

Analysis of ENTSOG Decisions

for the

refined draft Network Code

on Gas Balancing of

Transmission Networks



I. INTRODUCTION

1. Background

This document, entitled "Analysis of ENTSOG Decisions", accompanies the refined draft Network Code on Gas Balancing of Transmission Networks (ref. BAL350-12) [hereinafter the 'refined draft Network Code'] to be submitted to Agency for Cooperation of Energy Regulators (ACER) on 5 November 2012.

The refined draft Network Code has been prepared by ENTSOG, an organisation currently comprising 39 transmission system operators from 23 European countries, in line with its duties under Article 6 of the Regulation and following the receipt of the Invitation Letter dated 4 November 2011¹ sent by the European Commission (EC) to draft a network code on Gas Balancing in Transmission Systems to be in line with the Framework Guidelines on Gas Balancing in Transmission Systems [hereafter 'the FG'], issued by ACER on 18 October 2011².

This document shall not be construed as part of the refined draft Network Code, nor should it be considered to give rise to any specific right or obligation whatsoever to ENTSOG or any of its members as to any stakeholders.

The purpose of this document is to clarify the chosen policy approaches, decided upon by ENTSOG, in relation to significant topics in the refined draft Network Code. It explains the refinements comprising the refined draft Network Code, further to the public consultation on the initial draft Network Code held between 13 April and 12 June 2012 (ref. BAL241-12).

It should be noted that ACER issued informal recommendations to ENTSOG during this stakeholder feedback period, the "Preliminary Reasoned Opinion on the draft Network Code on Gas Balancing in Transmission Systems" (hereinafter 'the Draft Opinion'), dated 20 June 2012 and confidential to ACER and ENTSOG.³ The Draft Opinion was accompanied by a report of the Brattle Group⁴ (hereinafter 'the Brattle Report'), also confidential to ACER and ENTSOG⁵. These recommendations were duly considered by ENTSOG for the purpose of producing the refined draft Network Code implemented further to the Draft Opinion and the Brattle Report. Where ENTSOG has chosen not to follow ACER's guidance, the rationale for the approach chosen by ENTSOG is provided.

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¹ European Commission, letter with subject "Invitation to draft a network code on Gas Balancing in Transmission Systems," Ref. Ares (2011)1173099 - 04/11/2011, p.1.

² ACER, "Framework Guidelines on Gas Balancing in Transmission Systems," FGB-2011-G-002, 18 October 2011.

³ As was made known to the public by Konrad Keyserlingk, Ofgem/ACER, at the BAL NC Refinement Workshop held by ENTSOG on 26 July 2012.

⁴ The Brattle Group, "Analysis of ENTSOG's draft network code on gas balancing," report contracted by Ofgem for ACER, 12 June 2012,

⁵ See footnote 3.



Responses to public consultation

As reported at the Refinement Workshop for stakeholders held on 26 July 2012 in Brussels, ENTSOG received 51 responses to its public consultation, ranging from Network Users to industry associations [see figure below].

Figure 1. Consultation respondents by type

Type of respondent	Count	Per cent
European industry associations	9	18%
National industry associations*	8	16%
Network users and others	33	65%
National regulators (independently of ACER)	1	2%
Total	51	100%
* incl. from the Member States of France, Great Britain, Irelan	d, Italy, the Ne	etherlands and

The response submissions were also quite substantial, with respondents replying on average to 35 of the 54 (68%) of the substantive questions (i.e., Questions 1-54) on the topic chapters) [see figure below].

Figure 2. Responses by question number and chapter

	Chapter	Q#	Count		Chapter	Q#	Count
П	BALANCING SYSTEM	1	38	VIII	NEUTRALITY ARRANGEMENTS	30	38
		2	37			31	34
Ш	CROSS-BORDER COOPERATION	3	38			32	33
		4	41			33	36
IV	OPERATIONAL BALANCING	5	39			34	26
		6	38			35	30
		7	41			36	34
		8	40	IX	INFORMATION PROVISION	37	36
		9	36			38	40
		10	36			39	42
		11	30			40	38
		12	40			41	36
		13	39			42	38
		14	37	X	LINEPACK FLEXIBILITY SERVICE	43	35
٧	NOMINATIONS	15	37	XI	IMPLEMENTATION, INTERIM MEASURES	44	27
		16	36			45	25
		17	37			46	30
		18	36			47	30
VI	DAILY IMBALANCE CHARGES	19	38			48	26
		20	40			49	
		21	40			50	
		22	36			51	
		23	41			52	28
		24	35			53	31
VII	WITHIN-DAY OBLIGATIONS	25	40			54	28
		26	34		GENERAL ISSUES	55	20
		27	36			56	26
		28	34			57	37
		29	35				



2. Scope and structure of document

This document is structured as follows:

Part I: INTRODUCTION

Part II: HARMONISATION FOR ADVANCING THE BALANCING TARGET MODEL AND THE INTERNAL MARKET

ENTSOG has sought to develop a draft Network Code in line with the FG. Where the FG leaves room for ENTSOG to exercise discretion, ENTSOG, as mandated by the EC, should endeavour to favour European harmonisation, rather than specific solutions on national and/or regional level. In this part, ENTSOG presents the rationale for its interpretation of certain topics within the FG in favour of European harmonisation.

Part III: RATIONALE FOR POLICY CHOICES WITHIN DRAFT CODE

In this part of the document, ENTSOG describes the refinements of the refined draft Network Code implemented further to the consultation referred to in the Introduction. It also provides the rationale for the approach chosen in respect of the most significant policy choices within.

3. Policy context for the refined draft Network Code

The optimal formulation of an EU-level balancing regime depends on the rules applying in a range of other areas. Therefore, in developing the refined draft Network Code, ENTSOG has had to make assumptions about the eventual text of these rules in the other areas in order that the code is sufficiently specific for immediate application upon its entry into force. Any change or deviation from such assumptions affecting provisions of the refined draft Network Code will, as a consequence, require adjustment to the extent necessary.

In light of the above, ENTSOG cannot guarantee that the eventually adopted Balancing Network Code will not require adjustment should any change render the framework set out in it no longer appropriate. In this case, the adopted network code will have to be amended through the appropriate processes accordingly.

In the subsections which follow, ENTSOG has already identified areas which may affect the Balancing Network Code in future.

A. Nominations elements of EC-planned network code on Interoperability

In the development of the initial draft Network Code, ENTSOG and stakeholders came to the view that its implementation would not be possible without nominations (respectively renominations) rules being adopted and implemented concurrently. In this context, ENTSOG requested clarification about the scope of nominations (respectively re-nominations) and



received the consent of ACER that some elements of the foreseen EU-defined nominations (respectively re-nominations) rules be included in the draft Network Code [for more detail, see Part II, Chapter 5].

The nominations (respectively re-nominations) section of the planned network code on interoperability will complement the refined draft Network Code by addressing the operational processes and data exchange needed to underpin the nominations (respectively re-nominations) rules.

B. Interactions with the capacity allocation mechanism (CAM) network code and EC Decision on capacity management procedures (CMP)

With nominations (respectively re-nominations) being included in the refined draft Network Code and nominations (respectively re-nominations) being an element of the CAM draft Network Code⁶, interdependency has been created between the two network codes. In addition, the recent Commission Decision on CMP⁷, commonly referred to as the 'CMP Guidelines,' has implications and/or interactions with both network codes.

CAM draft Network Code

As regards the CAM draft Network Code, there are interactions between the timing of day ahead and within day capacity auctions, the impact of CMP and the schedule of initial nominations and re-nominations. The development of the draft Network Code has prompted detailed discussions within ENTSOG on the issue of nominations. These discussions highlighted a few areas within the CAM draft Network Code in which changes were seen to be necessary in order to ensure that the CAM draft Network Code is fully workable and compatible with other network codes.

On 6 March 2012, ENTSOG delivered the final draft CAM Network Code to ACER. On 5 June 2012, ACER provided ENTSOG with its reasoned opinion. Following a letter from the EC of 18 July 2012 establishing a re-submission deadline and a stakeholder engagement process⁸ held from 27 July through 10 August 2012 to inform some additional refinements, ENTSOG is to re-submit the CAM draft Network Code to ACER on 17 September 2012.

CMP Guidelines

The 'CMP Guidelines' have also been considered in the formulation of the draft Network Code. Specifically, the CMP Guidelines require an amount of unused day ahead capacity (if

⁶ ENTSOG, "Network Code on Capacity Allocation Mechanisms - An ENTSOG Network Code for ACER review and Comitology Procedure" (Ref. CAP210-12), 6 March 2012.

⁷ Commission Decision of 24 August 2012 on amending Annex I to Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks [OJ L 231 p. 16, 28/08/2012].

⁸ ENTSOG, "Stakeholder Engagement Document: Potential Modifications to the CAM NC Following Receipt of ACER Opinion," (Ref. CAP 267-12) 27 July 2012.



any) at IPs to be auctioned in the day ahead capacity auction. Accordingly, having the necessary information from the nomination process is required before the day ahead capacity auction begins. The timings proposed for the day ahead nominations have been designed to be compatible with this process.



II. HARMONISATION TO ADVANCE TO BALANCING TARGET MODEL AND INTERNAL MARKET

Where the FG leaves room for ENTSOG to exercise discretion, ENTSOG should endeavour to favour European harmonisation, rather than individualised solutions on national or regional level – a key objective set forth under 'Third Energy Package'⁹.

In the sections which follow, ENTSOG presents the rationale for its interpretation of certain topics within the FG in favour of European harmonisation:

- > Trade notification;
- Cross-border cooperation proposals;
- > Operational balancing;
- > Trading Platform and Trading Platform Operator roles;
- > nomination (respectively re-nomination) rules;
- > Daily Imbalance Charge
- > Within Day Obligations;
- > Neutrality arrangements;
- > Information provision;
- Linepack Flexibility Service;
- > Interim measures.

1. Trade notification

A key characteristic of a market-based balancing regime is that Network Users can transfer gas between their Portfolios; this will provide Network Users the opportunity to balance their Portfolios by trading flexible gas. Each balancing regime should have a service that allows for such a transfer of gas; the intitial draft Network Code establishes this service through the trade notification. Such a service is not specified in the FGs. ENTSOG believes a service like this is necessary in all entry-exit systems. The transfer of gas has an equal and opposite effect on the Portfolios of the two Network Users. The service provides a common mechanism for the transfer of gas between two Portfolios and thereby facilitates trade of gas between Network Users. This enables market based balancing rules and market-based procurement of flexible gas by the TSO. The refined draft Network Code has kept this service as simple as possible. It is not specific for prompt trading or trading forward or futures. In effect it serves to provide a point at which ownership of gas can be transferred from one Network User to another. The consequence of the trade notification is that it affects the imbalance position of the parties to the transaction. How trading is organised is beyond the scope of the Network Code and therefore not organised under the trade notification except

⁹ Package of two EU directives and three regulations (including Regulation 715/2009), adopted in July 2009, with the objective of creating a genuine internal market for energy.



for trading those products that the TSO needs to have market-based access to Flexible Gas. This is the topic of operational balancing.

The trade notification service is based on services that already exist in several Balancing Zones (e.g., the Balancing Zone(s) of National Grid, Interconnector UK, GTS, Gaspool, NetConnect Germany, GRTgaz) and which have proven to be effective and work together without problems.

In a trade notification, there are two parties: the acquiring Network User and the disposing Network User (the buyer and the seller respectively). Each submits a trade notification and the information they submit has to be consistent. If the information in both trade notifications is not consistent then there must be a rule, a default rule, on how to handle this set of inconsistent trade notifications.

Processing a trade notification refers to the administrative process; in effect gas in the transmission network changes ownership with no consequences on operational issues. Therefore, the time between receiving a trade notification and confirming it to the Network Users (either explicitly or implicitly) can be shorter than the time needed by the TSO to confirm a nomination on Interconnection Points (IPs); both lead times should not be linked to another and the lead time for trade notifications should be as short as reasonably possible. Linked to this is the latest time at which a trade notification can be submitted prior to the time at which it takes effect. In a Balancing Zone in which Network Users are incentivised to manage their within-day positions a trade notification takes effect some time during the day. If trade notification lead times are as short as possible and Network Users can submit trade notifications on a continuous basis then the TSO can accept trade notifications as close as possible to this effective time, giving Network Users better opportunity to manage their within day position. In Balancing Zones in which there are no restrictions on Network Users' within-day positions the trade notifications take effect at the end of the day. To balance their Portfolio(s) Network Users should be allowed to submit trade notifications until a time close to the end of the Gas Day.

For additional information on ENTSOG's approach on this topic, see Part III, Chapter 2.

2. Cross-border cooperation proposals

The FG mandates that the network code on gas balancing shall include proposals for TSOs to implement cross-border balancing projects in the European gas regions. At the third Stakeholders' Joint Working Session (SJSW), held on 9 February 2012, ENTSOG and stakeholders recognised that it would not be practical for a network code, as EU regulation to be adopted at a specific but yet unknown date, to include detailed project proposals. The



technical and economic feasibility of any project proposal included in the network code may have changed significantly within the time period of finalising the network code and its eventual adoption. The refined draft Network Code therefore focuses on establishing processes with stakeholder involvement where necessary that can lead to the identification of new cross-border projects.

Article 9(8) lists a number of types of cross-border balancing projects that the TSOs can propose. ENTSOG recognises that giving examples is not common practise in EU legislation, but has maintained the list of examples to be in line with the FG.

This process (see Article 10) starts when two or more TSOs have identified an opportunity to further integrate their Balancing Zones. These TSOs will consult stakeholders on proposals for this further integration. The result of such consultation will be submitted to ENTSOG. ENTSOG then will consolidate the results of different consultations and inform the relevant National Regulatory Authority (NRA) and ACER. TSOs will work within ENTSOG to consider comments made by the NRAs and ACER. Finally, the TSOs will complete the proposals and submit them to the competent NRAs for approval.

In the refined draft Network Code, "where technically feasible and economically reasonable" at the beginning of Article 9 (General provisions) so that it applies to the three forms of TSO cooperation: merging entry and exist zones, creating cross-border Balancing Zones and other means such as market coupling. Any project to further integrate the European gas market should only be implemented if it is technically feasible and the investment in such a project shall only be made if it is economically reasonable. The technical feasibility and the cost benefit analysis shall be considered also taking account of other measures in the CMP Guidelines and the CAM draft Network Code.

For additional information on ENTSOG's approach on this topic, see Part III, Chapter 3.

3. Operational balancing

TSO needs access to Flexible Gas to keep the transmission network within operational limits and to manage its end-of-day position. In a market-based balancing regime the TSO should use market-based mechanisms when it needs Flexible Gas and trade with Network Users. For this purpose, the draft Network Code introduces a small range of Short Term Standardised Products (STSPs). These STSPs, traded at a within day or day ahead basis, will provide the TSO access to Flexible Gas. If the Liquidity is well developed then the four products should be sufficient to manage the end-of-day position of the network and, in combination with Within Day Obligations (WDOs), also manage the within day positions of the network. Here not only the total Inputs and Off-takes are important, but also the



distribution of gas over the network; in an entry-exit system Network Users have a requirement to balance their Inputs and Off-takes, but, in general, do not have obligations to have their Inputs and Off-takes at specific Entry and Exit points; the distribution of gas over the transmission network may therefore need to be addressed by the TSO in its residual balancing role.

Some of the STSPs will require some parameters to be defined before they can be implemented. For the Locational Products, the TSO has to define how the relevant Entry and Exit Points have to be specified and what groups of entry-exit points can be used in trading Locational Products. Also, when trading Locational Products it must be clear which of the trading participants have the obligation to make the associated re-nomination. Current practice is that Network Users initiate locational trades and the TSO accepts the best offer. The draft Network Code has made this the standard practice by including that the originating party has the obligation to make the re-nomination; it is clear that the TSO cannot make re-nominations at Entry-Exit points. This mechanism is already in place in a number of balancing regimes, but stakeholders have asked to allow for alternative mechanisms where these might be more appropriate. Such alternative mechanisms shall ensure that it is clear in advance to both participants in the transaction which participant has to make the renomination and the mechanism shall prevent that the obligation will fall on the TSO.

The refined draft Network Code defines a merit order, giving guidance in choosing the tool – one of the STSPs or the use of a Balancing Service – to manage the position of the transmission network. The merit order promotes market-based balancing by prioritising the use of Title Products, which is likely to be used by Network Users as well to manage their positions, over Locational and Temporal Products, which are initially designed as a tool for the TSO, and over the use of balancing services. This is likely to minimise the need for the TSO to buy long term Balancing Services, which is considered to be keeping Flexible Gas away from the market.

When the TSO has access to a Balancing Service the marginal cost of using such a service can be lower than the marginal cost of trading in STSPs. The objective is a market-based balancing regime that reduces the access to Flexible Gas through long-term contracts and the use of the merit order contributes to this objective. However the use of STSPs might not always be cost optimal; any assessment of efficiency will have to take consideration of TSOs role in promiting liquidity. It is important that this is taken into account by the TSO when it proposes an incentive mechanism and for the NRAs in approving such mechanism and when reviewing TSOs' performance. The draft Network Code allows the TSOs to use Balancing Services as an alternative, when trading STSP will not provide the required response.



The draft Network Code allows the TSO to use Balancing Services as an alternative to trading STSP. The effects of trading a STSP and the use of a Balancing Service are the same: a change in flows onto and/or leaving the system. The main reason the TSO cannot always and/or under all circumstances rely on trading STSP is potential lack of Liquidity; in all markets the TSO cannot rely on the market to offer the right product at the right time, especially in Locational and Temporal Products. Other reasons include the response time of the market, it takes time to conclude a transaction and there is a leadtime for the transaction to take effect; Balancing Services can have very short response times.

The refined draft Network Code recognises that there are situations in which the TSO can trade in an adjacent market. This can be the case when the prices in the adjacent market are generally more favourable than in the own market, taking account of the price for cross-border capacity between both Balancing Zones. If the TSO believes there is merit in trading in an adjacent market, it can ask the NRA for approval. In judging the request, the NRA can investigate the reasons for the significant price difference with the adjacent market and can consider alternative measures to reduce the price spread with the adjacent market.

If the TSO trades in an adjacent market, the use of this Balancing Action shall not limit the access and use by the Network Users of capacity at the Interconnection Point concerned.. The applicable terms and conditions shall be reconsidered on an annual basis by the TSO and the national regulatory authority. In its approval the NRA and TSO, which is granted for a specific period and/or shall be reviewed on a regular basis, can agree on the circumstances under which the TSO can trade in adjacent markets. This can be a very general description and state at any time where the prices in the adjacent market are frequently more favourable, than alternative Locational Products in the local market. Both NRA and TSO should aim to improve Liquidity in their own market to the extent reasonable.

Most TSOs will be regulated entities and thus subject to revenue or price control mechanisms which determine the major component of TSO income stream. However, under the Third Energy Package the role of a TSO extends far beyond that of asset owner and operator. Accordingly, additional incentive mechanisms may be desirable to encourage and reward the efforts of TSOs to support, stimulate and encourage proper market functioning.

As regards TSO procurement of Balancing Services under the refined draft Network Code, Article 16(4) allows for the possibility of the duration of a Balancing Service being more than one year subject to NRA approval. The FG does not foresee the possibility of allowing for the use of longer-term Balancing Services when the network code is fully in force, often referred



to as the Balancing Target Model¹⁰ (BTM). ENTSOG maintains, however, that the policy objective of minimising the TSOs balancing role – especially with the use of long-term products – has to be balanced against the objective of encouraging investment in the services required by the TSO. In some circumstances there may be merit in allowing long term arrangements.

As regards to the establishment of incentive mechanisms for operational balancing, to be aligned with the FG, the draft Network Code provides that a NRA may design incentive mechanisms in order to encourage TSOs' compliance with prioritising the trade in STSPs. ENTSOG notes, however, that it is to the Member State to decide whether the NRA only has the right to approve balancing rules or whether its powers extend beyond that and, if so, to what extent; the Network Code cannot give additional powers to any NRA.

The refined draft Network Code proposes [see Article 17(2)] that a TSO also can design incentive mechanisms, where being consistent with the general principles set out in this Network Code and when having conducted a related public consultation. Such TSO-designed mechanisms could be seen by ACER as going beyond the FG. ENTSOG, however, believes that a TSO itself is best-placed to design such mechanisms, as evidenced in the early balancing network code(s) in GB [see Part III, Chapter 4 to follow].

For additional information on ENTSOG's approach on this topic, see Part III, Chapter 4.

4. Trading Platform and Trading Platform Operator roles

To keep the transmission network within operation limits and to manage its end-of-day position, the TSO needs access to Flexible Gas.

In a market-based balancing regime, the TSO should use market-based mechanisms when it needs Flexible Gas; the TSO should trade with Network Users. Balancing is an operational activity where the need for Flexible Gas manifests itself within the day – or at best day ahead. This leaves the TSO little time to look for Flexible Gas. A Trading Platform will help to ensure transparent and non-discriminatory access to flexible gas on an equal footing with other Network Users. Trading will be better organised through standardised contracts and processes.

The draft Network Code assumes there is a need for a Trading Platform in each Balancing Zone. This platform is not necessarily operated by the TSO. The TSO would have an

¹⁰ See the CEER Vision for a European Gas Target Model Conclusions Paper, C11-GWG-82-03, 1 December 2011, which establishes the concept of the Gas Target Model (GTM). The BTM, with reference to the GTM, is the liberalisation rules as they would apply to balancing in transmission systems.



important role in defining the necessary services and support of the platform. The TSO will be using the platform for its market-based access to Flexible Gas. The cooperation between TSO and Trading Platform Operator (TPO) is important notwithstanding their divergent interests. Without being too prescriptive on the TPO the refined draft Network Code seeks to provide sufficient guidance for the establishment of at least one Trading Platform in each Balancing Zone.

Where a Trading Platform meeting the requirements of the Network Code cannot be (or is not likely to be) established, the TSO can opt to introduce and operate a Balancing Platform directly. This way the TSO has an alternative if it cannot reach an agreement with a platform operator to meet the requirements on a Trading Platform as specified in the Network Code. If a Trading Platform exists but offers only a subset of the STSPs which are relevant for the TSO, then this Balancing Platform can supplement the product set of the Trading Platform and co-exist with it. Here the choice is made for a Balancing Platform rather than a Trading Platform. The reason for this is that operating a platform is not a primary task for TSOs, and the additional complexity of meeting all the requirements of operating a Trading Platform does not warrant the network code to place such obligation on the TSO.

The minimum requirements that a Trading Platform, on which the TSO undertakes Balancing Actions by trading STSPs, has to meet are specified in Article 14(2).

The refined draft Network Code refers to the *relevant* products in a Balancing Zone; not all four STSPs are relevant in all Balancing Zones. For example, the Temporal Products should not be relevant in Balancing Zones where there are no System-wide WDOs or Portfolio WDOs. The TPO can provide more support to the TSO and Network Users in relation to trades done on its platform. One addition would be to extend the Trading Platform to an exchange, with cleared services. There may be value for the TSO and the market as a whole in using exchange-based trading for the purpose of undertaking Balancing Actions.

The trades on the Trading Platform will feed into the Marginal Buy Price and the Marginal Sell Price and determine the Daily Imbalance Charge, the main balancing related cost for Network Users. To be able to manage its exposure to this Daily Imbalance Charge and to give a Network User incentives to manage its end-of-day position, it is important that Network Users know how the Marginal Buy and Sell Price evolve during the day and what would the prices be if no additional relevant transactions are concluded. The refined draft Network Code requires that either the TPO publishes this price evolution or provides the TSO with sufficient information to publish it. It is important that all Network Users have access to this price progression information, not only the participants on the Trading Platform. It is also important that this information is updated frequently to mitigate the risk of having to trade later in the day when prices will have changed.



Because prices established on the Trading Platform feed into the Marginal Buy and Sell Price and because the TSO needs to be sure that transactions concluded at the Trading Platform are firm, to minimise its need to take Balancing Actions, it is important that all trades at the Trading Platform are properly notified to the TSO; the possibility to have a transaction registered at the Trading Platform that is not duly notified to the TSO will decrease the confidence in the Marginal Buy and Sell Prices and potentially undermine the proper functioning of the balancing regime. This is the objective of Article 14(2)f. One aspect in this context is that all participants on the Trading Platform can make trade notifications. This is explicitly covered in Article 14(8) and (9). For each new participant the TPO will have to check with the TSO if this participant is allowed to make trade notifications. The TSO and TPO will have to agree on a mechanism that the participant cannot trade on the Trading Platform anymore if it has lost its right to make trade notifications.

The Trading Platform provides the main access to Flexible Gas for the TSO, therefore it is important that the Trading Platform is open seven days per week and 24 hours per day, also in the weekend. If there is no platform which can provide these opening hours, then the TSO either has to establish its own Balancing Platform or to use Balancing Services outside opening hours of the Trading Platform. Both options are not the preferred solution but must be considered as fall back when platform operators cannot provide the necessary support.

The refined draft Network Code is not explicit on whether or not TSO should trade on exchanges. Differences between exchange based trading and over-the-counter trading on a platform are not expected to pose undue barriers to cross-border trade or to entry into the market; the choice is left as a matter to be determined by local markets.

A TPO could offer more support to the market than specified in the refined draft Network Code without directly moving towards an exchange. The implementation of such additional support depends on local circumstances. A higher level of support will benefit the functioning of the market, but variance in forms of platforms and product types is not seen to impose undue barriers to cross-border trade. At the time of drafting of the refined draft Network Code, different platforms are operated in the EU and operated by different operators; each platform offers similar but slightly different services. These differences were not raised as issues during the development of the initial draft Network Code. Accordingly, the refined draft Network Code specifies a low level of harmonisation on this point and leaves decisions on additional services to the national level.

Depending on the services the TPO offers, an agreement between the TPO and the TSO has to be reached on how these services are provided for. In addition, this will also require changes in the contractual arrangements between TSO and Network Users and between TPO and trading participants. In response to feedback in the SJWS process, the refined draft



Network Code does not specify what these contractual arrangements should cover and how they are to be reached (e.g. the STSPs make no reference to a block size so it is acceptable that this will be agreed on a local basis) while paying due regard to cross-border cooperation.

For additional information on ENTSOG's approach on this topic, see Part III, Chapter 2.

5. Nomination (respectively re-nomination) rules

The FG provides that the network code "sets out criteria for nomination and renomination procedures to be harmonised" at IPs. The EU-rules for nominations (respectively renominations) were foreseen by the EC to be a part of the planned network code on interoperability for which ACER's formulation of the framework guideline 11 has since been completed.

In the SJWS sessions, stakeholders expressed a clear view that the implementation of the eventual Balancing Network Code would not be possible without nomination (respectively re-nomination) rules at IPs being implemented concurrently. In this context, ENTSOG explored the possibility of such an approach with ACER.

In a written exchange with ENTSOG and the EC on 2 February 2012¹², ACER invited ENTSOG to include nomination rules in the Balancing Network Code. "This should take into account," ACER said, "stakeholder input, analysis of what the issues are (particularly in relation to the Balancing FG objectives and cross-border trade) and any other relevant interactions, including with capacity auctions (CAM), as well as the requirements of the balancing regime (including Network Users' requirements). We would expect this to result in a proposal for harmonised renomination and nomination rules and lead times."

In light of this guidance from ACER, which was implicitly supported by the EC13, ENTSOG increased the scope of the draft Network Code to include nomination rules at IPs. ENTSOG assumes that doing so will not be considered as a deviation from the FG by ACER or the EC but a necessary complement.

The nomination (respectively re-nomination) section of the planned network code on interoperability will complement the draft Network Code by addressing the operational

12 Extract from e-mail message from Konrad Keyserlink, co-chairperson of ACER's Gas Balancing project team, to Nigel Sisman, ENTSOG, 2 February 2012; policy officers of the European Commission (Directorate-General for Energy, Unit B.2) were put in copy.

¹³ Ibid.



processes and data exchange needed to underpin the nomination (respectively renomination) rules.

ENTSOG began and continues to work with the project team for the expected network code on interoperability (and relevant kernel groups in the Interoperability Working Group) on nomination (respectively re-nomination) rules. This is expected to ensure consistency between the nomination (respectively re-nomination) rules in this draft Network Code and the eventual draft network code on interoperability.

That which could be seen as a further elaboration on the FG is the draft Network Code foreseeing the co-existence of daily and hourly nominations at the borders of some Balancing Zones. The FG states, "If not covered by other legal obligations, the network code on gas balancing shall set out criteria for nomination and re-nomination procedures to be harmonised at both sides of the border at interconnection points and consistently across Europe". There has been no demonstrable evidence (including from NRAs) that this presents a barrier to cross border trades, although there are some points where specific issues have arisen and warrant further consideration. The refined draft Network Code [see Article 22] provides for a public consultation process with the purpose of identifying whether harmonised nominations (respectively re-nominations) should be submitted at both sides of this Interconnection Point. This consultation shall consider at least: financial impact on TSOs and Network Users; impact on cross-border trade; impact on the daily balancing regime at the Interconnection Point. Given that a relevant TSO or NRA may consult with relevant stakeholders on the need for harmonisation, this will ensure that the rules are designed to address the specific local circumstances of such hourly/daily Balancing Zone interfaces.

Another matter in this chapter of the refined draft Network Code that could be viewed as an elaboration on the FG is the proposed 3-year transition process for the implementation of the above mentioned rules for nominations (respectively re-nominations). The implementation of these rules will require considerable systems and operations development for both TSOs and their Network Users in terms of adaptation of regulatory and market arrangements and agreements. The refined draft Network Code thus allows for the gradual implementation of the target processes by affected parties. The transitional measures will be in line with the timescales for development of other EU legislative requirements (e.g., CAM, Interoperability network codes and CMP Guidelines) and can be applied for a maximum period of three years (i.e., two additional years beyond the one year provided as a minimum period for implementation).

For additional information on ENTSOG's approach on this topic, see Part III, Chapter 5.

6. Daily Imbalance Charge



The FG requires the network code to establish a Daily Imbalance Charge mechanism which incentivises Network Users to balance their Inputs and Off-takes over a Gas Day. The FG specifies much but not all elements of the desired mechanism. ENTSOG was thus tasked with making the policy choice for a number of parameters needed to define the Daily imbalance Charge and its two critical elements: the calculation of Daily Imbalance Quantities; and the derivation of the Marginal Buy Price and Marginal Sell Price.

The FG prescribes that locational and temporal transactions should be excluded from the marginal price setting process. The refined draft Network Code, however, allows TSOs to include Locational Product trades in the marginal prices in cases where it is carrying out a significant amount of Locational Product trades, subject to NRA approval. With increasing Balancing Zone size, the TSO's need for Locational Product trades is likely to increase. In certain circumstances, this could mean the TSO's Balancing Actions are thereby separated from the marginal price setting and do not result in a signal being sent to Network Users.

For additional information on ENTSOG's approach on this topic, see Part III, Chapter 7.

7. Within Day Obligations

In the course of the SJWS process and in bilateral exchanges between ACER and ENTSOG¹⁴ during the network code development process, it was suggested that there would be value in ENTSOG considering any additional criteria deemed to be lacking in the list included in the FG. ENTSOG accepted this invitation, positing the criterion "analysis of the effect on cross-border trade includes the potential impact on adjacent Balancing Zone" in the initial draft Network Code – and now the refined draft Network Code [see Article 32(8)e]. The use of WDOs can have an impact on an adjacent Balancing Zones, for example if the price of flexible gas, either explicitly in the market or implicitly through within day charges, differs in both Balancing Zones. Before making a proposal to introduce WDO it is important to have a good view of the potential impacts on adjacent Balancing Zones to prevent to the extent possible any adverse effects.

In its Draft Opinion, ACER observed that ENTSOG's initial draft Network Code "does not reflect the principle in the framework guideline, relating to when WDOs may be introduced and what they should look like. The network code would benefit from a better definition of WDOs". In response, ENTSOG undertook to address this "when" by including this in the refined draft Network Code [see Article 31(1) and (2)] by establishing the explicit condition, as required in the FG that WDOs can only be introduced if it is necessary to incentivise

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¹⁴ E-mail message from Konrad Keyserlink, co-chairperson of ACER's Gas Balancing project team, to Nigel Sisman, ENTSOG, 2 February 2012; policy officers of the European Commission (Directorate-General for Energy, Unit B.2) were put in copy.



Network Users to manage their within day position in order to minimise the role of the TSO and to keep the transmission network within its operational limits. To further define WDOs and prescribe their characteristics, the refined draft Network Code establishes three types of WDOs. And, of course, any such TSO-proposed WDOs will be subject to public consultation and NRA approval.

Identifying WDO types

In an entry-exit system, there are a number of requirements that have to be met by the Inputs and Off-takes for a safe and secure operation of the transmission network, such as

- the position of the network must be within the operational limits at all times during the Gas Day, the difference between the total Off-take and the total Input must be within the operational limits of the network;
- > the position of a sub-system must be within the operational limits of that sub-system at all times during the Gas Day;
- > it must be possible to move the gas through the transmission network, from where Network Users make it available to the TSO to where customers take it off the transmission network;
- > The quality of the entry gas has to be made to match the quality of the exit gas, for example, a Network User delivering high calorific gas into the transmission network that supplies an end consumer using low calorific gas.

The first requirement cited above can be met by the transmission network itself, for example, if the cumulative difference between total flows onto and off the network is less than the linepack available in the system. This is important especially where the TSO can be confident of a specific entry profile, for example, (reasonably) flat over the day; it then can manage this requirement without any additional provisions. In an entry-exit system where the operational limits are too tight to cover all potential flow scenarios, the first requirement can be ensured by incentivising Network Users to manage their Inputs and Off-takes within day to help keep the transmission network within its operational limits.

Meeting the second and third requirements cited above is typically the role of the TSO. A possible exception is where large and/or sudden changes on an Entry/Exit point can cause locational problems in the network. In such cases, the TSO can put specific obligations on either the Network User or the adjacent operator/end consumer that limit the flow changes on that Entry/Exit point.

Different TSOs have different models for meeting the quality requirement. In some systems, separate Balancing Zones are defined for different markets; in other systems, the TSO may have a role to convert gas from one quality to another.



The pre-requisites for applying WDOs and the criteria that WDOs have to meet, as specified by the FG, are already very tight. To further define WDOs and harmonise their design the refined draft Network Code limits WDOs to one of three types.

For additional information on ENTSOG's approach on this topic, see Part III, Chapter 6.

8. Neutrality arrangements

In the unbundled world' of structurally separated TSOs established by the Third Energy Package and with key policy decisions being made at the level of an ACER-formulated framework guidelines, the role of a TSO changes significantly. Essentially, the role of a TSO within balancing becomes primarily one of market facilitation. Commodity exposures under such a policy regime could be large, therefore requiring new approaches to cash-flow treatment and credit risk management - hence neutrality. That being said, it is important that the TSO faces appropriate incentives to be efficient in its facilitation role.

The FG proposes for TSOs to be cost neutral in their Balancing Activities and allows NRAs to foster TSO efficiency in their balancing role by instituting incentive mechanisms. An objective of the FG is that a TSO shall neither gain nor lose from its Balancing Activities and therefore that the TSO shall pass to Network Users any costs or revenues arising from these activities. However, the FG provides little guidance as to how the concept should be developed.

Taken in conjunction with requirements in the Regulation, it is clear that balancing regime charges are to be levied and identified separately from other transmission charges and that the imbalance charges shall be levied on the Network Users that were out of balance at the end of the Gas Day. The FG also requires that the TSO shall only recover from all Network Users, any costs incurred from undertaking Balancing Activities that are not directly attributable to a Network User.

The FG proposes that the specific formulation of the detail of the neutrality mechanisms shall be a matter of determination for each balancing regime. However, at a minimum, a number of key principles need to be established in the Network Code to define the charges and revenues which will be included in neutrality. By definition, the net effect of the cash flows will be either credited (if the net financial consequence is cash generative) or recovered (if the net financial consequence is a cost) from Network Users. Therefore, the resulting Balancing Neutrality Charges (or credits) could be considered a tax. This consideration raises the challenging issue of over which tax base should charges (or credits) be levied or credited and how the most appropriate apportionment might be defined.

The refined draft Network Code foresees a methodology for Balancing Neutrality Charges calculation and apportionment that will be subject to approval by the NRA.



For additional information on ENTSOG's approach on this topic, see Part III, Chapter 8.

9. Information provision

The Network Code is closely aligned with the FG in terms of information provision, albeit with in a much more detailed manner. ENTSOG would draw stakeholders attention to the requirement set out in the FG that "Until such an assessment has been completed and any changes implemented, Network Users may be subject to less onerous balancing obligations if transitional arrangements are agreed by the relevant NRA". An interpretation of this clause was included in Article 42(4) of the initial draft Network Code, which meant "a less onerous balancing obligation" was a tolerance for a WDO. Many Stakeholders responded on this Item seeking for its removal as it raises confusion between the Information Provision Chapter and the Within Day Obligations Chapter. In the refined draft Network Code, this Item is no longer included.

10. Linepack Flexibility Service

The FG states that the Network Code should not prevent TSOs from allocating linepack to Network Users, if approved by the relevant NRA subject to certain conditions. The FG also specifies that the decision by the relevant NRA to approve the allocation of linepack should be based on objective criteria, including the physical characteristics of the transmission network, whether the provision is consistent with Section 4 of the FG (i.e., Balancing Period and nominations (respectively re-nominations) procedures) and whether offering a linepack product would facilitate a more efficient use of the transmission network.

During the SJWS process considerable confusion became apparent among stakeholders about what is meant by linepack. A definition of linepack was established by the 'Directive' 15 – namely, "the storage of gas by compression in gas transmission and distribution systems, but not including facilities reserved for transmission system operators carrying out their functions." It was questioned, however, whether linepack was an amount of gas in the network or whether it was about the difference in maximum and minimum levels of gas which are acceptable in the system, that could be called 'linepack flexibility'. Based on SJWS discussion, the term "Linepack Flexibility Service" was coined for an end-of-day service that Network Users could use for their own daily balancing. The refined draft Network Code allows for this Linepack Flexibility Service provided it meets specific criteria to be assessed by the NRA.

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Directive 2009/73/EC of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC.



For additional information on ENTSOG's approach on this topic, see Part III, Chapter 10.

11. Interim measures

In outlining the permissible interim measures during the transition to the BTM, the FG includes the exemption: "For smaller markets, the network code shall allow TSOs to request from the relevant NRA to include flexible gas in LNG facilities as part of the Balancing Zone." Therefore as no rationale for this exemption on the part of ACER or stakeholders has been provided to allow the implications be understood, ENTSOG has chosen not to include this exemption in the draft Network Code.

A matter in this chapter of the draft Network Code that could be viewed as an elaboration on the FG is the proposed process [see Article 48] for a TSO to submit its annual report, justifying the need for interim measures, with the actual roadmap. To ENTSOG, this appeared to be a gap in the process outlined in the FG which needed to be filled.

Yet another matter which could be viewed as an elaboration on the FG is the proposal [see Article 49(i)] where an interim measure can be introduced due to insufficient Liquidity. The Network Code is aimed to foster Liquidity in the Short Term Wholesale Gas Market. This Liquidity in general will develop over time. However, circumstances might evolve that will decrease the Liquidity in one or more of the STSP, in particular for Locational Products and Temporal Products. The TSO may then find itself in a position in which it will need to introduce a Balancing Platform for trading in these products. Evidence has shown that introducing a Balancing Platform takes some time so the TSO will need to prepare for such a step when this becomes necessary well in advance.

For additional information on ENTSOG's approach on this topic, see Part III, Chapter 11.



III. RATIONALE FOR POLICY CHOICES WITHIN DRAFT CODE

On 13 April 2012, ENTSOG launched a public consultation on the initial draft Network Code. The consultation closed on 12 June 2012. The 51 consultation responses received (published at www.entsog.eu) formed a key input for ENTSOG's Balancing Working Group and its specialist sub-groups during this iteration of development of the draft Network Code.

Across the 51 respondents, there was generally good support for the scope and substance of the draft Network Code. When responding to the consultation questions, respondents expressed support for ENTSOG's policy/approach in most cases. Stakeholders often, though, would qualify their support by raising related issues of concern that they would seek to be addressed in the draft Network Code. This dynamic is reported in the figure below, indicating in which topic chapters the 180+ issues were raised.

Figure 3. Respondent support for ENTSOG approach by question and chapter; stakeholder issues raised

Majority of respondents supported ENTSOG policy/approach
Mixed views were presented by respondents
Majority of respondents were opposed to policy/approach

	Chapter	Q#	Count	Position	Issues raised
П	BALANCING SYSTEM				
	VTP and Trade Notifications	1	38		8
	Sufficient harmonisation		37		
Ш	CROSS-BORDER COOPERATION				
	Report on harmonisation progress	3	38		6
	Report on CBC	4	41		
IV	OPERATIONAL BALANCING				
	TSO trading in adjacent markets	5	39		
	economic and efficient' criterion	6	38		
	Short-term standardised products	7	41		
	Exchanged-based trading and TPO		40		
	Services provided on Trading Platform	9	36		35
	Contractual structure	10	36		
	Originating Party obligation to (re)nominate	11	30		
	Merit order	12	40		
	Procurement of balancing services	13	39		
	TSO-proposed incentive mechanisms	14	37		
٧	NOMINATIONS				
	Reasonable noms procedures Schedule for day-ahead noms		37		
			36		29
	Schedule for re-noms	17	37		
	Specific features of nominations	18	36		



Figure 3 (cont.). Respondent support for ENTSOG approach by question and chapter; stakeholder issues raised

	Chapter				Issues raised	
VI	DAILY IMBALANCE CHARGES	٦,,,	Count	· contion	133423141324	
•	Quantity determination	19	38			
	Locational and Temporal Market Products	20	40			
	Inclusion of day-ahead trades	21	40		9	
	Source of trades	22	36		_	
	Small adjustment	-	41			
	Cross-border trade criterion	24	35			
VIII	WITHIN-DAY OBLIGATIONS	24	33			
•	Elaboration of criteria	25	40			
	Additional criteria needed	26	34			
	TSO and NRA roles in approval	27	36		33	
	6-mos process for TSO	28	34			
	6-mos process for NRA	29	35			
/111	NEUTRALITY ARRANGEMENTS	23	33			
V 111	Scope/depth of code proposals	30	38			
	Transparency	31	34			
	Info. granularity	32	33			
	Neutrality pots	33	36		14	
	Neutrality pots in practice	34	26			
	Cash-flow management	35	30			
	cush-jibw munugement	36	34			
ıv	INFORMATION PROVISION	30	34			
IA.	Info. for offtakes	37	36			
	Variant 2 requirements	38	40			
	CBA and additional elements	39	42		15	
	Harmonised info. flows	40	38		13	
	Transparency Guidelines	41	36			
	Input info. Requirements	42	38			
Х	LINEPACK FLEXIBILITY SERVICE	42	30			
^	LFS product reqs.	43	35		4	
VI	IMPLEMENTATION, INTERIM MEASURES	43	33			
ΛI	Definition of short-term balancing market	44	27			
	Access to short-term gas flexibility	45	25			
	LNG "small county" carve-out in FG	46	30			
	Price-based tolerances	47	30			
	Application of average price	48	26			
	Forecast accuracy and tolerance phase-out	49	31		25	
	Mitigating NDM demand risk	50	28			
	Release of TSO surplus flexibility	51	27			
	Ref. to balancing platform trades	52	28			
	Additional interim measures	53	31			
		54				
	ENTSOG monitoring activity GENERAL ISSUES	54	28			
		EE	20			
	Level of detail in code Omitted material issues	55 56	20		4	
		-	26			
	Supporting document	57	37			

In this context, ENTSOG decided that the most efficient and effective way to address stakeholder feedback was to review the issues raised by topic. Accordingly, the chapters of



Part III are numbered in relation to the chapters in the refined draft Network Code. Each chapter includes:

- > A summary table of the Outcome/conclusions by issue proposed in the refined draft Network Code, including references to the proposed legal text;
- > Presentation of the topic in the context of the FG and the development of the Network Code;
- > For all issues raised by stakeholders and ACER (in some chapters) on the initial draft Network Code issued for public consultation;
- > Reference to Annex I (in some of the chapters) which summarises additional, lesser stakeholder issues considered in amending the refined draft Network Code;
- > Analysis of issues raised by stakeholders and related policy options. ENTSOG's rationale for the policy decision taken as regards refining or maintaining the original legal text;
- > Outcome of policy decision in context of the refined draft Network Code.



1. Chapter I. General Provisions

Given its nature, the structure of this Chapter does not include the elements presented above.

ENTSOG would like to draw attention to the fact that in response to stakeholders' concerns about readability of the initial draft. Network Code, the number of terms in Annex 1 of the draft Network Code has been reduced, and definitions have been rationalised. For the sake of clarity, in some Chapters terms have been defined directly within its articles instead of referring to terms in the Annex 1 of the draft Network Code.

The draft Network Code states that it is not intended to impact DSOs roles other than required for the implementation of the code itself.

It should also be noted that the transmission networks to which this code will apply can differ considerably in their characteristics, from having many transmission networks in one Balancing Zone to being a single pipeline interconnector. The implementation of the code will need to take account of these local circumstances.

The initial draft Network Code specified the process for obtaining a NRA's approval of a TSO's relevant proposals ('Approval Process') that was elaborated with the view to make it viable, transparent and harmonised at its different stages to ensure the completion of the full process from the beginning to the end, i.e. from the preparation of a request, including consultation, where relevant, to the start of the implementation, including administrative process and escalation right. In its Draft Opinion, ACER argued that the initial draft Network Code goes beyond the FG and cannot provide rules for the definition a full process. The network code is not to harmonise further than the process to apply to the TSO and shall stop at time of submission to the NRA. The next steps shall rely upon the existing national rules and ENTSOG shall not seek to harmonise further in particular applicable timeframe, right of appeal / judicial review. Effectively, the refined draft Network Code now refers only to the part of the process up to the submission to the competent NRA only except where the FG foresees addition intervention from other NRA or ACER. The following aspects of it were amended in the refined draft Network Code:

- > Time limits imposed on NRAs ENTSOG deleted any specification of these time limits in the refined draft Network Code. As a consequence, the draft Network Code will remain silent and therefore cannot ensure the completion of a full process in due time to the parties involved.
- Escalation process Any available remedy or right of action will remain subject to the existing procedure in the Member State, if any.



> NRAs' powers

In its Draft Opinion ACER asked to add in the refined draft Network Code NRAs' powers to fix / approve the relevant arrangements specified in Article 41 of the Directive and, in particular, NRAs' power to amend TSOs' proposals or initiate alternatives thereto. ENTSOG believes that the draft Network Code shall rely upon the existing National Rules and ENTSOG shall not seek to harmonise further, in particular applicable timeframe, right of appeal / judicial review.

> Reasoned decision/opinion
The terminology has been corrected to refer to a motived decision being the usual term under administrative law.



Chapter II. Balancing System

A. Presentation of topic

The FG emphasises that the responsibility for balancing the transmission network must be shared between Network Users and the TSO. The preferred policy choice is that the most efficient outcome will be achieved when the primary responsibility for balancing lies with the Network Users and the TSOs have a small residual balancing role. The assumption is that when a sufficiently liquid short-term market exists, the TSO shall only have a small residual role, the division of responsibility between Network Users and TSO will then be to the benefit of the consumers. This will be evidenced if the balancing regime succeeds in incentivising Network Users to have entry and exit flows that will keep the system within operational limits, minimising the need for the TSOs' balancing actions.

In a market-based balancing regime, it is important that Network Users can trade gas within the Balancing Zone; the TSO must facilitate this trade by offering a service that allows Network Users to transfer gas between their Portfolios in a Balancing Zone. This service shall be easily accessible to all Network Users provided that they accept the balancing rules. The rules to facilitate this transfer of gas between two Portfolios in a Balancing Zone should be as simple as possible and the refined draft Network Code limits these rules to the information that is necessary for the TSO to transfer the gas from one Portfolio to the other and the timing of this information. Everything else, like how trading is organised and conducted, is for the market to decide.

Stakeholders supported ENTSOG in its view that each entry-exit system should have a service that allows Network Users to transfer gas from one Portfolio to another.

For TSOs, it may be important to achieve some alignment between these gas transfers and with nomination (re-nomination) timelines at IPs because some TSOs are likely to use similar IT functionality for this (and that is efficient). However, since this trading is not directly linked to physical flows the two hour processing time (to address physical considerations) may not be necessary.

B. Summary of key issues raised in chapter

#	Key stakeholder or	Refinement	Rationale for Outcome	Ref. in	Ref. in
	ACER issue	Y or N		refined	initial
				draft	draft
1	One single Virtual Trading	N	ENTSOG agrees that each balancing	Art.8	Art.8
	point (VTP) per Balancing		zone should have only one VTP and		
	Zone		believes it is not necessary to make		
			this explicit in the network code.		
2	Harmonised default rules on	Y	The costs and risks for changing	Art.8(5)	Art.8(5)



	trading notifications		existing default rules do not outweigh the benefits. The compromise is to limit the choice in default rules to the two different types currently used.		
3	Lead time trading notifications	Y	There is no operational impact arising from trade notifications; lead time can be shorter than those for nomination.	Art. 8(2) and Art 8(3)	Art. 8(2)
4	Aligning hourly and daily notifications	N	The draft Network Code already emphasises that the Notification Quantity shall be expressed in respectively kWh/d for daily notifications and kWh/h for hourly Notifications.	Art. 8(3)d	Art. 8(3)d
5	Single-sided notifications	Y	To mitigate the risk for clearing houses that quantities allocated deviate from the ones notified an option to agree on single sided nominations has been explicitly opened up in the draft network code.	Art. 8(4)a and b	Art. 8(4)a and b

C. Proposed outcome in the refined draft Network Code by issue in the context of stakeholder feedback

1. Single VTP per Balancing Zone

Stakeholder feedback

Each Balancing Zone should have one and only one VTP.

<u>Analysis</u>

ENTSOG agrees with this view. The purpose of the trade notification it to transfer gas, expressed in units of energy, from one Portfolio to another within the same Balancing Zone. This service should be as simple as possible and only describe what is needed for the TSO to capture the necessary information for transferring the gas. This limits the number of VTPs within a Balancing Zone to exactly one; having more than one would add a complexity that is not needed. It is not necessary to make a single VTP explicit in the Network Code.

Outcome/conclusion

The initial draft Network Code already implies that there is only one VTP in a Balancing Zone.

2. Harmonised default rule on trading notifications

Stakeholder feedback

Some stakeholders asserted that a default rule should be defined and harmonised in the draft Network Code. However, there were also arguments for maintaining local discretion,



since harmonisation procedures would entail significant costs associated with introducing these procedures.

Analysis

The default rule is used where the quanties in the trade notifications do not match. Given the divided stakeholder views on this issue, ENTSOG proposes a 'middle ground' option that of limiting the choice of default rules by a NRA to two: the lesser of rule or rejection.

Outcome/conclusion

The refined draft Network Code has been amended [see Article 8] to reflect the above mentioned choice over two default rules.

3. Lead time trade notifications

Stakeholder feedback

The refined draft Network Code should provide additional clarity on the time for processing trade notifications and the latest time by which trade notifications can be submitted.

A stakeholder concurred that there should be no fundamental reason for linking the time necessary to process a trade notification and the timelines for nominations. It was asserted that this "lead time" of trading notifications should be as short as possible and aligned on best practice.

In contrast to re-nominations at IPs, trade notifications do not result in a change of the physical flows entering or leaving the transmission networks, trade notifications result in effect to a change of ownership of gas that already is in the transmission network.

Analysis

Trade notifications are used to allocate Inputs and Off-takes to Network Users. This is why some TSOs use the same processes and timelines for trade notifications and for nominations on IPs. This, for example, means that these TSOs use a confirmation timeline for trade notifications similar to that used for nominations. It is important that Network Users get their notification confirmed, either explicitly or implicitly, as soon as possible. There are no operational consequences arising from a trade notification. As a result the time to process trade notifications can be shorter and trade notifications can be submitted closer to the time they take effect. This is especially important for regimes in which there are System-wide or Portfolio WDOs; it allows Network Users to change their position close to the relevant period.

Outcome/conclusion

The draft Network Code specifically limits the time for processing trade notifications to 30 minutes. Only where a trade notification takes effect later than 30 minutes after it is submitted (for example in daily notified systems, where all trade notifications take effect at



the end of the Gas Day) the TSO has the option to take a maximum of 2 hours to process the trade notification and inform the Network User of the result.

4. Aligning hourly and daily notifications

Stakeholder feedback

A stakeholder expressed a desire for having the Notification Quantity only in kWh/d and to add the daily quantity to hourly notifications and hourly quantity to daily notifications.

Analysis

The proposal makes the messages for daily and hourly notifications the same. This is a level of detail beyond that of the draft Network Code. In addition, such a message would increase confusion and be a source of errors. Examples of this would be where the daily quantity is not equal to the sum of the hourly quantities or where rounding problems occur.

Outcome/conclusion

The refined draft Network Code is not changed to reflect this proposal.

5. Single-sided notifications

Stakeholder feedback

One stakeholder argued that the Network Code should support single-sided notifications for an exchange or corresponding clearing house to ensure that the transaction committed at an exchange is firm.

<u>Analysis</u>

In general, clearing houses have to mitigate any financial risk. One risk they run, as central counterparty in the trades it is clearing, is when one of their counter-parties does not make the proper trade notification. ENTSOG agrees that the TSO and the clearing house should have the opportunity to agree on mechanisms that help the clearing house to mitigate these risks; the Network Code should not prevent such measures. A way to mitigate this risk is through a mechanism which allows the clearing house also to submit the trade notifications on behalf of its counterparties. This would allow a mechanism that is currently used and is known as single-sided notifications: the TSO allocates the Notification Quantity from the trade notification submitted by the clearing house, ignoring potential notifications made by the counterparties of the clearing house.



Figure 4

	Properly notified				Shipper A submits wrong notification		
	Notification Quantity	Allocations	Net result		Notification Quantity	Allocations (lesser-off rule)	Net result
Shipper A	-100	-100	-100		-90	-90	-90
Clearing House	100	100	0		100	90	-10*
Clearing House	-100	-100	0 -		-100	-100	-10
Shipper B	100	100	100		100	100	100

	Single sided notification						
	Notification Quantity	Allocations	Net result				
Shipper A	N/A	-100	-100				
Clearing House	100	100	0				
Clearing House	-100	-100	J				
Shipper B	N/A	100	100				

^{*}In the upper table, as a result of an improper notification by Shipper A, the clearing house is faced with a shortage of 10 units and the associated imbalance charge from the TSO. This is a situation a clearing house needs to prevent.

Single-sided notifications initially are agreed between the clearing house and the TSO but will have an impact on the contractual relation between TSO and Network Users and between clearing house and the Trading Participants. The mechanism is successfully applied in, at least, a number of North-West European Balancing Zones. The Network Code should not prevent parties to agree on or to continue the use of single-sided notifications.

Outcome/conclusion

The refined draft Network Code opens the option for trade notifications to be made on behalf of a Network User. As stated above, this also opens the option for TSO and a service provider such as a clearing house to agree on the use of single-sided notifications.

The lower table illustrates how this can be done using single sided notifications.



2. Chapter III. Cross-border Cooperation

A. Presentation of topic

The FG outline processes for cross-border cooperation to further integrate the European gas markets by delivering proposals for merging entry-exit systems, creating cross-border Balancing Zones or through other means, such as market coupling, wherever this is technically and economically reasonable. There are two processes: a TSO-led consultation process on cross-border proposals and an ENTSOG-led review process on harmonisation of rules in adjacent Balancing Zones. The overarching objective is to identify projects that would enhance cooperation between TSOs across borders.

The TSO-led consultation process will engage stakeholders through a consultation on proposals. The proposals shall include an impact assessment that identifies the economic and technical effects.

The ENTSOG-led review process implies that ENTSOG plays a key role in reviewing the harmonisation of rules in the adjacent Balancing Zones. This will result in a report that highlights the current status and could provide a useful input for the TSOs to either identify opportunities for the integration of markets.

B. Summary of key issues raised in chapter

#	Key stakeholder or ACER issue	Refine	Rationale for Outcome	Ref. in	Ref. in
		ment		refined	initial
		Y or N		draft	draft
1	Frequency of review process	Υ	Art 11.3 explicitly allows more frequent	Art. 11(4)	Art.
			reviews to increase likelihood of identifying		11(4)
			opportunities		
2	DSO role in consultation on	N	DSOs are not by definition affected by	Art. 10	Art. 10
	proposals to integrate markets		cross-border project; where relevant they		
			will be involved as stakeholder.		
3	ACER involvement in the ENTSOG	N	The Regulation already foresees that	Art. 11	Art. 11
	review process		ENTSOG shall report its findings to the		
			Agency.		
4	ENTSOG involvement in cross-	N	Current process in the network code should	Art. 10(5)	Art.
	border cooperation too heavy		ensure that good progress is made on cross-		10(5)
			border projects.		

C. Proposed outcome in the refined draft Network Code in the context of stakeholder feedback

1. Frequency of review

Stakeholder feedback



The majority of the respondents indicated that a bi-annual review process was a positive and necessary component of the harmonisation process. Some stakeholders thought that a more frequent review process could be helpful - especially in the interim period before the full implementation of the Network Code. This would allow Network Users or other stakeholders to bring forward new proposals or raise potential issues that could need swift attention.

Analysis

Allowing for reviews at a shorter interval can be beneficial in some cases. For instance, where significant changes have just been implemented and the review is published too early to capture potential or expected significant effects. A shorter time until the next review in the first few years after implementing the Network Code could therefore be of good use.

Outcome/conclusion

The refined draft Network Code was amended [see Article 11(4)] to foresee for the possibility of conducting a review at a lesser interval than the standard two years where and to the extent relevant. The timing of the first review remains the same, i.e., no later than 2 years as from the entry into force of the Network Code.

2. DSO role in consultation on proposals to integrate markets

Stakeholder feedback

Some respondents advocated for a clearer role for DSOs in the stakeholder process. The argument is that DSOs are often highly affected by the cross-border projects.

<u>Analysis</u>

DSOs are not by definition involved in cross-border proposals and could already participate in the current stakeholder consultation process.

Outcome/conclusion

Since the initial draft Network Code already allows for DSOs to play an important role in the stakeholder process, the refined draft Network Code was not amended in this area.

3. ACER involvement in the ENTSOG review process

Stakeholder feedback

A respondent wanted ACER to be more involved in the review of the balancing rules. According to the stakeholder, it would be essential that the reviews concerning the operations of the FG and the Network Code are being supervised by an independent organisation.

Analysis

These provisions are already outlined in Article 9 of the Regulation, where ACER is supervising ENTSOG's tasks regarding implementation of network codes.

Outcome/conclusion

The refined draft Network Code has not been amended in this area.



4. ENTSOG involvement in review process

Stakeholder feedback

One stakeholder asserted that ENTSOG could play too significant a role in the consultation process. This could, according to the stakeholder, slow down a process which could already be very long.

Analysis

Current process in the network code ensures a proper coordination between the involved TSOs and with ENTSOG, keeping relevant NRAs and ACER informed about the proposals consulted upon. This coordinating and information role of ENTSOG is aimed to support the process.

Outcome/conclusion

The refined draft Network Code has not been amended in this area.



3. Chapter IV. Operational Balancing

A. Presentation of topic

The FG emphasises that the TSO should use the short-term market to gain access to Flexible Gas. This could help address the problem of using long-term options for Flexible Gas. The FG therefore aims to reduce the long term options to Flexible Gas for undertaking Balancing Actions. Balancing actions are undertaken to change flows onto the transmission network and/or gas flows off the system to maintain the transmission network within acceptable operational limits and/or manage its end-of-day position. A key objective is therefore to favour the short term market over long term contracts to gain access to Flexible Gas.

TSO flexibility in the use of balancing tools coupled with incentives that align TSO interests with those of market participants will produce the optimum result for all parties concerned and foster market Liquidity, depth and growth.

B. Summary of key issues raised in chapter

#	Key stakeholder or ACER issue	Refine ment Y or N	Rationale for outcome	Ref. in refined draft	Ref. in initial draft
1	Merit order – clarity of legal text	Y	Priority in merit order needed to be firmer	Art. 13	Art. 13
2	Merit order – placement of Balancing Services	Υ	A clearer prioritisation between using STSPs and Balancing Services	Art. 13	Art. 13
3	Criteria for procuring Balancing Services	Y	Additional criteria added	Art. 16(2)	Art. 16(1)
4	Procedures for procuring Balancing Services	Υ	Gap in initial draft Network Code filled	Art. 16(2)	Art. 16(2)
5	Contracts for Balancing Services max 1 year	Y	Requirement from the FGs is now present in the refined draft Network Code	Art. 16(4)	N/A
6	Balancing Services - reduction linked to Liquidity	Y	A gradual reduction of Balancing Services should take place as Liquidity increases	Art.16(5)	Art.16(3)
7	TSO trading in adjacent market	Y	TSO will have the possibility to trade in an adjacent market under certain conditions	Art. 16(3)	n/a
8	Trading day ahead	Y	There are situations in which it is more appropriate for TSOs to trade day ahead. Focus on the priority on within day trading	Art.13(2)	n/a
9	Weekend to be considered as one day	Y	Operational balancing is a 24/7 activity for most TSOs; Where possible the TSO should have the option to trade in weekends	Art. 15(1)	Art.15(1)
10	Criteria to be respected when using exchange based Trading Platform	Y	To prescribe exchange based trading by the TSO is considered to be beyond the scope of the network code. Instead,	Art.12(2)	Art.14(2)



			specific criteria and factors should be fulfilled by a Trading Platform.		
11	Originating party	Y	Using the originating party to identify the trading participant that has the obligation to make the re-nomination in a locational trade has proven itself; important not to exclude other solutions if TSO and TPO consider these to be more appropriate	Art. 15(5)d	Art. 15(5)
12	Incentives	N	TSOs are best-placed to propose incentive mechanisms, subject to NRA approval. Where TSO and/or NRA think it is necessary to consult stakeholders then the TSO will do so.	Art. 17(2)	Art.17
13	"Economic and efficient" – expression to promote liquidity	Y	This phrase promotes market Liquidity and highlights the objective of the third package to have marked-based balancing and the merit order aims at fostering Liquidity	Art. 489(4)e	Art.12

C. Proposed outcome in the refined draft Network Code by issue in the context of stakeholder feedback

1. Merit Order - clarity of legal text

Stakeholder feedback

A number of stakeholders found the wording of the merit order in the initial draft Network Code not firm enough and that it did not provide sufficient priority of Title Product over the other products.

Analysis

ENTSOG agreed with this view and has made the merit order firmer.

Outcome/conclusion

The refined draft Network Code [see Article 13] has been amended accordingly.

2. Merit order – placement of balancing services

Stakeholder feedback

A significant number of stakeholders called for TSOs to avail of STSPs, the use of which is guided by the merit order, before they use Balancing Services. Some stakeholders even proposed that Balancing Services be included in the merit order as the last in the order.

Analysis

A market-based allocation of Flexible Gas through a short term wholesale market will provide for an efficient allocation of Flexible Gas to the benefit of both Network Users and TSOs. Balancing Services need to be an enduring feature of a balancing regime where products on the wholesale market do not deliver all of the physical requirements essential



for the TSO to fulfil its balancing requirements. TSOs will need to seek to reduce the amount of flexibility it holds under long term flexibility contracts where possible. TSOs will also need to maximise trading flexibility in wholesale markets, where the wholesale markets will provide the response looked for by the TSO in undertaking Balancing Actions. Reducing the amount of flexibility held in option by the TSO will make this flexibility available to the market, supporting the Liquidity in that market. ENTSOG accepts that this may not have been sufficiently captured in the initial draft Network Code.

Outcome/conclusion

The refined draft Network Code is amended [see Article 13(1)e] by explicitly limiting the use of Balancing Services to situations in which STSPs will not or are likely not to provide the required response.

3. Criteria for procurement of Balancing Services

Stakeholder feedback

Respondents supported the criteria for the procurement of Balancing Services. However, a number commented on the wording of the criteria and/or their respective priority.

Analysis

ENTSOG agreed with most comments made on the criteria to be considered when deciding to procure balancing services and has decided to rephrase the list to make it clearer and more relevant.

Outcome/conclusion

The criteria to be considered have changed to reflect comments made by respondents.

4. Procedure for procurement of Balancing Services

ACER feedback

The initial draft Network Code did not cover the market based procurement of Balancing Services.

Analysis

The FG is clear that Balancing Services should be procured in a market-based manner through transparent and non-discriminatory procedures.

Outcome/conclusion

The refined draft network Code now makes a clear distinction between the use of a Balancing Service, as part of the merit order in Article 13 and the procurement in Article 16. Article 16(3) has been added to cover the market-based procurement of Balancing Services, with a specific process outlines in Article 16(3)(a) and (b) and alternative procedure for specific circumstances with NRA approval.

5. Contracts for balancing services maximum 1 year

Stakeholder feedback



A number of stakeholders wanted the Network Code to reflect the FG requirements of one year contract duration of Balancing Services.

Analysis

ENTSOG appreciates that the FG aim to promote the TSOs use of the wholesale market and reduce reliance on long term products. The FGs indicate that long term products may be used and be up to one year in duration. The FG also say that "long term products may be either for a particular volume of Flexible Gas or an option to inject or withdraw a particular volume of Flexible Gas". The intention of limiting the contract duration of a balancing service to one year (i.e. 12 months) is to prevent the TSO to enter into commitments beyond the next year. In addition to limiting the contract duration to one year the code should also limit the lead time with which Balancing Services can be procured.

ENTSOG believes that the limitation on duration of Balancing Services was made with storage contracts in mind and did not consider the role of other sources of flexibility, such as demand side response, which could play in meeting the TSOs balancing needs.

Demand side response is provided as a Balancing Service, for example in GB, and it is expected to play a key role going forward in helping TSOs to manage the gas networks and is an economic and efficient option.

To promote investment in this area contracts greater than one year are often required, for example a power station will only implement alternative fuels such as oil if they know they can recover their upfront costs. Restricting these contracts to one year in duration may have the following impacts:

- The services will not be offered, reducing the diversity of services available to the TSO:
- The costs of such services may increase as a significant premium may need to be included to enable the service provider to recover their upfront costs and as a result they may no longer be economic and efficient;
- The industry participants currently offering demand side response may see this change as discriminatory.

When deciding what is and is not efficient/economic, the ultimate decision on recovery of costs by the TSO is solely down to the NRA and therefore in this instance there is a very clear role for the NRA to play.

Outcome/conclusion

The refined draft Network Code has been amended to reflect the duration of a balancing services to one year and foresees the TSO to contract Balancing Services no longer than one



year in advance. The draft Network Code provides the TSO to procure Balancing Services with duration longer than one year but subject to NRA approval.





6. Types of balancing services

Stakeholder feedback

ACER indicated that they would like to see further details of the types of Balancing Service employed by TSOs.

Analysis

There are many examples of Balancing Services used by TSO. A short analysis of these showed that most of these could be categorised into three types:

- Inject or withdraw a quantity of gas from storage, liquefied natural gas (LNG) facilities or other means to the transmission network;
- Deliver or off-take a quantity (same or revised) of gas to an agreed profile or within certain time period during the Gas Day to the transmission network;
- Demand side response, where the quantity of gas offtaken from the Transmission network is changed.

ENTSOG however, believes that there is a risk in defining the types of balancing service as it may have not captured other types used and restrict the further development of Balancing Services that may not yet have been envisaged by the TSOs.

Outcome/conclusion

No changes are made to the refined draft network Code.

7. Balancing services - reduction linked to Liquidity

Stakeholder feedback

A number of stakeholders supported the view that a gradual reduction of Balancing Services should take place as Liquidity increases.

Analysis

ENTSOG agrees with the view. The refined draft Network Code has been amended accordingly, capturing the link between Liquidity and a reduction of Balancing Services.

Outcome/conclusion

The refined draft Network Code has been amended accordingly.

8. TSO trading in adjacent market

Stakeholder feedback

Stakeholders were divided approximately 50-50 with regards to whether TSOs should have the right to trade in adjacent markets.

The stakeholders who were against a TSO right to trade in adjacent markets put forward the following arguments:

- > It would hinder development/Liquidity of the TSOs own market;
- > TSOs would divert flexibility away from shippers;



- It could compromise the TSOs' role as a residual balancer and undermine the principle of being incentivised to balance;
- > Any short term cost benefits may not negate other impacts, including those on Liquidity and competition.

Stakeholders, who favoured the TSO's right to trade in adjacent markets in certain circumstances, posited the following arguments:

- > Trading in adjacent markets as an alternative to trading Locational Products in the domestic market would be better for Liquidity – rather than trading in an illiquid locational market the TSO should favour the liquidity in the adjacent market of Title Products;
- Trading in adjacent markets could be justified in certain circumstances where costs are minimised and/or prices in the adjacent market are frequently more favourable than a Location Product;
- > Trading in adjacent markets could be justified when a certain gas quality only can be bought in adjacent markets.

<u>Analysis</u>

If prices in adjacent markets are generally more favourable in an adjacent market, a price difference between both markets well exceeding the price of short term capacity then this could signal inefficiencies in one of those markets. It is not up to the TSO to investigate such inefficiencies, but to consider using the more favourable prices if Network Users do not. The approval from the NRA serves two purposes: first signal the potential inefficiencies and allowing the NRA to investigate these; secondly to agree on the conditions under which the TSO is allowed to trade in the adjacent market.

Outcome/conclusion

The refined draft Network Code has been amended to give TSOs the right to trade in adjacent markets subject to NRA scrutiny.

9. Trading day ahead

Stakeholder feedback

Some stakeholders argued that the merit order should specify that TSO should trade within day and only where this does not provide the required response the TSO can use day ahead or weekend trades.

Analysis

In general, the TSO will undertake its Balancing Actions within day. Balancing is an operational activity. However, there are circumstances where, from an economic and/or efficiency point of view, it does make sense for the TSO to undertake Balancing Actions aimed at the position of the network for the next Gas Day. The refined draft Network Code has to reflect both these aspects.

Outcome/conclusion



The merit order is adapted and prioritises within day trading over day ahead trading where and to the extent appropriate.

10. Weekend to be considered as one day

Stakeholder feedback

Some stakeholders thought that the provisions for the STSPs were too restrictive, referring to the fact that some TSOs trade individual days within the weekend and that this should be possible in the new regime.

Analysis

The initial draft Network Code was not clear on the term for trading STSPs, this needed to be revised in the refined draft Network Code. To support the TSO in its Balancing Actions through trading STSPs, these should be tradable:

- seven days per week for delivery:
 - on the same day;
 - on the next day;
- > on trading days preceding a weekend for delivery on Saturday and Sunday.

What the delivery will be for trades preceding public holidays will be left for the TSO and TPO to agree upon and can differ per Member State. To ensure that TSOs have optimal access to Flexible Gas through the STSP also during public holidays, it is important that the TSO is involved in establishing these rules.

Outcome/conclusion

The refined draft Network Code reflects the above mentioned amendment.

11. Criteria to be respected regarding a Trading Platform

Stakeholder feedback

A group of stakeholders believed that some criteria need to be fulfilled when using an exchange based Trading Platform. Some of these criteria are the following:

- > facilitation of non-discriminatory access, anonymous trading for all traders;
- transparency regarding bids and offers on the Trading Platform;
- a secured notification system;
- > the provision of the services themselves shall be on an equal treatment basis.

Analysis

TSO's Balancing Actions shall be transparent and non-discriminatory. This implies the Trading Platform, the platform at which the TSO undertakes its Balancing Actions, has to support the TSO on these aspects. This will be achieved by ensuring that access to the platform is granted on a non-discriminatory basis, the access conditions are transparent; trading should be anonymous, at least until the transaction is concluded, and bids and offers shall be transparent to all participants to the platform. The TSO and the market have to be confident that transactions committed at the platform will be duly notified to the TSO and actually



take effect. This is important, because it reduces the need for the TSO to undertake additional Balancing Actions (if the transaction is not properly notified, then the TSO will not see the effect it was looking for) and because transactions feed into the Marginal Buy and Sell Price (a transaction that is not notified would change the marginal prices without an actual transfer of gas between two Network Users).

Outcome/conclusion

The refined draft Network Code has been amended [see Article 14(2)] to include the additional requirement.

12. Originating party

Stakeholder feedback

A stakeholder suggests removing this detail from the network code and leaving the implementation details to local implementation. The reasoning is that different markets need different solutions. Their suggestion is to replace "originating party" by "Network User trading against TSO".

Analysis

The originating party mechanism has merit and has proven itself in practice. However, ENTSOG cannot rule out that other mechanisms are possible and maybe better suited to local circumstances. The code should not unduly limit the options for the TSO and/or TPO and potentially limit Liquidity in these products.

Outcome/conclusion

The refined draft Network Code includes the option for TSO and TPO to agree an alternative mechanism to identify the party that has/takes the obligation to make the (re-)nomination in a locational trade.

13. Incentives

Stakeholder feedback

Overall there was stakeholder support for the proposed incentive schemes in the area of operational balancing, conditional on a consultation process ensuring relevant stakeholders input. However, differing views were expressed on which party – the NRA or the TSO itself – is best-placed to design the incentive and/or initiate the proposal.

Analysis

The TSO role is to provide the relevant assets to enable gas to flow through the European gas transmission grid while at the same time facilitating and enabling the market to flourish via the provision of non-discriminatory open access services.

The challenge here is to define incentives that align the interest of TSOs and proper market functioning. These incentives should refine behaviours in such a way that any response



promotes change that is likely to be considered consistent with more efficient operation of the regime, which are better market outcomes.

A very small number of TSOs may be merchant rather than regulated entities. Interconnectors may well be merchant TSOs and will typically not have local consumers and so the realisation of incentive schemes envisaged in the draft Network Code may be harder to implement, or possibly impractical.

Design considerations

Designing such incentives is not trivial. The following principles may well be relevant considerations:

- > Sliding scale schemes provide particularly straightforward structures for incentives;
- > Performance measures must be measurable and preferably visible to all market players;
- Target performance and the reward or loss for the TSO must be precisely defined to induce appropriate management consideration;
- > Higher TSO rewards must be correlated closely with the more desirable behavioural outcomes and vice versa;
- > The initial incentives should be set perhaps on a one year basis so that they might be recalibrated in the light of experience;
- Incentives focussed on one objective function or performance measure should not be expected to persist, as the regime evolves the focus of attention might move to other aspects and so performance measures that are the subject of incentive mechanisms may change over time;
- > The financial incentives of this "market facilitation mechanisms" need not be large (particularly when compared with core TSO revenue streams designed to fully remunerate the return and recovery of substantial capital investments and associated operating costs) but need to be sufficient to focus management attention on the relevant desired behavioural change.

The case history of the early Great Britain (GB) energy balancing incentive regime provides valuable learning.

GB Case History

Background

During the late 1990s, Transco was owner and operator of the transmission and distribution grid in GB with associated transportation revenues of approximately £3bn. The first GB network code had been introduced and was functioning well, a Balancing Platform (the "Flexibility Mechanism") was being used to deliver balancing gas (representing about 1% of system throughput). On 16-17 December 1997, however, Transco purchased some modest quantities of gas at prices of £4.97 per therm. The Office of Gas Supply (Ofgas) – and later its successor, the Office of Gas and Electricity Markets (Ofgem) -- and some Network Users



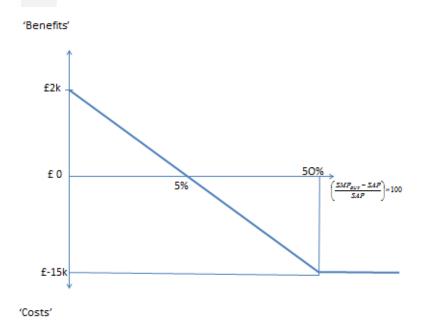
were concerned that Transco had taken gas at this extreme price well way from the value of the flexibility and probably for quantities that had no operational significance. The rather mechanistic approach that Transco used for its balancing decision-making process was challenged, suggesting that Transco should have more commercial freedom and "skin in the game". This was to prove the catalyst for the subsequent Reform of Gas Trading Arrangements implemented in October 1999.

The first incentive

One key element of the reforms was the introduction of an incentive mechanism. The scheme was designed based on a simple sliding scale mechanism based upon daily performance measures with daily caps and collars.

Transco's actions determined the daily imbalance cash-out prices that defined network users' exposures. Therefore, the incentive was designed to encourage Transco to keep daily cash-out prices as close as possible to the average price of gas for that day as traded on the newly introduced trading platform.

Figure 5: Daily Incentive function



The scheme illustrates a £2000 daily cap on reward, a 5% performance target, a £15000 maximum daily loss per component at around 50% price differential.

The scheme was proposed by Ofgem. The implied exposure of a maximum £2m per annum created considerable anxiety within Transco which had consistently argued that it did not need additional financial incentives. On further analysis and consideration, however, it



became apparent that the financial risks were not great given the structure of the incentive and afforded upside financial benefits the more balancing action decisions could be aligned with regulator's and stakeholder aspirations. Procedures were amended, control room awareness of the consequences of cash-out price differentials to network users increased and Transco netted an estimated £600.000 from the operation of this incentive in its first year of operation and considerable acclaim for its responsiveness from network users.

The second incentive

The intense scrutiny of the regime and particularly the role and effect of the incentive (an inevitability of the commercial significance of the TSO's role in operation of the regime) lead to a reconsideration of the incentive after approximately one year of operation.

Ofgem and network users expressed the view that, while the incentive had seen an overall reduction in balancing costs (as measured by net cash-flows into neutrality) the first incentive might have led to Transco avoiding some balancing actions that it might otherwise have taken and that therefore the balancing regime might include some cost mis-allocation between days.

Therefore, via a public network code development process a new incentive was designed and its parameters assessed. A new incentive was introduced that added a further component to Transco's decision making process. The further component related to the change in linepack from start of day to end of day with Transco being incentivised to keep this as small as possible.

Thus the new incentive included a new component (linepack component) necessitating Transco to consider the competing trade-offs between the price and linepack components. As before there were some anxieties about assuming an incentive that could not be controlled, but rather only influenced, by Transco. Again risk management assessed the proposal as a good deal and following further revision of control room processes the incentive netted £650 000 in its first year of operation.

Observations

Incentives provide an essential stimulus to induce changed behaviours from the TSOs. Incentive design is critical and performance measures must be targeted towards delivery of overall benefits to consumers. This ensures that the operation of the incentive ensures the fastest possible benefit transfer of outcomes to consumers.

The value of the incentives does not need to be high when compared with core revenues but it must be sufficient to focus management attention and to cover any resulting costs.



Incentive schemes to facilitate market development may be of relatively short duration (when compared with Price Control and Revenue settlements) and should be expected to evolve and potentially be replaced by different schemes during the evolution towards a properly functioning market.

Incentives provide a fair opportunity for TSOs to excel and reap a fair reward for the acceleration of benefits transfer to consumers fostering a co-operative approach to regime development rather than the traditional "stick" approach that has traditionally been used in many parts of Europe.

Outcome/conclusions

The refined draft Network Code [see Article 17(2)] allows for the design of the incentive mechanisms by the TSOs themselves. It should be noted, though, that NRAs hold the right of approval of any TSO-proposed incentives.

The refined draft Network Code also includes a provision [see Article 17(3)] for stakeholders to be formally consulted.

See Annex I for summaries of additional, lesser stakeholder issues considered in amending the refined draft Network Code.



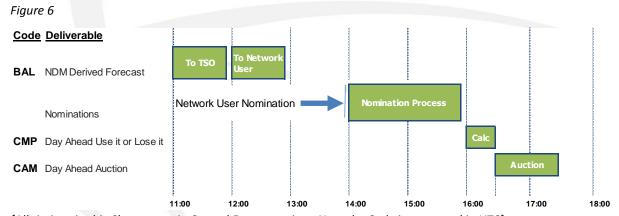
4. Chapter V. Nominations

A. Presentation of topic

As explained in Part II, Chapter 5, ENTSOG were invited in the FG to set out criteria for nominations (respectively re-nominations) rules at IPs. Stakeholders expressed a clear view during the SJWS process that rules for nominations (respectively re-nominations) should be included in the Network Code. Following an exploration of this approach, ACER requested in writing for ENTSOG to explore whether further harmonisation was needed with an expectation that this will lead to harmonised nomination (respectively re-nominations) procedures at IPs.

In the context of the ACER request, ENTSOG proposed harmonisation for nominations (respectively re-nominations) rules at IPs in the draft Network Code. These rules were prepared by the Interoperability Working Group of ENTSOG and were presented at the fifth SJWS on 7 March 2012 for stakeholder feedback.

The initial draft Network Code contains standardised nomination and re-nomination timings to be applied at all IPs. The timing for day ahead nominations is subject to a number of interactions which must all fit together correctly. These interactions are demonstrated in the figure below.



[All timings in this Chapter are in Central European time. Note the Code is expressed in UTC]

The draft Network Code also provides for a continuous re-nomination window opening at 16:00 on D-1 and remaining open until 03:00 on Day D. Under this process, the TSO will at least process re-nominations at the start of each hour and revert to the Network User within two hours from the start of this process. The re-nomination rules should, to the extent practical, be compatible with the within day capacity auctions and potential offering of interruptible capacity via over-nominations by TSOs. These are examined in more detail in the stakeholder response section to follow.



Finally, the refined draft Network Code provided details on supporting rules:

- > Specific provisions on co-existence of daily and hourly nominations (respectively renominations);
- > Rejection or amendment of nominations (respectively re-nominations);
- > Principles for nominations (respectively re-nominations) at non-IPs;
- > A specific transition measure for implementation.

B. Summary of key issues raised in chapter

#	Key stakeholder or ACER issue	Refine	Rationale for Outcome	Ref. in	Ref. in
		ment		refined	initial
		Y or N		draft	draft
1	Nomination rules at non-	N	Out of scope	N/A	N/A
	Interconnection Points				
2	Duration of transitional	Υ	3 years ensures that measure is short term	Art. 25	Art. 25
	measures		but allows a gradual implementation of the		
			target processes to be considered where		
			appropriate for TSOs and their Network		
			Users.		
3	Reduction of two (2) hour lead	N	drafting allows for <u>up-to</u> 2 hours, linked to	Art.	Art.
	time for re-nominations		physical requirements, draft brings	21(3)	21(5)
			significant harmonisation		
4	Amending capacity due to a	Υ	This criterion, based on a system integrity	Art.	Art.
	physical constraint		assessment defines a high hurdle for TSOs	23(4)	23(1)
			to invoke partial acceptance of a		and (2)
			nomination (respectively re-nomination).		

C. Proposed outcome in the refined draft Network Code by issue in the context of stakeholder feedback

1. Nomination rules at non-Interconnection Points

Stakeholder feedback

Several stakeholders offered the view that rules for nominations (respectively renominations) should be extended beyond Interconnection Points and cover other points on the network for example at storage and LNG entry points. Another association had the opposite view, citing this was out of scope of the FG.

ACER feedback

ACER asked ENTSOG to "explore whether additional minimal criteria for non-IPs are needed".

Analysis

The refined draft Network Code contains nomination (respectively re-nomination) rules, the scope of which goes well beyond that set-out in the FG (that the code shall set out criteria



for harmonised procedures at IPs). The draft Network Code also sets-out some criteria on nomination (respectively re-nomination) rules for non-IPs. 16

ENTSOG considers that further details for non-IPs are not within the scope of this Network Code as clearly stated in the FG. Furthermore, it is noted that no evidence was provided by stakeholders that there was a genuine lack of flexibility due to TSO processing of nominations (respectively re-nominations). ENTSOG therefore concludes that the detailed rules for non-IPs should be specified in local balancing regime rules.

Outcome/conclusion

The refined draft Network Code thus was not further extended beyond those provisions already included to include rules on nominations (respectively re-nomination) at non-IPs.

2. Duration of transitional measure

Stakeholder feedback

The majority of those Stakeholders that provided comments agreed on the reasonableness of transitional steps for nominations (respectively re-nomination) by seeking a definitive deadline for up to which it could be used by TSOs. A European Association and another Stakeholder sought a minimum number of re-nomination windows that must be made available - three. Another stakeholder made the point that the measures should also consider the transition needs of Network Users who would have to make organisational changes to utilise the continuous Re-nomination Cycle. Another stakeholder sought the introduction of a consultation on this measure and further details.

ACER feedback

In its Draft Opinion, ACER is of the view that the FG does not envisage such a step and that the measure goes beyond the scope of the FG.

Analysis

The implementation of harmonised nomination (respectively re-nomination) processes, as foreseen in the refined draft Network Code, requires considerable development for both TSOs and their Network Users in terms of adaptation of regulatory and market arrangements and agreements (shipping companies could have organisational impacts as they have to structure their organisations to cope with 24/7 balancing activity) and in terms of establishing the associated infrastructure to support such arrangements. The efforts required - not only by a TSO but also by Network Users - to define challenging and harmonised rules and to adapt their systems to them may be relevant in terms of changes related to different elements such as:

information and communications technology systems;

¹⁶ The achievement of which was only possible because of preparatory work undertaken by ENTSOG's Interoperability WG assuming that such procedures would be necessitated by the scope of the Interoperability code.



- human resources;
- > administrative costs;
- > regulatory framework.

Furthermore, where the re-nomination process is not foreseen in current practices, a testing period will be necessary in order to evaluate the impact of a completely new process and to address potential problems that might occur.

Therefore, the introduction of a harmonised approach towards the gradual implementation of the target processes has been considered appropriate for TSOs and their Network Users. The transitional measures should be in line with the development of the European requirements (CAM draft Network Code, CMP Guidelines) and can be applied for a maximum period of three years (i.e., two extra years in respect to the minimum implementation time of one year provided).

The transitional measures will at least contain:

- > a day ahead nomination cycle;
- a day ahead Re-nomination Cycle;
- > a within day Re-nomination Cycle.

During the 3-year transitional period, TSOs will endeavour to gradually align the nomination (respectively re-nomination) transitional measures to the BTM, providing to the same purpose all information and support required by Network Users.

It is clear that such a measure is not part of the FG, it is noted that as the FG did not envisage detailed nomination (respectively re-nomination) rules in the Balancing Network Code, the debate was not entered into at the development stage on its necessity.

Due to the short lifespan of this measure, a specific consultation requirement on its use has not been included.

Outcome/conclusion

The refined draft Network Code has been amended in this area as explained above.

3. Reduction of two (2) hour lead time for re-nomination

Stakeholder feedback

Two European associations and several stakeholders are seeking shorter lead times than 2 hours for the processing of re-nominations. Arguments offered to support this were that it offers greater flexibility to Network Users, provides faster access to local and neighbouring markets, supports security of supply and complements the increasing volatility of gas demand (as a result of increasing renewables penetration).

Analysis



The initial Draft Code did provide time for processing of re-nominations of <u>up-to</u> 2 hours. This means re-nominations may be processed quicker than 2 hours as is the case in some Balancing Zones presently, but that 2 hours is to be harmonised as the cap for this process. The proposals in the draft Network Code thus will result in a major reform of this rule across many Balancing Zones, and it is understood this has been a much sought-after measure by stakeholders.

The practical reality is that re-nominations processing involves more than administration and data processing. Managing flow changes involves physical changes within the grid and therefore a "lead time" between a requested flow change and its actual occurrence is likely to be necessary given the physics associated with gas transmission. It is essential to have some alignment between the physical and commercial worlds.

The TSOs have a role to bridge the gap between the physical and commercial world. However, instantaneous physical flow changes in line with a re-nomination request are unlikely to be possible. Therefore, some coherence between the commercial effect of renominations and physical flow rates is required. Two hours represents a compromise; physically it will not be possible to accommodate all requested flow changes within this "lead time."

Clearly harmonisation must take all points into account and the time taken by the TSO in this matter cannot be divorced from the physical system as the TSO must prepare for the flows of such gas. Furthermore to change to such a rule is likely to have consequential effects on the TSOs ability to offer capacity to Network Users. Thus a shorter "lead time" should be expected to reduce capacity quantities made available.

Outcome/conclusion

The refined draft Network Code thus was not amended to shorten the maximum TSO processing time of two hours.

4. Amending capacity due to a physical constraint

Stakeholder feedback

While stakeholders were generally positive towards the proposed nomination (respectively re-nomination) rules, a large majority did not support the reference in Article 23 of the initial draft Network Code to rejection or amendment of nominations (respectively renominations) which states "the TSO shall take into account physical constraints, if any".

Stakeholders' view was that the statement was not precise enough and might undermine the concept of firm capacity. Many stakeholders had the view that such provisions should be limited to use for cases of emergencies and force majeure events.



Some stakeholders also questioned the validity of the TSO taking action on a nomination (i.e. day ahead) for the scenario where the TSO interrupts due to the extent of the system imbalance. The argument being that the physical imbalance will not appear until the Gas Day itself.

<u>Analysis</u>

ENTSOG notes stakeholders' concerns on this matter; however, in dealing with renomination (respectively re-nomination) rules, ENTSOG must provide for the different reasons nominations (respectively re-nomination) may be rejected or amended. There will be rare situations in which otherwise valid nominations (respectively re-nominations) cannot be accepted.

Outcome/conclusion

Amendments [see Article 23(4)] are proposed within the refined draft Network Code setting out the circumstances under which the amendment of a requested gas quantity would be possible. The use of this rule is subject to a provision that the TSO must maintain a record of these circumstances and agree a rule to report the same to their NRA.

This criterion, based on a system integrity assessment defines a high hurdle for TSOs to invoke partial acceptance of a nomination (respectively re-nomination). Unless the TSO assesses such a high risk, it will balance the network using Balancing Actions as described in the refined draft Network Code. The provision on transparency should ensure the NRA is well aware of when such actions been taken and the reason why.

ENTSOG has also introduced provision where, if a TSO has already taken an action to manage capacity at a point, then it shall have a right to only partially accept a nomination (respectively re-nomination). Full acceptance could exacerbate that situation. The provision thus is designed to prevent an escalation of costs that would otherwise be met via other Network Users via neutrality.

It should be noted that capacity management rules are not part of this Network Code. The Network Code provides the opportunity, under very rare circumstances for the TSO to only partially accept a nomination (respectively re-nomination). This Network Code does not seek to address any of the resulting consequences.

It has become apparent to ENTSOG in the development of the Network Code that there is no capacity management rule set for dealing with issues in regard to a Network User's inability to use capacity rights. These issues while clearly important are nevertheless outside of the scope of the Balancing Network Code and may need to be addressed in another subsequent code.



See Annex I for summaries of additional, lesser stakeholder issues considered in amending the refined draft Network Code.





5. Chapter VI. Daily Imbalance Charges

A. Presentation of topic

The approach to deriving Network Users' imbalances and their cash settlement is a fundamental element of any balancing regime, as it defines the primary incentive to balance their actual Inputs and Off-takes to the Balancing Zone. Establishing an incentive on Network Users is thus consistent with the objective of minimising the balancing role of the TSO.

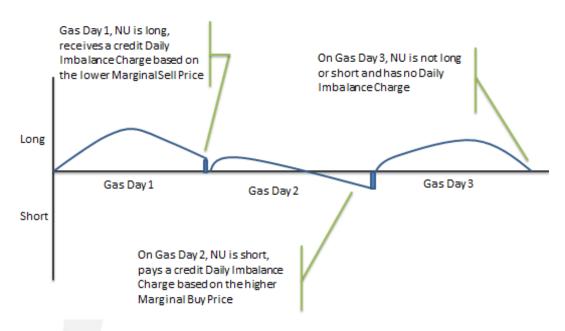
Where a Network User's Off-takes exceed its Inputs for a Gas Day (i.e., it was 'short' gas), it purchases gas from the system at a price which is at least slightly above the Weighted Average Price (WAP) of gas on the Gas Day, the Marginal Buy Price. Conversely, if its Inputs exceeded their Off-takes (i.e., they were 'long' gas), then they sell this gas to the system at a price at least slightly below the WAP of gas on the Gas Day, Marginal Sell Price. There is thus an inherent incentive to balance, assuming that a Network User would be better off trading to achieve as close to a balanced position as possible, rather than to face the Daily Imbalance Charge exposure. Furthermore, the Marginal Buy Price and Marginal Sell Price formulation have a direct link to the costs of Balancing Actions of the TSO. This is intended to achieve some cost targeting of TSO's Balancing Actions to those Network Users who cause such Balancing Actions.

The FG requires the Network Code to establish a Daily Imbalance Charge mechanism which incentivises Network Users to balance their Inputs and Off-takes over a Gas Day without specifying all elements of the expected mechanism. ENTSOG was thus tasked with making the policy choice for a number of parameters needed to define the Daily imbalance Charge and its two critical elements: the calculation of Daily Imbalance Quantity; and the derivation of the Marginal Buy Price and Marginal Sell Price. The initial draft Network Code set out an initial proposition on these issues. Then the stakeholders' views on this proposition are set-out later in this section, with some consideration of this feedback and the translation into the refined draft Network Code, describing any changes where they are made.

As indicated above, the network code sets out an imbalance methodology which comprises a Daily Imbalance Charge for each Network User per Gas Day per Balancing Zone depending if they were long or short gas. The figure below shows a scenario in which a Network User imbalance is treated. Each day's settlement process extinguishes each Daily Imbalance Quantity.



Figure 7



B. Summary of key issues raised in chapter

#	Key Stakeholder or ACER issue	Refine ment	Rationale for outcome	Ref. in	Ref. in
				refined	initial
		Y or N		draft	draft
1	Basis of final Daily Imbalance Quantity	N	Alternative measures put in place to deliver	Art.	Art.
			appropriate risk / opportunity level to Network	41(3)	31(1)(b
			Users) and
					(2)
2	Preference for single-price cash-out	N	Not in-line with FG	N/A	N/A
3	Inclusion of locational trades in Marginal	Υ	To allow for scenarios when TSO balancing	Art.	N/A
	Buy and Sell Price		predominantly through Locational Products	29(2)(d	
)	
4	Inclusion of day ahead trades in Marginal	N	Consistent with FGs and merit order.	Art.	Art.
	Buy and Sell Price			29(2)	29(2)
5	Source of trades in Marginal Buy and Sell	Y	Limited to platforms, ensures transparency and	Definiti	N/A
	Price		simplicity	ons 34	
				and 35	
6	Calculation/design of the Small	Υ	A cap gives Network Users comfort marginal	Art.	N/A
	Adjustment		price not unduly penal	29(4)	
7	Timing of initial Daily Imbalance Quantity	Υ	Allows Network Users forecast demand better if	Art.	Art.
			information provided earlier.	41(1)	31(1)(a
				and (2))

C. Proposed outcome in the refined draft Network Code in the context of stakeholder feedback



1. Basis of final Daily Imbalance Quantity

Stakeholder feedback

A small number of stakeholders argued that the Daily Imbalance Quantity should only be based on the after-the-day Allocation when the within day information is seen to be accurate, i.e., until such a time, it should be based upon the final forecast provided within day. In this context, others argued that the Daily Imbalance Quantity should be based on the initial Allocation and not the final Allocation, as any differences in these values, a reflection of inaccuracy, is outside of the control of Network Users.

Analysis

This issue related to the Base Case and Variant 2 information model only as the Variant 1 model is close in nature to the proposed approach. The concerns raised however were also voiced in the SJWS process and ENTSOG proposed some specific measures to mitigate risks for Network Users:

- > The use of Tolerance due to a lack of accurate information (as well as access to flexible gas per the FGs);
- a specific Tolerance Level to allow for the difference in the final NDM Derived Forecast and NDM Off-take Allocation;
- > a provision to allow an incentive to encourage the forecasting accuracy of the NDM Derived Forecast;
- > transparency on the accuracy of the NDM Derived Forecast, with results published each two years;
- > a provision that the NDM Derived Forecast must be based on load profiles and be subject to a consultation process.

The apparent intent of the FG is to leave a modest Daily Imbalance Quantity exposure (particularly where the Portfolio involves NDM Off-takes) with Network Users but, which in conjunction with a market-based Marginal Buy Price and Marginal Sell Price determination (which sets fair and not unduly penal exposures), will generate a fair allocation of risk within the balancing regime.

Outcome/conclusion

Under the refined draft Network Code, it specifies that a Network User's Daily Imbalance Quantity is based upon the final Allocation provided by the TSO to Network Users. Consistent with the FG, Network Users are provided available information within the Gas Day in order to allow them to manage the risks and opportunities in this role.



2. Preference for single-price cash-out

Stakeholder feedback

A European association of end-users expressed a strong preference for a one-price system, based on the WAP of gas traded in respect of that Gas Day.

Analysis

The suggested approach would not be in line with the FG, which is based on a two-price cash out methodology via a Marginal Buy Price and Marginal Sell Price for each Gas Day.

Outcome/conclusion

In light of the above, the legal text has not been amended on this matter. The Daily Imbalance Charge Calculation methodology design remains consistent with the FG, using a two-price cash-out methodology.

3. Inclusion of locational trades in Marginal Buy and Sell Price

Stakeholder feedback

There was a near unanimous view from stakeholders that only Title Product trades should be included in marginal price setting process and that both Locational Product trades and Temporal Product trades should be excluded. To support this view, respondents put forward arguments including:

- Locational Products and Temporal Products will have a limited Liquidity level so their prices should not feed into the derivation of the WAP;
- > trades in such products are generally taken to address physical constraints (e.g., local constraints) or within day issues and thus are not reflective of the costs of the end-of-day balancing;
- > the Network Code should avoid that small amounts determine a price for balancing energy which might differ significantly for the larger volume procured on the market for Title Products.

Some stakeholders suggested a price weighted to the amount of locational actions a TSO might be a better approach, while others favour a national level determination, in order to allow such trades where a justification is provided.

Analysis

In the first instance it is apparent that Temporal Product trades are not in respect of a Gas Day and therefore are not compatible with a daily price mechanism. Temporal Product trades continue to be excluded from the derivation of the Marginal Buy Price and Marginal Sell Price in the refined draft Network Code.

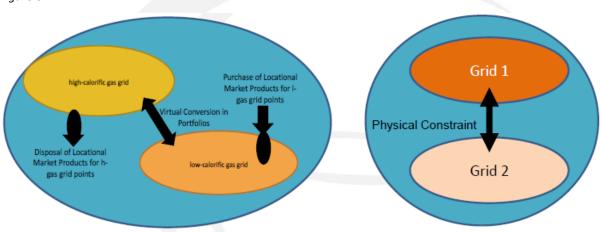
The refined draft Network Code remains consistent with the wording of the initial draft Network Code in that the Marginal Buy Price and Sell Price are based on Title Product trades.



However, it does provide [see Article 29(2)(d)] for the inclusion of Locational Product trades depending upon the "extent of the TSO's use of Locational Products".

With increasing Balancing Zone size, the TSO's need for Locational Product trades is likely to increase. In certain circumstances, this could mean the TSO's Balancing Actions are thereby separated from the marginal price setting and do not result in a signal being sent to Network Users. The illustrations in the figure below demonstrate two such scenarios.

Figure 8



The illustration on the left of the figure above is a Balancing Zone where there are two grids, one using high calorific gas and another using low calorific gas. If both grids are in the one Balancing Zone and Network Users trade only Title Products, then the TSO may need to do Locational Product trades to maintain the operation of the system; effectively the TSO is managing a system that may have some locational requirements because of limited conversion capability. On the right hand side of the same figure, there is a physical constraint between the two grids within the one Balancing Zone. This means that when the constraint is occurring, the TSO is likely to need Locational Products rather than Title Products in order to balance both systems.

Outcome/conclusion

The refined draft Network Code has been amended to allow TSOs to include Locational Product trades in the marginal prices and the WAP calculations in cases where it is carrying out a significant amount of Locational Product trades, subject to NRA approval. This rule deviates from the FG, which exclude the use of Locational Products and Temporal Product trades in the derivation of marginal prices.



4. Inclusion of day ahead trades in Marginal Buy and Sell Price

Stakeholder feedback

Consultation respondents' views, as during the SJWS process, were divided on the inclusion of day ahead trades in the derivation of the Marginal Buy Price and Marginal Sell Price. However, the consultation results indicate that the majority favour the specific exclusion of day ahead trades, generally because of the following arguments:

- Day ahead prices do not reflect the balancing needs of the system, whereas within day prices do;
- > TSOs should only undertake Balancing Actions within day;
- > It offers simplicity and transparency.

Several stakeholders support their inclusion only when interim steps are in place, while other stakeholders favour their inclusion for reasons such as price stability. Some stakeholders express a preference for local discretion on this matter, while another sees no rationale for location discretion and favours harmonisation. Finally another stakeholder states the importance of where the TSO takes a day ahead Balancing Action a signal is sent to the market to this effect and the inclusion in the Marginal Buy Price and Marginal Sell Price is the appropriate tool.

Analysis

Balancing is not a within day issue only, and indeed this is recognised in the merit order for operational balancing which seeks for TSOs to prioritise within day Balancing Actions. This provision should give stakeholders comfort that the setting of the marginal price will indeed be focussed on within day actions by the TSO. Furthermore, including day ahead trades in the calculation also means that Network Users will have early visibility on the price signals should the TSO trade gas for balancing purposes.

ENTSOG do not see value in different Balancing Zones having different applications of this rule and therefore have maintained the phrase "in respect of the Gas Day" which is consistent with the FG in the calculation of the WAP, the Marginal Buy Price and Marginal Sell Price.

Outcome/conclusion

The refined draft Network Code has not been amended in this area.

5. Sources of trades in Marginal Buy and Sell Price

Stakeholder feedback

All respondents on this matter expressed the common view that TSO trades affecting imbalance price-setting should be limited to those conducted on exchanges, Trading Platform and/or Balancing Platforms. The arguments in support of these views were:

- > It ensures transparency to Network Users;
- It ensures non-discriminatory Balancing Actions by TSOs.



Some respondents, though, expressed a further preference, arguing that exchanges should be prescribed as the target under the BTM. Another called for a single Trading Platform to be prescribed for the BTM, highlighting benefits such as simplicity and ease of use.

Analysis

Given the strength of stakeholder feedback on limiting the source of price effecting trades and the logic behind such feedback, ENTSOG have amended the draft network code in order to limit price affecting trades to those on a Trading Platform. Balancing Platforms are specifically provided for in the Article 49(i).

The draft Network Code has, however, not been amended to limit the TSO to trade on a single platform. Allowing the TSO to trade on more than one platform ensures the TSO can source a competitive place to trade and does not have to 'choose a winner' between competing platforms.

Outcome/conclusion

The refined draft Network Code stipulates that for the BTM all trades feeding into the formulation of the WAP, Marginal Buy Price and Marginal Sell Price must be carried out on a Trading Platform. This is fully consistent with stakeholder feedback and supports transparency and also non-discriminatory actions by the TSO.

The refined draft Network Code does not limit the TSO to the use of only one Trading Platform for the purpose of setting imbalance prices.

6. Calculation/design of the Small Adjustment

Stakeholder feedback

Respondents broadly supported the criteria proposed for consideration of the Small Adjustment – in particular, the additional proposal to the FG regarding the potential impact on cross-border trade. A large number of stakeholders, however, found the initial draft Network Code deficient in that it provided for insufficient harmonisation and/or too much discretion for TSOs, creating the risk that the Small Adjustment may not be "small." Several helpful examples were provided to ENTSOG in the consultation responses, including:

- A cap based on a percentage of the WAP;
- > A link to the cost of the transaction price at the hub (e.g. double);
- A proxy for alternative flexibility;
- Marginal cost of investment flexibility;
- Ex-post pricing based on system status.

While ENTSOG posed additional questions in this area including whether the differential should represent a commercial trading transaction or a value for physical flexibility no clear and unambiguous conclusions could be deduced from the feedback.



ACER feedback

At the Refinement Workshop and in its Draft Opinion, ACER also expressed concerns about the negative consequences which could result, if the Small Adjustment were too high. It suggested that it could be useful for the Network Code to provide additional guidance on how the Small Adjustment would be derived, potentially defining a proportion of imbalance charges which the adjustment cannot exceed.

Analysis

The key concern from stakeholders is that the values arising from the different applications or the same one could vary (one TSO could use +/- 25% and another +/- 2%) and expose them to unreasonable imbalance charges. On the other hand, it is important that the Small Adjustment provides a signal to Network Users to balance their Inputs and Off-takes to avoid the TSO having to buy / sell a lot of gas, which may not be supported by Network Users. For this reason a specific carve-out has been included in order to have a safeguard should such circumstances arise. ENTSOG believes that 10% of the WAP provides comfort to Network Users that the Small Adjustment will not be too high, but, at the same time, protects them from bearing costs that are incurred because other Network Users do not balance their Inputs and Off-takes.

Despite ACER and stakeholder support for a cap, or ceiling, on the level of the Small Adjustment, it is difficult to infer guidance from current practise in Europe. Unfortunately very few regimes already have cash-out regimes that are similar in structure to that proposed in the Network Code. Therefore, benchmarking is a challenge, as truly comparable caps are not available across EU Member States, but it is clear that caps around 3% (the current approximate percentage equivalent applicable in GB) are acceptable; whereas, other differentials in different regimes of 20% are considered by many Network Users to be unacceptable.

As a 'middle ground' option between the two, ENTSOG thus proposes in the refined draft Network Code a cap on the Small Adjustment of 10% of the WAP.

Outcome/conclusion

In the context of the feedback and the policy analysis, the refined draft Network Code [see Article29(4)] proposes to:

- cap the Small Adjustment at a percentage of 10% of the WAP for the BTM;
- > allow a TSO to seek for a Small Adjustment greater than this cap subject to NRA scrutiny;
- add the criterion "shall not result in Network Users' excessive financial exposure to Daily Imbalance Charges" to those to be considered by an NRA when approving the Small Adjustment.

7. Timing of Allocation information

Stakeholder feedback



A European trade association called for an obligation on TSOs where Allocation information is provided six hours after the end of the Gas Day. The stakeholders also proposed an interim measure to reach this goal.

Analysis

ENTSOG recognise that stakeholders value the provision of initial information on their Daily Imbalance Quantity on the following Gas Day. The Network Code has been amended so that in the BTM initial Allocation and Daily Imbalance Quantity information will be provided no later than the end of the following Gas Day. The code allows up-to three Gas Days for the provision of this information during the period where interim measures are applied, where such extra time is required for technical or operational reasons. Discussions with DSOs have indicated that this step is necessary in order to overcome technical and operational reasons (for example, in some cases this information is currently provided once per month).

Outcome/conclusion

The refined draft Network Code stipulates revised time provisions regarding the provision of initial imbalance information.



6. Chapter VII. Within Day Obligations

A. Presentation of topic

WDOs have two main objectives:

- Reduce the role of the TSO in managing within day positions of the network;
- > Targeting of costs incurred by the TSO for managing within day positions of the network.

The first objective comes from the FG, which states that "The principle is to provide, as much as possible, for Network Users to balance their individual portfolios, which is likely to minimise the need for TSO's balancing actions." To achieve this minimisation of TSO balancing action that the FG require, "The network code on gas balancing shall set out that Network Users, through their portfolio balancing activities, shall take primary responsibility for matching their inputs against their customer's off-takes from the Balancing Zone during the relevant balancing period". Where within day positions of the network have to be managed, "the network code on gas balancing shall provide for the TSO to impose specific obligations to Network User's inputs and off-takes during the gas day".

The second objective stems from the first and the requirement from the Regulation that balancing charges should seek to avoid cross-subsidisation. If a TSO has to undertake a Balancing Action to manage the within day position of the network as a result of Network Users' not meeting the WDO then the TSO should recover this cost from these Network Users. To avoid cross-subsidisation, WDOs should be aimed at avoiding TSOs' Balancing Actions when Network Users meet the WDO.

Well-designed WDOs can contribute to and in some cases are essential in reducing the need for TSOs to undertake Balancing Actions while keeping the transmission network within its operational limits. Whether WDOs are necessary depends on a number of aspects, including the topology of the network, the flexibility available to the transmission network and the flow scenarios that need to be supported. Where WDOs are required, well-designed WDOs improve the efficient and economic operation of the pipeline system and reduce the amount of cross-subsidies between Network Users; they enable market-based mechanisms for managing within day positions of the transmission network. Where the TSO considers WDO necessary, the WDO will be subject to an assessment by the NRA against a number of stringent requirements. If the WDO does not meet these requirements then the TSO will need to address its operational requirements via an alternative WDO or other means.

Systems cannot manage all possible flow scenarios; to some extent the entry flows onto the network have to match the exit flows leaving the network. In some systems the balancing requirements can be fairly light and/or general, in others they need to be more strict and/or specific and flows need to be actively managed to meet these balancing requirements.



To meet these requirements it is necessary to manage the flows onto and off the transmission network. Network Users have the primary responsibility for matching their Inputs and Off-takes during the Gas Day. By managing their Portfolio during the day consistent with desired effect of the WDO the need for TSO to undertake Balancing Actions is likely to be minimised and will reduce the amount of Flexible Gas the TSO needs to hold as Balancing Services.

A set of rules is necessary that specifies how each Network User can/is expected to contribute to keep the transmission network within its operational limits and a set of incentives to actually manage its Inputs and Off-takes within the day. An additional effect of such an incentive is that it allows the TSO to have a market-based mechanism for access to Flexible Gas.

If Network Users do not or cannot keep the transmission network within its operational limits, the TSO will have to undertake Balancing Actions to keep it within its limits; the TSO will need to trigger changes to the flows into and/or out of the network. The TSO has to trigger these within day flow changes to the extent possible in a market-based manner. This makes it necessary to create a market that can trigger flow changes that take effect already during the Gas Day. WDOs can play an important role in creating such a market.

To allow Network Users to take primary responsibility to balance their Portfolios, it is important that Network Users have sufficient information on their within day position. This is also a requirement to ensure an efficient within day market. Without a clear view of their within day position, the incentive to balance and/or trade in the market will be less efficient; the WDO will then be mainly used to charge Network Users for their within-day positions and provide a mechanism to avoid cross-subsidies in recovering the cost incurred by the TSO for managing within day positions of the network.

WDOs aim at keeping the transmission network within its operational limits. It is not necessary for the WDO to include a reset of within day position of all Network Users to zero during the day, any settlement as part of the WDO can be limited to a settlement necessary to bring the transmission network back to within its operational limits. In this context the Daily Imbalance Quantity can be considered to be bigger than the quantities that are settled as part of a WDO and the main cost to be incurred by Network Users will relate to their position at the end of the Gas Day. This is not a strict rule applied for individual Network Users for each Gas Day, but should be considered over all Network Users over a longer period.



Before a TSO can apply a WDO, it is important that it consults stakeholders and, after that, obtains NRA approval. The rights of the NRA in approving and the processes for approving are, in line with the Directive, determined by the Member State. The role of ACER is determined by the Regulation 713/2009. The Network Code has limited itself, in line with the FG, to providing that WDO(s) need prior approval by the NRA and indicates the criteria indicated that the NRA shall consider when approving the proposal by the TSO.

B. Summary of key issues raised in chapter

#	Key stakeholder or ACER issue	Refine	Rationale for Outcome	Ref. in	Ref. in
		ment Y or N		refined draft	initial draft
1	Additional criteria for assessing WDOs	Υ	Inclusion in the initial draft Network Code of requirements to incentivise Network Users to manage their within day Inputs and Off-takes	Art. 31(1) and (2)	Art. 32(1) and (2(
2	Different WDOs for different Off- takes	Υ	Merit in making explicit that different WDOs in a single Balancing Zone can create better incentives on Network Users and reduce cross-subsidies between (groups of) Network Users	Art. 32(4)	N/A
3	Helper concept	N	The option to have different WDOs also provides the option to offer a choice to Network Users; WDOs can already be designed to include a concept of helping the system. Not necessary to make this explicit	N/A	N/A
4.	Link between electricity and gas	N	Not necessary to make this link explicit in the refined draft Network Code	N/A	N/A
5.	Only WDOs if Network User can achieve them	N	An incentive that one cannot influence will not contribute to the objective of WDOs minimising the role of the TSO	Art. 31(1); 32(8)(a)	Art. 33(5)
6.	WDO with a charge based on swing factor	N	Considered a specific Portfolio WDO	Art. 32(1)b	N/A
7.	Minimum information requirement	Y	Information is essential in an incentive-based WDO; TSOs must assess whether Network User has adequate information to manage its within day position in line with the WDO	Art. 32(2)(b) and 32(8)(b)	Art. 33(1)(b)
8.	WDO as incentive	Υ	The FG makes a strong link between WDOs and the necessity to incentivise Network Users to undertake appropriate Balancing Actions during the day. Necessary to reflect this link in the refined draft Network Code	Art. 31(1))	Art. 32(1) and 33(5)(a)
9.	Further definition of WDO through three types of WDOs	Y	ENTSOG agrees with stakeholders that adding the three types of WDOs gives a more detailed definition of WDOs and sees merit in these types to further harmonise balancing regimes	Art. 32(1)	N/A



C. Proposed outcome in the refined draft Network Code in the context of stakeholder feedback

1. Additional criteria for assessing WDOs

Stakeholder feedback

On the criteria listed in the initial draft Network Code, stakeholders raised various concerns, such as:

- Article 33(1) of the initial Draft Code was considered to be too widely defined: implementation of WDOs is made too easy;
- > There should be a certain amount of coherence between WDOs in neighbouring systems;
- > Liquidity in hourly traded product should be sufficient before WDO can be applied;
- Use of STSPs above WDOs is to be made more explicit.

ACER invited ENTSOG to identify additional criteria on WDOs.

Analysis

The initial draft Network Code did not cover the prerequisite that there must be a need to incentivise Network Users to manage their within day position in order to minimise the need for the TSO to undertake Balancing Actions. This omission has been addressed.

There should be a certain amount of coherence between WDOs in neighbouring transmission network. Different WDO structures or even only different parameters used in WDOs might lead to migration of flexibility from one transmission network to another. In a single market the flexibility should go there where it is most valued and export of flexibility in itself is a good sign of a well-functioning market, provided that this flexibility is priced fairly at both sides of the border; not over-valued in one system and/or priced too cheaply in the other. The decision to have WDOs or not and the specific design of the WDO can have a significant impact on the perceived value of Flexible Gas and the introduction of a WDO can have an unintended impact on an adjacent Balancing Zone. Such effects have to be managed without introducing barriers to the cross-border trade of flexibility. This must be considered by the NRAs in assessing the impact on cross-border trade and the impact on adjacent Balancing Zones.

Some respondents argue that introduction of WDOs might decrease the Liquidity in STSPs. They suggest making it more explicit that this effect occurs and that it should be avoided. Although this might to some extent be true for end-of-day products, WDOs will increase Liquidity in the other three types of STSPs. The Liquidity in the other STSP will allow the TSO to manage the within day positions of the network in a market-based manner and give an opportunity to the market to support the TSO in keeping the transmission network within its operational limits. The individual TSO is responsible to explain this trade-off in their proposal and to obtain from the NRA the approval of the arguments.



A general principle set out in the draft Network Code is to put the primary responsibility on Network Users to balance their Inputs and Off-takes during the Gas Day where this is necessary to reduce the need for the TSO to undertake Balancing Actions. In particular, Network Users have to manage their within day positions where this is necessary to minimise the role of the TSO in keeping the within day position of the network within its operational limits and where it satisfies a range of wider criteria. The use of WDOs should only be allowed if in order to achieve this minimum role of the TSO it is necessary to incentive Network Users to manage their within day positions. If the minimum role of the TSO can be achieved through other measures then these other measures should be used. If the TSO proposes to use WDOs then it has to justify the necessity for this, as part of the recommendation document.

Outcome/conclusion

Article 31 of the refined draft Network Code has been amended to capture the prerequisite to incentivise Network Users.

2. Different WDOs for different Off-takes

Stakeholder feedback

To keep the transmission network within its operational limits, the flows onto and off the Balancing Zone have to be balanced. The ability for Network Users to balance their Inputs and Off-takes depends, among other things, on the variations of individual Off-takes during the day, the information they have within day, and the ability to match Inputs and Off-takes. The flow varies for the different types of flows which exit the transmission network. For example:

- Off-takes for residential market can show large within day variation which is fairly predictable;
- > Flows to some electricity generators can vary drastically within day and are difficult to predict by the TSO;
- > Some specific industrial end-users can take large flows off the transmission network with relatively moderate within day variation.

Within day information on Off-takes by residential end-users is not available in all systems; in most systems, Off-takes by electricity generators and large industrial end-users are available for most of these end-users.

From the above, it is evident that different Off-takes make different use of the operational capabilities of the system and that depending on the types of Inputs and Off-takes in its Portfolio different Network Users have different opportunities to contribute to maintaining the transmission network within its operational limits.



To avoid cross-subsidisation and to reduce the role of the TSO, there should be a clear distinction between certain groups of gas users: Intra-daily metered (IDM: near real time or hourly), daily metered (DM) and non-daily metered (NDM), because in their daily Off-take profile, there is typical demand, differing from a flat to a more profiled Off-take. Loads of frequently metered customers (IDM & DM) summed up, reveal a relatively smooth and flat profile. The reason lies in the statistical overlapping of the individual profiles. The shapes of the individual profiles equal each other out. This Portfolio profile leads to a constant and uniform use of the linepack with low costs as a result.

In case of a pure daily balancing regime without any WDOs or incentives, all costs, especially the intraday-costs, will be smeared among all Network Users. As such, associations representing end-users — especially end-users with flat profiles — are in favour of a hybrid system in which Network Users who are able and willing to contribute to balancing the transmission network must be stimulated. Those end-users who are contributing to balancing the transmission network and help to reduce the role of the TSOs, have to be rewarded for example with a symmetric imbalance price system (one price system), and may not be exposed and settled by the imbalance costs of other Network Users like the non-daily metered customers. End-user associations strongly oppose cross-socialisation subsidisation and socialisation of balancing cost.

Analysis

The aim of WDOs is to incentivise Network Users to manage their Inputs and Off-takes within specific limits to reduce the need for the TSO to undertake Balancing Actions to keep the transmission network within its operational limits. Depending on the Balancing Zone different incentives can work better for different categories of Entry or Exit Points. For example, in many systems, different information is available for different kinds of entry-exit points; within-day flow patterns could be managed by different WDOs depending on the information available. In addition, if different WDOs are offered by the TSO, Network Users could have a preference for one or the other. Such a preference might exist because of, for example, additional information to which the Network User has access, its access to Flexible Gas, its assessment of level of risk in its Portfolio. The choice for Network User would then be between stricter obligations on within day positions with a more direct cost targeting and more latitude in their Inputs and Off-takes with higher levels of socialised balancing costs.

The neutrality treatment of Network Users is envisaged to be different based on the WDO(s) that will apply to their Portfolio. Specific elements of the neutrality mechanism might be related to specific WDO applied by the TSO and to the extent to which Network Users either contribute to triggering or avoiding Balancing Actions by the TSO for managing the within day position of the network.

Outcome/conclusion



The refined draft Network Code explicitly adds the option for the TSO to use different WDOs if this will contribute to better incentives on Network Users and avoid cross-subsidies. The possibility to offer Network Users a choice is left to the TSO when they consult on the WDOs.

3. Helper concept

Stakeholder feedback

Stakeholders acknowledge that there are systems in which within day positions have to be managed and that there is a role for Network Users to manage these positions; rather than imposing obligations on all Network Users, they propose to have a set of rules which allow Network Users to help the TSO in managing these positions and be rewarded for that.



Analysis

Two different helper concepts can be distinguished. The first exists in the context of System-wide WDO. When the TSO undertakes a Balancing Action, buying or selling Flexible Gas, it will charge Network Users to recover the costs or revenues of that Balancing Action. Here, for example, the TSO can charge only those that have a portfolio position in the same direction as the transmission network position that triggered the balancing action, or the TSO can also reward those that have a position in the opposite direction and were 'helping the system'.

The second helper concept is related to the previous issue, allowing different WDOs for different types of Off-takes, from a slightly different angle. If the TSO cannot impose WDOs, then it could consider introducing mechanisms that allow Network Users to help TSO to manage the transmission network by managing their within-day positions. These Network Users could then either be paid for this or will not contribute to the neutrality payments that cover the cost of within day Balancing Actions taken by the TSO.

Outcome/conclusion

The second concept is covered by the previous issue, where the TSO can apply different WDOs on different Network Users. In addition, WDOs are incentives, with clearly stated consequences for Network Users when they have Inputs and/or Off-takes outside the specified limits. This gives Network Users the choice to either stay within the limits and thereby helping the system or go beyond the limits and accept the consequences. The refined draft Network Code gives the TSO the option to design a WDO which allows Network Users to help and be rewarded for that.

The first helper concept is not explicitly covered in the draft Network Code and left for the TSO to decide on.

4. Link between electricity and gas

Stakeholder feedback

Stakeholders suggest that the backup role of gas for renewable power production will increase the need for WDOs. Renewables (wind sun) may generate higher swings in non-renewable power production and gas as backup for this production will thus introduce high swing in gas consumption for these power plants. Stakeholders propose to add this effect as a part of the cost benefit analysis that should be part of the proposal for WDOs that TSOs issue to the NRA.

Analysis

Although this is a valid observation by stakeholders and TSOs should consider the intermittent character of renewable sources of electricity and the possible role of gas as a



back-up fuel, it is not necessary to make this explicit in the Network Code. It does make clear that flow patterns can change and that the need for and/or design of WDO can evolve over time.

Outcome/conclusion

No changes were made to the refined draft Network Code. Gas can be a back-up fuel for intermittent power generation and this may require new/other WDOs within the scope of the draft Network Code.

5. Only WDO where the Network User can achieve them

Stakeholder feedback

Stakeholders argue that the TSO can only use WDOs that Network Users are able to comply with. The re-nomination lead times and notification lead time should be as short as possible, and they suggest that they need to be shorter than the current 2 hours.

Analysis

It is clear that the main objective of WDO would be better achieved, if Network Users can better manage their Inputs and Off-takes to keep them within the limits specified by the WDO. This certainly is something the TSO has to take into consideration when designing WDOs. However, there is a trade-off to be made between WDO that Network Users can comply with, especially with regards to information provision, and the aim to have market-based rules, avoid cross-subsidies between Network Users and minimising the role of the TSO.

In a market-based balancing regime the consequences for Inputs and Off-takes outside the specified ranges should be reflective of the costs the TSO incurs for managing the within day position of the network. This way within day charges are reflective of the price for Flexible Gas and the Network User pays a market-based price for being out of balance.

Another aspect to consider in this context is the level of cross-subsidisation. If the TSO cannot apply WDOs as a result of Network Users not having sufficient access to Flexible Gas or information to stay within the specified limits, then the TSO's need to undertake Balancing Actions will increase, with both frequency and volumes increasing. This will increase TSO's cost to manage the transmission network. These costs will then be socialised and increase the level of cross-subsidies amongst Network Users. A WDO, even one where sufficient information is not provided or where there is not optimal access to Flexible Gas, can be used as a mechanism to attribute costs/revenues incurred by the TSO to those that make more use of the flexibility available in the transmission network.

Also in this case, in which the WDO was designed to recover the costs/revenues for managing the within day position of the network, the WDO will be an incentive for Network



Users. Network Users know the charges they will get for their within day position and will, to the extent possible, manage these positions to reduce their costs.

The assessment of the WDO providing a fair allocation of the costs/revenues for managing the within day position of the network against the ability for Network Users to influence their within day position in line with the WDO depends on a large number of factors and can only be left to be decided on a national level in consultation with stakeholders. This is an aspect the NRA has to consider in its approval of the WDO [see Article 33(3)(b)].

Outcome/conclusion

No specific changes were made to the refined draft Network Code; however, the ability of Network Users to manage their within day positions and exposures must be a key element of WDO design if the criteria for introducing or maintaining WDOs are to be satisfied.

6. WDO with a charge based on swing factor

Stakeholder feedback

One stakeholder argued that in a system without WDO the assumption must be that the entry into the system is flat over the day and the TSO will provide the swing in Off-take relative to this flat entry. The stakeholder suggests to target the cost incurred by the TSO for providing this swing (if any) should be targeted to Network User based on the amount of swing the Network User puts on to the system; Network Users with high swing will need to pay more than Network Users with a more flat profile. This swing factor will also apply to the entry onto the system, where Network Users that deviate from flat Input will pay for this deviation.

A charge based on a swing factor may be considered a WDO. Network Users will try to reduce their swing factor to reduce their costs or it could be seen as a means of charging Network Users to better reflect their use of transmission network flexibility and/or target related investment costs on those Network Users that have large swings.

Analysis

A charge based on a swing factor could be developed as a Portfolio WDO. Network Users may try to reduce their swing factor to reduce their costs. However, WDOs of this nature are not currently employed by TSOs.

Outcome/conclusion

The refined draft Network Code has not been amended in this area although it would be possible to develop the approach so that it could be part of the methodology for Balancing Neutrality Charges and therefore might deliver better, though approximate, cost targetting.

7. Minimum information requirement

Stakeholder feedback



A large majority of stakeholders argued that WDOs should only be applied if the TSO provides the Network User with the information necessary to comply with them, as provided for in the FG.

Analysis

This can be considered as part of the issue that Network Users should be able to achieve WDOs.

The Regulation requires the TSO to provide the Network Users with sufficient, well-timed and reliable information reflective of the level available to the TSO.

ENTSOG agrees that information is essential for Network Users. Network Users need to have access to the information on their imbalance position; the TSO is responsible for making the information it has available to the relevant Network Users. The TSO should not be seen as the sole source of information. Network Users do have relationships with their customers, who will have information about their flow patterns, expected and actual consumption. This information could be exchanged for the mutual benefit of Network User and its customers.

WDOs shall be structured so that Network Users are able to manage their inherent risks. This is different to saying that Network Users shall never pay a charge for the WDO or that Network Users need perfect information. The WDO should define the exposure a Network User faces so that the Network User shall be able to deploy Flexible Gas. In general, WDOs may specify a range within which Network Users are incentivised to manage their within-day position. If a Network User fully uses the flexibility of that range then deviation from expected Inputs or Off-takes may put its position outside of that range and the Network User will face some exposure. Network User can use (part of) the specified range as flexibility to avoid exposure resulting from unexpected changes to its Inputs and Off-takes in which case it is important that they deploy their Flexible Gas sufficiently early.

In different systems different information is available to the TSO and the information is available at different points in time. Different WDOs require different information. For example, with System-wide WDOs, the costs/revenues of a Balancing Action by the TSO is attributed to the Network Users based on its position at the time of the Balancing Actions. This requires that the TSO can determine Network Users' positions within the day and consequently the TSO should make these available as frequently as possible to enable Network Users to manage their exposure to Within Day Charges. Here it is important that Network Users have information on their Inputs and Off-takes that are used by the TSO for determining their within day position, especially because their exposure also depends on the behaviour of other Network Users.



For Portfolio WDOs, a similar requirement could be considered. However, where that information is not available to the TSO for all Entry and Exit Points a Portfolio WDO could still be considered, also because Network User's exposure is not dependent on the position of other Network Users and the Network User can manage its within day position based on information received from the TSO in combination with other information available to the Network User, particularly that sourced direct from its customers.

Outcome/conclusion

The refined draft Network Code has been amended [see Article 32(2)(b)] to make it explicit that the TSO, in its recommendation document, shall demonstrate that Network Users have access to adequate information in a timely manner to enable them to manage their within day positions

8. WDO as incentive

Stakeholder feedback

Respondents view the test for WDOs, as it was described in the initial draft Network Code as very broad and gives too wide possibilities for TSOs to impose WDOs on Network Users. Indeed, only the need to undertake Balancing Actions to manage within day positions of the transmission network is not enough to apply WDOs. What is equally important is that these WDOs will reduce the need for the TSO to undertake Balancing Actions to a minimum.

Where the TSO needs to undertake Balancing Actions to manage the transmission network's position within the Gas Day it should provide incentives for Network Users to manage their actual Inputs to and Off-takes from the transmission network in such a way that these incentives minimise the need for the TSO to undertake Balancing Actions for the purpose of managing the within day position of the transmission network.

<u>Analysis</u>

As discussed above, WDOs should provide incentives on Network Users.

The criteria that each WDO obligation has to meet are already stringent; justifying and designing a WDO will be no task the TSO will take lightly.

Outcome/conclusion

The refined draft Network Code [see Article 31(1)] has been updated to reflect that WDOs aim to incentivise Network Users. There is a specific provision which puts the emphasis on TSOs to demonstrate that such incentives are necessary.

9. Further definition of WDO through three types of WDOs

Stakeholder feedback



For a better definition WDOs, stakeholders have suggested adding the three types of WDOs that were described in the Launch Documentation¹⁷ for the development of the draft Network Code.



 $^{^{\}rm 17}$ ENTSOG, "Gas Balancing Launch Documentation," BAL125-11, 13 December 2011.

BAL391-12 14 09 2012



Analysis

WDOs shall reflect genuine system needs and the resources available to the TSO to manage the within day position of the transmission network.

Different networks and Balancing Zones have different characteristics, different genuine system needs and different access to Flexible Gas. As a result it is not possible to define specific WDOs that can be directly applicable to all systems in which it is necessary to incentive Network Users. In its Launch Documentation¹⁸, ENTSOG identified three types of WDOs: System-wide WDOs, Portfolio WDOs and Entry-Exit Point WDOs. These three types are currently used by TSOs and all WDOs currently in use can be categorised by one of the three type:

- > System-wide WDOs, the objective of which is to incentivise Network Users to keep the transmission network of the TSO within its operational limits;
- > Portfolio WDOs, the objective of which is to incentivise a Network User to keep the its position during the Gas Day within a pre-defined range;
- > Entry-Exit Point WDOs, the objective of which is to incentivise Network Users to adjust limit gas flow and/or gas flow variation under specific conditions at such specific Entry-Exit Points.

For each type, there are examples that show how it can contribute to the objective of minimising the role of the TSO in keeping the transmission network within its operational limits.

Outcome/conclusion

The refined draft Network Code has been amended in this area to reflect the above.

See Annex I for summaries of additional, lesser stakeholder issues considered in amending the refined draft Network Code.



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7. Chapter VIII. Neutrality Arrangements

A. Presentation of topic

As regards neutrality, the FG states,

"TSOs shall be cost neutral in relation to their balancing activities i.e. any net costs or revenues arising from TSO balancing and financial settlement of Network User imbalances shall be passed on to Network Users, although NRAs may incentivise TSOs to procure efficiently by allowing them to receive a payment if balancing costs are minimised to a certain level, or require them to make a payment if these are above a certain amount."

The FG, however, does not define the extent to which neutrality rules need to be specified in the code.

In this context, ENTSOG has formulated a section of the draft Network Code which delivers a neutrality concept and another one which also enables a range of incentives to be deployed, including but not limited to those that promote TSO's efficient undertaking of Balancing Actions and/or to maximise the undertaking of Balancing Actions through the trade in STSPs [see Chapter IV on operational balancing in the refined draft Network Code].

As explained in Part II, Chapter 5, ENTSOG believes that, at a minimum, a number of key elements need to be established in the network code to provide an indication of which charges and revenues will be included in neutrality. The key principles proposed in the draft Network Code include:

- the concept of neutrality for cash flows arising from the TSO's Balancing Activities;
- > transparency for the neutrality mechanism;
- cost targeting, to the extent possible, within the balancing neutrality regime;
- invoicing of Balancing Neutrality Charges.



B. Summary of key issues raised in chapter

#	Key stakeholder or ACER issue	Refine-	Rationale for outcome	Ref. in	Ref. in
		ment		refined	initial
		Y or N		draft	draft
1	Recovery of "efficient" costs for	Υ	Outcome/conclusion limited to avoid	Art.	Art.
	Balancing Activities		double counting of incentive results through	35(1)	36(1)
			neutrality.		
2	Degree of prescription in proposed	N	Stakeholder views divided. ACER view that	Chapt.	Chapt.
	arrangements		may already be gone too far.	VIII	VIII
3	Transparency and information provision	Υ	Transparency on costs key stakeholder	Art.	Art.
	for neutrality		concern	35(3)	37(4)
4	Separate neutrality pot for Variant 2	Υ	To enable better cost targeting	Art.	N/A
				36(5)	
5	Credit arrangements to protect Network	Υ	To establish symmetry in provisions for	Art. 37	Art. 38
	Users		TSOs and Network Users. To provide clarity		
			on TSO neutrality.		

C. Proposed outcome in the refined draft Network Code by issue in the context of stakeholder feedback

1. Recovery of efficiently incurred costs for balancing activities

ACER feedback

In its Draft Opinion, ACER states that its inclusion in the FG of the principle of NRAs incentivising TSO efficiency in their balancing role is that only efficiently incurred costs for Balancing Activities can be recovered. It also said that the code should be explicit that any benefits or costs through an incentive mechanism that the TSO bears should not be included in the neutrality mechanism. ACER expressed the view that Chapter VIII of the draft Network Code does not currently reflect the possibility for such incentives to be introduced and is therefore not consistent with the FG.

ACER also maintains that the network code must not preclude the possibility for an incentive regime to be introduced on the TSO and this needs to be enshrined within.

<u>Analysis</u>

Efficiency

As explained above, Chapter VIII on neutrality arrangements provides for a neutrality concept. It also explicitly recognises that the TSO may be subject to incentives in respect of its balancing role, including but not limited to those that promote TSO's efficient undertaking of Balancing Actions and/or to maximise the undertaking of Balancing Actions through the trade in STSPs.

The above is consistent with the view expressed in the Brattle Report which accompanied the Draft Opinion, "While any incentive scheme will function separately from the neutrality



mechanism, it is important that the general principles set out for the neutrality mechanism do not preclude incentive mechanisms."¹⁹ The incentive mechanisms envisaged in Chapter IV are designed to enable performance based risk/reward schemes where performance based measures can be established that correspond to high or low levels of efficiency (better or weaker performance). Thus, while Chapter VIII does not address efficiency issues, it is clear that the Chapter IV – and others related to TSO operations can.

ENTSOG, though, has several concerns with ACERs proposals on this matter:

- > The Network Code puts certain obligations on how the TSO behaves, for example, a merit order for Balancing Actions that diminishes TSO's freedom to act. Additionally, transparency requirements thmay disadvantage TSOs relative to other market players. In many circumstances the TSOs will be limited in the choices it can make;
- > Brattle Report contains a presumption in favour of incentive schemes as a way of achieving various objectives for balancing markets that are set out in the FG, including building Liquidity on the Trading Platform, and ensuring that the costs of Balancing Actions are efficient. Brattle imply that an incentive within neutrality may not leave the TSO financially neutral and notes that ENTSOG's neutrality formulation in the consulted upon code is already compliant with the FG requirement;
- > Elsewhere (Part III, Chapter 4) ENTSOG describes the role of incentives and that they should be carefully constructed upon measurable assessment of performance; ENTSOG considers it both impossible and inappropriate to assess the efficiency of each and every Balancing Action (and its consequences) because there are too many unknown variables inherent in the balancing regime and its operation. Given that TSOs are expected to have new requirements affecting their operational and commercial discretion over their Balancing Action decisions, it can only be meaningful to assess TSO performance against measurable and ex-ante determined performance/reward metrics;
- Incentives are to elicit a certain type of behaviour. The intent of incentives should be to align the financial reward of TSO with user or consumer interest. This is not possible via a subjective assessment of efficiency but can be made via defining performance measures that are considered to be aligned with user or consumer interest (e.g. TSO trading at prices that are close to market, or balancing towards a targeted linepack change (as evidenced in Chapter 4);
- > It is appropriate that TSOs have some commercial or financial stake (i.e. "skin in the game") in an incentive mechanism, but it would be wrong to have TSOs fully exposed to any assessment of inefficiently incurred balancing costs²⁰.

The figure below demonstrates some of the Inputs to the final costs/revenues that create a total cost or revenue per Gas Day. It is not clear to ENTSOG how the resultant costs or

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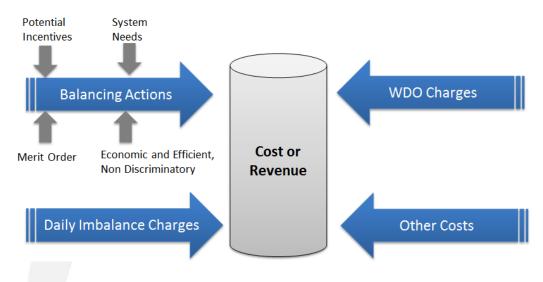
¹⁹ Brattle Report , Para. 8(c), p.4.

²⁰ This document does not discuss the vexed issue of discussion of what might constitute "balancing costs" but ENTSOG will supply an illustrative document on demand.



revenues could be tested against a simple "efficiency" test, nor whether such an approach would be considered fair.

Figure 9



Avoiding the pass-through of incentive-based gains or losses

In its dialogue with ACER's guidance on neutrality both bilaterally and at the Refinement Workshop, ENTSOG realised that another possible concern of ACER might be any gains or losses incurred via incentive mechanisms should not be included in neutrality calculations.

ENTSOG took this view into consideration, recognising that double counting for inefficient and/or efficient actions should be avoided.

Outcome/conclusion

ENTSOG concludes that the Chapter VIII is line with the FG requirement that "TSOs shall be cost neutral in relation to their balancing activities, i.e. any net costs or revenues arising from TSO balancing and financial settlement of Network User imbalances shall be passed on to Network Users."

Additionally, the text in Chapter IV, Article 17 (Incentives) addresses the FG requirement that "NRAs may incentivise TSOs to procure efficiently by allowing them to receive a payment if balancing costs are minimised to a certain level, or require them to make a payment of these are above a certain amount."

The refined draft Network Code has been amended [see Article 36(4)] to avoid the potential double counting of gains or losses from incentives and that these might be neutralised through neutrality.



2. Degree of prescriptiveness in proposed arrangements

Stakeholder feedback

Stakeholders' view on whether the Network Code should be more prescriptive or not on neutrality arrangements were quite divided. Those who supported further harmonisation contend that neutrality is a fundamental part of the balancing regime and is needed to reduce cross-subsidies (or to achieve cost targeting). Those not in favour of harmonisation contended that NRAs, having knowledge about local situations were better placed to define such rules. It should be noted, though, that no stakeholders called for the level of detail already included in the draft Network Code to be reduced.

ACER feedback

In its Draft Opinion, ACER expressed the opinion that the draft Network Code "may be going too far" in harmonising neutrality arrangements. Given the role of NRA approval on neutrality matters, it suggested that such arrangements should be defined at national level.

Analysis

Given stakeholder feedback both during the SJWS process and in the consultation response advocating that the Network Code include specifications regarding a minimum of neutrality arrangements, ENTSOG does not believe it has "gone too far"; rather, it maintains that it has found an appropriate balance between putting necessary tools/safeguards in place and allowing NRAs discretion in establishing neutrality arrangements.

Neutrality cash-flows will inevitably define redistributions between Network Users and therefore a transparent methodology is essential and should be subject to NRA approval. The methodology will define the charges and revenues to be included and the next level of detail required, including the detailed publication and invoice validation requirements. ENTSOG therefore believes the level of detail in the draft Network Code is appropriate and justifiable.

Outcome/conclusion

The scope of the refined draft Network Code section on neutrality has not been changed.

3. Transparency and information provision for neutrality arrangements

Stakeholder feedback

In consultation responses on this issue, virtually all stakeholders called for improved transparency and increased information provision in terms of both frequency and scope. No evidence was provided beyond the fact that a low level of granularity may provide insufficient to make an overall assessment of the balancing regimes.

In the context of this view and based on current 'best practice' among TSOs, the refined draft Network Code includes a requirement on TSOs to publish at least monthly aggregate data for the following categories:

> Balancing Actions;



- Daily Imbalance Charges;
- > Balancing Neutrality Charges.
- > WDO Charges;
- > other charges.

It is important for stakeholders to note that under the draft Network Code an individual Network User will also be invoiced with Balancing Neutrality Charges identified separately and accompanied by sufficient supporting information.

Outcome/conclusion

Based on stakeholder feedback, ENTSOG has prescribed that aggregate financial flows related to balancing must be published by a TSO at least once a month and per category (those mentioned above).

4. Separate neutrality pot for Variant 2

Stakeholder feedback

While views were mixed, a significant group of stakeholders called for a provision in the draft Network Code where separate neutrality pots are instituted to avoid undue cross-subsidies, such as where WDOs exist and where Variant 2 is applied.

In particular, several stakeholders sought a specific rule in which where Variant 2 is applied, a separate neutrality pot for NDM Off-takes should be established. The rationale provided was that this would reduce cross subsidisation among Network Users of the Balancing Zone. Stakeholders pointed to the fact that under Variant 2 a TSO is more likely to carry out greater Balancing Actions for NDM Off-takes than in the other models where updated forecasts provide for Network Users to trade for any changes in demand - such Balancing Actions can and should be separated from those taken by the TSO for IDM and DM Off-takes.

Analysis

The level of cross-subsidies that are likely to exist in such a regime are likely to be somewhat higher, given that a TSO may need to purchase or sell gas on a Gas Day because of forecasting inaccuracies (which by its nature is likely to be higher than the other two models). Accordingly, it is appropriate that such cost or gain should be directed to Network Users delivering gas to such customers. Clearly other balancing costs will arise for other reasons such as within day actions and as a result of Network Users not balancing their Inputs and Off-takes for a Gas Day.

Outcome/conclusion

Having considered stakeholder feedback on this issue, the refined draft Network Code provides that where Variant 2 is used, a separate neutrality pot should be established for NDM Off-takes with a view to produce a better cost-attribution.



5. Credit arrangements to protect Network Users

Stakeholder feedback

In its Draft Opinion, ACER expressed concerns about how the Network Code would allow TSOs to take necessary measures and impose relevant contractual requirements on Network Users to mitigate the default in payment. ACER maintains that the definition of "necessary measures" is potentially too broad and could include measure that are disproportionate or negatively impact on new entrants. ACER invited ENTSOG to amend this provision in order to ensure that rules for default arrangements are defined in the methodology for Balancing Neutrality Charges and that such arrangements are reasonable and do not pose undue barriers to entry.

Several stakeholders, while supporting the concept of credit protection measures, expressed similar concerns in their response to the public consultation, calling for the introduction of "reasonableness" for the credit protection measures in the Network Code. The stakeholders noted that the draft Network Code allows TSO to put default risk on Network Users. Network Users thus called for balance in the use of this measure.

<u>Analysis</u>

ENTSOG took into consideration both Network Users' and ACER's views that the additional proposals ensure that any credit arrangement measures introduced should be proportionate to the purpose and used on an equal treatment basis.

While a TSO's exposure to defaults in capacity transactions is usually restricted to the maximum amount of capacity booked or to the maximum overrun charges, there is no such restriction of credit exposure in balancing transactions. This is due to the nature of these transactions and the fact that the maximum imbalance charge depends on the difference between entry volumes and exit volumes. This difference, and the resulting financial exposures, can be extremely high even in a short time period. There is no limit on the maximum volume of transactions carried out at the hub.

There are several examples from the past showing the amount of exposure and the resulting losses for the TSO's. Where the Network User introduces volumes of gas which are lower than the volumes of gas off-takenfrom the transmission network, these imbalances will result in costs for imbalances and may potentially lead to a higher demand of balancing energy. Provided that these imbalance costs are actually paid by the Network User, the TSO can use these funds to procure balancing energy. However, if the Network User fails to pay these imbalance charges, the TSO still has to procure balancing energy without being able to cover these costs by funds from imbalance charges. This can easily lead to financial losses of millions of euros for the TSO in a relatively short time period of a few days depending on the involved volumes of imbalances. This happened recently in Germany during the winter period 2011/2012 when gas demand was very high in general.



Great Britain provides a very contrasting example. Credit risk management has been an integral part of the GB regime since 1996 and Network Users play a role in the management processes that are used to manage the community's risk.

These financial losses will be charged back to other Network Users via Balancing Neutrality Charges unless there is another way to avoid these losses. To this end, the credit risk of TSO's in respect of transactions of the hub needs to be addressed appropriately with the aim to mitigate losses of the TSO's arising from the failure of Network Users to keep their gas flows balanced. It is essential that the TSO does not only have the right to terminate contracts in case of serious breaches of this obligation. The TSO must also be in a position where financial losses can be avoided from the outset. Therefore, and for the purpose of minimising all Network Users exposure to credit risk from other Network Users balancing energy activity, the TSO should be able to require adequate credit support. The rules on credit risk in the refined draft Network Code and the National Rules are designed and applied in order to manage all Network Users financial exposure.

Article 37 should therefore entitle the TSO to take necessary measures including a demand for provision of credit support by the Network User in a form, amount and from an entity which is acceptable to the TSO with the aim to cover financial losses due to non-payment of Daily Imbalance Charges incurred in the past and potentially occurring in the future. Where the TSO has taken all necessary steps to avoid such financial losses but is still unable to cover all financial losses, the TSO shall not be liable for this loss and should be able to charge theses costs back to the community of Network Users via the Balancing Neutrality Charge.

Outcome/conclusion

The refined draft Network Code reflects the above amendments.

See Annex I for summaries of additional, lesser stakeholder issues considered in amending the refined draft Network Code.



8. Chapter IX. Information Provision

A. Presentation of topic

The FG indicates that the "network code on gas balancing shall require TSOs to provide, free of charge, to each Network User the available information regarding its Inputs and Off-takes from the Balancing Zone at appropriate intervals during the balancing period in order for Network Users to be able to balance their Portfolios."

The FG also requires that the information is provided at least twice a Gas Day and provides for a cost benefit analysis for more frequent information. It also describes different means of providing information depending on the metering circumstances in a Balancing Zone or whether Network Users can balance against a day-ahead forecast for NDM Off-takes.

Leading up-to the formal code development and during the code development, a joint Working Group with DSO Representative organisations (Eurogas Distribution Committee, CEDEC and GEODE) met regularly to progress this work stream. Several dedicated sessions were carried out on these provisions during the SJWS process to allow a detailed proposal be included within the draft Network Code.

For the avoidance of doubt, this Chapter proposes to cover information provision as related to the three information models, or "variants," of the Gas Day regime provided for in the FG. It does not cover information provision related to WDOs.

B. Summary of key issues raised in chapter

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#	Key stakeholder or ACER issue	Refine-	Rationale for Outcome	Ref. in	Ref. in
"	Key Stakeholder of ACLN 133de	itellile-	Nationale for Outcome	_	_
		ment		refined	initial
		Y or N		draft	draft
1	Features of cost benefit analysis (CBA)	Υ	Draft Network Code provides robust	Art.42	Art.44
			CBA, finding balance between speed and		
			accuracy objectives		
2	System information provision	N	Transparency Guidelines ²¹ provide for	N/A	N/A
			sufficient information		
3	Information in support of WDOs	Υ	Treatment in Chapter IV. WDOs	Art.	Art.
				32(2)(b	33(1)(b
) and)
				32(8)b	
4	Consultations for different information	N	Three existing models were foreseen in	Art.	Art.
	provision models		FG and thus do not require consultation	39(4)	40(5)

²¹ Commission Decision of 10 November 2010 amending Chapter 3 of Annex I to Regulation (EC) No 715/2009 on conditions for access to the natural gas transmission networks, *Official Journal*, L293/67, 11.11.2010.



5	DSO cost increase and need for	Υ	All parties affected should be included in	Art.	Art.
	remuneration		scope of CBA and in consultation	42(1)	44(2)
				and (2)	
6	Information accuracy: incentives/penalties	N	Accuracy deemed as important,	Art.	N/A
			becoming pillar of CBA and always and	42(1)(c)	
			option for NRA-initiated incentive		
			schemes		
7	Information granularity	N	Requires national consideration.	Art.	Art.
				39(8),	43(1)(1
)(a),
					43(2)(1
)(c),
					45(2)(1
)(d)

C. Proposed outcome in the refined draft Network Code in the context of stakeholder feedback

1. Features of CBA

Stakeholder feedback

Many stakeholders made specific comments on the provisions of the CBA, specifically:

- Accuracy is a key measure that should be assessed;
- The CBA should identify the parties that have the benefit and to whom the costs fall;
- Detailed specifications of it systems, metering, etc.;
- > The CBA should be carried out quicker than two years.

While the feedback differed among stakeholders, the general responses indicated the importance of the CBA to stakeholders.

Analysis

It is apparent that there can be a trade-off in information provision between "speed" and "accuracy". For example meter readings provided without any checks may be less accurate than those which undergo a review for errors. To that end, the refined draft Network Code includes an extra provision in the CBA in respect of accuracy, in addition to that already set-out for frequency and timing of information.

In terms of the issue of who benefits and who the costs are borne by it also may be the case that they are indeed different parties. To ensure this is taken into account and therefore ensure a robust debate on the outcome of the CBA, the refined draft Network Code specifies the categories of entities that the costs and benefits apply to should be set out.

The refined draft Network Code, however, does not include specific measures on IT costs, metering types, etc., as this is the objective of the CBA itself. To specify such measures in the



Network Code may actually hinder the CBA as technology and approaches are likely to change.

Over time. In terms of reducing the timeline to carry out the CBA, ENTSOG notes that the current text states "within 2 years". Furthermore, it is clear that the network code places many consultation obligations on TSOs as well as the roll-out of the code itself. In this context it does not seem appropriate to bring forward the CBA.

Outcome/conclusion

The refined draft Network Code reflects the above-mentioned amendments.

2. System Information Provision

Stakeholder feedback

In the public consultation on the initial draft Network Code, ENTSOG sought views on the sufficiency of the 'Transparency Guidelines' for system information. The consensus view from stakeholders was that the Transparency Guidelines indeed are sufficient, although there are cases where they are not fully implemented. In the Refinement Workshop, ENTSOG committed to informing stakeholders of developments in this area.

Analysis

ENTSOG concurs with the stakeholders that the Transparency Guidelines are sufficient for the provision of system-level information. ENTSOG is also committed to facilitating the implementation of the Transparency Guidelines, for example:

- The ENTSOG-hosted Transparency Platform publishes the information and data required of TSOs under Transparency Guidelines (as last amended by the CMP Guidelines) from 1 October 2013;
- > ENTSOG has launched a project aiming at improving the transparency, user-friendliness and data publication capabilities of its Transparency Platform. ENTSOG is currently in the process of drafting the functional specification;
- > ENTSOG frequently holds Transparency Workshops to raise awareness of the Transparency Platform and its role in the implementation of the Transparency Guidelines.

Outcome/conclusion

The refined draft Network Code does not include amendments in this area.

3. Information in support of WDOs

Stakeholder feedback

While the general consensus from stakeholders supported the three information models as described, there was also a general consensus that the chapter on Information Provision was intended for a daily balancing regime and not to support WDOs.

Analysis

The general provisions for this chapter do highlight in fact that the information is intended to support a daily regime. As discussed in Part III, Chapter 7 of this document, the refined draft



Network Code was amended [see Article 32(8)b] to clarify the information provision requirement for WDOs.

Outcome/conclusion

The refined draft Network Code was amended as explained above. As referred to earlier in this document, ENTSOG has removed the item in the refined draft Network Code specifically referring to tolerances for Within Day Obligations before the CBA is carried out. Stakeholders had indicated that this item created confusion with regard to information provision under the Network Code.

4. Consultation for different information models

Stakeholder feedback

A number of stakeholders argued that all models, including the Base Case and Variant 1, introduced after the entry into force of the network code should be approved only after a public consultation. Several stakeholders supported that the consultation for those systems using Variant 2, should also apply to existing systems, with this model in place.

Analysis

The inclusion of the clause for those that wish to implement Variant 2 allows the local stakeholders, TSO, DSO and NRA consider whether the system is appropriate in their regime, given the effect of the model differs from the Base Case and Variant 1.

Currently, there is one system which uses Variant 2: Germany. In this case, the model has undergone a full consultation the regulator has chosen this model, i.e., the model has been selected following such a consultation process and meets the requirement of the draft Network Code.

Other than the above, where models meet the requirements of the Network Code then they can be rolled out. ENTSOG do not propose to amend the refined draft Network Code.

Outcome/conclusion

The refined draft Network Code was refined for greater clarity on the text, however the effect of such text has not changed.

5. DSO cost increases and need for remuneration)recovery

Stakeholder feedback

Several stakeholders contended that distribution system operators (DSOs) are likely to have increased capital and operational costs (e.g. new meters, connection of the meter, data management) related to the implementation of this Network Code. The stakeholders noted that those whose benefit will be measured in an eventual CBA on increased information provision are not the same parties who will bear the costs of that provision. The stakeholders seek that DSOs are given guaranteed recovery of costs.

<u>Analysis</u>



The Information provision Chapter of the draft Network Code places requirements on both TSOs and DSOs for information provision, which is likely to result in extra costs for these parties. While the draft Network Code provides for neutrality for the TSO, it does not refer to set-up and operating costs.

Outcome/conclusion

The refined draft Network Code has not been amended.

6. Information accuracy: incentives/penalties

Stakeholder feedback

Several stakeholders propose that the Network Code should include obligations on TSOs to improve the accuracy of all information they provide to Network Users, thereby reducing the amount Network Users from being subject to Daily Imbalance Charges originating from inaccurate information. Respondents suggested that this could be done via incentive schemes or penalties.

Analysis

While ENTSOG considered this view, deciding that information accuracy could be made a pillar of the CBA.

ENTSOG also reminds stakeholders that NRAs have the option of introducing incentive schemes regarding information accuracy or other aspects of information provision at their discretion.

Outcome/conclusions

ENTSOG have not amended the code as the application of incentives is a task that is allocated to the NRAs.

7. Information granularity

Stakeholder feedback

Several associations and individual stakeholders raised the issue that the provision of information for Intraday Metered (IDM) on a site-by-site basis was more important than on an aggregated basis on the transmission network (and ideally on distribution).

Analysis

ENTSOG does recognise that in some systems there is value in providing individual information intra-day at least on the transmission network. It is difficult, however, to impose a harmonised rule appropriate for all systems. Some have a much lower threshold for IDM Off-takes and have large numbers of the same. Depending on National Rules, large Network Users do not want or are not entitled to this information.

Outcome/conclusion

The refined draft Network Code does not include amendments in this area.



See Annex I for summaries of additional, lesser stakeholder issues considered in amending the refined draft Network Code.





9. Chapter X. Linepack Flexibility Service

A. Presentation of topic

The FG states in 2.1 General Provisions "The network code on gas balancing shall not prevent TSOs from allocating linepack to Network Users if approved by the relevant NRA. Where linepack is sold, TSOs shall allocate the linepack to Network Users as a commercial product on a transparent and non-discriminatory basis and it shall be offered at a cost reflective price. The price may also be determined through competitive mechanisms. The decision by the relevant NRA to allocate linepack shall be based on objective criteria, including the physical characteristics of the networks, whether the provision is consistent with Section 4 of these Framework Guidelines and whether offering a linepack product would facilitate a more efficient use of the transmission system."

Based on this guidance the approach in the Network Code is to define a Linepack Flexibility Service (LFS) and then set-out criteria that such a service should meet before being put in place. These criteria were examined with stakeholders during the SJWS process.

B. Summary key issues raised in chapter

#	Key stakeholder or ACER issue	Refine-	Rationale for outcome	Ref. in	Ref. in
		ment		refined	initial
		Y or N		draft	draft
1	LFS should be limited to an "explicit	Υ	Use of an explicit LFS also encourages Network Users	Art.	N/A
	service"		to maximise their forecasting accuracy, thereby	44(6)	
			reducing the TSO's role in balancing	and (7)	
2	Criteria pertaining to offering of LFS	Υ	Stakeholder suggestions for additional or revised	Art.45	Art.47
			criteria to those in the initial draft Network Code		
3	Criteria may be too strict to offer	Υ	Some criteria may have prevented its offering	Art. 45	Art. 47
	service				

C. Proposed outcome in the refined draft Network Code in the context of stakeholder feedback

1. Linepack Flexibility Service should be limited to an "explicit service"

Stakeholder feedback

A European Association favoured that only an explicit LFS should be permitted under the Network Code. An explicit LFS means Network Users must nominate to TSOs for its intended use.



Analysis

This topic was also explored at the SJWS where many stakeholders indicated a similar preference. An explicit service is consistent with the overall objective of the FG in that Network Users bear responsibility for their Inputs and Off-takes.

In some circumstances, use of an implicit service can lead to unintended consequences. For example, there may be implications on the information requirements. Network Users are likely to seek a final Daily Imbalance Quantity immediately following the Gas Day, meaning that the DSOs and TSOs must provide final Allocations early the next Gas Day. This can come at the cost of accuracy, meaning the volumes of gas that are dealt with through reconciliation are likely to increase.

Use of an explicit LFS also encourages Network Users to maximise their forecasting accuracy, thereby reducing the TSO's role in balancing. Further the provision of nomination provides the TSO with an early indication of the Network Users' intentions for the Gas Day.

Taking these matters into consideration, the refined draft Network Code includes provisions requiring that the use of a LFS must be via nominations, i.e., as an explicit service. It also provides that an "implicit service" can be used at the TSOs discretion, providing that the change to non-nominated service

- a) does not undermine the development of the Short Term Wholesale Gas Market; and
- b) the TSO has sufficient information to provide an accurate Allocation of the use of a Linepack Flexibility Service the following Gas Day.

Outcome/conclusion

In light of stakeholder feedback, the refined draft Network Code has been amended so that so that the use if an LFS must be via a nomination, i.e., an explicit service and the use of an explicit service must meet some additional criteria.

2. Criteria pertaining to offering of Linepack Flexibility Service

Stakeholder Feedback

Stakeholders raise some specific issues regarding the criteria proposed for offering an LFS:

- The product should be offered at a market price not a cost price;
- The criteria allow the retention of an existing WDO in parallel with a WDO;
- > The product offering should match that of gas storage offerings;
- > The effect on market liquidity should also be a criterion to be assessed.

Analysis

It is not clear what offering the product at "a market price" actually means. As the product is likely to have quite different characteristics from a common gas storage products, there is unlikely to be a market price. By offering the product at a minimum cost price, it ensures



that it protects those not using it from any exposure while at the same time letting the market find the true value of the product.

With regards to the point that existing WDOs may not be reduced and at the same time an LFS is offered, ENTSOG has refined the text to incorporate such a scenario. The refined draft Network Code clearly prioritises the reduction of a WDO ahead of the offering of a LFS.

In terms of adding the effect on market Liquidity as an assessment criterion, it is not clear how such an assessment could be made. Furthermore, services offering Network Users' flexibility, such as this and gas storage facilities, are usually helpful in providing Network Users' flexibility and supporting the development of Liquidity. Also the following item was inserted into the refined draft Network Code for additional clarity on the impact of the service: "Gas delivered to and off-taken from the transmission network by these Network Users under this service shall be taken into account for the purpose of calculation of their Daily Imbalance Quantity."

Outcome/conclusion

In light of stakeholder feedback, the refined draft Network Code establishes the reduction of WDOss should be prioritised by the TSO ahead of offering a linepack service.

See Annex I for summaries of additional, lesser stakeholder issues considered in amending the refined draft Network Code.



Chapter XI. Interim Measures

A. Presentation of topic

Roadmap concept and interim steps

The FGs foresee:

- > Possible use of interim measures for up to five years where the wholesale market is insufficiently liquid;
- > TSOs to propose a roadmap of any use of interim measures, which will be the subject of consultation and which shall be approved, or modified, by the NRA;
- > The roadmap will be updated and approved as necessary;
- > Interim measures comprising: Tolerances, Balancing Platforms, TSO release of surplus gas flexibility and interim cash-out price determination.

Other interim measures to foster market development may be helpful and therefore the refined draft Network Code envisages that other enabling mechanisms may be useful in the transition including Portfolio nominations (respectively re-nominations) rules that help focus Liquidity and additional transparency (at TSO discretion) about announcement of its Balancing Action requirements.

Tolerances

The FG states that the Network Code may allow TSOs to introduce a Tolerance as an interim measure as a means of reducing a Network User's financial exposure to the Marginal Buy Price and Marginal Sell Price. A Tolerance can facilitate the transition to the BTM in circumstances where Network Users do not have access to a liquid Short Term Wholesale Gas Market or to sources of flexible gas. The FG mandate that the Tolerance Level should reflect genuine system flexibility and user needs.

There was a consensus among stakeholders in the SJWS process that the use of carry-over tolerances would be counter to the concept of daily balancing — in particular, given it is preferable to cash-out all imbalances on a day. A price tolerance approach was preferred because it better attributes costs to a day, prevents accounting complications arising from the interdependence between days and also provides for an easier transition to the preferred outcome of imbalance cash-out at marginal prices.

ENTSOG concluded, again via the SJWS process, that the price used for the Tolerance should be the WAP and to avoid a more complicated approach of applying scaling factors between this average price and the marginal prices. The TSO's roadmap of interim measures should be used to define the Tolerance Level that can be applied.

The FG also links the potential need for a Tolerance to the access or not of Network Users to Flexible Gas. During the SJWS process, stakeholders indicated that accurate information was important for Network Users to manage their risk. In the absence of such information, a



tolerance could be used to deliver acceptable exposures and with an acceptance that some socialisation of costs is appropriate. Accordingly, a new criterion for Tolerances was included in the initial draft Network Code: that a Tolerance can be used where Network Users do not have sufficient information regarding their Inputs and Off-takes.

The SJWS process also drew attention to the issues associated with information about NDM Off-takes. For many countries, given that the provision of NDM Derived Forecasts or apportionments will be a new requirement, it is likely to take time to establish accuracy in some cases.

Balancing Platforms

The FG specifies that where a wholesale market is insufficiently liquid the Network Code shall provide for TSOs to procure their Flexible Gas and Balancing Services on a Balancing Platform. Balancing Platforms shall only be used as an interim step towards the creation of a liquid wholesale market and may cover more than one Balancing Zone. Any Network User shall have the right to participate in the use of the Balancing Platform.

The FG also specifies, however, that the Network Code shall allow TSOs to seek from the NRA an exemption from the requirement to establish a Balancing Platform and instead obtain the permission to enter into a contract with one or more providers of Flexible Gas.

TSO sale of gas

The FG provides for the Network Code to require TSOs, if using Balancing Platforms, to buy and sell Flexible Gas transparently and on a non-discriminatory basis through a system of bids and offers.

The FG also calls for the Network Code to:

- > require, where long term contracts for the procurement of Flexible Gas are already in place and provide TSOs with an option to take specific volumes of Flexible Gas, that the volumes of Flexible Gas covered are to be reduced;
- > include arrangements for TSOs or the undertaking holding the Flexible Gas to release back to the market any surplus gas which is not required for balancing purposes in any given balancing period, in order that network users have access to greater volumes of Flexible Gas.

ENTSOG is to consult on the rules of procedure for the release of Flexible Gas, and the relevant NRA(s) may set targets regarding the proportion by which these long term contracts should be reduced in order to increase Liquidity in short term gas markets.



B. Summary of key issues raised in chapter

#	Key stakeholder or ACER issue	Refine- ment Y or N	Rationale for outcome	Ref. in refined draft	Ref. in initial draft
1	General: Proposal for criteria to guide NRAs in establishing additional interim measures	N	Provision, as per FG, is included in legal text	Article 47(4); Article 48	Article 49(3); Article 50
2	General: Identification of specific ENTSOG monitoring and reporting activities	N	ENTSOG's monitoring tasks are already described in the Regulation	N/A	N/A
3	General: Incorporating LNG in Balancing Zone in "smaller markets"	Y	Lack of justification for exemption	N/A	Art. 51(2)(2)(b)
4	Tolerances: Limitation on application	Y	Text clarified that they only can be used for reasons outlined.	Art.49(v)1	Art. 51(5)1
5	Tolerances: Obligation for TSO to offer	N	NRA has option to introduce tolerance	N/A	N/A
6	Tolerances: Structure of quantities	N	Tolerances not restricted to NDM, also allowed for IDM and DM	Art. 49(v)(6)	Art. 51(5)9
7	Tolerances: Mechanism for NDM tolerance relief	N	NDM relief mechanism is an option and not an obligation under the Network Code. It is designed to function at a Network User level.	Art. 49(v)8	Art. 51(5)9
8	Balancing Platform: obligation on Networks Users to offer available flexibility	N	It would be beyond the scope of the network code to place obligation on the Network Users to use the Balancing Platform	N/A	N/A
9	Balancing Platform: interim measures with 3- instead of 5-year duration	N		N/A	N/A
10	TSO sale of surplus gas: Measures to assess liquidity in the short term balancing markets	Y	Reference to a definition of Liquidity for NRAs in approving in the interim measures	Art. 48(4)(b)	N/A
11	TSO sale of surplus gas: Measures to enable wider access to short term gas flexibility	N	Considered to be out of scope of the Network Code.	N/A	N/A
12	TSO sale of surplus gas: Clarity needed on determination of volume and release of gas into market	N	Determining extent will be challenging. ENTSOG shall consult stakeholders on rules of procedure	N/A	N/A



C. Proposed outcome in the refined draft Network Code in the context of stakeholder feedback

1. General: Proposal for criteria to guide NRAs in establishing additional interim measures Stakeholder feedback

A stakeholder was of the view that some common criteria should be set to be followed by NRAs that want to introduce interim measures.

Analysis

The initial – and now refined – draft Network Code includes a set of provisions for the NRAs role in interim measures [see Article 47(4) and Article 48].

Outcome/conclusion

The refined draft Network Code does not include amendments in this area.

2. General: Identification of specific ENTSOG monitoring and reporting activities

Stakeholder feedback

A respondent argued that the detailed monitoring activities that ENTSOG are required to perform should be specified in the Network Code. This could include providing indicators of the quality of information on NDM and system integrity given by the TSO and the Network User, market Liquidity, cash-out price volatility and the TSOs Balancing Services subscription evolution. Further, ENTSOG should provide sufficient evidence and deliver to ACER and NRAs.

Analysis

The roadmap will define the interim measures to be defined and their sequencing designed to remove the interim measures. The roadmap will also identify the criteria for making the steps. Thus the TSOs will, where appropriate, have a responsibility via the roadmap to monitor and report the relevant information. ENTSOG's monitoring tasks are already described in the Regulation, and guidance from the EC indicates it is not appropriate for them to be repeated in the Network Code.

Outcome/conclusion

The refined draft Network Code already implies, via the roadmaps, the requirement for monitoring and reporting. Therefore, no refinement is considered necessary.

3. General: Incorporation of LNG in Balancing Zone in small markets

Stakeholder feedback

By and large stakeholders were confused by the question regarding LNG in the Balancing Zone. The view is that LNG terminals are entry points to the Balancing Zone and a terminal can be a source of Flexible Gas. If the TSO is looking for a Balancing Service and the LSO is offering, then the TSO can consider this option as any other.

<u>Analysis</u>



ENTSOG agrees with stakeholders that a rationale for this exemption on the part of ACER is missing.

The FG provides no basis for why to include Flexible Gas in LNG facilities as part of the Balancing Zone. LNG traditionally sits just outside of the Balancing Zone; LNG is normally regarded as an Entry Point into a Balancing Zone. The gas in LNG tanks is therefore not in the Balancing Zone but available for input into the Balancing Zone by those that have the rights to introduce it.

The suggestion that LNG facilities might be within the Balancing Zone raises interesting questions about where the relevant Entry Point to the Balancing Zone might be; is it at the port jetty or could it is at the pipe connecting to the gas liquefaction plant where gas received is via pipeline?

Given the nature of LNG facilities (effectively supplying some local storage at the edge of the Balancing Zone) their inclusion might create significant daily imbalances for Network Users taking delivery of substantial quantities of gas (relative to their Portfolio size in small markets).

It is also not clear to ENTSOG whether TSOs are expected, or allowed, to have any influence over the quantities of gas in or to be extracted from the LNG facility.

Without understanding the basis for the exemption specified in the code or its potential consequences and particularly the risk of unintended consequences ENTSOG has chosen not to include this exemption in the refined draft Network Code despite the fact that it constitutes a deviation from the FG.

Outcome/conclusion

The refined draft Network Code does not include amendments in this area.

4. Tolerances: Limitation on application

Stakeholder Feedback

A European trade association, a pan-European Network User and a few other stakeholders said that Tolerances should be prohibited to only when there is insufficient information available and /or there are inadequate sources of Flexible Gas.

Analysis

It was not ENTSOG's intent to make use of Tolerance unconditional; therefore, the circumstances for its use have been limited to those proposed in the initial draft Network Code.



Outcome/conclusion

To make the above-mentioned intent explicit, the refined draft Network Code now contains a requirement stating that tolerances can 'only' be applied in cases where Network Users do not have access to either:

- > a Short Term Wholesale Gas Market that has sufficient Liquidity or short-term flexible gas; or
- > sufficient information regarding their Inputs and Off-takes.

5. Tolerances: Obligation for TSO to offer

Stakeholder feedback

A European trade association and several stakeholders argued that Tolerances should be required where there is insufficient information available and an illiquid market, or insufficient sources of Flexible Gas. An example cited by one of the stakeholders is the link to 2% NDM Derived Forecast accuracy is provided as a benchmark for offering Tolerances.

Analysis

The interim measures enable the provision of Tolerances although they do not mandate them. The NRA will have discretion²² to decide on whether Tolerances are indeed required and if so the structure and level at which they should be set taking account of local circumstances and the desirability of encouraging Network Users to trade.

Outcome/conclusion

The refined draft Network Code does not include amendments in this area.

6. Tolerances: Structure of quantities

Stakeholder feedback

A few stakeholders raised concern that tolerances would be restricted only to NDM information flows, explaining that shippers/Network Users serving big (IDM and DM) customers, in absence of any guarantee on the accuracy of metering, could be subject to wider and less predictable variations (i.e. not only related to temperatures, but also to other factors, such as production decisions or the outcomes of the electricity market).

Analysis

ENTSOG clarifies to stakeholders [see Article 49(v)(6)] that Tolerances are allowed under the NC for IDM and DM. They are not restricted to NDM, for which more an option for a particular elaboration is given [see Article 49(v)(8)].

Outcome/conclusion

The refined draft Network Code does not include amendments in this area.

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²² See the Regulation, Article 41



7. Tolerances: Mechanism for NDM tolerance relief

Stakeholder feedback

A stakeholder questioned whether the mechanism for NDM tolerance relief proposed in Article 49(v)(8) [see figures below] would actually be feasible where entry and exit flows are not linked. The stakeholder and another also argued that Tolerances should be allowed in both directions.

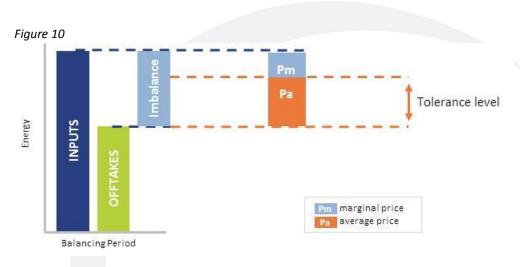
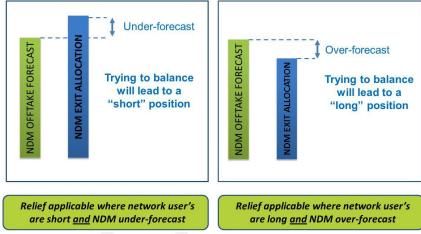


Figure 11





Analysis

Firstly, the application of an NDM relief mechanism is an option and not an obligation under the Network Code.

Secondly, for the NDM tolerance relief proposed [see Article 49(v)(8)] is designed to function at a Network User level. It takes account of aggregated Inputs and Off-takes into a daily balancing account and the NDM aggregated quantity that is part of the exit Allocation.



Outcome/conclusion

The refined draft Network Code was not amended in this area.

8. Balancing Platform: Obligation to offer available flexibility

Stakeholder feedback

A stakeholder saw this as a positive tool to develop Liquidity and facilitate shippers' participation in the balancing market.

Analysis

The FG provides that Balancing Platforms are to be used as an interim step towards the creation of a liquid market and to oblige the TSOs to buy and sell Flexible Gas through a system of bids and offers where the Network User has a right to participate in the use of the Balancing Platform. However, it would be inappropriate for the Network Code to place an obligation on the Network Users to use the Balancing Platform or to offer its full flexibility on the Balancing Platform.

It is essential that Balancing Platforms attract sufficient Flexible Gas and so any steps that NRAs could take to enhance the prospects of Network Users offering flexibility on the Balancing Platform would support market development and the prospect of establishing a deep, liquid Short Term Wholesale Market.

Outcome/conclusion

The refined draft Network Code does not include amendments in this area.

9. Balancing Platform: interim measures with 3- instead of 5-year duration

Stakeholder feedback

One stakeholder argued that the timeline for the interim measures related to operational balancing should be shortened from five to three years thereby speeding up the harmonisation process.

Analysis

Even though TSOs (or stakeholders) in mature might be able to make the transition to a 24/7 Trading Platform within a shorter period, the FG clearly state states that interim measures can apply for a maximum of five years. And, where an NRA assesses that a TSO roadmap for a particular interim measure is no longer valid, it can withdraw its approval.

Outcome/conclusion

The refined draft Network Code will still provide for an implementation period for five years for stakeholders to comply with the provisions of the Network Code.



10. TSO sale of surplus gas: Measures to assess Liquidity in the short-term balancing markets

Stakeholder feedback

Stakeholders in general were looking for more indicators of Liquidity in the Network Code which could give guidance for assessing Liquidity in the national market. Liquidity was thought to be best assessed on a national level and that stakeholders should be part of the assessment of the Liquidity of a market. Some stakeholders also reasoned that TSOs should start using the short term market without waiting for all the indicators of Liquidity to be fulfilled.

Analysis

The respondents stressed a number of features that the TSO could consider when assessing the Liquidity of the market. These following criteria could give a good measurement of the Liquidity of the product: if a criterion scores high, then that will be an indication of good Liquidity. A low score on the market features listed in Article 48(4)(b) would be interpreted to indicate low Liquidity.

Outcome/conclusion

The refined draft Network Code has been amended as indicated above.

11. TSO sale of surplus gas: Measures to enable wider access to short term gas flexibility Stakeholder feedback

Some respondents felt additional measures to access short term flexibility could help create more coherence between adjacent systems including access to storage, gas release programs and market making schemes.

Analysis

Since the FG do not contain provisions regarding access to gas storage or gas release programs, ENTSOG cannot consider any refinements in the draft Network Code in this regard. These are normally contractual arrangements.

The competitive nature of short term gas flexibility supply into the market is critical to the successful implementation of the Network Code; therefore, ENTSOG welcomes any initiative from market players and other actors to enhance the prospect of supply side flexibility.

Outcome/conclusion

The refined draft Network Code will not be amended in this area.



12. TSO sale of surplus gas: Clarity needed on determination of volume and release of gas into market

Stakeholder feedback

Some respondents expressed the need for more clarity on how volumes were to be determined and on what incentives the TSO would have to release it to the market.

Analysis

The release of TSOs' surplus flexibility may afford a significant opportunity to create an enhanced offering on the short-term flexible gas market. Determining the extent to which TSOs may have surplus flexibility will be a challenging issue that ENTSOG believes ACER recognised in the formulation of the FG. ENTSOG shall consult stakeholders on rules of procedure to apply for the release of TSOs' surplus flexibility [see Art. 49(iii)5].

It is clear that the release of surplus flexibility has wider financial implications that must be addressed. The use of incentives, as defined in Article 17, may have a significant role to play in this regard. ENTSOG's work may develop the generic framework within which TSOs are able to propose appropriate incentives to the NRAs.

Outcome/conclusion

The refined draft Network Code does not include amendments in this area.



ANNEX I – OTHER STAKEHOLDER ISSUES

The following are additional issues raised by stakeholders and given consideration relative to the refined draft Network Code. They have been included in this annex for the sake of brevity and readability in selected chapters of Part III.

Chapter IV. Operational Balancing

- > **Definition of block size**. A few stakeholders argued that the Network Code should include a definition of block size, appealing to the need for harmonised EU standards. Some stakeholders called for the definition of a minimum block size, allowing Network Users to balance even very small Portfolios. The definition of a minimum block size would also be beneficial for small trading counterparties, they argued, allowing them better market participation. Other stakeholders called for the Network Code to establish a process whereby the block size would be defined by Balancing Zone or by Member State, ensuring that block sizes would be appropriate for local circumstances. ENTSOG did not accept this argument, maintaining that the matter should be defined by the market. The refined draft Network Code thus does not include such a definition.
- Network code too prescriptive regarding the contractual structure and arrangements between the different parties. A stakeholder thought that some technicalities and conditions should not be relevant for using the Trading Platform and that the TPO should have the freedom to design its service to accommodate the market's needs. ENTSOG maintains that the Network Code cannot regulate Trading Platforms. It can require the TSO to choose or establish a Trading Platform that meets the criteria. The refined draft Network Code does, though, clarify that a Trading Platform is a platform at which the TSO trades for balancing purposes.
- > TPO cannot bear the risk of seeing a trade being cancelled. A stakeholder was not in favour of making the TPO responsible for nominations on behalf of a Network User that has entered into a locational trade, unless this is foreseen by local regulation. The Network Code does not link accepting/rejection of trade notification to the associated (re-)nomination in a locational trade.
- One Trading Platform per Balancing Zone. A stakeholder argued that the draft Network Code should restrict the number of Trading Platforms to one per Balancing Zone, maintaining that this would ensure that any Liquidity generate within the market would remain there. ENTSOG had doubts about this view, maintaining that such a restriction potentially could create a monopoly which could engage in anti-competitive or discriminatory behaviour. The refined draft Network Code has not been amended in this area.
- > **Temporal product as an interim measure**. Most respondents supported the four STSPs proposed in the draft Network Code and the merit order to guide their use. They argued that the Temporal Product should only be used as an interim measure in the transition to the BTM. The inclusion of a Temporal Product in the merit order caused concern for a few respondents. ENTSOG maintains that the placement of a Temporal Product within the merit order is intended to reflect that the product is not expected to be used widely.



Also the use of the STSPs via the merit order also addresses the concerns raised. The refined draft Network Code does not include amendments in this area.

- > Hourly trade notifications. One stakeholder argued that hourly trade notifications should only be used for Temporal Products or Locational Products. ENTSOG maintains that when nominations are made on an hourly basis, then trade notifications should be made on an hourly basis. Applying this same approach to Title Products, the refined draft Network Code will maintain this provision. The refined draft Network Code does not include amendments in this area.
- Units being defined in MWh. It is the view of one European association, it should be obligatory for trades to be notified in MWh. For the sake of consistency across network codes, ENTSOG has deferred to the CAM draft Network Code and draft Framework Guidelines on Interoperability²³ where it is established that notifications should be in KWh. The refined draft Network Code does not include amendments in this area.
- Obligation on Locational Product trades. A few stakeholders suggested introducing an obligation on the Network User to flow at least the amount traded via a Locational Product trade. The proposal does not cover the intent of the Locational Products. The aim of the Locational Product is to get a specific flow change at a group of Entry and/or Exit Points. This can be a reduced flow at an Entry and/or Exit Point. This is not covered by the minimum flow requirement suggested in the proposal from stakeholder. The refined draft Network Code does not include amendments in this area.

Chapter V. Nominations

- Clarity on nomination rejections due to interruptible capacity. Several stakeholders expressed the opinion that the text on nomination rejection due to interruptible capacity being offered by the TSO was confusing, ENTSOG has redrafted this section so it is more easily understood.
- > **Timing in definitions or not.** Several stakeholders indicated that the text was difficult to read due to the specific times being provided for in the definitions section. ENTSOG have refined the draft Network Code so these timelines are now in the body of the Chapter on nominations.
- Single nominations in respect of bundled capacity. ACER indicated the Network Code should stipulate TSO and NRA cooperation is needed in order to introduce single nominations in respect of bundled capacity. ENTSOG has added this requirement for TSOs although have not included it for NRAs as each NRA will have oversight on the rules pertaining to the respective TSO.
- Compatibility with other network codes. Some stakeholders and ACER questioned whether the code was compatible with the CAM draft Network Code and CMP Guidelines. ENTSOGs view is that it is except for the timing of within day capacity auctions. It is proposed the CAM draft Network Code is amended to remediate this issue.

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²³ See footnote 6.



Chapter VII. Within Day Obligations

- > WDO charges possible only where the TSO would incur an actual cost. At the Consultation Workshop held on 19 May 2012, a European trade association argued that a WDO should be imposed on Network Users only where the TSO actually would bear a cost in the absence of the Network Users complying with the WDO. ENTSOG maintains that this condition has been instituted within the initial and now refined draft Network Code, pointing to Article 32(2)(d).
- > Preference for WDO on system imbalance. Some stakeholders argued that, if needed, preference should be given to WDOs of a type where the total system imbalance is the trigger for any TSO Balancing Actions. ENTSOG did not find this a valid argument, given that all the different types of WDO can be provide for this approach if desired. The draft Network Code did not introduce any preference or priority. ENTSOG maintains that the various criteria in the FG, which were transposed into the Network Code, will ensure that a NRA decides effectively for which types of WDOs are appropriate for the market circumstances in that Balancing Zone. The refined draft Network Code was thus not amended in this area.
- NRAs to solely design WDOs. A stakeholder expressed a strong preference for a NRA to design and impose a WDO wherever it was justified in a Balancing Zone. ENTSOG did not give credence to this argument, deferring to the FG which specifically bestows this competence on TSOs. The refined draft Network Code was thus not amended in this area.
- Need for additional criteria for assessing WDOs. Numerous stakeholders proposed additional criteria for determining whether a WDO should be introduced. ENTSOG had doubts about these views, maintaining that the criteria in the draft Network Code will ensure that the introduction or renewal of a WDO will reflect genuine system needs. As genuine system needs vary from one system to another, a 'one-size-fits-all' approach would be inappropriate. As per the FG, there is also a criterion requiring the assessment of any impact on cross-border trade. The refined draft Network Code thus was not amended in this area.
- Flow restrictions and change rates should be under NRA approval. A stakeholder called for any flow restrictions and change rates which might be related to a WDO to be set by the NRA. ENTSOG had doubts about this view, as flow restrictions and change rates are normally a feature of the capacity contract. The refined draft Network Code thus does not contain such a provision. The refined draft Network Code was thus not amended in this area.

Chapter VIII. Neutrality arrangements

Credit arrangements. A European association of Network Users, including a SJWS Prime Mover, argued that credit arrangements clause in the initial draft Network Code, Article 38(3), appear to be limited to only cover the risk of default of payment on Balancing Neutrality Charges and not all the financial flows that arise due to balancing such as, Daily Imbalance Charges, Balancing Actions, etc. ENTSOG did not intend that the default arrangements were limited to only the neutrality charges and do indeed apply to the



wider cash flows that arise because of balancing. To that end, the refined draft Network Code has been amended to provide clarity on this.

- > Invoicing. A single stakeholder called for the Network Code to impose monthly invoicing on TSOs. ENTSOG notes the view especially given the frequency of invoicing links to collateral requirements and hence ease of market entry. However, this relates to settlement which is outside the scope of the Network Code. It is noted, however, that in Article 8, Item 6 of the Regulation does reference 'settlement rules'. The refined draft Network Code thus does not include amendments in this area, given the network code scope established in the FG and given the separate provision for Settlement in the Regulation.
- > Financing costs as "other charges". A European association of Network Users, including a SJWS Prime Mover, supported the policy that any financing costs related to TSO Balancing Actions be specifically set-out among the "other charges" in the calculation of Balancing Neutrality Charges. As financing costs are a second-level costs, their specification and those of similar charges is not appropriate for the refined draft Network Code. The refined draft Network Code does not include amendments in this area.
- Neutrality charges vs. transmission tariffs. A large majority of stakeholders argued that balancing costs should be recovered separately from transmission tariffs. Stakeholders argued that in situations where the neutrality costs were significant, the resulting changes to transmission tariffs could distort cross-border trade. The refined draft Network Code does not make any changes in this area as ENTSOG believes that the Regulation already obliges separate transmission and balancing charging.

Chapter IX. Information Provision

- Average market price as reconciliation price. A small number of stakeholders contend that the Network Code should mandate that the reconciliation price is the average market price, maintaining that it is a risk which is outside of their control/management. ENTSOG considers this reconciliation to be outside of the scope of the FG and thus the Network Code. The refined draft Network Code does not specify details on the reconciliation process as this is out of scope.
- After-the-day information. Stakeholders raised some queries on the initial draft Network Code on the Imbalance settlement [see Article 31] when considered against after-the-day information [Article 42], for example,
 - how would information provision after the day be considered?
 - which information feeds into each model for final imbalance?
- The refined draft Network Code now sets out clearly [see Article 42] the information provided after the day, but also which information feeds into the Daily Imbalance Quantity for each of the three models.



Chapter X. Linepack Flexibility Service

- > National Rules to determine inclusion in neutrality pot or not. Some stakeholders and ACER queried the intention of Article 46(2) in the initial draft Network Code which indicates that the offering of LFS shall be dealt with separately to the neutrality mechanism. This text was intended to mean that the revenues from such a service would be handled on a national basis. However, ENTSOG did not intend that this meant such revenues could not be included in the neutrality pot, if such a decision was made. The refined draft Network Code has been amended accordingly [see Article 44(5)].
- > **Definition of LFS**. The definition of the service was queried in the sense it was not quite clear enough. ENTSOG have amended the definition in order to provide greater clarity. The definition has also been moved from the definitions section to the main body of the text in order to improve the readability of Chapter.
- > Strictness of criteria. A stakeholder questioned whether the criteria, as set-out in the initial draft Network Code, were so strict as to potentially prevent the offering of a LFS. ENTSOG have examined these criteria and removed the Article 47(1)(g) provision in the initial draft Network Code: "The provision of a LFS should not lead to an increase in TSOs' Balancing Actions". It is likely such actions may be needed; however, the key is that those that contract for the service are the party that pay these costs and this is enshrined in the Network Code. Other safeguards are in place to protect Network Users not availing of this service.