Comments to ENTSO-E Draft Network Code for Operational Planning & Scheduling

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General comments

Harmonisation of TSO rules and TSO coordination should be strengthened

The fundamental purpose of the Network Codes (NC) outlined in the Third Energy Package is to introduce common European rules for cross-border issues necessary for a coordinated operation of the EU power system.

The draft Operational Planning and Scheduling NC does not sufficiently reflect the spirit of the Third Energy Package and does not provide strong guidance on how to move towards harmonisation of the various national TSO practices in this area. More specifically, it does not sufficiently require inter-TSO cooperation and harmonisation of methodologies for security analysis in operational planning and outage planning. Moreover, the code does not include any coordinated/harmonised methodology/tools or thresholds for scheduling and makes no attempt to align and coordinate scheduling platforms (Chapter 7).

Harmonisation of rules is a key prerequisite for accomplishing the internal energy market and ensuring security of supply in the European electricity system increasingly dominated by renewables. In this context, the reference made in many provisions to decisions by “each TSO” should be replaced with the reference to “common TSO” or at least to “coordinated TSO” decisions. Furthermore, such common rules should be formulated as obligations for TSOs, not as advice.

Proper regulatory oversight should be introduced

The code leaves too much room for unilateral TSO decisions without involvement of other relevant stakeholders. It also allows for long implementation times for TSOs, which do not always appear coherent. The code should foresee the involvement of grid users / market participants and approval by NRAs in cases where “each TSO” decides. The role of ACER, which is very limited in the current draft, should be strengthened significantly. ACER should play a key role in the harmonisation process and should be consulted whenever NRAs do not agree or intend to implement different rules.

Consistency between the NC OP&S and other network codes should be ensured

The draft code is inconsistent with other network codes (RfG, CACM, DCC, OS) on a number of issues, including data exchanges. There is also a need to simplify and introduce coherence as regards existing definitions of different areas (market balance area, outage area, control area, responsibility area). Terms like 'adequacy', 'planned/unplanned/forced outages', 'contingencies/constraints', 'grid element' and 'relevant' power generation modules/demand facilities, 'Significant Grid Users' and 'Scheduling Agent' should be clearly defined. Other definitions, like Common Grid Model or Remedial Actions should be included in the code and be made consistent with the NC CACM Requirements. Definitions must be made coherent with requirements in other codes.

In addition, there seems to be a discrepancy between a shorter term vision in this code and a long term one in the RfG and DCC codes as regards dealing with increased penetration of RES and development of 'Smart' solutions.

Information requirements on generators regarding outage planning should be consistent with current regulation. Data should be submitted only once

The process of submitting technical data to be provided by the concerned "Outage Planning Agent" should be in line with REMIT regulation, for example with regard to criteria of confidentiality of the information.

Generators already provide TSOs with a lot of operational data for the purpose of developing a common grid model and adequacy forecasts. Therefore provisions in this Network Code should not result in duplicating requirements for technical data already included in other Network Codes. Information should be submitted only once and should be clearly defined in the relevant NCs. Methodologies of information exchange must be as user-friendly as possible.

The NC on Operational Planning & Scheduling should include clear rules about sources of the needed information. If all of these information requirements are stipulated in the NC Operational Security, there should be a clear reference to the relevant provisions in this code without duplication. Provisions for information exchange should respect technical capabilities as defined in the NC Requirements for Generators.

Finally, information about commercial schedules, when calculated by power exchanges, should be sent directly to TSOs without requiring any intervention by market operators.

No additional constraints on the outage planning process should be proposed

We regard as legitimate the TSOs' need to exchange information about planned outage schedules one year ahead of real time in order to perform a common capacity calculation process. At this stage, agents have to provide information that is as accurate as possible. However, the process should not lead to a validated and binding planning: outage planning agents (generators, demand facilities) should have the right to optimise their units and maintenance plans until up to 3 months before real time.

The Network Code should not introduce any additional constraints on outage plans: relevant Outage Planning Agents should submit an indicative availability schedule. The current code's requirement to submit a definite year-ahead outage planning would imply for the Outage Planning Agent renouncing to freely adapt it to the changing environment throughout the corresponding period (Article 23.2).

The Network Code should not contain provisions stipulating that changes of the yearly outage planning should be subject to TSO decision, as currently foreseen in Article 24. This implies that TSOs would be given the right to refuse the proposed changes. In case of outage incompatibility, TSOs should adapt the outage planning for grid elements in their grids when possible. Where this proves impossible, TSOs should try to find the most cost-efficient alternative, by incentivising generators and other outage planning agents to reschedule the outage plans. TSOs should only freeze their maintenance schedule close to real time, in relation to strong maintenance planning constraints.

DSOs should be properly considered in operational planning & scheduling as regards distribution network users and grid elements

The ACER Framework Guidelines state clearly that collaboration between TSOs and DSOs is necessary when security of supply and completion of the Internal Energy Market are affected. Absence of such collaboration would have an adverse effect on other important objectives: efficiency, end costumers' satisfaction and RES integration. However, this need for collaboration between DSOs and TSOs is not adequately reflected in the network code – although the code affects elements of DSO grids as well as generation and demand facilities connected to distribution grids. Also the role of new parties, such as aggregators is not reflected in the code (e.g. Art 13). The Framework Guidelines require that the network code describes 'principles for exchange of all necessary information between system operators to handle the different planning and scheduling activities in a coordinated and cooperative manner' (p. 21).

TSO-connected DSOs need outage management information from the TSO, relevant neighbouring DSOs and significant users, including e.g. aggregators to maintain the security of the system they operate and support the overall system security. If DSOs are not properly involved in determining elements of their grids and users connected to their grids for outage planning and their outage coordination process (provisions of Art. 21, 22 and 25), DSO actions on their networks could inadvertently endanger cross-border exchanges. TSOs should not order or act directly on parts of distribution network or any generation or demand facility embedded in distribution networks for outage management purposes. Instead, such necessary actions should always be taken via the affected DSO.

In addition, affected DSOs should have the possibility to access the model of the TSO grid that influences the distribution network in order to perform their own security analysis (if needed). The information of that DSO influence grid should include the transmission grid elements or users outage planning. In addition, schedules from distribution network users should be communicated by the "Scheduling Agent" to the DSO so that the DSO can detect potential restrictions in advance. Distribution network users should not send information to TSOs without the awareness of the DSO, as this could endanger DSO operations. If the TSO requires some information from a DSO-connected user, the information exchange should be facilitated through the correspondent DSO.

Last but not least, in order to maximise RES integration and to avoid affecting overall system security (i.e. to maintain active/reactive power ration at T/D connection point), Significant DSOs should be able to monitor ancillary services. The central role of DSOs as facilitators must be taken into account, e.g. for data and information exchange and delivered quality of service to DSO connected customers. The code is also not fully coherent with the RfG and DCC codes with respect to ancillary services.

A compensation principle should be introduced

In case TSOs wish to adjust the outage plans of the outage planning agents, they should provide adequate compensation for resulting costs and profits lost. A clear general principle of compensation has to be introduced (Article 23.7, Article 23.11). Further clarification is needed on how TSOs will take decisions about changes in planning, given that these changes will incur additional costs and lost profits. In this context, it is important to ensure that TSOs operate in a non-discriminatory and neutral manner. It is also important to clarify if TSOs will also consider possible solutions available from across the border. In this context, ENTSO-E should provide more clarity on what they mean when using the term "minimizing the impact on the market", as it can be different for different market players (Article 23.8.a).

Cost assessments should consider all Network System Operators affected

The costs related to the obligations referred to in this (and other) Network Code(s) which have to be borne by regulated Network System Operators shall be assessed by National Regulatory Authorities (NRAs). The code also includes "hidden" obligations for DSOs. In particular, Art. 9, Art. 17 and Art. 30 foresee scenarios, forecasts, and analysis for Power Generating Facilities and Demand Facilities connected to Distribution Network performed by TSOs without mentioning DSOs' role/obligations. NRAs should recognise efficient DSO costs resulting from necessary adaptions of the existing grid (i.e. new installations) as well as related administrative cost.

Involvement of market stakeholders should be ensured and justification of proposed measures should be provided

Market involvement in the process of defining the rules is limited and definition of these rules with high relevance for market operation and functioning of the Internal Energy Market is mostly left exclusively to TSOs on the basis of their grid models. This does not leave any room for finding a balance between the interests of all market participants – generators, DSOs, significant grid users – who will have to comply with these rules. Grid users/ market participants and DSOs have to be properly engaged in the process of defining the methodologies, both at national and at regional/European level. For decisions on national level, Art 3.3 has to be adapted accordingly.

Market stakeholders and DSOs should be actively consulted on the criteria of establishing a list of Relevant Power Generating Modules, Relevant Demand Facilities, and Relevant Non-TSO Owned Interconnectors (Article 21.1). The draft Network Code includes many measures without clear justification.

Outage planning timetable

The introduction of the Regional Coordination Procedure is an important improvement towards the creation of the Internal Electricity Market. At the same time, the introduction of an additional step in the definition of planned outages should not deteriorate the effectiveness of outage decisions especially in the short-run (W-1 and D-1).

Title	Article	Paragraph	Initial version	Proposed version	Justification Text	Start li	End line	Type of Comment	Nature of Comment	Level of detail of Comment
1	1	3	In the micro isolated systems and small isolated systems and in the isolated systems	Need for clarification	What are small isolated systems? A correct definition would be appreciated			technical	fundamental	general remark
1	2	1	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) N°714/2009 apply. The definitions contained in the Article 2 of the [NC RfG], [NC CACM], [NC DCC], [NC OS] shall also apply.	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) N°714/2009 apply.	Non approved NC shouldn't be mentioned in this NC. Otherwise definitions could change after the code has been approved.			legal	fundamental	general remark
1	2	2	Market Balance Area means the Responsibility Area except if there are several Bidding Zones within this Responsibility Area. In the latter case the Market Balanced Area equals Bidding Zone	Market Balance Area means the Control Area except if there are several Bidding Zones within this Control Area. In the latter case the Market Balanced Area equals Bidding Zone	Responsibility area and Control area definitions in OS NC where agreed to be changed.			technical	fundamental	Detailed remark
1	3	3	Where reference is made to this paragraph, the TSO shall, after consultation with its national regulatory authority, establish the terms and conditions or actions necessary to ensure Operational Security in accordance with the principles of transparency, proportionality and non-discrimination. The establishment of these terms and conditions or actions necessary to ensure Operational Security shall be performed in compliance with and respecting the TSO's responsibility to ensure system security according to national legislation.	Where reference is made to this paragraph, the TSO and affected DSO(s) shall, after consultation with its national regulatory authority, establish the terms and conditions or actions necessary to ensure Operational Security in accordance with the principles of transparency, proportionality and non-discrimination. The establishment of these terms and conditions or actions necessary to ensure Operational Security shall be performed in compliance with and respecting the TSO's responsibility to ensure system security according to national legislation.	As DSOs and connected users are involved in the processes defined in this NC, they should be mentioned in this paragraph. It is necessary to limit risks related to handling of their facilities by 3rd parties and to ensure consistency with the FG and Objectives (5) of this NC.			legal	fundamental	general remark
1	4	1	The costs related to the obligations referred to in this Network Code which have to be borne by regulated Transmission System Operators shall be assessed by National Regulatory Authorities.	The costs related to the obligations referred to in this Network Code which have to be borne by regulated network operators and all network users required to contribute to operational security. shall be assessed by National Regulatory Authorities.	All Network Operators should be considered in the cost assesment, otherwise DSOs would be discriminated. Implementing the code will have a cost, both for the TSOs and the DSOs. DSOs should be thus explicitly included in this article. Fullfilling needs of the safe system operation will incur additional costs to be covered. This would also avoid unilateral optimisation only to the benefit of the TSO.			legal	fundamental	general remark
1	4	3	If requested to do so by National Regulatory Authorities, Transmission System Operators shall, within three months of such a request, use best endeavours to provide such additional information as reasonably requested by National Regulatory Authorities to facilitate the assessment of the costs incurred.	If requested to do so by National Regulatory Authorities, Network Operators shall, within three months of such a request, use best endeavours to provide such additional information as reasonably requested by National Regulatory Authorities to facilitate the assessment of the costs incurred.	All Network Operators should be considered in the cost assesment, otherwise DSOs would be discriminated. This article has been agreed in previous network codes (RfG & DCC) and should be respected also here.			legal	fundamental	general remark
1	5	2	Without prejudice to the obligation to preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its activities, each TSO shall provide to the operator of any other transmission system with which its system is interconnected, sufficient information to ensure the secure and efficient operation, coordinated development and interoperability of the interconnected system.	Without prejudice to the obligation to preserve the confidentiality of commercially sensitive information obtained in the course of carrying out its activities, each TSO shall provide to the operator of any other transmission system or relevant distribution system with which its system is interconnected, sufficient information to ensure the secure and efficient operation, coordinated development and interoperability of the interconnected system.	The Relevant DSO should also have right receive sufficient information to ensure the secure and efficient operation of the system			legal	fundamental	general remark
1	5	new		Notwithstanding the above, disclosure of such information and data may occur in case a Relevant Network Operator or a Relevant DSO is compelled under EU or national law to disclose it, under the conditions set forth in the relevant legislation. Such disclosure shall be reported to the owner of such information and data.	Add this disposal, included in all NC, to Confidentiality Obligations			legal	fundamental	general remark
1	5	new		In case of disclosure for other purposes than those described in above mentioned paragraphs, a Relevant Network Operator or a Relevant DSO shall seek the consent of the owner of such information and data. This consent cannot be unreasonably withheld.	Add this disposal, included in all NC, to Confidentiality Obligations			legal	fundamental	general remark
1	6	1	Transmission System Operators and entities designated in accordance with Article 18(7), Article 21(7) and Article 33(1) 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.	Need for clarification	It seems strange for a TSO to be able to delegate its responsability in Operational Planning and Scheduling. Please clarify the aim of this article.Is this meant for CORESO or analogue common TSO units?			legal	fundamental	specific comment
2	9	1	Each TSO shall integrate in the scenarios the power generated and consumed by the Power Generating Facilities and Demand Facilities connected to Distribution Networks within their Responsibility Areas.	**Each TSO shall in line with article 3.3 define in relation with DSOs if applicable, the methodology used to assess the aggregated power outputs of the Dispersed Power Generating and Demand Facilities connected to DSOs within its Control Area in the Individual Grid Model.**	It is necessary goes back to the previous redaction that was already agreed with DSO TEG: when TSO needs any kind of information of users of the Distribution Network it should be gathered by DSO, otherwise comunication efforts could be dupplicated for network users (against the principle of efficiency) or DSO could be out of the information loop, posing a risk for the network. Both options are against Framework Guidelines.			technical	fundamental	general remark
2	10	2	Each TSO shall deliver to the affected TSOs on their request further detailed information on the topology modifications or operational arrangements issued as a consequence of an outage, in such a way that an accurate representation of the system is provided for performing complete Operational Security analysis.	Each TSO shall deliver to the affected TSOs and DSOs on their request further detailed information on the topology modifications or operational arrangements issued as a consequence of an outage, in such a way that an accurate representation of the system is provided for performing complete Operational Security analysis.	DSOs are System Operator and also need this kind of information in order to support the overall system security.			technical	fundamental	general remark

2	12	2	Each TSO shall provide information to the TSOs in its Outage Planning Region in order to allow these TSOs to update their Individual Grid Model in accordance with the scenarios defined in this article.	Each TSO shall provide information to the TSOs and DSOs in its Outage Planning Region in order to allow these TSOs to update their Individual Grid Model in accordance with the scenarios defined in this article.	DSOs are System Operator and also need this kind of information.			technical	fundamental	general remark
2	12	3		Add new sub-article: If information is needed from distribution network connected generation or demand, they will be provided via the DSO.	If any information is needed from DSO connected users, this will be provided by the DSO in order to look for the efficiency of the communication channels and to avoid DSO not to have the relevant information of the network it operates.			technical	fundamental	general remark
2	13	2.b	updated information on demand and renewable generation in accordance with national legal framework;	updated information on demand and renewable generation in accordance with national legal framework; when considering generation and demand connected to distribution networks, if needed, the information will be provided by the DSO.	If any information is needed from DSO connected users, this would be provided trough DSO in order to look for the efficiency of the communication channels and the DSO to be aware of thay information to preserve security of supply and quality of service.			technical	fundamental	general remark
3	14	2	Each TSO shall perform Operational Security analyses at the time horizons specified in Article 14.1 in N-situation by simulating each Contingency from the TSO's Contingency List in accordance with Article 11 of [NC OS] and thus checking that the Operational Security Limits defined in accordance with Article 6(5) and 6(6) of [NC OS] in the (N-1) Situation are fulfilled.	2. Each TSO shall perform Operational Security analyses at the time horizons specified in Article 14.1 in N-situation by simulating each Contingency from the TSO's Contingency List checking the Operational Security Limits in the (N-1) Situation are fulfilled.	Non approved NC shouldn't be mentioned in this NC. Otherwise the requirements could change after the code being approved.			legal	fundamental	general remark
3	15	1	In accordance with Article 6(9) of [NC OS], each TSO shall prepare in coordination with the affected TSOs Cross Control Area Remedial Actions to be implemented in due time to cope with Contingencies detected in the different time horizons in which Operational Security analysis are performed. Each TSO shall assess the effectiveness of these Remedial Actions.	Each TSO shall prepare in coordination with the affected TSOs Cross Control Area Remedial Actions to be implemented in due time to cope with constraints detected in the different time horizons in which Operational Security analysis are performed. Each TSO shall assess the effectiveness of these Remedial Actions.	In addition, this provision should focus on constraints: contingency = simulated event (not detected) constraint = not respecting operational limits after contingency (detected during contingency analysis) The description of remedial action in NC OS is not fully in line with the usage of this definition here.			legal	fundamental	general remark
3	15	3	When setting up these Cross Control Area Remedial Actions, TSOs shall check: a) that the Remedial Action does not jeopardise the Operational Security of the Transmission System in which the Remedial Action is executed; b) the agreement of the TSO that executes the Remedial Action; c) the Remedial Action is in line with the categorisation as defined in Article 15 (2); d) the technical-economical efficiency of the Remedial Action.	When setting up these Cross Control Area Remedial Actions, TSOs shall check: a) that the Remedial Action does not jeopardise the Operational Security of the Electric System in which the Remedial Action is executed; b) the agreement of the TSO that executes the Remedial Action; c) the Remedial Action is in line with the categorisation as defined in Article 15 (2); d) the technical-economical efficiency of the Remedial Action. e) Operational Security of the neighbouring Transmission System	a) Remedial Actions should be done in order to not jeopardise the Operational Security of all Electric System (including, generation, demand & DSOs), not only Transmission System e) Existing methodolgies for cross-border co-operation (TPS, CORESO) sholud be described/ reflected in this code			technical	fundamental	general remark
3	15	5		Add new sub-article: If a Remedial Action involves a distribution network grid element or a DSO connected grid user, the DSO shall be properly engaged in the process.	Not involving DSO is by definition endanger the consecution of the Remedial Action as not being aware of it.			technical	fundamental	general remark
3	17	1	On a Day-Ahead basis and within the Intraday periods, each TSO shall perform an Operational Security analysis on its Responsibility Area, taking into account all the elements contained in its Contingency List in order to detect possible Constraints and agree upon Remedial Actions with the affected TSOs.	On a Day-Ahead basis and within the Intraday periods, each TSO shall perform an Operational Security analysis on its Responsibility Area, taking into account all the elements contained in its Contingency List in order to detect possible Constraints and agree upon Remedial Actions with the affected TSOs and coordinate with affected DSO.	Not involving DSO when its networks or users are involved, woiuld risk to jeopardize the Remedial Action.			technical	fundamental	general remark
3	17	5	Close to real-time, each TSO shall perform Operational Security analysis by using State Estimation.	Need for clarification	State Estimation is not defined			technical	fundamental	specific remark
3	18	1	Not later than 24 months after the entry into force of this Network Code, ENTSO-E shall submit, a methodology for Operational Security analysis in operational planning, harmonised at least per Synchronous Area, to ACER for its opinion	Not later than 24 (?) months after the entry into force of this Network Code, ENTSO-E shall submit, a methodology and thresholds for Operational Security analysis in operational planning, harmonised at least per Synchronous Area, to ACER for its opinion	Need for clarification: Is the implementation time correct? Why is a period of 24 months needed to implement a existing methodology? These methodologies should be described in more detail in the NC and the thresholds have to be defined. Consistency with NC CACM should be ensured.			legal	fundamental	general remark
3	18	6	When, as a result of Operational Security analysis, a Contingency is detected whose consequences affect other TSO(s) the detecting TSO shall share the information with the concerned TSO(s).	When, as a result of Operational Security analysis, a Contingency is detected whose consequences affect other TSO(s) or DSOs the detecting TSO shall share the information with the concerned TSO(s) and DSOs.	DSOs need information as a System Operator			technical	fundamental	general remark
4	20	4	Each TSO shall endeavour to provide the affected TSO with all relevant information at its disposal on the Transmission System, Power Generating or Demand Facility related projects that impact the operation of affected TSO's grids.	Each TSO shall endeavour to provide the affected TSO or DSO with all relevant information at its disposal on the Transmission System, Power Generating or Demand Facility related projects that impact the operation of affected TSO's or DSO's grids.	DSOs as need information as far as demand and generators connected to their or/and elements of the relevant distribution grid are concerned.			technical	fundamental	general remark

4	21	1	No later than 3 months after the entry into force of this Network Code each TSO shall establish a list of:	No later than 3 months after the finalization of the methodology for Operational Security analysis pusuant Article 18 each TSO in coodination with the DSOs where appropriate, i.e. in the case that Relevant Power Generating Modules and relevant Demand Facilities are connected to their Distribution Network, and after the consultation and coordinated NRA approval shall establish a list of :	- The list shall be in agreement with the methodology proposed in Article 18. This methodology shall be submitted after 24 months the entry in forrce of this NC. It does not have any sense that the list is ready much before the methodology. - DSOs should have a role when defining the list of Relevant Power Generating Modules and relevant Demand Facilities connected to their Distribution Network - This must be approved by NRAs in a coordinated way			legal	fundamental	general remark
4	21	1 (b)	b) the types of information to be submitted by the concerned Outage Planning Agent according to Article 21(7) to the TSO.This information shall include, but not be limited to: i. information related to technical characteristics; and ii. information related to Availability.	b) the types of information to be submitted by the concerned Outage Planning Agent according to Article 21(7) to the TSO.This information shall include	In order to be efficient, and not to increase other parties' costs, TSOs should not ask twice for the same information within the NCs (Technical data is already requested in other network codes - in particular, the OPS code already includes number of provisions for information exchange.			technical	fundamental	specific comment
4	21	2	Each TSO shall consult the other TSOs in its Outage Planning Region on the necessity to include specific Power Generating Modules or Demand Facilities in the proposed list.	Each TSO shall consult the other TSOs or DSOs where appropriate in its Outage Planning Region on the necessity to include specific Power Generating Modules or Demand Facilities in the proposed list.	DSOs should have a role to amend the list of Relevant Power Generating Modules and relevant Demand Facilities connected to their Distribution Network. Generators and demand shoud also be consulted in transparent manner			legal	fundamental	general remark
4	21	3	The proposed list shall contain at least: a) all Power Generating Modules and Demand Facilities whose unavailability leads to a variation of the cross-border flows beyond …	**The proposed list shall contain at least:** **a) all Power Generating Modules and Demand Facilities whose unavailability leads to a variation of the cross-border flows beyond X MW.**	It will be discriminatory if each TSO shall define its own threshold to include a PGM in this list. The threshold should be defined in the code to allow DSOs to estimate the impact & costs over BaU.			technical	fundamental	general remark
4	21	3	all Non-TSO Owned Interconnectors.	all Relevant Non-TSO Owned Interconnectors.	to be in line with the name of the article			legal	fundamental	specific comment
4	21	3	b) all combinations of Power Generating Modules and Demand Facilities feeding into the Transmission System and Distribution Network through a single grid element of which their aggregated availability status influences cross-border flows beyond the thresholds defined by each TSO according to the methodology in Article 18(1); and	b) all combinations of Power Generating Modules and Demand Facilities feeding into the Transmission System and Distribution Network through a single grid element of which their aggregated availability status influences cross-border flows beyond the thresholds defined by each TSO according to the methodology in Article 18(1). If these facilities are connected to distribution network, DSOs shall pass on the necessary information (if any) to the corresponding TSO; and	DSOs are the system operator for agents connected to its Network. General question: link with market place (CACM ?) role of aggregators ? In general: role should be defined for individual grid users, aggregators, DSOs and TSO			technical	fundamental	general remark
4	21	5	In case changes occur in the installed units in its Control Area having an impact on other TSOs, each TSO shall reassess the list established in accordance with Article 21(1) and consult all other TSOs of its Outage Planning Regions on the need to adapt the list of relevant units.	In case changes occur in the installed units in its Control Area having an impact on other TSOs or DSOs, each TSO shall reassess the list established in accordance with Article 21(1) and consult all other affected Grid Operators of its Outage Planning Regions on the need to adapt the list of relevant units.	DSOs shall be involved if their are affected by changes in the installed units in its distribution grid area. Also generators/ demand if concerned need to be informed			legal	fundamental	general remark
4	21	7	For every Relevant Power Generating Module, Relevant Demand Facility and Relevant Non-TSO Owned Interconnector, the concerned owner shall appoint an Outage Planning Agent.	Need for clarification	Planning agent not foreseen in CACM process ? What is the link with the scheduling agent			technical	fundamental	general remark
4	21	8	New provision	**When a Relevant Power Generating Module or Relevant Demand Facility is connected at distribution network, DSO shall be properly engaged in the process.**	Not involving DSO when its users are involved, endanger the whole process and do not respect the principle of coordination.			technical	fundamental	general remark
4	22	2	2. The list of Relevant Grid Elements shall contain at least: a) all Grid Elements interconnecting Control Areas; b) all Grid Elements of a Control Area whose planned outage impact another Control Area beyond the thresholds defined by each TSO according to the methodology in Article 18(1);	2. The list of Relevant Grid Elements shall contain at least: a) all Grid Elements interconnecting Control Areas; b) all Grid Elements of a Control Area whose planned outage impact another Control Area beyond XX MW	The threshold should be defined in the code, so that DSOs can estimate the impact (eventually costs) over BaU.			technical	fundamental	general remark
4	22	6	No later than 6 months after the entry into force of this Network Code, each TSO shall identify, in coordination with the concerned Distribution System Operators, the elements of the Distribution Network whose planned outages impact another Control Area beyond the thresholds defined by each TSO according to the methodology in Article 18(1).	No later than 6 (?) months after the entry into force of this Network Code, each TSO shall identify, in coordination with the concerned Distribution System Operators, the elements of the Distribution Network whose planned outages impact another Control Area beyond XX MW and while respecting the provisions of Article 3(3).	1) NRA should be informed Thresholds should be published within the code 2) Need for clarification. Art. 18 defines a implementation time of 24 months. This does not match with the 6 months in this provision. 24 Months is valid for the coordinated methodology. Simple cross border defintion is probably already existing or can be made quickly.			legal + technical	fundamental	general remark
4	23	14	Each TSO shall provide the concerned Outage Planning Agent with the final Year-Ahead outage plans for the following year of the Relevant Non-TSO Owned Interconnectors, Relevant Power Generating Modules and Relevant Demand Facilities before the 1st December of each year	Each TSO shall provide the concerned Outage Planning Agent and the relevant DSOs with the final Year-Ahead outage plans for the following year of the Relevant Non-TSO Owned Interconnectors, Relevant Power Generating Modules and Relevant Demand Facilities before the 1st December of each year	DSOs shall be informed about the availability of the elements of the TSO grid having an influence on this grid elements and generators/demand connected to their distribution networks			legal	fundamental	general remark
4	23	18	New provision	**When a distribution network Relevant Grid Element, or a distribution network connected Relevant Power Generation Module or Relevant Demand Facilities is engaged in the process, the process shall be coordinated with the affected DSO.**	Otherwise, as those elements are relevant for cross border interchanges, DSO as not being even aware of that, could make an action on its network that endangers cross border exchanges. DSOs also have to be informed because of interference with their outage and outage planning.			technical	fundamental	general remark

4	24	6	New sub-article	**When a distribution network Relevant Grid Element, or a distribution network connected Relevant Power Generation Module or Relevant Demand Facilities is engaged in the process, the process shall be coordinated with affected DSO.**	Otherwise, as those elements are relevant for cross border interchanges, DSO as not being even aware of that, could make an action on its network that endangers cross border exchanges.			technical	fundamental	general remark
4	25	7	New provision	**When a distribution network Relevant Grid Element, or a distribution network connected Relevant Power Generation Module or Relevant Demand Facilities is engaged in the process, the process shall be coordinated with affected DSO.**	Otherwise, as those elements are relevant for cross border interchanges, DSO as not being even aware of that, could make an action on its network that endangers cross border exchanges.			technical	fundamental	general remark
4	26	5	Before executing planned outages of Relevant Grid Elements, Relevant Power Generating Modules, Relevant Demand Facilities or Relevant Non-TSO Owned Interconnectors which would jeopardize the Operational Security, and upon request from a TSO, each concerned party shall delay the corresponding outage according to the instructions of the TSO.	Before executing planned outages of Relevant Grid Elements, Relevant Power Generating Modules, Relevant Demand Facilities or Relevant Non-TSO Owned Interconnectors which would jeopardize the Operational Security, and upon request from a TSO or a relevant DSO, each concerned party shall delay the corresponding outage according to the instructions of the TSO or the DSO if they are connected to distribution network.	1) DSOs are the system operator for agents connected to their Networks. Relevant DSOs need information as a System Operator			legal	fundamental	general remark
4	26	6	Before executing a planned test during the Commissioning period of Relevant Grid Elements, Relevant Power Generating Modules, Relevant Demand Facilities or Relevant Non-TSO Owned Interconnectors which would jeopardize Operational Security, and upon request from a TSO, each concerned party shall delay the corresponding test according to the instructions of the TSO.	Before executing a planned test during the Commissioning period of Relevant Grid Elements, Relevant Power Generating Modules, Relevant Demand Facilities or Relevant Non-TSO Owned Interconnectors which would jeopardize Operational Security, and upon request from a TSO or a relevant DSO, each concerned party shall delay the corresponding test according to the instructions of the TSO or the DSO.	1) DSOs are the system operator for agents connected to their Networks. Relevant DSOs need information as a System Operator			legal	fundamental	general remark
4	26	8	Each TSO shall inform all impacted parties as soon as possible in case of a deviation from the validated outage plan, at least including the reason for and the duration of the deviation.	Each TSO shall inform all impacted parties as soon as possible in case of a deviation from the validated outage plan, at least including the reason for and the duration of the deviation. Relevant DSO shall be also included if affected.	Not involving relevant DSO when its users or grid elements are involved, endanger the whole process and do not respect the principle of coordination.			technical	fundamental	general remark
	31	2	New sub-article	**d) In line with Article 3.3, Significant DSO shall have the right to be informed about availability of Ancillary Services.**	Most of the new RES capacity will be connected at Distribution Networks. DSOs need this information.			technical	fundamental	general remark
6	32	4	When the level of reactive power Ancillary Services is not sufficient to ensure the Operational Security of the transmission system, each TSO shall: a) inform affected TSOs; b) establish internal or Cross Control Area Remedial Action; and c) give the priority to the Remedial Actions in accordance with Article 6(9) of the [NC OS].	When the level of reactive power Ancillary Services is not sufficient to ensure the Operational Security of the transmission system, each TSO shall: a) inform affected TSOs; b) establish internal or Cross Control Area Remedial Action; and c) give the priority to the Remedial Actions	Non approved NC shouldn't be mentioned in this NC. Otherwise requirements could change after the code being approved.			legal	fundamental	general remark
6	32	5	New provision	**In order to manage the ratio of active and reactive power at the border between Transmission & Distribution, Significant DSO shall have the right to assess until real time if there are available reactive power sources.**	Significant DSOs have no tools to ensure the active/reactive power ratio at T/D connection point.			technical	fundamental	general remark
7	33 to 36		SCHEDULING	Need for clarification	Scheduling methodologies and tools should be harmonized in Europe (e.g.: message format, position to schedule,...). As it is now proposed, there is no attempts to align and coordinate scheduling platforms. All reference to national legal framework should be limited to specific situations when it does not intervene against NC principles and harmonization rules Criteria required:			technical	fundamental	general remark
7	34	4	New provision	DSO shall be informed of the schedules of units conected at its network to prevent in advance possible restrictions at distribution network	Otherwise a non-expected restriction at distribution network of Significant DSO could affect cross border flows, security supply and RES integration.			technical	fundamental	general remark
8	37	5	New provision	**In case a DSO network contains Relevant Power Generating Modules, Demand Facilities or interconnectors, the DSO will have access to the data contained in the operational planning environment the model of TSO grid wich directly affects to the grid it operates so that he can use them for Operational Planning and security analysis.**	It is necessary so that relevant DSOs (that are treated fairly), and if they have installations relevant for cross-border issues, they can discuss their influence with their TSO. This data is also valuable for the DSO as system operator of its network.			technical	fundamental	specific remark
8	37	5	New provision	**Each DSO shall be granted access to the content regarding outage planning contained in its common TSO platform which directly related to the grid it operates; subject to confidentiality guidelines.**	This comment had been already agreed with DSO TEG and then remuved with the justification of not being allowed to have acced to all TSOs information: DSO just NEEDS information of its network and users, which is extremely easy to implement in a IT platform. If that facilities are relevant, DSO information should be also part of this NC.			technical	fundamental	general remark
8	37	6	New provision	**Each Significant DSO shall be granted access to the content regarding the model of TSO grid in its common TSO platform which directly affects to the grid it operates; subject to confidentiality guidelines.**	Significant DSO needs the information of TSO network that influences distribution network in order to perform its security analysis, avoiding this way influencing transmission system and overall system security.			technical	fundamental	general remark