



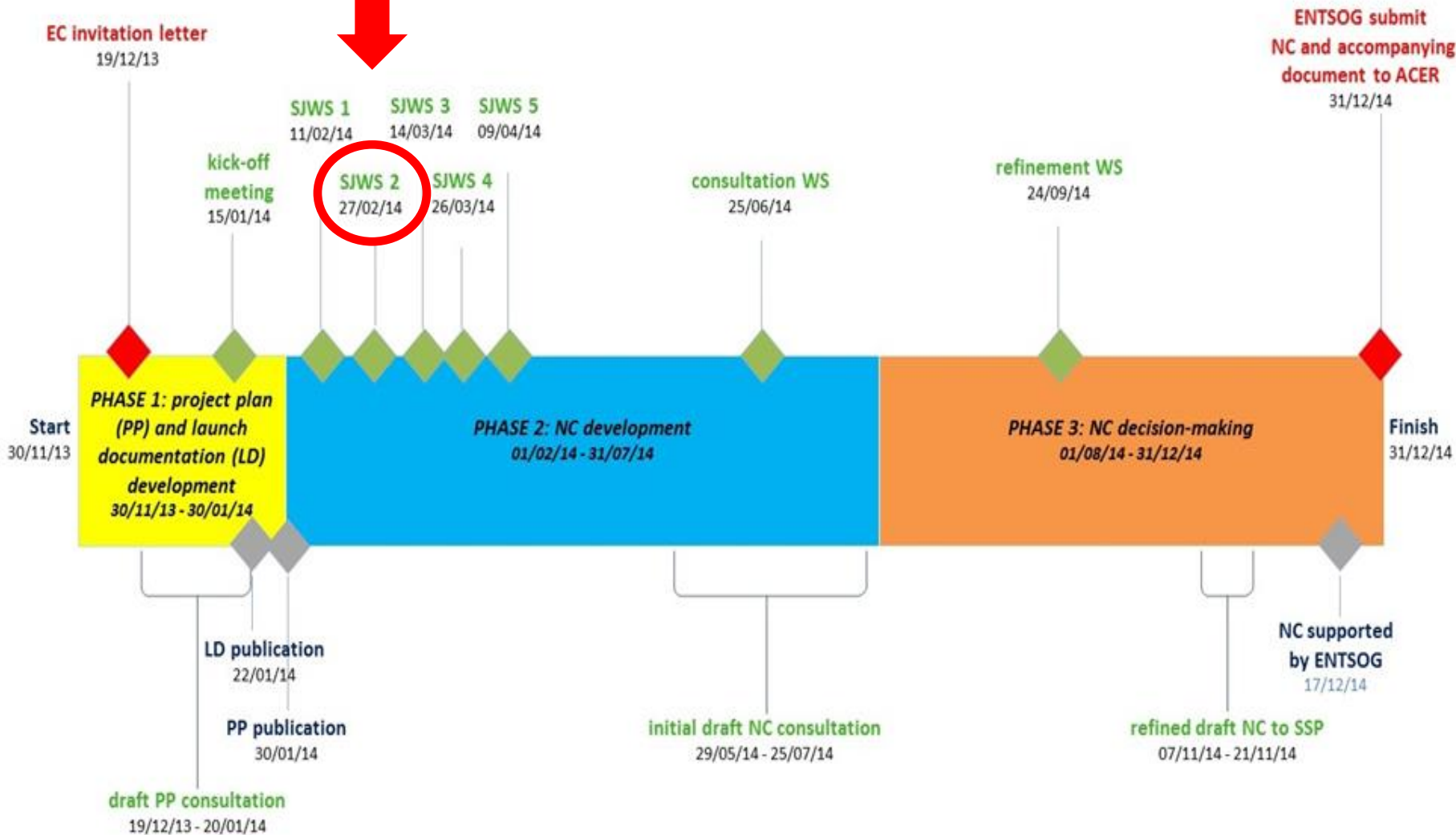
Development of the TAR NC: 2nd Stakeholder Joint Working Session

Introduction: Process Update and Meeting Objectives

Ann-Marie Colbert
ENTSO-G

TAR SJWS 2 – the 27th of February 2014

Phase 2: Network Code Development



TAR NC SJWS 2 – Meeting Objectives

- Open Discussion of Tariff Topics
 - Multipliers and Seasonal Factors
 - Cost Allocation Tasks
 - Circumstances
 - Variants
 - Cost Allocation Test
 - Implementation and Mitigating Measures
 - Transparency
 - Tariff Setting Year
- Input and suggestions welcome from Stakeholders



Development of the TAR NC: 2nd Stakeholder Joint Working Session

Multipliers & Seasonal Factors

TAR SJWS 2 – the 27th of February 2014



european network
of transmission system operators
for gas

Multipliers

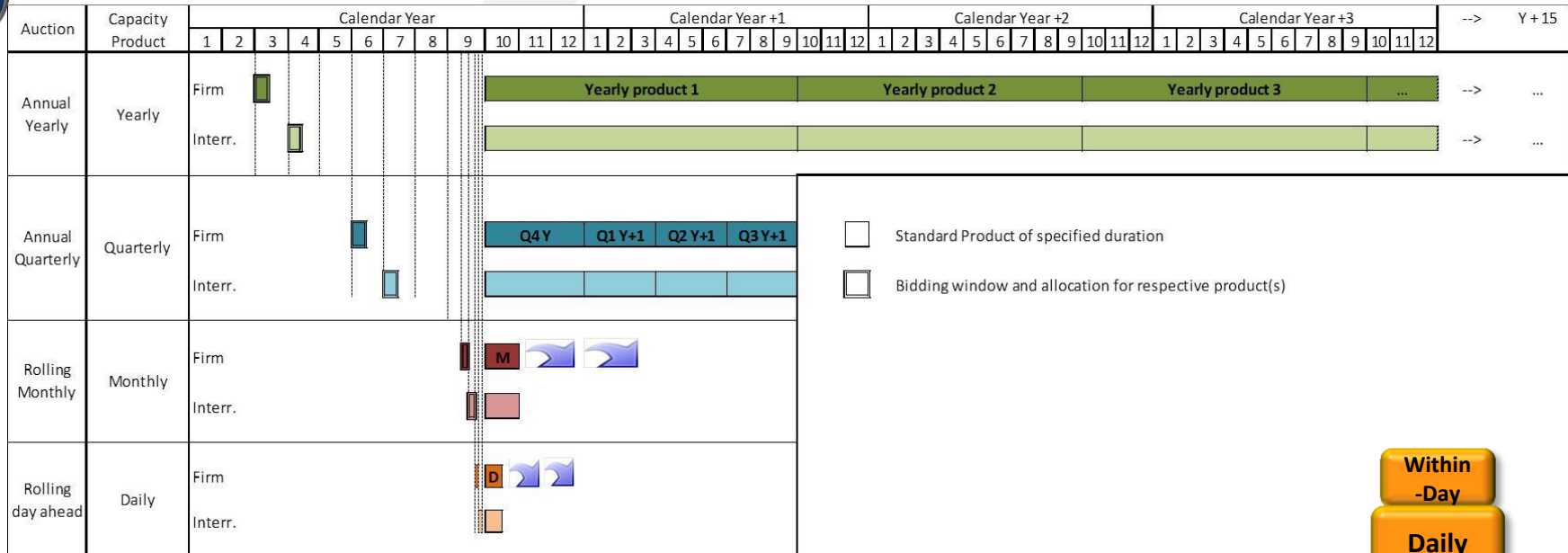
Fabrice Desjardin

GRTgaz (on behalf of ENTSOG)

Introduction – short term products

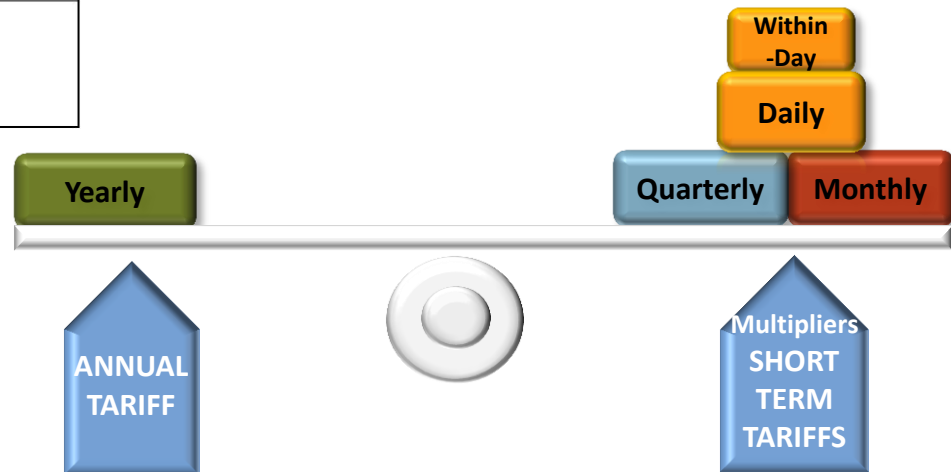
> Transmission system operators shall offer yearly, quarterly, monthly, daily and within-day standard capacity products (CAM NC).

IPs



- Standard Product of specified duration
- Bidding window and allocation for respective product(s)

Within-day products available every hour of each gas day (subject to capacity being made available).



Iterative process for annual and short term capacity pricing



Framework Guidelines Requirements

- > In determining reserve prices and the application of any multipliers that may be appropriate, NRA shall take account of the following:
 - The balance between facilitating short-term gas trading and efficient revenue recovery
 - The balance between facilitating short-term gas trading and providing long term signals for efficient investment
 - The need to ensure that multipliers (*discounts*) applied to interruptible products reflect the probability of interruption
 - The need to ensure that transport contracts signed with non-standard dates or with durations shorter than a standard annual transport contract shall not result in arbitrarily higher or lower tariffs.

- > NRAs may decide to apply multipliers. If an NRA decides not to apply multipliers reserve prices for all standard capacity products shall be set proportionately to the yearly reference price (i.e. *pro-rata temporis* which means a multiplier of one).

- > Before NRAs adopt their decision regarding the application of multipliers, NRAs shall consult with NRAs of adjacent Member States and relevant stakeholders. In adopting their decision, NRAs shall take account of the adjacent NRAs' opinions.

Framework Guidelines Requirements

- > Quarterly and monthly firm standard capacity products
 - The TAR NC shall set out that the reserve prices for quarterly and monthly firm standard capacity products shall be set by reference to the yearly reference price using the following formula: $P_{st} = m \times (p_y/365) \times d$

- > Daily and within-day firm standard capacity products
 - The TAR NC shall set out that the reserve prices for daily and within-day firm standard capacity products shall be set by reference to the yearly reference price using the following formulas: $P_{st} = m \times (p_y/365)$ or $P_{st} = m \times (p_y/8760) \times h$

- > Allowed ranges for multipliers dependent on the presence/absence of congestion

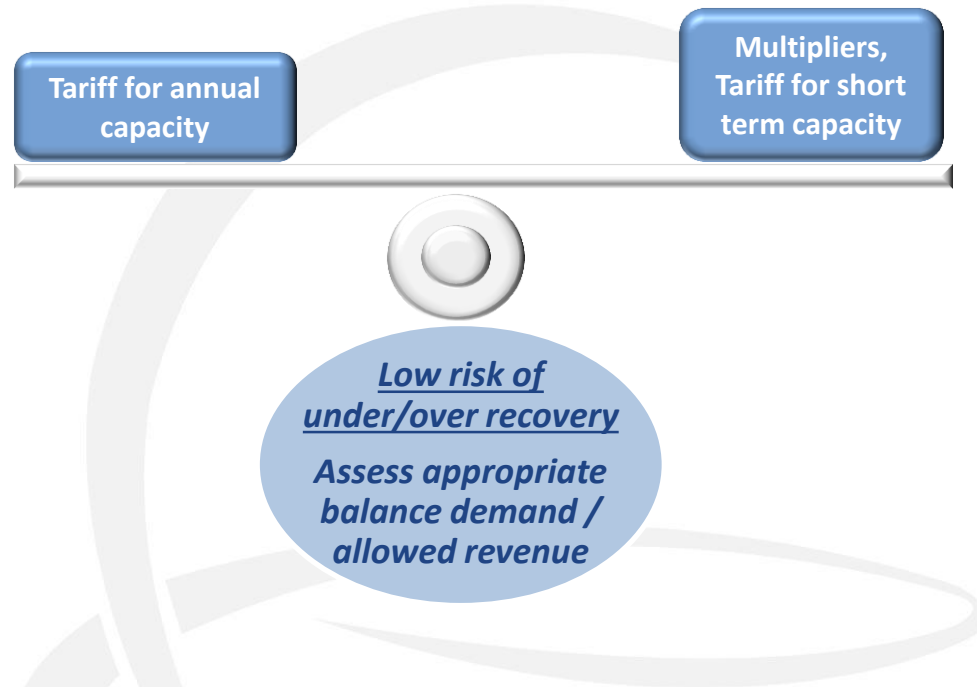
Duration of the short term product	Multiplier range <u>with</u> congestion	Multiplier range <u>without</u> congestion
Quarterly and monthly	0.5 – 1	0.5 – 1.5
Daily and within-day	0 – 1	0 – 1.5

Framework Guidelines Requirements

- > Congestion occurs at an IP if demand exceeded offer at the reserve price in the course of capacity allocation procedures in the year covered by ACER's monitoring report for products for use in either that year or in one of the subsequent two years
 - (a) for at least three firm capacity products with a duration of one month or
 - (b) for at least two firm capacity products with a duration of one quarter or
 - (c) for at least one firm capacity product with a duration of one year or more or
 - (d) where no firm capacity product with a duration of one month or more has been offered.

- > When the NRA decides to allow multipliers, the NRA shall take into account whether the TSO has offered additional capacity that has been paid by incentives (CMPs).

Risk of proposed multipliers ranges

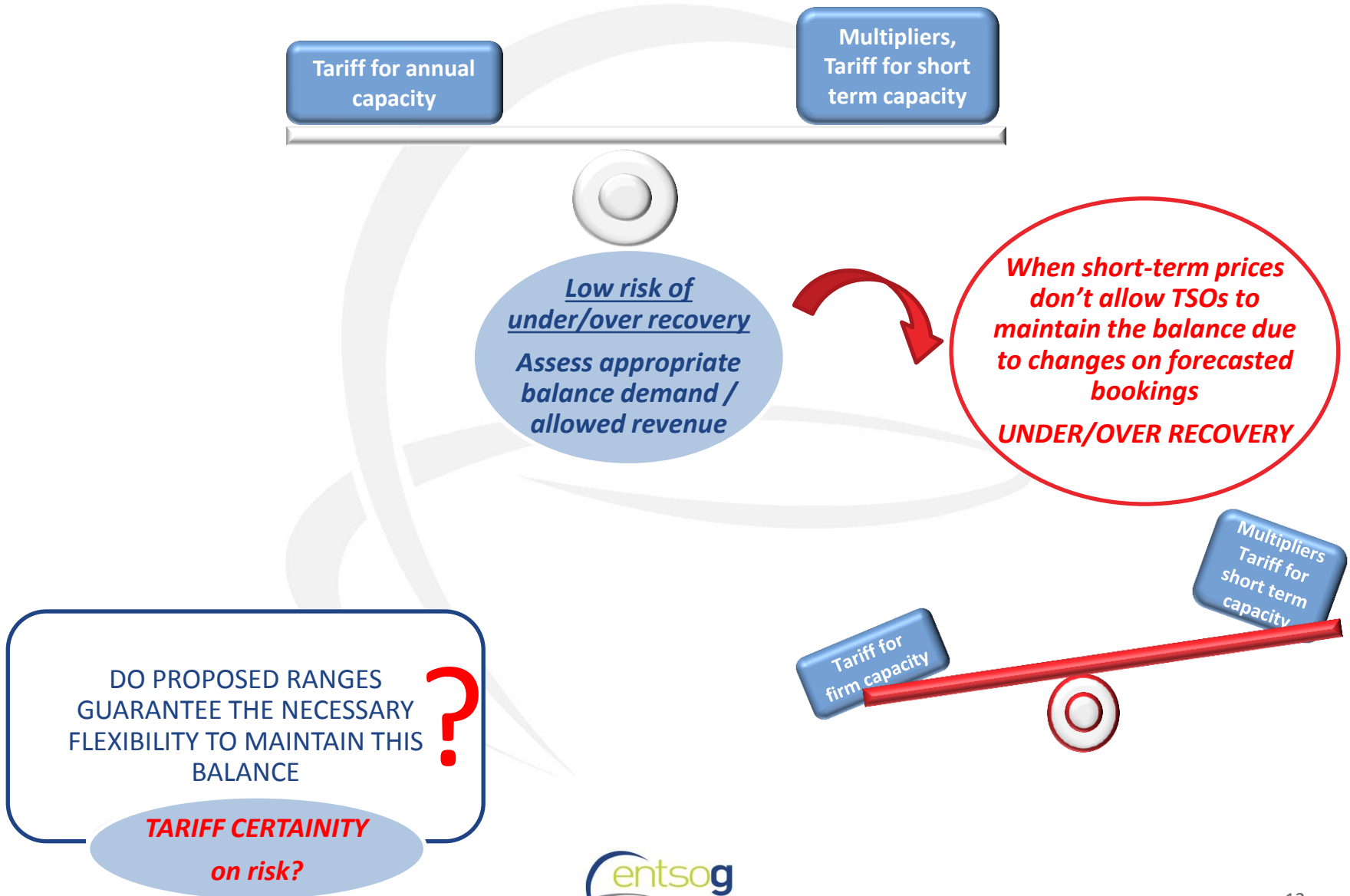


DO PROPOSED RANGES
GUARANTEE THE NECESSARY
FLEXIBILITY TO MAINTAIN THIS
BALANCE



TARIFF CERTAINTY
on risk?

Risk of proposed multipliers ranges



Risk of proposed multipliers ranges



Low risk of under/over recovery
 Assess appropriate balance demand / allowed revenue

When short-term prices don't allow TSOs to maintain the balance due to changes on forecasted bookings
UNDER/OVER RECOVERY

DO PROPOSED RANGES GUARANTEE THE NECESSARY FLEXIBILITY TO MAINTAIN THIS BALANCE ?

Multipliers higher than 1.5 could be needed in some cases



The shorter the duration of the product, the higher value it has for shippers.
 Higher multipliers for D, WD products are reflective of the value of the product

The combination of imbalanced recovery and fixed cap for multipliers will imply increase of annual tariffs

Solution for under recoveries: increase annual firm capacity tariff or short term multipliers

How to calculate the reserve prices

- > The NC on Tariffs shall include mathematical formulations where relevant

P_{st} is the reserve price of a short-term daily product,

m is the multiplier corresponding to the standard product

p_y is price of yearly product,

d is duration of short-term product in days,

h is duration in remaining hours of the gas day (within-day)

For quarterly firm capacity products

$$P_{st} = m_Q \times (p_y/365) \times d$$

For monthly firm capacity products

$$P_{st} = m_M \times (p_y/365) \times d$$

For daily firm capacity products

$$P_{st} = m_D \times (p_y/365)$$

For within-day firm capacity products

$$P_{st} = m_{WD} \times (p_y/8760) \times h$$

For leap years, the formulas shall be modified accordingly (366 days, 8784 hours)

How to calculate the reserve prices - Example

- > Calculation of the reserve price of a monthly product for July 2014

Annual Tariff	$p_y = 1 \text{ €/kWh/h/year}^*$
Monthly multiplier	$m_M = 0.5$
Duration in days	$d = 31 \text{ days}$

For monthly firm capacity products

$$P_{st} = m_M \times (p_y/365) \times d$$

$$P_{st} = 0.5 \times (1/365) \times 31$$

$$P_{st} = 0.0425 \text{ €/kWh/h}$$

* €/kWh/d/year is also a valid unit



european network
of transmission system operators
for gas

Seasonal Factors

Emmanuel Bouquillion
TIGF (on behalf of ENTSOG)

Framework Guidelines Requirements

- > Seasonal factors may apply to quarterly, monthly, daily and within-day products
- > Seasonal factors shall only apply if they improve the gas transmission system's efficient use and cost reflectivity of reserve prices.
- > When seasonal factors are applied in addition to multipliers, the combination of multipliers and seasonal factors for any standard capacity product with a duration of less than one year may for some seasons be higher than 1.5 or lower than 0.5.
- > The arithmetic mean of the products of multipliers and seasonal factors shall over the gas year not be lower than 0.5 and shall not exceed 1.5.
- > The Network Code on Tariffs shall develop a methodology for determining seasonal factors.

ENTSOG's INITIAL VIEW

- > The purpose of seasonal factors is to have reserve prices of short term products that evolve proportionally to the rate of transmission infrastructure usage (or booking), i.e. high factors applied to seasons with high flow (bookings) probability and low factors applied in seasons with low flow (bookings) probability.
- ✓ Seasonal factors provide incentives to shippers to use capacity efficiently
 - Through a range of seasonal factors, incentives are provided that may encourage a change in gas flows from high demand periods to lower ones, where possible. Thus, the use of capacity products becomes more efficient.
- ✓ Seasonal factors reduce the negative impact that profiled capacity bookings may have on revenue and tariff stability.

ENTSOG's INITIAL PROPOSAL

- > Seasonal factors shall be proposed by TSOs to NRAs if they improve the efficient use of the transmission system and cost reflectivity of reserve prices.
- > ENTSOG suggests that the seasonal factors are based on months (i.e. having one seasonal factor per calendar month).
- > Other seasonal factors such as quarterly, daily or within-day could be derived from the monthly values.
 - Quarterly seasonal factors -> average of monthly seasonal factors
 - Daily and within-day seasonal factors → same level as monthly seasonal factors

ENTSOG's INITIAL PROPOSAL

- 1) Divide the year in 'n' periods (e.g. 12 months) and calculate the **system usage** for each of these periods

Month	System Usage
Jan	200
Feb	180
Mar	145
April	100
May	80
June	70
July	65
Aug	65
Sept	75
Oct	110
Nov	140
Dec	170

ENTSOG's INITIAL PROPOSAL

- 1) Divide the year in 'n' periods (e.g. 12 months) and calculate the **system usage** for each of these periods

Per IP or
group of IPs

Flow profiles or
Booking profiles
historic /forecasts

Month	System Usage
Jan	200
Feb	180
Mar	145
April	100
May	80
June	70
July	65
Aug	65
Sept	75
Oct	110
Nov	140
Dec	170

ENTSOG's INITIAL PROPOSAL

- 1) Divide the year in 'n' periods (e.g. 12 months) and calculate the **system usage** for each of these periods

Month	System Usage
Jan	200
Feb	180
Mar	145
April	100
May	80
June	70
July	65
Aug	65
Sept	75
Oct	110
Nov	140
Dec	170

ENTSOG's INITIAL PROPOSAL

- 1) Divide the year in 'n' periods (e.g. 12 months) and calculate the **system usage** for each of these periods
- 2) Sum up all system usage over one year

Month	System Usage
Jan	200
Feb	180
Mar	145
April	100
May	80
June	70
July	65
Aug	65
Sept	75
Oct	110
Nov	140
Dec	170
Σ	1400

ENTSOG's INITIAL PROPOSAL

- 1) Divide the year in 'n' periods (e.g. 12 months) and calculate the **system usage** for each of these periods
- 2) Sum up all system usage over one year
- 3) Divide the system usage of each period by the sum of the year to get the **usage rate**

Month	System Usage	Usage rate
Jan	200	0.14
Feb	180	0.13
Mar	145	0.10
April	100	0.07
May	80	0.06
June	70	0.05
July	65	0.05
Aug	65	0.05
Sept	75	0.05
Oct	110	0.08
Nov	140	0.10
Dec	170	0.12
Σ	1400	1

ENTSOG's INITIAL PROPOSAL

- 1) Divide the year in 'n' periods (e.g. 12 months) and calculate the **system usage** for each of these periods
- 2) Sum up all system usage over one year
- 3) Divide the system usage of each period by the sum of the year to get the **usage rate**
- 4) To calculate the **primary factor (PF)** to be applied for each period, multiply the usage rate by 'n' (or divide by '1/n').

Month	System Usage	Usage rate	Relative factor 1/n	Primary Factor PF
Jan	200	0.14	0.083	1.71
Feb	180	0.13	0.083	1.54
Mar	145	0.10	0.083	1.24
April	100	0.07	0.083	0.86
May	80	0.06	0.083	0.69
June	70	0.05	0.083	0.60
July	65	0.05	0.083	0.56
Aug	65	0.05	0.083	0.56
Sept	75	0.05	0.083	0.64
Oct	110	0.08	0.083	0.94
Nov	140	0.10	0.083	1.20
Dec	170	0.12	0.083	1.46
Σ	1400	1		1.00

ENTSOG's INITIAL PROPOSAL

- 1) Divide the year in 'n' periods (e.g. 12 months) and calculate the **system usage** for each of these periods
- 2) Sum up all system usage over one year
- 3) Divide the system usage of each period by the sum of the year to get the **usage rate**
- 4) To calculate the **primary factor (PF)** to be applied for each period, multiply the usage rate by 'n' (or divide by '1/n').
- 5) To calculate the **seasonal factor (SF)**, apply the formula:

$$SF = PF^s$$

where 's' ≥ 0

(example in table 's' = 2)

Month	System Usage	Usage rate	Relative factor 1/n	Primary Factor PF	Seasonal factor SF (s=2)
Jan	200	0.14	0.083	1.71	2.94
Feb	180	0.13	0.083	1.54	2.38
Mar	145	0.10	0.083	1.24	1.54
April	100	0.07	0.083	0.86	0.73
May	80	0.06	0.083	0.69	0.47
June	70	0.05	0.083	0.60	0.36
July	65	0.05	0.083	0.56	0.31
Aug	65	0.05	0.083	0.56	0.31
Sept	75	0.05	0.083	0.64	0.41
Oct	110	0.08	0.083	0.94	0.89
Nov	140	0.10	0.083	1.20	1.44
Dec	170	0.12	0.083	1.46	2.12
Σ	1400	1		1.00	1.16

ENTSOG's INITIAL PROPOSAL

5) To calculate the **seasonal factor**, apply the formula: $SF = PF^S$

Seasonal factor SF (s=2)	Multiplier	Multiplier x Seasonal factor
2.94	1.5	4.41
2.38	1.5	3.57
1.54	1.5	2.32
0.73	1.5	1.10
0.47	1.5	0.71
0.36	1.5	0.54
0.31	1.5	0.47
0.31	1.5	0.47
0.41	1.5	0.62
0.89	1.5	1.33
1.44	1.5	2.16
2.12	1.5	3.18
1.16	1.5	1.7

ENTSOG's INITIAL PROPOSAL

5) To calculate the **seasonal factor**, apply the formula: $SF = PF^S$

6*) **Correction step** to adjust the level in order to remain within the range allowed by the NRA of the average during the year (when needed)

Corrected Seasonal Factor = Initial Seasonal Factor x correction factor (1.5/1.7 in the example)

Seasonal factor SF (s=2)	Multiplier	Multiplier x Seasonal factor	Corrected SF $SF \times \frac{\text{allowed cap}}{1.7}$
2.94	1.5	4.41	2.53
2.38	1.5	3.57	2.05
1.54	1.5	2.32	1.33
0.73	1.5	1.10	0.63
0.47	1.5	0.71	0.41
0.36	1.5	0.54	0.31
0.31	1.5	0.47	0.27
0.31	1.5	0.47	0.27
0.41	1.5	0.62	0.36
0.89	1.5	1.33	0.77
1.44	1.5	2.16	1.24
2.12	1.5	3.18	1.83
1.16	1.5	1.7	1.0

ENTSOG's INITIAL PROPOSAL

5) To calculate the **seasonal factor**, apply the formula: $SF = PF^S$

6*) **Correction step** to adjust the level in order to remain within the range allowed by the NRA of the average during the year (when needed)

Corrected Seasonal Factor = Initial Seasonal Factor x correction factor (1.5/1.7 in the example)

7*) **Rounding step** (optional)

Seasonal factor SF (s=2)	Multiplier	Multiplier x Seasonal factor	Corrected SF $SF \times \frac{\text{allowed cap}}{1.7}$	Rounded Seasonal factor SF
2.94	1.5	4.41	2.53	2.5
2.38	1.5	3.57	2.05	2.1
1.54	1.5	2.32	1.33	1.3
0.73	1.5	1.10	0.63	0.6
0.47	1.5	0.71	0.41	0.4
0.36	1.5	0.54	0.31	0.3
0.31	1.5	0.47	0.27	0.3
0.31	1.5	0.47	0.27	0.3
0.41	1.5	0.62	0.36	0.4
0.89	1.5	1.33	0.77	0.8
1.44	1.5	2.16	1.24	1.2
2.12	1.5	3.18	1.83	1.8
1.16	1.5	1.7	1.0	

ENTSOG's INITIAL PROPOSAL

5) To calculate the **seasonal factor**, apply the formula: $SF = PF^S$

6*) **Correction step** to adjust the level in order to remain within the range allowed by the NRA of the average during the year (when needed)

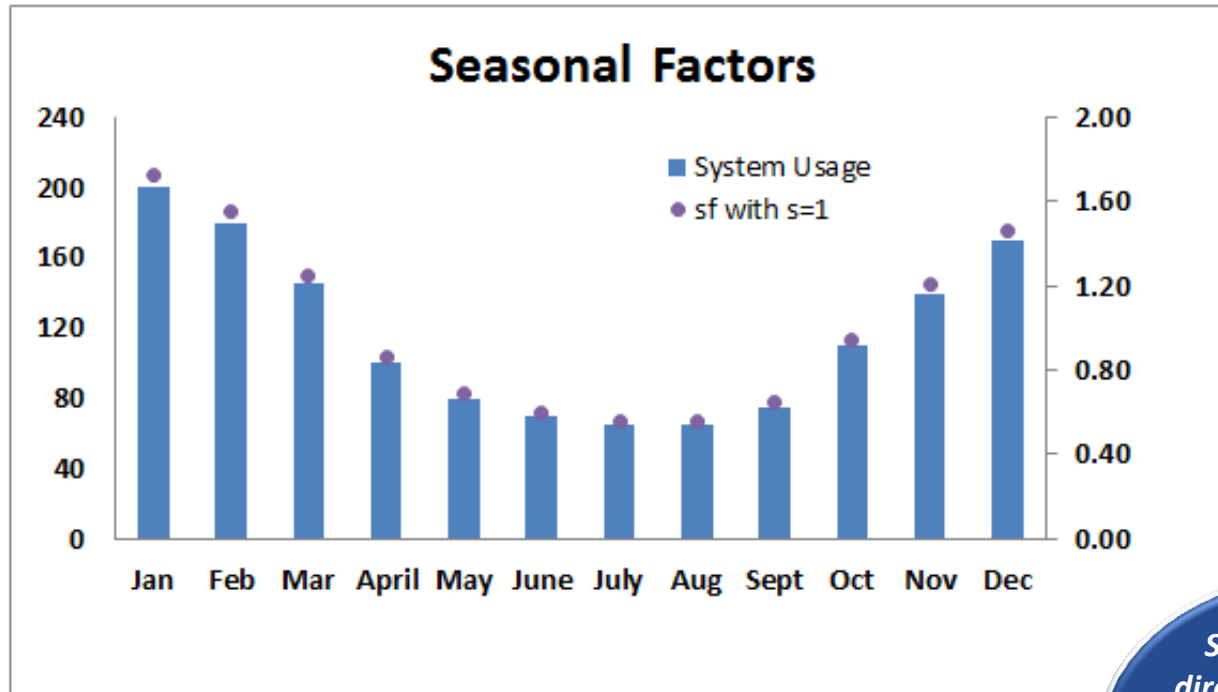
Corrected Seasonal Factor = Initial Seasonal Factor x correction factor (1.5/1.7 in the example)

7*) **Rounding step** (optional)

Seasonal factor SF (s=2)	Multiplier	Multiplier x Seasonal factor	Corrected SF $SF \times \frac{\text{allowed cap}}{1.7}$	Rounded Seasonal factor SF
2.94	1.5	4.41	2.53	2.5
2.38	1.5	3.57	2.05	2.1
1.54	1.5	2.32	1.33	1.3
0.73	1.5	1.10	0.63	0.6
0.47	1.5	0.71	0.41	0.4
0.36	1.5	0.54	0.31	0.3
0.31	1.5	0.47	0.27	0.3
0.31	1.5	0.47	0.27	0.3
0.41	1.5	0.62	0.36	0.4
0.89	1.5	1.33	0.77	0.8
1.44	1.5	2.16	1.24	1.2
2.12	1.5	3.18	1.83	1.8
1.16	1.5	1.7	1.0	

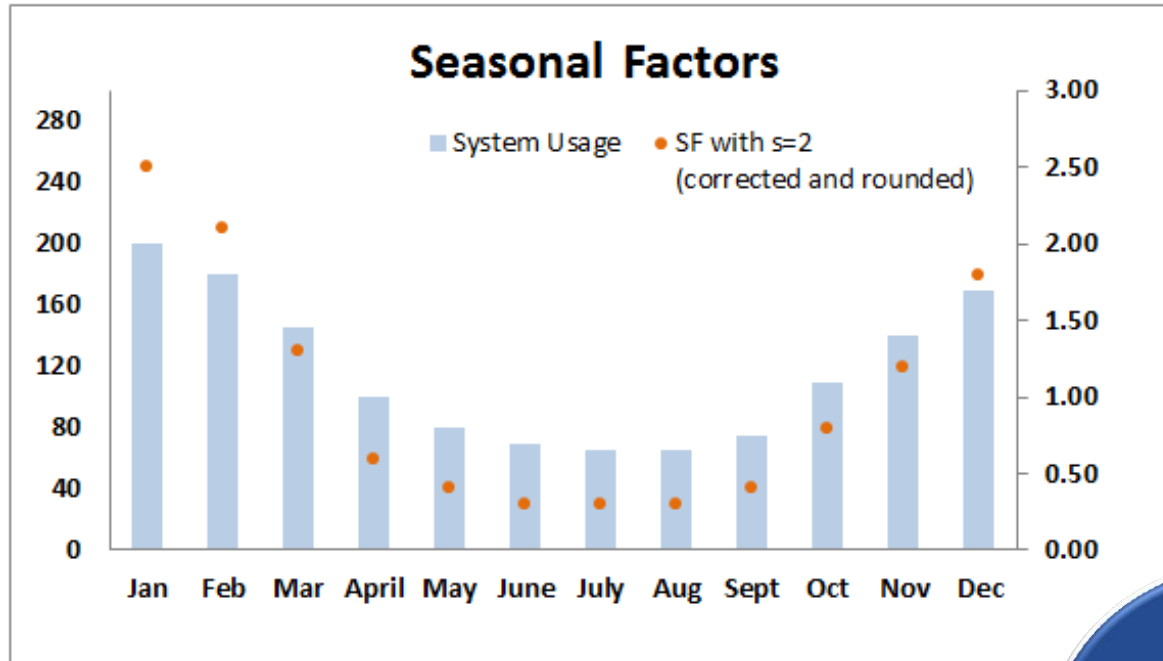
Note
Some safeguards provisions are needed for extreme cases (e.g. in case of zero or very low flows for one month - a minimum value will be set)

ENTSOG's INITIAL PROPOSAL



$s = 1$
Seasonal factors
directly proportional
to the use of the
system
 $SF = \text{usage rate} /$
 average usage

ENTSOG's INITIAL PROPOSAL



*$s = 2$
is applied to
penalize/incentivize
more clearly the
months that deviate
the most from a flat
usage*

Level of the parameter 's'

$0 < s < 1$ could be applied to 'soften' seasonal factors – only for cases where flow changes are extreme between the different periods

How to calculate the reserve prices

- > The NC on Tariffs shall include mathematical formulations where relevant for the underlying provisions.

P_{st} is price of a short-term daily product,

m is the multiplier corresponding to the standard product

sf is the seasonal factor corresponding to the period

p_y is price of yearly product,

d is duration of short-term product in days,

h is duration in remaining hours of the gas day (within-day)

For quarterly firm capacity products

$$P_{st} = (m_Q \times sf_Q) \times (p_y/365) \times d$$

For monthly firm capacity products

$$P_{st} = (m_M \times sf_M) \times (p_y/365) \times d$$

For daily firm capacity products

$$P_{st} = (m_D \times sf_D) \times (p_y/365)$$

For within-day firm capacity products

$$P_{st} = (m_{WD} \times sf_{WD}) \times (p_y/8760) \times h$$

For leap years, the formulas shall be modified accordingly (366 days, 8784 hours)

How to calculate the reserve prices - Example

- > Calculation of the reserve price of a monthly product for July 2014 including seasonal factors

Annual Tariff	$p_y = 1 \text{ €/kWh/h/year}^*$
Monthly multiplier	$m_M = 0.5$
Seasonal factor for July	$sf = 0.6$
Duration in days	$d = 31 \text{ days}$

For monthly firm capacity products

$$P_{st} = m_M \times sf \times (p_y/365) \times d$$

$$P_{st} = 0.5 \times 0.6 \times (1/365) \times 31$$

$$P_{st} = 0.0255 \text{ €/kWh/h}$$

* €/kWh/d/year is also a valid unit



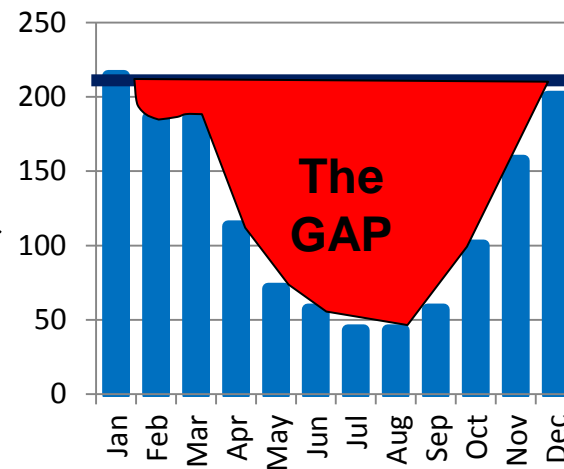
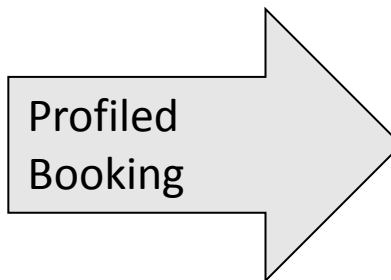
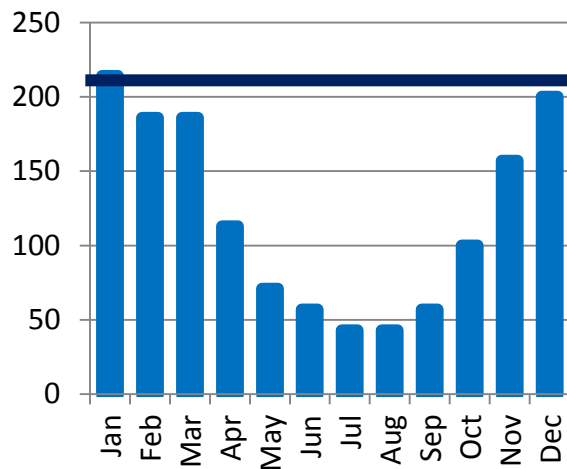
european network
of transmission system operators
for gas

Thank you

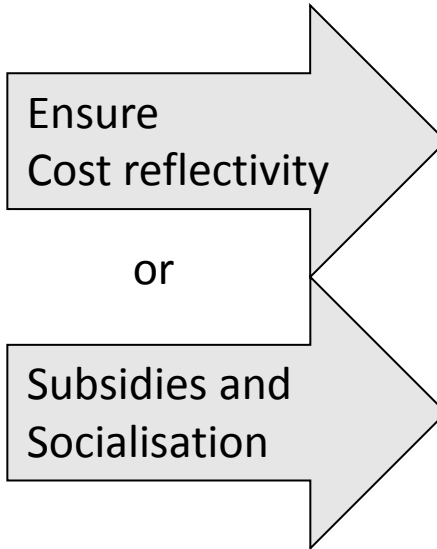


Tariff NC
GLE view on
Seasonal Factors and Multipliers

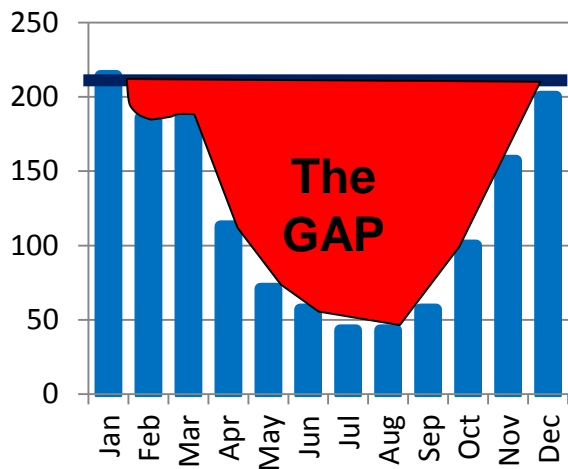
February 2014



In order to facilitate cross border trade, network users have the ability to book profiled (short term) on quarterly, monthly or daily basis.
The network code has to deal with the consequences of potential underrecovery.



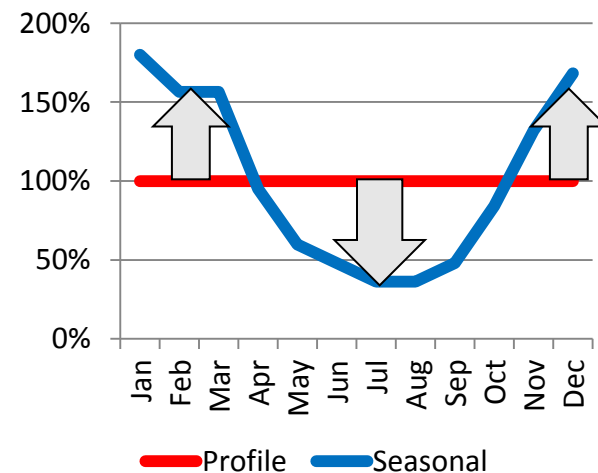
Ensure cost reflectivity



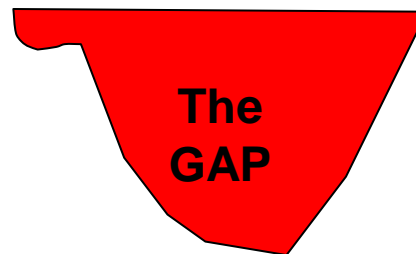
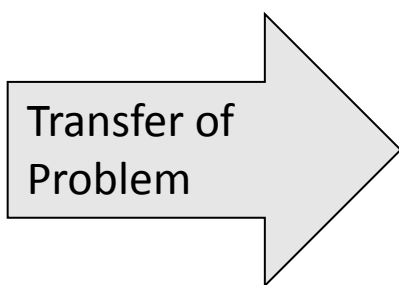
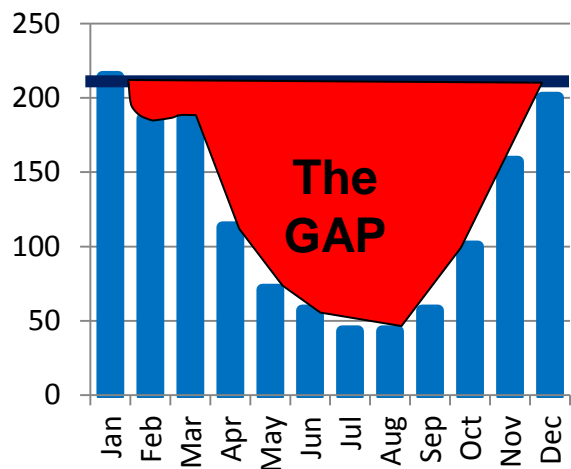
Setting the tariff simply based on average use of capacity would undermine longterm booking and would not deliver any signal for efficient use.

↪ Something more intelligent needed

Seasonal Factors are a proper instrument to incentivise efficient use of network and to deliver a signal for the congestion and/or value of capacity at given time. Seasonal factors in combination with reasonable defined multipliers can ensure in addition cost coverage for the TSO.



Cross subsidies and socialisation



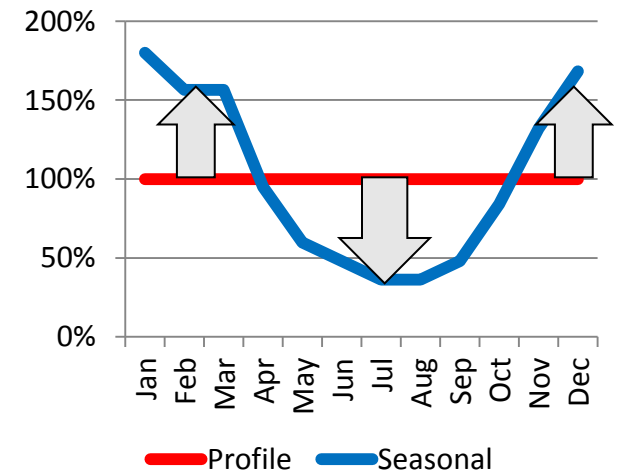
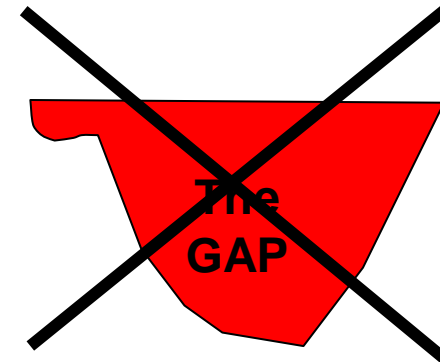
Cost not earned at cross border points have to be earned elsewhere or will be subject of revenue recovery (which is pretty much the same).

Justified if the benefits of the transfer exceed the burdens.

Well, we have some doubts!

The combination of Seasonal Factors and well defined Multipliers deliver balanced solution:

- Balanced price for short term and long term bookings
- Clear signal for efficient use of capacity
- Cost reflective solution dealing with consequences at point of origin instead of problem-transfer
- Network users can find individual optimum of short and long term bookings
- Fair allocation of risk



A stylized, light blue globe is positioned in the background on the left side of the slide. It features several curved lines representing latitude and longitude, creating a grid-like pattern over a circular shape.

Comments on Multipliers and Seasonal Factors

**ENTSOG 2nd SJWS on Tariff NC
Brussels, 27 February 2014**

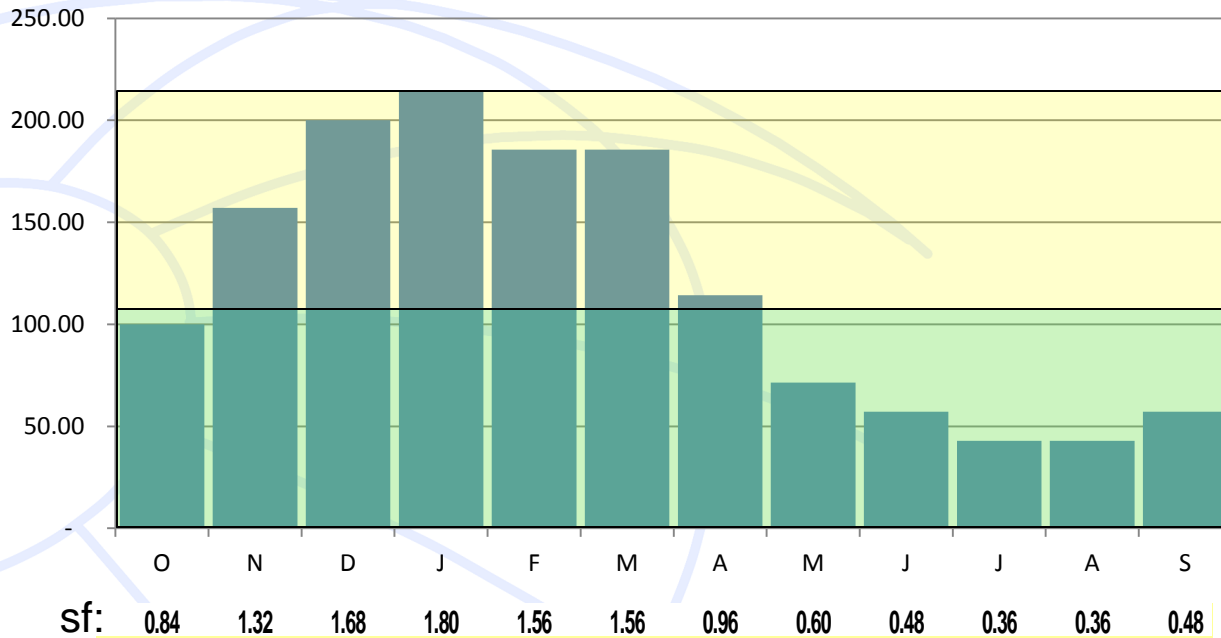
Kees Bouwens, ExxonMobil

- **Tariff NC should find the right balance between the annual reserve price and the pricing of short-term capacity products**
 - Avoid cross-subsidies and discrimination of users that book annual capacity and those that book short-term products
 - Provide long-term investment signals
 - Facilitate short term trading
- **Seasonal Factors and Multipliers help to set a balanced price for short-term products at IPs with a strong seasonal utilization**
 - Pure proportional pricing unduly favours short-term products
- **This requires that annual reserve price is determined by dividing allowed revenue by peak capacity booking (not average booking)**
 - Using average booked capacity would make the annual capacity product over-priced and distort the balance

Multipliers and Seasonal Factors



Seasonal flow profile
(page 50 of Tariff Launch Documentation)



multiplier: 1.40

Based on average demand the annual price would be 180;
this approach would conflict with the overarching goals

*Charges for network user
with flat profile:*

Annual capacity charge: 100 **100**
(based on peak demand)

Profiled booking charge: 56 **100**
(proportional pricing)

with seasonal factors: 71 **100**

with sf and multiplier: 100 **140**

& optimized booking: 86 **140**
(~50% annual capacity product)

- **Multipliers and Seasonal Factors may help to set a balanced price for short-term products**
 - As such they improve the system's efficient use and cost-reflectivity, while avoiding discrimination and cross-subsidies
- **At IPs with strong seasonal utilization the multiplier should be ≥ 1**
 - FG suggest that congestion may provide a similar incentive and override multiplier > 1
- **Multiplier < 1 needs further discussions**
 - With congestion, the market should help to set a balanced price for short-term products
 - Without congestion, the interests of users with long-term capacity should be considered

Thank you for your attention !



Development of the TAR NC: 2nd Stakeholder Joint Working Session

Cost Allocation Task II

TAR SJWS 2 – the 27th of February 2014



Development of the TAR NC: 2nd Stakeholder Joint Working Session

Cost Allocation – Circumstances and Methodology Assessment

Colin Hamilton

National Grid (on behalf of ENTSOG)

TAR SJWS 2 – the 27th of February 2014

Circumstances for selecting Primary Methodologies

Framework Guideline Requirement:

In determining the Network Code on Tariffs, ENTSOG shall further elaborate on the circumstances which should be taken into account in selecting a primary methodology and applying secondary adjustments, as well as on the consequences of the choices with regard to reaching the objectives of these Framework Guidelines.

In particular, ENTSOG shall assess how the relevance of each methodology is affected by the following parameters:

- ⌚ Status of the system (Production / Proportion of domestic/cross-border gas flows / Consumption);
- ⌚ Dynamics of demand (congestion in the system);
- ⌚ Topological considerations (age of the network, length of the pipeline).

Are the proposed parameters the most relevant ones for identifying a suitable cost allocation methodology?

ENTSOG proposes to discuss the FGs criteria with the aid of tables showing some advantages and disadvantages (Pros/Cons) associated with the different cost allocation methodologies

Circumstances for selecting Primary Methodologies

- ENTSOG preliminarily assessed the relevance of the above mentioned parameters against each proposed methodology
- Some parameters appear less relevant for the methodology selection
Examples:
 - Congestion in the system (CMPs are the appropriate tool)
 - Age of the networks: how is this influencing methodology choices?
- Other more relevant parameters are captured by the proposed advantages / disadvantages tables (Pros/Cons)
 - Flow dynamics
 - Topology of the networks
- Tables in the following slides include other more relevant elements for methodology selection such as
 - Clearness / understandability
 - Cost-reflectiveness
 - Predictability / Stability

Postage Stamp Approach

Methodology	<i>Pros</i>	<i>Cons</i>
Postage Stamp Approach	1. Clear and easy to understand as well as easy to apply and the calculation should be easy for market players to follow.	1. Could be less cost reflective than other methodologies
	2. This methodology ensures that network users have access to capacity at the same price regardless of where they enter or exit the system.	2. This approach does not provide locational signals
	3. Provides good stability and visibility for market players	

Capacity Weighted Distance Approach

Methodology	<i>Pros</i>	<i>Cons</i>
Capacity Weighted Distance Approach	<ol style="list-style-type: none">1. Easy to understand, the calculation should be easy for market players to follow and for TSOs to apply.2. Broadly cost reflective in systems where the flow direction is not a cost driver.3. Provides stability (dependent on the type of capacity used in the cost allocation methodology).	<ol style="list-style-type: none">1. Costs for compressors and cost differences for different pipeline diameter cannot be fully considered.2. Does not take into account the flow direction, for counter flow capacity bookings (in systems with predictable flows) this methodology may be less cost-reflective than other methodologies.

Virtual Point Based Approach

Methodology	<i>Pros</i>	<i>Cons</i>
Virtual Point Based Approach	1. Helps to provide tariff stability and predictability	1. Complex modelling required to implement
	2. Clear & stable locational signals - could lead to expansion of certain points	2. Requires secondary adjustments to calculate the tariffs in Variant A of the cost allocation methodology
	3. Is cost reflective, especially when Variant A is used with incremental costs and when the flow direction is stable	3. Result of methodology is very sensitive to flow pattern changes in system.

Matrix Approach

Methodology	<i>Pros</i>	<i>Cons</i>
Matrix Approach	<p>1. Cost reflectivity: matrix considers several elements (e.g. distances, capacities, costs of pipelines typologies, network structure, gas flows) and together with their yearly updating, it includes the key cost drivers which can affect tariffs in terms of cost reflectivity</p>	<p>1. Depending on the network complexity, additional TSOs' resource requirements will be necessary for the initial implementation. Once the methodology is up and running the computational burden would not be too great.</p>
	<p>2. Stability: reflects in the tariffs the main grid evolutions and related allowed/expected revenues changes, without overturning tariff levels unless justified by substantial changes in the system (e.g. prevailing flows).</p>	<p>2. Stakeholders may also need time to become familiar with the methodology.</p>
	<p>3. Flexibility (in terms of ability to reflect changes in gas grid elements).</p>	

Circumstances for selecting Primary Methodologies

Framework Guideline Requirement:

The use of a postage stamp methodology should be limited to networks where one of the following criteria is met:

- a significant majority (at least 2/3) of the transmission capacity (proportion to be further specified by the Network Code on Tariffs), is dedicated either to the domestic market or to cross- border gas flows;
- the difference between the average distance travelled by cross-border flows and the average distance travelled by domestic flows does not exceed a threshold, which shall be determined in the Network Code on Tariffs.

The virtual point based methodology is recommended where a network has a unique geographical node that can be identified where all the flows converge;

The choice of the capacity weighted distance approach compared with the matrix methodology or the virtual point methodology, shall consider the drawback of necessary simplifications to the network representation and the benefit in cost reflectivity, as compared to the capacity-weighted distance approach.

Circumstances for selecting Primary Methodologies

Postage Stamp Approach :

1. The proposal is to specify that if two thirds of the transmission capacity is dedicated to serve domestic gas consumption or for cross border flows, then the postage stamp methodology may be applied. This proposal is in line with the TAR FG.
2. The calculation of “the difference between the average distance travelled by cross border and domestic flows” could be expressed as a percentage calculated as follows:

Threshold percentage % =

$$\frac{(\text{average distance of cross border gas flows}) - (\text{average distance of domestic gas flows})}{(\text{average distance of cross border and domestic gas flows})}$$

ENTSOG's initial proposal is to set the threshold at a maximum of 50%.

Circumstances for selecting Secondary Adjustments

1. Only rescaling, equalisation and benchmarking may be used to adjust the methodology
2. Rescaling may be used to adjust the allocated initial tariffs that result from the methodology to recover the allowed revenue and/or to avoid negative capacity charges by either adding a constant or by multiplying it by a constant
3. Benchmarking shall be limited to the point, where the TSO faces effective competition from other TSOs' point or route. The tariff reduction shall be limited to what is strictly necessary to adjust to the competitive tariff level.
4. The Network Code on Tariffs shall only allow equalisation for the following reasons:
 - (i) security of supply, applied for points that connect assets that serve such purpose;
 - (ii) price stability, in order to mitigate local forecast errors and compensate for local flow variations;
 - (iii) fostering competition in the retail market and/ or in the renewable energy sector. Where you equalise a set of points, each set of points subject to equalisation can only include either domestic or cross-border points

The circumstances/criteria for secondary adjustments are already prescriptive and ENTSOG would question the need for any further circumstances/criteria.

Cost Allocation Methodologies

Questions for Stakeholders:

1. Do you think that the TAR NC merits an elaboration of the circumstances set out in the TAR FG?
2. What circumstances do you think could be applicable for the different cost allocation methodologies?
3. Is the question really about whether you choose the postage stamp approach or not? How would you decide whether it is better to use the postage stamp approach or use one of the other three methodologies?
4. Do you think that the four cost allocation methodologies in the TAR FG are sufficient for the European market?



Development of the TAR NC: 2nd Stakeholder Joint Working Session

Cost Allocation - Methodology Variants and the Cost Allocation Test

Niels Krap

Ontras (on behalf of ENTSOG)

TAR SJWS 2 – the 27th of February 2014

Methodology Variants

Framework Guideline Requirement:

‘In developing the Network Code, ENTSOG shall consider for each methodology consisting of more than one variant whether it can be described as a single methodology (without variants), with a comparable level of detail and consistent with the Framework Guideline objectives.’

Applicable Cost Allocation Methodologies

Capacity Weighted Distance Approach - Variant A & Variant B

Virtual Point Based Approach - Variant A & Variant B

Methodology Variants

ENTSOG's Initial View:

Capacity Weighted Distance Approach:

After a high level review of the variants, it may be possible to merge the variants by making some amendments to the current text. For example, modifications could be made to the formulas in steps 3 and 4 showing the possibility to consider just some of the combinations of distances between entry and exit points but not all and an explanatory paragraph could also be included.

Virtual Point Based Approach:

The situation is more complicated for the virtual point based approach due to the differences between the variants such as the application to a meshed network vs. an unmeshed network with a single dominant node. In one variant the VTP location is determined mathematically but in the other variant it is determined geographically. In addition, for one variant the tariff determination is by distance and peak flow while for the other variant it is by distance and booked capacity.

Cost Allocation Test

1. Calculate the total revenue from cross border entry and exit points
2. Calculate the total revenue from domestic entry and exit points
3. Identify physical cost drivers and their relative importance
 - > e.g. distance, capacity, geography
4. Insert the relevant revenue and cost drivers into the mathematical formula for the two ratios:

Ratio 1

(total revenue from entry and exit points for domestic customers)
(cost drivers for domestic customers)

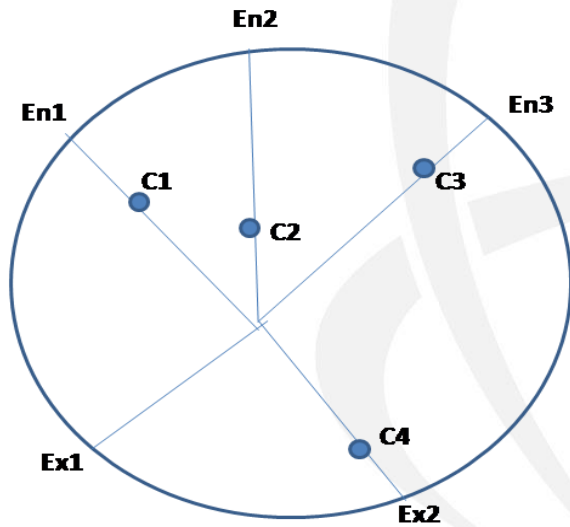
Ratio 2

(total revenue from entry and exit points for cross border customers)
(cost drivers for cross border customers)

Cost Allocation Test - Example

- > Example uses a simplified network & points characterised by geographical coordinates (longitude & latitude)

Simplified Network



Point's characteristics

	Longitude	Latitude	Capacity
En1	1	2,7	100
En2	2	3	80
En3	3,3	2,9	120
Ex1	1	1,2	70
Ex2	2,6	1	90
C1	1,5	2,5	50
C2	2	2,4	30
C3	3	2,6	40
C4	2,5	1,2	40

Cost Allocation Test - Example

- **Distance & Capacity** are used as **cost drivers** where average distances have been calculated using the Euclidean (airline distance) approach as outlined in SJWS 1

Name	Average Distance	Capacity	domestic (d)/ cross-border (cb)
Ex1	2.19	70	cb
Ex2	2.14	90	cb
C1	1.11	50	d
C2	1.07	30	d
C3	1.12	40	d
C4	1.96	40	d

- The following **revenues streams** are also assumed

Domestic exit capacity	160	50%
Cross-border exit capacity	160	50%
Entry points revenues in total	1,260	
Entry revenues dedicated for domestic	630	50%
Entry revenues dedicated for cross-border	630	50%
Exit revenues from domestic	350	28%
Exit revenues from cross-border	900	72%

Calculation of Ratios

$$\text{Ratio 1} = \frac{\text{revenues (domestic)}}{\text{costdrivers (domestic)}} = \frac{350+630}{210.48} = 4.6559$$

Domestic exit capacity	160	50%
Cross-border exit capacity	160	50%
Entry points revenues in total	1,260	
Entry revenues dedicated for domestic	630	50%
Entry revenues dedicated for cross-border	630	50%
Exit revenues from domestic	350	28%
Exit revenues from cross-border	900	72%

$$\text{Ratio 2} = \frac{\text{revenues (crossborder)}}{\text{costdrivers (crossborder)}} = \frac{900+630}{346.56} = 4.4148$$

Calculated using weighted average approach

Calculation of Ratios

$$\Delta_{rev} = \frac{|Ratio1 - Ratio2|}{(Ratio1 + Ratio2)/2}$$

$$= \frac{4.6559 - 4.4148}{(4.6559 + 4.4148)/2}$$

$$= \frac{0.2411}{4.5354} = 5.3\%$$

5.3% < 10 % → test passed ✓



european network
of transmission system operators
for gas

Any Questions?



Development of the TAR NC: 2nd Stakeholder Joint Working Session

Implementation and Mitigating Measures

Ann-Marie Colbert

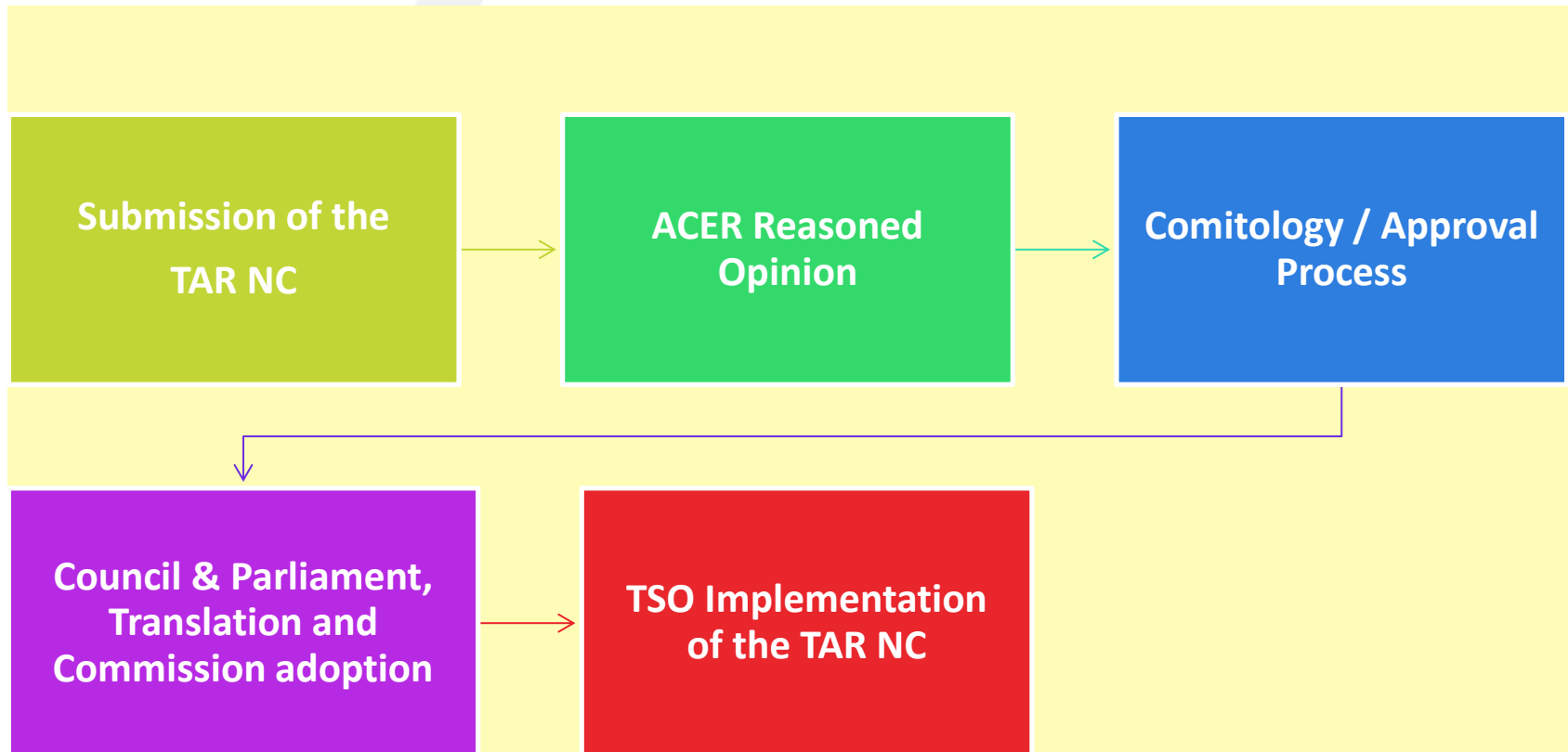
ENTSO-G

TAR SJWS 2 – the 27th of February 2014

Implementation

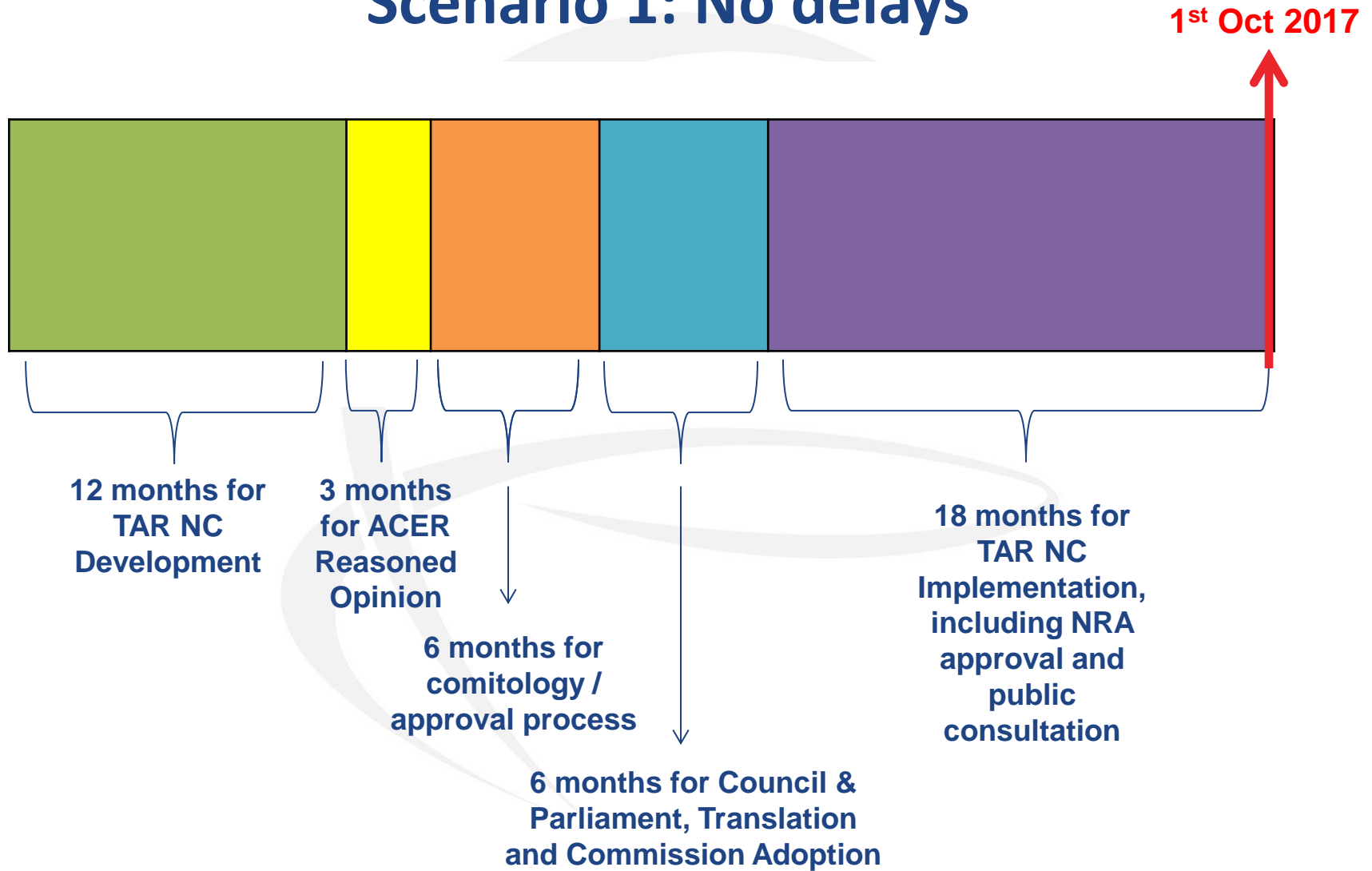
TAR Framework Guidelines Requirement:

The provisions in the Network Code on Tariffs, including those relating to or affecting the tariff levels, shall apply to all contracts from 1 October 2017 at the latest.



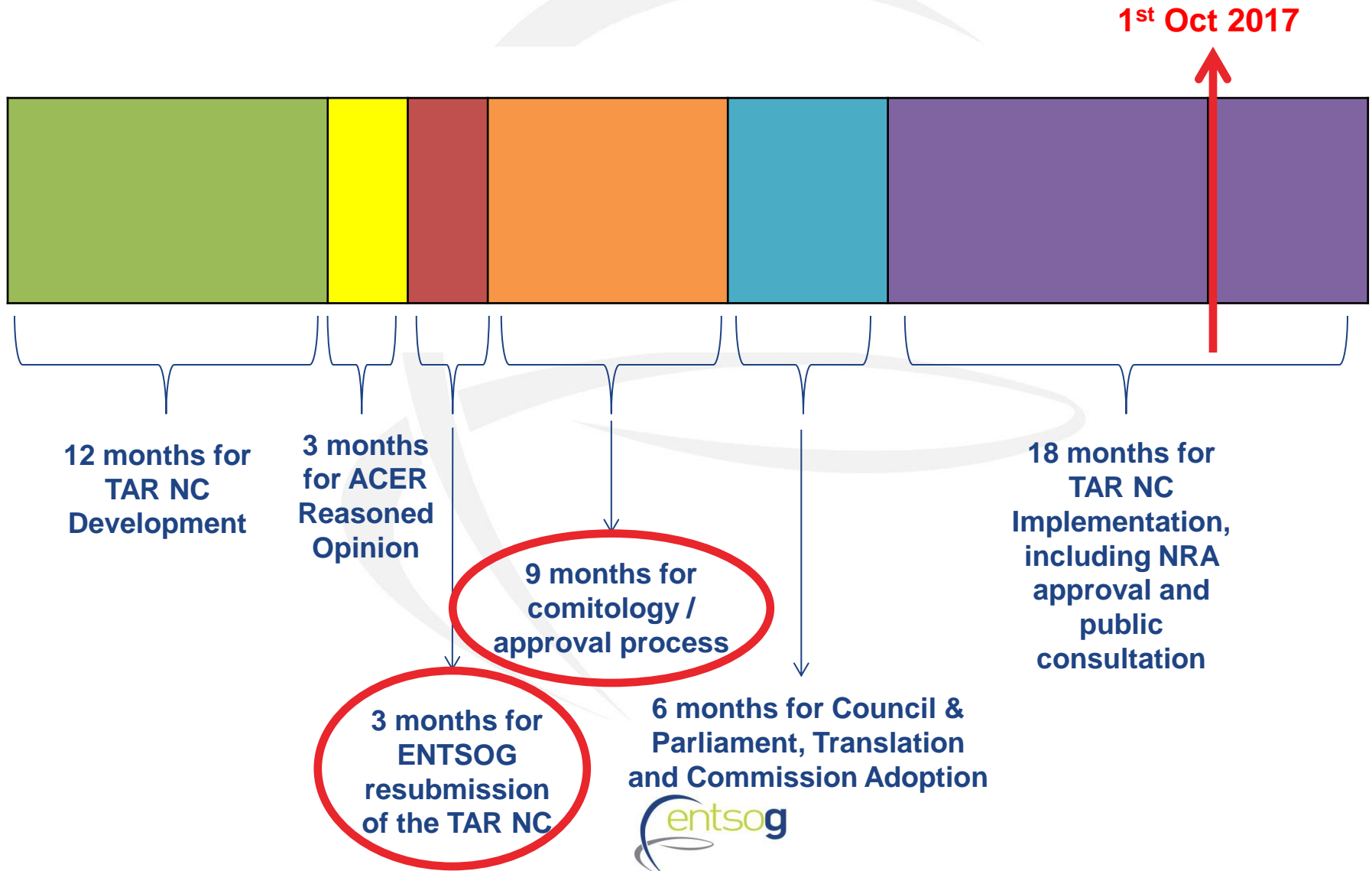
Implementation Timeline

Scenario 1: No delays



Implementation Timeline

Scenario 2: Delays at two points in the process



Implementation

An implementation period of at least 18 months is necessary to ensure that the provisions of the TAR NC are properly implemented.

ENTSOG suggests that the implementation deadline be:

- the 1st October 2017 for implementation

Or

- 18 months from the date of entering into force

whichever is later.

Mitigating Measures

TAR Framework Guidelines Requirement:

To prevent or limit undue negative repercussions resulting from implementation of the Network Code on Tariffs, NRAs may implement mitigating measures before 1 October 2017. In the case of exceptional circumstances such measures may be extended beyond 1 October 2017, by a period not exceeding twenty four months subject to Article 7(4) of the Agency Regulation.

These circumstances may include instances, where the transition to the new tariff level by 1 October 2017 would:

- ❖ affect the execution of specific contracts;
- ❖ not coincide with the commencement of the gas year, tariff setting cycle or regulatory period; or
- ❖ where tariffs at individual entry or exit points would increase by more than 20% from one year to the next due to the application of the provisions in the Network Code on Tariffs.

What are Mitigating Measures?

1. Methods or plans to reduce, offset, or eliminate adverse project impacts.
 2. Action taken to avoid, reduce the severity of, or eliminate an adverse impact.
- > Mitigation can include one or more of the following:
- Avoiding impacts
 - Minimising impacts by limiting the degree or magnitude of an action
 - Reducing or eliminating impacts over time

Why are Mitigating Measures needed?



When do Mitigating Measures apply?

Mitigating measure can apply before 1st Oct 2017

Application of the TAR NC by the 1st of October 2017

Does it have one of the following impacts:

1. Affect the execution of specific contracts
2. Not coincide with the commencement of the gas year, tariff setting cycle or regulatory period
3. Where tariffs would increase by more than 20% from one year to the next

No

No Action

Yes

Delay to implementation

If there is an impact for situation 1, then the action is to delay the implementation of the TAR NC until specific contracts would not be affected or up to the 1st Oct 2019

If there is an impact for situation 2, then delay the implementation of the TAR NC until the relevant gas year, tariff setting cycle or regulatory period, or up to the 1st Oct 2019

If there is an impact for situation 3, then apply mitigating measures as set out by the NRA or as suggested by the TSO and approved by the NRA up to 1st Oct 2019



Application of Mitigating Measures

When and for how long should mitigating measures be applied?

Implementation mitigating measures

- Mitigating measures can be applied before 1st Oct 2017 and in exceptional circumstances up to the 1st Oct 2019

Enduring mitigating measures

- Should mitigating measures be enduring?
- Should floating prices be accompanied by some mitigating measures to mitigate against tariff volatility?

Suggested Mitigating Measures

1. Step change for tariff increases up to a particular threshold e.g. 20% tariff increase, with anything over 20% being smoothed over a defined period of time
2. Using the auction premium, where applicable, to reduce floating tariff increases
3. Glide path of tariff increases and decreases
 - > Balance between the increases and decreases in tariffs so that the tariffs are smoother



european network
of transmission system operators
for gas

Thank you

TAR SJWS 2 – the 27th of February 2014

A stylized, light blue globe is positioned in the background on the left side of the slide. It features several curved lines representing latitude and longitude, creating a sense of global connectivity.

Comments on Implementation and Mitigating Measures

**ENTSOG 2nd SJWS on Tariff NC
Brussels, 27 February 2014**

Kees Bouwens, ExxonMobil

- **Framework Guidelines cause concerns for existing contracts**
 - FG state that the Tariff NC 'shall apply to all contracts from 1 October 2017 at the latest'
 - NRAs may implement mitigating measures 'where the transition to the new tariff level by 1 October 2017 would affect the execution of specific contracts'
- **To remove these concerns we suggest the NC includes specific text to clarify that the code is not to frustrate existing contracts**
 - Contracts signed before entry into force of NC with fixed or indexed prices shall be respected
 - For existing contracts with a floating price the parties shall agree to implement the NC in a way that respects their positions
 - If no agreement can be reached, network user has the right to terminate
- **Ongoing mitigating measures are needed to provide tariff stability**



Mitigating Measures

Presentation only for discussion

27 February 2014

Claude Mangin

When to apply ? How to apply ?

- Not only at the implementation of the Tariffs Network Code but **“as often as needed”**.
- **Is the 20% tariff increase** from one year to the next at an individual entry or exit point **the right trigger ?**
 - **20% seems too high.**
 - The **German threshold (inflation) could be a solution** but could lead to unstable reference price (if applied each year).
 - **Is a fix percentage the best solution for all IPs in all market conditions ?**
- **Smoothing the price increase over time seems not to be a suitable solution** since :
 - It will only **delay** the price increase which still could hamper the rationale of a long term booking.

Which design(s)?

- **Two one-off solutions** to put in place at the implementation of the tariff code :
 - **the possibility for a shipper to terminate capacity contracts** (as provided in Germany),
 - **the shift of entry points revenues towards exit points if exit points tariff scheme is reviewed to avoid cross-subsidies between modulated and non modulated end-customers.**
- **Two permanent solutions :**
 - **the option to have a fix reserve price in exchange of a premium** (as the cost of this “guarantee”),
 - **the possibility to use the auction premium due by a network user** (which in any case is an extra-revenue for the TSO) to “absorb” a tariff increase at the time of use of the capacity.

The two one-off solutions

- Should solve the nowadays issue of **IP tariffs that are not “in the money”** (i.e. the hubs’ spread does not reflect the cost of the IP capacity).
 - Nowadays situation is not cost-reflective
 - and does not give a fair reference price.
- Will lead to **two different models** across Europe :
 - **The US model “Henry hub + transportation”.**

The wholesale price of gas in a market place will derive from the wholesale price of gas on the leading hub in Europe + the tariffs of IPs to reach this specific hub.

It will lead to permanent tariff variations depending of the weather of the past winter.
 - **The “low IP tariffs model”** will not change the model North West Europe is experiencing nowadays : hub prices are correlated and converging most of the time **but** will solve the “missing money” issue.

The two permanent solutions

- These options, **if set appropriately**, should not lead to **cross-subsidies between network users**.
 - the reconciliation (i.e. the smearing) of the regulatory account will be done on a smaller perimeter since shippers that have subscribed to one of these two options will pay a premium in exchange of not being part (or only partly) of the reconciliation process.
- 1. The possibility to fix the price of capacity, as proposed by Gasterra, by introducing a (modest) risk premium for existing and new capacity
 - The risk premium should be of the same magnitude of the variation of the reference price in order to avoid cross-subsidisation.
- 2. The possibility to use the auction premium to “absorb” a tariff increase at the time of use of the capacity, as proposed by Edison, could work this way :

Year	0	1	2	3	4	5
Reference Price (A)	10	9,5	10,5	10,8	11	12
Premium	1	1	1	1	1	1
Net premium (B)	1	1	0,5	0,2	0	0
Payable Price (A+B)	11	10,5	11	11	11	12

Another solution : reshuffling ?

- A TSO has offered to shippers to switch from one IP to others entry or exit points as long as their financial commitment (via the booking) is the same.
- Is this an option the market may want ?
- How could it work if all the shippers would change bookings towards another unique point ?
 - Which merit order for instance ?
 - A prorata of the demand ?
 - How does it work with bundled products ?

Conclusion

- Most of the shippers strongly advocates for mitigating measures whatever the design.
- Indeed, there may not be a consensus on the prefer design but there is a consensus for the need of “enhanced” mitigating measures compared to chapter I.4. of the FG.
- **What could the Commission and ACER offer to the market regarding this item ?**
- Depending of their answers, shippers would be happy to have further discussions regarding this difficult topic.

ENTSOE NC TAR
2nd SJWS



European Federation of Energy
Traders

Mitigating Measures -
what network users need



Gunnar Steck
EFET Europe

CAM, CMP and macroeconomics have fundamentally changed shippers perspective on ~~capacity usage~~

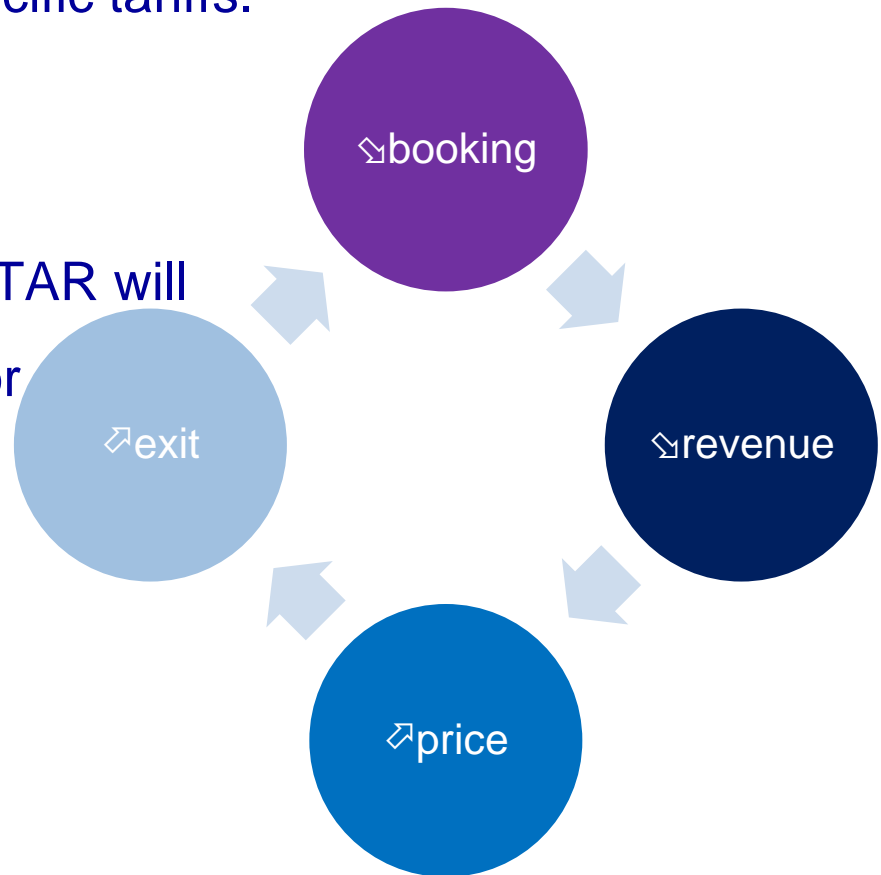


- ① Market liberalisation has brought choice to consumers – it has increased switching rates and shortened average term of supply contracts.
- ② CAM has brought choice to network users – it has shortened terms of transport bookings and will further do so. With bundling business cases will have to adapt and change fundamentally.
- ③ CMP encourages network users to profile their bookings, i.e. book short term.

Inevitably this will decrease the rate of utilisation of European transport systems...

... and this, on the basis of the NC TAR concept of 'floating reserve prices', will lead to increased specific tariffs.

As such the NC CAM, CMP and TAR will lead to a frustration of purpose for variety of business cases.



For x-border points mitigation of this effect can best be achieved with a reset option.



NRAs and TSOs should have the option to provide an

One-off capacity reset right with entry-into-force of NC TAR

OR

Ongoing mitigation measures

if tariffs increase above indexed rate

The NC TAR alone does not cause this effect. BUT it provides for an opportunity to bring network users and network operators requirements in balance again!



European Federation of Energy Traders

**Amstelveenseweg 998
1081 JS Amsterdam**

**Tel: +31 (0)20 5207970
Email: secretariat@efet.org
www.efet.org**



european network
of transmission system operators
for gas

Development of the TAR NC: 2nd Stakeholder Joint Working Session

Transparency

Irina Oshchepkova

ENTSO-G

TAR SJWS 2 – the 27th of February 2014



european network
of transmission system operators
for gas

WHAT TO PUBLISH

TAR FG: 3 groups of *'all the relevant input information necessary to calculate tariffs'*

Subsection I

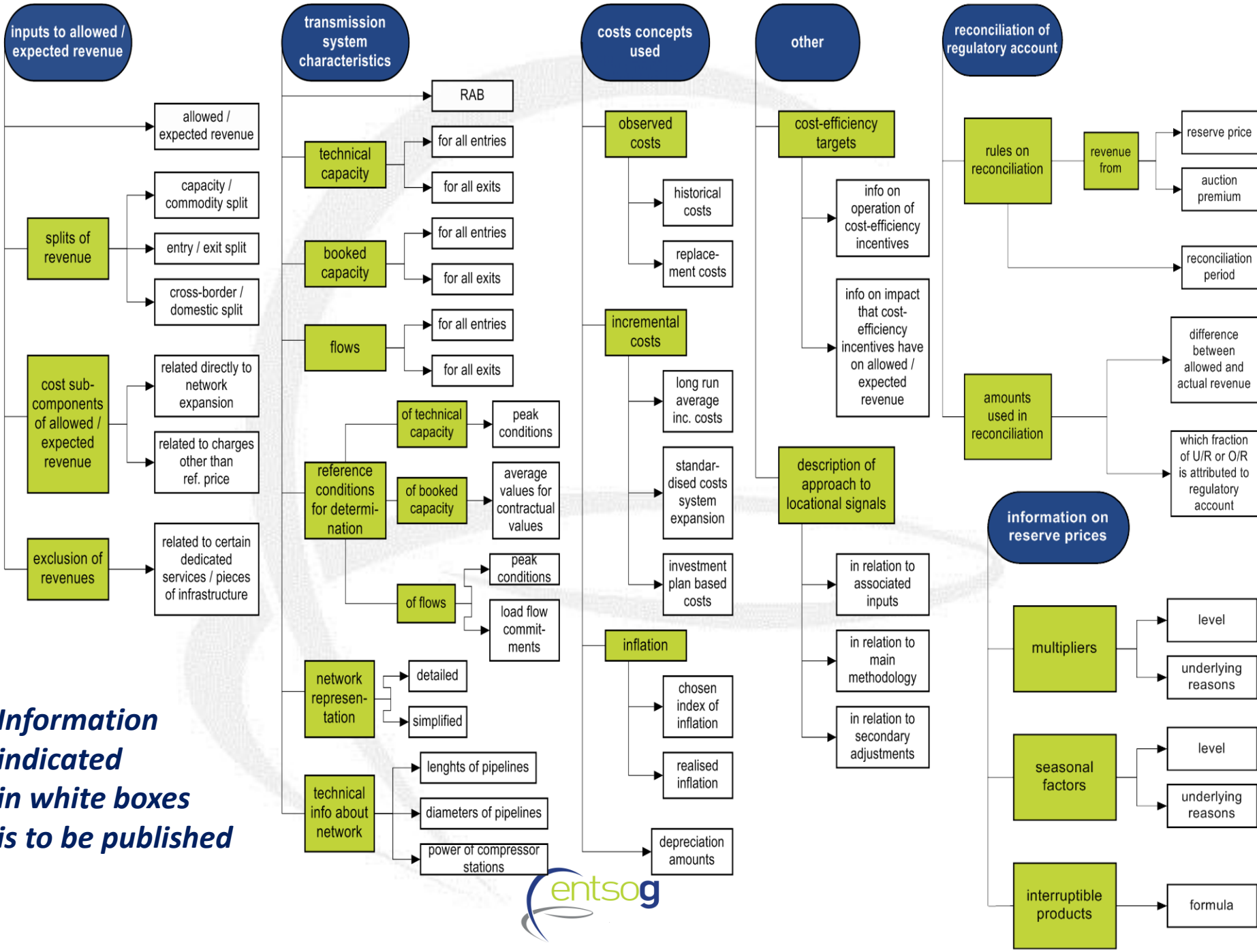
- Inputs for the cost allocation methodology
 - A. Inputs on the allowed revenues
 - B. Transmission system characteristics
 - C. Cost concepts used
 - D. Cost-efficiency targets
 - E. Locational signals

Subsection II

- Rules on and amounts used in the reconciliation of the regulatory account, including treatment of auction revenues

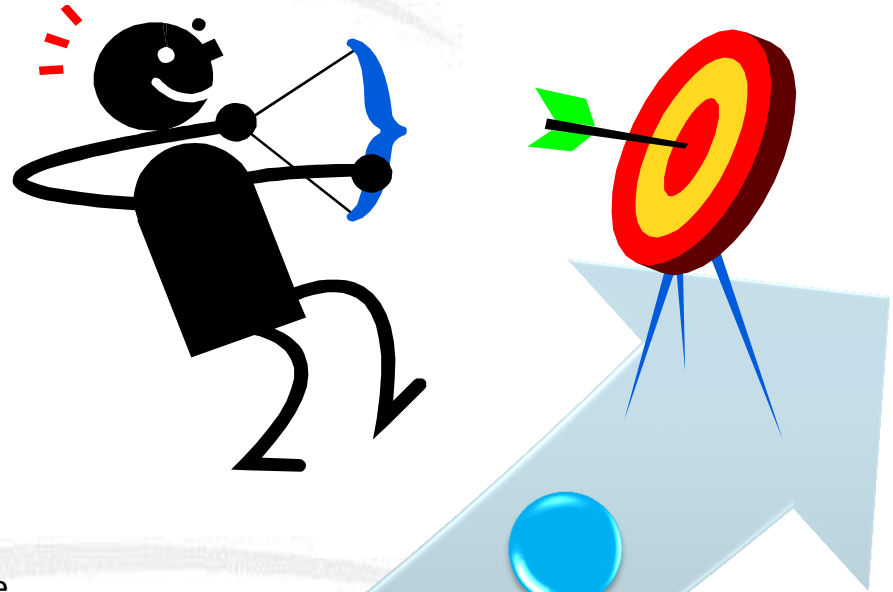
Subsection III

- Information on reserve prices, such as level and underlying reasons for multipliers and seasonality factors, and formulas to calculate discounts/reserve prices for interruptible products



The objectives of publication requirements

Network users are to be able to...



...make a reasonable estimation of the reference price (also, in the subsequent years within the remainder of the regulatory period)

...be fully aware of the costs underlying the transmission services

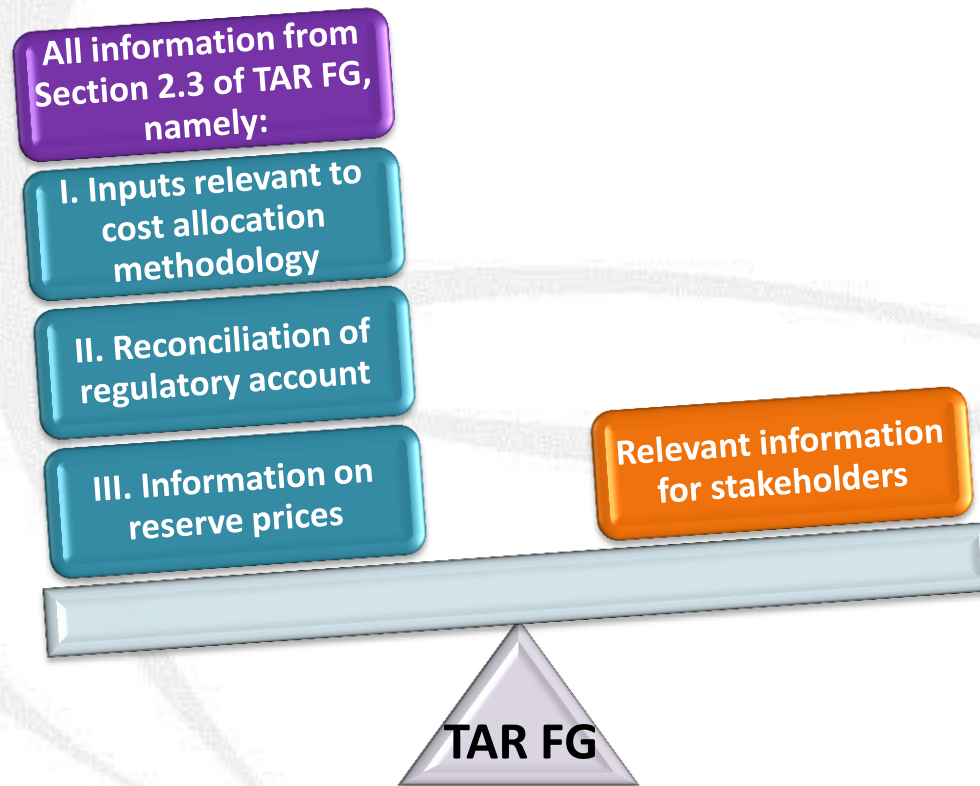
...understand how individual transmission tariffs have been derived and why they (do not) differ

...understand all the TSO services offered and corresponding transmission tariffs

...obtain a reasonable degree of tariff predictability

Finding a proper balance in order to meet the objectives of publication requirements

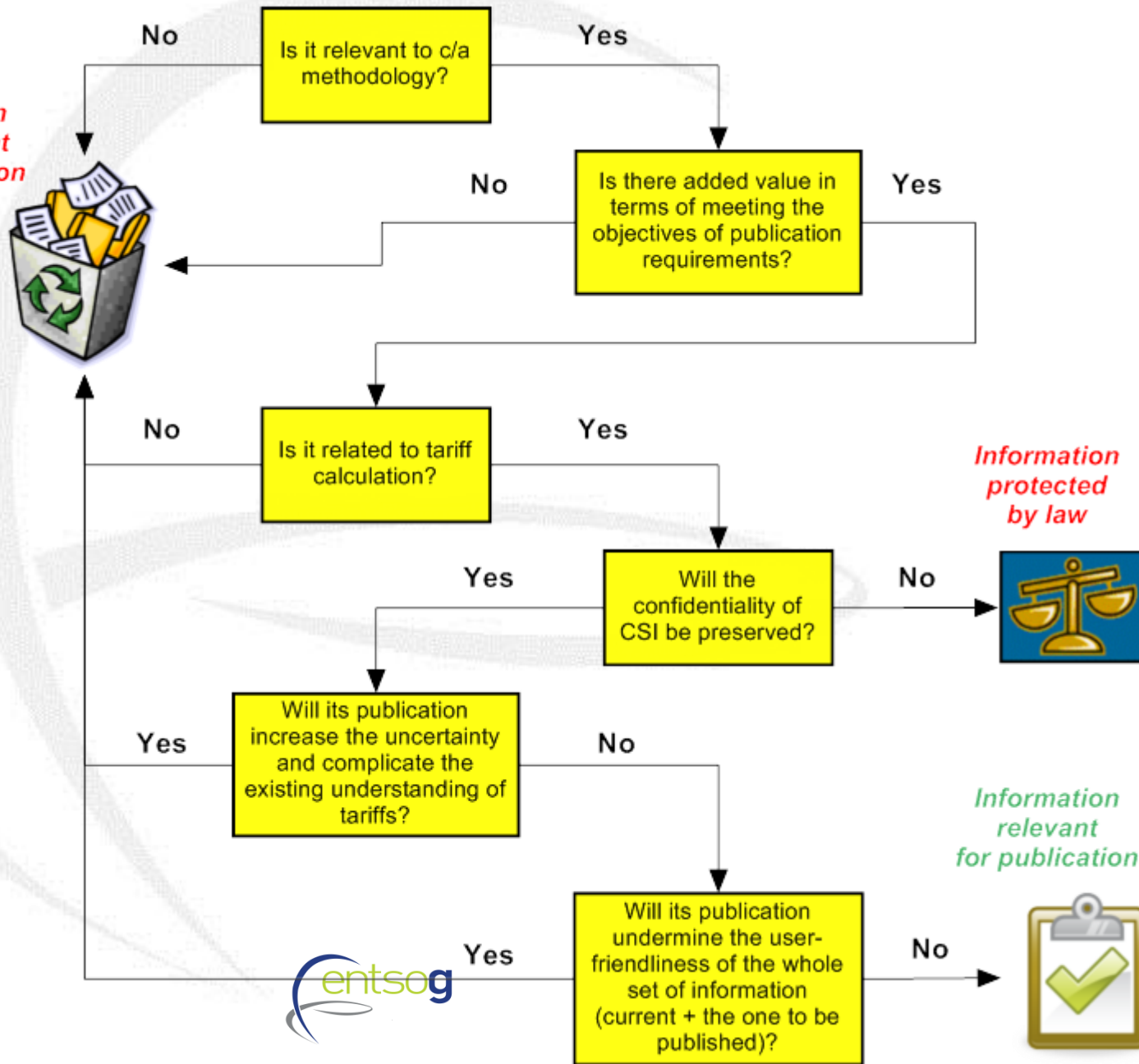
Article 18(2) of the Gas Regulation:
'reasonably and sufficiently detailed information on tariff derivation, methodology and structure'



Question for stakeholders: what is the information that you need so that the objectives of publication requirements are met?

What is relevant to be published?

Information not relevant for publication



Following this algorithm will help to ascertain the relevance of information for the purpose of Option 1



european network
of transmission system operators
for gas

HOW TO PUBLISH

TAR FG: task for ENTSOG for the development in the TAR NC

'The Network Code on Tariffs shall develop a **standardised format for publishing the information** specified above (e.g. by integrating it into the EU-wide ENTSO-G Transparency platform).'

*TAR FG, Section 2.3 'General publication requirements'
last paragraph, p. 12*

How a standardised format may look like?

RELEVANT DATES			
• time period for which the tariffs are applicable		XX	
• date of publication		XX	
GENERAL INFORMATION			
• cost allocation methodology		XX	
• regulatory regime		XX	
REQUIREMENTS ^(1,2)	FIGURES	UNITS	COMMENTS / REMARKS ⁽³⁾
INPUTS FOR THE COST ALLOCATION METHODOLOGY			
Inputs on the allowed / expected revenue			
• splits of revenue			
* capacity / commodity split	XX	XX	XX
* entry / exit split	XX	XX	XX
* cross-border / domestic split	XX	XX	XX
Transmission system characteristics			
• technical capacity			
* for all entry points	XX	XX	XX
* for all exit points	XX	XX	XX
• booked capacity			
* for all entry points	XX	XX	XX
* for all exit points	XX	XX	XX

How to complete this standardised format?

- To complete the template and to publish the information when the tariffs are updated.
- The cells need to be filled in only when a particular information is relevant for a given cost allocation methodology.
- If not relevant, the cell should indicate 'n/a'.
- Where – due to the specificity of a particular information – it is difficult to fill in the cell, the cell in the 1st column should be converted to a hyperlink leading to another webpage of a TSO with the proper description. The cell in the 2nd column should then indicate 'yes'/'no'.
- The column 'comments/remarks' should be filled in where it is deemed necessary.

Where to provide the information?

entsog TRANSPARENCY PLATFORM

HOME POINTS & ROUTES

SELECT PO

Q

OPERATOR INFO

Address
Plinovodi d.o.o.
Cesta Ljubljanske brigade 11b
P.O. Box 3720
1001 Ljubljana
Slovenia

Plinovodi

[Link to Homepage](#)

Applied capacity model
Entry-Exit

Capacity Allocation Mechanism
No information available

Gas-Day
8:00 AM - 8:00 AM

Balancing Model
DailyWithHourlyConstraints

For more capacity-booking-related information contact the "Commercial and Financial Department"

Links

- [Link to Tariff Calculator page](#)
- [Link to Tariff Information page](#)
- [Link to Capacity Information page](#)
- [Link to Access Conditions page](#)
- [Link to Contractual Documents page](#)
- [Link to Maintenance page](#)

Contact

Name
"Transport Department" or "Commercial and Financial Department"

Phone
+ 386 1 58 2 0700

E-Mail
info@plinovodi.si

Homepage
[Link to www.plinovodi.si](http://www.plinovodi.si) page

Gorizia_Sempeter (entry)
Plinovodi d.o.o.

Murfeld_Cersak (entry)
Plinovodi d.o.o.

Rogatec (exit)
Plinovodi d.o.o.

The link to each TSO own website could be placed here



european network
of transmission system operators
for gas

Thank you

TAR SJWS 2 – the 27th of February 2014

Tariff Network Code ENTSOG SJWS 2

IFIEC-CEFIC response on Transparency

Dirk-Jan Meuzelaar

Brussels, February 27th 2014

Transparency in NC in Tariffs; *Real or Imaginary?*

For the end customer transparency is key because:

- Confidence is the basis off all markets
- Better integration IEM
- More competition
- Incentives for TSOs to improve efficiency

We support the publication requirements of the FG (chapter 2) on the condition that this transparency contribute to these goals, however.....

- TSOs still have several options and alternatives for allocation
- These methodologies contain many variables which TSOs can use to manipulate the tariffs (e.g the applied backhaul correction factor)
- Even one single methodology (e.g post stamp tariffs) does not provide reliable information to compare the efficiency of the TSOs

We are concerned that the NC on Tariffs will not deliver the proper information
At the end of the day we will be more confused then convinced

Tariff Transparency and Information

Steve Rose – Tariff SJWS2 – 27/2/14



Disclaimer

The views presented below do not represent the official position of RWE Supply & Trading but are provided in my capacity as a Prime Mover for the purposes of discussion and debate, as part of the on-going EU Network Code development process. RWE Supply and Trading will express its official position on this, and other issues, in response to the consultation.

Tariff transparency and information – Objective

- > Article 18(2) of Gas Regulation already obliges NRAs and TSOs to provide reasonably and sufficiently detailed information on tariff derivation, methodology and structure
- > Important that the Tariff NC enhances this obligation by:
 - enabling a full understanding of how each methodology derives actual tariffs outcomes
 - providing a reasonable degree of tariff predictability
 - providing supporting information and justification for all tariff changes
 - providing relevant cost and price control data in a consistent form
 - requiring all information to be published both in the national language and in English

Tariff transparency and information – Requirements

- > Tariff NC would help to achieve tariff understanding and predictability by:
 - requiring TSOs to release working versions of their tariff models
 - pre-loaded with the relevant data that determines actual tariff rates
 - with ability for network users to revise assumptions underpinning the methodology e.g. booked capacity, supply merit order, peak demand scenarios
 - with annual updates and an accompanying user guide
 - alternatively, ENTSOG could produce a generic working tariff model for each allowed methodology included in the Tariff NC
 - would ensure a consistent approach towards implementation
 - may simplify drafting of the methodology section of the Tariff NC

Tariff transparency and information – Requirements

- > Tariff NC would provide supporting information and justification in a consistent way by requiring TSOs to provide:
 - explanatory documents with each tariff change
 - on-going quarterly updates of key parameters throughout the regulatory period e.g. under/over recovery, allowed revenues, RAB, booked capacity
 - standing regulatory and tariff data in consistent template form e.g. regulatory period, WACC, depreciation period, entry/exit split, network length, capacity/commodity split, basis for escalating allowed revenue
 - a breakdown of any new infrastructure requirements and new investment costs associated with incremental capacity
 - a breakdown of how PV_{AR} is determined for the single economic test



**Development of the TAR NC:
2nd Stakeholder Joint Working Session**

Tariff Setting Year - Impact Assessment

Ann-Marie Colbert
ENTSO-G

TAR SJWS 2 – the 27th of February 2014

Tariff Setting Year – Impact Assessment

TAR Framework Guidelines Requirement:

In determining the Network Code on Tariffs, **ENTSOG shall carry out an impact assessment on harmonising the transmission tariff setting year**, including downstream impacts, across all member states. The Network Code on Tariffs may also include provisions to harmonize the tariff setting year across the EU.

What is the Tariff Setting Year?

The tariff setting year is the year for which the annual tariff is applicable.

For example of the tariff applies from the 1st of January until the 31st of Decembers then the tariff setting year is from the 1st of January.

Alternatively, the tariff could apply from the 1st of October until the 30th of September so the tariff setting year would be from the 1st of October.

Jan 1st



Dec 31st

Oct 1st



Sep 30th

2014

01 January	04 April	07 July	10 October
02 February	05 May	08 August	11 November
03 March	06 June	09 September	12 December

What is an Impact Assessment?

An impact assessment is a tool used for the structured exploration of different options to address particular policy issues.

It is used where one or more options are available and is aimed at facilitating the active consideration of alternatives.

This process:

- (1) identifies and assesses the issue to be addressed;
- (2) considers the objectives to be pursued;
- (3) identifies the main options for achieving the objective;
- (4) assesses their likely impacts;
- (5) outlines advantages and disadvantages of each option; and
- (6) examines possible trade-offs.

Options for Consideration in the Impact Assessment

Option 1

Harmonise the tariff setting year

1st January to the 31st December

Option 2

Harmonise the tariff setting year

1st October to the 30th September

Option 3

No harmonisation of the tariff setting year

Status Quo

Costs and Benefits of Harmonising the Tariff Setting Year

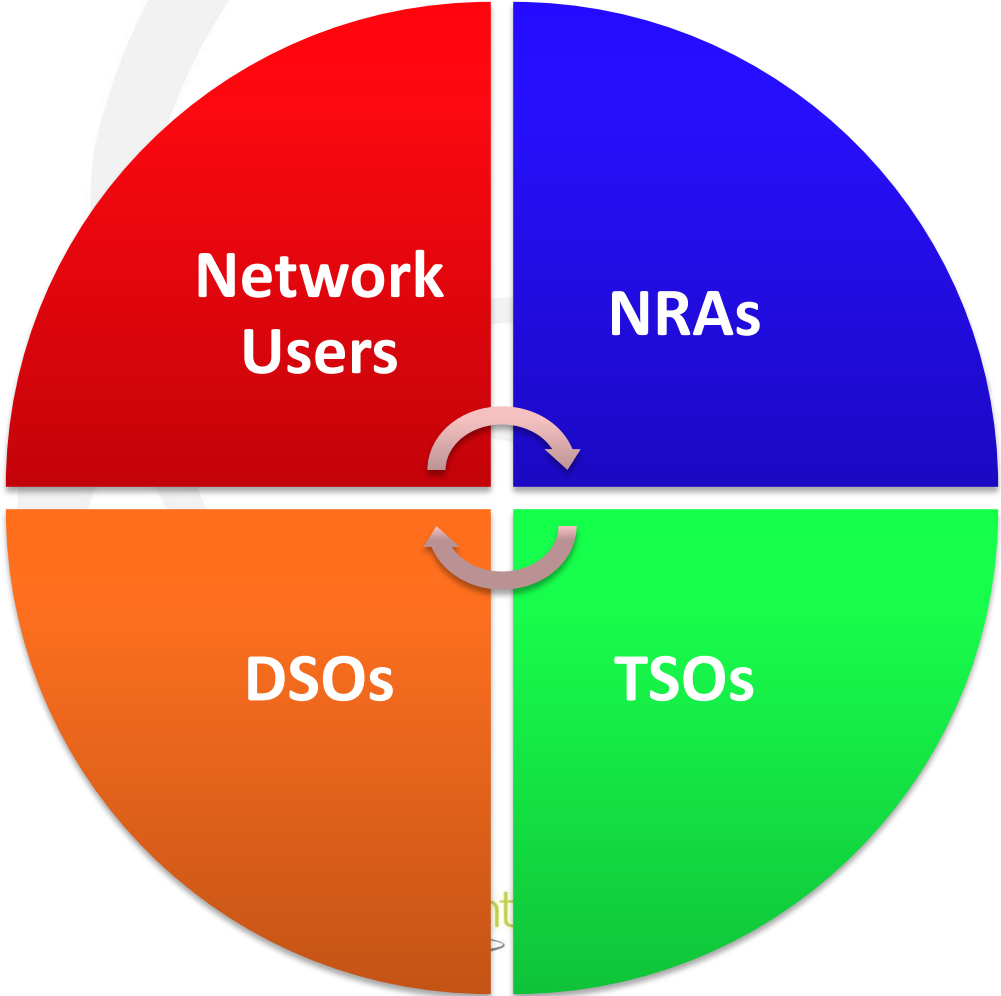
Need to balance the costs of harmonising the tariff setting year with the benefits that such harmonisation may bring.

What are the benefits and who reaps the benefits?



What are the costs and who pays?

Who would be impacted by a harmonisation of the Tariff Setting Year?



Lead time for tariff calculation: Belgian Example

- Predetermined tariffs for a period of 4 years
- Tariffs apply from 1st Jan to 31st Dec

- Tariff calculation starts around February
- Calculation is based on validated data, 2 years before the new tariffs apply

- The calculated tariffs are sent to the NRA for approval on the 30th of June
- Tariffs are approved in Oct/Nov

Lead time for tariff calculation: UK Example

- Predetermined tariffs for a period of 1 year (for exit) and out to Y+16 (fixed price) for entry
- Tariffs apply to auctions occurring from 1st Oct to 30th Sep

- Tariff calculation cycle starts in Mar
- Calculation is based on data from previous year and estimates

- Exit capacity: Calculated Mar, published May, applicable Oct
- Entry capacity: Calculated May, published Jun, applicable Oct to Sep Y+1
- Entry (long-term quarterly product): Calculated Nov, published Jan, auction Mar (applicable Oct Y+2 to Sep Y+16)

Considerations

- ❑ How to assess the positive and negative impacts for each option under consideration?
- ❑ What are the trade-offs for each option?
- ❑ If the tariff setting year were to be harmonised, would this have an impact on the timing of when the allowed/expected revenue is applicable?
- ❑ What is the value to the market of a harmonised tariff setting year e.g. either 1st Jan or 1st Oct?



european network
of transmission system operators
for gas

Thank you

TAR SJWS 2 – the 27th of February 2014

Fixed and Floating Prices

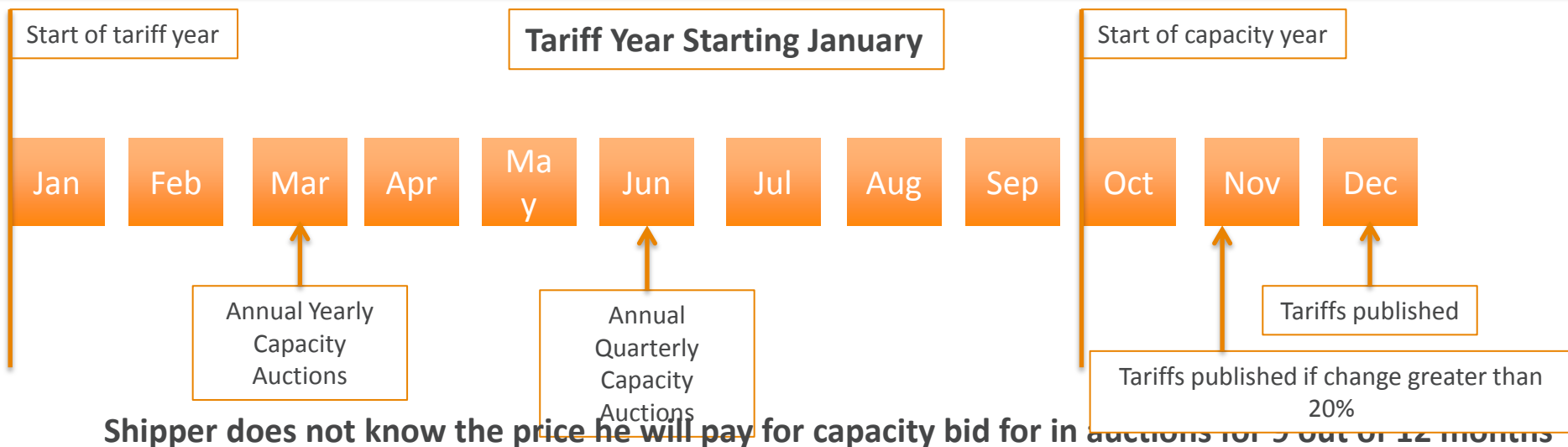
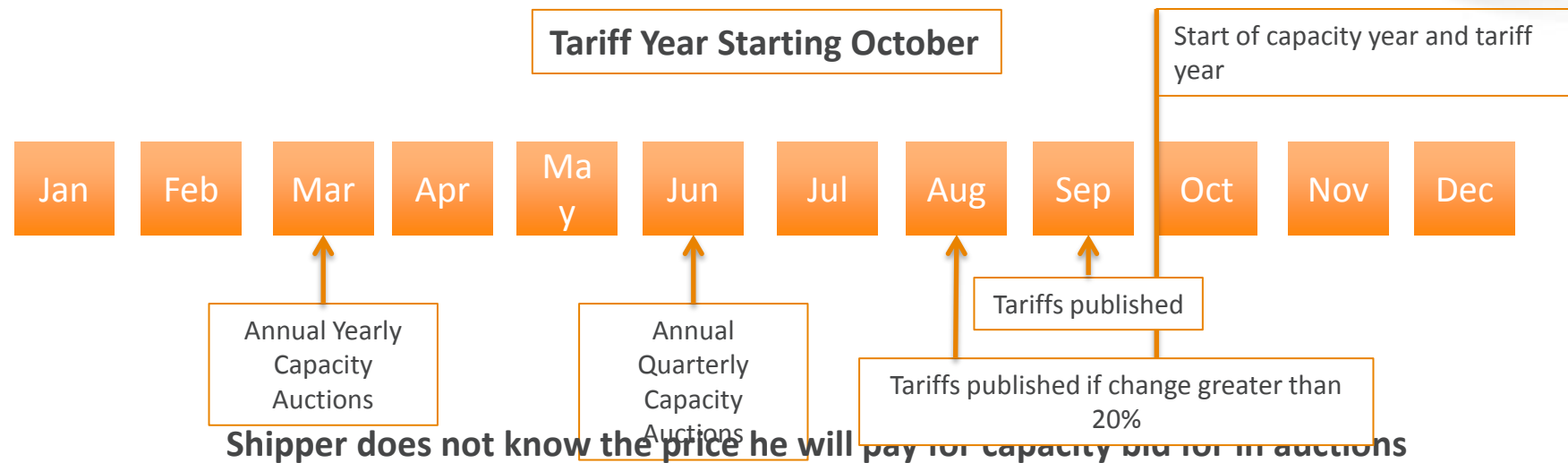
Tariff SJWS 2 – 27th February 2014

Alex Barnes, Prime Mover ENTSOG Network Code Development Process



Disclaimer: these slides do not represent Gazprom's official position

Uncertainty of tariffs IS an issue



Possible solutions

- TSOs could publish final tariffs before the Annual Yearly Capacity Auctions.
 - Shippers would know for at least one capacity year what they will be paying.
 - This improves transparency and hence price signals.
- TSO and NRAs would need to agree a revised timetable for the proposal and approval of tariffs.
- **OR** NRAs could approve the methodology only so that NRAs did not need to approve the tariffs themselves.
 - This may fit with Tariff NC approach of harmonising tariff methodology and “mechanistic” approach for recovering revenue .
- Synchronisation of Capacity Year (as in CAM NC) and Tariff Year could help.
 - Otherwise problem of uncertainty of tariffs for part of year persists . . .
 - . . . But need to check if this causes other problems.
- Earlier publication of tariffs is possible if revenue recovery is “smoothed” over time.
 - TSOs can set tariffs based on best estimate of under / over recovery of revenues at time of tariff calculation.
- Second best approach would be for TSOs to publish “indicative” tariff
 - But how would reliable would this be?
 - What degree of change would be allowed when final tariff is published?

Topics for TAR NC SJWS 3 on March 14th

- Revenue Recovery
- Storage
- VIPs
- Cost Allocation
 - Business Rules
- Interruptible Capacity and Non-physical Backhaul
 - Business Rules



european network
of transmission system operators
for gas

THANK YOU