

## **Network Code**

### **on Capacity Allocation Mechanisms**

#### **An ENTSOG Network Code proposal for market consultation**

This document constitutes the ENTSOG proposal for a Capacity Allocation Mechanisms network code.

The code was developed following an invitation letter from the European Commission to draft a network code on gas capacity allocation rules which was received by ENTSOG on the 27<sup>th</sup> of January 2011. The development of such code is based upon the Revised Pilot Framework Guideline on Capacity Allocation Mechanisms published by ERGEG dated the 7<sup>th</sup> of December 2010.

This Network Code was developed under the assumption that the TSOs' revenues are guaranteed by a tariff system which is consistent with the capacity allocation mechanisms proposed in this Network Code.

Responses are sought until the 3<sup>rd</sup> of August 2011. Details with regards to the further code development steps can be found in the Final Network Code General Project Plan (CAP0115-11) published on the ENTSOG website.

The consultation is supported by a Supporting Document (CAP0142-11, available on the ENTSOG website) in which instructions for consultation respondents, and further explanation of the general and specific issues relating to this Capacity Allocation Methodologies network code, are provided. The Supporting Document is intended to be for information purposes only and is neither intended to become part of the Network Code nor construed as a commitment from ENTSOG. If there are any inconsistencies, this Network Code shall prevail.

The Network Code document is subject to the outcome of the comitology procedure.

21<sup>st</sup> of June 2011

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## 1. Rationale of the Capacity Allocation Mechanisms Network Code

Regulation (EC) No 715/2009 defines several tasks for ENTSOG. Amongst these is the development of European-wide harmonised network codes pursuant to article 8 (6) of Regulation (EC) 715/2009 to be applied by all Transmission System Operators for Gas.

The process for delivering a network code by ENTSOG is based on the procedure as set out in article 6 of Regulation (EC) 715/2009.

With regards to capacity allocation according to article 23 (1) lit b) of Regulation (EC) 715/2009, ERGEG (acting as the predecessor to ACER) published the Revised Pilot Framework Guideline on Capacity Allocation Mechanisms on 7 December 2010.

This Framework Guideline was reviewed by the European Commission and approved as the basis for ENTSOG's work on the Network Code.

Additionally, ACER, after its foundation, published a Draft Framework Guideline on Capacity Allocation Mechanisms for the European Gas Transmission Network for consultation on 3 March 2011.

As foreseen by article 28 of ENTSOG's published Rules of Procedure as well as by ENTSOG's Guidelines on Stakeholder Interaction during the Network Code Development Process, ENTSOG consulted the market on its proposed CAM Network Code project plan and published a document comprising all responses.

This Network Code was developed upon the basis of the ENTSOG CAM Network Code Launch Documentation which was published on 22 March 2011 at the beginning of the code development process. The document includes key concepts relevant to the code for consultation.

Before this Network Code was finally issued, ENTSOG organised Stakeholder Joint Working Sessions to discuss the launch documentation concepts and to assess the market's needs in accordance with the ENTSOG Guidelines on Stakeholder Interaction during the Network Code Development Process.

This document represents the ENSTOG proposal for a Network Code on Capacity Allocation Mechanisms. Its content shall be subject to the outcome of the comitology procedure according to article 5a (1) to (4) and article 7 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission, as foreseen in Art 28 (2) of Regulation (EC) 715/2009.

### 1.1. Subject matter

This Network Code deals with capacity allocation. It shall define a standardised capacity allocation mechanism in the form of an auction procedure for Europe, including the underlying Standard Capacity Products to be offered and the description of how cross-border capacity will be allocated. Further, the Network Code shall set out how adjacent transmission system operators cooperate in order to facilitate capacity sales, having regard to general commercial as well as technical rules related to capacity allocation mechanisms.

## 1.2. Definitions

Words and expressions set out herein shall have the meaning given to them in Regulation (EC) 715/2009 and Directive 2009/73/EC save where otherwise provided. For the purpose of this Network Code, the following additional definitions shall apply:

- (a) 'Auction Calendar' means a table displaying information relating to specific auctions. The Auction Calendar shall be published by ENTSOG by January of every calendar year for auctions taking place during the period of March until February of the following calendar year. The Auction Calendar shall consist of all relevant timings for auctions, including starting dates, durations, lead times, and Standard Capacity Products to be auctioned.
- (b) 'Backhaul Capacity' means capacity offered at a unidirectional Interconnection Point in the counter direction to the physical gas flow.
- (c) 'Bidding Window' means the time period during which network users can submit bids.
- (d) 'Bundled Capacity' means a corresponding entry and exit capacity on a firm basis at both sides of every Interconnection Point.
- (e) 'Capacity Contract' means a transport contract between a transmission system operator and a network user as defined in article 2 of Regulation (EC) 715/2009.
- (f) 'Cleared-Price' with regard to an auction means an auction in which all successful bids shall be payable at an identical price which is equal to the price of the lowest successful bid resulting from a given auction.
- (g) 'Comitology Procedure' means the procedure according to article 5a (1) to (4) and article 7 of Council Decision 1999/468/EC of 28 June 1999 laying down the procedures for the exercise of implementing powers conferred on the Commission, OJ 1999 L 184/23.
- (h) 'Contractual Timestamp' means the time at which the Capacity Contract entered into force.
- (i) 'Day-ahead Capacity' means a daily Capacity Contract allocated during the Gas Day preceding its validity.
- (j) 'Handbook' means the ENTSOG Data & Solutions Handbook as referred to in article 3.2.
- (k) 'Framework Guideline' means the ERGEG Revised Pilot Framework Guideline on Capacity Allocation Mechanisms dated 7 December 2010.
- (l) 'Gas Day' means the period from 5:00 to 5:00 UTC for winter time and from 6:00 to 6:00 UTC when daylight saving is applied.

- (m) 'Incremental Capacity' means capacity above the available level, that a transmission system operator accepts as being offered in addition to the prevailing level of capacity.
- (n) 'Interconnection Agreement' means an agreement entered into by and between adjacent transmission system operators, whose systems are connected at a particular Interconnection Point, which specifies terms and conditions, operating procedures and provisions, in respect of delivery and/or withdrawal of gas at the Interconnection Point with the purpose of facilitating efficient interoperability of the interconnected transmission networks.
- (o) 'Interconnection Point' means a cross-border interconnection point, whether it is physical or virtual, between two or more Member States as well as interconnection between adjacent entry-exit-systems within the same Member States, in so far as these points are subject to booking procedures by network users.
- (p) 'Long Term Capacity' means any combination of Standard Capacity Products sold via annual quarterly auctions as defined in article 4.5.
- (q) 'Minimum Amount of Capacity' means the minimum amount for a Standard Capacity Product which the network user is willing to be allocated.
- (r) 'Network Code' means this Network Code on Capacity Allocation Mechanisms pursuant to article 8 (6) lit g) of Regulation (EC) 715/2009.
- (s) 'Regulated Tariff' means either the tariff as calculated using the methodology set and/or approved by the national regulatory authority, or the tariff set and/or approved by the national regulatory authority, or both.
- (t) 'Reserve Price' means the minimum eligible floor price in the auction, being equal to the Regulated Tariff.
- (u) 'Short Term Capacity' means any combination of Standard Capacity Products that can be acquired during the annual monthly, rolling monthly and rolling daily auctions as well as Within-day as defined in article 4.6 to article 4.9.
- (v) 'Stakeholder Joint Working Session' means a meeting with network users and other market participants in order to discuss initial network code concepts which are relevant for the code development.
- (w) 'Standard Capacity Product' means a certain amount of capacity over a given period of time. Standard Capacity Products are: Within-day, daily, monthly and quarterly, as defined in article 4.2.
- (x) 'Standard Interruption Lead Time' means the minimum amount of time between the notification of interruption and the hour to which the notification refers.
- (y) 'Unidirectional Interconnection Point' means an Interconnection Point at which the physical gas flow has one direction.

- (z) 'Uniform-Price' auction means an auction in which the bidder freely bids price as well as quantity and all bidders pay the price of the lowest successful bid.
- (aa) 'Virtual Interconnection Point' means the aggregation of two or more Interconnection Points between two adjacent transmission networks into one commercial point.
- (bb) 'Volume-Based Cleared-Price' auction means an auction in which a bidder places requested quantities against defined price steps. All bidders pay the price of the lowest successful bid.
- (cc) 'Within-day' means daily capacity offered and allocated during the relevant Gas Day, or within the relevant period preceding the relevant Gas Day.

### 1.3. Equal treatment, non-discrimination and transparency

The requirements established in this Network Code and respective implementation by the transmission system operators are based on the principles of equal treatment, non-discrimination and transparency in accordance with Regulation (EC) 715/2009 and Directive 2009/73/EC.

### 1.4. Confidentiality

- 1) Without prejudice to the obligation related to relevant binding rules regarding the confidentiality of commercially sensitive information under the European regulation as transposed in the country of operation, each transmission system operator shall preserve the confidentiality of the information and data submitted to it for the implementation of this Network Code and shall not disclose further to third parties save for the use of such confidential information exclusively for the purpose for which it has been submitted, notably to verify the compliance of requirements set forth in this Network Code.
- 2) Notwithstanding the above, article 1.4 (1) shall not apply where a transmission system operator is compelled under relevant EU or national law to disclose such confidential information, under the conditions set forth in the relevant European and/or national binding legislation.

### 1.5. Relationship with European and national legislation

- 1) This Network Code shall be without prejudice to the rights of member states to maintain or introduce measures that contain more detailed provisions than those set out herein provided that such measures are consistent with the general principles set out in this Network Code.
- 2) This Network Code is without prejudice to public service obligations of a transmission system operator arising out of European and/or national legislation with regard to capacity allocation issues.
- 3) Further, this Network Code is without prejudice to the regulatory regime for cross border issues pursuant to article 42 of Directive 2009/73/EC and to the responsibilities and

powers of the regulatory authorities established according to article 41 (6) of Directive 2009/73/EC insofar as within the scope of this Network Code.

#### 1.6. Entitlement to participate in capacity bookings

A network user shall be compliant with the applicable legal and contractual requirements in order to book and use capacity.

## 2. Application of the Network Code

- 1) The rules of this Network Code shall apply to cross-border Interconnection Points as well as interconnections between adjacent entry-exit systems within the same member state, insofar as the points are subject to booking procedures by users. For the avoidance of doubt, the provisions of this Network Code shall not rule on the capacity allocation issues with regard to exit points to end consumers and distribution networks, entry points to supply-only networks, entry points from LNG terminals and production facilities, or entry/exit points to or from storage facilities.
- 2) This Network Code shall apply to all existing capacity at Interconnection Points as calculated by transmission system operators, including capacity being made available by capacity increase via enhanced capacity calculation, oversubscription and capacity surrendered by network users. Further, this Network Code shall also apply to all capacity under existing Capacity Contracts once freed up by the expiry or termination of the related Capacity Contract.
- 3) This Network Code shall not apply to capacity allocated via open season. Nevertheless processes for determining Incremental Capacity, i.e. capacity to be made available above the prevailing level of existing technical capacity, will have to be consistent with the provisions of this Network Code.
- 4) This Network Code sets out the minimum requirements that shall be implemented by transmission system operators through their Capacity Contracts.
- 5) This Network Code is not intended to cover areas other than capacity allocation, such as balancing, tariffs, interoperability, congestion management procedures or transparency, except to the extent necessary to address interactions with these areas.
- 6) In the event of any conflict or inconsistency between the terms of this Network Code and any provisions of another network code related to capacity allocation mechanisms issues that are described in articles 4 to 6 and article 8 of this Network Code, the terms of this Network Code shall prevail.
- 7) This Network Code shall be amended to the extent needed as from the coming into force to adapt its provisions to any changes in terms of needs, obligations or applicable legislation to the subject matter, pursuant to the procedure set forth in article 7 of Regulation (EC) 715/2009.
- 8) In accordance with article 4, this Network Code describes the methods for explicit auctions without prejudice to the application of implicit auctions, with the understanding

that once an implicit auction is applied the provisions in articles 4 to 6 and article 8 of this Network Code shall not apply.

### **3. Principles of co-operation**

#### **3.1. Coordination of maintenance**

- 1) Where maintenance of a pipeline or part of a transmission network has an impact on the amount of capacity which can be offered at Interconnection Points, the respective transmission system operators shall fully cooperate with their adjacent transmission system operator(s) regarding their respective maintenance plans to minimise the impact on potential gas flows and capacity at an Interconnection Point. The exchange of data between the respective transmission system operators shall be integrated in their respective Interconnection Agreement.
- 2) Reliable and sufficient information relating to the planned maintenance shall be published in a systematic, timely and non-discriminatory manner to the network users for all Interconnection Points in order to optimise and ensure network access.
- 3) Planned maintenance shall be published on a website accessible to the public, free of charge and without any need to register or otherwise sign on with the transmission system operator. The information shall be in a downloadable format and shall contain the following:
  - (a) Interconnection Point affected;
  - (b) impact on capacity availability;
  - (c) nature of planned maintenance; and
  - (d) planned start date and planned duration.
- 4) Any changes to planned maintenance periods and notification of unplanned maintenance shall be published on a non-discriminatory basis, as soon as the information becomes available to the transmission system operator(s) concerned.

#### **3.2. Standardisation of communication**

- 1) To ensure interoperability between each network user's IT systems, particularly for capacity booking, transfers of capacity rights, planning day-to-day network operation and information on potential congestion, transmission system operators shall coordinate the development and implementation of standard communication procedures, coordinated information systems and compatible electronic on-line communications such as shared data exchange formats and protocols, as well as agreed principles as to how this data is treated.
- 2) ENTSOG shall develop a coordinated and agreed approach between network users and transmission system operators to move towards the goal of achieving greater

coordination and harmonisation of IT and communication matters which will lead to agreed solutions regarding the electronic exchange of data.

- 3) ENTSOG shall specify processes for adopting technical solutions regarding compatible electronic on-line communications needs.
- 4) Technical solutions adopted by ENTSOG shall be contained in a single document known as the ENTSOG Data & Solutions Handbook. The Handbook shall contain additional items such as a list of agreed data types to be exchanged and published, as well as a mapping of data types and principles with related technology standards. Any solution adopted by ENTSOG shall have an implementation plan and duration of applicability. The solutions shall ensure confidentiality, including of commercially sensitive information.
- 5) The Handbook shall also contain any relevant technical solutions (such as the data format or exchange protocol) referred to in this Network Code.
- 6) The latest version of the Handbook shall be available through ENTSOG's website.
- 7) All solutions adopted for the needs of the Network Code shall be compatible with the specifications set out in the relevant paragraphs of this Network Code.

### 3.3. Capacity calculation and maximisation

- 1) The maximum capacity at all relevant points referred to in article 18 (3) of Regulation (EC) No 715/2009 shall be made available to network users, taking into account system integrity and efficient network operation.
- 2) Transmission system operators shall determine technical capacity by the application of a calculation methodology. Transmission system operators shall publish those methodologies in accordance with Chapter 3 of Annex 1 to Regulation (EC) No 715/2009 dated 10 November 2010.
- 3) Adjacent transmission system operators shall exchange relevant information with the aim of coordinating the results of their capacity calculations to maximise technically available capacity.

## 4. Allocation of firm capacity

### 4.1. Allocation methodology

- 1) Auctions shall be used for the allocation of capacity at Interconnection Points.
- 2) At all Interconnection Points the same auction design shall apply. The relevant auction processes shall be held simultaneously for all concerned Interconnection Points.
- 3) The Standard Capacity Products for which network users shall be entitled to bid in an auction shall follow a logical order by which products covering Long Term Capacity shall be offered first, followed by the next shortest capacity duration. The timing of the auctions described in articles 4.5 to 4.9 shall therefore be consistent with this principle.

- 4) The Standard Capacity Products as defined in article 4.2 and auctions as defined in articles 4.5 to 4.9 shall apply for Bundled Capacity at an Interconnection Point.
- 5) For a given auction, the availability of the relevant Standard Capacity Products shall be communicated in accordance with articles 4.5 to article 4.9 and according to the Auction Calendar.
- 6) When defining the available capacity for the auction of Long Term Capacity, at least 10% of the available capacity shall be withheld for Short Term Capacity auctions.
- 7) The exact proportion of capacity to be reserved in relation to article 4.1 (6) shall be subject to a stakeholder consultation and review by national regulatory authorities at each Interconnection Point in accordance with article 9.

#### 4.2. Standard Capacity Products

- 1) The following Standard Capacity Products shall be defined: quarterly, monthly, daily, Within-day.
- 2) Quarterly Standard Capacity Products shall be the capacity, which may be applied for and registered as held (in a given amount) by a network user for each Gas Day in a particular calendar quarter (starting respectively on the 1<sup>st</sup> of January, 1<sup>st</sup> of April, 1<sup>st</sup> of July or the 1<sup>st</sup> of October).
- 3) Monthly Standard Capacity Products shall be the capacity, which may be applied for and registered as held (in a given amount) by a network user for each Gas Day in a particular calendar month (starting on the 1<sup>st</sup> Gas Day of each month).
- 4) Daily Standard Capacity Products shall be the capacity, which may be applied for and registered as held (in a given amount) by a network user for a particular Gas Day only.
- 5) Within-day Standard Capacity Products shall be the capacity, which may be applied for and registered as held (in a given amount) by a network user from a start time within a particular Gas Day until the end of the same Gas Day.

#### 4.3. Applied booking unit

The capacity offered shall be expressed in energy units per unit of time. The following units shall be used: kWh/h or kWh/d assuming a flat flow rate over the day.

#### 4.4. Auction design

- 1) Long Term Capacity shall be offered via annual quarterly capacity auctions.
- 2) Short Term Capacity shall be offered via annual monthly capacity auctions, rolling monthly capacity auctions, rolling daily capacity auctions and Within-day auctions.
- 3) If Bidding Windows last more than one business day, the entity responsible for the auction shall publish aggregate interim information at the end of each business day

except the allocation results which shall be published after the closing of the Bidding Window.

4.5. Long Term Capacity auctions: annual quarterly auctions

- 1) The Long Term Capacity auction shall be held once a year.
- 2) Capacity for each quarterly Standard Capacity Product shall be auctioned through the Long Term Capacity auction.
- 3) The auction process shall offer capacity for the upcoming 15 years, that is, each quarterly Standard Capacity Product from one up to 60 quarters. The Long Term Capacity auctioned shall be effective from the fourth quarter of each calendar year.
- 4) The Bidding Window shall open on the 1<sup>st</sup> Monday of March of each calendar year unless otherwise specified in the Auction Calendar.
- 5) One or more capacity bids, for one or more quarters in the Long Term Capacity auction, shall be handled as follows:
  - (a) Submission from 09:00 UTC to 15:00 UTC (winter time) or 10:00 UTC to 16:00 UTC (daylight saving) during each Gas Day of the Bidding Window.
  - (b) Withdrawal or amendment from 09:00 UTC to 15:00 UTC (winter time) or 10:00 UTC to 16:00 UTC (daylight saving) during each Gas Day of the Bidding Window.
- 6) The duration of the Bidding Window shall be 10 consecutive business days as of the opening of the Bidding Window.
- 7) During the Long Term Capacity auction network users shall be able to apply for Standard Capacity Products for one or several quarters.
- 8) The capacity to be offered during the Long Term Capacity auction shall be equal to:

$$A - B - C$$

Where:

- A is the transmission system operator's calculated available firm capacity for each of the Standard Capacity Products;
  - B is the at least 10% of the total available firm capacity (A) reserved for Short Term Capacity auctions according to article 4.1 (6);
  - C is the previously sold Long Term Capacity
- 9) One month before the Bidding Window opens, transmission system operators shall notify network users about the amount of capacity to be offered for each quarter for the upcoming Long Term Capacity auction.

- 10) Aggregated interim information shall be published to the market at the end of each day.
- 11) The allocation results of the auction shall be published 5 business days after the closing of the Bidding Window simultaneously to individual network users participating in the respective auction.
- 12) Subsequently, final aggregated auction information shall be published to the market.

#### 4.6. Annual monthly capacity auctions

- 1) The annual monthly capacity auction shall be held once a year.
- 2) Each calendar year, capacity for each calendar month from October of the respective calendar year to September of the following calendar year (inclusive) shall be auctioned through the annual monthly capacity auction.
- 3) During the annual monthly capacity auction network users shall be able to apply for monthly Standard Capacity Products for a minimum of one and a maximum of 12 months.
- 4) The Bidding Window shall open on the 1<sup>st</sup> Monday of June of each calendar year unless otherwise specified in the Auction Calendar.
- 5) A monthly capacity bid in the annual monthly capacity auction shall be handled as follows:
  - (a) Submission from 09:00 UTC to 15:00 UTC (winter time) or 10:00 UTC to 16:00 UTC (daylight saving) during each Gas Day of the Bidding Window.
  - (b) Withdrawal or amendment from 09:00 UTC to 15:00 UTC (winter time) or 10:00 UTC to 16:00 UTC (daylight saving) during each Gas Day of the Bidding Window.
- 6) The duration of the Bidding Window shall be 5 consecutive business days as of the opening of the Bidding Window.
- 7) The capacity to be offered in the annual monthly auction shall be, each month, equal to:

B + L

Where:

B is the at least 10% of the total available firm capacity (A) reserved for Short Term Capacity auctions according to article 4.1 (6);

L is the unsold capacity from Long Term Capacity auctions (if any) plus any extra capacity;

- 8) One month before the Bidding Window opens, transmission system operators shall notify network users about the amount of capacity to be offered for each month for the upcoming annual monthly capacity auction.

- 13) Aggregated interim information shall be published to the market at the end of each day.
- 14) The allocation results of the auction shall be published 3 business days after the closing of the Bidding Window simultaneously to individual network users participating in the respective auction.
- 15) Subsequently, final aggregated auction information shall be published to the market.

#### 4.7. Rolling monthly capacity auctions

- 1) The rolling monthly capacity auction shall be held once a month.
- 2) Each month, the next monthly Standard Capacity Product shall be auctioned through the rolling monthly capacity auction.
- 3) During the rolling monthly capacity auction network users shall be able to apply for one monthly Standard Capacity Product.
- 4) The Bidding Window shall open on the 3<sup>rd</sup> Monday of each month for the auction of the following monthly Standard Capacity Product unless otherwise specified in the Auction Calendar.
- 5) A capacity bid in the rolling monthly capacity auction shall be handled as follows:
  - (a) Submission from 09:00 UTC to 15:00 UTC (winter time) or 10:00 UTC to 16:00 UTC (daylight saving) during each day of the Bidding Window.
  - (b) Withdrawal or amendment from 09:00 UTC to 15:00 UTC (winter time) or 10:00 UTC to 16:00 UTC (daylight saving) during each day of the Bidding Window.
- 6) The duration of the Bidding Window shall be 2 consecutive business days as of the opening of the Bidding Window.
- 7) The capacity to be offered in the rolling monthly capacity auction shall be, each month, equal to:

$$U + C$$

Where:

U is the unsold capacity from previous auctions (if any);

C is any extra capacity

- 8) One week before the Bidding Window opens, transmission system operators shall notify network users about the amount of capacity to be offered for the upcoming rolling monthly capacity auction.
- 9) Aggregated interim information shall be published to the market at the end of each day.

10) The allocation results of the auction shall be published 2 business days after the closing of the Bidding Window simultaneously to individual network users participating in the respective auction.

11) Subsequently, final aggregated auction information shall be published to the market.

#### 4.8. Rolling daily capacity auctions

1) The rolling daily capacity auction shall be held once a day.

2) Every day, a Standard Capacity Product for the following day shall be auctioned through the rolling daily capacity auction.

3) During the rolling daily capacity auction network users shall be able to apply for capacity for one daily Standard Capacity Product.

4) The Bidding Window shall open every day at 05:00 UTC (winter time) or 06:00 UTC (daylight saving).

5) A capacity bid for the Daily Standard Capacity Product for the rolling daily capacity auction shall be handled as follows:

(a) Submission from 05:00 UTC to 12:00 UTC (winter time) or 06:00 UTC to 13:00 UTC (daylight saving).

(b) Withdrawal or amendment from 05:00 UTC to 12:00 UTC (winter time) or 06:00 UTC to 13:00 UTC (daylight saving).

6) The capacity to be offered in the rolling daily capacity auction shall be, each day, equal to:

$$F + R$$

Where:

F is the unsold capacity from previous auctions (if any);

R is any extra capacity

7) One hour before the Bidding Window opens, transmission system operators shall notify network users about the amount of capacity to be offered for the upcoming rolling daily capacity auction.

8) The allocation results of the auction shall be published no later than 1 hour after the closing of the Bidding Window simultaneously to individual network users participating in the respective auction.

9) Subsequently, final aggregated auction information shall be published to the market.

#### 4.9. Within-day capacity auctions

- 1) Subject to capacity being made available, a Within-day capacity auction shall be held every hour during a relevant Gas Day (subject to article 4.9 (3)).
- 2) The first Bidding Window shall open directly on the next hour bar following the publication of results of the day-ahead auction in accordance with article 4.8. The first Bidding Window closes at 03:00 UTC (winter time) or 04:00 UTC (daylight saving) before the Gas Day. The allocation of successful bids shall be effective from 05:00 UTC (winter time) or 06:00 UTC (daylight saving) on the relevant Gas Day.
- 3) The last Bidding Window shall close at 02:00 UTC (winter time) or 03:00 UTC (daylight saving) on the relevant Gas Day.
- 4) Network users shall be entitled to withdraw or amend bids from the opening of the first Bidding Window until 02:00 UTC (winter time) or 03:00 UTC (daylight saving) within-day, unless the respective transmission system operator is running an allocation process.
- 5) Each hour on the relevant day, capacity effective from the hour + 2 shall be auctioned as Within-day capacity.
- 6) Each Bidding Window shall open at the start of every hour on the relevant day.
- 7) The duration of each Bidding Window shall be 1 hour as of the opening of the Bidding Window.
- 8) The capacity to be offered in the Within-day capacity auction shall be, each hour, equal to:  
  
     $H + G$   
  
    Where:  
  
    H      is the unsold capacity from previous auctions (if any);  
  
    G      is any extra capacity the TSO at its discretion is willing to make available
- 9) Transmission system operators shall publish the available amount of Within-day firm capacity on offer, after closure of the day-ahead auctions.
- 10) Transmission system operators shall provide network users who bid in the day-ahead auctions with the option to have un-allocated bids automatically entered into the subsequent Within-day auction, in so far as the day-ahead bid was not accepted in the day-ahead auction.
- 11) The capacity shall be allocated within 15 minutes of the closure of the Bidding Window (every effective hour bar) provided that the bids are accepted and the transmission system operator runs the allocation process.

- 12) The results of the auction shall be made available to successful network users simultaneously.
- 13) The aggregated market information shall be published at least at the end of each day.

#### 4.10. Auction algorithms

- 1) If several Standard Capacity Products are offered during an auction, the respective allocation algorithm (Cleared-Price auction) shall be applied separately for each Standard Capacity Product when it is being allocated. Bids for the different Standard Capacity Products shall be considered independently from each other in the application of the auction algorithm.
- 2) For Long Term Capacity auctions, annual monthly capacity auctions and rolling monthly capacity auctions, a Volume-Based Cleared-Price auction algorithm shall be applied in accordance with article 4.11.
- 3) For day-ahead capacity auctions and Within-day capacity auctions, a Uniform-Price auction algorithm shall be applied in accordance with article 4.12.

#### 4.11. Volume-Based Cleared-Price auction algorithm

- 1) The transmission system operator shall provide a price range of 30 price steps unless otherwise agreed on an Interconnection Point by Interconnection Point basis, starting at the Reserve Price  $P_0$ .
- 2) Each subsequent price step in the range shall be obtained by increasing the previous one by a price increment, defined as follows:

$$P_i = P_{i-1} + x$$

$i = 1$  to 29, unless otherwise agreed on an Interconnection Point by Interconnection Point basis by the involved transmission system operators

$$P_0 = \text{Reserve Price}$$

$x =$  price increment (variable or fixed rate of increase)

- 3) During the Bidding Window of a given auction, the current bid submitted by a network user shall be considered as his only valid bid per price step. Any previous bid at this price step shall be removed. All bidders shall submit a bid at price step  $P_0$ . Each bid quantity at  $P_1$  and subsequent steps shall be equal to or less than the bid quantity at the previous price step. After the closure of the Bidding Window, all remaining bids shall neither be amended nor withdrawn.
- 4) A bid shall specify:
  - (a) the identity of the network user applying;
  - (b) the concerned Interconnection Point and direction of the flow;

- (c) the Standard Capacity Product for which the capacity is applied for;
  - (d) per price-step, the amount of capacity for the respective Standard Capacity Product applied for; and
  - (e) per price-step, the Minimum Amount of Capacity for the respective Standard Capacity Product which the network user is willing to be allocated according to the relevant algorithm in case he is not allocated the amount requested in accordance with article 4.11 (4) (d).
- 5) The transmission system operator shall aggregate the demand per price step.
  - 6) All remaining bids at Bidding Window closing time shall be considered as binding on those bidders that are allocated at least the Minimum Amount of Capacity in accordance with article 4.11 (4) (e).
  - 7) All bids at the lowest price at which total demand is less than or equal to the available quantity shall be allocated the capacity requested in accordance with article 4.11 (4) (d).
  - 8) If the total demand exceeds available capacity at the maximum price step, at that price step the demand shall be pro-rated proportionally to the individual bid quantity. Should the allocated capacity be less than the Minimum Amount of Capacity requested in accordance with article 4.11 (4) (e), the bid shall be disregarded (and not legally binding), and the capacity concerned shall be allocated to the remaining bids.
  - 9) The clearing price is defined as price of the lowest successful bid. All successful bids shall be deemed payable by the network users at the clearing price.

#### 4.12. Uniform-Price auction algorithm

- 1) No price steps shall be provided. Network users may freely choose the price or prices at which they submit their bid or bids.
- 2) During the Bidding Window of a given auction, network users may submit up to 10 bids. Each bid shall be treated independently of other bids. After the closure of the Bidding Window, all remaining bids shall not be amended or withdrawn.
- 3) A bid shall specify:
  - (a) the identity of the network user applying;
  - (b) the concerned Interconnection Point and direction of the flow;
  - (c) the Standard Capacity Product for which the capacity is applied for;
  - (d) the amount of capacity for the respective Standard Capacity Product applied for;

- (e) the Minimum Amount of Capacity for the respective Standard Capacity Product which the network user is willing to be allocated according to the relevant algorithm in case he is not allocated the amount requested in accordance with article 4.12 (3) (d); and
  - (f) the bid price, which shall not be less than the Reserve Price applicable for the relevant Standard Capacity Product, which the network user is willing to pay in respect of the capacity applied for. Bids with a bid price below Reserve Price shall not be accepted.
- 4) The transmission system operator shall rank all bids relating to a given Standard Capacity Product according to their bid price, the highest price ranking first.
  - 5) All remaining bids at Bidding Window closing time shall be considered as binding on those bidders that are allocated at least the Minimum Amount of Capacity requested in accordance with article 4.12 (3) (e).
  - 6) Pursuant to article 4.12 (4) and subject to article 4.12 (7) to article 4.12 (10), available capacity for the relevant Standard Capacity Product shall be allocated to the bids in function of their price ranking. All bids for which capacity is allocated shall be considered as successful, and all successful bidders shall pay the same price. After the allocation of capacity, the remaining available capacity shall be reduced by such quantity.
  - 7) Pursuant to article 4.12 (6) and subject to article 4.12 (9), where the amount of capacity bid for exceeds the capacity available (after capacity has been allocated to network users placing higher bids), this bidder will be allocated capacity equal to the available un-allocated capacity.
  - 8) Pursuant to article 4.12 (7) and subject to article 4.12 (9), where each of two or more bids specifies the same bid price, and the amount of relevant capacity remaining applied for in aggregate under such bids exceeds the remaining unallocated amount, the remaining unallocated amount shall be allocated pro rata to the amounts applied for in each such bid;
  - 9) Where the amount to be allocated in respect of a bid pursuant to article 4.12 (6), article 4.12 (7) or article 4.12 (8) is less than the Minimum Amount of Capacity according to article 4.12 (3) (e), the bid shall be disregarded (and not legally binding), and a revised allocation shall be made between remaining equal price bid(s) under article 4.12 (8), or (as the case may be) an allocation shall be made in respect of the next priced bid, pursuant to article 4.12 (6).
  - 10) Where the remaining amount to be allocated in respect of any bid pursuant to article 4.12 (6), article 4.12 (7), article 4.12 (8) or article 4.12 (9) is equal to 0 (zero) no further capacity shall be allocated to the remaining bids. Those bids shall be considered unsuccessful.
  - 11) The clearing price shall be defined as price of the lowest successful bid. All successful bids shall be deemed payable by the network users at the clearing price.

## 5. Cross-border capacity

Adjacent transmission system operators shall jointly offer Bundled Capacity products, according to the following principles:

- 1) All firm capacity shall be offered as Bundled Capacity, in so far as the capacity is firm on both sides of the Interconnection Point.
- 2) Transmission system operators shall make available capacity for the duration considered on a booking platform for the network users registered at the relevant platform, in accordance with article 8 of this Network Code and in accordance with the applicable booking procedure timelines, as set out in article 4.
- 3) The booking platform(s) shall be designed in such a way, that the joint capacity to be offered by the transmission system operators concerned at an Interconnection Point once the corresponding available capacity is available as a bundled product, shall be booked through a single booking and allocation procedure.
- 4) Network users shall comply with applicable terms and conditions of the Capacity Contract(s) of the transmission system operators concerned as from the booking. For the avoidance of doubt, once allocated the capacity shall be deemed a contracted capacity as defined in article 2 of Regulation (EC) 715/2009.
- 5) Where due to technical reasons there is more firm capacity available on one side of an Interconnection Point than on the other side and where this results in a mismatch between the available firm capacities of a specific duration, the transmission system operator with the most available firm capacity on offer shall offer the divergent capacity to the network users as an unbundled firm product in accordance with the Auction Calendar.
- 6) Firm capacity becoming available on one side of an Interconnection Point exceeding the available capacity on the other side of the Interconnection Point shall be allocated for a duration not exceeding the expiration date of the corresponding Capacity Contract on the other side of the Interconnection Point. Adjacent transmission system operators shall monitor and plan this process.
- 7) Adjacent transmission system operators shall establish a joint nomination procedure for Bundled Capacity, providing network users with the means to nominate the flows of their Bundled Capacity via a single nomination.
- 8) Where two or more Interconnection Points connect the same two adjacent transmission systems, the adjacent transmission system operators in question shall offer the available capacities at the Interconnection Points at one Virtual Interconnection Point according to the following conditions:
  - (a) the total virtualised capacity shall be equal to or higher than the sum of the individual capacities available at the relevant Interconnection Points;

- (b) to the reasonable judgement of each transmission system operator concerned regarding its own transmission network, the characteristics of the transmission systems involved shall allow virtualisation of capacities;
- (c) Virtual Interconnection Points shall only be established, if they facilitate the economic and efficient use of the system including but not limited to rules set out in article 16 of Regulation (EC) No 715/2009; and
- (d) adjacent transmission system operators shall start the analysis of the possible establishment of a Virtual Interconnection Point in due time for any Virtual Interconnection Point to be functional no later than 5 years after the entering into force of this Network Code.

## **6. Interruptible capacity**

### **6.1. Allocation of interruptible services**

- 1) Interruptible capacity may be offered by transmission system operators at any Interconnection Point in both directions.
- 2) The minimum obligation posed upon transmission system operators shall be to offer a daily product for interruptible capacity, to be allocated day-ahead at Interconnection Points where firm capacity is sold out day-ahead.
- 3) At Unidirectional Interconnection Points, Backhaul Capacity shall be offered at least on an interruptible basis.
- 4) If interruptible capacity is offered, this shall not be detrimental to the amount of firm capacity on offer.
- 5) If offered, the same Standard Capacity Products for firm capacity shall also apply for interruptible capacity.
- 6) If offered, interruptible capacity shall be allocated via an auction process (with the possible exception of Within-day).
- 7) Adjacent transmission system operators shall coordinate the amount of interruptible capacity on offer at both sides of an Interconnection Point.
- 8) Transmission System Operators shall publish the amounts of interruptible capacity on offer before the start of the auction process. Notwithstanding the above and due to the nature of Within-day interruptible capacity and regulatory regimes, the transmission system operators may not be able to publish the amount of Within-day interruptible capacity.
- 9) If offered, interruptible capacity shall be allocated via a separate auction after firm capacity of equal duration has been allocated, but before the auction of firm capacity with a shorter duration will start.

- 10) If offered, interruptible capacity auctions shall be conducted in accordance with the same design principles and timescales as applied for firm capacity. The exact Bidding Windows applied for the interruptible capacity auctions shall be detailed within the Auction Calendar.

#### 6.2. Standard Interruption Lead Times

- 1) Interruptible capacities shall have Standard Interruption Lead Times, on which adjacent transmission system operators shall decide jointly.
- 2) The default Standard Interruption Lead Time shall be two hours (next hour bar + 2 hours), unless the adjacent transmission system operators agree on a different lead time.

#### 6.3. Coordination of interruption process

The transmission system operator that initiates the interruption shall notify the relevant adjacent transmission system operator. Both adjacent transmission system operators shall notify their respective affected network users as soon as practicable.

#### 6.4. Defined sequence of interruptions

- 1) The order in which interruptions shall be performed, if the total of nominations exceeds the quantity of gas that can flow at a certain Interconnection Point, shall be determined based on the Contractual Timestamp of the respective Capacity Contracts on an interruptible basis. The Capacity Contract with the oldest Contractual Timestamp shall prevail.
- 2) If, after applying the procedure described in article 6.4 (1), two or more nominations are ranked at the same position within the interruption order and the transmission system operator does not interrupt both/all of them, a pro-rata reduction of these specific nominations on the basis of their respective nomination shall apply.
- 3) To accommodate the differences between the various interruptible capacity services within Europe, the adjacent transmission system operators will implement and coordinate the joint procedures described in this article 6.4 on an Interconnection Point by Interconnection Point basis.

### 7. Tariffs

- 1) If not further or otherwise specified in the network code on tariffs, the following shall apply for the determination of specific tariffs for the application of this Network Code.
- 2) The Regulated Tariff shall be used as the Reserve Price in all auctions for all Standard Capacity Products for firm and interruptible capacity.
- 3) The regulated prices as Reserve Prices for firm Standard Capacity Products shall be set such that bookings of a profiled set of products to meet the actual flow requirements throughout the year yield revenues which are, as far as reasonably possible, equivalent to the revenues from non-profiled longer capacity bookings to meet annual peak flow

requirements. In order to achieve such equivalence, Standard Capacity Products shall be offered at regulated prices as Reserve Prices, which are derived per Interconnection Point and per direction by applying multipliers higher than one to a tariff determined from an annual accounting basis.

- 4) Auction revenues from Bundled Capacity need to be split between the transmission system operators placing capacity elements in a Bundled Capacity. The Reserve Price of the Bundled Capacity shall be the sum of Reserve Prices of the capacity elements in the bundle. All revenues from sales of Bundled Capacity shall be attributed to the contributing transmission system operators in relation to each capacity transaction.
- 5) Any revenue from an auction of Bundled Capacity shall be split between the transmission system operators placing capacity elements in the bundle according to a pro-rata rule, based on the proportions of the Reserve Prices of the capacity elements placed in the bundle at the time of the auction. By way of derogation, transmission system operators placing capacity in a Bundled Capacity can agree on a different split of the revenue from an auction of bundled products.
- 6) Auction revenues exceeding the allowed revenue (or under a price cap, auction revenues arising from capacity prices above the regulated tariff) shall be used for different aims, subject to approval by the national regulatory authority.
- 7) In the event of revenue under-recovery (or under a price cap, capacity prices falling short of later regulated prices after the auction), national regulatory authorities shall allow transmission system operators to collect the revenue shortfall in a timely manner by adjusting tariffs accordingly.

## **8. Booking platforms**

Joint booking platform(s) shall be established, given the following rules:

- 1) Booking platform(s) shall be established to implement the rules and processes for offering and allocation of all capacity, according to the rules laid out in article 4.
- 2) The establishment of a process to offer firm Bundled Capacity in accordance with article 5 shall have priority.
- 3) Booking platform(s) shall allow an option for network users to offer and obtain secondary capacity.
- 4) Adjacent transmission system operators shall take the necessary steps towards applying the rules of this Network Code. This can be done by offering Bundled Capacity via the following:
  - (a) using already existing booking platforms;
  - (b) one transmission system operator or an agreed party offering the Bundled Capacity including, where necessary, acting on behalf of the transmission system operator(s) towards the network users;

- (c) establishing a joint booking platform; or
  - (d) establishing another platform approach not specified here.
- 5) The action plan on how to reduce the number of platforms and eventually establish a single EU-wide platform is as follows:
- (a) no later than 1 year after the entry into force of this Network Code, ENTSOG shall publish a report describing the number and operation of existing and planned booking platforms;
  - (b) based on this report ENTSOG shall start a market consultation process to identify the market's needs with respect to booking platforms;
  - (c) this market consultation process shall last at most 12 months and shall end with the publication by ENTSOG of a comprehensive report setting out the market's requirements for booking platforms. This report shall also provide a reasoned assessment of costs and time needed to establish an EU-wide booking platform meeting the market's requirements. A road map towards a single EU-wide booking platform, including interim steps, if needed, shall also be part of this report.

## **9. Exceeding required decisions**

- 1) This Network Code aims at the highest possible degree of harmonisation across Europe, especially with regard to the provisions of the Framework Guideline and Regulation (EC) No 715/2009. However, in case essential elements for the purpose of a functioning capacity allocation mechanism are beyond the scope of this Network Code, such elements shall be decided at a cross-border level. The respective decision making shall be carried out via a stakeholder consultation involving the respective parties at this Interconnection Point.
- 2) Decisions with regard to article 9.1 (1) shall be relevant in particular to, but not limited to:
  - (a) the exact level of capacity reserved for Short Term Capacity beyond the 10% requirement;
  - (b) the applied time reference of the booking unit; and
  - (c) further detailed specifications of the auction design.

## **10. Adaption, implementation and interim period**

### **10.1. Adaption of national terms and conditions**

Transmission system operators shall adapt relevant national terms and conditions to the extent affected by this Network Code within [six months] of this Network Code entering into

force and shall start the relevant endorsement process subject to the relevant national mandatory procedures. The rules shall comply with the Implementation Period set forth herein.

#### 10.2. Implementation period

Subject to article 10.1, for the implementation of the systems stemming from the provisions set out in this Network Code, including but not limited to technical aspects, an additional transitory period of [18 months] shall apply.

#### 10.3. Interim period for auctions

In case the characteristics of a national or regional market are not considered appropriate for the purpose of applying auctions on a national level at the time of the coming into force of the corresponding provisions, an interim period may be adopted for this market. During this interim period, adjacent transmission system operators shall apply a compatible allocation mechanism at each Interconnection Point.

### 11. Entry into force

This Network Code shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.