

ENTSO-E Draft Network Code on Forward Capacity Allocation

28 March 2013

Notice

This document reflects the status of the work of Transmission System Operator experts as of 28 March 2013 in line with the ACER Framework Guidelines on Capacity Allocation and Congestion Management for Electricity published on 29 July 2011 after the EC mandate letter was received by ENTSO-E on 21 September 2012.

The document does not in any case represent a firm, binding or definitive ENTSO-E position on the content, the structure or the prerogatives of the Network Code on Forward Capacity Allocation.

This document is issued for public consultation with stakeholders, who are invited to submit their comments via the web-based ENTSO-E consultation tool by 28 May 2013.

The text highlighted in grey in the NC FCA submitted to consultation is identical to the Network Code on Capacity Allocation and Congestion Management (NC CACM) as submitted to ACER on the 27 September 2012.

While drafted in the framework of the NC CACM development process, this text has been included in the NC FCA as it is applicable to all Capacity Allocation timeframes, including Forward Capacity Allocation. As requested by some stakeholders, we highlighted this text to ease readability and to facilitate the understanding of how the two Network Codes interact. As part of this NC FCA public consultation, comments submitted on the text highlighted in grey shall exclusively refer to the applicability of this text to the Forward Capacity Allocation timeframe. ENTSO-E reserves its right not to consider comments specifically related to the Day Ahead and Intraday timeframe as these should have been addressed within the scope of the NC CACM development process.

In addition, it shall be noted that on 14 March 2013 ACER issued a Recommendation to the European Commission to adopt the NC CACM. As a result of this recommendation and of the ongoing adoption process by the EC, the final version of the NC CACM may be subject to amendments. Consequently, such amendments will eventually also affect the relevant parts of the FCA NC now highlighted in grey.

THE EUROPEAN COMMISSION,

Having regard to Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC,

Having regard to Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators (ACER),

Having regard to Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 and especially Article 6,

Having regard to the priority list issued by the European Commission on 19 July 2012,

Having regard to the Framework Guideline on Capacity Calculation and Congestion Management issued by the Agency for the Coordination of Energy Regulators on 29 July 2011,

Whereas:

- (1) Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC and Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 underline the need for an increased cooperation and coordination among transmission system operators within a European Network of Transmission System Operators for Electricity (ENTSO-E) to create Network Codes for providing and managing effective and transparent access to the transmission networks across borders, and to ensure coordinated and sufficiently forward-looking planning and sound technical evolution of the transmission system in the European Union, including the creation of interconnection capacities, with due regard to the environment.
- (2) Transmission System Operators are according to Article 2 and 12 of Directive 2009/72/EC responsible for operating, ensuring the maintenance of and, if necessary, developing the extra high-voltage and high-voltage interconnected system its interconnections with other systems, and for ensuring the long-term ability of the system to meet reasonable demands for the transmission of electricity and with a view to its delivery of electricity to final customers or to distributors.
- (3) As stated in Directive 2009/72/EC a well-functioning internal market in electricity should provide producers with the appropriate incentives for investing in new power generation, including in electricity from renewable energy sources, paying special attention to the most isolated countries and regions in the European Union's energy market. A well-functioning market should also provide consumers with adequate measures to promote the more efficient use of energy for which a secure supply of energy is a precondition.
- (4) The security of energy supply is an essential element of public security and is therefore inherently connected to the efficient functioning of the internal market in electricity and the integration of the isolated electricity markets of Member States. Electricity can reach the citizens of the Union only through the network. Functioning electricity markets and, in particular, the networks and other assets associated with electricity supply are essential for public security, for the competitiveness of the economy and for the well-being of the citizens of the Union.

- (5) ENTSO-E has drafted this Network Code on Forward Capacity Allocation aiming at setting out clear and objective requirements for System Operators, National Regulatory Authorities, Market Participants and Allocation Platforms in order to contribute to non-discrimination, effective competition and the efficient functioning of the internal electricity market and to ensure system security.
- (6) This Network Code has been drafted in accordance with the Article 8(7) of Regulation (EC) No714/2009 according to which the Network Codes shall be developed for cross-border issues and market integration issues and shall be without prejudice to the right of Member States to establish national network codes which do not affect cross-border trade.
- (7) A well-functioning market shall rely on an efficient long term capacity calculation process by the Transmission System Operators, taking into account the security of supply and the needs of market participants. This process will take place at least at the yearly and monthly timeframes, and will be coordinated among System Operators, at least at a regional level.
- (8) All the necessary data for the capacity calculation will be gathered in a common and shared grid model, representing the European interconnected system. In order to take into account the uncertainties inherent to the long term timeframes, the model may include several scenarios and may be complemented with additional elements such as statistical approach.
- (9) There are two permissible approaches for the capacity calculation and allocation: coordinated net transmission capacity based or flow based. The flow based approach can be applied where interdependencies on cross zonal capacities between bidding zones are high and the approach is justified from a social welfare point of view. Furthermore, the approach used for the long term shall be compatible with the approach used in day ahead and intraday capacity calculation and allocation.
- (10) Nomination procedures are in place on Bidding Zones Border(s) where System Operators have proposed, and National Regulatory Authorities approved, the issuance of Physical Transmission Rights.
- (11) Nomination Rules contain detailed information on the nomination procedure including requirements, timings, gate closures and interactions with the secondary market for Long Term Transmission Rights.
- (12) Market Participants wanting to participate in the Forward Capacity Allocation shall comply with the corresponding Allocation Rules.
- (13) Allocation Platform(s) publish(es) all the relevant information about the auction before its opening including at least timings, participation requirements, offered products. After the allocation is done Allocation Platform(s) publish(es) the result of the auction defining the volume of the Long Term Transmission Rights expressed in MW.
- (14) Price determination for Long Term Transmission Rights follows the marginal price principle resulting from the corresponding Forward Capacity Allocation.
- (15) Long Term Transmission Right holders are entitled to return their Long Term Transmission Rights for its allocation in a subsequent Forward Capacity Allocation. In addition Market Participants are also entitled to either transfer or acquire Long Term Transmission Rights in

the Secondary Market as long as the transmission System Operators are appropriately informed and are always notified who holds the Long Term Transmission Rights as the counterparty of the final Long Term Transmission Right holder.

- (16) Fallback procedures are in place for the cases when the process of Forward Capacity Allocation is not able to provide results in due time.
- (17) System Operators will establish and operate a Single Platform for Allocation and for Secondary Trading at the pan-European level.
- (18) The Single Platform for Allocation is a single point of contact for Market Participants wanting to participate in Explicit Auctions to acquire Long Term Transmission Rights. This central platform is developed by all System Operators to ease the operation of allocation of Long Term Transmission Rights for Market Participants.
- (19) The Single Platform for Secondary Trading shall facilitate and support the transfer of Long Term Transmission Rights from one eligible Market Participant to another. It is then up to the respective Market Participants to conclude trades with each other transferring Long Term Transmission Rights via regulated markets, brokers, or bilaterally via “over the counter” transactions. This network code does not prevent any third party to set-up trading platforms for exchange of transmission rights or to exchange such transmission rights on existing trading venues, provided the requirements under this network code are respected.
- (20) The Allocation Rules generally contain the description of the allocation of Long Term Transmission Rights including the minimum requirements for participation, financial matters, type of products offered in explicit auctions, nomination rules, curtailment and compensation, secondary trading, UIOSI, force majeure and liability. Allocation Rules outline also the contractual obligations to be respected by Market Participants wanting to acquire Long Term Transmission Rights on an Allocation Platform(s).
- (21) Currently there are multiple sets of Allocation Rules across Europe governing the contractual arrangements for trading Cross Zonal Capacity. Allocation Rules for Physical Transmission Rights and Financial Transmission Rights shall be harmonised at the European level. System Operators will develop a set of harmonised Allocation Rules.
- (22) Given the contractual nature of the Allocation Rules and the likelihood that these rules will need to be amended over time to meet Market Participant needs. The Forward Capacity Allocation network code clearly outlines the minimum harmonised principles that will need to be included in the harmonised Allocation Rules.
- (23) The CACM network code establishes a day-ahead firmness deadline and a related compensation regime due to the holders of Transmission Rights for curtailments of underlying allocated cross-zonal capacity after such deadline. Before the day-ahead firmness deadline, System Operators have the right to curtail allocated Cross Zonal Capacity. In these cases, they have to reimburse or compensate the Long Term Transmission Right holders whose underlying Cross Zonal Capacities have been curtailed. However, cumulated compensation payments from System Operators to such holders should not be higher than

the total congestion income derived from the allocation of Long Term Transmission Rights for the fix period of time.

(24) Reimbursement of the initial price paid or caps on the compensation to be paid to Market Participants for curtailing allocated Cross Zonal Capacity may be introduced, taking into the account the liquidity of the relevant markets and the possibility for transmission system users to adjust their cross-border positions as well as in the case of and for curtailments of long duration.

(25) Until the introduction of day-ahead market coupling, alternative compensation arrangements apply as a transitional measure. These transitional arrangements shall be fair, transparent and non-discriminatory.

(26) Regional Platforms can continue to operate as a transitory measure until the Single Platform for Allocation and Single Platform for Secondary Trading are in place and fully operational.

HAS ADOPTED THIS NETWORK CODE:

CONTENTS

TITLE 1	GENERAL PROVISIONS.....	10
Article 1	SUBJECT MATTER AND SCOPE.....	10
Article 2	DEFINITIONS	10
Article 3	CONFIDENTIALITY OBLIGATIONS.....	14
Article 4	CONSULTATION	14
Article 5	PUBLICATION OF INFORMATION.....	15
Article 6	TRANSPARENCY OF INFORMATION.....	16
Article 7	REGULATORY APPROVALS.....	16
TITLE 2	GOVERNANCE.....	18
CHAPTER 1	ROLES AND RESPONSIBILITIES	18
Article 8	ROLES IN FORWARD CAPACITY ALLOCATION.....	18
Article 9	DELEGATION OF ROLES	18
Article 10	ESTABLISHMENT OF STAKEHOLDER COMMITTEE FOR FORWARD CAPACITY ALLOCATION.....	19
TITLE 3	REQUIREMENTS.....	20
CHAPTER 1	CAPACITY CALCULATION FOR FORWARD CAPACITY ALLOCATION	20
SECTION 1	GENERAL REQUIREMENTS.....	20
Article 11	CAPACITY CALCULATION TIMEFRAMES.....	20

Article 12	CAPACITY CALCULATION REGIONS.....	20
Article 13	AMENDMENT OF CAPACITY CALCULATION REGIONS.....	21
SECTION 2	THE COMMON GRID MODEL.....	21
Article 14	GENERATION AND LOAD DATA PROVISION METHODOLOGY.....	21
Article 15	AMENDMENT TO THE GENERATION AND LOAD DATA PROVISION METHODOLOGY... ..	22
Article 16	COMMON GRID MODEL METHODOLOGY.....	22
Article 17	AMENDMENTS OF THE COMMON GRID MODEL METHODOLOGY.....	22
Article 18	SCENARIOS.....	23
Article 19	INDIVIDUAL GRID MODEL.....	23
SECTION 3	CAPACITY CALCULATION METHODOLOGY.....	24
Article 20	CAPACITY CALCULATION METHODOLOGY.....	24
Article 21	AMENDMENT OF CAPACITY CALCULATION METHODOLOGIES.....	25
Article 22	CAPACITY CALCULATION APPROACHES.....	25
Article 23	RELIABILITY MARGIN.....	26
Article 24	SIZE OF RELIABILITY MARGIN.....	26
Article 25	OPERATIONAL SECURITY CONSTRAINTS.....	26
Article 26	ALLOCATION CONSTRAINTS.....	27
Article 27	GENERATION SHIFT KEYS.....	27
Article 28	REMEDIAL ACTIONS IN CAPACITY CALCULATION.....	27
Article 29	CROSS ZONAL CAPACITY VALIDATION.....	28
SECTION 4	THE CAPACITY CALCULATION PROCESS.....	28
Article 30	GENERAL PROVISIONS.....	28
Article 31	CREATION OF THE COMMON GRID MODEL.....	28
Article 32	REGIONAL CALCULATIONS OF CROSS ZONAL CAPACITIES.....	29
Article 33	VALIDATION AND DELIVERY OF CROSS ZONAL CAPACITY.....	30
SECTION 5	BIENNIAL REPORT ON CAPACITY CALCULATION.....	31
Article 34	BIENNIAL REPORT ON CAPACITY CALCULATION.....	31
CHAPTER 2	BIDDING ZONES.....	31
Article 35	GENERAL PROVISIONS.....	31
Article 36	REVIEWING BIDDING ZONE CONFIGURATION.....	32
Article 37	CRITERIA TO ASSESS THE EFFICIENCY OF ALTERNATIVE BIDDING ZONE CONFIGURATIONS.....	33
Article 38	BIENNIAL ASSESSMENT OF THE CURRENT BIDDING ZONE CONFIGURATION.....	34
Article 39	THE BIENNIAL TECHNICAL REPORT.....	34

CHAPTER 3	SPLITTING OF CROSS ZONAL CAPACITY	35
SECTION 1	METHODOLOGY.....	35
Article 40	METHODOLOGY FOR SPLITTING CROSS ZONAL CAPACITY.....	35
Article 41	AMENDMENT OF THE METHODOLOGY FOR SPLITTING CROSS ZONAL CAPACITY	35
SECTION 2	PROCESS FOR SPLITTING OF CROSS ZONAL CAPACITY	35
Article 42	VALIDATION AND DELIVERY OF SPLITTING FOR CROSS ZONAL CAPACITIES.....	35
CHAPTER 4	THE FORWARD CAPACITY ALLOCATION	36
SECTION 1	GENERAL PROVISIONS.....	36
Article 43	OBJECTIVES OF FORWARD CAPACITY ALLOCATION	36
Article 44	INPUT AND RESULTS OF FORWARD CAPACITY ALLOCATION	36
SECTION 2	OPTIONS FOR CROSS ZONAL TRANSMISSION RISK HEDGING	37
Article 45	DECISION ON CROSS ZONAL RISK HEDGING OPPORTUNITIES	37
Article 46	TYPE OF LONG TERM TRANSMISSION RIGHTS	38
Article 47	AMENDMENT OF THE TYPE OF LONG TERM TRANSMISSION RIGHTS	38
Article 48	PHYSICAL TRANSMISSION RIGHTS.....	39
Article 49	FINANCIAL TRANSMISSION RIGHTS - OPTIONS.....	39
Article 50	FINANCIAL TRANSMISSION RIGHTS - OBLIGATIONS	39
Article 51	PRINCIPLES FOR LONG TERM TRANSMISSION RIGHTS REMUNERATION	40
SECTION 3	NOMINATION PROCEDURES FOR PHYSICAL TRANSMISSION RIGHTS.....	40
Article 52	GENERAL PROVISIONS FOR PHYSICAL TRANSMISSION RIGHTS NOMINATION.....	40
Article 53	AMENDMENT OF NOMINATION RULES FOR PHYSICAL TRANSMISSION RIGHTS.....	41
SECTION 4	PROCESSES AND OPERATION	41
Article 54	TERMS AND CONDITIONS FOR PARTICIPATION IN FORWARD CAPACITY ALLOCATION.....	41
Article 55	SUBMISSION OF INPUT DATA TO ALLOCATION PLATFORM(S)	42
Article 56	OPERATION OF THE FORWARD CAPACITY ALLOCATION.....	42
Article 57	PRICING OF THE LONG TERM TRANSMISSION RIGHTS	42
Article 58	FINANCIAL REQUIREMENTS AND SETTLEMENT	43
Article 59	ESTABLISHMENT OF FALLBACK PROCEDURES.....	43
Article 60	RETURN OF LONG TERM TRANSMISSION RIGHTS.....	43
Article 61	SECONDARY TRADING	43
Article 62	DELIVERY OF RESULTS	44
Article 63	INITIATION OF FALLBACK PROCEDURES.....	44
Article 64	PUBLICATION OF MARKET INFORMATION.....	44
CHAPTER 5	SINGLE PLATFORMS FOR ALLOCATION AND SECONDARY TRADING	45

Article 65	GENERAL TASKS	45
Article 66	FUNCTIONAL REQUIREMENTS FOR THE SINGLE PLATFORM FOR ALLOCATION AND THE SINGLE PLATFORM FOR SECONDARY TRADING	46
Article 67	ESTABLISHMENT OF THE SINGLE PLATFORM FOR ALLOCATION AND THE SINGLE PLATFORM FOR SECONDARY TRADING.....	46
Article 68	AMENDMENT OF FUNCTIONAL REQUIREMENTS FOR THE SINGLE PLATFORM FOR ALLOCATION AND THE SINGLE PLATFORM FOR SECONDARY TRADING	47
CHAPTER 6	ALLOCATION RULES	47
Article 69	STRUCTURE AND PROCESS FOR THE ESTABLISHMENT OF HARMONISED ALLOCATION RULES	47
Article 70	REQUIREMENTS FOR HARMONISED ALLOCATION RULES.....	47
Article 71	INTRODUCTION OF HARMONISED ALLOCATION RULES.....	48
Article 72	AMENDMENT TO THE HARMONISED ALLOCATION RULES	48
CHAPTER 7	FIRMNESS	49
Article 73	GENERAL FIRMNESS PROVISIONS	49
Article 74	THE LONG TERM FIRMNESS DEADLINE	49
Article 75	COMPENSATION RULES.....	49
Article 78	FIRMNESS IN CASE OF FORCE MAJEURE OR EMERGENCY SITUATIONS.....	50
CHAPTER 8	CONGESTION INCOME DISTRIBUTION	51
Article 79	ESTABLISHMENT OF CONGESTION INCOME DISTRIBUTION ARRANGEMENTS.....	51
Article 80	AMENDMENT TO CONGESTION INCOME DISTRIBUTION ARRANGEMENTS	51
CHAPTER 9	COST RECOVERY	51
Article 81	GENERAL PROVISIONS.....	51
Article 82	COST OF ESTABLISHING, DEVELOPING AND OPERATING THE SINGLE PLATFORM FOR ALLOCATION AND THE SINGLE PLATFORM FOR SECONDARY TRADING	52
Article 83	COST OF ESTABLISHING AND OPERATING COORDINATED CAPACITY CALCULATION PROCESS	52
Article 84	COST OF ENSURING FIRMNESS	52
TITLE 4	TRANSITIONAL ARRANGEMENTS	53
Article 85	GENERAL PROVISIONS.....	53
Article 86	REGIONAL PLATFORMS FOR ALLOCATION AND/OR SECONDARY TRADING.....	53
Article 87	DURATION OF REGIONAL PLATFORMS	53
Article 88	REGIONAL ALLOCATION RULES	54
Article 89	TRANSITIONAL ARRANGEMENTS FOR FIRMNESS	54
Article 90	TRANSITIONAL ARRANGEMENTS ACCORDING TO THE NETWORK CODE ON CAPACITY ALLOCATION AND CONGESTION MANAGEMENT	54

TITLE 5 FINAL PROVISIONS..... 55
Article 91 ENTRY INTO FORCE..... 55

TITLE 1

GENERAL PROVISIONS

Article 1

SUBJECT MATTER AND SCOPE

1. This Network Code establishes common rules for Forward Capacity Allocation including the establishment of common methodology for determining the volumes of capacity simultaneously available between Bidding Zones. Within this Network Code Capacity Allocation shall refer to Explicit Allocation unless stated otherwise.
2. The requirements set forth by this Network Code shall apply to Transmission System Operators, National Regulatory Authorities, the Agency, Allocation Platforms, platforms for Secondary Trading and Market Participants.

Article 2

DEFINITIONS

For the purpose of this Network Code, the definitions contained in Article 2 of Directive 2009/72/EC and in Article 2 of Regulation (EC) No 714/2009 apply. The definitions contained in Article 2 of the Capacity Allocation and Congestion Management Network Code shall apply. Any other words or expressions already defined in the article 2 of other network codes in force at the moment of the entry into force of this network code shall apply.

1. The following definitions shall apply:

Agency means the Agency for the Cooperation of Energy Regulators as established by Regulation (EC) No 713/2009;

Allocation/ Capacity Allocation means the attribution of Cross Zonal Capacity;

Allocation Constraints means the constraints specified by the System Operator that are respected during Capacity Allocation. Allocation Constraints may include: Operational Security Constraints, ramping constraints and/or transmission losses;

Allocation Platform means the Single Platform for Allocation or Regional Platform(s) for the attribution of long term Cross Zonal Capacity;

Allocation Rules means the rules to Forward Capacity Allocation applied by Allocation Platforms;

Auction means the process by which long term Cross Zonal Capacity is offered and allocated to Market Participants who submit bid(s);

Bidding Zone means the largest geographical area within which Market Participants are able to exchange energy without Capacity Allocation;

Bidding Zone Border means a set of physical transmission lines linking adjacent Bidding Zones;

Capacity Calculation Approach means either a Flow Based Approach or a Coordinated Net Transmission Capacity approach;

Capacity Calculation Methodology means the description of the way in which Capacity Calculation is performed;

Capacity Calculation Process means a process in which the capability of the Transmission System to accommodate market transactions is assessed, it consists of calculation of the Cross Zonal Capacity. This assessment must be in line with operational security and optimisation of Cross Zonal Capacity made available to market participants;

Capacity Calculation Region means the regions in which regional coordinated capacity calculation shall be applied. A System Operator belongs to a Capacity Calculation Region if a part of its Control Area belongs to a Bidding Zone having its Bidding Zone Border within the Capacity Calculation Region;

Common Grid Model means European-wide or multiple-System Operator-wide data set, created by the European Merging Function, through the merging of relevant data;

Compensation Rules means the rules according to which each System Operator responsible for the Bidding Zone Border where a Long Term Transmission Right has been allocated compensates Market Participants for curtailing the underlying Cross Zonal Capacities;

Congestion Income means the revenues received as a result of Capacity Allocation;

Coordinated Capacity Calculator means the role of calculating Cross Zonal Capacity, at least at a regional level and managing the validation process;

Coordinated Net Transmission Capacity (NTC) means either a Cross Zonal Capacity or a capacity calculation methodology based on the principle of assessing and defining ex-ante a maximum energy exchange between adjacent Bidding Zones;

Countertrading means a Cross Zonal energy exchange initiated by System Operators between two Bidding Zones to relieve a Physical Congestion;

Critical Network Element means a network element either within a Bidding Zone or between Bidding Zones taken into account in the Capacity Calculation Process, limiting the amount of power that be exchanged in order to maintain the System Security;

Cross Border means across a border between two or more Member States or a Member State and one or more jurisdictions in which this Network Code applies;

Cross Zonal Capacity means the capability of the Interconnected System to accommodate energy transfer between Bidding Zones. It can be expressed either as a Coordinated Net Transmission Capacity value or Flow Based Parameters, and takes into account Operational Security Constraints;

Day Ahead Firmness Deadline means the point in time after which Cross Zonal Capacity becomes firm;

Direct Current Line means a transmission link between two Bidding Zones using direct current technology;

Emergency Situation means a situation where the System Operator must act in an expeditious manner and Redispatching or Countertrading is not possible as defined by Article 16 of Regulation (EC) No 714/2009;

European Merging Function means the role of creating unique Common Grid Models, through the merging of all Individual Grid Models;

Explicit (Capacity) Allocation means the allocation of Cross Zonal Capacity only, without the energy transfer;

Financial Transmission Rights means a right based on cross zonal capacity entitling the holder to receive or to pay a financial remuneration based on the Day Ahead Market results;

Financial Transmission Rights Obligation means a Financial Transmission Right based on which the Financial Transmission Right Obligation holder is entitled to receive or obliged to pay the Day Ahead price difference between two Bidding Zones during a specified time period in a specific direction;

Financial Transmission Rights Option means a Financial Transmission Right based on which financial right to receive a payment based on the positive (if any) Day Ahead price difference between two Bidding Zones during a specified time period in a specific direction;

Flow Based or Flow Based Approach means a capacity calculation method limiting the exchanges between Bidding Zones directly with the maximum flows on the Critical Network Elements and Power Transfer Distribution Factors;

Flow Based Parameters mean the available margins on Critical Network Elements with associated Power Transfer Distribution Factors;

Force Majeure means, for the purpose of application in respect of capacity allocation mechanisms as foreseen in Article 16 of Regulation (EC) No 714/2009, any unforeseeable and/ or unusual event or situation beyond the reasonable control of a System Operator, and not due to a fault of such System Operator, which cannot be avoided or overcome with reasonable foresight and diligence, which cannot be solved by measures which are from a technical, financial and/or economic point of view, reasonably possible for the System Operator, which has actually happened and is objectively verifiable, and which makes it impossible for such System Operator to fulfil temporarily or definitively, its obligations in accordance with this Network Code;

Forward Capacity Allocation means the attribution of long term Cross Zonal Capacity through an Auction;

Generation Shift Keys (GSK) means a method of translating a Net Position change of a given Bidding Zone into estimated specific injection increases or decreases in the Common Grid Model;

Individual Grid Model means a data set prepared by the responsible System Operator(s), to be merged with other Individual Grid Model components through the European Merging Function in order to create the Common Grid Model;

Long Term Firmness Deadline means an optional defined point in time before the Day Ahead Firmness Deadline;

Long Term Transmission Right means a Physical Transmission Right or Financial Transmission Right Option or a Financial Transmission Right obligation acquired in the Forward Capacity Allocation;

Marginal Price means the lowest successful bid price for a product in an Auction;

Market Time Period means the time resolution for the delivery of energy;

Market Spread means the difference between the Day Ahead prices of the two concerned Bidding Zones for the respective Market Time Period;

National Regulatory Authority means a regulatory authority as referred to in Article 35 (1) of Directive 2009/72/EC;

Net Position means the netted sum of electricity exports and imports for each Market Time Period for a given geographical area. In the context of this Network Code, geographical area is a Bidding Zone;

Nomination means the notification of the use of Cross Zonal Capacity by a Physical Transmission Right holder to System Operator(s);

Nomination Rules means the rules with regard to the notification of use of Cross Zonal Capacity by a Physical Transmission Right holder to System Operator(s);

Operational Security means keeping the Transmission System within agreed security limits;

Operational Security Constraints means a limit that guarantees the secure and reliable operation of the Transmission System;

Physical Transmission Right means a right whose holder is entitled to physically transfer a certain volume of electricity in a certain period of time between two Bidding Zones in a specific direction;

Power Transfer Distribution Factor means a representation of the physical flow on a Critical Network Element induced by the variation of the Net Position of a Bidding Zone;

Redispatching means a measure activated by one or several System Operators by altering the generation and/or load pattern in order to change physical flows in the transmission system and relieve a physical congestion;

Regional Platform means a platform for the attribution of long term Cross Zonal Capacity within a Capacity Calculation Region;

Regional Allocation Rules means the rules applying for the attribution of long term Cross Zonal Capacity on (a) Regional Platform(s);

Reliability Margin means the margin reserved on the permissible loading of a Critical Network Element or a Bidding Zone Border to cover against uncertainties between a capacity calculation timeframe and real time, taking into account the availability of Remedial Actions;

Remedial Action means a measure activated by one or several System Operators, manually or automatically, that relieves or contributes to relieving Physical Congestions. They can be applied pre-fault or post-fault and may involve costs;

Revenue Adequacy means the condition that links the Long Term Transmission Rights payouts to the collected Day Ahead congestion income in order to mitigate the risk to System Operators of adverse financial deficits due to specific design aspects of Day Ahead Capacity Allocation such as, but not limited to, adverse flows, losses;

Secondary Trading means the trading of Long Term Transmission Rights through which a Market Participant compliant with a set of specific requirements is able to buy or sell Long Term Transmission Rights which were initially allocated by the Allocation Platform(s);

Single Platform for Allocation means a pan-European platform established by all System Operators for the attribution of Long Term Transmission Rights;

Single Platform for Secondary Trading means a pan-European platform established by System Operators to support Secondary Trading;

Social Welfare means a quantification to assess the potential implications of alternative policy options. The assessment of social welfare shall include a consideration of the additional economic benefit or cost, defined as the sum of the additional individual benefits and costs which are expected to be accrued due to the implementation of the respective policy options compared to the status quo. These benefits and costs shall be analysed independently for tariff customers (as a whole and separated based on their ability to afford the cost of electricity), Market Participants and System Operators. In undertaking this assessment, in all cases, the undertaking party shall clearly specify:

- assumptions about the redistributive effects of an increase of one of the above components for the surpluses of the other groups stated above;

- assumptions about preconditions for market functioning such as market power and liquidity; and
 - assumptions about implications stemming from external effects
- used to undertake the analysis.

Stakeholder Committee for Forward Capacity Allocation means a group of appointed representatives comprising the European Commission, ACER, NRAs, System Operators and Market Participants (such as but not limited to traders, generation companies, industrial consumers, small supply companies involved in Forward Capacity Allocation);

System Security means the ability of the power system to withstand unexpected disturbances or contingencies;

System Operator means the role covering various tasks and operational responsibilities assumed by Transmission System Operators pursuant to this Network Code, including the physical transmission of electricity resulting from wholesale electricity market transactions and from all interconnectors which have an impact on the trading of electricity between Bidding Zones, without prejudice to the exemptions granted under Regulation (EC) No 1228/2003 and Regulation (EC) No 714/2009 which shall continue to apply until the scheduled expiry date as decided in the granted exemption decision;

Transmission System means the electric power network used to transmit electricity over long distances within and between Member States. The Transmission System is usually operated at the 220 kV and above for AC or HVDC, but may also include lower voltages.

Use it or sell it (UIOSI) means an automatic application by which the underlying capacity of the non-nominated Physical Transmission Rights is made available for Day Ahead Cross Zonal Capacity Allocation and whereby Physical Transmission Right holders that do not nominate to use their rights receive a payout.

Article 3 CONFIDENTIALITY OBLIGATIONS

1. All entities referred to in Article 1(2) as well as their delegated third parties if any shall preserve the confidentiality of the information and data submitted to them in the fulfilment of the obligations arising from this Network Code.
2. Without prejudice to the obligation to preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its activities, each System Operator shall provide to the neighbouring System Operators, sufficient information to ensure the secure and efficient operation, coordinated development and interoperability of the interconnected system.

Article 4 CONSULTATION

1. The party responsible under this Network Code for developing the proposal in question shall consult on with Market Participants or, when justified, with the Stakeholder Committee according to Article 10 for a period of not less than 4 weeks. The proposal shall be consulted on in all Member States concerned.
2. At least the following proposals shall be subject to consultation:

- a) The Capacity Calculation Regions and the amendments pursuant to Article 12 and Article 13;
 - b) the generation and load data provision methodology and amendments pursuant to Article 14 and Article 15;
 - c) The Common Grid Model methodology and amendments pursuant to Article 16 and Article 17;
 - d) the Capacity Calculation methodology and amendments pursuant to Article 20 and Article 21;
 - e) the methodology for splitting Cross Zonal Capacities and amendments pursuant to Article 40 and Article 41;
 - f) the Market Participants needs for cross zonal risk hedging opportunities pursuant to Article 45;
 - g) the selection of the type and characteristics of the Long Term Transmission Right and amendments pursuant Article 46 and Article 47;
 - h) the Nomination Rules and amendments pursuant to Article 52 and Article 53;
 - i) the functional requirements for the Single Platform for Allocation and the Single Platform for Secondary Trading and amendments of these requirements pursuant to Article 66 and Article 68;
 - j) the harmonised Allocation Rules and amendments pursuant from Article 70 to Article 72 and Article 59;
 - k) the establishment of Regional Allocation Platforms for Allocation and/or Secondary Trading pursuant to Article 86; and
 - l) the Regional Allocation Rules pursuant to Article 88.
3. The views of stakeholders emerging from the consultations undertaken pursuant to paragraph 1 shall be duly considered by the party to whom the obligation is addressed prior to the submission of the document for regulatory approval, if required, or prior to publication in all other cases. In all cases, a clear and robust justification of the reasons for including or not including the views emerging from the consultation in the submission shall be developed and published in a timely manner.
4. Minor amendment of the terms and conditions or methodologies mentioned in the present network code (including Nomination Rules and Allocation Rules) already approved by National Regulatory Authorities shall not be subject to prior consultation. These minor amendments shall exclusively encompass only correction of errors, clarification of wording and/or updates of minor information, which does not affect the legal meaning of the approved wording of these terms and conditions or methodologies. National Regulatory Authorities shall be informed of these minor amendments and they may, in any case, request a regulatory approval with prior consultation for these minor amendments.

Article 5
PUBLICATION OF INFORMATION

1. The items consulted upon according to Article 4(1) shall be made publically available after their approval no later than one month after the decision of National Regulatory Authorities, if regulatory approval is required, or after finalisation in all other cases by the party to whom the obligation is addressed.

2. Each System Operator and Allocation Platform shall ensure that published documents are clear, transparent and easily accessible.

Article 6

TRANSPARENCY OF INFORMATION

All entities referred to in Article 1(2) shall ensure that information is published at a time and in a format which does not create an actual or potential competitive advantage or disadvantage to any individual party or category of party.

Article 7

REGULATORY APPROVALS

1. The items specified in paragraphs 3 to 4 shall be treated in a manner consistent with Article 37 of Directive 2009/72/EC.
2. Each National Regulatory Authority shall be responsible for approving the terms and conditions or at least the methodology used to calculate or establish the terms and conditions for access to cross-zonal infrastructures, including the procedures for Forward Capacity Allocation and Congestion Management.
3. The following shall be subject to approval by all National Regulatory Authorities:
 - a) The Capacity Calculation Regions and the amendments pursuant to Article 12 and Article 13;
 - b) the generation and load data provision methodology and amendments pursuant to Article 14 and Article 15;
 - c) The Common Grid Model methodology and amendments pursuant to Article 16 and Article 17;
 - d) the requirements for the Single Platform for Allocation and the Single Platform for Secondary Trading and amendments of these requirements pursuant to Article 66 and Article 68; and
 - e) the harmonised Allocation Rules and amendments as defined in Article 59 and Article 70 to Article 72.
4. The following shall be subject to approval by each National Regulatory Authority of the concerned Member States, as determined on a case-by-case basis:
 - a) the Capacity Calculation methodology and amendments pursuant to Article 20 and Article 21
 - b) the methodology for splitting Cross Zonal Capacities and amendments pursuant to Article 40 and Article 41;
 - c) the selection of the type and characteristics of the Long Term Transmission Right and amendments pursuant from Article 46 to Article 51;
 - d) the Nomination Rules and amendments pursuant to Article 52 and Article 53;
 - e) the designation of Regional Allocation Platforms for Allocation and Secondary Trading pursuant to Article 86; and
 - f) the Regional Allocation Rules pursuant to Article 88.

5. For each of the approvals specified in paragraphs 3 and 4, each System Operator shall, prior to the expiry of the deadline for developing the terms and conditions or methodologies, submit those terms and conditions or methodologies, to the competent National Regulatory Authority for approval. All submissions shall include a proposed timescale for implementation and a description of the expected impact of the proposal.
6. Each National Regulatory Authority shall, no later than six months after having received the proposal pursuant to paragraphs 3 and 4, provide System Operators with an approval or request to amend the proposal.
7. In the event that a National Regulatory Authority requests an amendment to the proposal pursuant to paragraphs 1 to 5, the respective System Operator(s) shall submit an amended proposal for approval within three months.
8. When more than one National Regulatory Authority is competent for specific terms and conditions or methodology pursuant to this Network Code, each National Regulatory Authority concerned shall closely consult and cooperate with each other and aim at reaching an agreement within the period referred to in Article 8 of Regulation (EC) No 713/2009.
9. Each System Operator shall implement the decision of its respective National Regulatory Authority by a date no later than the date specified in the decision.
10. Minor amendment of the terms and conditions or methodologies referred to in the present network code (including Nomination Rules and Allocation Rules) already approved by National Regulatory Authorities shall not be subject to prior approval. These minor amendments shall exclusively encompass only correction of errors, clarification of wording and/or updates of minor information, which does not affect the legal meaning of the approved wording of these terms and conditions or methodologies. National Regulatory Authorities shall be informed of these minor amendments and they may, in any case, request a regulatory approval with prior consultation for these minor amendments.
11. In the event that concerned National Regulatory Authorities request an amendment to the terms and conditions or methodology approved pursuant to this Article, the respective System Operators shall submit amended terms and conditions or methodology for approval within six months.

TITLE 2 GOVERNANCE

CHAPTER 1 ROLES AND RESPONSIBILITIES

Article 8 ROLES IN FORWARD CAPACITY ALLOCATION

1. The process of Forward Capacity Allocation under this Network Code shall involve the following Roles:
 - a) System Operator;
 - b) Coordinated Capacity Calculator(s);
 - c) European Merging Function;
 - d) Single Platform for Allocation;
 - e) Single Platform for Secondary Trading; and
 - f) Regional Platform(s) for Allocation and/or Secondary Trading.
2. While respecting the principles of transparency, proportionality and non-discrimination, each Member State shall, where required assign each of the Roles pursuant to paragraph 1 to Transmission System Operators.
3. All System Operators shall cooperate loyally in fulfilling their obligations under this Network Code.

Article 9 DELEGATION OF ROLES

1. Transmission System Operators shall be entitled to delegate all or part of any role assigned to them under this Network Code to one or more competent third parties. The delegating entity shall remain responsible for ensuring compliance with the obligations under this Network Code.
2. In all cases, a third party shall, have clearly demonstrated its ability to fulfil each of the obligations of the Network Code to the satisfaction of the delegating party, prior to delegation.
3. In the event that all or part of any role specified in this Network Code is delegated to a third party, the delegating party shall ensure that appropriate confidentiality agreements have been put in place prior to delegation.

Article 10

ESTABLISHMENT OF STAKEHOLDER COMMITTEE FOR FORWARD CAPACITY ALLOCATION

1. All System Operators shall establish a Stakeholder Committee for Forward Capacity Allocation. The members of this Stakeholder Committee shall comprise representatives from System Operators and other stakeholders such as Market Participants involved in the Forward Capacity Allocation.
2. The Stakeholder Committee for Forward Capacity Allocation shall advise System Operators regarding the operation and development of Forward Capacity Allocation.
3. The Stakeholder Committee for Forward Capacity Allocation shall make publicly available all documents related to its activity.

TITLE 3 REQUIREMENTS

CHAPTER 1 CAPACITY CALCULATION FOR FORWARD CAPACITY ALLOCATION

SECTION 1 GENERAL REQUIREMENTS

Article 11 CAPACITY CALCULATION TIMEFRAMES

1. Capacity Calculation shall produce results for long term Capacity Calculation timeframes.
2. All System Operators of each Capacity Calculation Region shall ensure that long term Cross Zonal Capacity is calculated for each Forward Capacity Allocation.

Article 12 CAPACITY CALCULATION REGIONS

1. No later than two months after the entry into force of this Network Code, all System Operators shall make a common proposal regarding the Capacity Calculation Regions within which Coordinated Capacity Calculation shall be performed.
2. In determining the Capacity Calculation Regions the following rules shall be complied with:
 - (a) each Bidding Zone Border shall be attributed to one Capacity Calculation Region;
 - (b) the proposal shall be based on the objectives of this Network Code; and
 - (c) the proposal pursuant to paragraph 1 shall be based on the regions specified in Article 3(2) of Annex 1 of Regulation (EC) No 714/2009.
3. The Capacity Calculation Regions applying a Flow Based Approach shall be merged to one Capacity Calculation Region provided that:
 - (a) the Capacity Calculation Regions are linked Transmission Systems;
 - (b) the Capacity Calculation Regions are within the same Capacity Allocation; and
 - (c) Social Welfare is higher as a consequence of merging the Capacity Calculation Regions than it would be were the Capacity Calculation Regions kept separate.
4. In the event that no proposal is made in the timescale defined in paragraph 1, all National Regulatory Authorities shall be entitled to define Capacity Calculation Regions in accordance with Article 12(2) and Article 12(3).

Article 13

AMENDMENT OF CAPACITY CALCULATION REGIONS

1. All System Operators shall be entitled to launch a reassessment of Capacity Calculation Regions on the basis of their own judgement or following a request from all National Regulatory Authorities. A reassessment shall be launched not earlier than one year after the previous assessment or reassessment.
2. Where a reassessment of the Capacity Calculation Regions is launched, all System Operators shall develop a proposal to amend or maintain the current Capacity Calculation Regions in accordance with Article 12(2) and 12(3).

SECTION 2 THE COMMON GRID MODEL

Article 14

GENERATION AND LOAD DATA PROVISION METHODOLOGY

1. No later than four months after the entry into force of this Network Code, all System Operators shall develop a single methodology for the delivery of generation and load data required to establish the Common Grid Model. This document shall be termed the generation and load data provision methodology.
2. The generation and load data provision methodology shall detail which generation and load units shall be required to provide information to their respective System Operators for the purposes of Capacity Calculation. The proposal shall include a justification, based on the objectives of this Network Code, demonstrating the reasons for requiring the information.
3. The generation and load data provision methodology shall detail the information to be provided by generation and load units to System Operators. The information shall include, but not be limited to the following:
 - (a) information related to technical data;
 - (b) information related to availability;
4. The proposal shall include time schedules for providing information.
5. All System Operators shall use and share with other System Operators the information related to paragraph 3.
6. All System Operators shall publish no later than two months after the approval by all National Regulatory Authorities:
 - (a) a list of entities required to provide information;
 - (b) a list of information to be provided; and
 - (c) a time schedule for providing information.

Article 15

AMENDMENT TO THE GENERATION AND LOAD DATA PROVISION METHODOLOGY

1. All System Operators shall be entitled to develop proposals to amend the generation and load data provisions methodology.
2. Any proposal for amendment(s) shall be supported by a justification based on the objectives of this Network Code.
3. All System Operators shall update the information published in accordance with Article 16(6) to reflect the approval of all National Regulatory Authorities no later than two months after the approval of the amendment(s).

Article 16

COMMON GRID MODEL METHODOLOGY

1. No later than six months after the entry into force of this Network Code, all System Operators shall develop a Common Grid Model methodology.
2. The Common Grid Model methodology shall enable the establishment of the Common Grid Model in accordance with the objectives of this Network Code. At a minimum, it shall contain:
 - (a) a determination of scenarios in accordance with Article 18;
 - (b) a determination of Individual Grid Models in accordance with Article 19; and
 - (c) a description of the process to merge Individual Grid Models to form the Common Grid Model.

Article 17

AMENDMENTS OF THE COMMON GRID MODEL METHODOLOGY

1. All System Operators shall be entitled to launch a reassessment of the Common Grid Model methodology on the basis of their own judgement or following a request from all National Regulatory Authorities. A reassessment shall be launched not earlier than one year after the previous assessment or reassessment.
2. Where a reassessment of the Common Grid Model methodology is launched, all System Operators shall develop a proposal to amend or maintain the current Common Grid Model methodology in accordance with Article 16.

Article 18
SCENARIOS

1. All System Operators shall define a common set of scenarios for each Capacity Calculation Timeframe for use in the Common Grid Model.
2. All System Operators shall define scenario(s) for each Forward Capacity Allocation.
3. For each scenario, all System Operators shall define common rules fixing the Net Position for each Bidding Zone and the flow for each Direct Current Line. These common rules shall be based on the best forecast of the Net Position for each Bidding Zone and flows on each Direct Current Line for each scenario and include the overall balance between load and generation for the European Interconnected System.

Article 19
INDIVIDUAL GRID MODEL

1. Each Individual Grid Model shall represent the best forecast of Transmission System conditions for the specified scenario at the moment at which the Individual Grid Model is created.
2. For each Bidding Zone and for each scenario:
 - (a) all System Operators of the Bidding Zone shall provide a single Individual Grid model which respects the rules defined in Article 18(3); or
 - (b) each System Operator of the Bidding Zone shall provide an Individual Grid Model for its Control Area provided that the sum of net positions in the Control Areas covering the Bidding Zone respects the rules defined in Article 18(3).
3. Individual Grid Models shall cover relevant network elements of the Transmission System.
4. All System Operators shall use best endeavours to progressively harmonize the way in which Individual Grid Models are built.
5. Each System Operator shall provide all necessary data in the Individual Grid Model to allow active and reactive power flow and voltage analyses in steady state.
6. Where appropriate, and upon agreement among all System Operators within a Capacity Calculation Region, each System Operator of that Capacity Calculation Region shall exchange data to enable voltage and dynamic stability analyses.

SECTION 3 CAPACITY CALCULATION METHODOLOGY

Article 20 CAPACITY CALCULATION METHODOLOGY

1. No later than twelve months after the entry into force of this Network Code, all System Operators of each Capacity Calculation Region shall develop a common coordinated Capacity Calculation Methodology.
2. The common coordinated Capacity Calculation methodology for Forward Capacity Calculation for a Capacity Calculation Region shall meet the following objectives:
 - a) be coherent with the Capacity Allocation method; and
 - b) manage the uncertainty with a coordinated approach in the calculation of Cross Zonal Capacity.
3. The common coordinated Capacity Calculation methodology for Forward Capacity Allocation for a Capacity Calculation Region shall contain at least the following for each long term Capacity Calculation timeframe:
 - a) Capacity Calculation inputs:
 - a determination of the Reliability Margin in accordance with Article 23 or an approach taking into account better the uncertainties in long term Cross Zonal Capacity calculation;
 - a determination of Operational Security Constraints in accordance with Article 25 ;
 - a determination of Allocation Constraints to be taken into account directly in Capacity in accordance with Articles 26 ;
 - a determination of the Generation Shift Keys in accordance with Article 27; and
 - a determination of Remedial Actions to be considered in Capacity Calculation in accordance with 28, where appropriate.
 - b) Capacity Calculation Approach:
 - a Capacity Calculation Approach to be applied pursuant to Article 22;
 - a mathematical description of the applied Capacity Calculation Approach with different Capacity Calculation inputs;
 - a rule to treat, where appropriate, previously allocated Cross Zonal Capacity;
 - a rule to combine the Remedial Actions made available by System Operators for Capacity Calculation, where appropriate;
 - a rule to share the Cross Zonal Capacity between the borders of the Capacity Calculation Regions prior to Capacity Allocation, where appropriate, and when using the Coordinated Net Transmission Capacity approach; and
 - a rule to share the Cross Zonal Capacity between the different Capacity Calculation Regions prior to Capacity Allocation, where appropriate.
 - c) Validation of Cross Zonal Capacity in accordance with Article 29.

4. All System Operators of each Capacity Calculation Region shall be entitled to complement the Long Term Capacity Calculation Methodology described in paragraph 3 with additional elements such as a statistical approach , if this approach is demonstrated to:
 - a) increase the efficiency of the Long Term Capacity Calculation Methodology developed pursuant to paragraph 3;
 - b) better take into account the uncertainties in long term Cross Zonal Capacity calculation; and
 - c) increase Social Welfare with the same level of System Security.
5. The Capacity Calculation Methodology shall include a fallback procedure consistent with the objectives of this Network Code.
6. All System Operators of each Capacity Calculation Region shall use best endeavours to progressively harmonize the Capacity Calculation inputs used for the Capacity Calculation.
7. All System Operators shall use best endeavours to progressively harmonize the Capacity Calculation Methodologies across Capacity Calculation Regions.

Article 21

AMENDMENT OF CAPACITY CALCULATION METHODOLOGIES

1. All System Operators shall be entitled to launch a reassessment of the Capacity Calculation Methodology for a Capacity Calculation Region on the basis of their own judgement or following a request from all National Regulatory Authorities of the Capacity Calculation Region. A reassessment shall be launched not earlier than one year after the previous assessment or reassessment.
2. Where a reassessment of the Capacity Calculation Methodology of a Capacity Calculation Region is launched, all System Operators of that Capacity Calculation Region shall develop a proposal to amend or maintain the current Capacity Calculation Methodology of the Capacity Calculation Region in accordance with Article 20.

Article 22

CAPACITY CALCULATION APPROACHES

1. For the long term Capacity Calculation timeframes the Capacity Calculation Approach shall be a Coordinated Net Transmission Capacity Approach, or a Flow Based Approach.
2. All System Operators shall be entitled to apply a Flow Based Approach for Capacity Calculation Region(s) in which the electricity flows between Bidding Zones are highly influenced by each other and the application of the Flow Based Approach fulfils the following prerequisites:
 - a) lead to an increase in Social Welfare in the Capacity Calculation Region(s) with the same level of System Security;

- b) transparency and results produced by the method have been ensured in the Capacity Calculation Region(s); and
 - c) provide Market Participants with six months to adapt their processes.
3. The long term Capacity Calculation Approach shall be compatible with the Capacity Calculation Approach of the Day Ahead and Intraday Capacity Calculation timeframes according to Article 24 of the Network Code on Capacity Allocation and Congestion Management.
 4. The long term Capacity Calculation Approach shall be coordinated at least within the Capacity Calculation Region.

Article 23
RELIABILITY MARGIN

1. The Reliability Margin shall take into account uncertainties between the Capacity Calculation Timeframe and real time respecting Operational Security and taking into account, Remedial Actions available after Capacity Calculation, and financial risks arising as a consequence of the applicable firmness regime.
2. The Reliability Margin shall integrate a statistical analysis of historic data showing the deviation of power flows and shall take into account expectation of future deviations. In particular, it shall consider deviations caused by:
 - (a) unintended deviations of physical electricity flows within a Market Time Period caused by the regulation of electricity flows within and between Control Areas to maintain a constant frequency; and
 - (b) uncertainties which could affect Capacity Calculation and which could occur between the Capacity Calculation Timeframe and real time, for the Market Time Period being considered.

Article 24
SIZE OF RELIABILITY MARGIN

For each Capacity Calculation Timeframe, each System Operator shall define the size of the Reliability Margin on its Critical Network Elements or its Bidding Zone Borders based on the specification in Article 23.

Article 25
OPERATIONAL SECURITY CONSTRAINTS

1. Each System Operator shall define:
 - (a) thermal limits of the Critical Network Elements; and
 - (b) voltage limits, imposing admissible substation voltage ranges;
2. Each System Operator shall be entitled to define additional Operational Security Constraints. Where appropriate, such constraints may include but shall not be limited to:
 - (a) dynamic or voltage stability limits ensuring the stability of the power system;
 - (b) short circuit current limits; and/or
 - (c) generation limits for a Bidding Zone or a set of Bidding Zones ensuring adequate availability of generation and generation reserves.

Article 26

ALLOCATION CONSTRAINTS

The determination of Allocation Constraints required by the Capacity Calculation Methodology developed pursuant to Article 22 may contain the use of:

- (a) Operational Security Constraints in accordance with Article 25; or
- (b) other types of constraint, which may include but are not limited to transmission losses and ramping constraints.

Article 27

GENERATION SHIFT KEYS

1. All System Operators of each Bidding Zone shall build one Generation Shift Key for each scenario developed pursuant to Article 18.
2. A Generation Shift Key shall represent the best forecast of the translation of a change in the Net Position of a Bidding Zone into a specific change of generation and/or load in the Common Grid Model. This forecast shall make use of information from the generation and load data provision methodology.

Article 28

REMEDIAL ACTIONS IN CAPACITY CALCULATION

1. Each System Operator shall define the available Remedial Actions which may be used in Capacity Calculation to facilitate the objectives of this Network Code.
2. Each System Operator shall ensure that Remedial Actions shall be considered in Capacity Calculation under the condition that the remaining available Remedial Actions together with the Reliability Margin defined in Article 24 are sufficient to ensure Operational Security.
3. Remedial Actions used in Capacity Calculation shall be efficient.
4. Each System Operator shall use available Non Costly Remedial Actions during Capacity Calculation.
5. Each System Operator shall ensure that Remedial Actions are the same for all Capacity Calculation Timeframes, taking into account their technical availabilities for each Capacity Calculation Timeframe.
6. All System Operators of each Capacity Calculation Region shall coordinate the use of Remedial Actions for Capacity Calculation and their actual application in real time operation.
7. All System Operators of each Capacity Calculation Region shall agree on the use of Cross Control Area Remedial Actions in Capacity Calculation.

Article 29

CROSS ZONAL CAPACITY VALIDATION

1. Each System Operator shall accept or correct Cross Zonal Capacity relevant to the System Operator's Bidding Zone Borders or Critical Network Elements provided by the Coordinated Capacity Calculator(s).
2. Where a Coordinated Net Transmission Capacity Approach is applied, all System Operators of the Capacity Calculation Region shall include in the Capacity Calculation Methodology a rule for splitting the correction between the different Bidding Zone Borders.
3. During the validation process, and only for reasons of System Security, each System Operator shall be entitled to reduce the Cross Zonal Capacity on its Bidding Zone Borders or its Critical Network Elements.
4. Each Coordinated Capacity Calculator shall coordinate with the neighbouring Coordinated Capacity Calculator(s) during Capacity Calculation and validation.
5. Each Coordinated Capacity Calculator shall, every three months, report all reductions made during the validation of Cross Zonal Capacity to all National Regulatory Authorities of the Capacity Calculation Region. This report shall include the location and amount of any reduction and shall include a justification for the reduction(s).
6. All National Regulatory Authorities of the Capacity Calculation Region shall decide whether to publish all or part of the report.

SECTION 4

THE CAPACITY CALCULATION PROCESS

Article 30

GENERAL PROVISIONS

1. No later than twelve months after the entry into force of this Network Code, all System Operators shall establish a European Merging Function and define rules for the operation of the European Merging Function.
2. No later than twelve months after the entry into force of this Network Code, all System Operators of each Capacity Calculation Region shall establish the Coordinated Capacity Calculator(s) and define rules for the operation of the Coordinated Capacity Calculator(s).
3. The Coordinated Capacity Calculator(s) shall cover the Capacity Calculation Process at least on a regional basis as defined in Article 32 and the management of the validation of Cross Zonal Capacity values and the provision of information for the purposes of Capacity Allocation as defined in Article 33.
4. Each System Operator shall, every second year as part of the biennial report on Capacity Calculation produced in accordance with Article 34, review the quality of data submitted within the Capacity Calculation Process.

Article 31

CREATION OF THE COMMON GRID MODEL

1. For each Capacity Calculation Timeframe as specified in Article 11(1), each generator or load unit included in the generation and load data provision methodology established pursuant to

Article 14 shall provide the data specified in the methodology in the timescales specified in the methodology to the System Operator responsible for the respective Control Area.

2. Each generator or load unit providing information pursuant to Article 14(3) shall use reasonable endeavours to deliver a reliable set of estimations as practicable.
3. For each Capacity Calculation Timeframe, all System Operators shall provide the Individual Grid Model for each scenario in accordance with Article 19 to the European Merging Function and all other System Operators.
4. Each System Operator shall use best endeavours to deliver a reliable set of estimations for each Individual Grid Model as practicable.
5. For each Capacity Calculation Timeframe, the European Merging Function shall create a single, Europe wide, Common Grid Model for each scenario specified in Article 18 by merging inputs from all System Operators.
6. The European Merging Function shall provide the Common Grid Model for each scenario to each Coordinated Capacity Calculator and to each System Operator.

Article 32

REGIONAL CALCULATIONS OF CROSS ZONAL CAPACITIES

1. For each Capacity Calculation Timeframe, each System Operator of each Capacity Calculation Region shall provide the Coordinated Capacity Calculator(s) and all System Operators of that Capacity Calculation Region with Operational Security Constraints, Generation Shift Keys, Remedial Actions, Reliability Margins, Allocation Constraints and previously Allocated Cross Zonal Capacity, pursuant to Article 20(2).
2. Each System Operator shall use best endeavours to deliver a reliable estimation for its Generation Shift Keys.
3. Each Coordinated Capacity Calculator shall perform system security analysis using the Common Grid Model created pursuant to Article 31 for each scenario.
4. When calculating Cross Zonal Capacity, each Coordinated Capacity Calculator shall calculate the impact of the change of Bidding Zone Net Positions and flows on Direct Current Lines using Generation Shift Keys.
5. When calculating Cross Zonal Capacity, each Coordinated Capacity Calculator shall ensure that all the sets of Bidding Zone Net Positions and flows on Direct Current Lines not exceeding the Cross Zonal Capacity, shall respect the Operational Security Constraints and Reliability Margins pursuant to Article 20(3)(a) and take into account already Allocated Cross Zonal Capacity pursuant to Article 20(3)(b).
6. Each Coordinated Capacity Calculator shall optimize Cross Zonal Capacity using available Remedial Actions for Capacity Calculation in accordance with Article 20(3)(a).
7. Each Coordinated Capacity Calculator shall apply the sharing rules established pursuant to Article 20(3)(b).
8. Each Coordinated Capacity Calculator shall respect the mathematical description of the applied Capacity Calculation Approach pursuant to Article 20(3)(b).

9. Each Coordinated Capacity Calculator shall cooperate with the neighbouring Coordinated Capacity Calculators. This coordination shall be ensured by neighbouring System Operators and be achieved by exchanging and confirming information regarding the interdependency between the regional Coordinated Capacity Calculators relevant for the capacity calculation and validation. Neighbouring System Operators shall provide information on the interdependency to the Coordinated Capacity Calculators before the capacity calculation. The biennial report prepared in accordance with Article 34 shall contain an assessment of the accuracy of this information and corrective measures, where appropriate.
10. Each Coordinated Capacity Calculator applying:
 - (a) the Coordinated Net Transmission Capacity Approach shall produce the Cross Zonal Capacity values for each Bidding Zone within the Capacity Calculation Region; or
 - (b) the Flow Based Approach shall produce the Flow Based Parameters for each Bidding Zone within the Capacity Calculation Region.
11. For additional elements such as the statistical approach complementing Long Term Capacity Calculation Methodology in accordance with Article 20(4), paragraphs from 3 to 6 shall apply where appropriate. The process for calculation of Cross Zonal Capacity and justification for this approach shall be included in the Capacity Calculation Methodology.
12. Each Coordinated Capacity Calculator shall submit the Cross Zonal Capacity for validation, pursuant to Article 20(3)(c), to each System Operator within that Capacity Calculation Region.

Article 33

VALIDATION AND DELIVERY OF CROSS ZONAL CAPACITY

1. Each System Operator shall validate the results of the Regional Capacity Calculation on its Bidding Zone Borders or Critical Network Elements, in accordance with Article 29.
2. Each System Operator shall send its capacity validation to the relevant Coordinated Capacity Calculator(s) and to the other System Operators of the relevant Capacity Calculation Region(s).
3. Validated Cross Zonal Capacities shall be provided by each Coordinated Capacity Calculator for the execution of Forward Capacity Allocation in accordance with Article 44 (Input and Results of Forward Capacity Allocation).
4. Each System Operator shall provide Allocation Constraints for the execution of Forward Capacity Allocation in accordance with Article 44 (Input and Results of Forward Capacity Allocation).

SECTION 5

BIENNIAL REPORT ON CAPACITY CALCULATION

Article 34

BIENNIAL REPORT ON CAPACITY CALCULATION

1. No later than 2 years after the entry into force of this Network Code all System Operators shall prepare and send to all National Regulatory Authorities a report on the Capacity Calculation Process.
2. If requested to do so by all National Regulatory Authorities, in every second subsequent year, all System Operators shall prepare and send to all National Regulatory Authorities a report on the Capacity Calculation Process.
3. The report on Capacity Calculation shall contain, for each Bidding Zone, Bidding Zone Border or Capacity Calculation Region at least:
 - (a) the Capacity Calculation Approach used;
 - (b) statistical indicators on Reliability Margins;
 - (c) statistical indicators of the Cross Zonal Capacity for each Capacity Calculation Timeframe;
 - (d) quality indicators for the information used within the Capacity Calculation; and
 - (e) where appropriate, proposed improvement measures, including an evaluation of the continued application of the Coordinated Net Transmission Capacity Approach.
4. Statistical and quality indicators for the report shall be commonly agreed between all System Operators. All National Regulatory Authorities shall be consulted on these indicators before their application.
5. All National Regulatory Authorities shall decide whether to publish all or part of the biennial report.
6. Each System Operator shall provide data to allow the preparation of the report in a timely manner.

CHAPTER 2

BIDDING ZONES

Article 35

GENERAL PROVISIONS

Where Bidding Zone Border(s) no longer exist, holders of Long Term Transmission Rights on those Bidding Zone Border(s) shall be entitled to reimbursement based on the initial price paid for the Long Term Transmission Rights.

Article 36

REVIEWING BIDDING ZONE CONFIGURATION

1. A review of the Bidding Zone configuration may be launched by:
 - a) all National Regulatory Authorities pursuant to Article 40; or
 - b) all National Regulatory Authorities based upon a recommendation from the Agency or a System Operator; or
 - c) a System Operator, with the approval of its National Regulatory Authority, inside the System Operator's Control Area, where the distribution of power flows is not highly influenced by exchanges between other Bidding Zones outside the System Operator's Control Area, if:
 - the review of the Bidding Zone configuration is necessary in a hydro dominated systems due to rapid and unforeseen changes in network topology, patterns of generation and/or load or local energy situations (deficit or surplus), and when the Bidding Zone configuration is deemed to be the adequate measure to preserve the System Security or to prevent the significant loss of Social Welfare; or
 - the Bidding Zone configuration has negligible impact on the neighbouring System Operators' Control Area and is needed to efficiently maintain the System Security or to prevent a Social Welfare loss inside the System Operator's Control Area.
2. In the event that all National Regulatory Authorities request to launch a review of the Bidding Zone configuration pursuant to paragraphs 1(a) or 1(b), they shall specify:
 - a) the geographic area(s) in which the Bidding Zone configuration shall be studied and the neighbouring geographic area(s) for which the impacts shall be taken into account;
 - b) participating System Operator(s); and
 - c) the participating National Regulatory Authority(ies).
3. When a System Operator, having gained the approval of its National Regulatory Authority, decides to launch a review of Bidding Zone configuration pursuant to paragraph 1(c):
 - a) the geographic area in which the Bidding Zone configuration is studied shall be limited to the Control Area of that System Operator;
 - b) that System Operator shall be the only participating System Operator;
 - c) that National Regulatory Authority shall be the only participating National Regulatory Authority;
 - d) the launch of the review of Bidding Zone configuration shall be notified and justified by the System Operator to the neighbouring System Operators, in timescales agreed bilaterally between those System Operators, and by the National Regulatory Authority to the neighbouring National Regulatory Authorities, before the application; and
 - e) such a review process shall be transparent, while taking into consideration the time constraints for such review.
4. The participating System Operator(s) involved in the review of the Bidding Zone configuration shall:
 - a) Perform the assessment of the Bidding Zone configuration. This assessment shall be undertaken in a coordinated way, unless paragraph 1(c) applies, and include Nominated Electricity Market Operators;
 - b) propose the alternative Bidding Zone configuration(s);

- c) assess the current Bidding Zone configuration and each alternative Bidding Zone configuration using the criteria specified in Article 37;
 - d) perform a public consultation regarding the alternative Bidding Zone configuration proposal(s) relative to the existing Bidding Zone configuration, including proposing timescales for implementation, unless the first condition of paragraph 1(c) applies; and
 - e) make the proposal(s) to participating National Regulatory Authority(ies) to maintain or amend the Bidding Zone configuration within twelve months of the decision to launch a review.
5. Nominated Electricity Market Operators or other Market Participants shall, if requested by System Operators, provide participating System Operators with information to enable them to assess the Bidding Zone configuration. This information shall be shared only between the participating System Operator(s) for the sole purpose of assessing the Bidding Zone configuration.

Article 37

CRITERIA TO ASSESS THE EFFICIENCY OF ALTERNATIVE BIDDING ZONE CONFIGURATIONS

1. When the Bidding Zone configuration is reviewed, at least the following criteria shall be considered:
- a) In respect of network security:
 - the ability of the Bidding Zone configuration to ensure Operational Security and the security of supply; and
 - the size of uncertainties in the cross Bidding Zone Capacity Calculation.
 - b) In respect of overall market efficiency:
 - the increase or decrease in Economic Surplus arising from the change;
 - market efficiency, including, at least, firmness costs, market liquidity, market concentration and market power, the facilitation of effective competition, the accuracy and robustness of price signals and transition costs, including costs of amending existing contractual obligations, incurred by Market Participants, Nominated Electricity Market Operators and System Operators;
 - the need to ensure the feasible market outcome without an extensive application of economically inefficient corrective measures;
 - any adverse effects of internal transactions on other Bidding Zones; and
 - the impact on the operation and efficiency of the balancing mechanisms and imbalance settlement processes.
 - c) In respect of the stability and robustness of Bidding Zones:
 - the need for Bidding Zones to be sufficiently stable and robust over time;
 - the need for Bidding Zones to be consistent for all Capacity Calculation Timeframes;
 - the need for each generation and load unit to belong to only one Bidding Zone for each Market Time Period; and
 - the location and frequency of congestion, provided that: Structural Congestions influence the delimitation of Bidding Zones; and taking into account investments which may relieve existing congestions.

Article 38

BIENNIAL ASSESSMENT OF THE CURRENT BIDDING ZONE CONFIGURATION

1. The efficiency of the current Bidding Zone configuration shall be assessed every two years.
2. The assessment process shall consist of:
 - a) a biennial technical report prepared by all System Operators and sent to all National Regulatory Authorities; and
 - b) an evaluation of market structure and possible market power issues prepared by all National Regulatory Authorities on the basis of the biennial technical report.
3. All National Regulatory Authorities may request to launch a process for reviewing of Bidding Zone configuration based on the assessment.

Article 39

THE BIENNIAL TECHNICAL REPORT

1. The biennial technical report shall include, at least:
 - a) a list of Structural Congestions and other major Physical Congestions, including their location and frequency;
 - b) an analysis of the expected evolution or removal of these Physical Congestions due to investments in networks or due to significant changes in generation or consumption patterns;
 - c) an analysis of the share of power flows that do not result from the Capacity Allocation mechanism, for each Capacity Calculation Region where appropriate; and
 - d) Congestion Incomes and Firmness costs.
2. Each System Operator shall provide data and analysis to allow the preparation of the biennial technical report in a timely manner.
3. The first biennial technical report shall be delivered no later than six months after the entry into force of this Network Code, and thereafter on a biennial basis, no later than the end of March of each second year.
4. The biennial technical report shall provide information for the previous two calendar years finishing on the 31 December of the previous year.

CHAPTER 3 SPLITTING OF CROSS ZONAL CAPACITY

SECTION 1 METHODOLOGY

Article 40 METHODOLOGY FOR SPLITTING CROSS ZONAL CAPACITY

1. No later than six months after the entry into force of this Network Code, all System Operators of each Capacity Calculation Region shall develop a methodology for splitting Cross Zonal Capacity in a coordinated manner between different Capacity Allocation timeframes for their Capacity Calculation Region.
2. The methodology shall meet the objectives set in Article 20(2) of this Network Code and be based on the following criteria:
 - a) Market Participants needs; and
 - b) liquidity of products.

Article 41 AMENDMENT OF THE METHODOLOGY FOR SPLITTING CROSS ZONAL CAPACITY

1. All System Operators of each Capacity Calculation Region shall be entitled to launch a reassessment of the methodology for splitting Cross Zonal Capacities between different Capacity Allocation timeframes for their Capacity Calculation Region. A reassessment shall be launched not earlier than one year after the previous assessment or reassessment.
2. Where a reassessment of the methodology of a Capacity Calculation Region is launched, all System Operators of that Capacity Calculation Region shall develop a proposal to amend or maintain the current methodology for splitting Cross Zonal Capacities between different Capacity Allocation timeframes for their Capacity Calculation Region in accordance with Article 40.

SECTION 2 PROCESS FOR SPLITTING OF CROSS ZONAL CAPACITY

Article 42 VALIDATION AND DELIVERY OF SPLITTING FOR CROSS ZONAL CAPACITIES

1. Each Coordinated Capacity Calculator shall split the calculated Cross Zonal Capacities for each Forward Capacity Allocation timeframe applying the methodology for splitting Cross Zonal Capacities in accordance to Article 40.
2. Each Coordinated Capacity Calculator shall submit the results of splitting Cross Zonal Capacities for validation to each System Operator within its Capacity Calculation Region together with the Cross Zonal Capacities for validation in accordance with Article 32.

3. Each System Operator shall validate the submitted results on its Bidding Zone Borders or Critical Network Elements.
4. Each System Operator shall send its validation of split Cross Zonal Capacity to its Coordinated Capacity Calculator and to the other System Operators of relevant Capacity Calculation Region(s) together with validated Cross Zonal Capacities in accordance with Article 33.
5. Validated split for Cross Zonal Capacities shall be provided by each Coordinated Capacity Calculator for the execution of Forward Capacity Allocation in accordance with Article 44.

CHAPTER 4 THE FORWARD CAPACITY ALLOCATION

SECTION 1 GENERAL PROVISIONS

Article 43 OBJECTIVES OF FORWARD CAPACITY ALLOCATION

1. The Forward Capacity Allocation shall enable long term cross zonal trade and provide Market Participants with long term cross zonal hedging opportunities against congestion costs and Day Ahead congestion pricing, compatible with Bidding Zone delimitation.
2. The Forward Capacity Allocation shall determine the results specified in Article 44(2) (Input and Results of Forward Capacity Allocation), in a manner which:
 - a) uses the Marginal Pricing principle to generate results for each Bidding Zone Border, direction of utilization and Market Time Period;
 - b) allocates no more than the validated split Cross Zonal Capacity ; and
 - c) is repeatable and scalable.

Article 44 INPUT AND RESULTS OF FORWARD CAPACITY ALLOCATION

1. In determining results, the Allocation Platform(s) shall use the following inputs:
 - a) Validated split Cross Zonal Capacity submitted by each Coordinated Capacity Calculator;
 - b) Allocation Constraints, where appropriate; and
 - c) Bids submitted by Market Participants.
2. The Allocation Platform(s) shall for each Forward Capacity Allocation, at least, simultaneously determine the following results for each Bidding Zone Border, direction of utilization and Market Time Period:
 - a) the volume of allocated Long Term Transmission Rights expressed in MW;
 - b) the price of Long Term Transmission Rights in accordance with Article 57; and
 - c) the execution status of bids.

3. The Allocation Platform(s) shall use best endeavours to ensure that Auction results are accurate.
4. Each System Operator shall ensure that the Auction results are consistent with the inputs provided to the Allocation Platform(s) according to paragraph 1.

SECTION 2

OPTIONS FOR CROSS ZONAL TRANSMISSION RISK HEDGING

Article 45

DECISION ON CROSS ZONAL RISK HEDGING OPPORTUNITIES

1. No later than six months after the entry into force of this Network Code, National Regulatory Authorities competent on Bidding Zone Borders where Long Term Transmission Rights do not exist shall determine whether appropriate cross zonal risk hedging opportunities are available to Market Participants. National Regulatory Authorities shall:
 - a) consult on Market Participants needs for cross zonal risk hedging opportunities; and
 - b) evaluate in a coordinated manner whether forward financial electricity markets are well developed and have shown their efficiency.
2. Where National Regulatory Authorities competent on (a) Bidding Zone Border(s) determine that appropriate cross zonal risk hedging opportunities other than Long Term Transmission Rights are available to Market Participants, System Operator(s) may at their own discretion issue Long Term Transmission Rights on those Bidding Zone Border(s).
3. Where System Operators do not issue Long Term Transmission Rights on (a) Bidding Zone Border(s) pursuant to paragraph 2, System Operators for these Bidding Zone Border(s) shall be exempted from the application of the provisions set out in this Network Code except Article 1(2), Article 2, Article 3, Article 4(1), Article 4(2a) to Article 4(2d), Article 4(3), Article 4(4), Article 5, Article 6, Article 7(1), Article 7(3a) to Article 7(3c), Article 7(4a), Article 7(5) to Article 7(11), Article 8(1a) to Article 8(1c), Article 8(2), Article 8(3), Article 9, Article 10, Article 11 to Article 34, Article 35 to Article 39, Article 83 and Article 90.
4. Where National Regulatory Authorities competent on (a) Bidding Zone Border(s) determine that no appropriate cross zonal risk hedging opportunities are available to Market Participants, System Operators of the Bidding Zone(s) Border(s) shall issue Long Term Transmission Rights.
5. Upon request of System Operator(s) or their own initiative, National Regulatory Authorities competent on each Bidding Zone Border shall assess or reassess whether appropriate cross zonal risk hedging opportunities are available to Market Participants. During assessment or reassessment National Regulatory Authorities shall:
 - a) consult on Market Participants needs for cross zonal risk hedging opportunities; and
 - b) evaluate in a coordinated manner whether forward financial electricity markets are well developed and have shown their efficiency.

Article 46

TYPE OF LONG TERM TRANSMISSION RIGHTS

1. Long term Cross Zonal Capacity shall be allocated to Market Participants by the Allocation Platform(s) in the form of Physical Transmission Rights in accordance with the Use-it-or-sell-it (UIOSI) principle or in the form of Financial Transmission Rights.
2. The System Operators shall offer through the Allocation Platform(s) to Market Participants long term Cross Zonal Capacity for at least annual and monthly timeframes pursuant to Article 40. The System Operators may also decide to offer long term Cross Zonal Capacity on additional timeframes following consultation with concerned Market Participants and approval by National Regulatory Authorities.
3. System Operators of each Bidding Zone(s) Border shall develop a proposal for the Long Term Transmission Right to be issued on their Bidding Zone Borders no later than six months after National Regulatory Authorities decision pursuant to Article 45, including timescales for implementation and at least the description of the following characteristics defined in the Allocation Rules:
 - a) type of Long Term Transmission Right (Physical Transmission Right, Financial Transmission Right Option, Financial Transmission Right Obligation);
 - b) timeframe (e.g. yearly, monthly);
 - c) form of product (e.g. base, peak, off-peak);
 - d) the Bidding Zone border(s) covered;
 - e) participating System Operators; and
 - f) participating National Regulatory Authority(ies).
4. For the proposed Long Term Transmission Right to be issued, each System Operator shall duly consider the result of the stakeholder consultation pursuant to Article 4.
5. The allocation of Physical Transmission Rights and Financial Transmission Rights in parallel at the same Bidding Zone Border is not allowed.

Article 47

AMENDMENT OF THE TYPE OF LONG TERM TRANSMISSION RIGHTS

1. A review of Long Term Transmission Rights offered in between two Bidding Zones may be launched by:
 - a) All National Regulatory Authorities of each Bidding Zone(s) Border; or
 - b) all National Regulatory Authorities of each Bidding Zone(s) border based upon on recommendation from the Agency or all System Operators of each Bidding Zone(s) Border.
2. The System Operator(s) of the Capacity Calculation Region shall be responsible to undertake the review as described in paragraph 1.

3. The System Operators involved in the review shall:
 - a) perform the assessment of the offered Long Term Transmission Right taking into account the criteria defined in Article 46(2);
 - b) if considered necessary, propose an alternative Long Term Transmission Right, including a proposal on timescales for implementation, taking into account the result of the assessment of the offered Long Term Transmission Right;
 - c) perform a public consultation regarding the:
 - results of the assessment of the offered Long Term Transmission Right; and
 - proposal for an alternative Long Term Transmission Right if applicable; and
 - d) after finalisation of the public consultation and within three months of the issuance of the decision to launch a review, make the proposal(s) to their National Regulatory Authority(ies) to maintain or amend the Long Term Transmission Right.

Article 48

PHYSICAL TRANSMISSION RIGHTS

1. Each Physical Transmission Right holder shall be entitled to nominate all or part of the Cross Zonal Capacity associated to its Physical Transmission Right.
2. Where the Physical Transmission Right holder does not nominate in accordance with Article 52 by the deadline specified in the Nomination Rules, the Physical Transmission Right holder shall be entitled to obtain a payment in line with Article 51(1).

Article 49

FINANCIAL TRANSMISSION RIGHTS - OPTIONS

1. Financial Transmission Right Option holders shall be entitled to obtain a payment in line with Article 51(1).
2. The implementation of Financial Transmission Right Options shall be subject to the application of Day Ahead price coupling according to Chapter 5 of the Capacity Allocation and Congestion Management Network Code.

Article 50

FINANCIAL TRANSMISSION RIGHTS - OBLIGATIONS

1. Financial Transmission Right Obligations holders shall be entitled to receive the payment pursuant to Article 51(1) or obliged to pay the payment pursuant to Article 51(2).
2. System Operators shall be entitled to develop a proposal for common rules for the implementation of Financial Transmission Right Obligations on the Bidding Zone Border(s) they are responsible for.
3. The implementation of Financial Transmission Right Obligations shall be subject to the following preconditions:

- a) Application of Day Ahead price coupling in accordance with Chapter 5 of the Capacity Allocation and Congestion Management Network Code; and
- b) common rules of Financial Transmission Right Obligations as defined in Article 50(2).

Article 51

PRINCIPLES FOR LONG TERM TRANSMISSION RIGHTS REMUNERATION

1. System Operators on a Bidding Zone Border shall remunerate the Long Term Transmission Right holders based on the related Market Spread between the two concerned Bidding Zones in case the difference is positive in the direction of the Long Term Transmission Right.
2. The Financial Transmission Rights Obligation holder shall remunerate the System Operators on a Bidding Zone Border based on the related Market Spread between the two concerned Bidding Zones in case the difference is negative in the direction of the Financial Transmission Rights Obligation.
3. No later than six months after the entry into force of this Network Code, System Operators on a Bidding Zone(s) Border shall develop a proposal for the calculation of Long Term Transmission Right remuneration respecting the principles set in paragraph 1 as well as the principle of Revenue Adequacy for the following cases:
 - a) Cross Zonal Capacity is allocated through market coupling in the Day Ahead timeframe;
or
 - b) Cross Zonal Capacity is allocated through other method than market coupling in the Day Ahead timeframe.

SECTION 3

NOMINATION PROCEDURES FOR PHYSICAL TRANSMISSION RIGHTS

Article 52

GENERAL PROVISIONS FOR PHYSICAL TRANSMISSION RIGHTS NOMINATION

1. Where System Operators issue and apply Physical Transmission Rights on Bidding Zone Border(s), they shall enable Physical Transmission Right holders or an authorised third party acting on their behalf the possibility to nominate their electricity exchange schedules.
2. No later than twelve months after the entry into force of this Network Code, all System Operators issuing Physical Transmission Rights on Bidding Zone Border(s) shall develop a proposal of Nomination Rules for electricity exchange schedules between Bidding Zone Borders. Nomination Rules shall contain at least the following information:
 - a) entitlement for Physical Transmission Right holder to nominate;
 - b) minimum technical requirements to nominate;
 - c) description of the Nomination process;
 - d) Nomination timings;
 - e) format of Nomination and communication; and

- f) contractual framework with the Market Participants.
3. All System Operators shall progressively harmonise these Nomination Rules for all Bidding Zone Border(s) on which Physical Transmission Rights are applied.
4. Physical Transmission Right holders or an authorised third party acting on their behalf shall nominate all or part of the Cross Zonal Capacity associated to their Physical Transmission Right between Bidding Zone Borders in compliance with the Nomination Rules.

Article 53

AMENDMENT OF NOMINATION RULES FOR PHYSICAL TRANSMISSION RIGHTS

1. All System Operators shall be entitled to launch a reassessment of the Nomination Rules for Physical Transmission Right on a Bidding Zone Border where these Physical Transmission Rights are being issued. A reassessment shall be launched not earlier than one year after the previous assessment or reassessment.
2. Where a reassessment of the Nomination Rules for Physical Transmission Rights is launched, all System Operators shall develop a proposal to amend or maintain the current Nomination Rules for Physical Transmission Rights in accordance with Article 52.

SECTION 4 PROCESSES AND OPERATION

Article 54

TERMS AND CONDITIONS FOR PARTICIPATION IN FORWARD CAPACITY ALLOCATION

1. Market Participants shall be registered with the Allocation Platform(s) and meet all required eligibility requirements under the corresponding Allocation Rules before being entitled to participate in the Auction(s) or perform Secondary Trading. The eligibility requirements shall follow the principles of non-discrimination and transparency.
2. Following Market Participants' request for entitlement the Allocation Platform(s) shall notify the Market Participant whether it has met all eligibility requirements and is entitled to participate in the Auction(s) or perform Secondary Trading from a specified date.
3. Market Participant(s) shall fully comply with the corresponding Allocation Rules, shall keep all information relating to its participation up to date and shall notify the Allocation Platform(s) of any changes to this information without undue delay.
4. Market Participants shall omit any action or behaviour in relation with the Auction(s) which may affect, distort or restrict competition in the internal energy market.
5. The Allocation Platform(s) shall be entitled to suspend or withdraw a Market Participant's entitlement to participate in the Auction(s) or perform Secondary Trading following a breach or non-compliance with its contractual obligations under corresponding Allocation Rules.

6. Suspension and withdrawal of entitlement shall not exonerate a Market Participant from its payment obligations under the corresponding Allocation Rules.
7. A Market Participant may also request withdrawal of entitlement at any time, in order to terminate its participation in the corresponding Allocation Rules.

Article 55

SUBMISSION OF INPUT DATA TO ALLOCATION PLATFORM(S)

Each System Operator shall ensure that validated long term Cross Zonal Capacities and splitting of these long term Cross Zonal Capacities are submitted to the Allocation Platform(s) prior to the publication of the auction specification as established in Article 56.

Article 56

OPERATION OF THE FORWARD CAPACITY ALLOCATION

1. No later than the time specified in the corresponding Allocation Rules for each forward capacity Auction, the Allocation Platform(s) shall define and publish an auction specification containing at a minimum the following information:
 - a) date and time of gate opening and gate closure of the Auction;
 - b) Long term Cross Zonal Capacity and type of the Long Term Transmission Right that will be auctioned according to Article 55 and Article 60;
 - c) format of bids;
 - d) date and time of publication of Auction results; and
 - e) the period during which Auction results can be contested.
2. Each Market Participant shall submit its bids to the Allocation Platform(s) prior to the gate closure time provided in the Auction specification and respecting the conditions provided in Auction specification pursuant to paragraph 1.
3. The Allocation Platform(s) shall ensure the anonymity of submitted bids.

Article 57

PRICING OF THE LONG TERM TRANSMISSION RIGHTS

The price of Long Term Transmission Rights for each Bidding Zone Border, direction of utilization and Market Time Period shall be equal to the Marginal Price resulting from the Forward Capacity Allocation expressed in Euro.

Article 58
FINANCIAL REQUIREMENTS AND SETTLEMENT

1. The Allocation Platform(s) shall provide invoicing or self-billing procedures for the settlement of debits or credits resulting from the allocation of Long Term Transmission Rights, the return of Long Term Transmission Rights and the remuneration of Long Term Transmission Rights. These procedures shall be determined in the corresponding Allocation Rules.
2. In order to participate in the Auction(s) a Market Participant shall be required to secure bids and allocated capacity with sufficient collaterals as defined by the corresponding Allocation Rules.

Article 59
ESTABLISHMENT OF FALLBACK PROCEDURES

1. In the event that Forward Capacity Allocation is unable to produce results the default fallback procedure shall be the postponement of the Forward Capacity Allocation.
2. All System Operators on both sides of a Bidding Zone Border shall be entitled to implement other coordinated fallback solutions. In such cases, these System Operators shall develop a coordinated proposal for reliable fallback procedures.

Article 60
RETURN OF LONG TERM TRANSMISSION RIGHTS

1. Long Term Transmission Right holders may return their Long Term Transmission Right to the Allocation Platform(s) for subsequent Forward Capacity Allocation.
2. Long Term Transmission Right holders willing to return their Long Term Transmission Rights in a subsequent Forward Capacity Allocation shall notify the Allocation Platform(s) and System Operators on the Bidding Zone Border to which the Long Term Transmission Right is associated as set out in the Allocation Rules.
3. Long Term Transmission Right holders whose Long Term Transmission Rights have been issued by System Operators in accordance with Article 48 shall get paid by System Operators on the Bidding Zone Border to which the Long Term Transmission Right is associated based on the Marginal Price resulting from the Auction where the Long Term Transmission Rights were returned.

Article 61
SECONDARY TRADING

1. Long Term Transmission Right holders shall be entitled to transfer their Long Term Transmission Rights through Secondary Trading to other Market Participants according to the Allocation Rules.

2. Long Term Transmission Right holders transferring their Long Term Transmission Rights through Secondary Trading shall notify the Allocation Platform(s) and concerned System Operators.
3. Market Participants acquiring a Long Term Transmission Right through Secondary Trading shall confirm to the Allocation Platform(s) and concerned System Operators the notification sent by the previous Long Term Transmission Right holder in accordance with the paragraph 2.
4. System Operators on their Bidding Zone Borders to which the Long Term Transmission Right is issued shall be the counterparty to the Long Term Transmission Right holder resulting from the Secondary Trading as defined in the Allocation Rules.

Article 62
DELIVERY OF RESULTS

1. The Allocation Platform(s) shall notify the System Operators responsible for the Bidding Zone Border to which the Long Term Transmission Right is associated, Market Participants and Long Term Transmission Right holders about the result of the Forward Capacity Allocation specified in Article 44(2) no later than the time provided in the Auction specification in accordance with Article 56.
2. The Allocation Platform(s) shall inform Market Participants on the execution status and clearing prices of their bids.

Article 63
INITIATION OF FALLBACK PROCEDURES

1. In the event that the Allocation Platform(s) is unable to deliver either the Auction specification in accordance with Article 56 or part or all of the results of the Forward Capacity Allocation by the time specified in the Allocation Rules, fallback procedures as established in accordance with Article 59 shall be followed.
2. The Allocation Platform(s) shall notify System Operators responsible for the Bidding Zone Border where fallback procedure may be initiated as soon as a failure to deliver in accordance with paragraph 1 is identified. The Allocation Platform(s) shall as soon as reasonably practicable notify Market Participants that fallback procedures shall be followed.

Article 64
PUBLICATION OF MARKET INFORMATION

1. Allocation Platform(s) shall publish at minimum the following information for each Bidding Zone Border and direction of utilization:
 - a) Auction specification as described in Article 56;

- b) an indicative Auction Calendar setting out the type of products to be offered pursuant to Article 40 and the date(s) when these products shall be offered to Market Participants.
 - c) Forward Capacity Allocation results as defined in Article 44(2);
 - d) number of Market Participants in each Auction; and
 - e) Allocation Platform contact details.
2. Allocation Platform(s) shall publish the information required in accordance with paragraph 1, respecting the timing provided in the corresponding Auction specification and in the Regulation (EC) XX/YYY (Transparency Regulation).
 3. The Allocation Platform(s) shall ensure that historical data for a period of not less than 5 years is freely available.

CHAPTER 5

SINGLE PLATFORMS FOR ALLOCATION AND SECONDARY TRADING

Article 65

GENERAL TASKS

1. The Single Platform for Allocation shall be responsible for performing the Forward Capacity Allocation based on the provisions set out in this Network Code. In particular, the Single Platform for Allocation shall be responsible, at least, for:
 - a) the registration of Market Participants;
 - b) providing a single point of contact to Market Participants;
 - c) the operation of Auctions procedures;
 - d) the financial settlement of allocated Long Term Transmission Rights with Market Participants;
 - e) cooperation with a clearing house function, if such a function is required by the common design according to Article 50(2);
 - f) enabling the returning of Long Term Transmission Rights in accordance with Article 60;
 - g) the publication of Auctions results, in accordance with Article 64;
 - h) providing and operating interfaces for data exchange with Market Participants;
 - i) the organization of a fallback procedure in accordance with Article 59 and Article 63; and
 - j) providing and operating interfaces for data exchange with the Single Platform for Secondary Trading.
2. The Single Platform for Secondary Trading shall support the transfer of Long Term Transmission Rights by providing a communication platform, on which:
 - a) Market Participants can indicate to other Market Participants their interest to purchase or sell Long Term Transmission Rights which have been initially allocated by an Allocation Platform; and

- b) Market Participants can contact each other in order to perform the transfer of Long Term Transmission Rights.

Article 66

FUNCTIONAL REQUIREMENTS FOR THE SINGLE PLATFORM FOR ALLOCATION AND THE SINGLE PLATFORM FOR SECONDARY TRADING

1. No later than nine months after the entry into force of this Network Code all System Operators, which issue Long Term Transmission Rights, shall develop a common set of requirements for the Single Platform for Allocation and a common set of requirements for the Single Platform for Secondary Trading. Thereby, System Operators shall take into account the tasks of Single Platform for Allocation and Single Platform for Secondary Trading according to Article 65.
2. The set of requirements for the Single Platform for Allocation shall at least include provisions for:
 - a) the expected Bidding Zone Borders to be covered;
 - b) technical availability and reliability;
 - c) operational processes;
 - d) different products (Physical Transmission Rights and Financial Transmission Rights);
 - e) allocation timeframes;
 - f) allocation methods and algorithms ;
 - g) principles of financial settlement and risk management;
 - h) data interfaces; and
 - i) consistent contractual framework with Market Participants.
3. The set of requirements for to the Single Platform for Secondary Trading shall at least include provisions for:
 - a) technical availability and reliability;
 - b) means of communication among Market Participants;
 - c) data interfaces; and
 - d) consistent contractual framework with Market Participants.

Article 67

ESTABLISHMENT OF THE SINGLE PLATFORM FOR ALLOCATION AND THE SINGLE PLATFORM FOR SECONDARY TRADING

1. No later than twelve months after the approval of the set of requirements pursuant to Article 66(2) all System Operators, which issue Long Term Transmission Rights, shall decide on the establishment of the Single Platform for Allocation and the Single Platform for Secondary Trading taking into account the requirements pursuant to Article 66(3) and requirements for cost recovery according to CHAPTER 9.
2. Said System Operators shall ensure that the Single Platform for Allocation and the Single Platform for Secondary Trading are operational and compliant with the requirements defined in accordance with Article 66 by a date no later than twelve months after the decision on the establishment pursuant to paragraph 1.

3. The provisions of this Network Code regarding the establishment of the Single Platform for Allocation and the establishment of the Single Platform for Secondary Trading shall be without prejudice to Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors.

Article 68

AMENDMENT OF FUNCTIONAL REQUIREMENTS FOR THE SINGLE PLATFORM FOR ALLOCATION AND THE SINGLE PLATFORM FOR SECONDARY TRADING

1. All System Operators, which issue Long Term Transmission Rights, shall be entitled to launch a reassessment of the common set of requirements defined in accordance with Article 66. A reassessment shall be launched not earlier than one year after the previous assessment or reassessment.
2. Where a reassessment of the common set of requirements is launched, all System Operators shall develop a proposal to amend or maintain the current common set of requirements in accordance with Article 66(2) and Article 66(3).

CHAPTER 6 ALLOCATION RULES

Article 69

STRUCTURE AND PROCESS FOR THE ESTABLISHMENT OF HARMONISED ALLOCATION RULES

1. No later than six months after the entry into force of this Network Code, all System Operators shall develop:
 - a) a general structure of harmonized Allocation Rules at all Bidding Zone Borders under this Network Code; and
 - b) a process for the implementation of harmonised Allocation Rules on all Bidding Zone Borders under this Network Code.

Article 70

REQUIREMENTS FOR HARMONISED ALLOCATION RULES

1. The harmonised Allocation Rules for Physical Transmission Rights and the harmonised Allocation Rules for Financial Transmission Rights shall be based on the same principles and apply the same wording, unless the characteristics of the product require it to differ.
2. The harmonised Allocation Rules for Physical Transmission Rights and the harmonised Allocation Rules for Financial Transmission Rights shall individually contain at least:
 - a) harmonised definitions and interpretation;
 - b) harmonised provisions on eligibility and entitlement, suspension and renewal, collusion and costs of participation pursuant to Article 54;
 - c) a description of the Forward Capacity Allocation process including at least provisions on auction specification, submission of bids, publication of Auction results, contestation

- period and fallback procedures pursuant Article 54, Article 55, Article 56, Article 59, Article 60 and Article 61;
- d) a description of the products which are offered;
 - e) harmonised provisions for Secondary Trading pursuant to Article 61;
 - f) harmonised provisions for the return of Long Term Transmission Rights pursuant to Article 60;
 - g) Nomination Rules pursuant to Article 52;
 - h) harmonised Use-It-Or-Sell-It (UIOSI) provisions in case of Physical Transmission Rights pursuant to Article 48;
 - i) Firmness provisions and Compensation Rules pursuant to Article 73, Article 74 and Article 75;
 - j) harmonised provisions for financial requirements and settlement pursuant to Article 58; and
 - k) a contractual framework between the Allocation Platform(s) and the Market Participants including: the applicable law, the applicable language as well as provisions on confidentiality, liability and force majeure.
3. The harmonised Allocation Rules shall contain regional specificities, where appropriate.

Article 71
INTRODUCTION OF HARMONISED ALLOCATION RULES

- 1. No later than twelve months after the entry into force of this Network Code, all System Operators shall develop a proposal for harmonised Allocation Rules for Physical Transmission Rights.
- 2. No later than twelve months after the entry into force of this Network Code, all System Operators shall develop a proposal for harmonised Allocation Rules for Financial Transmission Rights.

Article 72
AMENDMENT TO THE HARMONISED ALLOCATION RULES

- 1. All System Operators shall be entitled to launch a reassessment of the harmonised Allocation Rules. A reassessment shall be launched not earlier than one year after the previous assessment or reassessment.
- 2. Where a reassessment of the harmonised Allocation Rules is launched, all System Operators shall develop a proposal to amend or maintain the current harmonised Allocation Rules in accordance with Article 70.

CHAPTER 7 FIRMNESS

Article 73 GENERAL FIRMNESS PROVISIONS

1. Prior to the Day Ahead Firmness Deadline, all System Operators shall be entitled to curtail allocated Cross Zonal Capacities. In such cases, System Operators on the Bidding Zone Border where allocated Cross Zonal Capacities have been curtailed shall compensate the Long Term Transmission Right holder whose underlying Cross Zonal Capacities have been curtailed.
2. When compensating, each System Operators shall apply one or, if applicable, a combination of the following compensation principles:
 - a) initial price paid for the Long Term Transmission Right on the Forward Capacity Allocation; or
 - b) capped Market Spread.
3. Where System Operators apply capped Market Spread compensation principles, a cap based on congestion income and/or a price cap shall be used. The cap based on congestion income shall limit the compensation payments to the amount of congestion income derived from the allocation of Long Term Transmission Rights by the System Operator over a predefined period of time provided pursuant to Article 75. The price cap shall be defined in the Compensation Rules as a maximum Market Spread which is used for calculating the compensation.
4. Cumulated compensation payments shall not exceed the congestion income derived from the allocation of Long Term Transmission Rights.

Article 74 THE LONG TERM FIRMNESS DEADLINE

1. All System Operators on the same Bidding Zone Borders shall be entitled to implement a Long Term Firmness Deadline which separates the period before the Day Ahead Firmness Deadline into two sub-periods, the time before and the time after the Long Term Firmness Deadline. In case of determination of a Long Term Firmness Deadline, the degree of firmness shall be higher in the sub-period after than before the Long Term Firmness Deadline.
2. The determination of Long Term Firmness Deadline shall be based on characteristics of the type of Long Term Transmission Rights and respect the objectives of this Network Code.
3. In case System Operators implement a Long Term Firmness Deadline, the compensation for the Long Term Transmission Right holder shall be higher for the sub-period after the Long Term Firmness Deadline than the compensation before the Long Term Firmness Deadline.

Article 75 COMPENSATION RULES

1. All System Operators of a Capacity Calculation Region shall incorporate in the Allocation Rules according to Article 70 of this Network Code a set of Compensation Rules for the curtailments of allocated Cross Zonal Capacities.

2. The Compensation Rules shall include, at least;
 - a) the applied compensation principle(s) pursuant to Article 73(2) ;
 - b) where applicable, the applied cap based on congestion income and price cap according to Article 73(3); and
 - c) where applicable, according to Article 74 the determination of Long Term Firmness Deadline.
3. Each System Operator shall be entitled to develop a proposal for adequate Compensation Rules for an outage, if the System Operator foresees that the outage will last for a long period of time such as an outage related to direct current cables, subsea cables and phase-shifter transformers. Any such proposal shall establish clear terms and conditions for the application of the Compensation Rules.

Article 76

THE DAY AHEAD FIRMNESS DEADLINE

No later than twelve months after the entry into force of this Network Code, all System Operators shall develop a proposal for a single Day Ahead Firmness Deadline which shall not be shorter than half hour before Gate Closure Time of the Day Ahead Market.

Article 77

AMENDMENT OF THE DAY AHEAD FIRMNESS DEADLINE

In the event that all System Operators identify a need to amend the Day Ahead Firmness Deadline, they shall produce a proposal.

Article 78

FIRMNESS IN CASE OF FORCE MAJEURE OR EMERGENCY SITUATIONS

1. In the event of a Force Majeure situation or an Emergency Situation, System Operators shall have the right to curtail allocated Cross Zonal Capacities. In all cases, curtailment shall be undertaken in a coordinated manner having liaised with all directly affected System Operators.
2. The System Operator which invokes the Force Majeure or the Emergency Situation shall publish a notification describing the nature of Force Majeure and its probable duration.
3. Allocated Cross Zonal Capacities which become subject to an Emergency Situation or Force Majeure situation shall be reimbursed for the period of that Emergency Situation or Force Majeure situation, by the System Operator which invokes the Force Majeure or Emergency Situation, in the event of Explicit Allocation Market Participants shall be entitled to compensation equal to the value of the capacity set during the Explicit Allocation process.
4. The System Operator which invokes a Force Majeure situation or an Emergency Situation shall make every possible effort to limit the consequences and duration of the Force Majeure situation or Emergency Situation.

CHAPTER 8 CONGESTION INCOME DISTRIBUTION

Article 79

ESTABLISHMENT OF CONGESTION INCOME DISTRIBUTION ARRANGEMENTS

1. No later than twelve months after the entry into force of this Network Code, all System Operators shall establish a methodology for sharing Congestion Income.
2. The methodology(ies) developed pursuant to paragraph 1 shall:
 - (a) facilitate the efficient long-term operation and development of the pan-European Interconnected System and the efficient operation of the pan-European electricity market;
 - (b) facilitate the achievement of the general principles of congestion management as specified in Article 16 of Regulation (EC) No 714/2009;
 - (c) allow for reasonable financial planning;
 - (d) be compatible across timeframes; and
 - (e) establish arrangements to share Congestion Income deriving from transmission assets owned by parties other than System Operators.

Article 80

AMENDMENT TO CONGESTION INCOME DISTRIBUTION ARRANGEMENTS

Where System Operators identify a need to amend the methodology(ies) established pursuant to Article 72 they shall:

- (a) develop a proposal agreed by relevant System Operators; and
- (b) demonstrate how the proposal better facilitates the achievement of the principles specified in Article 79(2).

CHAPTER 9 COST RECOVERY

Article 81

GENERAL PROVISIONS

1. The costs related to the obligations allocated to System Operators in accordance with Article 8, including but not limited to the costs specified under Article 82 to Article 84, shall be assessed by all National Regulatory Authorities.
2. Costs assessed as reasonable and proportionate shall be recovered in a timely manner via network tariffs or appropriate mechanisms as determined by National Regulatory Authorities.
3. If requested to do so by National Regulatory Authorities, any party defined in Article 1, shall, within three months of such a request, use best endeavours to provide such information as

reasonably requested by National Regulatory Authorities to facilitate the assessment of the costs incurred.

4. Any costs incurred by Market Participants in meeting the requirements of this Network Code shall be borne by those Market Participants.

Article 82

COST OF ESTABLISHING, DEVELOPING AND OPERATING THE SINGLE PLATFORM FOR ALLOCATION AND THE SINGLE PLATFORM FOR SECONDARY TRADING

1. All System Operators issuing Long Term Transmission Rights on the Single Platform of Allocation shall bear costs related to the establishment and operation of the Single Platform for Allocation.
2. All System Operators issuing Long Term Transmission Rights on the Single Platform for Allocation shall bear costs related to the establishment and operation of the Single Platform for Secondary Trading.

Article 83

COST OF ESTABLISHING AND OPERATING COORDINATED CAPACITY CALCULATION PROCESS

1. Each System Operator shall bear the costs related to the provision of inputs to the Capacity Calculation Process.
2. All System Operators shall bear costs related to the establishment and operation of the European Merging Function.
3. All System Operators of each Capacity Calculation Region shall bear costs related to the establishment and operation of the Coordinated Capacity Calculator(s).

Article 84

COST OF ENSURING FIRMNESS

The costs of ensuring firmness in accordance with Article 73 to Article 75 shall be borne by System Operators. These costs shall include, but shall not be limited to the costs of Redispatching, Countertrading, correcting imbalances, incurred market mechanism imbalance costs and compensation mechanisms associated with ensuring firmness.

TITLE 4

TRANSITIONAL ARRANGEMENTS

Article 85 **GENERAL PROVISIONS**

The transitional arrangements shall promote the objectives of this Network Code related to the establishment and operation of the Single Platform for Allocation and Single Platform for Secondary Trading and shall apply for a period of no longer than twenty four months after entry into operation of the Single Platform for Allocation and Single Platform for Secondary Trading. The arrangements shall be compatible and, as far as possible consistent with the provisions of Article 65 to Article 68.

Article 86 **REGIONAL PLATFORMS FOR ALLOCATION AND/OR SECONDARY TRADING**

1. As a transitory measure, all System Operators shall be entitled to designate existing Regional Platforms for Forward Capacity Allocation and/or Secondary Trading subject to approval by the National Regulatory Authorities of the relevant Member States.
2. Regional Platforms for Forward Capacity Allocation and Secondary Trading shall only be allowed if the following conditions are cumulatively met:
 - a) Regional Platform(s) shall not hamper the improvement and harmonisation process of harmonised Allocation Rules;
 - b) Regional Platform(s) shall not have an adverse impact on the liquidity of Long Term Transmission Rights on any Bidding Zone Border;
 - c) Regional Platform(s) shall facilitate the transfer of Forward Capacity Allocation and Secondary Trading to the Single Platform for Allocation and the Single Platform for Secondary Trading once established; and
 - d) concerned System Operators and National Regulatory Authorities shall have consulted, at least, with the Stakeholders of the Bidding Zone Border(s).

Article 87 **DURATION OF REGIONAL PLATFORMS**

1. The operation of Regional Platforms shall terminate once the Single Platform for Allocation and the Single Platform for Secondary Trading have been established and their tasks referred to in Article 65 are fully operational.
2. After the moment in time referred to in paragraph 1, all System Operators are entitled to delegate the Forward Capacity Allocation and the provision of Secondary Trading on their Bidding Zone Border(s) to Regional Platforms for a further period not longer than twenty-four months and subject to regulatory approval, in case:
 - a) System Operators of the Bidding Zone Border(s) have defined specific regional requirements in relation to the Single Platform for Allocation, which deviate from the set of requirements defined according to Article 66, and this deviation has been approved by the National Regulatory Authorities of the Bidding Zone Border(s); or
 - b) on a Bidding Zone Border the single price coupling on the Day Ahead timeframe has not been implemented and Explicit Allocation is still being performed in this timeframe.

3. The prolongation of operation of Regional Platforms according to paragraph 2 shall only be approved if the conditions of Article 86(2) are met.
4. Within the twenty-four months transitory period, the operation of Regional Platforms pursuant to paragraph 2 shall end if:
 - a) in case of paragraph 2(a), the National Regulatory Authorities of the Bidding Zone Border(s) do not deem the specific requirements as reasonable anymore and withdraw their approval; or
 - b) in case of paragraph 2(b), the price coupling is introduced on the Bidding Zone Border(s).

Article 88
REGIONAL ALLOCATION RULES

1. As a transitory measure, System Operators of the Bidding Zone Border(s) shall be entitled to use regional Allocation Rules subject to approval by the National Regulatory Authorities of the Bidding Zone Border(s) for which the Regional Platform(s) are responsible.
2. A Regional Allocation Rules shall only be approved if the following conditions are cumulatively met:
 - a) the Regional Allocation Rules shall not hamper the improvement and harmonization process of harmonised Allocation Rules;
 - b) Regional Allocation Rules shall not have an adverse impact on the liquidity of Long Term Transmission Rights on any Bidding Zone Border; and
 - c) System Operators and National Regulatory Authorities of the Bidding Zone Border(s) shall have consulted, at least, with the Stakeholders of the Bidding Zone Border(s).
3. Notwithstanding the regional specificities that the harmonised Allocation Rules provide for, Regional Allocation Rules shall be replaced by the harmonised Allocation Rules twenty four months after publication of the harmonised Allocation Rules.

Article 89
TRANSITIONAL ARRANGEMENTS FOR FIRMNESS

Until the introduction of price coupling in the Day Ahead timeframe, alternative Compensation Rules shall apply as a transitional firmness measure. These transitional arrangements shall be fair, transparent and non-discriminatory. Compensation for curtailment of Long Term Transmission Rights on Bidding Zone Border(s) where price coupling in the Day Ahead timeframe has not been introduced yet shall be limited to the Initial Price Paid principle pursuant to Article 73(2)(a).

Article 90
TRANSITIONAL ARRANGEMENTS ACCORDING TO THE NETWORK CODE ON CAPACITY ALLOCATION AND CONGESTION MANAGEMENT

The transitional arrangements provided for under Article 96 of Network Code on Capacity Allocation and Congestion Management shall also apply to this Network Code.

TITLE 5 FINAL PROVISIONS

Article 91 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.

This Network Code shall be binding in its entirety and directly applicable in all Member States.