

ERGEG principles

Capacity allocation and congestion management in European gas transmission networks

Ref: E09-GNM-10-03 10 December 2009

European Regulators' Group for Electricity and Gas Contact: Council of European Energy Regulators ASBL 28 rue le Titien, 1000 Bruxelles Arrondissement judiciaire de Bruxelles RPM 0861.035.445



INFORMATION PAGE

Abstract

This document E09-GNM-10-03 is an ERGEG document on Capacity Allocation Mechanisms and Congestion Management Procedures.

This document seeks to provide an overall picture of ERGEG's principles on Capacity Allocation Measures and Congestion Management Procedures on European Gas Transmission Networks.

Target Audience

Energy suppliers, traders, gas/electricity customers, gas/electricity industry, consumer representative groups, network operators, Member States, academics and other interested parties.

If you have any queries relating to this paper please contact:

Mrs. Fay Geitona

Tel. +32 (0)2 788 73 32

Email: fay.geitona@ceer.eu

Related Documents

CEER/ERGEG documents

- "Pilot Framework Guideline on Capacity Allocation on European Gas Transmission Networks", ERGEG, December 2009, Ref. E09-GNM-10-05
- "Pilot Framework Guideline on Capacity Allocation on European Gas Transmission Networks Impact Assessment", ERGEG, December 2009, Ref. E09-GNM-10-06
- "Recommendations for Guidelines adopted via comitology procedure on Congestion Management Procedures on European Gas Transmission Networks", ERGEG, December 2009, Ref. E09-GNM-10-07
- "Recommendations for Guidelines adopted via comitology procedure on Congestion Management Procedures on European Gas Transmission Networks – Impact Assessment", ERGEG, December 2009, Ref. E09-GNM-10-04





Table of contents

Listin	g of A	bbreviat	ions	v	
Exec	utive	Summar	у	. 1	
Introd	ductio	า		3	
1.	ERGI 1.1	EG's approach to CAM and CMP ERGEG priorities on CAM and CMP			
		1.1.1	Stability and security of access	6	
		1.1.2	Short-term flexibility	6	
		1.1.3 conaes	Enhancing the utilisation of infrastructure and removing contractual tion	7	
	1.2	Towards the single EU gas market: what target model?			
		1.2.1 points	Harmonisation of capacity products, CAM and CMP at interconnection	8	
		1.2.2	Promoting cooperation between adjacent TSOs	8	
	1.3	Overvie	ew of the proposed CAM and CMP	. 8	
	1.4	Synthes	sis of the public consultation	. 9	
2.	ERG	EG's prir	nciples on CAM and CMP	11	
	2.1	Legal b	ackground	11	
	2.2 \$	Scope of	the principles	12	
		2.2.1	General scope of application	12	
		2.2.2	Existing contracts	13	
		2.2.3	Other issues related to CAM and CMP	13	
	2.3	ERGEG principles on general issues14			
		2.3.1	Implementation of compatible products and procedures	14	
		2.2.1	Cooperation between adjacent TSOs	14	
		2.3.2	Minimum requirements for capacity calculation	14	
		2.3.3	Network security and emergency	15	
		2.3.4	Incentivisation	15	
	2.4	ERGEG	G principles on capacity offer	15	
		2.4.1	Bundled products	16	
		2.4.2	Capacity duration	16	
		2.4.3	Capacity products of one year and less	17	
		2.4.4	Intra-day capacity	17	
		2.4.5	Interruptible products	17	



2.5	ERGEG principles on capacity allocation mechanisms		
	2.5.1	Allocation of existing capacity	18
	2.5.2	Capacity booking platforms	19
2.6	ERGEG principles on congestion management procedures		
	2.6.1 commi	Increasing firm capacity offered: purchase of system energy, e.g. flow the timent and capacity buy back	19
	2.6.2	Firm short-term UIOLI	20
	2.6.3	Long-term UIOLI	20
	2.6.4	Secondary market	21



Listing of Abbreviations

AGGM	Austrian Gas Grid Management
CAM	Capacity allocation mechanisms
СМР	Congestion management procedures
DG Comp	Directorate General for Competition
ENTSO-G	European Network of Transmission System Operators for Gas
ERGEG	European Regulators Group for Electricity and Gas
FCFS	First come, first served
GGPOS	Guidelines of Good Practice for Open Season Procedures
NRA	National Regulatory Authority
OSP	Open Subscription Period
TSO	Transmission System Operator
UIOLI	Use it or lose it



Executive Summary

In July 2009, the 3rd Package was adopted by the European Union and published at the Official Journal of the European Communities on August 14. This package includes two directives on electricity and gas respectively, as well as three regulations on access rules to electricity and gas networks and the creation of the Agency for Cooperation of Energy Regulators (ACER). These texts will enter into force on March 3, 2011.

Concerning natural gas, the 3rd Package aims at deepening market integration by improving regulatory harmonisation throughout Europe through the adoption of European network codes. The preparation of network codes will be a two-step process: the ACER will develop framework guidelines on specific topics which will be translated into codes by the European Network of Transmission System Operators for Gas (ENTSOG). During the interim period before the entry into force of the 3rd Package, this drafting process is tested by ERGEG and GTE+ on the topic of capacity allocation.

This document therefore aims at setting ERGEG's position on capacity allocation mechanisms (CAM) and congestion management procedures (CMP). It sets out a revised version of ERGEG principles on CAM and CMP published in January 2009. These principles constitute the basis for ERGEG works on these issues and, in particular, the development of a draft framework guideline on CAM and a proposal for revising the annex to the Regulation 1775/2005 on CMP.

A target model for the EU gas market

The challenge of building the EU gas market consists of moving from several interconnected national markets to a single market made of several interconnected balancing zones. In this perspective, facilitating gas flows across interconnections is considered as a priority objective of the future network codes. The focus is given to developing compatible rules on the two sides of interconnection points, which includes the same products and the same allocation procedures. The objective is to create bundled products at all the IPs which would constitute bridges between adjacent markets. In the end, a small number of capacity products should be applied all over Europe with coordinated and converging allocation mechanisms; auctions are the preferred model while pro-rata would be allowed as interim step.

The pilot project of framework guideline and network codes

The European energy regulators have committed to work diligently during the interim period between the adoption of the 3rd Package and the date when the Agency for the Cooperation of Energy Regulators (Agency) is able to fully exercise its powers. The aim is to provide assistance to the Agency in view of framework guideline development when the 3rd Package enters into force. In addition, it was decided to develop pilot projects for electricity and gas to test the drafting process as foreseen by the 3rd Package. Following ERGEG's consultation document on CAM and CMP, the European Commission decided that the gas pilot would focus on capacity allocation and officially sent a letter on September requesting ERGEG to prepare a framework guideline to be presented at the Madrid Forum in January 2010. The draft framework guideline will then be consulted upon from January to March; final guideline being foreseen by may 2010.



On the other hand, some proposals of amendments to the annex of the Gas Regulation¹ have been developed on the basis of ERGEG principles. The objective is to rapidly adopt new provisions allowing to reduce contractual congestion. The present document is an "umbrella paper" over four other documents

This document is divided into two sections:

Section 1 of this document provides ERGEG's approach to CAM and CMP, including the legal background and ERGEG's priorities. These are based on the following pre-requisites: Capacity allocation mechanisms and congestion management procedures must be transparent and non-discriminatory; they must combine technical and economic efficiency while addressing the various needs of markets participants. While promoting harmonisation of regulation at a European level, the proposals developed in this consultation paper are sufficiently adaptable to address the various national situations within a coherent system at EU level. They are driven by the following concerns: satisfaction of shippers' actual capacity needs, which include stability and flexibility of access, and promoting the liquidity of the European gas market resulting in the development of efficiently working gas hubs.

Section 2 sets out ERGEG's principles on CAM and CMP presenting the legal framework as well as detailed proposals to be translated into guidelines.

¹ Regulation (EC)1775/2005



Introduction

Competition in natural gas markets is based on opening essential facilities to all suppliers in a transparent and non-discriminatory way. Rules for third party access are therefore a key element of market functioning, in particular as far as transmission is concerned. Transmission capacity is indeed a scarce resource which must be shared among market participants in a way that promotes competition and security of supply.

Establishing common rules at a European level has been a challenge due to the differences existing between national gas systems in terms of demand, production, import dependency and storage availability. In addition, some countries are important transit corridors while, in others, which are less connected to the rest of the European grid, most of the gas entering the system is consumed locally. This situation has justified the principle of progressive market opening in the European Union, first by defining limits to the eligibility of consumers and, second, by implementing regulations offering enough freedom to national authorities to look for rules adapted to their initial market situation.

However, after more than ten years, the liberalisation process requires effectively progressing towards further and deeper harmonisation throughout the EU. This is precisely the objective of the 3rd Package which foresees the adoption of EU wide network codes following a two-step process: preparation of framework guideline by the ACER and redaction of codes by ENTSOG.

Focus on capacity allocation and congestion management

Stating that regulatory and contractual obstacles to cross-border gas flows remain a major barrier to market integration at a European level, ERGEG decided to work in priority on capacity allocation and congestion management at interconnection points as from 2008 in the perspective of the adoption of the 3rd Package. ERGEG edited principles on CAM and CMP for consultation in January 2009 and published an evaluation of comments paper in August 2009. The present document consists of a revised version of the initial principles taking into account the views expressed during the consultation as well as addressing explicitly the development of a framework guideline on CAM and the proposal of amendments on CMP to the annexes of the Regulation (EC)1775/2005.

Thanks to the maturity of ERGEG's work on this topic, CAM was indeed chosen by the European Commission in June 2009 to develop a pilot project on framework guideline and network codes aimed at testing the drafting process as foreseen by the 3rd Package during the interim period preceding the entry into force of the directive 2009/73/EC and the regulation (EC) 715/2009. The present document must therefore be understood as an umbrella paper setting the general principles behind the concrete proposals expressed in the pilot framework guideline.

A target model for the EU gas market

In January 2009, the initial ERGEG principles on CAM and CMP proposed a 'toolbox' approach in order to cope with the differences between national gas systems. However, a large majority of respondents to the public consultation criticised this approach and requested to be more prescriptive with regard to capacity allocation. ERGEG therefore decided to develop a concept of target model proposing a preferred design of the EU gas market for the long term. The idea is to provide an agreed way towards the achievement of the single market; however this might be long and does require a progressive and pragmatic implementation. Enough flexibility has to be kept in order to cope with uncertainty and potential unanticipated effects of the measures.

The proposed target model aims at simplifying cross border trade and development of liquid gas markets; it comprises two dimensions. The first one consists of harmonising capacity



products and allocation at every cross border point to make combined allocations and bundling of products possible. The second one consists of adopting the same kind of allocation procedure over Europe by eliminating first come first served and moving towards auctions, while allowing pro-rata as an interim step.

The objective is to concentrate trading on virtual hubs and develop easy access to interconnections. For this purpose, at each European interconnection point, the same capacity products should be simultaneously offered and allocated on their two sides and the same capacity allocation should be used. In order to be able to offer sufficient amount of capacity, the set of capacity products should be reasonably small. In the end, the design of the EU gas market should be as follows: a set of entry/exit market zones with their own virtual hub connected through a limited number of bundled capacity products identical all over the EU and allocated via auctions.

Background principles and structure of the document

This document sets out ERGEG's position on CAM and CMP for interconnection points between entry-exit systems (cross-border as well as within Member States) to be used as a basis for the pilot framework guidelines on capacity allocation and for recommending amendments to the Guidelines annexed to Regulation (EC) 1775/2005. It covers four ER-GEG deliverables on CAM and CMP:

- The pilot framework guidelines on congestion allocation in gas transmission networks, which the European commission has officially invited ERGEG to draft and to submit two weeks ahead of the 17th Madrid Forum. An initial impact assessment comes along with this pilot framework guideline.
- On congestion management, ERGEG recommends modifications to the existing Guidelines annexed to Regulation (EC) 1775/2005 via comitology. An impact assessment also comes along with these comitology proposals.

As foreseen by Art. 6 of the Gas Regulation 715/2009, a public consultation of two months will be held on the Framework Guideline after the 17th Madrid Forum. Once the final version of the framework guideline published, ENTSOG will be requested to draft a network code in line with the framework guideline.

ERGEG's approach developed in this document is based on the general pre-requisites to be applied to gas transmission infrastructure: transparency and non-discrimination. CAM and CMP must combine technical and economic efficiency while addressing the various needs of market participants. On the basis of the target model ERGEG's ambition is, to allow for sufficient adaptability in order to address the various national situations, at least for a limited period of time. The future network codes should also allow shippers to have stable and flexible access to capacity and to act within a simplified system promoting the liquidity of the European gas market and resulting in the development of efficient gas hubs.

This document is divided into the two following sections:

- 1. ERGEG's approach to CAM and CMP
- 2. General principles on capacity offer, capacity allocation and congestion management, from which concrete proposals to improve cross-border gas transport are derived



1. ERGEG's approach to CAM and CMP

The function of national regulatory authorities, and in the future of the Agency, is to promote the creation of a single competitive EU gas market to the benefit of EU energy consumers. Since the adoption of the first gas directive in 1998, competition mainly developed on a national basis, which translated in several different market designs and difficulty for new entrants to have access to interconnection points. Promoting cross border trade is therefore a key challenge on the way towards a fully competitive EU gas market associated with liquid virtual hubs.

National regulatory frameworks have to converge toward a common organisation and develop compatible rules for the management of interconnections. In this perspective, access to gas transmission infrastructure is a central issue, not only because networks are essential facilities but also because transmission capacity is a scarce resource which is often booked for long durations by dominant market players. As concluded in the European Commission Directorate General for Competition's (DG COMP) sector inquiry², the EU natural gas market suffers from a lack of competition; under-developed network access for new entrants is identified as a barrier to entry. Evidence shows that, at many interconnection points, capacity is fully booked on a long-term basis, hindering the development of competition. Therefore bringing some firm capacity back to the market via improved CAM and CMP has been identified as a priority for ERGEG, within the existing regulatory context and the amended Regulation as proposed in the 3rd Package.

ERGEG principles on CAM and CMP focus on interconnection points between entry-exit systems³ (cross-border as well within Member States). It is based on the EU market model as expressed in the new Directive 2009/73/EC and Regulation (EC) 715/2009 as well as on a pragmatic approach addressing the concrete needs of market participants. It sets out proposals to maximise the use of existing pipelines and ensure compatibility of CAM and CMP at interconnection points.

1.1 ERGEG priorities on CAM and CMP

Stimulating competition to the benefit European energy consumers, is one of ERGEG's primary concerns. To achieve this, increased liquidity in the wholesale markets is required. Such liquidity will facilitate new entrants' access to gas, so that they can meet the demand of end-consumers.

ERGEG has identified⁴ several issues that must be resolved urgently. These issues primarily relate to the difficulty of new entrants in obtaining capacity. This is due to the lack of available capacity at many interconnection points between entry-exit zones and to some discriminatory aspects of allocation mechanisms. This results in undue transaction efforts for shippers and an imbalance in the market opportunities available to new entrants as compared to incumbents. This situation contributes to an inefficient use of existing interconnection capacity (short-term and long-term) and a lack of liquidity on most European markets.

The DG Comp 2007 sector inquiry also concluded that new entrants are unable to secure primary capacity at key interconnection points due to long-term contracts signed between

² http://ec.europa.eu/competition/sectors/energy/inquiry/index.html

³ As provided for by art. 13 (1) al. 4 of Directive 2009/73

⁴ The last analysis was conducted as part of the development of this document, via an ERGEG questionnaire to all NRAs.



incumbent transmission system operators (TSOs) and supply affiliates. Moreover, access to secondary capacity, which should be open to new entrants, is rarely made available, but where it is, it is bought by other incumbents. Therefore, due to the lack of effective congestion management mechanisms on many of transmission systems, it is seldom possible for new entrants to secure even small amounts of short-term capacity. The effective management of congestion is important in order to facilitate new entry and to promote competition.

As a part of the existing legal framework, there are obligations to provide non-discriminatory third party access. Congestion management provisions are already in place, including use-it-or-lose-it (UIOLI) provisions and secondary capacity trading. The contracts allow the historic capacity holder to re-nominate, typically until two hours before the relevant gas flows are to commence. Thus, capacity not used by such historic capacity holders is either not released on the secondary market or, if it is, it is only released on a very short-term and interruptible basis. Therefore, congestion management measures need to be implemented more effectively to achieve the goal of functioning third party access and competitive gas markets.

There are two types of congestion: contractual and physical. Contractual congestion occurs when capacity is fully booked, but a proportion of capacity remains unutilised and there is still demand for capacity. Physical congestion occurs where parts of the network flow at their maximum technical capacity and no further flows can be accommodated, but there is still demand for additional flows. In an efficient market, all technically available capacity would be used and demand for additional capacity would signal the need for investment. The main objective of this document is to propose measures which will encourage TSOs to maximise the capacity offered and provide new entrants with better access to capacity.

1.1.1 Stability and security of access

Uncertainty about how to access network capacity is damaging for gas shippers seeking to flow gas across borders. Shippers need clear information on how to access transmission capacity and the pricing of that capacity. They are likely to wish to book a certain amount of capacity over a longer term for gas that they are guaranteed to flow. They will also wish to have the flexibility to obtain additional capacity on a short-term basis for additional peak flows in gas. In an effective market shippers will have an incentive to sell unwanted capacity on the secondary markets, as it will not be economical to pay for excess capacity.

This requirement can be fulfilled by regularly offering firm capacity products for a range of durations at interconnection points. TSOs must offer complementary products of various durations, with sufficient transparency to allow market participants to develop their business, with a special focus on new entrants.

Guarantees should also be given that, if not used capacity will be brought back to the market. UIOLI mechanisms achieve this aim by maximising the usability of pipelines, while also at communicating the willingness of the regulators' and transporters' to deter capacity hoarding when capacity is fully allocated under long-term contracts. Other mechanisms such as capacity release could also help to provide new entrants with firm capacity in case of market domination by incumbents.

1.1.2 Short-term flexibility

Short-term flexibility is a basic requirement for the development of competitive markets. It provides the correct environment for efficient trading hubs to emerge and provides operators with the ability to manage the intrinsic uncertainty of gas supply businesses. Flexibility can be provided by short-term capacity products offered through flexible CAM such as day-ahead auctions. Flexibility can also be achieved by means of firm and interruptible short-term UIOLI.



However, in a context dominated by long-term contracts, only a small amount of capacity is available for short-term products at interconnection points in Europe. Several options are available to increase this amount, including requesting TSOs to set aside a non-negligible portion of their existing capacity for bookings of one year or less. Such an obligation appears to be necessary with regard to the new Gas Regulation which states that short-term services must be offered, but does not lay down any threshold.

Short-term capacity products should not be considered as the ultimate solution for achieving competition in European gas markets. In contrast to the electricity market, the ability to use day-to-day opportunities⁵ has not yet evolved in many of the European gas markets. In this area, the proposed measures must build on the experiences in the electricity markets.

1.1.3 Enhancing the utilisation of infrastructure and removing contractual congestion

As previously mentioned, the objectives of CAM and CMP are to allocate existing transmission capacity in a manner that both promotes competition and non-discrimination and optimises use of the infrastructure. Thus, if booked capacity is not fully used and demand exceeds supply (contractual congestion), effective congestion management mechanisms (such as UIOLI or methods to improve secondary trading) must be implemented. The congested capacity must be returned to the market in order to maximise the rate of use of the infrastructure and to prevent possible capacity hoarding. In doing so, it is important to find means to ensure that capacity is offered on a firm, rather than an interruptible basis.

Regulation 715/1775 mentions day-ahead UIOLI mechanisms "at least on an interruptible basis" as a means to manage contractual congestion and to avoid possible capacity hoarding. An effective mechanism may be to apply UIOLI to longer-term capacity in order to prevent shippers from capacity hoarding and / or encourage shippers to offer unused capacity on the secondary market. Such mechanisms must, however, avoid "unfair expropriations" and risks of contract cancellation for TSOs.

Another approach may be to develop a capacity buy-back mechanism or the purchase of system energy, e.g. flow commitment, in order to increase TSOs' offer of firm capacity.

Finally, in an effective market, ERGEG would expect that shippers would not hold more capacity than they need and for capacity to be traded in a secondary market. Therefore it is, important for NRAs to consider the barriers to secondary trading. One existing barrier may be that some of the current capacity allocation methods do not create pricing signals that would encourage shippers to sell on excess capacity. A market-based approach to capacity allocation through auctions may create such incentives.

In any case if there is no congestion, there should be no restriction of access to cross-border interconnection. TSOs should introduce capacity allocation methods that ensure all capacity demands are met. Where the congestion is physical, then investment should be considered. However this issue is not addressed within this document.

1.2 Towards the single EU gas market: what target model?

ERGEG proposals aim at providing a new boost to the development of the single European gas market. For this purpose, the concept of a target model has been developed, which consists of a long term objective showing the way to integration and efficiency.

⁵ Regulation 1228/2003/EC amended by Commission Decision 770/2006/EC amending the Annex to Regulation 1228/2003/EC on conditions for access to the network for cross-border exchanges in electricity.



1.2.1 Harmonisation of capacity products, CAM and CMP at interconnection points

To date regulations in Europe have been developed with regard to national contexts. As a result, capacity products, CAM and CMP differ widely from one country to another and sometimes even from one TSO to another within the same country. This is a source of capacity mismatches at many interconnection points, which represents a major obstacle to cross-border gas trading and lead to sub-optimal use of infrastructure.

Therefore ERGEG wants capacity products, CAM and CMP to be harmonised at every interconnection point across Europe. At least, compatible capacity products will have to be offered in compatible quantities, using compatible timing and processes; including compatible information processes on the both sides of an interconnection point.

The aim is to implement the same target model at every European interconnection point. This target model is based on the following elements:

- Capacity at interconnection to be sold via bundled capacity products
- Reasonably small set of capacity products
- Capacity products to be marketed via auction. Auctions of the various capacity products to be periodically held and at the same time for each interconnection points
- Maximisation of the firm capacity offered and release by shippers of their unused capacity

As the immediate implementation of this target model might be, in defined situations, inappropriate, interim steps should be possible at certain interconnection points. These interim steps, which would only be applied under certain conditions, would thus allow for a progressive implementation of the target model. For example, in given cases, before implementing bundled products allocated through auctions, capacity at interconnection points could be allocated as combined exit-entry products through pro rata mechanisms.

This target model and the possible interim steps are described in detail below.

1.2.2 Promoting cooperation between adjacent TSOs

The means by which adjacent TSOs work together to manage interconnection points has a direct impact on the ease of access for shippers and on the capacity made available. Therefore ERGEG proposes to make a high level of cooperation between TSOs mandatory on every aspects regarding interconnection capacity.

1.3 Overview of the proposed CAM and CMP

In summary, for shippers (in particular new entrants) to be able to access capacity at interconnection points, the following features must be developed:

- TSOs must have a **transparent and clearly defined mechanism** for shippers to request capacity. Where there is no congestion, TSOs **should accept all requests for capacity**.
- TSOs need to implement **better methods of capacity allocation** in order to ensure that new entrants are not foreclosed from the market.



- These methods should ensure that a range of capacity durations on a regular basis for a reasonable amount of capacity through a fair and non-discriminatory process providing signals in the case of insufficient capacity. If shippers are to have an incentive not to hoard extra capacity for peak periods, they must know that they can buy capacity for shorter durations on a regular basis.
- Therefore TSOs must also take an active role in managing capacity calculation and allocations and may need incentives to offer as much capacity as possible onto the market.
- There needs to be sufficient transparency with regard to gas flows, capacity availability, the supply and demand balance, capacity pricing, the volume of capacity offered and sold under each capacity product and the technical information requirements for network access.
- Capacity allocation methods at cross-border interconnection points must be compatible.

The general principles present capacity products, capacity allocation management and congestion management procedures, summarised as follows:

- Co-ordination between systems by promoting co-operation among adjacent TSOs,
- Capacity products: different durations, firm and interruptible,
- **Capacity allocation mechanisms**: auctions as the standard CAM, subject to certain conditions. Before these conditions are met, pro rata allocations can be used.
- **Congestion management procedures**: long-term "Use It Or Lose It", interruptible and firm short-term "Use It Or Lose It", purchase of physical energy and capacity buy-back mechanisms and secondary market,
- Lack of available capacity: optimisation of capacity calculation and maximisation of the firm capacity offered, rules to discourage capacity hoarding (such as long-term use it or lose it provisions, reservation for short-term bookings, and secondary markets),
- **Putting unused capacity back on the market** by enhancing the usability of interruptible capacity (such as improved transparency and firmness-information provided day-ahead) and day-ahead allocation of unused capacity (including redesign of nomination timetables and restrictions of re-nomination rights).
- In some cases, well designed incentives may provide an effective and efficient mechanism for regulators to influence the behaviour of TSOs and shippers.

As the structure of European gas markets and the structure of networks differ, the mechanisms and procedures to be applied in Europe cannot be identical in each Member State. On the other hand, procedures should be at least compatible to support gas flows across interconnection points and the functioning of a competitive market. To this end, many principles allow for solutions to be progressively implemented. The implementation of the principles depends on various criteria, e.g. the development stage of the considered market.

1.4 Synthesis of the public consultation

On the 26th January 2009, ERGEG launched a public consultation on "ERGEG Principles:



Capacity Allocation Mechanisms and Congestion Management for Gas Transmission Networks". This public consultation document set ERGEG's initial position on capacity allocation and congestion management for interconnection points between entry-exit systems (crossborder and within Member States). ERGEG also held a workshop in Brussels on 18 February 2009 where it presented its proposals to the stakeholders. More than a hundred representatives of the European gas industry participated to this event, having a first opportunity to comment ERGEG proposals. Both the workshop and the 37 responses received to the consultation have shown how important the issues of capacity allocation and congestion management are for the market. The main results of the public consultation can be summarised as follows.

A high number of ERGEG proposals have found wide support or full consensus among the consulted stakeholders, though respondents generally required regulators' proposals to be more prescriptive. There is a large agreement that ERGEG has identified the right issues. The need of further cooperation between TSOs as well as between NRAs as suggested by ERGEG is as well pointed out by the market. A small set of capacity products is desired. The procedures and products are asked to be compatible - if not completely harmonised - at both sides of interconnection points. Finally, secondary markets are seen by many respondents as the best tool to improve capacity use.

Regarding capacity offer, in order to increase available capacity to be offered to the market a more dynamic capacity calculation and the possible application of buy-back mechanisms by TSO have been assessed as a helpful step ahead. In this respect, incentives for TSOs are deemed convenient. Bundled capacity products are largely wished and the mandatory setting aside of a part of capacity for short term would be welcome as well, though in this case the suggested percentages are somewhat diverse.

Concerning capacity allocation methods and congestion management procedures, ERGEG proposal to restrict the use of First Come First Served (FCFS) in case of congestion is widely appreciated. Among other proposed capacity allocation methods (auctions and prorata), there is a preference for auctions, though both receive more support than negative critics. In relation to CMPs, long term Use It Or Lose It (UIOLI) has received varied responses, the main concern being the definition of the underutilisation of capacity. As for short term UIOLI, many reactions have not been positive ad essentially focused on the proposed restriction of renomination rights. Finally, the idea of having a booking platform for capacity allocation has also been widely welcomed by stakeholders.

Some other ERGEG proposals have encountered strong and justified scepticism or reserves. They will therefore be abandoned. This is the case of freeing-up capacity (capacity release) and setting special rules for dominant players, which is considered to be in the domain of competition authorities.

Particular attention is to be paid to GTE's views, given that, once the 3rd Package implemented, TSOs will be responsible through ENTSOG for drafting the network codes on the basis on the framework guidelines developed by the ACER. GTE considers that ERGEG proposals should be more prescriptive to limit the options allowed by the 'toolbox' approach. In its opinion, this is necessary to avoid contradictory measures being implemented on either side of interconnection points. GTE also supports incentives for TSOs, while asking for a fair allocation of risks and rewards and an appropriate coverage of extra costs. Other proposals, such as more dynamic capacity calculation, bundled products and booking platforms are not seen as a priority at this stage. In the consultation, GTE did not support ERGEG's proposal



of a firm short-term UIOLI based on a restriction of re-nomination rights because of its feared impact on the flexibility needed by shippers and on balancing whereas accepts the long term UIOLI option with some reservation. GTE finally asks for an implementation schedule to be defined.

2. ERGEG's principles on CAM and CMP

This document presents ERGEG's principles on CAM and CMP. These principles seek to facilitate effective, fair and non-discriminatory third party access and thereby support the development of a competitive internal gas market in Europe.

ERGEG's principles and proposals on CAM and CMP seek to guarantee security, predictability and flexibility for all shippers seeking access to transmission capacity. Therefore, the principles state that TSOs shall regularly offer capacity products of various durations via transparent, fair and non-discriminatory allocation procedures. Adjacent TSOs shall cooperate in order to optimise the use of the networks and to, at least, offer compatible products and use compatible procedures. Finally, ways need to be found to bring unused capacity back onto the market in the short and the long-term.

2.1 Legal background

The principles developed in this document are based on the new Gas Directive 2009/73, Gas Regulation 715/2009, on the new Agency Regulation 713/2009 and for the comitology recommendations on the Gas Regulation 1775/2005.

Art. 6(4) of the Agency Regulation 713/2009 and Art. 6 of the Gas Regulation 715/2009 require the Agency for the Cooperation of Energy Regulators to submit framework guidelines to the European commission. The European commission has invited ERGEG to assume the role assigned to the Agency under article 6(2) of Regulation 715/2009 and to submit a nonbinding framework guideline on capacity allocation before the 17th Madrid Forum.

Furthermore, recommendations on congestion management procedures are suitable for legally-binding adoption into the annex of the Gas Regulation 1775/2005 via comitology, according to Article 9(1)b of Regulation (EC) 1775/2005.

The 3rd Package on energy adopted by the European commission will come into force on the 3rd March 2011. It aims at achieving a truly internal European gas market. This is why the promotion of cross-border trade is at the centre of the new Gas Directive and Regulation. Accordingly, transmission system operators as well as regulators have now a duty to cooperate in order to facilitate cross-border flows.

The new Gas Regulation addresses in length capacity allocation and congestion management in its Art. 16, which is broadly similar to the Art. 5 of the Regulation 1775/2005. The novelty is that transmission system operators are now required to develop capacity allocation mechanisms and congestion management which shall facilitate cross-border exchanges of natural gas. Art. 12 states that "[T]ransmission system operators shall promote operational arrangement in order to ensure the optimum management of the networks and shall promote [...] the coordinated allocation of cross-border capacity through non-discriminatory market-based solutions".

Furthermore, according to the Directive 2009/73, "[T]he development of a true internal market in natural gas [...] should be one of the main goals of this Directive and regulatory issues on cross border interconnections and regional markets should, therefore, be one of the main



tasks of the regulatory authorities"⁶. Art. 7 requires regulatory authorities to cooperate with each other in order to integrate their national markets. Regulatory authorities shall also promote the cooperation of transmission system operators and foster the consistency of their legal, regulatory and technical frameworks. More specifically, Art. 42 (2)a imposes a duty on regulators to cooperate in order to promote the allocation of cross-border capacity. Art. 40 provides for regulatory authorities to enhance the integration of national markets.

In order to foster the harmonisation of cross-border rules, the new directive grants regulators the appropriate competences. According to Art. 41 (6)c and Art. 9, "[T]he regulatory authorities shall be responsible for fixing or approving sufficiently in advance of their entry into force at least the methodologies used [...and...] establish the terms and conditions for: [...] access to cross-border infrastructures, including the procedures for the allocation of capacity and congestion management". "[T]ransmission system operators [...] shall submit their congestion management rules, including capacity allocation to the national regulatory authorities [, who] may request amendments to those rules."

Furthermore, the following documents have been taken into account:

- Existing guidelines on third-party access service and on principles underlying the capacity allocation mechanisms, congestion management procedures and their application in the event of contractual congestion, annexed to Regulation (EC) 1775/2005 on conditions for access to the natural gas transmission networks
- Commission staff working document on capacity allocation and congestion management for access to the natural gas transmission networks regulated under Article 5 of Regulation 1775/2005/EC on conditions for access to the natural gas transmission networks; SEC(2007) 822

2.2 Scope of the principles

2.2.1 General scope of application

These guidelines shall apply to every interconnection point between entry-exit systems⁷, i.e. cross-border as well as within Member States, as far as these points are subject to booking procedures.

The guidelines shall thus apply only to interconnection points which are part of transmission networks. This means that exit points to end consumers, entry points from LNG-terminals as well as entry/exit points to/from storage facilities are not subject to these Guidelines.

The guidelines seek to propose solutions for effective, fair and non-discriminatory third-party access to capacity that are consistent with the different market developments across Europe. This is why under a unique set of principles and given the diversity of the European gas markets, a uniform set of procedures for every European interconnection point, might not be appropriate at this stage. Therefore, interim steps may be accepted until the implementation of the defined target model has been achieved.

⁶ Visa (57) of Directive 2009/73

⁷ As provided for by art. 13 § 1 al. 4 of Directive 2009/73 [target model to be achieved]



In case of the absence of congestion, congestion management procedures would logically not be needed. Therefore, in the absence of congestion, the specific congestion management procedures – firm short term use-it-or-lose-it (UIOLI, cf. below) – do not need to be applied as their implementation would then be contra productive.

2.2.2 Existing contracts

Where needed, existing contracts should be amended in order to comply with the rules established by ERGEG's proposals on CAM and CMP. In case contracts would be amended, shippers should have the possibility of terminating contracts.

This does not question the existence of capacity contracts but would only consist of amending some existing contracts if necessary. These amendments would be needed to allow for a swift and uniform implementation of the proposed measures. In general, it should be noted that reforms and changes of existing rules imply amendments of existing contracts. This has been witnessed in the recent past in many gas European systems. It is thus normal that the implementation of these guidelines could lead to amending the existing contracts once implemented.

2.2.3 Other issues related to CAM and CMP

This document focuses on CAM and CMP issues and does not directly address other related issues.

Tariffs

ERGEG's proposals may result in additional income for TSOs. This is likely with regard to auctions and is likely to occur when TSOs free up capacity. These surplus revenues could be used to increase physical capacity or to redistribute it among network users in the form of a tariff reduction or to provide incentives to maximise the offered capacity, subject to the national regulatory authority's approval.

The design of access tariffs has a determining influence on the use of capacity. Therefore tariffs shall reflect the market value of the capacity services offered. They shall not provide distorted or improper incentives for the utilisation of capacity, e.g. the price of long term capacity products shall not be to high as this would lead to a level of long term bookings exceeding the real need for long term capacity reservation. In the same way, the price for interruptible capacity should reflect the probability of interruption. Given the importance of this issue, a framework guideline on tariffs is already under preparation and will comprehensively address these issues.

Allocation of new capacity – investments

When developing new capacity, TSOs shall use transparent, fair and non-discriminatory allocation procedures to allocate this new capacity. These procedures shall allow all market participants to request capacity.

- Allocation of new capacity in the long-term shall be carried out using open seasons or long-term auctions, as currently used in the UK. Open seasons shall follow ERGEG's Guidelines for Good Practice on Open Season Procedures (GGPOS).
- If TSOs reserve a part of the capacity developed for short term bookings (e.g. a duration of one year or less), this short-term capacity shall be allocated via auctions or pro-rata mechanisms.



In some countries, investment decisions may be driven by elements and procedures such as well-supported demand or central planning. Even in these cases, it remains essential that once the investment decision is made, the new capacity is allocated in a transparent, efficient and non-discriminatory way.

2.3 ERGEG principles on general issues

2.3.1 Implementation of compatible products and procedures

TSOs shall at least implement compatible products and follow compatible procedures on each side of interconnection points. This concerns, inter alia, the type of contract and the network codes, booking procedures (lead time, reservation notice, etc.), capacity duration, available capacity, nomination and, re-nomination procedures (if relevant).

This also applies to interruptible capacity. Adjacent TSOs shall apply compatible procedures regarding the offer, allocation and interruption of interruptible capacity. There should not be different interruption patterns on each side of the border for shippers, otherwise interruptible capacity products could not be usable by shippers at interconnection points.

Solving the current capacity mismatches in Europe, reducing the operational complexity of cross-border shipping and ensuring full product compatibility will significantly reduce the obstacles to the development of flows at interconnection points. Compatibility is vital for the integration of adjacent markets and, for the achievement of the single European market.

Furthermore, transmission system operators shall implement standardised communication procedures. They shall utilise information systems and electronic on-line screen-based communications as a means to provide adequate data to network users and to simplify transactions, such as nominations, capacity contracting and transfers of capacity rights between network users. National regulatory authorities may set out further details relating to standardised communication procedures.

2.2.1 Cooperation between adjacent TSOs

Transmission system operators shall cooperate with adjacent transmission system operators in order to promote efficient cross-border trade and efficient network access. In order to optimise the use of the networks and the capacity offered, adjacent transmission system operators shall cooperate at the technical and operational level. At the end, they shall exchange all necessary information and data. This information shall comprise, inter alia, forecasts on entry and exit flows, availability of networks and maintenance, the use of system energy and capacity buy-back and flow metering.

Furthermore, in order to maximise the available capacity adjacent transmission system operators shall cooperate and coordinate maintenance periods. This joint maximisation of available capacity shall be based, inter alia, on a coordination of the capacity calculation and on the information to be exchanged between adjacent transmission system operators.

Finally, adjacent transmission system operators shall allocate capacity simultaneously or at least coordinate their capacity allocations and shall harmonise congestion management procedures.

2.3.2 Minimum requirements for capacity calculation

It is recommended that TSOs follow a dynamic approach with regard to the calculation of technical capacity, instead of the static approach currently used by many TSOs. This dy-



namic approach requires in particular that TSOs re-calculate technically available capacity on a regular basis, on the basis of actual technical conditions (e.g. calorific value, temperature, expected consumption). This dynamic capacity calculation should aim at maximising the capacity offered to the market. This is without prejudice to the ability of TSOs to offer capacity above the existing calculated capacity (cf. capacity buy-back below).

2.3.3 Network security and emergency

In any case, the application of ERGEG principles does not reduce or question the TSO's responsibility for security of network operation and supply.

Should difficulties in meeting contractual delivery obligations arise due to force majeure, transmission system operators shall notify network users and seek a non-discriminatory solution without delay, e.g. proportionate reduction of nominated flows.

2.3.4 Incentivisation

TSOs shall receive a fair remuneration (cost coverage and an appropriate remuneration of capital) for the provision of their normal services, as prescribed by European legislation. TSOs shall also be rewarded in case they take extra risks going beyond their obligations and their normal duties relative to capacity allocation and congestion management. This incentivisation could be both positive, as a reward for performance going beyond the normal duties of TSOs, and also negative, as a sanction in the event TSOs fail to perform their normal duties. Effective incentive mechanisms thus ensure that it is in the TSOs' interest to act in a specific way.

Incentivisation may be achieved by allowing TSOs to retain a certain share of the revenues subject to the achievement of certain targets and by not covering losses in cases TSOs perform under a certain level. One example of incentivisation is the capacity buy-back (cf. below).

2.4 ERGEG principles on capacity offer

Transmission system operators shall offer to shippers a reasonably small set of capacity products of various durations in a transparent and non-discriminatory manner and on a regular and repeated basis. They shall regularly consult stakeholders on their capacity offer. The set of capacity products offered by TSOs shall be the same for each interconnection point across the European Union.

<u>Target model and possible interim steps:</u> Adjacent TSOs shall offer bundled firm and interruptible capacity products at every interconnection point between entry-exit systems. However, in case capacity products are not harmonised on each side of the interconnection point, it might not be possible to offer bundled products. In that case, TSOs should offer combined exit-entry products as an interim steps towards bundled products.

Capacity published as available shall be binding on TSOs since this is a prerequisite for allocating capacity. Capacity allocations shall not take place outside the allocation procedures provided for by these Guidelines. Separate capacity for transit purposes shall be avoided in order to ensure maximum liquidity of capacity markets.



2.4.1 Bundled products

TSOs shall offer bundled products at interconnection points between entry-exit systems. In order to offer bundled products, TSOs shall integrate exit and entry capacity into single bundled products at interconnection points. The bundling of capacity is a key element to facilitate cross-border market integration. It greatly helps to reduce transaction efforts and to gather liquidity at the virtual hubs, as trading at the flanges, i.e. at interconnection points, will be restrained or even will not be possible any more. Shippers intending to book or use bundled capacity must have access at least to virtual hubs on both sides of the relevant interconnection points.

However, this offer of bundled capacity products at interconnection points shall be subject to conditions. One of the main conditions is the prior harmonisation of capacity offer, products and procedures on each side of the considered interconnection points. Before this condition is met, TSOs shall be required to offer at least combined exit-entry capacity products between entry-exit zones to shippers. The combined products include the exit capacity from one zone and the entry capacity into the adjacent zone. To be able to offer such products, an option is that one TSO allocates all available entry and exit capacity jointly offered. Combined entry-exit products are thus a first step towards bundled products.

2.4.2 Capacity duration

TSOs shall ensure that shippers can book capacity for a range of short to long-term durations⁸. At the same time the set of capacity products shall be reasonably small in order to avoid a too high dispersion of capacity. The capacity offer shall be developed by transmission system operators, following proper consultation with users and supervised by national regulatory authorities.

The combination of capacity products of various durations is necessary to achieve both stability and flexibility of access. If shippers have access to a range of capacity durations, it will incentivise them to buy as much capacity as required over longer timescales, while allowing them to procure additional capacity at short notice for unexpected peaks., Shippers must be offered capacity on a regular basis, through a fair and non-discriminatory process. If shippers are to have an incentive not to hoard extra capacity for peak periods, they must be confident that they can buy capacity for shorter durations on a regular basis.

Capacity products with durations of more than 5 years are the standard offered by many TSOs today. They are often the only ones provided to the market and in most situations are fully booked by incumbents.

Capacity products with durations of 2 to 5 years may also be requested by shippers, depending on the market structure. Products with these durations may meet the needs of new entrants developing supply activities to end-consumers. They need stability of access, but are unable to commit themselves for more than a few years.

Offering capacity with a duration of one year or less facilitates bringing capacity onto the market on a regular basis and, hence, new entrants' access to capacity. However, it should be noted that where capacity is already fully booked, the segmentation will not result in additional capacity that can be provided to the market.

TSOs shall thus offer capacity products of various durations to meet the various needs of shippers. NRAs shall be entitled to require TSOs to offer a certain quantity of capacity products of various durations.

⁸ Annex 2 illustrates different capacity products.



2.4.3 Capacity products of one year and less

A reasonable part of the technical capacity shall be set aside for firm capacity products of one year and less. Some of this shall be reserved for yearly capacity products.

The provision of capacity products of one year and less shall be mandatory for the following reasons:

- they allow new entrants access to capacity, even those with limited financial commitment capabilities;
- they reduce the risk of market foreclosure by incumbents;
- they help to bring capacity onto the market on a regular basis;
- Buying capacity for short durations discourage shippers to hoard extra capacity for peak periods, as explained before.

This provision of capacity products of one year and less shall be mandatory, unless the primary and secondary market and the UIOLI procedures provide shippers with satisfactory access to capacity, which could justify an exemption.

This is because, in some cases, there may be liquid primary or secondary markets for capacity of various durations or functioning UIOLI mechanisms. In this situation, shippers could obtain access to the capacity they need, even for a short duration via this primary or secondary market. In this particular situation, there would be no need for a mandatory offer of capacity products of one year and less.

The minimum level of capacity of one year and less to be offered is a decision which should be reached on a national basis, taking into account market needs. ERGEG proposes that a realistic range for the short-term capacity share is 10% to 25% of the technical capacity. This proportion shall be subject to national regulatory authorities' approval.

2.4.4 Intra-day capacity

National regulatory authorities may require that any capacity becoming available to the transmission system operator within day shall be offered immediately, as far as the national regulatory authority considers this necessary.

Network users should be entitled to submit nominations on an interruptible basis at any time. Transmission system operators shall use best endeavours to comply with these nominations.

2.4.5 Interruptible products

Transmission system operators shall offer compatible interruptible capacity or equivalent products at every interconnection point. TSOs shall thus harmonise, among others, the technical reasons for interruption, the classes of interruptibility and the calculation of the interruption probabilities, the interruption procedures. Interruptions shall take place in a coordinated manner. The "Last come – first interrupted" methodology shall not be used, given that it is potentially discriminatory, as is "first come – first served".

Interruptible intra-day UIOLI capacity could be required: capacity for day *D* would be required by means of re-nominations. The original capacity holder would keep the right to renominate, thus interrupting the intra-day capacity allocated through the UIOLI mechanism.



2.5 ERGEG principles on capacity allocation mechanisms

Primary capacity shall be allocated through transparent, efficient and non-discriminatory procedures. It is reminded that these procedures will be approved by the relevant NRAs. Allocation procedures established by TSOs shall allow every shipper looking to obtain access to capacity to request the amount of capacity they are seeking to purchase.

<u>Target model and possible interim steps:</u> Adjacent TSOs shall allocate capacity through auctions held simultaneously at every interconnection point between entry-exit systems. However - before certain conditions are met - auctions might be inappropriate, as their outcome may bar some shippers from access to capacity. In that case, pro-rata allocation may be used as an interim solution. In any case, the allocation methodology shall be harmonised on each side of a given interconnection point.

2.5.1 Allocation of existing capacity

Capacity allocation mechanisms shall regularly offer shippers equal opportunities to request the amount of capacity they need. Allocation procedures shall consist of a time window during which shippers can express their capacity requirements.

If the demand for capacity does not exceed the capacity offered through the allocation procedure, i.e. in the absence of contractual congestion, TSOs shall accept all requests for firm capacity and allocate capacity accordingly to shippers.

Concretely, this means that, subject to certain conditions, TSOs shall use auctions to allocate capacity. Auction should be used to allocate scarce capacity as it is, in ERGEG's view, the best allocation mechanism in case of congestion, if certain conditions are met. It is the preferred method as it best reveals the value of capacity. Through auctions, the capacity is thus allocated to those shippers who value it most. Auctions are also the preferred method for re-allocating unused capacity freed up through UIOLI (use-it-or-lose-it) provisions.

Any issues arising from market structure and behaviour of participants (such as vertical integration or market dominance) largely exist regardless of the preferred allocation method, and can be addressed in part through the detailed auction design.

However, this is true only if certain conditions are met. These conditions are mainly related to the development stage of the relevant market. In case of immature or underdeveloped market, auctions may not be appropriate. In this case, there is indeed a risk that some participants may be able to exploit their dominant position and to bar small shippers from access to capacity. This is why, before these conditions are met, TSOs may use a pro-rata mechanism instead of auctions. Pro rata is indeed a guarantee for every shipper that he will have a minimum access to capacity.

The frequency of capacity allocations and their lead time (i.e. the time between the capacity contract conclusion and its beginning) shall be appropriate with regard to the duration of the capacity contract allocated through the allocation procedures. The longer the duration of the capacity contract, the longer the required lead time and the lower the frequency of allocations should be.

There is one type of capacity for which first come first served (FCFS) allocation could be appropriate: intraday capacity. Given the immediacy needed for the allocation of intraday capacity, FCFS seems to be suitable and could therefore be used instead of auction or pro rata.



In any case, FCFS shall not be used when it impedes a regular offer of capacity on a transparent and non-discriminatory basis.

Prior to allocating capacity, TSOs shall publish the rules of the procedure, i.e. the allocation mechanism itself, as well as the details of the capacity products (duration, starting date, quantity, etc.) proposed to the market.

For capacity products with the same start date, products with longer durations should be allocated before products with shorter durations, as shorter-term capacity is often used to meet the shippers' flexibility after having booked capacity with a longer duration.

After the allocation of capacity with long duration, the remaining unsold capacity, if any, shall be sold via an allocation procedure for capacity products with shorter duration. Successive allocation procedures for capacity with decreasing durations are a way to guarantee utilisation of unused capacity.

2.5.2 Capacity booking platforms

To maximise transparency and non-discriminatory measures and to reduce transaction efforts for shippers, TSOs shall establish joint, anonymous, web-based platforms. These platforms shall at least allow joint booking of the capacity products on both sides of interconnection points. They shall also integrate primary and secondary capacity offers.

Transmission system operators shall jointly develop plans to implement booking platforms at interconnection points and on the long term to reduce the number of platforms.

2.6 ERGEG principles on congestion management procedures

Congestion management procedures are means to satisfy capacity requests when available capacity has been entirely booked, by removing contractual congestion. Given the current booking situation across Europe, effective congestion management procedures are much needed: capacity is often fully booked by incumbents, but underused.

2.6.1 Increasing firm capacity offered: purchase of system energy, e.g. flow commitment and capacity buy back

TSOs shall maximise the amount of firm capacity offered to shippers. Basic tool are enhanced capacity calculation and co-operation between TSOs (cf. above). Beyond this, TSOs could increase the offered firm capacity to the market, or maintain it when merging balancing zones, via purchase of physical energy, e.g. flow commitments or capacity buy back mechanisms. These mechanisms allow TSOs to control the physical gas flows at given points of their networks thanks to certain shippers' actions.

TSOs could use these two tools in order to maximise firm capacity:

 Purchase of system energy. TSOs and shippers may enter into agreements, e.g. flow commitments, through which shippers commit themselves to inject or to withdraw determined gas volumes at given points of the networks either permanently or at request of the TSOs.



Capacity buy-back (already used in some Member States). Capacity buy-back is a mechanism which is used at shorter notice than flow commitments. It allows TSOs to offer additional capacity on a firm basis above its technical capacity at a given interconnection point. In the event of (expected) physical congestion, i.e. of nomination above the technical capacity, TSOs would need to buy back capacity, so that flows do not exceed this technical capacity and so that TSOs can meet their contractual obligations. Shippers may submit offers on the price and quantity of capacity which they are willing to sell. The system operator will accept the lowest offers in order to buy-back sufficient capacity to relieve congestion. The NRAs may offer incentives, which reward TSOs for their efficient use of the buy-back mechanism.

Subject to NRA approval, TSOs may thus purchase system energy and/or implement capacity buy-back mechanisms. It should be ensured that the costs of these measures do not exceed their benefits.

2.6.2 Firm short-term UIOLI

Firm short-term UIOLI would be a significant enhancement of the interruptible short-term UIOLI, as unused capacity would be brought back to the market one day ahead on a firm, rather than on an interruptible basis. This would contribute to optimising network utilisation. Furthermore, the fact that unused capacity is brought back to the market is an incentive for capacity holders to sell capacity on the secondary market.

In order to make day-ahead firm capacity available, national regulatory authorities may restrict rights for re-nomination of firm capacity, where these rights exists and are applied. This would allow day-ahead capacity to be made available on a firm basis.

The firm short-term UIOLI procedure shall describe the respective roles of TSOs, NRAs and any other authority. Firm short-term UIOLI procedures shall be applied by virtue of an NRA decision.

2.6.3 Long-term UIOLI

If a TSO fails to satisfy a shipper's capacity request and if this shipper informs the TSO that the requested capacity is not available on the secondary market, a long-term UIOLI may be applied.

TSOs shall keep capacity use under permanent review and should regularly offer additional capacity to the market. The TSO shall first examine if one or more shippers holding capacity are underutilising the capacity. An application for withdrawal of systematically underutilised capacity procedure requires several conditions to be met. If the TSO observes that a shipper has used less than a certain percentage of his booked capacity during a specific period of time, including at least one winter month, the TSO shall order the shipper concerned to irrevocably release the proportion (e.g. a certain percentage) of unused capacity, ideally corresponding to the capacity requested by the first shipper. The shipper concerned shall have the right to justify the underutilisation by contesting the reassignment notified by the TSO.

The long-term UIOLI procedure shall describe the respective roles of TSOs, NRAs and any other authority. Long-term UIOLI procedures shall be applied by virtue of an NRA decision.

Long-term UIOLI can mitigate capacity hoarding based on incumbents' underused long-term capacity contracts. Thus, it is an essential tool to allow new entrants to obtain access to capacity which would not otherwise be available. Scarce capacity that is systematically unused can thus be returned to the market on a firm basis.



In addition, long-term UIOLI measures are effective tools to discourage large participants from overbooking capacity and / or encourage shippers to release unused capacity on the secondary market if needed by other shippers.

2.6.4 Secondary market

Secondary capacity should be marketed via two different ways. Unused primary capacity could be surrendered by shippers to TSOs, which could then allocate it again as primary capacity. Secondary capacity could also be anonymously traded between shippers. In that case, shippers should have the possibility to slide and dice the secondary capacity they want offer. Nevertheless the secondary capacity offered shall be in line with the duration and starting date of the capacity products offered on the primary market.