reviewing of any analysis or information provided from different agents/TSOs in each market on potential projects.
- Effective reviewing of harmonisation of rules in a prudent manner.
- An evaluation of the performance of any non-binding proposals in place or being proposed by TSOs.

Proposals mentioned in the Framework Guidelines

Shipper Led Cross-border portfolio balancing

- This proposal confirms the E/E model, where shippers move gas between balancing zones based on transmission rights and nominations of cross-border flows.

Cross border balancing

- TSOs would act as intermediaries to facilitate access to flexible gas between adjacent markets. E.g., TSOs could accept bids and offers for flexible gas from adjacent zones.

Joint balancing platforms

- Where sufficient interconnection exists, a whole platform could be created.

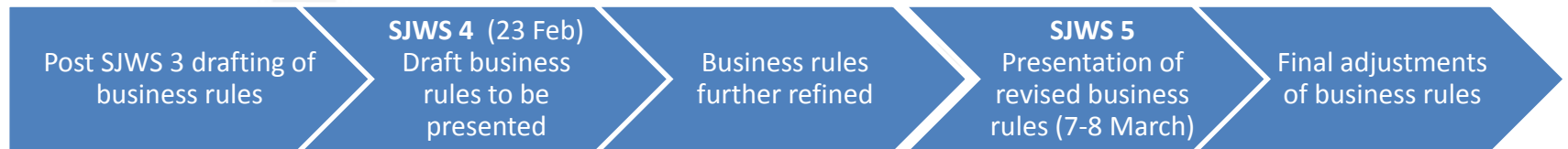
Proposals

- But...
- ENTSOG thinks it would be inappropriate for the network code to include detailed proposals for such projects
- The network code shall rather describe the specific **process** by which project proposal shall be developed (public consultations, CBAs,...)

Considerations for the Network Code

- A clear determination of the roles and responsibility in the process should be identified in the network code
- Identification of the scenario and high level criteria are required to promote a cross-border project
- Details of the review process for ENTSOG to monitoring harmonization should be considered

Cross-Border Schedule for SJWS Timeline



Cross-border cooperation

Any questions?



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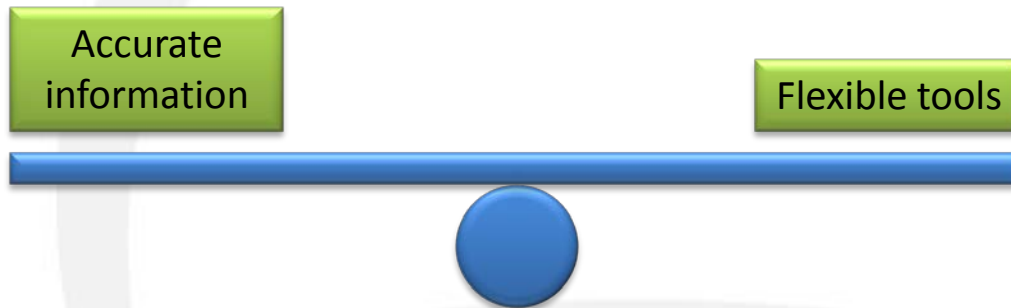
End of Day Tolerances

Commercial Framework KG

Recap SJWS 2

Balancing target model

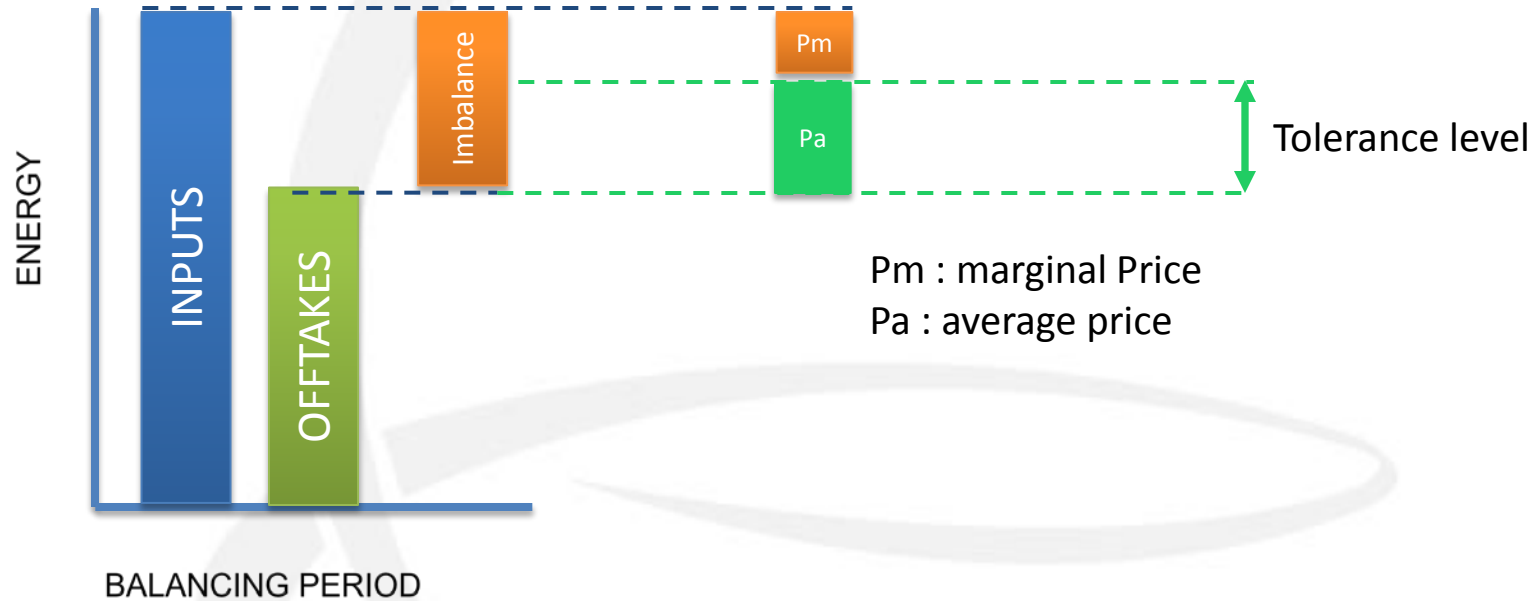
A network user is able to balance its portfolio according to this balance



General comment : *if both sides of the balance are efficient enough, no tolerances will be provided to network users*

Introduced Information Provision to need for Tolerances (where appropriate)

Recap SJWS 2



Proposed a Price Based Tolerance



Business Rules

Business Rules

Use of Tolerance

- Tolerances may be applied when one or more of the following circumstances exist:
 - Network Users do not have access to a liquid short-term wholesale gas market or balancing platform or to sources of flexible gas (including the associated infrastructure) to trade in order to be in a position to balance their portfolios.
 - The information available to a Network Users portfolio position during the transition to the Balancing Target Model, results in Network Users (as set out in Business Rules “ X.Y”) facing an undue risk in their ability to balance their portfolio.

Business Rules

Tolerance Levels

In designing the rules, the TSO shall consider:

- reflect genuine system flexibility and user needs;
- risk proportionate to BTM
- not hinder the evolution of a liquid wholesale market
- non-discriminatory basis, particularly against Network users with small portfolios.
- The resultant costs of balancing the system not unduly excessive.
- The determination of the [relevant] [percentage]/[quantity] shall be determined individually for each class and in respect of the NDM component may alternatively, or additionally, based upon the difference between a NDM Derived Forecast and the NDM Exit Allocation.

Business Rules

Tolerance Levels

-
- The levels will be re-evaluated each [X] year(s) considering the evolution of the rationale for using tolerances in order to be reduced to 0 when the interim measure is considered not appropriate anymore (max 5 years).

Not a means to avoid Information Provision rather a tool to support the implementation of Information Provision (it's an interim measure!)

Business Rules

Tolerance Levels

-
- The tolerance level should be determined based upon portfolio class composition with a [percentage] / [quantity] basis applicable to each class (which for the avoidance of doubt may be zero) and with potentially different rules applicable for NDM demand component.

Business Rules

- Process
 - The tolerance applied shall be a price based tolerance. There is no roll over of imbalance quantity, i.e. the Network User commences the following Gas Day with an Imbalance Quantity of zero.
 - For that part of the Imbalance Quantity up to the Network User Portfolio Tolerance Quantity the price applied in the Daily Imbalance Charge will not be the Marginal Buy Price and Marginal Sell Price, rather a Tolerance Buy Price and Tolerance Sell Price
 - Where the Network Users Daily Imbalance Quantity is positive:
 - Within Tolerance Sell Price = Weighted Average Gas Price x Tolerance Sell Multiplier
 - Where the Tolerance Sell Multiplier shall be a figure which is:
 - Less than or equal to 1;
 - Greater than the Marginal Sell Price divided by the Weighted Average Gas Price.



Some Key Considerations

Tolerance Mechanism

The tolerance mechanism proposed has two levers to provide relief on the Daily Imbalance Charge:

Step

Lever

The quantity of imbalance that is subject to the marginal price is reduced by the tolerance level

• Level of tolerance

A price between the marginal price and average price (or equal to) is applied to the tolerance volume

• Price applied to tolerance

Tolerance Mechanism

Advantages of two levers

- Allows greater specification of tolerance – more accurate

Disadvantages

- More complicated than simple one lever
- Less potential harmonisation of tolerance application
 - Although only interim measure
- Greater administrative complexity

Stakeholder Views Sought

Quantity of Tolerance

Construction of Tolerance

- Have not yet specified whether volume or percentage tolerance
- Do we need to?
- If so.....

Volume Tolerance

- Favours small Users (relatively bigger proportion of portfolio)

Percentage Tolerances

- Less favourable to small users
- Easier to harmonise (although interim measure)

Stakeholder Views Sought

Discussion

- **Double lever for tolerance**
- **Volume versus percentage tolerances**
- **Specific Provision for NDM**

Further feedback sought by Wednesday 15 February to inform final formulation



Appendix

Basic Worked Example

Worked Example

Scenario:

- A Network User called “G Gas” is provided with an imbalance tolerance of 200 units for Gas Day “D”
- For these 200 units G Gas is not subject to marginal pricing

Gas Day “D”

G Gas Outcomes	Market Outcome
<ul style="list-style-type: none">• Allocated Inputs of 2,000 units onto the Balancing Zone• Allocated Offtakes of 2,250 units off the Balancing Zone	<ul style="list-style-type: none">• Average Price = 35 c/unit• Marginal Buy Price = 40 c/unit• Marginal Sell Price = 30 c/unit

So what is “G Gas Daily” Imbalance Charge

$$\begin{array}{rclcl} \text{Inputs} & - & \text{Offtakes} & = & \text{Daily Imbalance Quantity} \\ 2,000 & - & 2,250 & = & -250 \end{array}$$

G Gas has a negative Daily Imbalance Quantity meaning it must buy gas at the Marginal Buy Price

If it had no tolerance:

$$-250 \text{ units} \times 40 \text{ c/units} = 10,000\text{c to be paid to TSO}$$

But with the tolerance.....

-200 units x 35 c/units = 7,000 c (tolerance applied)

-50 units x 40 c/units = $\frac{2,000 \text{ c}}{9,000 \text{ c}}$ (outside tolerance)

Reduced exposure from tolerance = 10,000c – 9,000c = 1,000c



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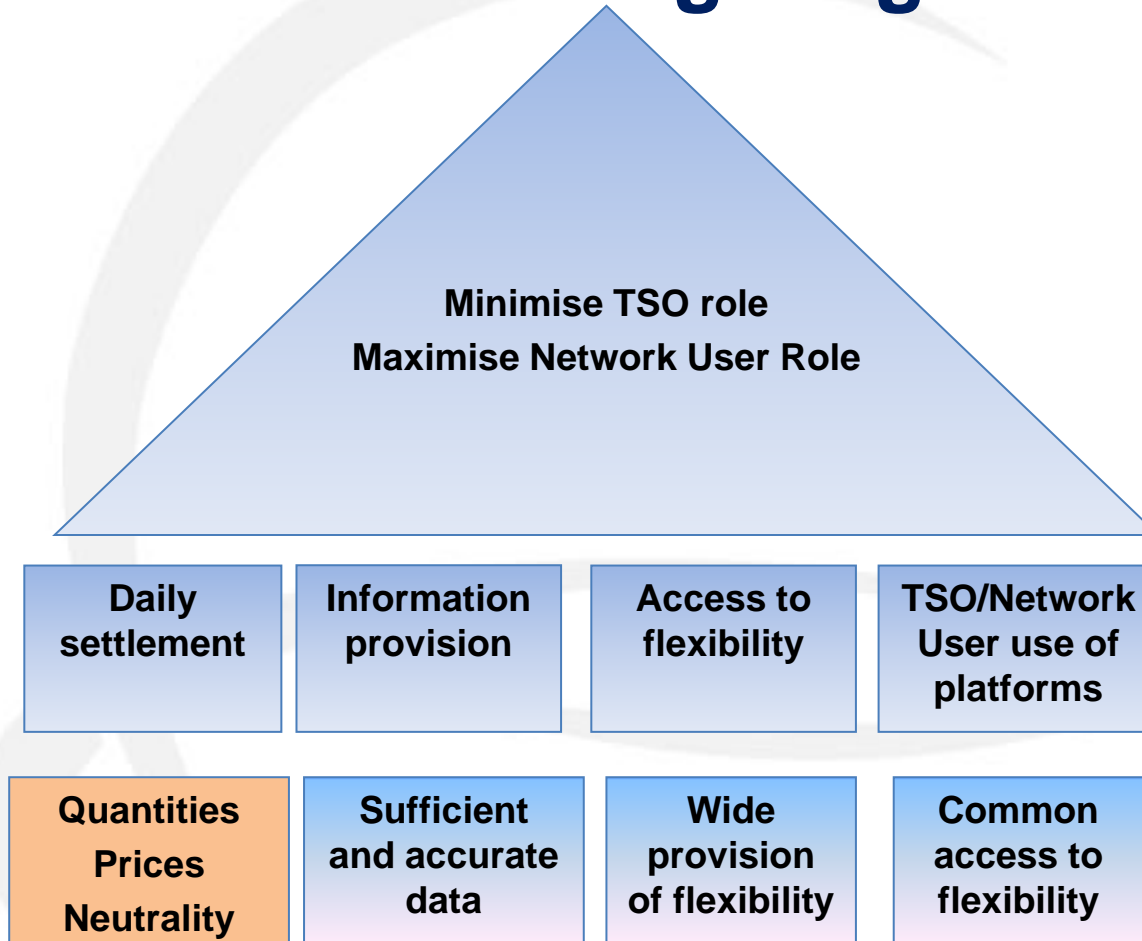
Interim steps

- Managing the transition

Nigel Sisman

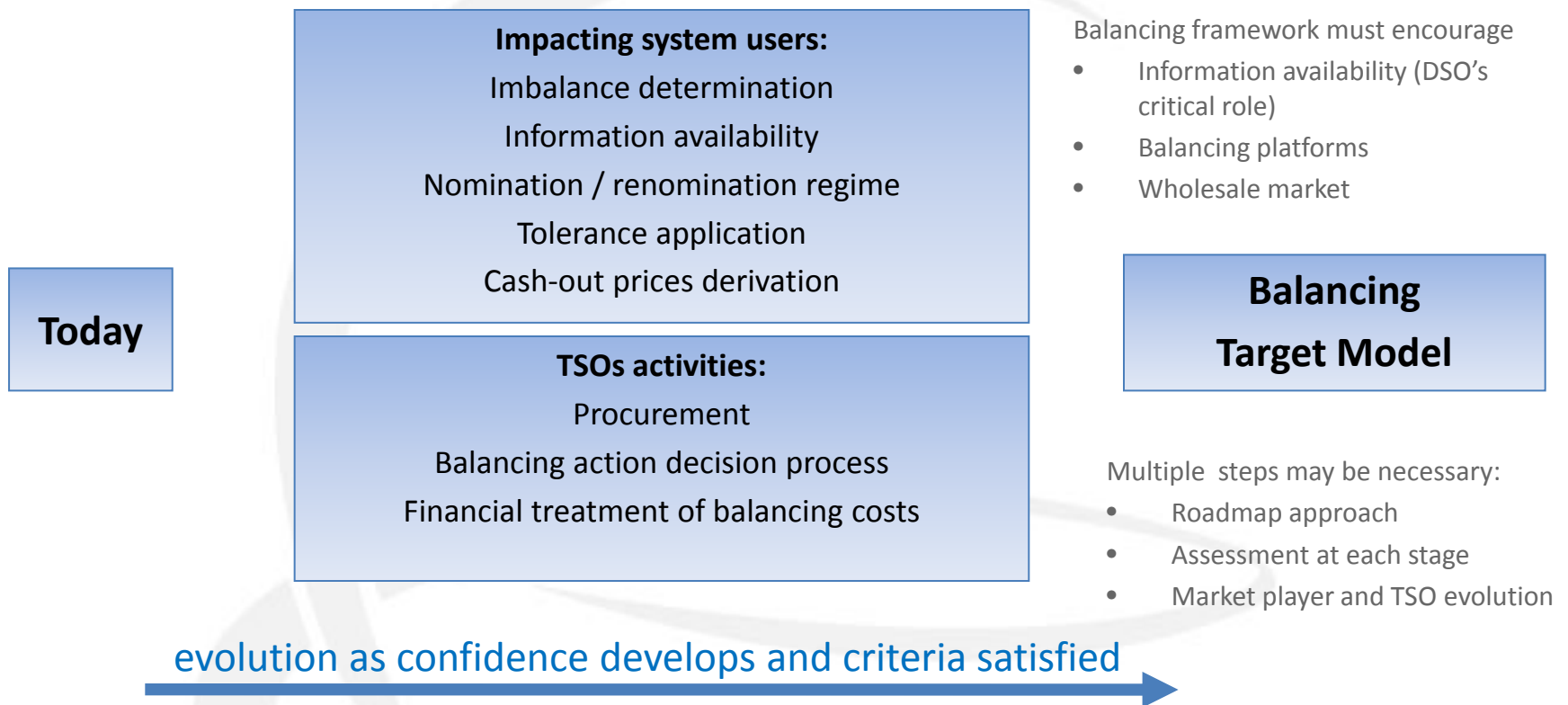
Business Area Manager, Markets

The Gas Balancing Target Model



Unwarranted risks to be mitigated so network users can manage risks and opportunities

Transition – to deliver a properly functioning regime



Aiming towards a balancing target model requires adaptation and change for both network users and TSOs

Defining routemaps towards Balancing Target Model



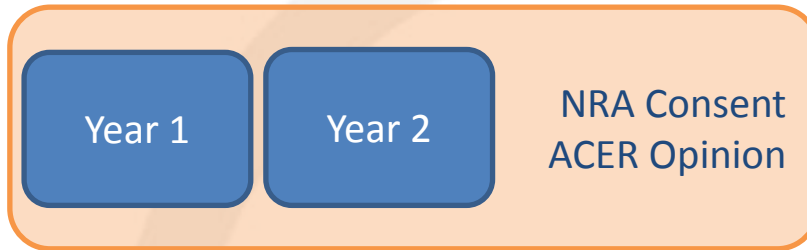
What role does the network code have to define:

the routemap?

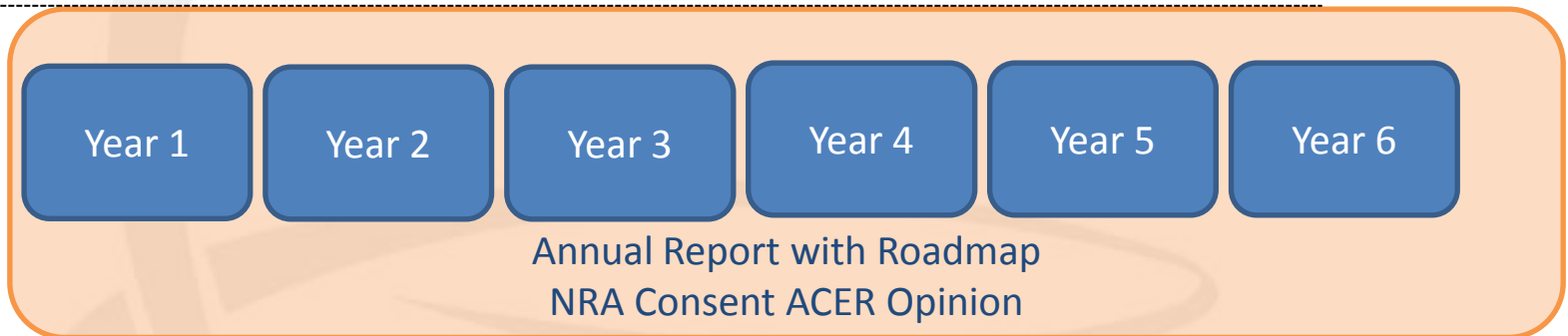
the criteria for progress from one step to the next?

Implementation timeline

No Interim Measures

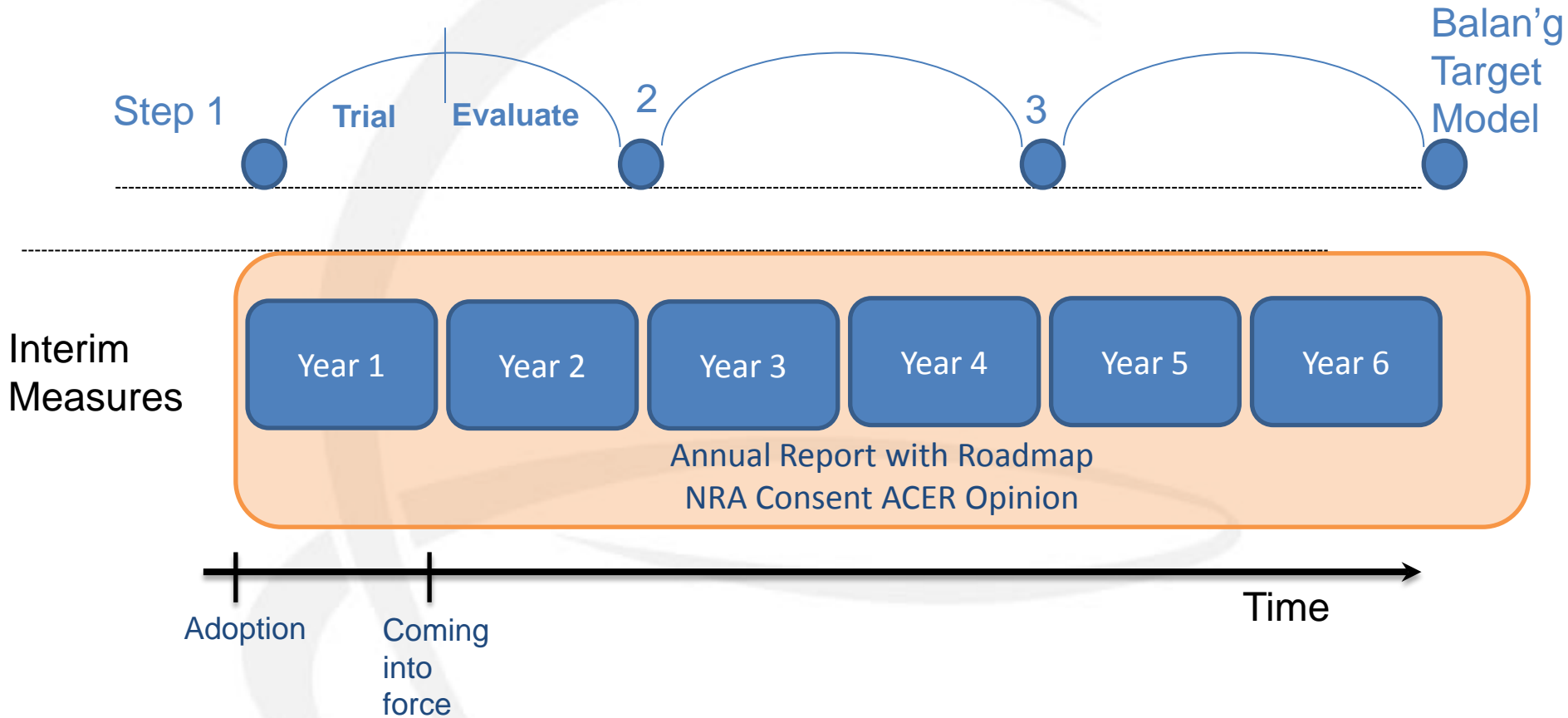


Interim Measures



Balancing target model implementation after 1 year, 2 years, or up to 6 years

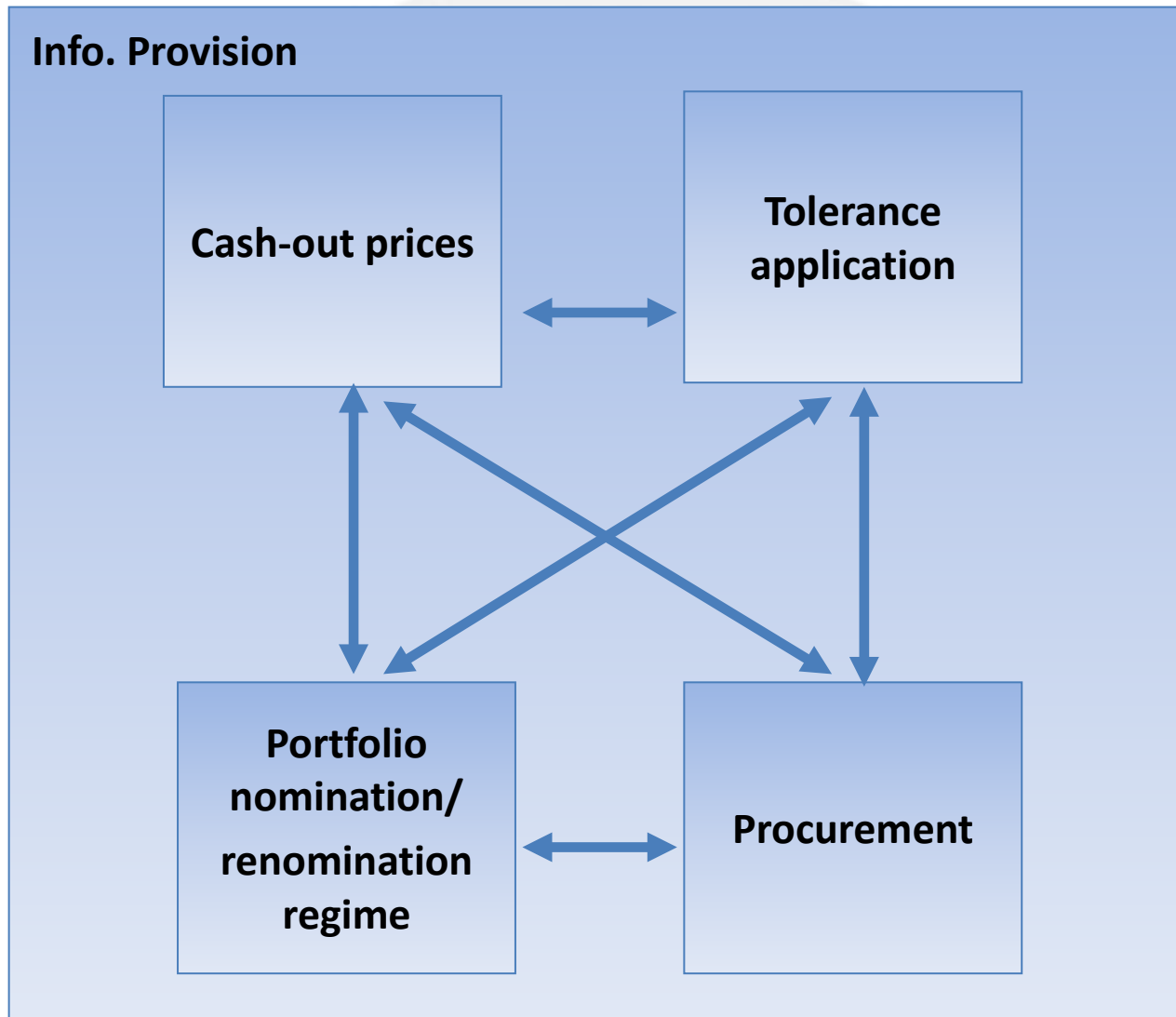
Managing the transition



Being ready to start requires NRA, TSO, stakeholder and wider actor action

Completion requires acceptance of major change and progressive evolution

Delivery of effective functioning transition



Understanding interactions is critical to define efficient and orderly transition

Use of platforms –

“Procurement is the stimulus for a short term balancing market”

Successive steps – towards full market based procurement



Procurement

Establishment of platforms for access to:

- “physical flexibility”
- “commercial” title product

Proving ground for short term balancing markets

Encourage flexibility providers to transact

Full wholesale
based
procurement¹

Open issues for resolution:

- Who to deliver platforms? TSOs or others?
- Rules/encouragement for Network Users to commit flex to platforms?
- TSO Balancing Services to be “bid into platforms”? At what prices?
- Incentives on TSOs to use title products to accelerate market maturity?

.... first step to create visibility of short term access to flexibility

... balancing platform or can we go straight to a wholesale market platform

¹Where wholesale market cannot meet requirements
balancing services may be used

Tolerance relief reduction

Successive steps – towards eradication of tolerances



Tolerance application

- Unwarranted exposures to reduce based on
- Better quality information
 - Network User forecasting ability
 - More robust cash-out price formation

No tolerances

Open issues to inform progressive reduction:

- assessment of information accuracy / best practise forecast ability?
- cash-out price robustness – measures of effectiveness of market?

Early “larger” tolerances provide a “softer landing” for network users ...

Cash out pricing


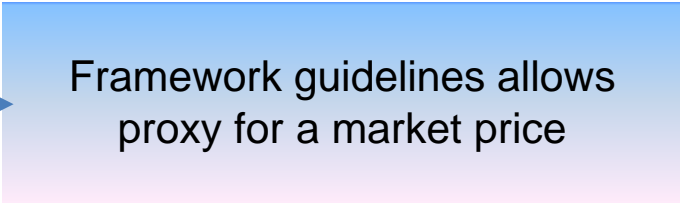
Successive steps – towards full market based pricing



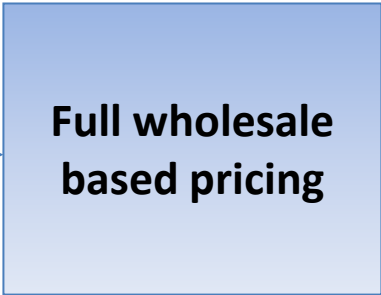
Cash-out prices



Framework guidelines allows proxy for a market price



Full wholesale based pricing



Question:

Could cash-out prices derived from TSO balancing actions (possibly on balancing platform) and on locational/temporal trades provide transitional prices?

Cash-out pricing evolution is part of the transitional package to define increasing balancing responsibility to network users

Sharing the balancing responsibility via discrete partition of the day?

Portfolio nomination/
renomination
regime

Window based approach to balancing?
Opportunity for Network Users to track demand changes?

re(nominations)
to maximise
deployment of
flexible gas

Network
Users

Nomination
window

Renomination
window

Renomination
window

TSOs

Balancing
Window

Balancing
Window

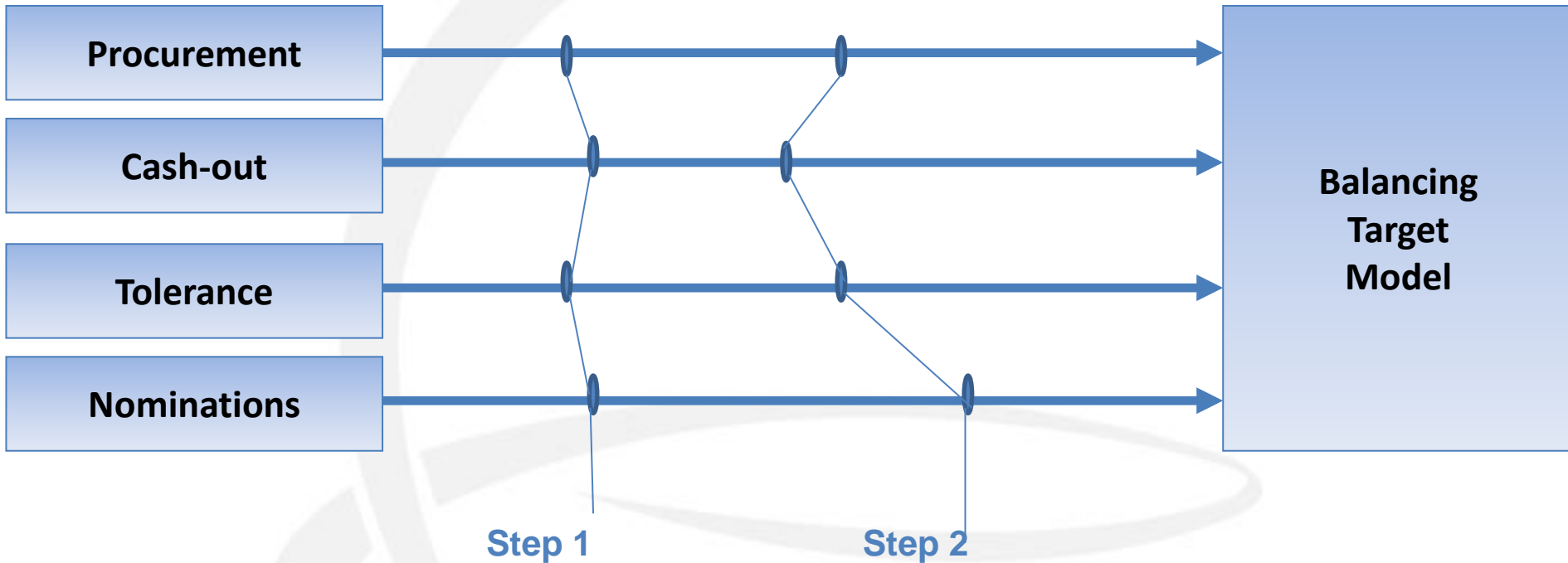
Balancing
Window

D-1

D

Stepwise evolution of the nomination regime can be used to focus liquidity at D-1 and particular windows within day D

Planning the implementation



... developing packages of changes probably the best way forward

Discussion points

- How do we develop options for each area?
- How do we construct the various steps?
- How do we define the criteria for moving one step to the next?
- How much of the above needs to be explicit in the network code text?

More feedback please by 15 February



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**39 Members and 1 Associated Partner
 in 23 EU countries**

3 Observers from EU affiliate countries
 - Gassco AS (Norway)
 - Plinacro Ltd (Croatia)
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