Supporting Document for Public Consultation on Initial Draft Network Code on Harmonised Transmission Tariff Structures for Gas

Approved by the ENTSOG Board on 28 May 2014

Contents

A. Introduction

This document constitutes a Supporting Document for Public Consultation (hereinafter referred to as the 'Supporting Document') which accompanies the Initial Draft Network Code on Harmonised Transmission Tariff Structures for Gas (TAR200-14) developed by ENTSOG (hereinafter referred to as the 'initial draft TAR NC'). This Supporting Document was developed for the purpose of the public consultation (hereinafter referred to as the 'Public Consultation') to be conducted during the preparation of all network codes developed pursuant to Article 8(1) of Regulation (EC) No 715/2009[1] and Article 28 of ENTSOG's Rules of Procedure[2].

The initial draft TAR NC was developed following an invitation letter from the European Commission (hereinafter referred to as the 'Commission') to draft a Network Code on Tariff Structures in Gas Transmission Networks which was received by ENTSOG on 19 December 2013 (hereinafter referred to as the 'Invitation Letter').[3] The development of the initial draft TAR NC is based on Framework Guidelines on rules regarding harmonised transmission tariff structures for gas (hereinafter referred to as the 'Framework Guidelines') published on 29 November 2013 by the Agency for the Cooperation of Energy Regulators (hereinafter referred to as 'ACER').[4]

For the avoidance of doubt, the Supporting Document shall not be construed as part of the initial draft TAR NC and is publicly disclosed to the market for information and consultation purposes only without any commitment whatsoever from ENTSOG as to the final content of the TAR NC. Any and all interested parties, in their capacity as professional stakeholders, shall be responsible for seeking to obtain the accurate and relevant information needed for their own assessment and decision to respond to the consultation. ENTSOG hereby disclaim all responsibility for any changes that may occur to the initial draft TAR NC. Such changes may

[1] Regulation (EC) No 715/2009 of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005 (OJ L 211, 14.8.2009, p. 36).

[2] Rules of Procedure of the International Non-Profit Association (AISBL) European Network of Transmission System Operators for Gas (ENTSOG) // Published on ENTSOG's website: http://www.entsog.eu/public/uploads/files/publications/Statutes/2012/LGT0105-12_Rev_1_23%2011%202012_ENTSOG_RoP_Amendment_GA(131212)clean.pdf

[3] Please refer to ENTSOG's website: http://www.entsog.eu/public/uploads/files/publications/Tariffs/2013/20131217%20Invitation%20ENTSOG%20draft%20NC%20TAR.pdf.

[4] Please refer to ACER's website: http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Framework_Guidelines/Framework%20Guidelines/Framework%20Guidelines%20on%20Harmonised%20Gas%20Transmission%20Tariff%20Structures.pdf.

result from, amongst others, the results of the public consultation or comitology procedure. The final content of the TAR NC shall be subject to the outcome of the procedure according to Article 5a(1) to (4) and Article 7 of Council Decision 1999/468/EC[5], as foreseen by Article 28(2) of Regulation (EC) No 715/2009.[6] The content of the initial draft TAR NC and the Supporting Document should not be considered as giving rise to any specific right or obligation whatsoever to ENTSOG or any of its members as to any stakeholders.

The initial draft TAR NC is based on the inputs from ENTSOG's members, gathered through its Tariff Working Group and from external stakeholders via the Stakeholders' Joint Working Sessions (SJWSs) held in February, March and April 2014 and from numerous Prime Mover meetings held during the same time period. ENTSOG's Launch Documentation for the Network Code on Harmonised Transmission Tariff Structures for Gas, which was published on 22 January 2014 (TAR136-13),[7] formed the basis for the SJWS discussions. The materials from the SJWSs are available on ENTSOG's website: http://www.entsog.eu/publications/tariffs.

ENTSOG has sought to produce a Supporting Document which is both useful and relevant for parties which have an interest in the Public Consultation. ENTSOG would like to thank the prime movers and those market participants who have contributed to date to the development of the initial draft TAR NC, particularly for their contribution to the SJWS discussions and for providing written feedback after the SJWS.

B. Structure of the Supporting Document

The Invitation Letter from the Commission requests ENTSOG, in accordance with Article 6(6) of Regulation (EC) No 715/2009, to submit a network code which is in line with the Framework Guidelines by 31 December 2014. It also says that the network code should be sufficiently specific for immediate application upon its entry into force. In addition, ENTSOG was invited by the Commission to ensure that, where relevant, the network code would be developed in

[5] Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the European Commission as amended by Council Decision 2006/512/EC of 17 July 2006 (OJ L 200, 22.7.2006, p. 11).

[6] Currently Regulation (EC) No 715/2009 provides for the application of the regulatory procedure with scrutiny. In case of the change of the applicable procedure due to the Lisbon Treaty, the new procedure will apply accordingly.

[7] Please refer to ENTSOG's website: http://www.entsog.eu/public/uploads/files/publications/Tariffs/2013/TAR136-13_140122_TAR%20NC%20Launch%20Documentation.pdf.

coordination with the work on the amendment of the Network Code on Capacity Allocation Mechanisms on the matter of incremental and new capacity.

The structure of the Supporting Document is based on the structure of the initial draft TAR NC which is as follows:

- Chapter I: General Provisions
- Chapter II: Cost Allocation Approach
- Chapter III: Publication Requirements
- Chapter IV: Reserve Prices
- Chapter V: Revenue Reconciliation
- Chapter VI: Pricing of Bundled Capacity and Capacity at Virtual Interconnection Points
- Chapter VII: Payable Price
- Chapter VIII: Incremental and New Capacity
- Chapter IX: Final and Transitional Provisions

Within each of these Chapters in the Supporting Document, particular topics will be covered and the following information will be described where relevant:

- Framework Guidelines
- Policy Options
- Questions for Public Consultation

C. How to respond to this Public Consultation

ENTSOG's Public Consultation on the initial draft TAR NC will be carried out using an on-line Consultation Response Form similar to the one used for the draft TAR NC project plan consultation. ENTSOG welcomes all responses to the initial draft TAR NC consultation, particularly replying to the specific questions raised throughout the Supporting Document. See Annex 2 for a full list of consultation questions.

Please fill in the on-line Consultation Response Form which can be found using the link below: https://www.surveymonkey.com/s/SDVWJP5.

Please submit your on-line response by 17:00 UTC on 30 July 2014.

To enable ENTSOG to consider responses as fully as possible, we would be grateful if the respondents could:

- reflect upon this document, the initial draft TAR NC and the materials from the SJWSs;
- provide responses that are as focused and succinct as possible; and

- provide full reasoning and, where available, supporting quantitative and/or qualitative evidence for responses.

If you wish your full response submission or any part thereof to be treated as confidential, please mark the relevant sections of your document clearly. Please note, however, that ENTSOG's approach to developing the TAR NC relies heavily on transparent exchange of views across market participants. Therefore, we would encourage you to allow your full response to be made public, unless it is not possible due to the inclusion of commercially sensitive information.

Any questions regarding the initial draft TAR NC or the Supporting Document can be sent to TAR-NC@entsog.eu. Respondents will also have the opportunity to seek clarification on these documents at the Consultation Workshop to be held in Brussels on 25 June 2014. The views from respondents will be welcomed at that Workshop and will be taken into consideration in the further development process of the TAR NC.

After the closure of this Public Consultation on 30 July 2014, ENTSOG will host the Refinement Workshop, dedicated to stakeholder responses, on 24 September 2014. The summary of consultation responses received will be presented at that Workshop and accompanied by an explanation of how such responses were considered when refining the initial draft TAR NC. Stakeholders are welcome to express their views on key elements of the refined draft TAR NC at that Workshop.

Afterwards, the refined draft TAR NC will be launched for consultation in the form of a Stakeholder Support Process (SSP)[8] where the stakeholders will be able to express their support of or disapproval with respect to the refined draft TAR NC. According to the Project Plan, the SSP is scheduled to take place from the 7 – 21 November 2014.

D. Procedural background and consultation with stakeholders

The initial draft TAR NC and the Supporting Document have been prepared by ENTSOG, an organisation currently comprising 43 Members, 3 Associated Partners from 26 European

[8] ENTSOG, Rules of Procedure, Article 26(4) and Article 28(6)-(7) (the Stakeholder Support Process is subject to ENTSOG's Board's approval).

countries and 4 Observers[9] from EU-affiliate countries, in line with its tasks under Article 8 of Regulation (EC) No 715/2009.

Consultation and expertise

In line with its internal process and in compliance with Regulation (EC) No 715/2009, ENTSOG has engaged extensively with market participants, by both organising and participating in events in order to publicise the process and encourage stakeholder involvement. In the project plan consultation[10], market participants were invited to indicate their level of participation in the development process. Respondents to that consultation, which included, amongst others, producers, traders, network users and end users, expressed strong support for ENTSOG's proposed process.

Throughout the development process to date, stakeholders have also expressed their appreciation of the transparency of the process and the high level of consultation such as the public consultation on the draft TAR NC project plan (19th Dec'13 – 20th Jan'14), a kick-off workshop (15 January 2014), stakeholder joint working sessions (11 February, 27 February, 14 March, 26 March and 9 April 2014), Prime Mover meetings (4 February, 18 February, 6 March, 17 March, 31 March and 12 May 2014) and other meetings with key stakeholders to discuss specific issues in relation to the initial draft TAR NC.

Stakeholders' views

In accordance with Article 10 of Regulation (EC) No 715/2009 and ENTSOG's Statutes, stakeholders' views, expressed, *inter alia*, at SJWSs and within the feedback received on the Business Rules[11] have been taken into consideration during the development of the initial draft TAR NC as described throughout the Supporting Document when explaining the rationale for the options selected.

Planning and next steps

Responses to this Public Consultation will help to determine the amendments to the initial draft TAR NC necessary for formulating the refined draft TAR NC.

Key dates for the finalisation of the TAR NC can be found in the table below.

[9] Details about ENTSOG's members can be found using the following link: http://www.entsog.eu/members.
[10] ENTSOG Developing a Network Code on Rules regarding Harmonised Transmission Tariff Structures for Gas Draft Project Plan Consultation, TAR0116-13, 19 December 2013.
[11] The set of final Business Rules was published for SJWS 5 of 9 April 2014. Please refer to ENTSOG's website: http://www.entsog.eu/events/5th-sjws-meeting-for-the-tariff-network-code-development#downloads.

Table 1: Key dates in the process to finalise the TAR NC

30 May 2014	Public consultation on the initial draft TAR NC launched
25 June 2014	Consultation Workshop
30 July 2014	Deadline for responses to the Public Consultation
24 September 2014	Refinement Workshop
07 November 2014	Stakeholder Support Process starts
21 November 2014	Stakeholder Support Process ends
31 December 2014	Final TAR NC submitted to ACER

E. Interactions with other network codes and Guidelines

The interactions between the Commission Guidelines and the other network codes will become more numerous as work continues towards the completion of all areas of scope envisaged in Regulation (EC) No 715/2009. Ensuring coherence and consistency across all developments will become more challenging.

The initial draft TAR NC interacts with a number of network codes and Guidelines. *Inter alia*, these interactions are as follows:

- CAM NC[12]: Chapters IV, VI and VII of the initial draft TAR NC specifically refer to points under the scope of the CAM NC (namely, interconnection points) and provide the rules for the tariff-related aspects of the CAM NC.
- BAL NC[13]: ACER definition of transmission services which lists balancing as an exclusion. Balancing costs should be covered separately because under the BAL NC a neutrality mechanism will apply.

[12] Commission Regulation No 984/2013 of 14 October 2013 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems and supplementing Regulation (EC) No 715/2009 of the European Parliament and of the Council (OJ L 273, 15.10.2013, p. 5)

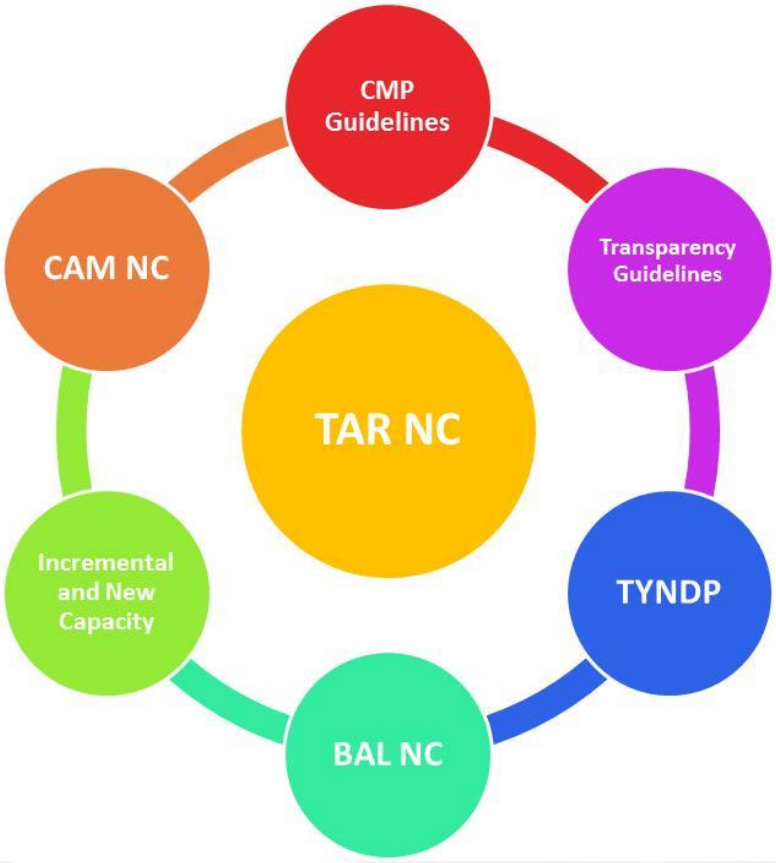
[13] Commission Regulation No 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks (OJ L 91, 27.3.2014, p. 15)

- CMP Guidelines[14]: In Chapter IV of the initial draft TAR NC on Reserve Prices, a direct link is made to the point 2.2.3(1) of Annex I to Regulation (EC) No 715/2009 in relation to the NRA decision-making on the applicable multiplier ranges. Such decision is based on whether a point is congested or not.
- Transparency Guidelines[15]: In terms of the obligations for the TSOs to publish information, there are interactions between Chapter III of the initial draft TAR NC on Publication Requirements and the Transparency Guidelines.
- Incremental Proposal[16]: There are interactions between the development of the TAR NC and the development of the amendment proposal to the Network Code on Capacity Allocation Mechanisms on the matter of incremental and new capacity.
- TYNDP[17]: In Chapter II of the initial draft TAR NC on Cost Allocation Approach the TYNDP is referred to with regards to the parameters of the primary cost allocation methodologies.

In addition, there are interactions between the different network codes with regards to the definitions set by them. The initial draft TAR NC incorporates the definitions employed in Directive 2009/73/EC[18] and Regulation (EC) No 715/2009 as well as the definitions introduced by the previous network codes, namely the CAM NC, the BAL NC and the INT NC[19]. Since the INT NC still undergoes the comitology procedure, the definitions introduced by it are not yet fixed. The adoption of the INT NC is planned to take place in Q2 2015.

[14] Point 2.2 of Annex I to Regulation (EC) No 715/2009.
[15] Point 3 of Annex I to Regulation (EC) No 715/2009
[16] The incremental proposal will consist of two parts. The first part is an amendment to the CAM Network Code and the second part is the development of one Chapter of the TAR NC on the basis of Sections 2.4.1 and 3.5 of the Framework Guidelines. Please refer to ENTSOG's website: http://www.entsog.eu/publications/incremental-capacity.
[17] See e.g. the latest TYNDP for 2013-2022: http://www.entsog.eu/publications/tyndp#ENTSOG-TEN-YEAR-NETWORK-DEVELOPMENT-PLAN-2013-2022. The adoption of Community-wide network development plan is another task of ENTSOG pursuant to Article 8(3)(b) of Regulation (EC) No 715/2009.
[18] Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (OJ L 211, 14.8.2009, p. 94).
[19] On 15 January 2014, the INT NC (Commission Regulation No [000/00 of XXX] establishing a Network Code on Interoperability and Data Exchange Rules) was recommended by ACER for adoption. As of 30 May 2014, the inter-services consultation was completed.

Figure 1: Interaction between the initial draft TAR NC and other Network Codes/Commission Guidelines.



1. General Provisions

Chapter I of the initial draft TAR NC outlines the subject matter and the scope of TAR NC. Also, this Chapter details the definitions setting out the meaning of some of the terms used in the initial draft TAR NC.

1.1 Topic: Scope (Article 2.1)

> Framework Guidelines

'These Framework Guidelines, upon which the Network Code on Tariffs will be based, apply to the transmission services offered at all entry and exit points on the gas transmission systems operated by gas Transmission System Operators (TSOs), irrespective of whether such points are physical or virtual.'

> Policy Options

On 29 June 2012, the Commission sent a letter to ACER inviting them to draft the Framework Guidelines for the TAR NC.[20] The letter stated that 'the scope of the framework guideline should include all entry and exit points of gas transmission system operators.' The Framework Guidelines were drafted to reflect the scope as set out by the Commission in their letter to ACER. In order to be in line with the Framework Guidelines, the initial draft TAR NC has been drafted so that Chapters I, II, III, V and IX apply to all entry and exit points while Chapters IV, VI, VII and VIII apply to points under the scope of the CAM NC. Some stakeholders have raised concerns about the scope of the TAR NC and questioned why it is in general applicable for all points and not just cross-border points.

The potential application of Chapters IV, VI and VII of the TAR NC to non-CAM points and the application of the TAR NC to third countries is covered by Article 2.1 and 2.2.

Question 1 – Is the scope of the initial draft TAR NC as set out in Article 2 clear to you?

[20] Please refer to ACER's website: http://www.acer.europa.eu/Gas/Framework%20guidelines_and_network%20codes/Documents/FG_TAR_Invitation.pdf.

Question 2 – Do you agree with the scope of the initial draft TAR NC?

1.2 Topic: Scope (Article 2.4)

The specific nature of interconnectors should be taken into account when applying the TAR NC, particularly when considering the issue of revenue recovery. An effective revenue recovery mechanism is needed in recognition of the fact that interconnectors are not meshed networks and have no captive demand. Interconnectors often play an important role in security of supply and market integration. Many of the benefits they provide to adjacent markets are based on the very fact that a physical link has been established, for example the IUK asset facilitates the narrowing of price differentials between NBP and ZEE markets. Without captive demand and with volatile flow patterns that reflect utilisation in times of supply tension, there is a danger that the strict application of some of the rules within the TAR NC would not work due to the specific nature of the interconnectors. For example, in terms of revenue recovery ACER has recognised that in an under-recovery situation, only permitting an increase in capacity prices may simply exacerbate an under-recovery situation if this is applied to a few entry/exit points. For interconnectors, who have a limited number of entry/exit points, compete with other flexibility sources and have no captive demand, simply increasing capacity charges would exacerbate the problem. Therefore, it would be prudent to allow the relevant national regulatory authorities, to develop an appropriate effective revenue recovery mechanism, as necessary, upon consideration of the benefits that the interconnector provides to the markets it connects. Thus, a situation of spiralling capacity charges resulting in lower bookings and exacerbating any under-recovery situation would be avoided.

1.3 Topic: Definitions (Article 3)

- Policy Options

The definitions in Article 3 of the initial draft TAR NC are additional to the definitions already defined in the preceding network codes (namely the CAM NC, BAL NC and INT NC) Directive 2009/73/EC and the Regulation. The differences between the definitions outlined in the Framework Guidelines and those that have been inserted in the initial draft TAR NC, along with the reasons for these differences, are documented in Table 2 below. The definition for transmission services will be dealt with separately after this section.

Table 2: Explanation of the differences between the definitions in the Framework Guidelines and those in the Initial Draft TAR NC.

Definition	Framework Guidelines	Initial Draft TAR NC	Reasoning for amendment
Allowed Revenue	The maximum level of revenues set or approved by the NRA that a TSO is allowed to obtain within a defined period of time for undertaking its regulated activities.	The total revenue that a transmission system operator is entitled to obtain for the provision of all the regulated services within a given time period under a non-price cap regime.	Change made to clarify that this notion is applicable for a non-price cap regulatory regime only.
Auction Premium	The difference between the reserve price and the clearing price in an auction.	The difference between the clearing price and the reserve price in an auction.	The same as the Framework Guidelines except for reversing the order of reserve price and clearing price.
Bundled Reserve Price	The reserve price applicable to a bundled capacity product offered at an auction.	Omitted from the initial draft TAR NC.	The definition is deemed as unnecessary because the concept is described in a sufficiently clear manner in Chapter VI.
Costs	Are operational expenses, depreciation and the cost of capital (which includes the cost of debt and the cost of equity). The costs are determined for a specific year and shall be expressed in the price level of that specific year. They can be determined using either observed costs or incremental costs.	Omitted from the initial draft TAR NC.	The concept is clear and it is deemed not necessary to define it.
Cost Allocation Methodology	The methodology that determines the share of the TSO's (allowed) revenues, which is to be collected from the expected sale of transmission services at every entry or exit point.	Omitted from the initial draft TAR NC.	The concept is clearly explained in Chapter II.
Cost Driver	A cost driver is either an input, throughput or output parameter within a TSO's	Omitted from the initial draft TAR NC.	The concept is clear and it is deemed not necessary to define it.

	activity which is correlated, irrespective of causation, to the TSO's costs in their entirety or to a subset of them.		
Entry Point	A point into an entry-exit system, either from an adjacent entry-exit system or from an LNG facility, production facility, storage facility, distribution network, or from a third country, that is subject to network tariffs.	Omitted from the initial draft TAR NC.	The concept is clear and it is deemed not necessary to define it.
Exit Point	A point out of an entry-exit system either into another entry-exit system or into a distribution network, storage facility, transmission-connected consumer, or to a third country, that is subject to network tariffs.	Omitted from the initial draft TAR NC.	The concept is clear and it is deemed not necessary to define it.
Fixed Costs	All costs that are not affected, in the short run, by the amount of transmitted natural gas.	Omitted from the initial draft TAR NC.	The concept is clear and it is deemed not necessary to define it. It is only used in the TAR FG text in the definitions section.
Locational Signals	Different price levels that send incentives to network users in order for the network operators to achieve an efficient operation and/or expansion of the gas system.	The application of differential pricing mechanisms for the purpose of incentivising the network users to use specific points on the transmission system in order to achieve an efficient operation of and/or to encourage investment in the transmission system.	Amended for greater clarity.
Multiplier	A factor to calculate reserve prices for non-yearly standard capacity products applied to the proportional yearly reference price, before the application of a seasonal factor, if any.	The factor applied to the respective proportion of the reference price, in order to calculate a reserve price for a non-yearly standard capacity product.	The reference to 'yearly' was omitted since it is covered by the definition of 'reference price'. The portion regarding the correlation with 'seasonal factor' was omitted since it is captured in the definition

			of 'seasonal factor'.
Non-Physical Backhaul Flows	At unidirectional entry or exit points, the volume of gas nominated to be flowed in the opposite direction to the physical flow.	Omitted from the initial draft TAR NC.	This concept is clearly explained in Chapter IV.
Non-price cap regime	Not defined in the TAR FG.	Omitted from the initial draft TAR NC.	This concept is clearly explained in Chapter V.
Payable Price	The price to be paid, at the time of use, by the network user to the TSO, for capacity products.	Omitted from the initial draft TAR NC.	This concept is clearly explained in Chapter VII.
Price Cap Regime	A tariff regime under which the NRA sets an upper limit to the price, or to the weighted average of the prices of services provided by the TSO.	Omitted from the initial draft TAR NC.	This concept is clearly explained in Chapter V.
Reference Price	The value of the annual capacity product for each entry and exit point calculated after the application of the cost allocation methodology. Where auctions are used, the reference price is used as the reserve price for the annual capacity product and the basis for setting the reserve prices for capacity products of shorter duration and for interruptible capacity. Where auctions are not used to allocate capacity the reference price is used as the regulated price for the annual capacity product.	The price of the yearly capacity product for firm capacity applicable for entry and exit points derived in accordance with the cost allocation methodology.	Wording aligned with the CAM NC. The last two sentences omitted since the definition of a concept must not prescribe any rules. These rules are foreseen in Chapter IV and VII.
Regulated Price	The price of capacity products at points where the capacity allocation procedure is not an auction.	Omitted from the initial draft TAR NC.	Not used within the initial draft TAR NC. Substituted with a notion of 'price applicable at points other than interconnection points'.
Regulatory Account	An account aggregating over- and under-recovery of the	The account aggregating under- and over-recovery of the	Reference to 'annual basis' omitted to prevent the

	allowed revenues on an annual basis.	allowed revenues.	interpretation that the reconciliation of the regulatory account is to be carried out every year. The order of under-/over-recovery switched.
Regulatory Period	The period during which a tariff structure or allowed revenue is valid.	The time period for which the national regulatory authority sets the rules applied for the calculation of transmission tariffs and other charges.	'Or' which suggests that 'tariff structure' or 'allowed revenue' are alternatives was substituted with 'relating' to indicate the link between the two notions.
Revenue Cap Regime	A tariff regime under which the NRA sets the allowed revenues for the service(s) provided by the TSO. Tariffs are either defined by the NRA or the TSO, in compliance with the allowed revenues. Where TSOs define tariffs NRAs would approve the tariffs or the tariff methodologies, prior to implementation.	Omitted from the initial draft TAR NC.	Now referred to as a non-price cap regime.
Revenue Reconciliation	The reconciliation of the regulatory account following revenue collection.	Omitted from the initial draft TAR NC.	The definition is not required since the concept is described sufficiently clear in Chapter V.
Seasonal Factor	The factor that is applied to reserve prices in order to facilitate efficient utilisation of the infrastructure in different seasons of the year.	The factor reflecting the seasonal gas flow that may be applied in addition to the relevant multiplier in order to calculate a reserve price for a non-yearly standard capacity product.	Portion 'in order to facilitate…'is moved to Chapter IV.
Target Revenue	Not defined in the TAR FG.	Means the product of the total expected capacity sales and the allowed transmission tariffs and the sum of expected other charges that a transmission system operator is entitled to charge for the provision of all the regulated services within a	Introduced to keep the parallelism with the similar notion for TSOs functioning under a price cap regulatory regime.

		given time period under a price cap regime.	
Tariff Period	Not defined in the TAR FG.	Means the time period during which a particular level of transmission tariffs is applicable, which lasts at least one year and may coincide with the regulatory period.	Added for clarity.
Tariff Structure	A tariff structure is the result of a methodology which is used to calculate the price for transmission services at every entry and exit point of an entry-exit zone In particular, tariff structures address the relation between the tariffs for the different types of services (characterised by elements such as duration, interruptibility, pressure) and overall costs of the TSO.	Omitted from the initial draft TAR NC.	Not used in the text of the network code except when referring to the title.
Transmission Service	Any service necessary to transport natural gas through a transmission system, excluding balancing, flexibility, metering, depressurisation, ballasting, odorisation and any other dedicated or specific service.	The services provided by the transmission system operator for the purpose of transmission, excluding the activities defined under the applicable national rules, such as regional and local transmission activities, balancing, provision of flexibility services, metering, depressurisation, ballasting, quality conversion, biogas related services, odorisation, system operation services for third parties and any other dedicated services or infrastructure.	Amended to fulfil one of the tasks for ENTSOG foreseen by the TAR FG.
Transmission Tariff	Transmission tariffs determine what network users have to pay for each transmission service.	The price to be paid by network users to the transmission system operators at different entry and exit points for the provision of transmission services.	Small drafting changes for clarity.

Interactions between Revenue, Prices and Tariffs

In order to more comprehensively explain the inter-relationship between the definitions for revenue, prices and tariffs, the two figures below have been included. Figure 2 outlines the inter-relationship between 'transmission services', the revenue received from transmission services, 'cost allocation approach', 'cost allocation methodology', 'reference price' and 'transmission tariffs'. Cost allocation approach, as set out in the TAR NC, includes the 2 steps, namely the capacity-commodity split and the application of the cost allocation methodology to the capacity part.[21]

Figure 2: Explanation of the interaction between revenue, prices and tariffs.

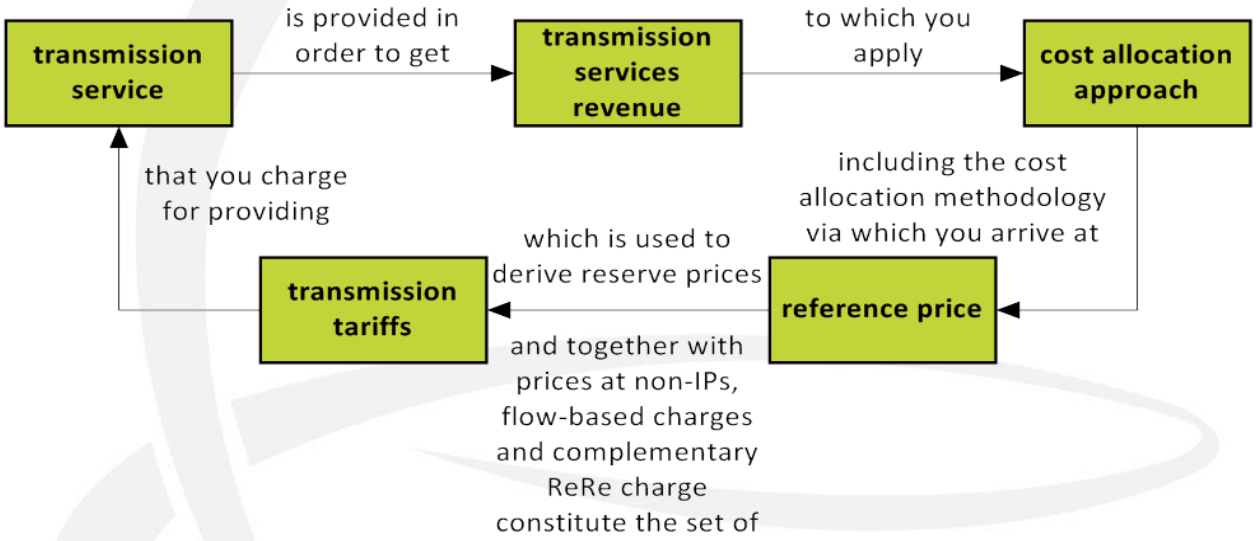
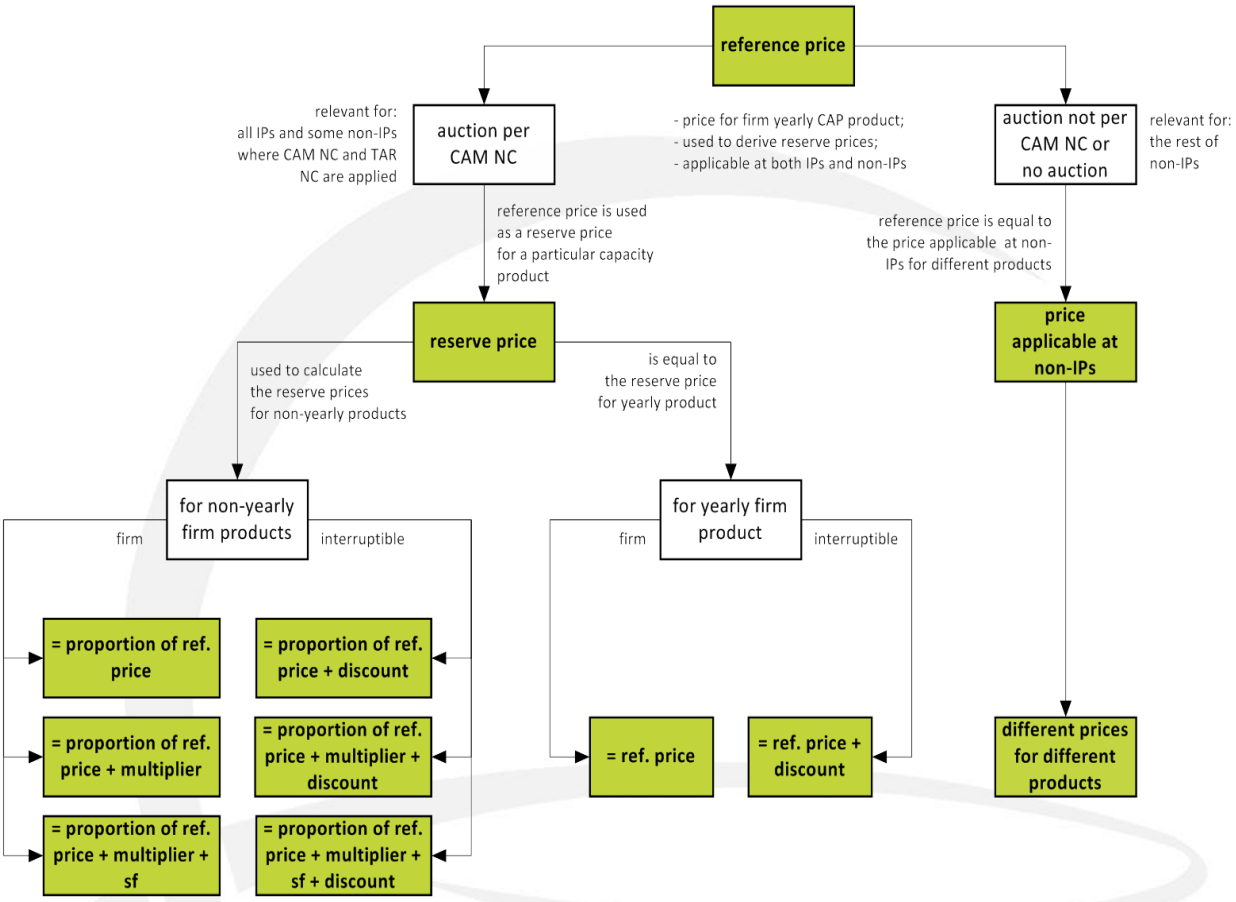


Figure 3 below provides a more detailed explanation of the inter-relationship between the 'reference price' and the 'reserve price' and between the situation where auctions are applied or the situation where there are no auctions. In addition, it provides an illustrative explanation of use of the reserve price to calculate the price for non-yearly products for firm and for interruptible capacity.

[21] Illustrated in Figure 5

Figure 3: Explanation of the interaction between prices and the application of auctions/no auctions.



The reference price is the price for the capacity products at points other than interconnection points unless the NRA takes the decision to apply both the CAM NC and the TAR NC at those points, while the reserve price is the price used where auctions as foreseen in the CAM NC take place i.e. at all IPs and some non-IPs. The reserve price may be different to the reference price, depending on the duration of the product on offer in the auction.

Question 3 – Do you agree with ENTSOG's proposal for amendments to the definitions foreseen by the TAR FG, as set out in Article 3 of the initial draft TAR NC?

Question 4 – Are there any other definitions that should be included in the TAR NC?

1.4 Topic: Transmission Services Definition (Article 3.11)

> Framework Guidelines

'The Network Code on Tariffs shall propose and justify a consistent definition for transmission services in line with Section 1.3.'

> Policy Options

The Framework Guidelines defines transmission services as follows: transmission service is 'any service necessary to transport natural gas through a transmission system, excluding balancing, flexibility, metering, depressurisation, ballasting, odorisation and any other dedicated or specific service'.

The proposal for the transmission services definition in the initial draft TAR NC is as follows: transmission services 'means the services provided by the transmission system operator for the purpose of transmission, excluding the activities defined under the applicable national rules, such as regional and local transmission activities, balancing, provision of flexibility services, metering, depressurisation, ballasting, quality conversion, biogas related services, odorisation, system operation services for third parties and any other dedicated services or infrastructure'.

Table 3: Comparison of the transmission services definition in the TAR FG and ENTSOG's proposal.

FG Definition	NC Definition	FG v NC Definition
Any service necessary to transport natural gas through a transmission system, excluding	The services provided by the transmission system operator for the purpose of transmission, excluding	Amended
-	The activities defined under the applicable national rules,	New addition
Balancing	Balancing	No change
-	Regional and local transmission activities	New addition, explained below
Flexibility	Flexibility services	Amended
Metering	Metering	No change
Depressurisation	Depressurisation	No change
Ballasting	Ballasting	No change

-	Quality conversion	New addition, explained below
-	Biogas related services	New addition, explained below
Odorisation	Odorisation	No change
-	System operation services for third parties	New addition, explained below
Any other dedicated or specific service	Any other dedicated services or infrastructures	Amended and explained below

Regional and Local Transmission Activities

Whilst considering the transmission services definition in the initial draft TAR NC, it was deemed necessary to include text 'regional and local transmission activities' because some TSO's assets also include 'regional and local transmission activities' which have no cross-border relevance.

Therefore, the assets relating to regional and local transmission activities can be seen similar, in terms of cross-border significance, to the assets used for dedicated services e.g. 'balancing, provision of flexibility services, metering, depressurisation, ballasting, quality conversion, biogas related services, odorisation, system operation services for third parties'.

These assets can be excluded from the cost allocation approach and another approach could apply for calculating the charges related to these assets. This solution is viewed as not having any negative effect on harmonisation of tariff structures or negatively affecting cost-reflective tariff setting, due to the assumption that these assets are only used by downstream, local customers.

Quality Conversion

A reference to quality conversion was inserted as an exclusion in the transmission services, referring both to (i) a gas quality conversion fee (as currently applied in Germany and in Belgium for example) and (ii) future costs for network adaption primarily due to the nature of charging for quality conversion (which is planned to be applied in Germany).

Gas quality conversion fee

Northwest Europe is supplied by two types of natural gas: low calorific gas (L-Gas) and high calorific gas (H-Gas). The physical transmission grids for both types of gas are separated although, for example, in Germany both entry-exit systems (GASPOOL and NCG) allow for cross-quality trading within one entry-exit zone. According to the German NRA's (Bundesnetzagentur) provisional regulation of 24 August 2011 (BK7-11-002-E2), in order to cover the conversion

costs, the market area operators (entry-exit system operator) are obliged to levy a conversion charge as of 1 October 2011. Conversion fees are charged by market area operator to network user. As these costs are not charged by TSOs and refer to the balancing services they are out of scope of the TAR NC. In addition to the conversion fees levied in Germany as described above, in Belgium, specific gas quality conversion installations can be requested by network users for transferring L-gas to the H-grid or vice versa. The cost of the installation is borne by the network user and hence should also be excluded from the definition of transmission services.

Future costs for network adaption

The supply of L-gas is established in the northwest of Germany, based on the natural reserves in Germany and from the Netherlands. During the last number of years, a continuous decline in the domestic German production took place and will continue in the next number of years. Also, the Netherlands announced the upcoming decrease of L-gas production and a reduction of the export amounts from 2020 onwards. The L-gas exports to Germany are expected to be reduced to zero by 2029. In order to assure the security of supply, the future absence of L-gas must be compensated with additional amounts of H-gas. Therefore, new additional infrastructure as well as modification of existing transmission assets are needed to guarantee future supply for Germany as well as the northwest of Europe (transit of additional H-gas amounts through Germany) with H-gas. The costs brought about by this demand (e.g. construction costs for additional pipelines, adjustment and modification of existing pipelines) are directly related to transmission services. The one-off costs of each particular household associated with switching supply from L- to H-gas (such as adaption of heaters, gas stoves etc.) as well as one-off costs for adaption of industrial gas appliances have to be covered and charged by network operators. These will increase the operational expenditures of network operators and relate to local requirements. On the basis of national legislation, the allocation of these costs may be not related to the transmission services.

Biogas Related Services

Reference to biogas related services was included as some Member States have implemented measures to promote the production and injection of biogas, e.g. in Germany, the system operator connecting the biogas facility, regardless of whether this is a TSO or a DSO, bears all the costs that are related to the connection of such facilities. On the basis of national legislation, these costs may be covered from all gas consumers on an equal level and are not related to transmission services.

System Operation Services for Third Parties

Also, it was deemed important to include 'system operation services for third parties' in this definition, as TSOs provide system operation services (e.g. dispatching, handling of nominations, allocations, matching, customer service etc.) to network users, for which costs are usually not charged separately. TSOs however, can offer such activities and also physical asset management, e.g. maintenance, to other network operators (third parties), who cannot carry out these tasks on their own and/or it is more efficient for them to have these activities done by a TSO already providing these services. Respecting the principles of cost-reflectivity and the avoidance of cross-subsidisation upon application of the cost allocation methodology, third parties who subscribe to TSO's system operation services should reimburse the TSO providing these services via a separate charge subject to their agreement and NRA approval.

Dedicated Services and Infrastructure

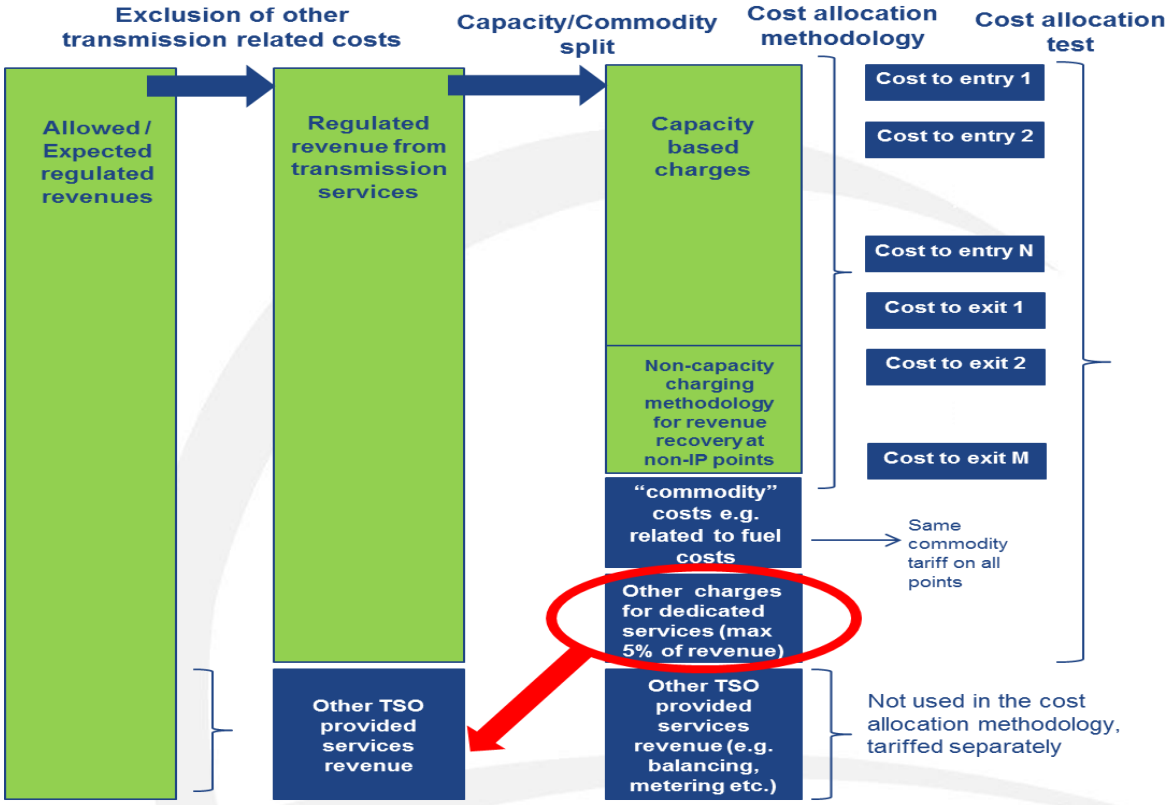
> Framework Guidelines

'The collection of the revenues shall be based on capacity charges, except in the following cases:

- *Upon approval or determination by the NRA, specific charges for dedicated services and/or dedicated infrastructure (such as the provision of metering services), may be established, provided that such charges will be in accordance with the objectives of the Framework Guidelines. The revenue collected from these charges on aggregate will be limited to a maximum of 5% of total (allowed) revenues. The Network Code shall provide for a list of TSO services that could be covered by the provision.'*

In accordance with Section 3.1.1 of the Framework Guidelines, the recovery of the costs of dedicated services and/or infrastructure may be based on charges other than capacity charges. This was discussed at the SJWSs and ENTSOG presented the fact that there was a redundancy in the Framework Guidelines as there are two options for excluding a share of the allowed/target revenues from the cost allocation methodologies related to dedicated services. In order to avoid confusion and provide clarity with regard to the treatment of dedicated services, it has been decided to keep the reference to dedicated services in the definition of transmission services but to add 'infrastructure'. At the same time, the possibility to have a separate charge for dedicated services with a 5% total revenue limit has been omitted so that all dedicated services are dealt with through the exclusions from the transmission services definition. Figure 4 below provides an illustrative explanation of how dedicated services will be treated.

Figure 4. Parameters of a cost allocation approach



Question 5 – Do you agree with ENTSOG's proposal for the definition of transmission services as set out in Article 3.11 of the initial draft TAR NC?

Shorthaul is a service offered to network users to cover situations where a network user requires gas to be delivered to an exit point(s) close to a specific entry point and where it could be more cost effective for the network user to invest in a dedicated pipeline to deliver the gas from that entry point rather than face the full entry/exit tariffs for the use of the TSO's system. Shorthaul is an optional tariff offered by the TSO that network users can elect to pay rather than face the full entry/exit tariffs and it thus prevents the inefficient bypass of the TSO's system. It should be designed such that it is only attractive for large exit points situated close to an entry point and that at longer distances and certain loads it would become more economical to pay the standard entry/exit tariffs. Shorthaul should be considered as a dedicated service.

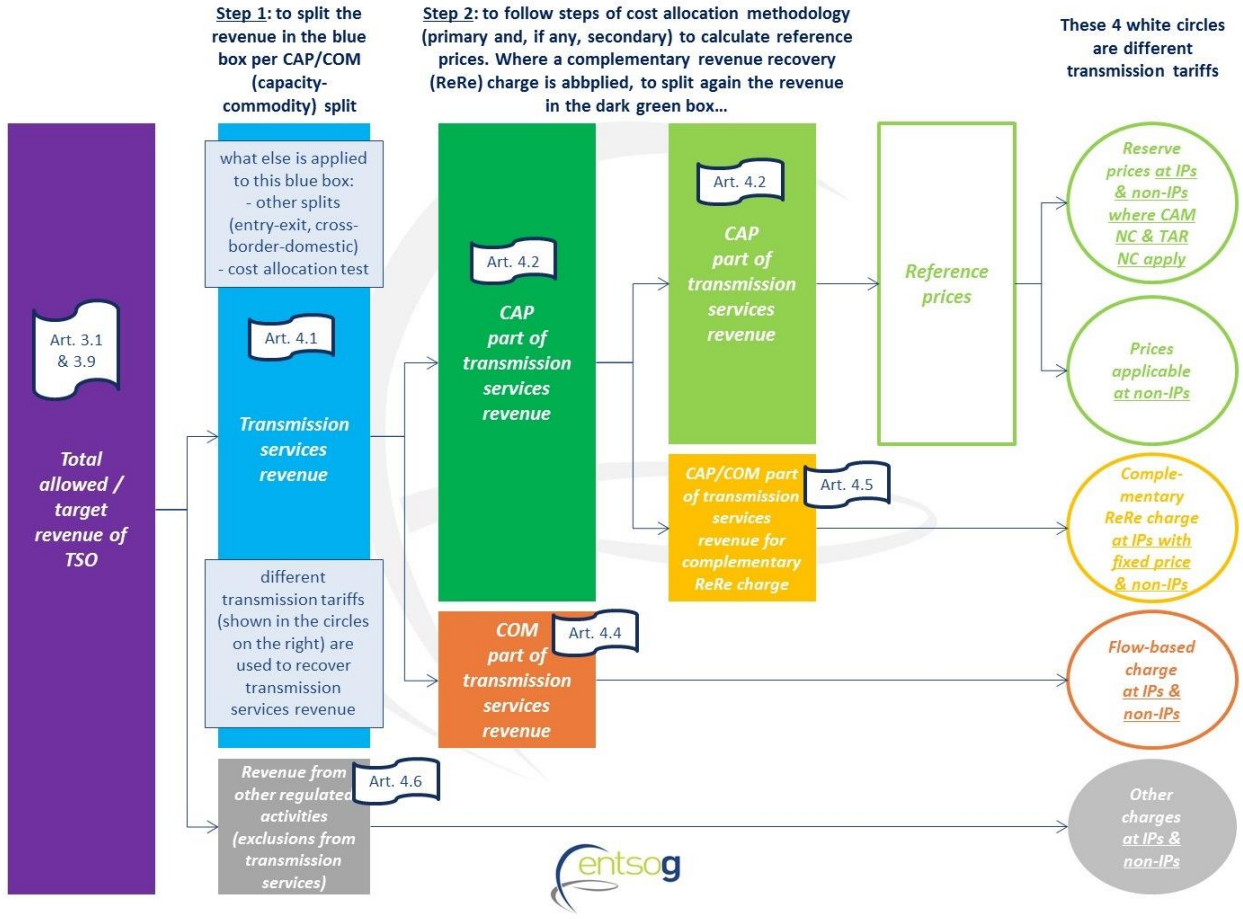
2. Cost Allocation Approach

Chapter II of the initial draft TAR NC outlines the following information: the parameters of a primary cost allocation methodology, criteria for choosing a cost allocation methodology, transmission services revenue, entry-exit split, the individual primary cost allocation methodologies, secondary adjustments, selection, review, cost allocation test and storage.

2.1 Topic: Composition of transmission services revenue (Article 4)

This section explains that the revenue received by the TSO in relation to the provision of transmission services forms part of the total allowed or target revenue, as relevant, from the regulated activities of a TSO. It is this revenue (blue box in figure 5 below) that the cost allocation approach applies to. The exclusions from the transmission services revenue, mentioned in the definition of transmission services, may be charged by other means.

Figure 5: Composition of allowed or target revenue and interaction between transmission services revenue and various charges.



Question 6 – Is it clear which portion of the allowed or target revenue is used as an input to the cost allocation approach as set out in Article 5.1 of the initial draft TAR NC?

2.2 Topic: Cost allocation approach and cost allocation methodology (Article 5)

> Policy Options

This section explains what is meant by the terms 'cost allocation approach' and 'cost allocation methodology'. It is important to understand the difference between these two concepts so that it is clear which portion of the allowed or target revenue is used to calculate the transmission tariffs for capacity and where relevant, commodity.

Cost allocation approach = application of a capacity-commodity split to the transmission services revenue and then the cost allocation methodology is applied to the capacity portion of the revenue.

Cost allocation methodology = the primary cost allocation methodology plus the application of secondary adjustments, if any.

Question 7 – Is the difference between cost allocation approach and cost allocation methodology as set out in Article 5 of the initial draft TAR NC clear and understandable?

2.3 Topic: Details of parameters for primary cost allocation methodologies (Article 7.6)

> Framework Guidelines

'The Network Code shall define possible objective approaches to distance and average distance and shall give guidance on how to simplify the network representation in a transparent, non-discriminatory and objective way.'

> Policy Options

Outlined in Article 7.6 of the initial draft TAR NC, are two alternative approaches for calculating distance, namely the airline approach and the path approach. The airline (also known as Euclidean) approach is the shortest straight line distance between two points in a transmission system based on their coordinates. The path (also known as pipeline) approach is the measured distance of a pipeline route connecting an entry point to an exit point based on either the shortest or average measured distance where more than one pipeline route could apply. These approaches were presented at the SJWSs. For a more detailed explanation and examples, please refer to the TAR NC Launch Documentation.

Question 8 – Are you satisfied with the two approaches for calculating distance as outlined in Article 7.6 of the initial draft TAR NC?

Question 9 – If you are not satisfied with the two approaches, could you suggest other approaches for calculating distance?

2.4 Topic: Criteria for choosing the parameters of a primary cost allocation methodology (Article 8)

> Framework Guidelines

'Regarding assumptions related to capacity, the TSOs communicate capacity values for each entry and exit point in the system at reference conditions. Flows in the system may be used to characterise the capacity. However, unstable flow patterns decrease the quality of forecasts. The Network Code shall define in relation to unstable flow patterns what forecast quality cannot be used and provide appropriate proxies instead.'

> Policy Options

The capacity concept used in the tariff calculation can be of three types, as stated in Section 2.3 of the Framework Guidelines, i.e. technical capacity, forecasted contracted capacity or flows. After analysing the different types of capacity concepts used by TSOs for the calculation of the capacity based transmission tariff, 'flows' are sometimes used in this situation but it should be understood that it is the flow under a specific demand and supply scenario that is used.

ENTSOG proposes that, instead of using 'flows' as a capacity concept in networks with unstable flow patterns, one of the other capacity concepts would be used (technical or forecasted contracted capacity). This proposal was presented at the SJWS[22] and no specific remark against this proposal was made by participants.

> Framework Guidelines

'The capacity assumption shall be consistent with the economic signals expected from the chosen allocation methodology: (i) technical capacity shall be favoured in combination with allocation methodologies providing locational signals, while (ii) the application of booked capacity shall be limited to allocation methodologies that do not provide such signals.'

> Policy Options

As outlined in the above text box, the Framework Guidelines express a preference for when to use technical capacity and contracted capacity in relation to the chosen cost allocation

[22] http://www.entsog.eu/public/uploads/files/publications/Tariffs/2014/TAR%20NC%20SJWS%201%20-%20All%20Presentations%20-%20Final%20(2).pdf.

methodology. However, the descriptions of the primary cost allocation methodologies are based on a usage of a mix of 'technical capacity' and 'contracted capacity'. For example, following the description in the Framework Guidelines, the capacity weighted distance approach uses both capacity types. Therefore, it is suggested that such a preference for one capacity type over another should not be imposed when choosing the primary cost allocation methodology.

Question 10 – Do you agree with the criteria for choosing the components of a primary cost allocation methodology as outlined in Article 8 of the initial draft TAR NC?

2.5 Topic: Entry-exit split (Article 9)

> Policy Options

One of the parameters of the primary cost allocation methodologies is that of the split between entry revenue and exit revenue. This entry-exit split may be either an input to or an output of the cost allocation methodology. This is explained by means of simple examples using postage stamp as the chosen primary cost allocation methodology as outlined in Tables 4 and 5 below:

Table 4: The entry-exit split as an input.

Inputs	
Transmission Services Revenue	€100
Entry Capacity	50 units
Exit Capacity	50 units
Entry-Exit Split	40% / 60%

Calculation		
Total Entry Revenues	40% * €100	= €40
Total Exit Revenues	60% * €100	= €60

Result		
Entry Tariff	€40 / 50 units	= €0.80 / unit
Exit Tariff	€60 / 50 units	= €1.20 / unit

Table 5: The entry-exit split as an output.

Inputs	
Transmission Services Revenue	€100
Entry Capacity	20 units
Exit Capacity	50 units
Entry-Exit Split	unknown

Calculation	
Total Capacity	20 units Entry + 50 units Exit
Tariff	€100 / 70 units
Entry Tariff	= €1.43 / unit
Exit Tariff	= €1.43 / unit

Result	
Entry-Exit Split	(20/70):(50/70) = 29:71

2.6 Topic: Primary Cost Allocation Methodologies (Articles 11 – 13)

> Framework Guidelines

'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'.

> Policy Options

The Framework Guidelines request that ENTSOG consider those methodologies which have more than one variant and whether the variants are necessary or could the methodology be described without variants. In the Framework Guidelines, both the capacity weighted distance and the virtual point based methodologies were described with variants. After a review of both variant A and variant B of the capacity weighted distance methodology, it was deemed possible to merge these variants so that the text of the initial draft TAR NC text reflects all the steps involved in the combined methodology.

In contrast to the capacity weighted distance methodology, it was deemed necessary to maintain both variants of the virtual point based methodology. The reason for maintaining the

separate variants is because one variant is suitable for a meshed network and the other variant is suitable for an unmeshed network with a single dominant node. In one variant the virtual point location is determined mathematically but in the other variant it is determined geographically. In addition, for one variant the tariff calculation is done by using distance and peak flow while for the other variant it is done by using distance and contracted capacity.

2.7 Topic: Asset allocation methodology (Article 15)

The Framework Guidelines stipulate the inclusion of four primary cost allocation methodologies (i.e. postage stamp, capacity weighted distance, distance to the virtual point and matrix) in the TAR NC. In addition to these four, a fifth methodology, the 'asset allocation methodology', is being included in the initial draft TAR NC, named. In certain situations and for relatively simple, unmeshed networks, the application of one of the original four primary cost allocation methodologies could lead to sub-optimal results compared to a cost allocation based on the direct allocation of assets. In simple unmeshed networks, where it is possible to identify assets in transmissions systems that serve the interests of identifiable and homogenous groups of network users, the asset allocation methodology would be more suitable. This is particularly necessary where the revenue recovery mechanism is insufficient to guarantee the TSO's full recovery of the asset value and reconciliation is necessary to or from customers in other markets where approved by the relevant NRAs.

The general approach for this methodology covers the following steps.

1. Identification of homogenous groups of network users, e.g.:
    - domestic customers;
    - customers abroad (i.e. transit customers);
    - subgroups of transit customers, e.g. from specific Member State(s) (for purpose of PCI cross-border cost allocation – CBCA).
2. Identification of assets necessary to provide peak demand capacity to each identified homogenous group of network users at associated entry/exit points:
    - based on assumed flow scenarios agreed between TSO, NRA and Member State;
    - including agreed level of 'surplus' capacities for purposes of security of supply and diversification of sources;
    - for CBCA purposes, also based on assumed flow scenarios agreed with neighbouring TSOs, NRAs and Member States.

3. Calculation of costs for each identified homogenous group of network users;
4. Distribution of costs to identified entry/exit points.

For a more in-depth example of how this methodology would work and an outline of the characteristics relevant for the asset allocation methodology, please see Annex 1c.

Question 11 – Do you agree with the inclusion of the asset allocation methodology as set out in Article 15 of the initial draft TAR NC?

2.8 Topic: Secondary adjustments (Articles 16 – 18)

The Framework Guidelines specify the possibility to apply secondary adjustments to the primary cost allocation methodology and limits the secondary adjustments to those of rescaling, equalisation and benchmarking. The conditions for applying the three secondary adjustments are set out in Articles 16, 17 and 18 of the initial draft TAR NC.

Question 12 – Do you agree with the secondary adjustments as described in Articles 16 – 18 of the initial draft TAR NC?

2.9 Topic: Criteria for choosing a primary cost allocation methodology and a secondary adjustment (Article 19)

The Framework Guidelines set out certain criteria for choosing a particular cost allocation methodology. The initial draft TAR NC has been prepared to be in line with the Framework Guidelines as much as possible but although ENTSOG has tried further specifying the criteria, it was not possible to identify sensible criteria.

Question 13 – Is it necessary to specify further criteria other than those outlined in Article 19 of the initial draft TAR NC?

Question 14 – If it is necessary, could you suggest additional criteria to those outlined in Article 19 of the initial draft TAR NC?

2.10 Topic: Selection and approval of the cost allocation approach (Article 20)

> Policy Options

This section outlines the requirement of either the TSO or the NRA, where relevant, to conduct a consultation on the reasons as to why the chosen cost allocation approach was selected. The consultation should also include the alternative approach (counterfactual), details of the cost allocation test, parameters of the primary cost allocation methodology and any secondary adjustments. The cost allocation test should be applied after the primary cost allocation methodology and after secondary adjustments, if any, and this would also apply to the alternative approach. Following the end of the consultation period, the NRA(s) will then approve either the proposed cost allocation approach or any of its alternatives for use in the relevant regulatory period.

2.11 Topic: Review of the cost allocation approach (Article 21)

> Policy Options

The information outlined in Article 20.2(c), i.e. the indication of the relevant parameters of the proposed cost allocation approach and the corresponding information on their respective values and the assumptions used, must be reviewed at least every four years to ensure that they are still relevant. This review will be carried out based on any relevant technical and market data. Where the outcome of the review results in a change of the type of cost allocation approach being applied, then the whole process as outlined in Article 20 shall be followed. Where the outcome of the review does not result in the necessity to change the type of the cost allocation approach from the applied to another one, a justification document which includes an explanation of the outcome of the review of the applied cost allocation approach shall be published.

Question 15 – Is the content of the four year review and the requirement for a justification document or consultation (depending on the outcome of the review) clear, as set out in Article 20 of the initial draft TAR NC?

2.12 Topic: Cost allocation test (Article 22)

> Framework Guidelines

'The Network Code on Tariffs shall develop a detailed test comparing expected revenues and cost drivers of domestic and cross-border points. The amount of cross-border exit capacity shall be used as a proxy for the amount of entry capacity dedicated to cross-border use on networks where this ratio is not readily identifiable. The rest of the entry capacity shall be considered as dedicated to domestic use. The Network Code shall define a rule to determine the average distance used by cross-border and domestic uses. The Network Code shall include a mathematical formula of the two ratios. The NRAs shall justify the reasons for any deviation between the two ratios by more than 10%, where the first ratio is compared to the second.'

> Policy Options

The aim of the cost allocation test is to provide an objective comparison of the revenues recovered from domestic and cross-border points with the applicable cost drivers. The transmission services revenue is an input to the cost allocation test, including the flow-based charge and complementary revenue recovery charge set out in Article 4.4 and 4.5 respectively. The Framework Guideline states that 'the amount of cross-border exit capacity shall be used as a proxy for the amount of entry capacity dedicated to cross-border use on networks where this ratio is not readily identifiable. The rest of the entry capacity shall be considered as dedicated to domestic use.' The reason that this proxy may be necessary is that most TSOs don't know explicitly at each entry point which part of the capacity is dedicated to national use or transit. For a more detailed explanation and example of the cost allocation test, please refer to the TAR NC Launch Documentation.

Question 16 – Are there any other means of distinguishing between domestic and cross-border entry capacity, other than using cross-border exit capacity as a proxy for cross-border entry capacity when carrying out the cost allocation test as set out in Article 22 of the initial draft TAR NC?

2.13 Topic: Storage (Article 23)

> Policy Options

The issue of transmission tariffs for storage was discussed at the SJWSs at the request of stakeholders. Some stakeholders believe that since gas stored in storage facilities is not a net

source of supply or demand and gas storage users already pay entry and exit tariffs at import/production and at end consumption, only any additional costs and benefits of gas storages should be taken into account to avoid cross-subsidies between network users storing or not storing gas. ENTSOG is of the opinion that NRAs are best placed to consider, *inter alia*, any net benefit storage facilities may provide the transmission system as well as minimising any adverse effect on cross-border trade.

Question 17 – Do you think the considerations outlined in Article 23 of the initial draft TAR NC with regard to tariff setting for storage are sufficient?

3. Publication Requirements

Chapter III of the initial draft TAR NC deals with information to be published, the standardised format and the publication notice period.

3.1 Topic: General provisions (Article 24.1a)

> Policy Options

It is foreseen in this section, that any information relevant for the calculation of transmission tariffs will be published so that network users will be able to estimate the reference price for one (or more than one) tariff period within the current regulatory period. It is also anticipated that the circumstance whereby a network user would have the ability to estimate the reference price for more than one tariff period would only be in the situation where the tariff period is shorter than the regulatory period, e.g. a typical regulatory period could be 4 years whereby a typical tariff period could be one year.

Figure 6 below provides an illustrative example of this concept. In the example, the regulatory period has been set as January 2013 – December 2016. As the current tariff year is 'Tariff year 2', it is anticipated that the network user would, in accordance with the initial draft TAR NC, have the information necessary to be able to make a reasonable estimation of the reference price for Tariff Year 3 and Tariff Year 4 in accordance with Article 24.1(a).

Figure 6: Example of a regulatory period

Question 18 – Is the relationship between the regulatory period and tariff period as defined in Article 3.7 and 3.10 of the initial draft TAR NC clear to you?

3.2 Topic: Information to be published (Article 25)

This Article provides the details on what information is required for publication for each tariff period by the TSO or the NRA, as relevant. E.g. Article 25.1(c) says *'where relevant, the information on the reconciliation of the regulatory account…'*. For clarification purposes, the text 'where relevant' is included here as it is only relevant for a non-price cap regime. In a price cap regime, the only information required to be provided on the reconciliation of the revenue account is that of information pertaining to the auction premium.

3.3 Topic: Standardised format (Article 26)

- Framework Guidelines

The specific requirements outlined in the Framework Guidelines regarding Publication Requirements are as follows:

'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).'

- Policy Options

As the parameters necessary to run each of the primary cost allocation methodologies are different, it has been decided that one standardised template would not suffice. Therefore, a

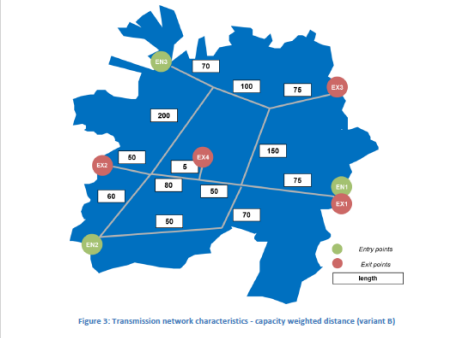
customised template is suggested to be developed for each of the primary cost allocation methodologies, i.e. the information as outlined in Article 25.1(a) which includes the information on the parameters of the applied primary cost allocation methodology and information on the applied secondary adjustment(s), if any. The information that is common (or general) to all the primary cost allocation methodologies would then be inputted into a separate 'general' template, i.e. the information as is outlined in Article 25.1(b) and (c).

In other words, each TSO or NRA, as relevant, will be obliged to populate two parts of the template. The first of which is applicable to the chosen cost allocation methodology and the second of which is the 'general' part of the template and is applicable to all cost allocation methodologies. An example of the parts of the template applicable to capacity weighted distance approach is outlined below:

Table 6: Customised part of the template (illustrative example of a capacity weighted distance approach).

<table>
<tr><th></th><th>TSO XXX</th></tr>
<tr><th>Requirements</th><th>Value (with unit) / Text</th></tr>
<tr><td>Transmission services allowed or target revenue</td><td></td></tr>
<tr><td>• Value of transmission services revenue[23]</td><td>2016 2017
500.246.276 € 495.039.482 €
2018 2019
511.351.916€ 511.868.371€</td></tr>
<tr><td>• Inflation</td><td>2%</td></tr>
<tr><td>• Entry-exit split for capacity charges</td><td>25% entry / 75% exit</td></tr>
<tr><td>• Information on cost-efficiency incentives</td><td>Not applicable.</td></tr>
<tr><td>Primary methodology</td><td></td></tr>
<tr><td>• Cost drivers</td><td>Capacity, distance</td></tr>
<tr><td>• Capacity (all entries/all exits)</td><td>
<table>
<tr><th>Capacities</th><th>Expected bookings</th><th>Technical</th></tr>
<tr><td>Entry 1</td><td>10</td><td>13</td></tr>
<tr><td>Entry 2</td><td>10</td><td>12</td></tr>
<tr><td>Entry 3</td><td>5</td><td>10</td></tr>
<tr><td>Exit 1</td><td>10</td><td>12</td></tr>
<tr><td>Exit 2</td><td>5</td><td>8</td></tr>
<tr><td>Exit 3</td><td>5</td><td>8</td></tr>
<tr><td>Exit 4</td><td>10</td><td>12</td></tr>
</table>
</td></tr>
</table>

[23] Depending on the rules applicable to each TSO, i.e. whether the tariff period is 1 year or more than one year, the revenue for applicable tariffs should be published. In this example, it is assumed that the tariff period is 4 years.

	Unit in GWh/h/year
• Network representation and length of pipelines	 Figure 3: Transmission network characteristics - capacity weighted distance (variant B) For distance, the shortest path is used when several option are possible.
• Relevant entry/exit combinations[24]	Not relevant since all combinations are used for the calculation.
Secondary adjustments	
• Description of the approach to locational signals	Tariffs depend on the location at entry and exit points since the used cost allocation methodology is not the postage stamp. Only on domestic exit points, an equalisation is applied.
• Rescaling	Not applicable.
• Equalisation	For all the domestic exit points, we have made an equalisation for simplicity.
• Benchmarking	For entry 1, benchmark with competitors reveals that there is a competition on this point and the tariff resulting from the CWD methodology results in a too high tariff. In agreement with NRA, tariff at entry 1 was decreased by 20%. All other tariffs were increased by 5%.
Other	
Result	

[24] Applicable only for Variant B set out in the Framework Guidelines.

• Reference Prices[25]	**[€/kWh/h/year]**	**2016**	**2017**
	Entry 1	8	8.16
	Entry 2	8	8.16
	Entry 3	13	3.06
	Exit 1	11	11.22
	Exit 2	8	8.16
	Exit 3	12	12.24
	Exit 4	7	7.14
		2018	**2019**
	Entry 1	8.32	8.49
	Entry 2	8.32	8.49
	Entry 3	3.12	3.18
	Exit 1	11.44	11.67
	Exit 2	8.32	8.49
	Exit 3	12.49	12.73
	Exit 4	7.28	7.43

Table 7: General part of the template (illustrative example of a capacity weighted distance approach).

	TSO XXX		
Requirements	**Value (with unit) / Text**		
Multipliers / seasonal factors / interruptible discount			
Multipliers			
• Level	Multipliers applicable for all IPs in the entry-exit system - Quarterly capacity: 1.1 - Monthly capacity: 1.3 - Daily capacity: 1.5 Within-day capacity: set at same value as daily capacity		
• Underlying reasons	No congestion in system		
Seasonal factors			
• Level	**Daily and within-day**		
	Jan	**Feb**	**Mar**
	3.6	3.6	1.8

[25] Depending on the rules applicable to each TSO, i.e. whether the tariff period is 1 year or more than one year, the tariffs for each year should be published. In this example, it is assumed that the tariff period is 4 years.

<table>
<tr><td></td><td>
<table>
<tr><td>Apr</td><td>May</td><td>Jun</td></tr>
<tr><td>1.8</td><td>0.9</td><td>0.9</td></tr>
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<tr><td>0.9</td><td>0.9</td><td>0.9</td></tr>
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<tr><td>Jan</td><td>Feb</td><td>Mar</td></tr>
<tr><td>1.92</td><td>1.92</td><td>0.96</td></tr>
<tr><td>Apr</td><td>May</td><td>Jun</td></tr>
<tr><td>0.96</td><td>0.48</td><td>0.48</td></tr>
<tr><td>Jul</td><td>Aug</td><td>Sep</td></tr>
<tr><td>0.48</td><td>0.48</td><td>0.48</td></tr>
<tr><td>Oct</td><td>Nov</td><td>Dec</td></tr>
<tr><td>0.96</td><td>0.96</td><td>1.92</td></tr>
</table>
Daily and within-day seasonal factors correspond to the monthly factors of the month related to this specific day.
Quarterly seasonal factors are the average of the monthly seasonal factors of the months related to this specific quarter (weighted with the number of days in each month).
</td></tr>
<tr><td>• Underlying reasons</td><td>Seasonal factors follow the seasonal usage of the system (based on the average gas flow of the three last years). The factor used to adjust the initial values in accordance with Article 31.2(e) is equal to 1.</td></tr>
<tr><td>Interruptible products</td><td></td></tr>
<tr><td>• Formula</td><td>Ex-ante Discount = 10 x Probability of interruption
Probability of interruption is estimated at 2% → ex-ante discount is equal to 20%.
No ex-post discount.</td></tr>
<tr><td>• Other</td><td>Tariff of an interruptible product is equal to 80 % of the tariff of the firm same product.</td></tr>
<tr><td>Reconciliation of the regulatory account</td><td></td></tr>
<tr><td>Amounts used in reconciliation (for previous regulatory period)</td><td></td></tr>
<tr><td>• difference between the allowed and the actually obtained revenue</td><td>25 M€ over-recovery over the last tariff period.</td></tr>
<tr><td>• which part of under-/over-recovery is attributed to the regulatory account</td><td>100% of this over-recovery is logged on to the regulatory account.</td></tr>
<tr><td>• revenue from auction premium</td><td>No revenue from auction premium.</td></tr>
<tr><td>Rules on the reconciliation (for current regulatory period)</td><td></td></tr>
</table>

• reconciliation period	We have a regulated account reconciled at the end of the regulatory period for the next regulatory period. 25 M€ amount in the regulatory account is integrated in tariff calculation of the new tariff period.
• incentive mechanisms implemented	If our the sales during a year of the regulated period are below the expected value of sales for this yea , it is for the margin of the TSO. If our the sales in the regulated period are above the expected value of sales for this year, 100% is logged on to the regulated account. If our OPEX are below the expected value of cost, the 3 first M € are for our margin and the 5 next M € are for the regulatory account etc. 25% of over and under-recovery will be kept by the TSO. The rest is for updating the allowed revenue for the next tariff period.
• treatment of auction premium	We have an account, separate from the regulatory account, for the revenue from the auction premium. We can use the amount whenever we want, only for reducing physical congestion and after approval of the NRA. Auction premium, if any, will be added to the separate account.
• application of mitigating measures	Not applicable.
Charges other than the reference price	
• flow-based charge	No flow-based charge(
• other charges	Not applicable.
Cost allocation test	
• ratio 1	26 (for year 2016)
• ratio 2	24.5 (for year 2016)
• cost drivers for ratio 1 & 2	Booked capacity x Distance
• test result	5,94 % < 10% ok

Question 19 – Do you agree with the standardised format as set out in Article 26.1 of the initial draft TAR NC?

Question 20 – Do you agree with the separation of the information into two different parts as set out in Article 26.1(a) of the initial draft TAR NC?

3.4 Topic: Publication notice period (Article 27.1)

This Article of the initial draft TAR NC states that 'the level of transmission tariffs shall be applicable within the tariff period [which shall last from [xx] to [xx]]'. The reason that the dates have not been specified is because the outcome of the impact assessment on the tariff setting

year may have an impact on the final drafting of this Article. If the impact assessment shows that the tariff setting year should be harmonised then the dates for the harmonised tariff setting year will be inserted and the square brackets will be removed.

3.5 Topic: Tariff Setting Year Impact Assessment

> Framework Guidelines

'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.'

> Policy Options

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. The issue that has been identified in the Framework Guidelines is that currently, there are different tariff setting years across the EU, i.e. the tariffs are applicable from different dates. Therefore, network users that operate in different countries must be aware of the different dates when the tariffs change.

ENTSOG's objective is to assess the impact of the possible harmonisation of the transmission tariff setting year, taking into account downstream impacts, e.g. on DSOs, across all Member States.

Options for impact assessment

The main options that will be considered as part of the impact assessment are as follows:

1. Harmonisation of the tariff setting year so that the tariffs apply from 1 January to 31 December;
2. Harmonisation of the tariff setting year so that the tariffs apply from 1 October to 30 September;
3. Status quo – no harmonisation of the tariff setting year.

Consequences of the Options

As already described in the TAR NC Launch Documentation, the likely consequences of the three possible options are set out below.

Option 1: The tariff setting year from 1 January to 31 December

- The tariff setting year would be aligned with the calendar year which could be advantageous for reporting and accounting purposes, e.g. could avoid double reporting for calendar year and gas year;
- The tariffs are published prior to the start of the capacity auctions in March, allowing a network user to purchase capacity and know the price of that capacity for at least three months (i.e. October to December) of the gas year, depending on length of tariff period e.g. one year or multiple years.

Option 2: The tariff setting year from 1 October to 30 September

- The tariff setting year would be aligned with the timing for the yearly standard capacity products as defined in the CAM NC;
- A network user would not know the tariff for capacity purchased in the yearly auctions in March because the tariffs would not be published until e.g. 1 September where the minimum notice period is 30 days;
- The tariff setting year aligned with the timing for the yearly standard capacity products would have a massive impact on other regulated entities.

Option 3: Status quo

- The 'no change' option would be a neutral option in terms of IT system changes;
- Network users would still experience different tariff setting years as occurs today. This might create additional complexity in transportation cost determination. In case of misalignment at the border, the bundled tariff could be subject to a double change during the year.

Question 21 – Are you concerned by the fact that tariffs are set / applied at different times of the year?

Question 22 – If you are concerned, then do you think that the tariffs should be set / applied at the same time of the year by all TSOs?

Question 23 – Could you identify the benefits of the harmonisation of the tariff setting year, if any, for your business and could you quantify them?

Question 24 – Could you identify the costs of harmonisation of the tariff setting year, if any, for your business and could you quantify them?

Question 25 – If applicable, do you think the benefits would outweigh the costs?

Timing of Tariff Publication

In several SJWSs, prime mover meetings and via written feedback on the Business Rules, stakeholders have requested that all the tariffs for the gas year be published before the auctions for the yearly standard capacity products start. The consequence of this request would mean that all the tariffs would be published at the start of February (based on the current CAM NC auction calendar) so that stakeholders would know the tariffs for the different capacity products:

a. at the same time that the TSO provides notification about the amount of technical capacity to be offered for each year for the annual yearly capacity auctions, and
b. a month before the start of the annual yearly capacity auctions on the first Monday in March.

Question 26 – Is this issue of knowing the tariffs for the relevant gas year before the auctions start very important to you?

Question 27 – Are there other issues or aspects that are more important than the issue specified in Question 26?

4. Reserve Prices

Chapter IV of the initial draft TAR NC relates to the derivation of reserve prices for standard capacity products with a duration of less than one year, including the determination and use of multipliers and seasonal factors. This chapter also deals with the pricing of standard interruptible capacity products.

4.1 Topic: Use of multipliers and seasonal factors (Articles 28 and 29)

This Topic deals with the decision process when setting the ranges of applicable multipliers and seasonal factors for the standard capacity products and is split into three themes outlined

below: (1) link to the CMP Guidelines with regards to defining congestion; (2) insertion of a safeguard in relation to the cap for multipliers; and (3) the decision process when setting the level of multipliers for the standard capacity products.

Link to the CMP Guidelines with regards to defining congestion

> Policy Options

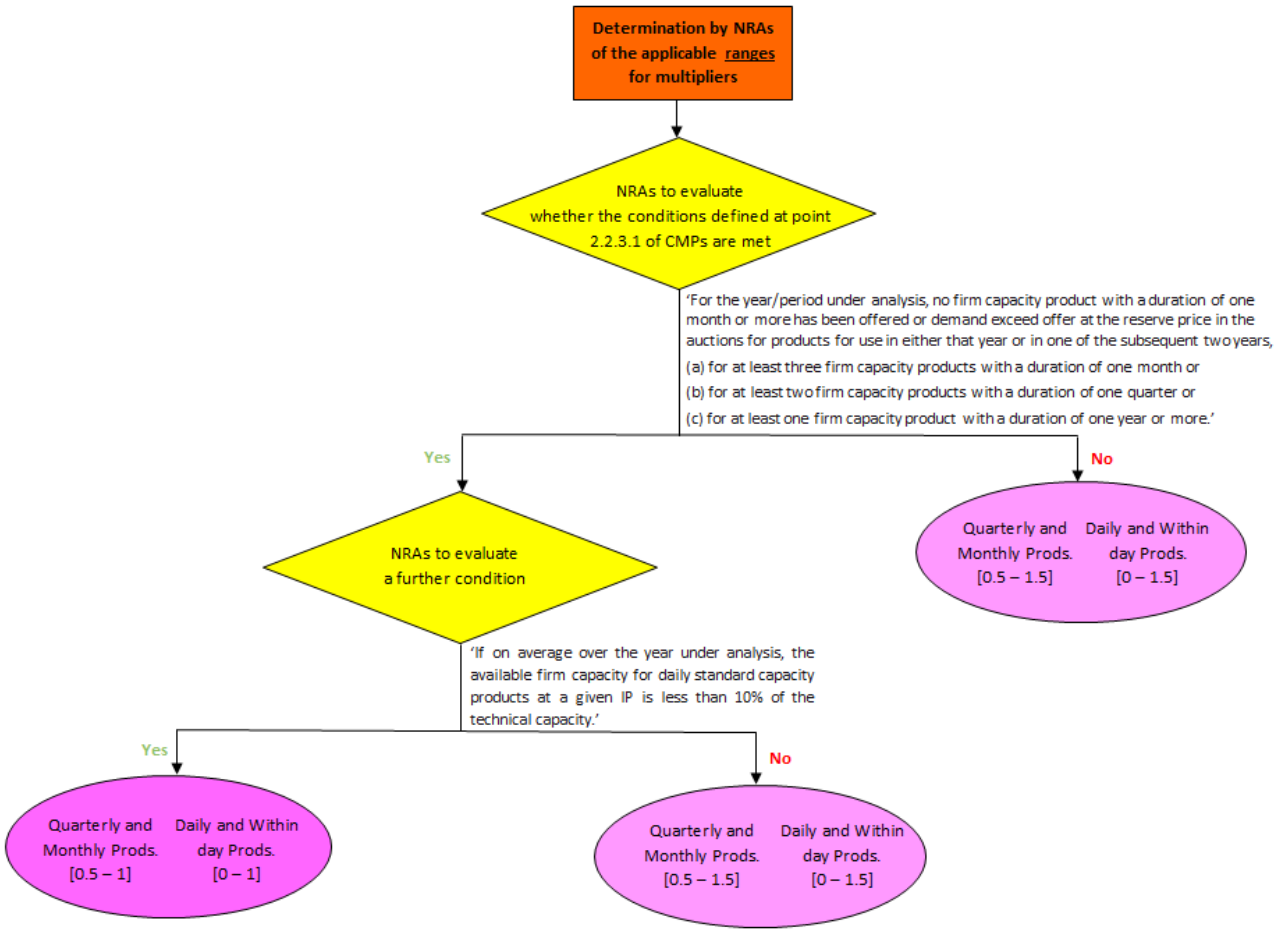
The Framework Guidelines specify the ranges of multipliers that are applicable at IPs for the different short-term standard capacity products. The proposal from the Framework Guidelines is to set the ranges based on the definition of congestion as set out in point 2.2.3(1) of the CMP Guidelines. According to this text, if IPs are found to be congested in the ACER Annual Report on Contractual Congestion, multipliers higher than 1 won't be allowed[26]. During the decision process, NRAs shall also take into account whether the TSO implemented oversubscription and buy-back schemes in the past; however, the Framework Guidelines are not specific about how this shall be taken into account when setting the multiplier ranges.

ENTSOG is of the view that the criteria for allowing different ranges of multipliers need to be clear and consistent. The current definition of contractual congestion in in point 2.2.3(1) of the CMP Guidelines might be subject to review in the future, as the analysis carried out by ACER in the monitoring report is raising concerns about the conclusion with regards to congestion for several IPs across the EU[27]. This indicates that the definition might need to be subject to further developments and discussions. Therefore, ENTSOG considers NRAs as the most appropriate party to evaluate the definition of contractual congestion, for the cases where the analysis carried out in the Annual Report is deemed as inaccurate at a specific IP; and to include a further condition that evaluates physical congestion. This further condition is a safeguard, a clear indicator of physical congestion at an IP that will need to be evaluated when the NRAs set the multiplier ranges. The figure below shows ENTSOG's proposal for the decision process with regards to the applicable ranges as described in Article 29.1 to 3 of the initial draft TAR NC.

[26] For quarterly and monthly products, the ranges with congestion are [0.5, 1]. For daily and within-day, the ranges with congestion are [0, 1].

[27] Please find the first ACER Annual Report on Contractual Congestion published on 28 February 2014: http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER%20Gas%20Contractual%20Congestion%20Report%202014.pdf.

Figure 7: Decision process in order to set the multiplier ranges.



Another alternative could be to set the multiplier ranges on the basis of the level of capacity bookings, rather than on the basis of the presence of auction premia. The following alternative has been developed by ENTSOG in order to gather stakeholders' views during the consultation process.

1) When selling yearly capacity products, if more than 80% of the firm capacity is sold (10% being kept for short-term) ➔ multiplier applied to quarterly products are capped at 1. Otherwise, they are capped at 1.5.

2) When selling quarterly capacity products, if more than 90% of the firm capacity is sold ➔ multipliers applied to monthly, daily and within-day products are capped at 1. Otherwise, they are capped at 1.5.

Question 28 – Do you agree with ENTSOG's proposal for the conditions for determining the allowed multiplier ranges, as set out in Article 29 of the initial draft TAR NC?

Question 29 – Do you agree with Article 29.1(a) linking the applicable ranges of multipliers to the status of congestion according to the definition set out in point 2.2.3(1) of Annex I to Regulation (EC) No 715/2009?

Question 30 – Do you agree with ENTSOG's alternative proposal (not yet included in the initial draft TAR NC) to set the multiplier ranges on the basis of the percentage of technical capacity that was booked, as outlined in Section 4.1(a) of the Supporting Document?

Insertion of a safeguard in relation to the cap for multipliers

ENTSOG considers it appropriate to include a safeguard in the initial draft TAR NC with regards to the application of multipliers higher than 1.5, when it can be justified by TSOs/NRAs that higher levels of multipliers better correspond to Article 28.5. Following Article 25.1(b)(ii) and 27.3 of the initial draft TAR NC, the justification for the level of multipliers will need to be published, this would also apply when the multipliers deviate from the ranges set out in the figure above.

As discussed at SJWSs, the current proposal could lead to discrimination and cross-subsidisation between different types of network users (i.e. flat versus profiled) and could produce tariff volatility, especially in systems with low or no congestion. ENTSOG has explained its concerns at SJWSs with regards to the inclusion of a cap in the TAR NC which, if found to be inadequate, would take about two years to change.

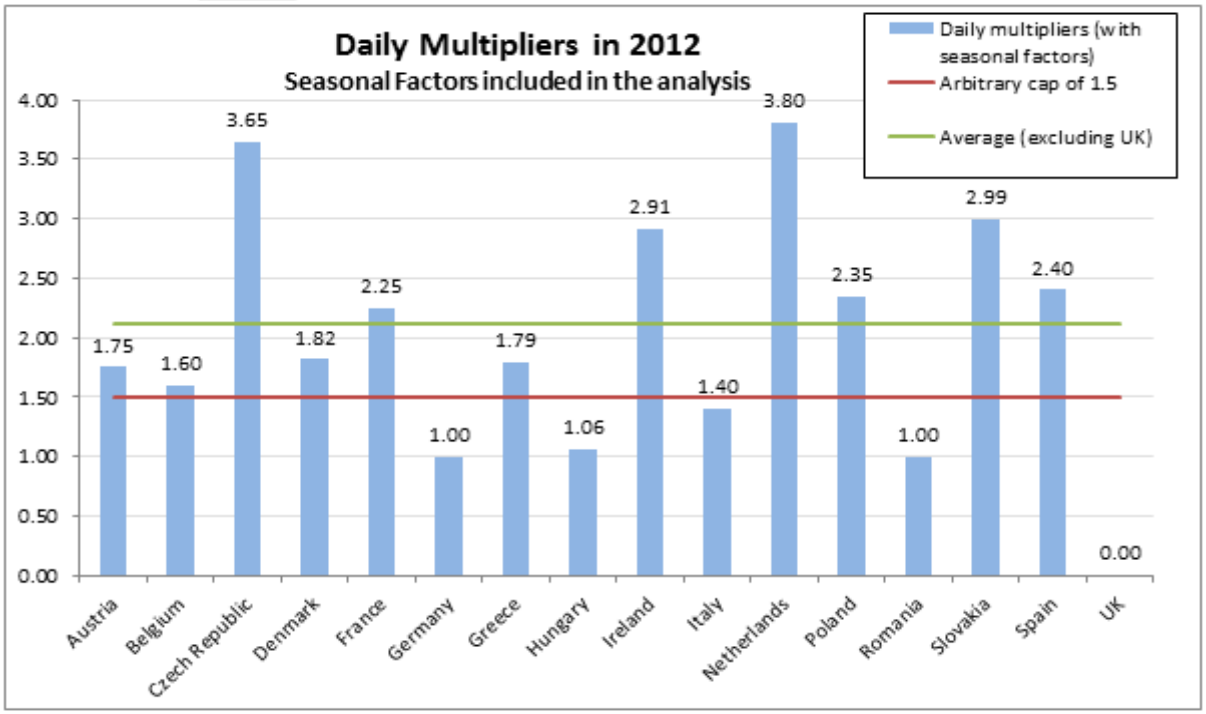
It needs to be taken into account that at IPs which have non-profiled bookings, seasonal factors will be of no use in order to help the system to recover the allowed revenues of the TSOs. Circumstances that could explain the necessity to apply higher multipliers are the following:

- Where high under-recoveries have occurred in the previous year (see Example 1);
- Where unreasonable increases in the annual tariffs occur due to respecting the cap of 1.5;
- Where too low multipliers lead to inconsistency with the chosen cost allocation methodology. This could happen if the cap of 1.5 is not appropriate for an IP in the system which leads to an increase of the annual tariff for all IPs and thus cross-subsidies between IPs could be created.

Moreover, where a price cap regime is applied and a cap on short-term multipliers is introduced

this will result in inappropriate revenue shortfalls which the TSO is unable to reconcile, meaning an irrecoverable shortfall of revenues for TSOs. Balancing the objectives of revenue recovery/reconciliation and the facilitation of short-term trade could require higher multipliers than the proposed cap of 1.5, especially with regards to daily and within-day multipliers. For those short-term products, current practices in most systems would need to be adapted to the new ranges, leading most probably to cross-subsidisation or tariff instability. The following figure shows the daily multipliers (combined with seasonal factors) that were applied in the year 2012 across the EU and their situation with respect to the proposed limit of 1.5.

Figure 8: Daily multipliers in 2012.



The figure shows that the number of systems that would need to adapt their daily multipliers to be in line with the new rules is significant, and thus, negative consequences could be created not only at a national level, but also across the EU.

For the reasons explained above, ENTSOG proposes that the initial draft TAR NC specifies that subject to the approval of the NRA, the values of the multipliers may be higher than 1.5. ENTSOG would like to clarify that this safeguard will only be used where it can be justified that the resulting values of reserve prices better correspond to Article 28.5. It should be noted that,

when discussed at SJWSs, some stakeholders showed an interest in this possibility; as a positive measure to prevent cross-subsidies and tariff volatility. Concerns have been expressed regarding the fact that if annual bookings decrease considerably due to the new multipliers ranges, then full commoditisation could take place where there are little or no annual bookings.

Example 1: Impact of low multipliers on the annual tariff.

ENTSOG has worked on an example to show the impact of multiplier that is too low on revenue recovery for one year. The example has the following inputs:

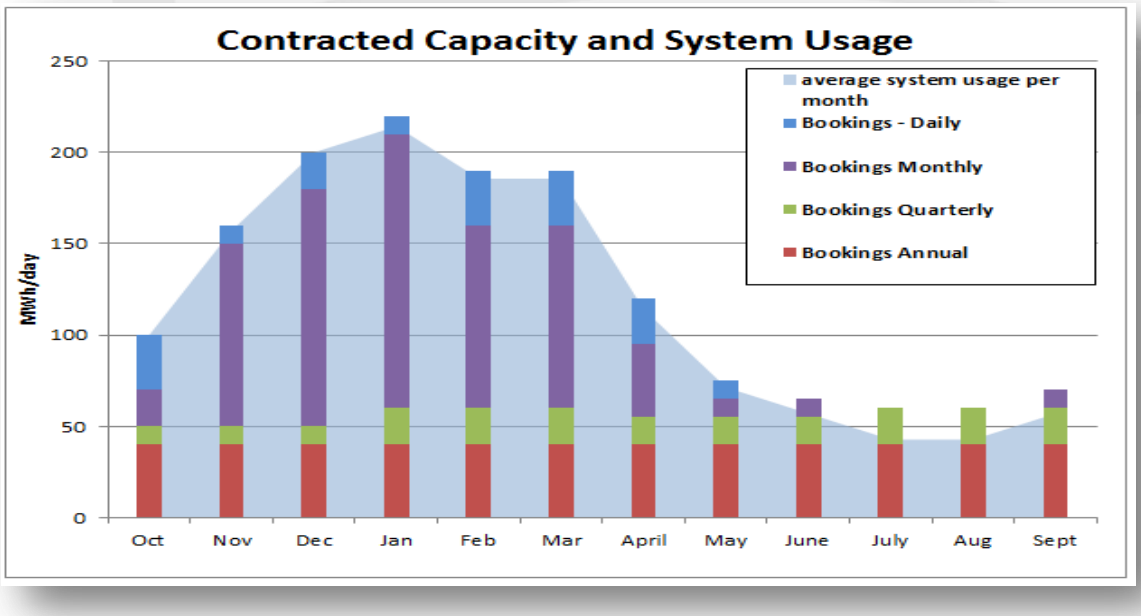
- Allowed revenue = 3000 €;
- Forecasted contracted capacity = 250 MWh/day;
- The annual tariff = 12 €/MWh/day/year;
- Different sets of multipliers (M):
  - M = 1 for all short-term standard products for scenarios 1 and 2;
  - M = 1.5 for all short-term standard products for scenarios 3 and 4.
- The level of contracted capacity over the year (which is contracted with annual, quarterly, monthly and daily bookings[28]) and the actual system usage can be found in Table 8 and Table 9 below.

[28] The figures of daily contracted capacity in the table represent the average of daily bookings over each respective month.

Table 8: Contracted capacity.

Month	average system usage in month in MWh/day	Contracted Capacity			
		Annual MWh/day	Quarterly MWh/day	Monthly MWh/day	Average Daily MWh/day
Oct	100	40	10	20	30
Nov	157			100	10
Dec	200			130	20
Jan	214		20	150	10
Feb	186			100	30
Mar	186			100	30
April	114		15	40	25
May	71			10	10
June	57			10	0
July	43		20	0	0
Aug	43			0	0
Sept	57			10	0

Figure 9: Contracted capacity and system usage.



The sudden shortfall in capacity bookings was unforeseen. Such a dramatic shortfall can happen

due to very low multipliers and the optimization of capacity bookings by network users. Especially, if network users would have the opportunity to terminate long-term contracts, then such a shortfall couldn't be fully foreseen.

Given these inputs, the percentage of allowed revenue recovered has been calculated for different scenarios:

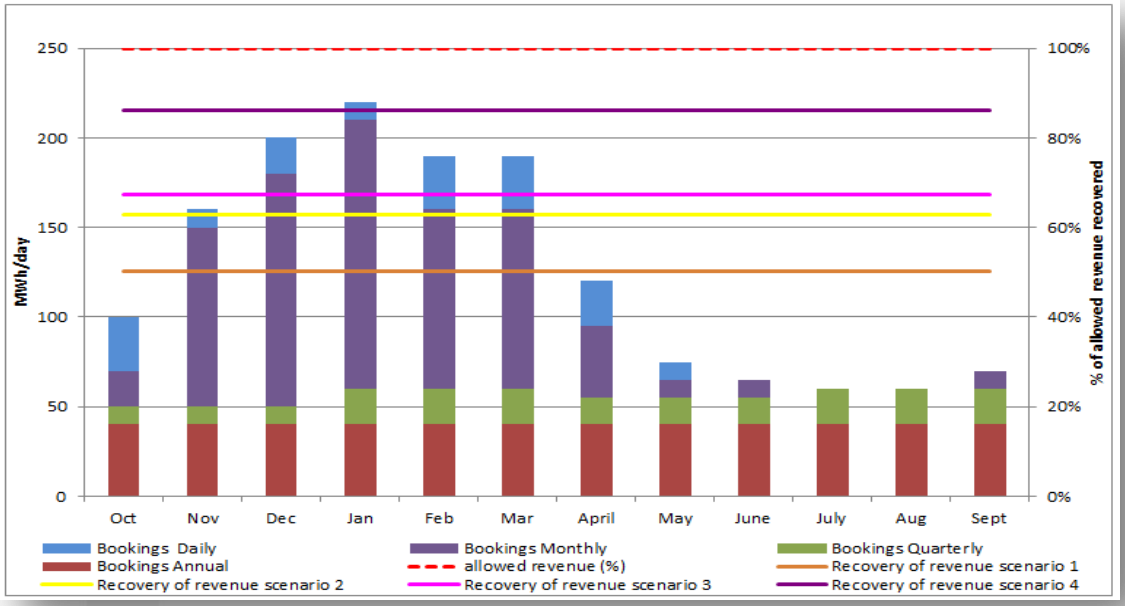
Scenario 1: M = 1 for all short-term standard capacity products; no seasonal factors
Scenario 2: M = 1 for all short-term standard capacity products; with seasonal factors
Scenario 3: M = 1.5 for all short-term standard capacity products; no seasonal factors
Scenario 4: M = 1.5 for all short-term standard capacity products; with seasonal factors

When seasonal factors have been used for the calculations, those have been calculated following the methodology described in the initial draft TAR NC, using a power of 1 for step (e) of Article 31.1, i.e. ´s´ = 1. For all the scenarios analysed, after the year the system is generating relevant under recoveries:

Scenario 1: the revenue recovered is 50 % of the total allowed revenue (50.2%)
Scenario 2: the revenue recovered is 63 % of the total allowed revenue (62.8%)
Scenario 3: the revenue recovered is 67 % of the total allowed revenue (67.3%)
Scenario 4: the revenue recovered is 86 % of the total allowed revenue (86.2%)

This is represented in figure 10 below.

Figure 10: Percentage of allowed revenue recovered.



If we assume that for the next year the same inputs are to be in place, the annual tariff should be recalculated in order to allow the TSO to recover its allowed revenue plus the under-recoveries from the previous year. This means that the increases of the annual tariff in the different scenarios would be from 132% for Scenario 4, and up to 300% (298%) for Scenario 1. Even for Scenario 4 (M = 1.5 and includes the use of seasonal factors), the increase of the annual tariff needed would be relevant. Any high increase of the annual tariff would have an impact on network users that would depend on their behaviour (flat vs. profiled) and risk appetites. As a consequence of the low multipliers set, the burden generated would be greater for those network users who book on domestic exits via a flat profile of bookings.

Question 31 – Do you agree with ENTSOG's proposal for the possibility to set higher multipliers than those within the ranges set out in Article 29.2 of the initial draft TAR NC, as a safeguard, when it can be justified that the resulting levels better meet the requirements of Article 28.5?

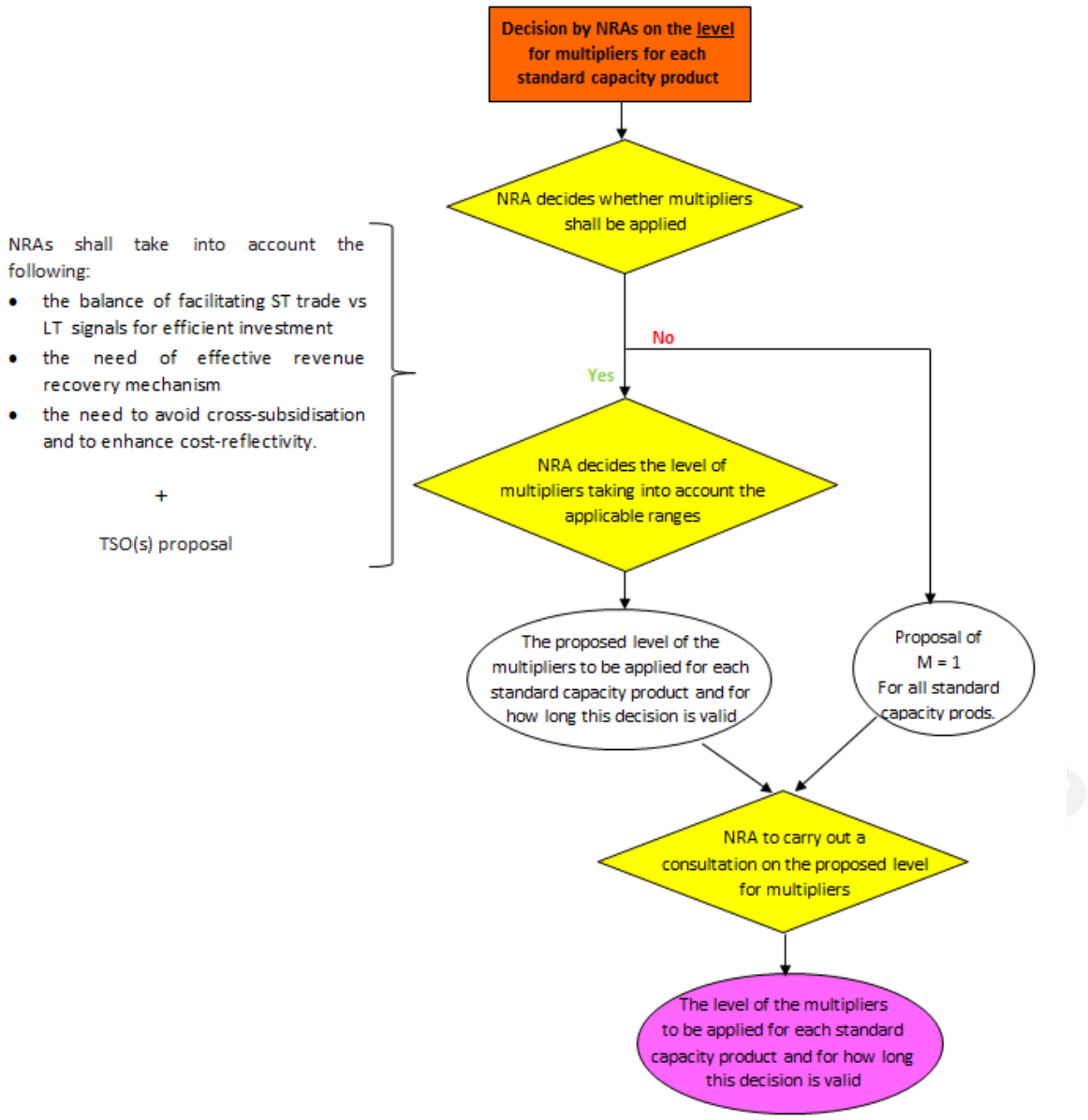
Question 32 – For those cases where it can be justified that higher levels better meet the requirements of Article 28.5, do you support ENTSOG's proposal to leave it up to the NRA to

determine a higher level of multipliers (1st option), or do you support the inclusion in the initial draft TAR NC of a cap higher than 1.5 in the refined draft TAR NC (2nd option)?

Decision process when setting the level of multipliers for the standard capacity products

Without prejudice to the right of the NRAs to take the decision on their own initiative with regards to the application of multipliers, TSOs may propose to the NRAs the levels of multipliers and seasonal factors and provide the NRAs with the calculations behind the proposed levels, respecting in any case the set ranges. The following diagram explains the process to take place at each entry-exit system when setting the level of multipliers.

Figure 11: Decision process for setting the level of multipliers.



Question 33 – Do you agree with ENTSOG's proposal for the criteria to be taken into account for setting the level of multipliers, as set out in Article 28.5 of the initial draft TAR NC?

4.2 Topic: Calculation of reserve prices for non-yearly standard capacity products for firm capacity without seasonal factors (Article 31)

> Framework Guidelines

'The Network Code shall include mathematical formulations where relevant for the underlying provisions.'

> Policy Options

ENTSOG has developed the formulas to be used for the calculation of the reserve prices for non-yearly standard capacity products[29].

For within-day capacity products, ENTSOG has included two alternatives in the TAR NC. The first alternative is setting the within-day capacity product tariff at the same level as the tariff of the daily capacity product. The price therefore would not be dependent on the number of hours that the capacity is booked, as the price would be equal to the price of a daily product. The positive features of this alternative are its simplicity with regards to implementation and, where this product has been offered in the past, it has been priced in this way. Furthermore, where within-day capacity is marketed in kWh/d as is one option foreseen by Article 10 of the CAM NC, it is consistent to apply the tariff of the daily capacity product. The second alternative is in line with the pricing of the other short-term products, i.e. dependent on the exact duration of the product.

Question 34 – Do you agree with ENTSOG's proposal for the formulas to calculate reserve prices for quarterly, monthly and daily standard capacity products in absence of seasonal factors as set out in Article 30.1(a) of the initial drat TAR NC?

Question 35 – Do you agree with ENTSOG's proposal for the two options for calculating reserve prices for within-day standard capacity products in the absence of seasonal factors as set out in Article 30.1(b) of the initial drat TAR NC?

[29] For more information on the use of these formulas, please see Appendix 3A of the TAR NC Launch Documentation, where simple examples on how the formulas work were included.

4.3 Topic: Methodology for the calculation of seasonal factors and calculation of reserve prices with seasonal factors (Article 31)

> Framework Guidelines

'The Network Code on Tariffs shall develop a methodology for determining seasonal factors.'

> Policy options and analysis of decisions

Following Article 28.2 of the initial draft TAR NC, TSOs may propose to the relevant NRAs the level for seasonal factors, including the necessary calculations; and the NRA approves the level of seasonal factors to be applied.

The level of seasonal factors for a given month can be calculated for each interconnection point individually, for a group of interconnection points or for all interconnection points. For the last two cases, in the methodology the average data of system usage shall be used. The following figure describes the steps (a) to (e) of the methodology developed for the calculation of seasonal factors.

Table 9: Steps (a)-(e) of the methodology to calculate seasonal factors.

Step (a) Calculate the usage for each month — **Step (c)** Calculate the usage rate — **Step (d)** Primary Factor = usage rate x 12 — **Step (e)** Initial values = (Primary factor)^s

Month	System Usage	Usage rate	Relative factor	Primary Factor	' s '	Initial values for seasonal factors
Oct	110	0.08	12	0.94	2	0.89
Nov	140	0.10		1.20		1.44
Dec	170	0.12		1.46		2.12
Jan	200	0.14		1.71		2.94
Feb	180	0.13		1.54		2.38
Mar	145	0.10		1.24		1.54
April	100	0.07		0.86		0.73
May	80	0.06		0.69		0.47
June	70	0.05		0.60		0.36
July	65	0.05		0.56		0.31
Aug	65	0.05		0.56		0.31
Sept	75	0.05		0.64		0.41
Σ	1400					

Step (b) Sum up the resulting values

With regards to the power parameter used to adjust the initial values following step (e) (´s´), ENTSOG would like to note that it shall not be higher than 2. It shall be used as follows:

- s = 1; when the aim is to have seasonal factors directly proportional to the use of the system.
- 0 < s < 1; when the aim is to 'soften' the level of seasonal factors obtained. It may be used for those cases where flow changes are extreme within the different months.
- 1 < s ≤ 2; when the aim is to penalise or incentivise more clearly the months that deviate the most from the flat usage of the system.

Once the initial values of the seasonal factors are calculated, the average of the initial seasonal factors and monthly multipliers over the gas year must be checked as to whether they meet the ranges stated in the initial draft TAR NC, i.e. [0.5, 1.5].

Table 10: Step (f) of the methodology to calculate seasonal factors.

Step (f)
Calculate the average of Initial SF x M

Initial values for seasonal factors	Monthly multiplier (M)	Initial SF x M	Average [0.5 - 1.5]
0.89	1.4	1.24	1.6
1.44		2.02	
2.12		2.97	
2.94		4.11	
2.38		3.33	
1.54		2.16	
0.73		1.03	
0.47		0.66	
0.36		0.50	
0.31		0.43	
0.31		0.43	
0.41		0.58	

As indicated in step (g), when the average calculated at step (f) falls within the range, then the seasonal factors shall be equal to the values of the initial seasonal factors. An optional rounding of the obtained numbers can be applied, and there is no further step needed. But as it is shown in the figure above, the average can fall outside the applicable ranges. For these cases, a further correction step, step (h), is needed as follows:

Table 11: Step (h) of the methodology to calculate seasonal factors.

Step (h)
If average > 1.5 --> Correction Factor = 1.5/average
If average < 0.5 --> Correction Factor = 0.5 / average
SEASONAL FACTORS = Initial SF x Correction Factor

Initial values for seasonal factors	Monthly multiplier (M)	Initial SF x M	Average [0.5 - 1.5]	Correction Factor	Seasonal Factors
0.89	1.4	1.24	1.6	0.9	0.82
1.44		2.02			1.33
2.12		2.97			1.96
2.94		4.11			2.72
2.38		3.33			2.20
1.54		2.16			1.43
0.73		1.03			0.68
0.47		0.66			0.43
0.36		0.50			0.33
0.31		0.43			0.29
0.31		0.43			0.29
0.41		0.58			0.38

When the NRA has approved a level for the monthly multiplier higher than 1.5 as set out in Article 29.5 of the initial draft TAR NC, then that level shall be used as the upper limit in step (h) instead of 1.5 when calculating the correction factor.

For daily and within-day standard capacity products, the relevant monthly seasonal factors shall be applied. For quarterly products, two options for the calculation of quarterly seasonal factors have been included. Option 1 is a simple average of the respective monthly seasonal factors, while Option 2 sets the cap and the floor of the quarterly seasonal factors, leaving further flexibility to set the level nationally.

Table 12. Options for the calculation of quarterly seasonal factors

QUARTERLY PRODUCTS Article 31(3)

Option 1: Quarterly SF = average of the three respective monthly SF

Option 2: Quarterly SF = any number within the highest or lowest value of the three relevant months.

Month	Monthly Seasonal Factors	Quarterly Option 1	Quarterly Option 2
Oct	0.82	1.37	SF Q1 = any number within the range [0.82 - 1.96] e.g. SF Q1 = 1.5
Nov	1.33		
Dec	1.96		
Jan	2.72	2.11	SF Q2 = any number within the range [1.43 - 2.72] e.g. SF Q2 = 1.9
Feb	2.20		
Mar	1.43		
April	0.68	0.48	SF Q3 = any number within the range [0.33 - 0.68] e.g. SF Q3 = 0.5
May	0.43		
June	0.33		
July	0.29	0.32	SF Q4 = any number within the range [0.29 - 0.38] e.g. SF Q4 = 0.3
Aug	0.29		
Sept	0.38		

The correction is only presented for monthly seasonal factors. The same correction step is needed for quarterly, daily and within day products, using the applicable level of multiplier for each case as set out in Article 31.4 of the initial draft TAR NC. For every case, at the end of the calculation process, a rounding step can be applied.

If, and only if, the system had experienced exceptional circumstances that imply drastic changes in the transmission system usage, seasonal factors could be re-calculated within the tariff period. This will help to maintain the cost-reflectivity of the reserve prices and the efficient utilisation of the infrastructure, which are the criteria of the developed methodology. When such a re-calculation is needed, the updated tariffs should be published together with the corresponding information indicating the reasons for the update as early as possible, following Article 27.3 of the initial draft TAR NC.

Question 36 – Do you agree with ENTSOG's proposal for the methodology to calculate seasonal factors, as set out in Article 31 of the initial draft TAR NC?

4.4 Topic: Interruptible capacity (Article 32)

> Framework Guidelines

'The Network Code on Tariffs shall set out that reserve prices for interruptible capacity be set at a discount to the reserve price of the firm standard capacity product with equivalent duration.

The Network Code on Tariffs shall set out a methodology for determining reserve prices for interruptible capacity.

The methodology shall meet the following criteria:

- *At interconnection points where firm capacity is offered in both directions, the discount(s) for interruptible capacity shall adequately reflect the risk (likelihood and duration) of interruptions, so that if the risk is low, the discount shall also be low. TSOs shall publish their assessment of the risks of interruption. The discount is to be recalculated at least once a year.*
- *At unidirectional interconnection points where TSOs offer firm capacity only in one direction and capacity is offered in the other direction on an interruptible basis (non-physical backhaul capacity), the methodology for determining the reserve price shall be set to reflect the actual marginal (additional) costs that the TSO incurs to provide this service and shall not be below zero.'*

> Policy Options

ENTSOG has developed three approaches that could be applied to calculate the discount for interruptible capacity products. The three approaches are an ex-ante discount, an ex-post discount and a combination of both. The different approaches are explained in the sections below.

Interruptible products of different characteristics can be offered, which is defined in the initial draft TAR NC as types of interruptible capacity products. The minimum requirements set out in CAM NC are to offer daily interruptible capacity when firm is sold out, but TSOs have flexibility

to offer a variety of interruptible capacity products of different duration[30]. The offer of different types of products helps TSOs to adapt their offer to the market needs in a cost-reflective way, beneficial for the functioning and development of the market.

A report on the probability of interruption shall be published at the same time as the transmission tariffs are published. In this report, TSOs or NRAs, as relevant,[31] shall include a list of all the types of interruptible capacity products offered. The report shall also include a table for each IP (or group of IPs, where relevant) that indicates the main characteristics of the type of products offered, their probability of interruption and the level of the discount to be applied to the reserve price. The probability of interruptions, and thus the discounts, shall be calculated separately for each type of product offered.

TSOs may propose the methodology to set reserve prices for standard capacity products for interruptible capacity and the proposed levels of the discounts to their NRA. The NRA approves the methodology and the level of the discounts.

Question 37 – Do you agree with ENTSOG's proposal for the calculation of reserve prices for capacity products for interruptible capacity with an ex-ante discount, an ex-post discount or a combination of both approaches as set out in Article 32.1 of the initial draft TAR NC?

Question 38 – Do you agree with ENTSOG's proposal for the information to be included in the report on the probability of interruption and on the timing of its publication as set out in Article 32.3 of the initial draft TAR NC

4.5 Topic: Interruptible capacity at uni-directional points (Article 32)

At one of the SJWSs, a stakeholder raised a concern about the pricing of unidirectional interruptible capacity where it is offered in the opposite direction to the direction of the physical flow. It was suggested that pricing this interruptible capacity on the basis of actual marginal costs could be in contradiction to the principle set out in Regulation (EC) No 715/2009. ENTSOG also has concerns about the way the pricing for this product is set out in the

[30] For clarifications purposes, we note that all the different types offered shall always have the duration of one of the standard products defined in CAM NC as set out in Article 21.3 of the CAM NC.

[31] Where the NRA is in charge of calculating the probability of interruption and setting the discount, this report shall be published by the NRA.

Framework Guidelines. It considers that the marginal pricing of an interruptible capacity product may not be aligned with Regulation (EC) No 715/2009. The network codes can detail and supplement the Regulation but are not to contradict it, therefore ENTSOG proposes to use the same methodology for the pricing of all kinds of interruptible capacity products. This issue is currently under legal review within ENTSOG.

Moreover, ENTSOG believes that treating the pricing of all interruptible capacity in the same way is the best approach. The main reason is that, when forward and backhaul products are offered in parallel to enter the same entry-exit system (which could happen even at the same IP where there is more than one TSO at one side of the border), the risk of cross-subsidies is high, especially when stable forward flows are present. In this case, backhaul products could be used for gas transmission at very low prices, bookings will therefore be shifted to the uni-directional IP creating cross-subsidies and a detrimental situation for TSOs. The negative consequences will worsen where there are several TSOs competing in one system[32]. ENTSOG is of the opinion that marketing non-physical backhaul capacity based on tariffs reflecting only marginal costs will limit the offer of these products across the EU thus eliminating the benefits that they could provide to the market.

Question 39 – Do you agree with ENTSOG's proposal for the application of the same methodology for the calculation of reserve prices for all interruptible products offered by a TSO, including non-physical backhaul capacity products, as set out in Article 32.2 of the initial draft TAR NC?

4.6 Topic: Ex-ante discount for interruptible capacity (Article 33)

> Policy options and analysis of decisions

The ex-ante discount has been applied satisfactorily by several TSOs across the EU. ENTSOG has developed a formula that shall be used when ex-ante discounts are applied:

$$Di_{ex\text{-}ante} = Pro \times A = \frac{N \times D_{int}}{D} \times \frac{C_{av,int}}{C} \times A$$

[32] In the Appendix 5 of the TAR Launch Documentation, a list of IPs where you can transport gas via firm forward flow or backhaul flows in competition can be found.

Where:

$Di_{ex\text{-}ante}$ is the level of an ex-ante discount in percentage;

'Pro' is the probability of interruption. It shall be calculated separately for every type of interruptible product offered. It can be calculated for each, some or all IPs. A forecast of the interruptions shall be performed for the calculation of the parameters N, D_{int} and $C_{av,int}$, which shall be used for the calculations.

N is the expectation of the number of interruptions over D;

D_{int} is the average duration of each interruption expressed in hours;

D is the total duration of the respective type of standard capacity product for interruptible capacity expressed in hours;

$C_{av,int}$ is the average amount of interrupted capacity for each interruption related to the respective type of standard capacity product for interruptible capacity;

C is the total amount of capacity for the respective type of standard capacity product for interruptible capacity.

'A' is the adjustment factor applied to reflect the estimated economic value of the type of standard capacity product for interruptible capacity. It shall be 1 or a higher number and can differ per standard capacity product. The level of parameter A does not need to be harmonised at the EU level, as its appropriate value will depend on national circumstances and specificities. This flexibility will help TSOs and NRAs to find the appropriate discount that better reflects the economic value of each type of interruptible product offered.

Question 40 – Do you agree with ENTSOG's proposal for the calculation of an ex-ante discount for capacity products for interruptible capacity as set out in Article 33 of the initial draft TAR NC?

Question 41 – Do you agree with ENTSOG's proposal for the calculation of the probability of interruption as set out in Article 33.2 of the initial draft TAR NC?

Question 42 – Do you agree with ENTSOG's proposal that data for several interconnection points or all interconnection points could be gathered together to calculate the probability of interruption for an interruptible capacity product as set out in Article 33.2 of the initial draft TAR NC?

4.7 Topic: Ex-post discount for interruptible capacity (Article 34)

> Policy Options

The ex-post discount has been applied satisfactorily by several TSOs across the EU. For the purpose of greater clarity, ENTSOG has developed an improved formula that shall be used to calculate the amount to be reimbursed when ex-post discounts are applied and at least one interruption has occurred for a given capacity contract:

$$E_{Rm} = B \times \left(\frac{E_m}{q \times h_m}\right) \times \sum_{R=1}^{h_R} q_{diff\,R}$$

Where:

E_{Rm} is the amount to be reimbursed for an invoicing period within a given contract;

B is the adjustment factor applied to reflect the estimated economic value of the type of standard capacity product for interruptible capacity;

E_m is the contractual payment for an invoicing period within a given contract excluding, if any, the auction premium;

q is the amount of contracted capacity with respect to one hour or one day;

h_m is the number of hours or days of an invoicing period within a given contract;

$q_{diff\,R}$ is the amount of interrupted capacity with respect to each hour or each day when the capacity was interrupted;

h_R is the number of hours or days of an invoicing period within a given contract when the capacity was interrupted.

The reimbursement is capped to the contractual payment per invoicing period, excluding, if any, the auction premium. With regards to the units to be used in the calculations, those shall be the same ones that are expressed in the respective capacity contract.

The factor B shall be by default 1, but a higher value can be approved nationally in order to better reflect the estimated economic value of the product.

Example 2: Calculation of the reimbursement for a given capacity contract

Contracted capacity: 20,000 kWh/h (interruptible day ahead capacity contract)

Nominated capacity: 20,000 kWh/h per day

B (refund factor) = 1

Two interruptions took place; the 1st interruption of 20,000 kWh/h that lasted 2 hours and the 2nd interruption of 10,000 kWh/h that lasted 1 hour:

Then,

$$E_{Rm} = B \times \left(\frac{E_m}{q \times h_m}\right) \times \sum_{R=1}^{h_R} q_{diff\,R} = 1 \cdot \left(\frac{E_m}{24 * 20000}\right) \cdot (20000 + 20000 + 10000) = 0.10 \cdot E_m$$

The ex-post discount to the contractual payment for the invoicing period is of 10%.

The obligation to apply an ex-ante discount could imply that in some systems with non-congested points, the offer of interruptible capacity will be limited to the minimum requirements in the CAM NC. Where there is no congestion, interruptible capacity products offered with an ex-ante discount will have very low risk of being interrupted, and therefore network users will book interruptible capacity even if firm capacity is available. To limit this risk, TSOs will be forced to offer interruptible capacity only day ahead and only when all firm is sold out. Therefore, ex-post discounts can help to maintain the current offer of different interruptible products, which are useful for the market from the network users' perspective as well as from the TSOs', as TSOs are able to maximise offered capacities as well as flexibility for network users.

Moreover, in those systems where the CAM NC as well as the CMP measures are already in place and the ex-post discount is applied, unnecessary costs would be generated by reducing the offer of interruptible capacity to only day-ahead when firm capacity is sold out.

Where interruptible capacity is offered on more than a day-ahead basis even when firm capacity is not sold out, an ex-post discount would be a good way to assess the risk. An ex-post discount can better take into account the actual risk for the network user to be interrupted compared to the ex-ante discount following the first booked last interrupted rule. Due to the fact that network users can contract capacity at different times they face different levels of risk on the basis of the rule set out in the CAM NC.

The CAM NC states as a minimum requirement that interruptible capacity must to be offered on day-ahead basis if firm capacity is sold out. In addition to this the CMP measures need to be

taken into account as there are short-term UIOLI (Use It or Lose It) provisions (also known as re-nomination restrictions). The combination of all existing rules and the ex-post discount makes it advantageous for network users because of the following steps:

1. Firm capacity exists and/or is made available through the application of short-term UIOLI.
2. This firm capacity is offered in Slot 1 in the capacity auction.
3. Slot 2 offers interruptible capacities regardless of whether network users have booked quantities in Slot 1 as the ex-post discount applies.
4. Network users have more flexibility and they get their quantities without paying high auction premiums in Slot 1.
5. The maximum amount of capacity is offered (firm and interruptible).

In case of an ex-ante discount it can be expected that network users would try to switch to Slot 2 which will not be opened if only a single kWh/h firm remains unsold in Slot 1. Without the system of an ex-post discount network users would need to buy all firm capacity so that interruptible Slot 2 will be opened if they demand a higher flow rate. Consequently, high auction premiums for small volumes of firm capacity are likely to occur.

Question 43 – Do you agree with ENTSOG's proposal for the calculation of an ex-post discount for interruptible capacity products as set out in Article 34 of the initial draft TAR NC?

5. Revenue Reconciliation

Chapter V of the initial draft TAR NC deals with the requirement for revenue reconciliation with a view to promoting financial stability of TSOs and stability of tariffs for the network users so that there will not be any significant tariff differences from one tariff period to the next.

5.1 Topic: Regulatory Account (Article 37)

Where a non-price cap regime is in place, the TSO will have a regulatory account which will be reconciled periodically in line with the decision of their NRA. Each TSO shall have a single regulatory account but may have sub-accounts for the purpose of tracking the under-recovery or over-recovery of the allowed revenue. The under-/over-recovery tracked in the sub-accounts must then be aggregated in the single regulatory account for the purpose of revenue

reconciliation. The exception to the 'single regulatory account' rule is that the NRA may decide to introduce a separate and specific account for auction premium, if any. The possibility to have a specific account for auction premium applies to both non-price cap regimes and price cap regimes.

Figure 12: The interaction between the one regulatory account, sub-accounts for tracking and revenue reconciliation.

The NRA may decide that the earned auction premia, if any, be attributed to a regulatory account separate from the single regulatory account and may be used for reducing physical congestion.

Question 44 – Is the interaction between the one regulatory account, the sub-accounts for tracking and the revenue reconciliation, as set out in Article 37 of the initial draft TAR NC clear to you?

6. Pricing of bundled capacity and capacity at virtual interconnection points

Chapter VI of the initial draft TAR NC relates to the pricing of both bundled capacity and capacity at virtual interconnection points (VIPs).

With regard to bundled capacity, the reserve price will be equal to the sum of the reserve prices of both the entry and exit capacity. Where the payable price is greater than this reserve price (i.e. due to auction premia), then this additional revenue will be split between the respective TSOs, following the decision/agreement from the NRA(s).

6.1 Topic: Pricing of capacity at a virtual interconnection point (Article 40)

> Framework Guidelines

'The reserve price for virtual interconnection points shall be established based on the combination of the reserve prices set for the individual entry or exit points. The mechanism shall be elaborated in the Network Code on Tariffs consistently with the fulfilment of the overall objectives of these Framework Guidelines, and especially avoiding that the establishment of a virtual interconnection point creates barriers to cross-border trade.
The Network Code on Tariffs shall include mathematical formulations for the reserve price for virtual interconnection points.'

> Policy Options

Article 3.17 of the CAM NC defines a VIP as:

'Two or more interconnection points which connect the same two adjacent entry-exit systems, integrated together for the purposes of providing a single capacity service'.

For the pricing of unbundled capacity at a VIP, the reserve price will be equal to an aggregate of reserve prices of the capacity product offered at IPs contributing to such VIP.

Where the capacity is marketed by one TSO, the reserve price will be:

- Derived from the reference price calculated in accordance with the applied cost allocation methodology where such methodology allows for taking account of the established VIP or;
- Equal to the weighted average of the reserve prices, derived from the reference prices calculated at each IP contributing to such VIP, in accordance with the applied cost

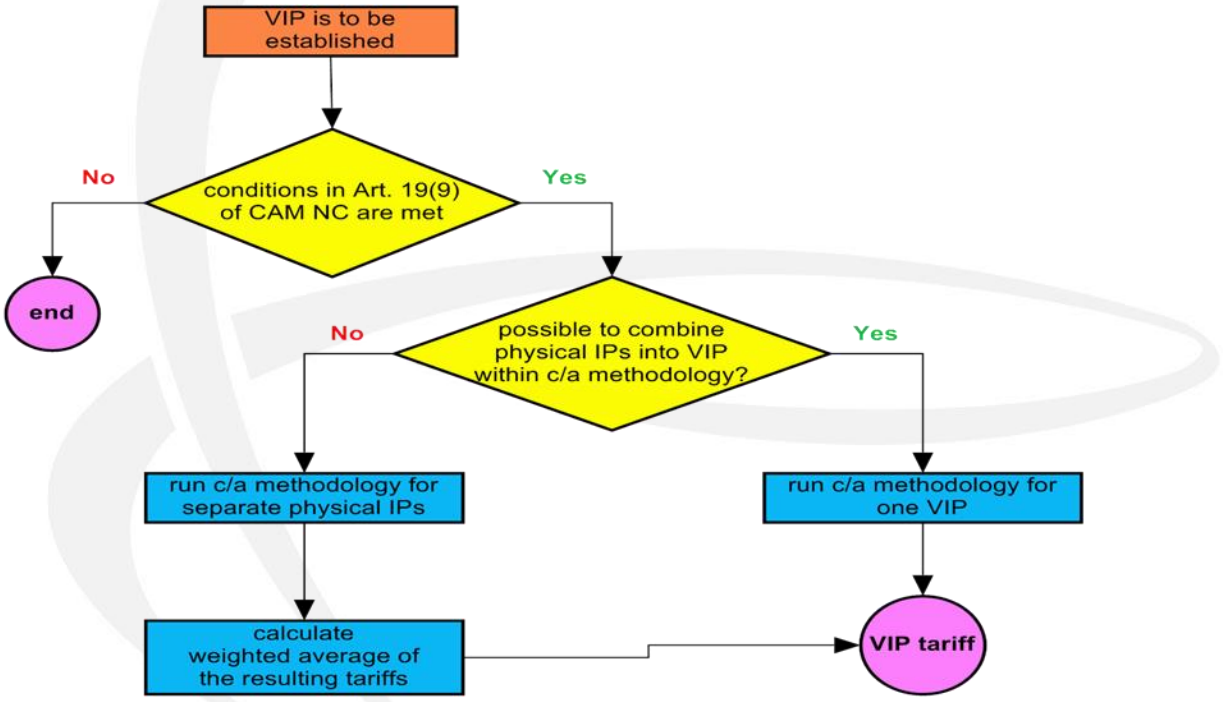
allocation methodology, where such methodology does not allow for taking account of the established VIP.

Where the capacity is marketed by more than one TSO and the transmission tariffs are calculated by each TSO separately, the reserve price should be calculated by:

- Each TSO following the process outlined above; and
- The weighted average of the resulting values being derived.

Where the capacity is marketed by more than one TSO and the transmission tariffs are calculated by the TSOs together, then the process as for capacity marketed by one TSO (outlined above) will apply. Figure 15 below aims to describe these two situations in more detail.

Figure 13: Establishment of VIP.



The tariff for the bundled products of a VIP will be calculated by summing the VIP tariffs on both sides of the border.

Question 45 – Do you agree with ENTSOG's proposal with regard to the way in which a VIP tariff is calculated where the capacity is marketed by one TSO, as set out in Article 40.2 of

the initial draft TAR NC?

Question 46 – Do you agree with ENTSOG's proposal with regard to the way in which a VIP tariff is calculated where the capacity is marketed by more than one TSO, as set out in Article 40.3 of the initial draft TAR NC?

7. Payable price

Chapter VII of the initial draft TAR NC deals with the question of payable price at IPs.

7.1 Topic: Payable price at interconnection points (Article 41.2)

> Framework Guidelines

'The Network Code on Tariffs shall set out that the payable price determined in a capacity auction shall be a floating price, which consists of the applicable reference price at the time when the capacity can be used plus the auction premium, if any.'

> Policy Options

The Framework Guidelines state that the payable price determined in a capacity auction shall be a floating price, meaning that the shipper pays the applicable price at the time when the capacity is used, and not when the capacity is purchased. The Framework Guidelines do not foresee alternatives to the floating price or other prices in combination with it. This topic was discussed at many of the SJWS and stakeholders have strongly indicated that the uncertainty about the actual price that they will pay at a time in the future would discourage them from purchasing long-term capacity under a floating price regime. Having only a floating price, means that the buyer of capacity is committing, at the time of the auction, to pay for something without knowing what the price will actually be at a later date.

Whilst this is a general concern for all TSOs, it may cause acute problems for certain TSOs who have no captive demand and system flows which can vary considerably from one year to the next. Without long-term commitments, revenues could be volatile for such TSOs. With a volatile revenue flow which has a knock on effect on floating prices, the effective price paid by shippers could be particularly instable and would act as a major disincentive for long-term bookings. It should also be noted that some TSOs, such as interconnectors, compete with other flexibility sources subject to less constrained trading arrangements. These competing assets, such as storage, LNG and production, will be able to offer contracts of different durations and

be able to offer fixed prices. If such TSOs are unable to offer similar arrangements then it distorts competition and puts such TSOs at a competitive disadvantage for the provision of long-term security of supply services. Therefore, it is proposed that in combination with the option of floating price contracts, the initial draft TAR NC would also allow for fixed priced contracts.

Some advantages of having the option to have a fixed price are:

a) greater choice for network users;

b) greater tariff stability for long-term (existing and new) capacity holders;

c) capacity reset option put forward by some stakeholders would not be needed;

d) as a consequence of more stable system usage, the TSO's willingness to invest in e.g. extra capacity at IPs that are expected to be congested would probably increase.

Limiting the impact of under/over recovery on bookings with a floating reserve price

In some situations it may be more suitable to offer fixed price contracts than just floating price contracts. For example, TSOs with volatile flows and who compete with other pipelines or assets i.e. those that also provide flexibility services, fixed prices could be a way of increasing overall capacity bookings in the network. If a TSO is allowed to earn 100 million euros over a 4 year regulatory period and tariffs are adjusted every year and in addition if this TSO has volatile flows, then a floating tariff could vary considerably and create a vicious cycle of higher tariffs leading to lower capacity bookings leading to even higher tariffs and even lower capacity bookings. Therefore, if network users have a choice not to utilise the network they will go elsewhere if the tariff swing is too great. On the other hand if a fixed price option also exists on such a network, it gives network users some certainty. If this encourages more long term bookings then it would actually reduce the likelihood of the floating tariffs varying too much and thereby help to reduce the under-/over-recovery problem.

Fixed Price Mechanisms

During the discussions in the SJWS on this topic, ACER raised some concerns about possible cross-subsidisation between different users i.e. those with floating price contracts and those with fixed price contracts. The concern is that if one group of network users have fixed price contracts and another group has floating price contracts then the group with floating price contracts will take all the risk of e.g. increases in allowed revenue. A fixed price option could be constructed in different ways to ensure non-discrimination between those with floating price contracts and those with fixed price contracts and to minimise any potential cross-subsidisation.

Some fixed price mechanisms could be: (1) fixed price + indexation; (2) fixed price + a premium; (3) fixed price + a variable charge; (4) fixed price + a combination of indexation, and a premium or variable charge.

1. Fixed price plus indexation

For this option the TSO would set a fixed tariff for a period of time and then indexation would be applied to the fixed tariff each year. The fixed price could be 'fixed' in real terms; so that it is adjusted to reflect the time value of money (in other words it is increased in line with an assumed inflation rate such as the indexation rate used to inflate the regulated asset base).

2. Fixed price + a premium

For this option the TSO would set a fixed tariff for a period of time but would also set a fixed premium to be applied to the fixed tariff each year. Therefore, the fixed price would include a risk premium and be higher than the regular floating tariffs resulting from auctions (i.e. fixed reserve price + auction premium + risk premium, instead of having a floating reserve price + auction premium). In order to take account of differences in risk, the rate of return (cost of capital) could be varied in allowed revenue calculations. Transmission tariffs are determined on the basis of the TSO's regulated asset base, its operating costs and a reasonable rate of return. In order to derive an adequate risk premium, one may vary the rate of return for fixed-price bookings and in doing so, somewhat reflecting the higher risk. This would lead to a higher tariff outcome and the difference in tariff level could then be the basis for determining the risk premium which would distinguish fixed tariffs from floating tariffs. Such calculations would offer a valid representation of the additional risk for network users who opt for a floating tariff in comparison with network users who opt for a fixed tariff. The risk premium would be used to offset any increases in the floating tariff.

A premium could be applied to the reserve price that acts as a buffer such that the reserve price 'floats' inside this premium. As the reserve price floats, the premium is adjusted so that their sum remains unchanged – thus the reserve price remains fixed over the duration of the capacity contract unless the floating tariff exceeds the sum of the reserve price plus premium that was applicable at the time the capacity was allocated in which case the premium would be adjusted to zero and the reserve price would float without a buffer. The principle of buffering could apply to the normal auction premium, if any, or to an additional 'risk premium', in which case any additional income from risk premiums would feed the regular tariff calculation to prevent over-recovery.

3. Fixed price + a variable charge

For this option the TSO would set a fixed tariff for a period of time and then apply a variable charge each year. The variable charge could be the 'complementary revenue recovery charge' as set out in Article 4.5 of the initial draft TAR NC and would apply to both fixed and floating price contracts. An alternative could a variable charge that would be calculated to cover any increases in allowed revenue not related to changes in capacity bookings and this charge would apply to both fixed and floating price contracts.

4. Fixed price + a combination of indexation, and a premium or variable charge

For this option the TSO could choice to charge a combination of the above options such as (i) fixed price + indexation + premium, (ii) fixed price + indexation + variable charge or (iii) fixed price + premium + variable charge.

Question 47 – Are the mechanisms for fixed capacity prices described clearly enough in Section 7.1 of the Supporting Document?

Question 48 – Do you agree with ENTSOG's proposal for the inclusion of different mechanisms for fixed capacity prices in the refined draft TAR NC, as outlined in the Supporting Document?

Question 49 – Do you have any further suggestions for calculating the fixed price premium referred to in Section 7.1 of the Supporting Document?

8. Incremental & New Capacity

Chapter VIII of the initial draft TAR NC forms part of the Incremental Proposal and its content will be consulted on as part of the Incremental Proposal consultation. As this Chapter will form a part of the TAR NC to be submitted to ACER by the end of 2014 it needs to be consistent with the other chapters of the initial draft TAR NC.

Question 50 – Do you consider the incremental and new capacity Chapter (Articles 42 – 46) to be consistent with the other Chapters of the initial draft TAR NC?

9. Final and Transitional Provisions

Chapter IX of the initial draft TAR NC relates to mitigating measures due to implementation of the TAR NC, transitional provisions and entry into force. This Chapter outlines the circumstances whereby TSOs can (1) implement mitigating measures within a specified time period; and (2) implement transitional period by applying the TAR NC within a 24 month period from either 1st October 2017 or from the date 18 months after entry into force, whichever is later.

9.1 Topic: Mitigating measures (Article 47) and transitional provisions (Article 48)

> Framework Guidelines

'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.'*

> Policy Options

Mitigating measures are methods or plans to reduce, offset, or eliminate adverse project impacts or can be actions taken to avoid, reduce the severity of, or eliminate an adverse impact. The Framework Guidelines states that mitigating measures (in general) may be applied by NRAs before 1 October 2017. It also states that in exceptional circumstances mitigating measures may be applied up to 1 October 2019 and it includes three potential instances of exceptional circumstances. For the first two circumstances (where the execution of specific contracts is affected and where the implementation of the tariff provisions does not coincide with the commencement of the gas year, tariff setting cycle or regulatory period), ENTSOG believes that the mitigating measure will result in a delay to the implementation of the TAR NC and has therefore drafted these under 'Transitional provisions' in Article 48 of the initial draft TAR NC.

The third exceptional circumstance which relates to a tariff increase of more than 20% from one year to the next has been included under 'Mitigating measures' in Article 47 as it is not clear that this would result in a delay to the implementation of the TAR NC.

Stakeholders responded to ENTSOG's draft project plan consultation and requested that the topic of mitigating measures be discussed at the SJWSs. This topic was discussed explicitly at SJWS 2 and also at a number of other SJWSs due to the interrelationship of the topic with the policy choices for other topics. Following on from the discussions with stakeholders and the suggestions provided, ENTSOG has included two examples of mitigating measures in Article 47 of the initial draft TAR NC.

Some stakeholders also called for other mitigating measures including a one-off reset of capacity contracts. This option would have the following characteristics:

a) offered to all network users when the TAR NC comes into effect (October 2017 or earlier/later);

b) network users entitled to relinquish all or part of their existing IP capacity extending beyond October 2017 with no penalty; and

c) Any retained existing IP capacity becomes subject to the TAR NC along with unsold capacity.

In addition to the fact that this was presented at SJWSs by some stakeholders, after the last SJWS, six stakeholders provided written comments to support the inclusion of this mitigating measure. Four stakeholders also presented a joint statement to the Madrid Forum on inclusion of a capacity reset mechanism in the TAR NC. A smaller number of other stakeholders are opposed to this mitigating measure. ENTSOG has not included this mitigating measure in the initial draft TAR NC because it is not a balanced or proportionate measure. A one-off reset of capacity contracts would have an impact on future investments and on the structure/application of the rules for incremental and new capacity. Many investments in transmission infrastructure have been underwritten by long-term contracts. If those that triggered the investment were to step out of their contract, then the remaining costs would have to be socialised over the whole system, which would result in those left booking capacity facing an unfair burden whilst also risking the ability of TSOs to finance projects.

The option to step out of contracts on a one-off basis could lead to severe instability in the market and have an impact on tariff stability in the future. It could also cause cross-subsidisation between different users and a substantial non-cost reflective redistribution of costs. There could also be an impact on the market valuation of the TSO, which could lead to a

devaluation of the company, which in turn could have an impact on the tariffs and on the ability of the TSO to invest in the network in the future.

Question 51 – Do you agree with ENTSOG's interpretation of the mitigating measures as set out in Article 47 of the initial draft TAR NC and the separation of mitigating measures and transitional provisions?

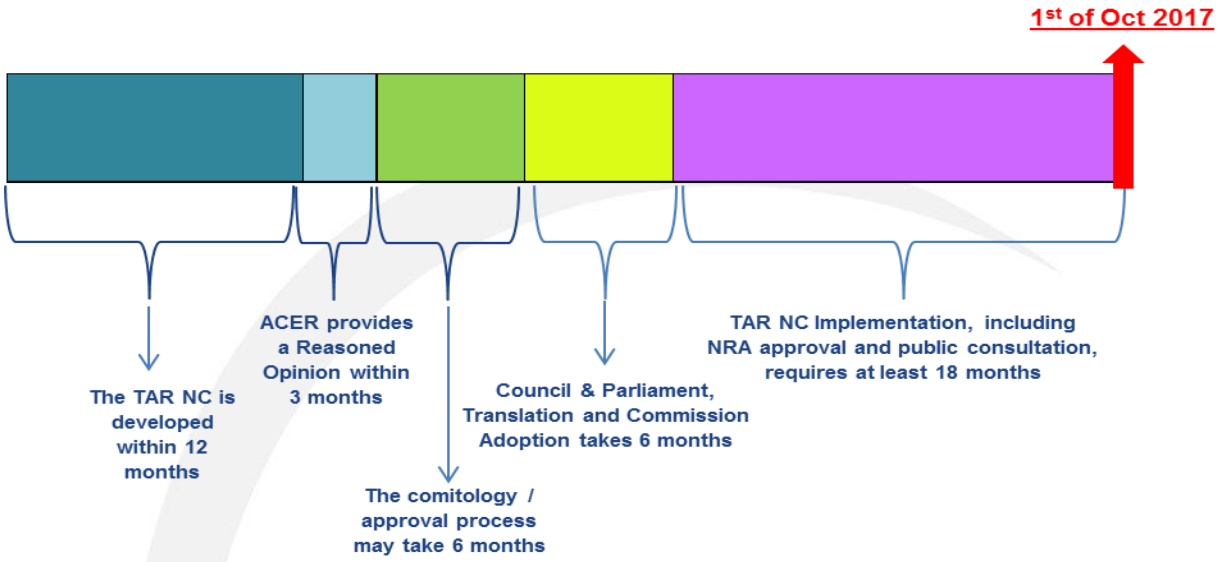
Question 52 – Do you agree with the inclusion of the mitigating measures as set out in Article 47.2(a) and (b)?

9.2 Topic: Entry into force (Article 49)

The Framework Guidelines stipulates that the provisions of the TAR NC shall apply to all contracts by 1 October 2017. There is no set implementation time period for the TSOs to comply with the TAR NC provisions as from its entry into force. The time that TSOs have to implement the TAR NC depends on, and may be significantly shortened by, the timing of the processes within the TAR NC establishment, in particular the phase between its submission for ACER reasoned opinion and the phase of its adoption procedure.

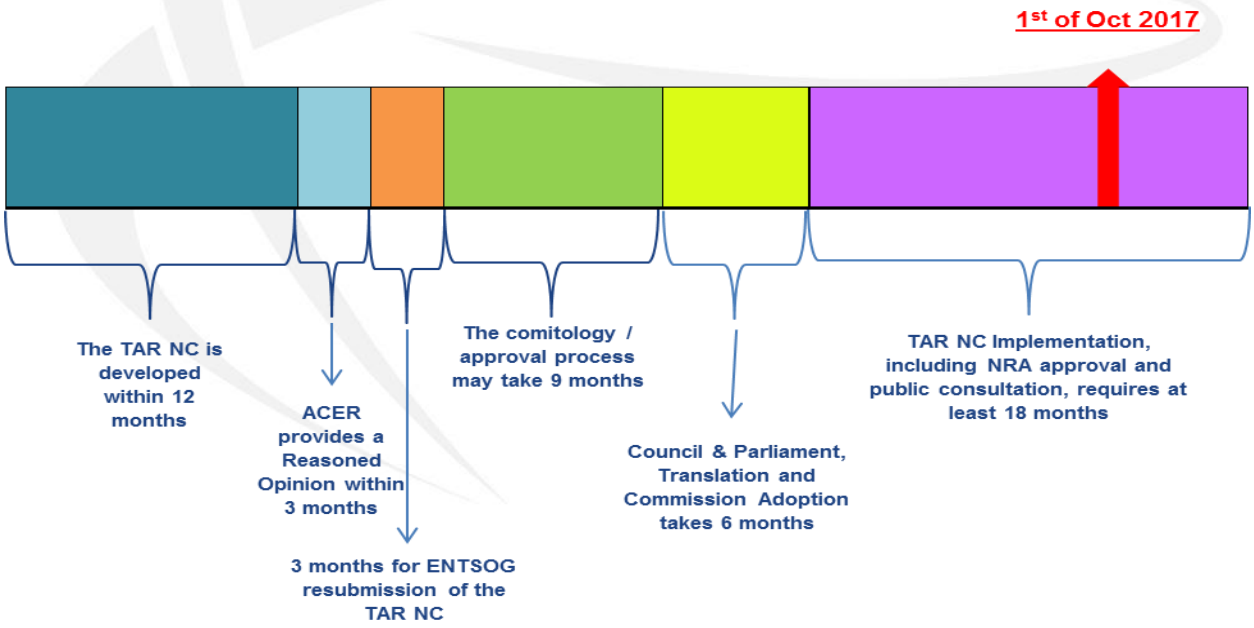
ENTSOG has raised concerns about the implementation timeline during the SJWSs and presented two scenarios. The scenarios shown below highlight two possible situations (i) with no delays and (ii) with short delays at two points in the process.

Figure 14: Scenario 1. No delays in the Implementation process.



The first situation is where there are no delays in the process and the comitology or approval process just takes six months which is only two comitology meetings. This is an optimistic situation which relies on everything running smoothly for each step in the process.

Figure 15: Scenario 2. Short delays at two points in the implementation process



The second situation is where there are two short delays in the process. There could be a delay after ACER provides its reasoned opinion if the reasoned opinion requires amendments to the TAR NC. ENTSOG may need three months to consider the reasoned opinion and the amendments to the TAR NC before potentially resubmitting it to ACER. The second delay could be during the comitology or approval process where it may be necessary to have three comitology/approval meetings rather than two comitology/approval meetings. This is a more realistic view of the situation which allows for some delays in the process. ENTSOG suggests that the implementation deadline be '1 October 2017 for implementation' or '18 months from the date of entering into force' whichever is later.

For the avoidance of doubt, it should also be noted however, that should the tariff setting year be classified as the calendar year, then the provisions of the TAR NC shall apply to the upcoming (and not current) tariff setting year (i.e. 1 January 2018).

Question 53 – Do you agree that an implementation period of at least 18 months after entry into force, as set out in Article 49 of the initial draft TAR NC, is necessary to ensure the proper implementation of the TAR NC?

Question 54 – Do you agree with the text that ENTSOG has included in Article 49 on the timing of the implementation?

10. General Issues

This chapter of the Supporting Document covers a number of items such as ENTSOG's position on monitoring and general questions for stakeholders to allow them to provide views that have not been captured elsewhere in the consultation.

10.1 Topic: Monitoring

> Framework Guidelines

'The Network Code on Tariffs shall specify, that all information relevant to implementation monitoring shall be communicated by ENTSOG to the Agency pursuant to Articles 8(8) and 8(9) of Gas Regulation. The relevant information, and associated timing of communication, shall be determined in full by the Agency in close cooperation with ENTSOG within three months after the entry into force of the Network Code on Tariffs. This information shall be subsequently updated when appropriate.

The relevant information shall include, but shall not be limited to:
• direct tariff related aspects, such as percentage changes in tariffs, the amount of over- and under-recovery in each year and the size of regulatory accounts;
• beneficiaries and/or concerned parties of the potential over- and under-recovery;
• number of cross-border tariff-related discrimination complaints;
• the value of multipliers or seasonal factors per product, interconnection point, etc. in each year;
• fulfilment of the transparency norms, formulated in the Network Code on Tariffs, in a qualitative and quantitative manner.
The Agency shall share this information with NRAs.'

> Policy Options

ENTSOG's role in the task of monitoring the network codes is already foreseen in Regulation (EC) No 715/2009 (Article 9(1) for ACER's obligation and Article 8(8) for ENTSOG's obligation, which to a certain extent overlap) as well as in Regulation (EC) No 713/2009. The monitoring of the network code implementation is a separate task from that of the network code elaboration and hence, it is out of scope for the Framework Guidelines and the subsequent network code to foresee the details related to such monitoring. ENTSOG shall cooperate closely with ACER to determine the relevant information and the associated timeline for communication outside of the process for the network code establishment.

As for ENTSOG's obligation to make available all information required by ACER to fulfil its tasks under Article 9(1), ENTSOG does not have any authority to compel its members to respond to requests for information and data. This power of NRAs is foreseen by Directive 2009/73/EC. It would be more effective and efficient for ACER to seek such information directly from NRAs and would avoid TSOs having to provide the same information to ENTSOG, which they may have already provided to the relevant NRAs.

ENTSOG is of the opinion that it is not appropriate for a network code to describe in detail the points for monitoring the implementation of that network code.

10.2 Topic: *Mutatis Mutandis* (Articles 2.1, 11.2, 21.2, 31.4 and 40.3)

In Articles 2.1, 11.2(a), 21.2, 31.4 and 40.3 of the initial draft TAR NC, the phrase '*mutatis mutandis*' is used, which is a Latin expression meaning 'all necessary changes having been made; with the necessary changes' (Black's Law Dictionary). This expression is used in the initial draft TAR NC in order to avoid repetition of almost the same rules that are applicable for

different situations, thus making the drafting concise. Previously, this tool was employed when drafting the BAL NC and was proved to be a viable solution.

For instance, Article 21.2 of the initial draft TAR NC sets out that at least every 4 years as from the date when the cost allocation methodology is approved for the first time following the TAR NC entry into force, 'the process referred to in Article 20 shall apply, mutatis mutandis'. This means that the same consultation process as set out in Article 20, but with 'all necessary changes having been made', is applicable when as a result of the review (to be made at least every 4 years) the necessity to change the applied cost allocation approach is identified. In this case, the 'necessary change' is the substitution of 'within a reasonable time as from the entry into force of this Regulation' foreseen in Article 20.1 with 'at least every four years as from the date of the approval referred to in Article 20.5 and when the necessity to change the applied cost allocation approach is identified'.

10.3 Topic: Structure of the initial draft TAR NC

The structure of the initial draft TAR NC is different to the structure of the Framework Guidelines. ENTSOG made some changes to the structure when preparing the draft Business Rules and has since further refined the structure for the initial draft TAR NC.

Some of the main changes to the structure are that the input information related to the cost allocation methodologies, that had been set out in the publication requirements Chapter, has been moved to the cost allocation approach Chapter. The reason for this is to have all the information related to the detail of the cost allocation methodologies in the same chapter. The publication requirements Chapter makes cross-references to the cost allocation approach Chapter in terms of the information that needs to be published.

The pricing for bundled capacity and capacity at a virtual interconnection point has been put into one Chapter and all the rules related to incremental capacity are collated in a single chapter. Please refer to Annex 4 for the correlation table that compares the Framework Guidelines and the initial draft TAR NC and explains how the structure has changed as you move from one document to the other.

Question 55 – Do you agree with the structure of the initial draft TAR NC?

General Questions

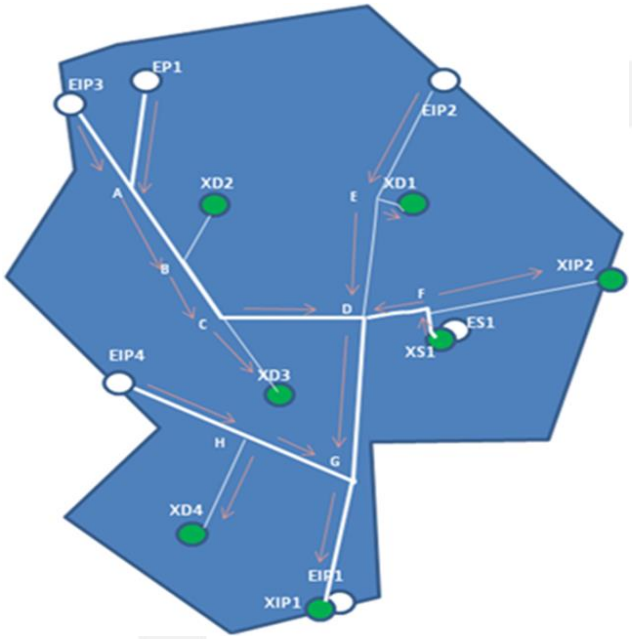
Question 56 – Do you consider that the level of detail in the initial draft TAR NC is appropriate for this EU legislation? If not, please explain why (with reference to specific topics or articles, where appropriate)?

Question 57 – After reviewing the initial draft TAR NC, do you find that there are other material issues that ENTSOG should consider for the purpose of the refined draft TAR NC?

Question 58 – Do you find the Supporting Document for consultation to be 'respondent-friendly' in terms of its readability, style, etc.? Please outline how ENTSOG could improve future consultation documents.

Annex 1 – Cost Allocation Methodology Examples

a. Example of Capacity Weighted Distance Methodology



Allowed Revenue	500.000.000,00 €
Entry/Exit Split	%
Entry	50%
Exit	50%

To calculate the capacity weighted distance, the following assumptions are made:

- Distance between points are calculated following Art. 7 (6) (a) (airline distance)
- Technical capacity is used as weight
- Due to the flow scenarios, following relations are excluded:
  (1) Entry Point 1 with Exit Point 1
  (2) Storage Entry with Storage Exit

The following table shows the calculation of distances depending on each relevant in addition to the calculation of the average distance for each point following Art. 11 (2) (a).

			North	100	1134	1134	545	628	1134	
			East	553	773	228	175	764	228	
			technical capacity [MWh/h]	29000	30000	20000	25000	35000	29000	
North	East	technical capacity [MWh/h]	airline distance*	Entry Point 1 - EIP1	Entry Point 2 - EIP2	Entry Point 3 - EIP3	Entry Point 4 - EIP4	Storage Entry - ES1	Production Entry - EP1	capacity weighted distance
100	553	30000	Exit Point 1 - XIP1		1057	1084	584	569	1084	859
744	1075	40000	Exit Point 2 - XIP2	829	493	932	922	332	932	709
628	764	13000	Storage Exit - XS1	569	506	737	595		737	622
895	711	20000	Exit Domest 1 - XD1	811	247	539	640	272	539	493
891	353	25000	Exit Domest 2 - XD2	816	485	273	389	488	273	467
520	467	22000	Exit Domest 3 - XD3	429	686	659	293	316	659	498
250	314	29000	Exit Domest 4 - XD4	282	996	888	326	588	888	657
			capacity weighted distance	636	665	767	562	434	767	

* other possibility is to consider the pipeline distance between two point following Art. 7 (6) (b)

As subsequent steps, the point weight, allocated costs and finally tariffs have to be calculated for each point following Art. 11 (2) (b) – (d). To calculate the weight, forecasted contracted capacity is used as weight. The results are shown in the following table.

Entry point	forecasted contracted capacity [(kWh/h)/a]	point weight	allocated costs [€]	tariffs [€/(kWh/h)/a]
Entry Point 1 - EIP1	25.000.000	19,59%	48.975.000,00	1,96
Entry Point 2 - EIP2	16.000.000	13,11%	32.775.000,00	2,05
Entry Point 3 - EIP3	15.000.000	14,18%	35.450.000,00	2,36
Entry Point 4 - EIP4	24.000.000	16,62%	41.550.000,00	1,73
Storage Entry - ES1	17.000.000	9,09%	22.725.000,00	1,34
Production Entry - EP1	29.000.000	27,41%	68.525.000,00	2,36

Exit point	forecasted contracted capacity [(MWh/h)/a]	point weight	allocated costs	tariffs [€/(kWh/h)/a]
Exit Point 1 - XIP1	25.000.000	21,41%	53.525.000,00	2,14
Exit Point 2 - XIP2	38.000.000	26,86%	67.150.000,00	1,77
Storage Exit - XS1	5.000.000	3,10%	7.750.000,00	1,55
Exit Domest 1 - XD1	19.000.000	9,34%	23.350.000,00	1,23
Exit Domest 2 - XD2	24.000.000	11,17%	27.925.000,00	1,16
Exit Domest 3 - XD3	21.000.000	10,43%	26.075.000,00	1,24
Exit Domest 4 - XD4	27.000.000	17,69%	44.225.000,00	1,64

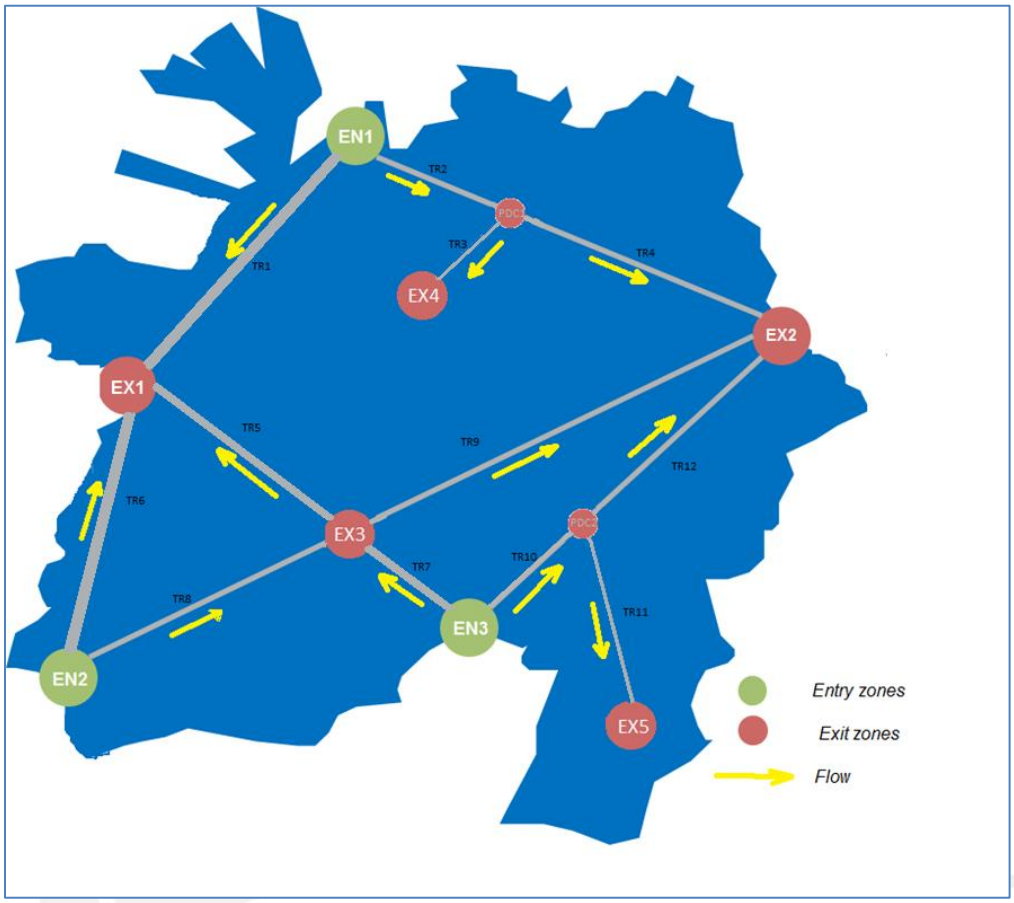
b. Example of the Matrix Cost Allocation Methodology

The following text is aimed at explaining by an illustrative and structured step-by-step way how to apply the cost allocation methodology "Matrix Approach"[33].

STEP 1

Simplified representation of the transmission network in terms of segments and relevant entry and exit points (or clustering).

[33] The example contains a topology scheme and figures destined only to improve the understanding of Matrix methodology and not linked to actual information of any gas system, representing just a simplified model.



In the map pipe diameters have been graphically represented using different line thickness

STEP 2

Identification of a unitary transmission cost index on the basis of different pipeline typologies composing each segment. In this example, the cost driver is the diameter (DN) with associated theoretical capacity and unitary investment (per kilometer). Additionally, a coefficient representing the allowed remuneration of the assets (WACC [Weighted Average Cost of Capital] + Depreciation + OPEX) is needed to report the investment costs to a yearly value (reference prices are related to annual capacity products).

A unitary transmission cost index is then calculated dividing the unitary investment on yearly basis by the theoretical capacity.

Segment	from	to	Diameter (DN)	Theoretical cap. [Mcm/d]	Unit.Inv. [M€/km]	Yearly coeff. (wacc+dep+opex)	Unit.Cost [€/y/(cm/d)/km]
TR1	EN1	EX1	1050	33,9	2,01	0,1	0,00595
TR2	EN1	PDC1	400	2,7	0,54	0,1	0,02031
TR3	PDC1	EX4	300	1,0	0,44	0,1	0,04207
TR4	PDC1	EX2	400	2,7	0,54	0,1	0,02031
TR5	EX1	EX3	900	22,5	1,64	0,1	0,00730
TR6	EN2	EX1	1050	33,9	2,01	0,1	0,00595
TR7	EN3	EX3	900	22,5	1,64	0,1	0,00730
TR8	EN2	EX3	500	4,8	0,69	0,1	0,01427
TR9	EX3	EX2	400	2,7	0,54	0,1	0,02031
TR10	EN3	PDC2	600	7,9	0,95	0,1	0,01206
TR11	PDC2	EX5	300	1,0	0,44	0,1	0,04207
TR12	PDC2	EX2	400	2,7	0,54	0,1	0,02031

STEP 3

For each segment (TR_n), calculate the transmission cost as product of its length (Km) and the related unitary transmission cost index:

Segment	Lenght (km)	Unit.Cost [€/y/(cm/d)/km]	Segment cost [€/y/(cm/d)]
TR1	300	0,00595	1,783996
TR2	150	0,02031	3,046709
TR3	100	0,04207	4,207216
TR4	350	0,02031	7,108988
TR5	250	0,00730	1,825538
TR6	300	0,00595	1,783996
TR7	150	0,00730	1,095323
TR8	250	0,01427	3,566610
TR9	450	0,02031	9,140128
TR10	150	0,01206	1,809597
TR11	250	0,04207	10,518041
TR12	300	0,02031	6,093419

STEP 4

Grid verification is carried out to determine the flow directions in each segment (e.g. under peak condition). For all entry-exit point combinations, calculate the cost of each possible path between and entry and an exit point as sum of the segment they are composed of. When flow is in the opposite direction ("counterflow") the value of the segment is discounted according to parameter comprised in the range [0;1], as determined by the NRA[34].

[34] In the unit cost Matrix provided in this example, a segment in counterflow is valued 14% of the segment cost (as currently determined in the Italian system).

In case of meshed grids, multiple paths are possible when linking entry and exit points: criteria to select one of them are then needed and a sensible possibility is to choose the one having the minimum cost ("shortest economical distance")[35].

Unit cost Matrix		Exit points				
		EX1	EX2	EX3	EX4	EX5
Entry points	EN1	1,78	10,16	2,04	7,25	14,52
	EN2	1,78	11,62	2,04	9,29	14,52
	EN3	2,92	7,90	1,10	10,42	12,33

Unit cost Matrix, having as dimensions the number of entry points and the number of exit points

Depending of system complexity, entry and/or exit points can be clustered[36], therefore reducing the dimensions of the Matrix.

STEP 5

Calculate entry and exit initial tariffs for each path determined as the combinations minimizing the differences between their sum and the unit cost at the related entry and exit points. In practice, this means to build a tariff Matrix whose elements, determined as sums of the entry and exit initial tariffs, minimize the aggregated sum of the squared differences between them and the elements composing the unit cost Matrix.

To avoid negative tariffs, a constraint shall be put in place.

tariff Matrix			Exit initial tariffs				
			1,534	**9,265**	**1,096**	**8,360**	**13,160**
			EX1	EX2	EX3	EX4	EX5
Entry initial tariffs	**0,468**	EN1	2,00	9,73	1,56	8,83	13,63
	1,168	EN2	2,70	10,43	2,26	9,53	14,33
	0,251	EN3	1,79	9,52	1,35	8,61	13,41

Initial tariff Matrix, having the same dimensions of the unit cost Matrix

The differences between respective elements of the unit cost Matrix and the tariff Matrix are hereby collected:

[35] As alternative, the average cost of all the paths can be used to fill the unit cost Matrix.

[36] For example, a "reduced" matrix can be produced aggregating points and attributing to the cluster an average transmission cost weighted using the flows in entry/ exit from/to the single points composing the cluster.

Delta Matrix		EX1	EX2	EX3	EX4	EX5
	EN1	0,22	- 0,42	- 0,48	1,57	- 0,89
	EN2	0,92	- 1,19	0,22	0,24	- 0,19
	EN3	- 1,14	1,61	0,25	- 1,81	1,08

The differences are then squared (positive and negative discrepancies have the same weight in terms of misalignment with the underling costs):

Delta squared Matrix		EX1	EX2	EX3	EX4	EX5
	EN1	0,05	0,18	0,23	2,48	0,80
	EN2	0,84	1,42	0,05	0,06	0,04
	EN3	1,29	2,60	0,06	3,29	1,18

Finally, squared differences for the entire matrix are summed up (light blue area) and the tariff matrix selected[37] is the one whose entry and exit tariffs are minimizing this sum (in the example: $\sum\varepsilon^2 = 14,5$).

STEP 6[38] (Rescaling)

Tariff determined under step 5 are not supposed to get back to the TSO the regulated (allowed) revenues when applied to the forecasted booked capacities at entry and exit points, unless these capacities (together with the allowed revenues and the entry-exit split) are set as constraint during tariff Matrix solving process.

To obtain the relevant reference prices to be applied to entry-exit points, a rescaling procedure is needed. The initial tariffs obtained are then adjusted multiplying them by constants uniformly (applied respectively to all entry and to all entry points) in order to recover the allowed revenues, accordingly to the entry-exit split set by the NRA.

[37] The selection is performed through an iterative process which could be more or less complicated depending on different elements, such as matrix dimensions and the number of constraints. An increased complexity of the matrix and/or the introduction of additional constraint is reducing - if not removing- the probability to get multiple solutions.
Additional constraints that can be added when determining the tariff Matrix are: forecasted booked capacities; allowed revenues; entry-exit split. When the previous additional constraints are added in solving the matrix, the tariffs determined are not subject to secondary adjustments (rescaling).

[38] See previous footnote. This step is needed only if forecasted booked capacities, allowed revenues and the entry-exit split are not already included as additional constraints in the tariff Matrix solving process.

Total Allowed revenue (€)			100.000.000
Split	Entry	50%	50.000.000
	Exit	50%	50.000.000

Entry points	Forecasted capacities mc/d/y	Initial tariffs [€/y/(cm/d)]	Hypothetical revenues from entry	Rescaling constant	**Ref. Prices** [€/y/(cm/d)]	Allowed revenue from entry(€)
EN1	14.400.000	0,468	6.737.817,07	1,429137044	**0,67**	9.629.264
EN2	21.600.000	1,168	25.231.148,75		**1,67**	36.058.769
EN3	12.000.000	0,251	3.017.182,10		**0,36**	4.311.967
			34.986.147,92			50.000.000

Exit points	Forecasted capacities mc/d/y	Initial tariffs [€/y/(cm/d)]	Hypothetical revenues from exit	Rescaling constant	**Ref. Prices** [€/y/(cm/d)]	Allowed revenue from exit(€)
EX1	10.000.000	1,534	15.338.026,46	0,217254427	**0,33**	3.332.254
EX2	9.600.000	9,265	88.941.526,90		**2,01**	19.322.940
EX3	18.000.000	1,096	19.722.402,00		**0,24**	4.284.779
EX4	6.400.000	8,360	53.501.239,40		**1,82**	11.623.381
EX5	4.000.000	13,160	52.641.712,35		**2,86**	11.436.645
			230.144.907,10			50.000.000

c. Example of the Asset Allocation Methodology

Inputs on the methodology

i. Value of assets

ii. Capacity/commodity split

iii. Technical capacity at entry/exit points and where necessary technical capacity of pipelines

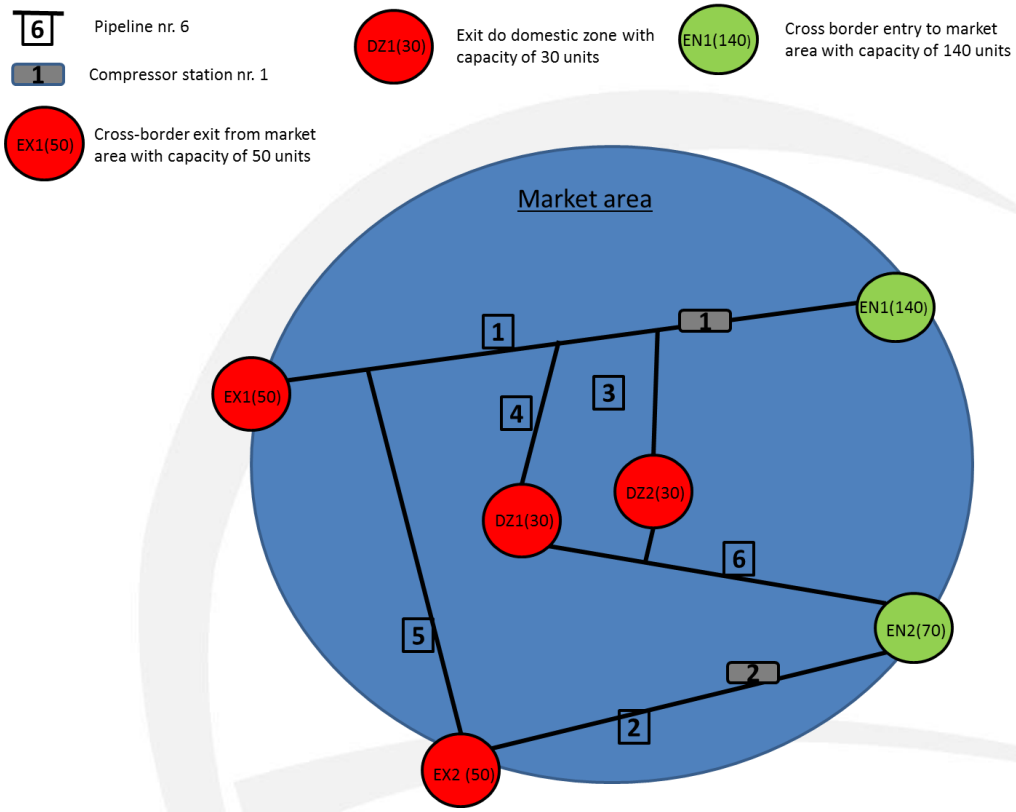
iv. Expected booked capacity at entry/exit points

v. Initial entry/exit split

vi. Peak demand of domestic supply

Transmission network characteristics

Figure 1: Transmission network characteristics



Main methodology

1 - Annual costs calculation

i. Identification of homogenous groups of network users and identification of assets

(a) Identification of homogenous groups of network users = domestic and transit network users.

(b) Identification of assets and their values.

Table 1: Complete item list of assets and their values

Cross border station (on ENTRY 1)	10,0
Cross border station (on ENTRY 2)	10,0
Compressor station 1	10,0
PIPELINE 1	80,0

Section 1a	*30,0*
Section 1b	*30,0*
Section 1c	*20,0*
PIPELINE 3	20,0
PIPELINE 4	20,0
PIPELINE 6	20,0
Domestic exit (DZ1 + DZ2)	20,0
PIPELINE 2	40,0
PIPELINE 5	40,0
Compressor station 2	10,0
Cross border station (on EXIT 1)	10,0
Cross border station (on EXIT 2)	10,0
Supporting assets[39]	5,0
TOTAL	**305,0**

ii. Allocation of the assets to the identified homogenous groups of network users according to their utilization in relation to those groups taking into account the relevant network parameters including in particular peak demand for domestic supply (1 in 20)[40], necessary surplus capacities in line with the legal obligation for security of supply (N-1 rule)[41] and diversification of sources and increase of competition on the gas commodity market.

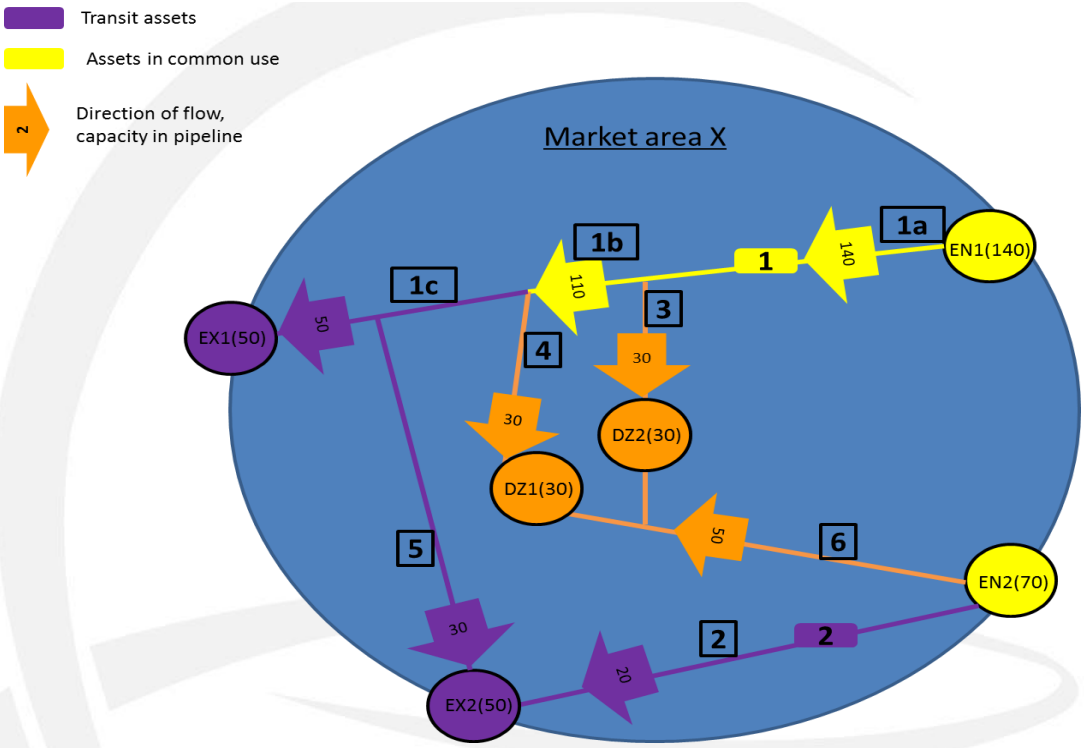
(a) Identification of peak demand for domestic supply (1 in 20) = 50.

(b) Identification of necessary capacities and assets needed for securing peak demand and surplus capacities defined in previous step for domestic supply and competition = domestic transmission assets.

[39] Supporting assets, such as construction and maintenance machinery, e.g. pigging, drilling and plugging equipment.
[40] Regulation (EU) 994/2010 Article 8
[41] Regulation (EU) 994/2010 Annex I

(c) The rest of assets which are not necessary for the domestic transmission and are used to secure capacities necessary for transit transmission are transit assets, see figure 2 below.

Figure 2: Identification of transit and domestic assets according to steps 1.3.ii. (b), (c)



(d) If assets that are used for both domestic transmission and transit are identified, this means that these are assets in common use. Appropriate split of value of these assets between the identified groups of network users according to the ratio of capacities necessary for the domestic transmission and those necessary for transit transmission.

Table 2: Allocation of pipelines in common use to the groups of

Assets in common use	Capacity	Capacity %	Value of assets
PIPELINE 1 - section 1a	140,0	100,0%	30,0
Domestic transmission	60,0	42,9%	12,9
Transit transmission	80,0	57,1%	17,1

PIPELINE 1 - section 1b	110,0	100,0%	30,0
Domestic transmission	30,0	27,3%	8,2
Transit transmission	80,0	72,7%	21,8
Compressor station 1	140,0	100,0%	10,0
Domestic transmission	60,0	42,9%	4,3
Transit transmission	80,0	57,1%	5,7
Cross border station (ENTRY 1)	140,0	100,0%	10,0
Domestic transmission	60,0	42,9%	4,3
Transit transmission	80,0	57,1%	5,7
Cross border station (ENTRY 2)	70,0	100,0%	10,0
Domestic transmission	50,0	71,4%	7,1
Transit transmission	20,0	28,6%	2,9

(e) Distribution of assets between the domestic transmission and transit transmission

Table 3: Allocation of pipelines to domestic transmission and transit

Domestic transmission	**Value of assets**
Cross border station (ENTRY 1)	**4,3**
Cross border station (ENTRY 2)	**7,1**
Compressor station 1	**4,3**
PIPELINE 1:	**21,0**
section 1a	**12,9**
section 1b	**8,2**
PIPELINE 3	**20,0**

PIPELINE 4	**20,0**
PIPELINE 6	**20,0**
Domestic exit (DZ1 + DZ2)	**20,0**
Total domestic transmission assets	**116,8**
Transit transmission	**Value of assets**
Cross border station (on ENTRY 1)	**5,7**
Cross border station (on ENTRY 2)	**2,9**
Compressor station 1	**5,7**
PIPELINE 1:	**59,0**
section 1a	**17,1**
section 1b	**21,8**
section 1c	**20,0**
PIPELINE 5	**40,0**
Cross border station (EXIT 1)	**10,0**
PIPELINE 2	**40,0**
Compressor station 2	**10,0**
Cross border station (EXIT 2)	**10,0**
Total transit transmission assets	**183,2**
Domestic + transit transmission (primary assets)	**300,0**

(f) Distribution of the supporting assets that are necessary to provide service to identified homogenous groups of network users in the proportion to the already allocated primary assets in point 1.3.ii.(e). Share of domestic assets = 116,8/300 , share of transit assets = 183,2/300.

Table 4: Allocation of supporting assets to the homogenous groups of network users

	Value of assets	Ratio %	Allocation supporting asset value to domestic and transit transmission
Supporting assets	5,0	-	-
Asset values allocated to domestic transmission	116,8	39%	1,9
Asset values allocated to transit transmission	183,2	61%	3,1

(g) In the next step of asset allocation, the overall sum of assets allocated to the homogenous groups of network users is determined.

Table 5: Summary of allocated assets

Assets	Value of assets (primary + supporting)
Total domestic transmission assets	**118,7**
Total transit assets	**186,3**
TOTAL	**305,0**

(h) Once asset allocation is completed, the annual costs are calculated with the formula summing up the operational costs[42], depreciation[43] and return[44] on asset value[45]

[42] Please note, that operational costs are directly allocated to assets.
[43] in this example depreciation is calculated with residual economic lifetime of asset value of 10 years.
[44] Please note that in this example the appropriate rate of return on transit transmission is higher due to the capacity risk borne by the TSO. The appropriate rate of return may be decreased with implementation of cross-border cost allocation mechanism which would allow for cost allocation to those network users who benefit from transit transmission service.
[45] Usually called RAB or RAV depending on the cost concept applied in given market area.

Calculation of annual costs of assets	Domestic transmission	Transit transmission
a) Operational expenses	15,0	20,0
b) Depreciation	11,9	18,6
c) Rate of return reflecting the capacity risk	8,0%	12,5%
d) Asset value ("RAB" or "RAV")	118,7	186,3
Annual costs [a + b + (c x d)]	**36,4**	**61,9**

2 - Annual tariff calculation

iii. Identification of entry and exit points used by identified homogenous groups of network users

After asset allocation and annual cost calculation the next step may proceed with determination of entry and exit tariffs by identifying points from which the costs shall be recovered.

Table 6: Identification of points used by identified groups of network users

	Identification of entry and exit points	
	Domestic transmission	**Transit transmission**
EXIT 1		x
EXIT 2		x
Domestic exit points	x	
ENTRY 1 (common use)	x	x
ENTRY 2 (common use)	x	x

iv. Initial application of entry-exit split

Entry-exit split has to be calculated in several steps. In a first step, the initial split has to be defined for one of the identified homogenous group of network users. In this example, we assume the initial split for domestic network uses as 50/50.

Table 7: Within initial step e-x split for domestic costs is defined,

	Cost of transmission	
	Annual costs of domestic transmission	**Annual costs of transit transmission**
EXIT	18,2	*[46]
ENTRY	18,2	*
TOTAL	36,4	61,9

v. Calculation of tariff according to the applied entry-exit split and estimated booked capacity proceeds in two steps.

(a) Tariffs for domestic network users are defined

$$Tariff\ at\ a\ point = \frac{Allocated\ annual\ costs\ at\ homogenous\ group\ of\ points}{Sum\ of\ estimated\ booked\ capacity\ at\ homogenous\ group\ of\ points}$$

Table 8: Tariffs for domestic network users

	Allocated annual costs of domestic transmission	**Expected booked capacity**	**Tariff**
Domestic exit points	18,2	40	0,45
ENTRY 1 (common use)	12,1	30	0,40
ENTRY 2 (common use)	6,1	15	0,40

(b) In order not to discriminate between network users with different cross border entry price, the cross border entry price calculated in previous step is an input to the transit tariff determination. Once the portion of annual costs is allocated to entry points via the sum of expected bookings multiplied by the entry tariff set in the previous step, the residual costs are divided by expected exit bookings in order to define the cross-border exit tariff.

[46] *Entry-exit split for transit costs will be defined at a later step*

Table 9: Tariffs for transit transmission network users

	Expected booked capacity	Tariff	Allocated annual costs of transit transmission
ENTRY 1 (common use)	65	0,40	26,3
ENTRY 2 (common use)	25	0,40	10,1
EXIT 1	40	0,28	11,4
EXIT 2	50	0,28	14,2

Final calculation of entry-exit split

Once all costs have been distributed and tariffs calculated, the final entry- exit split can be derived.

Table 10 – Final calculation of entry-exit split

	Annual costs		Sum
	Allocated annual costs of domestic transmission	Allocated annual costs of transit transmission	
EXIT	18,2	25,6	43,7
ENTRY	18,2	36,4	54,5
TOTAL	36,4	61,9	98,3
Entry-Exit split	50 : 50	41 : 59	44 : 56

Annex 2 – List of Consultation Questions

CHAPTER I. GENERAL PROVISIONS

Question 1 – Is the scope of the initial draft TAR NC as set out in Article 2 clear to you?

Question 2 – Do you agree with the scope of the initial draft TAR NC?

Question 3 – Do you agree with ENTSOG's proposal for amendments to the definitions foreseen by the TAR FG, as set out in Article 3 of the initial draft TAR NC?

Question 4 – Are there any other definitions that should be included in the TAR NC?

Question 5 - Do you agree with ENTSOG's proposal for the definition of transmission services as set out in Article 3.11 of the initial draft TAR NC?

CHAPTER II. COST ALLOCATION APPROACH

Question 6 – Is it clear which portion of the allowed or target revenue is used as an input to the cost allocation approach as set out in Article 5.1 of the initial draft TAR NC?

Question 7 – Is the difference between cost allocation approach and cost allocation methodology as set out in Article 5 of the initial draft TAR NC clear and understandable?

Question 8 – Are you satisfied with the two approaches for calculating distance as outlined in Article 7.6 of the initial draft TAR NC?

Question 9 – If you are not satisfied with the two approaches, could you suggest other approaches for calculating distance?

Question 10 – Do you agree with the criteria for choosing the components of a primary cost allocation methodology as outlined in Article 8 of the initial draft TAR NC?

Question 11 – Do you agree with the inclusion of the asset allocation methodology as set out in Article 15 of the initial draft TAR NC?

Question 12 – Do you agree with the secondary adjustments as described in Articles 16 – 18 of the initial draft TAR NC?

Questions 13 – Is it necessary to specify further criteria other than those outlined in Article 19 of the initial draft TAR NC?

Question 14 – If it is necessary, could you suggest additional criteria to those outlined in Article 19 of the initial draft TAR NC?

Question 15 – Is the content of the four year review and the requirement for a justification document or consultation (depending on the outcome of the review) clear, as set out in Article 20 of the initial draft TAR NC?

Question 16 – Are there any other means of distinguishing between domestic and cross border entry capacity, other than using cross-border exit capacity as a proxy for cross-border entry capacity when carrying out the cost allocation test as set out in Article 22 of the initial draft TAR NC?

Question 17 – Do you think the considerations outlined in Article 23 of the initial draft TAR NC with regard to tariff setting for storage are sufficient?

CHAPTER III. PUBLICATION REQUIREMENTS

Question 18 – Is the relationship between the regulatory period and tariff period, as defined in Article 3.7 and 3.10 clear to you?

Question 19 – Do you agree with the standardised format as set out in Article 26.1 of the initial draft TAR NC?

Question 20 – Do you agree with the separation of the information into two different parts as set out in Article 26.1(a) of the initial draft TAR NC?

Question 21 – Are you concerned by the fact that tariffs are set / applied at different times of the year?

Question 22 – If you are concerned, then do you think that the tariffs should be set / applied at the same time of the year by all TSOs?

Question 23 – Could you identify the benefits of the harmonisation of the tariff setting year, if any, for your business, and could you quantify them?

Question 24 – Could you identify the costs of harmonisation of the tariff setting year, if any, for your business and could you quantify them?

Question 25 – If applicable, do you think the benefits would outweigh the costs?

Question 26 – Is the issue of knowing the tariffs for the relevant gas year before the auctions start very important to you?

Question 27 – Are there other issues or aspects that are more important than the issue specified in Question 26?

CHAPTER IV. RESERVE PRICES

Question 28 – Do you agree with ENTSOG's proposal for the conditions for determining the allowed multiplier ranges, as set out in Article 29 of the initial draft TAR NC?

Question 29 – Do you agree with Article 29.1(a) linking the applicable ranges of multipliers to the status of congestion according to the definition set out in point 2.2.3(1) of Annex I to Regulation (EC) No 715/2009?

Question 30 - Do you agree with ENTSOG's alternative proposal (not yet included in the initial draft TAR NC) to set the multiplier ranges on the basis of the percentage of technical capacity that was booked as outlined in Section 4.1(a) of the Supporting Document?

Question 31 – Do you agree with ENTSOG's proposal for the possibility to set higher multipliers than those within the ranges set out in Article 29.2 of the initial draft TAR NC, as a safeguard, when it can be justified that the resulting levels better meet the requirements of Article 28.5?

Question 32 – For those cases where it can be justified that higher levels better meet the requirements of Article 28.5, do you support ENTSOG's proposal to leave it up to the NRA to determine a higher level of multipliers (1st option), or do you support the inclusion of a cap higher than 1.5 in the refined draft TAR NC (2nd option)?

Question 33 – Do you agree with ENTSOG's proposal for the criteria to be taken into account for setting the level of multipliers, as set out in Article 28.5 of the initial draft TAR NC?

Question 34 – Do you agree with ENTSOG's proposal for the formulas to calculate reserve prices for quarterly, monthly and daily standard capacity products in absence of seasonal factors as set out in Article 30.1(a) of the initial draft TAR NC?

Question 35 – Do you agree with ENTSOG's proposal for the two options for calculating reserve prices for within-day standard capacity products in absence of seasonal factors as set out in Article 30.1(b) of the initial draft TAR NC?

Question 36 – Do you agree with ENTSOG's proposal for the methodology to calculate seasonal factors, as set out in Article 31 of the initial draft TAR NC?

Question 37 – Do you agree with ENTSOG's proposal for the calculation of reserve prices for capacity products for interruptible capacity with an ex-ante discount, an ex-post discount or a combination of both approaches as set out in Article 32.1 of the initial draft TAR NC?

Question 38 – Do you agree with ENTSOG's proposal for the information to be included in the report on the probability of interruption and on the timing of its publication as set out in Article 32.3 of the initial draft TAR NC?

Question 39 – Do you agree with ENTSOG's proposal for the application of the same methodology for the calculation of reserve prices for all interruptible products offered by a TSO, including non-physical backhaul capacity products, as set out in Article 32.2 of the initial draft TAR NC?

Question 40 – Do you agree with ENTSOG's proposal for the calculation of an ex-ante discount for capacity products for interruptible capacity, as set out in Article 33 of the initial draft TAR NC?

Question 41 – Do you agree with ENTSOG's proposal for the calculation of the probability of interruption, as set out in Article 33.2 of the initial draft TAR NC?

Question 42 – Do you agree with ENTSOG's proposal that data for several interconnection points or all interconnection points could be gathered together to calculate the probability of interruption for an interruptible capacity product, as set out in Article 33.2 of the initial draft TAR NC?

Question 43 – Do you agree with ENTSOG's proposal for the calculation of the ex-post discount for interruptible capacity products, as set out in Article 34 of the initial draft TAR NC?

CHAPTER V. REVENUE RECONCILIATION

Question 44 – Is the interaction between the one regulatory account, the sub-accounts for tracking and the revenue reconciliation, as set out in Article 37 of the initial draft TAR NC clear to you?

CHAPTER VI. PRICING OF BUNDLED CAPACITY AND CAPACITY AT VIRTUAL INTERCONNECTION POINTS

Question 45 – Do you agree with ENTSOG's proposal with regard to the way in which a VIP tariff is calculated where the capacity is marketed by one TSO, as set out in Article 40.2 of the initial draft TAR NC?

Question 46 – Do you agree with ENTSOG's proposal with regard to the way in which a VIP tariff is calculated where the capacity is marketed by more than one TSO, as set out in Article 40.3 of the initial draft TAR NC?

CHAPTER VII. PAYABLE PRICE

Question 47 – Are the mechanisms for fixed capacity prices described clearly enough in Section 7.1 of the Supporting Document?

Question 48 – Do you agree with ENTSOG's proposal for the inclusion of different mechanisms for fixed capacity prices in the refined draft TAR NC, as outlined in the Supporting Document?

Question 49 – Do you have any further suggestions for calculating the fixed price premium referred to in Section 7.1 of the Supporting Document?

CHAPTER VIII. INCREMENTAL AND NEW CAPACITY

Question 50 – Do you consider the incremental and new capacity Chapter (Articles 42-46) to be consistent with the other Chapters of the initial draft TAR NC?

CHAPTER IX. FINAL AND TRANSITIONAL PROVISIONS

Question 51 – Do you agree with ENTSOG's interpretation of the mitigating measures as set out in Article 47 of the initial draft TAR NC and the separation of mitigating measures and transitional provisions?

Question 52 – Do you agree with the inclusion of the mitigating measures as set out in Article 47.2(a) and (b)?

Question 53 – Do you agree that a minimum implementation period of 18 months after entry into force, as set out in Article 49 of the initial draft TAR NC, is necessary to ensure the proper implementation of the TAR NC?

Question 54 – Do you agree with the text that ENTSOG has included in Article 49 on the timing of implementation?

CHAPTER X. GENERAL ISSUES

Question 55 – Do you agree with the structure of the initial draft TAR NC?

Question 56 – Do you consider that the level of detail in the initial draft TAR NC is appropriate for this EU legislation? If not, please explain why (with reference to specific topics or articles, where appropriate)?

Question 57 – After reviewing the initial draft TAR NC, do you find that there are other material issues that ENTSOG should consider for the purpose of the refined draft TAR NC?

Question 58 – Do you find the Supporting Document for consultation to be 'respondent-friendly' in terms of its readability, style, etc.? Please outline how ENTSOG could improve future consultation documents.

Annex 3 – List of Figures, Tables & Examples

Figures

Tables

Examples

Example 1: Impact of low multipliers on the annual tariff

Example 2: Calculation of the reimbursement for a given capacity contract

Annex 4 – Comparison of the TAR FG and TAR NC

TAR FG Structure	From TAR FG to TAR NC	TAR NC Structure
1. General Provisions		Recitals (1), (2), (3), (4), (5), (6), (7), (8), (9)
1.1. Introduction	→ Rec. (6)	CHAPTER I. GENERAL PROVISIONS
1.2. Scope and objectives	→ Rec. (1),(2)	Article 1. Subject matter
1.3. Definitions	→ Art. 3,5	Article 2. Scope
1.4. Implementation	→ Art. 47,48,49	Article 3. Definitions
		CHAPTER II. COST ALLOCATION APPROACH
2. Publication requirements	→ Rec. (4), Art. 24	Article 4. Composition of transmission services revenue
2.1. Initial publication requirements	→ Art. 20	
2.2. Approval decision and periodic review	→ Art. 20,21	Article 5. Cost allocation approach and cost allocation methodology
2.3. General publication requirements	→ Art. 6,25,26	Article 6. Parameters of a primary cost allocation methodology
2.4. Publication notice period	→ Art. 27	
2.4.1. Incremental and new capacity	→ Art. 45	Article 7. Details of parameters of the primary cost allocation methodologies
3. Cost allocation and determination of the reference price	→ Art. 7,21	Article 8. Criteria for choosing the parameters of a primary cost allocation methodology
3.1. General principles on the determination of the reference price		Article 9. Entry-exit split
		Article 10. Primary cost allocation methodology: postage stamp methodology
3.1.1. The capacity-commodity split	→ Art. 5,6	
3.1.2. The entry-exit split	→ Art. 6,9	Article 11. Primary cost allocation methodology: capacity weighted distance methodology
3.2. Cost allocation methodology selection		Article 12. Primary cost allocation methodology: variant A of virtual point based methodology
3.2.1. Circumstances influencing the choice of a cost-allocation methodology and of the necessary inputs		Article 13. Primary cost allocation methodology: variant B of virtual point based methodology
3.2.1.1. Methodology criteria	→ Art. 19	Article 14. Primary cost allocation methodology: matrix methodology
3.2.1.2. Inputs criteria	→ Art. 8	
3.2.1.3. Further specification	→ Art. 20	Article 15. Primary cost allocation methodology: asset allocation methodology
3.2.2. Cost allocation test	→ Art. 22	
3.2.3. Methodology counterfactual	→ Art. 20	Article 16. Secondary adjustment: rescaling
3.3. Main cost allocation methodologies	→ Art. 5	Article 17. Secondary adjustment: equalisation
3.3.1. Primary cost allocation methodologies		Article 18. Secondary adjustment: benchmarking
3.3.1.1. Postage stamp	→ Art. 10	Article 19. Criteria for choosing a primary cost allocation methodology and a secondary adjustment
3.3.1.2. Capacity-Weighted Distance approach	→ Art. 11	
3.3.1.3. Virtual point based approach	→ Art. 12,13	Article 20. Selection and approval of the cost allocation methodology
3.3.1.4. Matrix approach	→ Art. 14	
3.3.2. Secondary adjustments		Article 21. Review of the cost allocation methodology
3.3.2.1. Rescaling	→ Art. 16	
3.3.2.2. Equalisation	→ Art. 17	Article 22. Cost allocation test
3.3.2.3. Benchmarking	→ Art. 18	Article 23. Storage
3.4. Storage	→ Art. 23	CHAPTER III. PUBLICATION REQUIREMENTS
3.5. Incremental and new capacity		Article 24. General provisions
3.5.1. Economic test		Article 25. Information to be published

3.5.1.1. Economic test formula	→ Art. 42	Article 26. Standardised format
3.5.1.2. Criteria to be considered when setting the "f" parameter	→ Art. 43	Article 27. Publication notice period
		CHAPTER IV. RESERVE PRICES
3.5.1.3. Single economic test	→ Art. 44	Article 28. General provisions
3.5.2. Determination of the price at which users can request incremental or new capacity	→ Art. 46	Article 29. Ranges for the values of multipliers and seasonal factors
		Article 30. Calculation of reserve prices for non-yearly standard capacity products for firm capacity in absence of seasonal factors
4. Revenue reconciliation		
4.1. Regulatory account	→ Rec. (5), Art. 35,36,37	Article 31. Calculation of reserve prices for non-yearly standard capacity products for firm capacity with seasonal factors
4.2. Reconciliation of regulatory account	→ Art. 35,38	
5. Reserve price	→ Art. 28	Article 32. Calculation of reserve prices for standard capacity products for interruptible capacity
5.1. Reserve prices for firm standard capacity products		
5.1.1. Quarterly and monthly firm standard capacity products	→ Art. 29,30	Article 33. Ex-ante discount for interruptible capacity
5.1.2. Daily and within-day firm standard capacity products	→ Art. 29,30	Article 34. Ex-post discount for interruptible capacity
5.1.3. Seasonal factors	→ Art. 29,31	CHAPTER V. REVENUE RECONCILIATION
5.2. Reserve prices for interruptible capacity	→ Art. 32,33,34	Article 35. General provisions
		Article 36. Under- and over-recovery
		Article 37. Regulatory account
6. Virtual interconnection points	→ Art. 40	Article 38. Reconciliation of regulatory account
		CHAPTER VI. PRICING OF BUNDLED CAPACITY AND CAPACITY AT VIRTUAL INTERCONNECTION POINTS
7. Bundled capacity products	→ Art. 39	
8. Payable price	→ Art. 41	Article 39. Pricing of bundled capacity
		Article 40. Pricing of capacity at a virtual interconnection point
		CHAPTER VII. PAYABLE PRICE
		Article 41. Payable price at interconnection points
		CHAPTER VIII. INCREMENTAL AND NEW CAPACITY
		Article 42. Economic test principles
		Article 43. The f-factor
		Article 44. Combination into single economic test
		Article 45. Publication requirements relating to the economic test
		Article 46. Tariff issues
		CHAPTER IX. FINAL AND TRANSITIONAL PROVISIONS
		Article 47. Mitigating measures
		Article 48. Transitional provisions
		Article 49. Entry into force

Annex 5 – Abbreviations

ACER – Agency for the Cooperation of Energy Regulators established by Regulation (EC) No 713/2009 of the European Parliament and of the Council, 13 July 2009
BAL NC – Commission Regulation establishing a Network Code on Gas Balancing of Transmission Networks
CAM NC – Commission Regulation No 984/2013 establishing a Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems and supplementing Regulation (EC) No 715/2009, 14 October 2013
CAP/COM Split – Capacity/Commodity Split
CMP Guidelines – Congestion Management Procedure Guidelines
CWD – Capacity Weighted Distance
DSO – Distribution System Operator
ENTSOG – European Network of Transmission System Operators for Gas
EU – European Union
Incremental Proposal – amendment proposals to the Network Code on Capacity Allocation Mechanisms on the matter of incremental and new capacity
INT NC – Commission Regulation establishing a Network Code on Interoperability and Date Exchange Rules
IP – interconnection point, as defined by Article 3(10) of the CAM NC
NRA – National Regulatory Authority
SJWS – Stakeholder Joint Working Session
SSP – Stakeholder Support Process
TAR FG – Framework Guidelines on rules regarding harmonised transmission tariff structures for gas, 29 November 2013
TAR NC – the Network Code on Harmonised Transmission Tariff Structures for Gas
TSO – transmission system operator for gas
VIP – Virtual Interconnection Point

Annex 6 – Topics Discussed At Public Meetings

Date	Meeting	Topics Discussed	Link to presentations
15 Jan 2014	TAR NC Kick Off Meeting	ACER's Impact Assessment, ENTSOG Process and Initial Views and Stakeholder's Initial Views on the TAR FG.	http://www.entsog.eu/public/uploads/files/publications/Tariffs/2013/All%20Presentations%20for%20TAR%20NC%20KO%20Meeting_15%2001%2014_Final.pdf
11 Feb 2014	TAR NC SJWS 1	ACER's Initial Impact Assessment, Cost Allocation Tasks, Interruptible Capacity & Non-Physical Backhaul and CAM Related Topics.	http://www.entsog.eu/public/uploads/files/publications/Tariffs/2014/TAR%20NC%20SJWS%201%20-%20All%20Presentations%20-%20Final%20(2).pdf
27 Feb 2014	TAR NC SJWS 2	Multipliers & Seasonal Factors, Cost Allocation Tasks II, Implementation & Mitigating Measures, Transparency and Tariff Setting Year Impact Assessment.	http://www.entsog.eu/public/uploads/files/publications/Tariffs/2014/TAR%20NC%20SJWS%202%20-%20All%20Presentations.pdf
14 Mar 2014	TAR NC SJWS 3	Revenue Reconciliation, Storage, VIPs, Interruptible Capacity & non-physical and Cost Allocation.	http://www.entsog.eu/public/uploads/files/publications/Events/2014/SJWS%203_TAR%20NC_All%20Presentations_14%2003%2014.pdf
26 Mar 2014	TAR NC SJWS 4	Multipliers and Seasonal Factors, Cost Allocation, CAM Related Topics, General Provisions and Transparency.	http://www.entsog.eu/public/uploads/files/publications/Events/2014/SJWS%204_TAR%20NC%20Presentations_26.03.14.pdf
9 Apr 2014	TAR NC SJWS 5	Revenue Reconciliation, ACER's IA/Justification Document, ENTSOG Process Update, Next Steps and Draft TAR NC and Stakeholder Views on Process and Draft TAR NC.	http://www.entsog.eu/public/uploads/files/publications/Tariffs/2014/SJWS%205_TAR%20NC%20Presentations_09%2004%2014.pdf