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# ENTSO-E Response to EC public consultation on risk preparedness in the area of security of electricity supply

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8 October 2015

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## **RISK IDENTIFICATION AND MANAGEMENT**

**1. Whilst Directive 89/2005 imposes a general obligation on Member States to ensure a high level of security of supply, the Directive does not specify what measures Member States should take to prevent risks. Would there be an added value in requiring Member States to draw up a plan identifying relevant risks and preventive measures to respond to such risks (risk preparedness plans)?**

### **Answer:**

*Yes. Such risk preparedness plans (responding to long- or medium-term adequacy issues identified in ENTSO-E SOAF or in regional or national assessments) already exist in most MS, but due to the increasing interdependency between neighbouring power systems, these plans might require further regional coordination.*

*To respond to seasonal-term risks (e.g. those identified in Winter/Summer Outlook), risk preparedness plans should be delivered by concerned TSOs, in close cooperation with their neighbouring TSOs, with their governments and their NRAs.*

*To ensure consistency with the very relevant Europe-wide and regional adequacy analyses that ENTSO-E is mandated to deliver, reporting of the nationally produced and regionally coordinated risk preparedness plans for the seasonal, medium and long term could become mandatory parts of the respective ENTSO-E adequacy reports.*

*ENTSO-E welcomes that the definitions of the Risk Preparedness Plans itself would be discussed in the Electricity Coordination Group (ECG).*

*Regarding operational issues in shorter time frames, management of risk situations is fully covered by the Network Codes.*

### **Background**

Risk preparedness for electricity is deeply rooted in delivering system adequacy as well as ensuring system security in operational planning and system operation, e.g. in the form of adequacy planning, defence and/or restoration plans. Risk preparedness plans already exist at the Member State level, either prepared by Member States or by the TSOs coordinated by Member States.

*Regarding risk preparedness plans for medium- to long-term adequacy issues:* Generation adequacy is monitored by TSOs at the Member State level and reported by ENTSO-E on the European level in the SOAF (mid- to long-term) and in seasonal outlooks adequacy forecasts on a regular basis. Adequacy forecasts were also recently performed by TSOs at the regional level within the PLEF Region.

Even though close cross-border cooperation is of high importance, national challenges in Europe are still very different among countries. Some MS have seasonal challenges (winter or summer), others are highly interconnected, while some operate as (nearly-)electrical islands, and generation mix and the related challenges might differ significantly from one MS to another MS. Thus, even if basic rules have to be agreed upon at the European level, each MS still needs to maintain its ability to react within its national legal measures to cope with local challenges, as well, in the future.

*Regarding the response to seasonal-term risks and issues on the short- or real-time:* Some years ago, TSOs had already proactively initiated the development of Regional Security Coordination Initiatives (RSCIs), such as TSC and CORESO, which cover bilateral/ multilateral cross-border remedial actions by TSOs.

A stronger regional coordination of the risk preparedness does make sense, indeed. RSCIs are well-positioned to regionally coordinate the preparation of such risk preparedness plans.

ENTSO-E fully supports the ambition to provide a truly European dimension of security of supply by promoting regional cooperation and coordination. Close cooperation of TSOs is a prerequisite to ensure the secure operation of the interconnected European electricity system and the functioning of the existing cross-border market schemes.

Within the present legal framework, Directive 2005/89/EC requires that transmission system operators maintain an appropriate level of operational network security and cooperate with the transmission system operators to which they are interconnected. Regulation 714/2009 imposes additional obligations on ENTSO-E to facilitate coordinated system operation and planning.

While there is some inherent gas commodity storage in the natural gas system, the electric power system is fundamentally different from the gas power system, requiring real-time balancing of demand and supply. Therefore, interdependency of electricity systems is very strong. Fluctuations in one Member State have immediate impacts in the neighbouring systems. As these fluctuations increase substantially due to RES integration and IEM issues, a stronger regional coordination of the risk preparedness does make sense. Efficient RSCIs, based on a strong bottom-up process defined by the RSCIs' TSO-TSO cooperation papers published by ENTSO-E, already outline the next steps needed. TSOs are prepared to fulfil their responsibility with the help of the RSCIs framework while strongly interacting with their NRAs and Ministries, as well as with ENTSO-E. Some regulatory market design barriers might have to be removed to achieve truly efficient RSCI coordination.

**2. If yes, what should be the minimum requirements such risk preparedness plans should comply with?**

**For instance, should they:**

- a. explain the various types of risks?**
- b. identify the demand side measures Member States plan to take (e.g., use of interruptible contracts, voluntary load shedding, increased efficiency, energy savings)?**
- c. identify the supply side measures Member States plan to take (e.g., increased production flexibility, increased import flexibility)?**
- d. assess the expected impact of existing and future interconnections?**
- e. identify roles and responsibilities?**
- f. identify how Member States co-operate or intend to co-operate amongst each other to identify, assess and mitigate risks?**
- g. other elements?**

**Answer:**

*2a) Yes, all “risk preparedness plans” (mid- to long-term plans, seasonal plans) should detail the various types of security of supply risks, starting with system adequacy (i.e. LOLE appraisal as a result of the availability of transmission and generation capacity), but also measure long-term evolution of residual load, steep residual load hourly variations, and system inertia. Many of these are obviously handled best at the pan-European level within ENTSO-E’s adequacy reports. National reports must complement at local level, whenever appropriate, e.g. regarding voltage stability concerns, and local supply disruption risks, possibly involving DSOs’ expertise. Without prejudging each Member State’s capability to fix its*

*own level of SoS, there should exist common definitions of indicators and common methodologies for risk assessment.*

*2b) Yes. Regarding demand side measures, mid-long term risk preparedness plans, as well as seasonal risk preparedness plans, should depict the available volumes and basic mobilisation conditions, distinguishing interruptible contracts, voluntary load shedding, and market-based DSM/ DSR capabilities. These are key assumptions for national TSOs when they prepare their input for the ENTSO-E adequacy analyses. Additional measures taken (e.g. regulatory change, public support, etc.) on the demand side and justification regarding proportionality of the measure to solve the identified issue could be included in the Member State's long-term plans. These are key assumptions for national TSOs when they prepare their input for the ENTSO-E adequacy analyses.*

*2c) Yes. Regarding supply side measures, mid-long term risk preparedness plans, as well as seasonal risk preparedness plans, should depict the available volumes, balancing capabilities, system services reserve margins, etc., sorting them according to basic market commitment conditions. These are key assumptions for national TSOs when they prepare their input for the ENTSO-E adequacy analyses.*

*2d) Impact of interconnectors is very high and should be assessed. This is a key part of the ENTSO-E adequacy analysis, especially with the new methodology, and cannot be done accurately if foreign countries are not modelled.*

*2e) Yes. Adequacy planning should involve MS/NRA/TSOs. Operational security is the responsibility of TSOs based on the Network Codes framework. The ENTSO-E adequacy forecasts already carry an important institutionalised role. Their role is likely to increase with the new methodology and the relationship to regional and European discussions on capacity mechanisms, and therefore these forecasts are the appropriate focal point that gather input from different actors.*

*2f) Yes. Coordination through the Electricity Coordination Group (ECG) and regional initiatives like PLEF are welcome. Regarding identification and assessment of risks, Member States' cooperation and inputs are already given for the ENTSO-E adequacy analyses and the international cooperation functions very well in the ENTSO-E context for the production of these forecasts and analyses. Regarding the risk mitigation, further cooperation should be encouraged via exchange between all concerned countries at the regional level and in the Electricity Coordination Group (ECG).*

*2g) Other: Cybersecurity is becoming an ever more important issue and deserves attention. ENTSO-E and its member TSOs are already very active in this field, by their own initiative and by implementing the latest cybersecurity legislation.*

*Also European overview on anticipated decommissioning of power plants and tools, to react in case a power plant is identified as "system relevant" (see answer 11f), could be useful. This could be established as legally mandated inputs from generators to TSOs, when TSO need to provide input to ENTSO-E's adequacy forecasts.*

## **Background**

First of all, the network codes should be implemented as quickly as possible, as risk preparedness is closely interrelated with operational planning as well as with system adequacy assessment. In particular, the operational network codes establish the necessary basis for any further activity required in this domain. When defining additional requirements for system adequacy assessment, these should be in line with the ENTSO-E adequacy assessment methodology.

A number of risk factors are already covered by the present ENTSO-E system adequacy assessment framework or will be included in the next adequacy assessment reports, e.g. weather impacts, lack of or need for flexibility, role of demand side measures, role of existing and future interconnections, and effects of grid constraints and flow-based market coupling. This methodology has also been successfully deployed by TSOs within the recently published PLEF adequacy assessment report.

While policy instruments chosen by Member States are important to facilitate demand side and supply side measures, these should be in line with the present market framework. Demand and supply side measures are important resources to provide additional flexibility for the power system required by the large-scale integration of variable RES generation.

The different risks that each country accepts and prepares itself for, need to be commonly understood across Europe through common definitions. Given the increasingly integrated internal electricity market, it is indeed important to further define roles and responsibilities with respect to how Member States cooperate in the assessment and mitigation of identified risks.

The RSCIs' approach provides a basis for a strong regional cooperation in operational planning and system operation between Member States and their TSOs.

### **3. Do you think that it would be useful to establish a common template for risk preparedness Plans?**

#### **Answer**

*Yes, there should be a common template for each type of risk preparedness plan, with common definitions. Also, the concept of 'risk preparedness plan' itself needs to be defined commonly. Especially important is the relation of such commonly defined 'risk preparedness plans' to existing national plans for emergency situations, regulated under national laws. A template might definitely help in developing cooperation between Member States, and could be part of the ENTSO-E adequacy reports structure.*

#### **Background**

For operational planning and system operation, the system operation network codes already offer the appropriate level of harmonisation. The existing ENTSO-E system adequacy assessment reports provide a harmonised approach for adequacy-related risk identification where TSOs provide the national short-term and mid-term forecasts by common templates to ENTSO-E. These templates enable a consistent treatment of the most relevant risk factors such as generation capacity additions and withdrawals; demand evolution; interconnection capacity; non-usable hydro, wind, and solar generation capacity; impact of maintenance and outages; and weather conditions. Some other types of risks (e.g. fuel supply disruptions) are also recently considered. Due to increasing RES share and interdependency of neighbouring power systems, methodologies must be further developed and should be extended from the national to the regional and pan-European levels.

The coordination functions of RSCIs are of key importance concerning a common framework related to delivering operational security and consistent planning standards to assess the risks identified above.

### **4. Given that electricity markets are increasingly interlinked, should risk preparedness plans be prepared at the national, regional or EU level?**

#### **Answer**

*Risk preparedness plans should be prepared at the national level, and strongly coordinated at the regional and European levels, due to the level of interdependence and increased share of RES. As explained in the*

*background below, the regional process of risk preparedness can be strengthened by using ENTSO-E's RSCIs framework. TSOs prepare the risk preparedness plans and use RSCIs to assist in the preparation of plans at a regional level. Furthermore, reporting of risk preparedness plans by TSOs within ENTSO-E adequacy analyses ensures an efficient and consistent approach across the national, regional, and EU levels. Risks of local supply disruption (i.e. depending on contingencies internal to an MS and impacting directly less than e.g. 500,000 European citizens in the same MS) can be addressed best at the national level, possibly involving DSOs.*

*For longer-term risk preparedness plans, national plans could also be coordinated via regional organisations and the Electricity Coordination Group (ECG).*

### **Background**

The risk exposure and the most relevant risks related to security of electricity supply vary widely across EU Member States. National and regional adequacy assessments are important parts of the European reports published by ENTSO-E. Separate national adequacy assessments can offer different levels of detail and contribute to risk identification and, more importantly, mitigation at the regional or national levels.

A harmonised regional framework for operational planning and coordination is crucial to the integrated electricity markets where RSCIs can provide coordinated security analysis and remedial action-related analysis, forming the basis of regional risk preparedness plans.

For operational planning and system operation, the network codes identify the appropriate level for the different aspects at hand. For certain aspects, the regional level (as implemented through the RSCI model) is appropriate, whereas for other aspects, the appropriate level is the synchronous area (load-frequency control). The network codes establish a strong basis that ensures cross-regional coordination.

### **5.a Do you see a role for the Commission in assessing these plans? Would you see an added value of having the plans peer reviewed, at a regional or EU level?**

#### **Answer**

*ENTSO-E considers that the European Commission could have a role via the Electricity Coordination Group (ECG). We do not envision a specific role for EC in assessing the plans.*

### **5.b What role do you see in this context for the Electricity Coordination Group?**

#### **Answer**

*ENTSO-E welcomes the ECG as a framework for TSOs, NRAs and MS, ACER, EC, and ENTSO-E to interact at the relevant/needed technical level regarding regional assessments of SoS and common definitions, as well as regarding the definition of 'risk preparedness plans' itself. The ENTSO-E adequacy forecasts are already an important discussion point for the ECG.*

### **Background**

For historical reasons and due to the Lisbon treaty, the responsibility for safeguarding the security of supply is national – but with strong coordination and peer review by TSOs and ENTSO-E. TSOs already coordinate in terms of operational planning and system operation; methodologies and defence plans are being reviewed and evaluated at the regional and ENTSO-E levels.

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The system operation network codes and the items that will be developed under them will be subject to regulatory scrutiny. Stakeholder committees will also be established to follow the network code implementation.

## **6. What level of transparency should be given to the plans? Who should be informed of what?**

### **Answer**

*Risk preparedness in power systems, both regarding mid-long term and seasonal issues, is a very sensitive topic with huge impact on society in case of failure. Competent authorities must be involved; however, appropriate levels of confidentiality must be ensured.*

### **Background**

The existing strong TSO–NRA communication should be maintained and reinforced. Through the RSCIs’ framework, the link to the group of concerned national NRAs comes automatically. Overregulation by another regional body does not seem efficient. NRAs are welcome to coordinate their regulatory actions on a regional level.

The rules and methodologies of operational planning and system operation are typically part of the national grid codes and are subject to regulatory scrutiny. These documents have been developed with strong stakeholder engagement. The system operation network codes and the items that will be developed under them will follow the same approach. Furthermore, the system operation network codes foresee coordination between all of the actors (TSOs, DSOs, grid users), and this ensures the dissemination of information.

As such risk preparedness plans regarding short-term issues can also pinpoint the weaknesses and vulnerabilities of the electricity system, appropriate levels of confidentiality of data should be agreed with a view to safeguarding critical infrastructure and system security while ensuring maximum transparency to the relevant stakeholders.

For long-term and seasonal studies, the risk preparedness plans could be public, so that market actors could use them as input to review their investment decisions. For short-term and operations studies, security is at stake, so appropriate levels of confidentiality must be ensured.

## **7. How often should risk preparedness plans be made / be updated? What are the relevant time frames to be covered?**

### **Answer:**

*Twice a year looking 6 months ahead, and once a year covering at least 5 years ahead, consistent with the periodicity of ENTSO-E’s adequacy forecasts.*

### **Background**

According to the provisions of Regulation 714/2009 (Article 8) and the Network Code on Operational Planning and Scheduling [part of the merged draft System Operation Guideline], ENTSO-E is required to adopt annual summer and winter generation adequacy outlooks on a regular basis. Medium-term generation adequacy outlook reports will be published at least every second year, although ENTSO-E has adopted an internal standard to publish them every year. Separate short-term and medium-term reports are essential to assess different types of risks that can be attributed to different time horizons. Further legal measures in this respect are not needed.

Furthermore and in order to improve the quality of the data and accuracy of the adequacy assessments, ENTSO-E proposes to consider reporting about decommissioning or mothballing perspectives from large (>100 MW) and ‘system-relevant’ generators, at least one year ahead on a best-effort basis (see answer 2g).

In addition to the adequacy assessment studies delivered by ENTSO-E in their seasonal outlooks, short- and medium-term adequacy assessments and risk assessments linked to operational planning and system operation are coordinated by the RSCI framework. The regular update of the assessments prepared by RSCIs for TSOs should be coordinated to the ENTSO-E seasonal-term adequacy assessment process so that seasonal outlooks and RSCI assessments could be cross-checked regularly, e.g. every 6 months.

Furthermore, TSOs’ analysis with RSCI coordination is performed in different timeframes on a rolling basis with the objective to detect problems as early as possible and also to use the best information available.

**8. Given the challenges that DSOs are facing (e.g. integration of renewables, more decentralised systems), should DSOs take an active participation in the assessment of the risks and preparation of the risk preparedness plans? If yes, do you see the need for separate assessments and separate risk plans at the DSO levels? Or do you believe it is more appropriate to ensure an active participation of DSOs in risk assessments and risk preparedness plans covering the entire electricity system?**

**Answer**

*There should only be one single risk preparedness plan per TSO that includes the input of all DSOs within that TSO’s control area, coordinated on the regional level within the RSCI and ENTSO-E structures regarding adequacy forecasts. Risks of local supply disruption (i.e. depending on contingencies internal to an MS and impacting directly less than 500,000 European citizens in the same MS) can be addressed best at the national level, possibly involving DSOs.*

**Background**

As the first and most important step, the well-established national processes between TSOs and NRAs should be complemented with coordination at the regional level. RSCIs help TSOs to facilitate this process.

DSOs should, of course, take an active role in the assessment of the risks and in the preparation of the risk preparedness plans, especially where distributed generation and demand side response have an emerging role in considering the provision of additional operational flexibility. Such a plan should cover all relevant risks of the electricity system. Therefore, no separate risk plans are needed for DSOs or TSOs. The plan should be valid for the electricity system of one Member State in order to properly identify possible impacts on embedded generation or consumers.

For the operational planning and system operation, ENTSO-E supports the active participation of DSOs; this is currently an approach at the national level and is also reflected as such in the system operation network codes.

**9. Ensuring cybersecurity is an increasingly important aspect of security of supply. What measures should Member States take to protect themselves against possible cyber-attacks or other cyber-related threats? Do you see the need for specific EU rules on cyber security, targeted to the energy field? Given the cross-border nature of cyber security risks, what scope is there for enhancing co-operation (for instance through the exchange of best practices)?**

**Answer**

*ENTSO-E considers cybersecurity as part of the work plan to enhance the protection of critical infrastructure. ENTSO-E identifies cybersecurity as an issue with a strong cross-border component, where European coordination is welcomed.*

**Background**

The draft system operation network codes address the issue through the so-called ‘Security Plan’ that will be developed by TSOs. This plan is to contain a risk assessment of critical TSO assets to major physical- and cyber-threat scenarios with an assessment of the potential impacts.

**ADDRESSING CRISIS SITUATIONS**

**10. Currently, it appears that in some Member States, detailed emergency plans exist, whereas in others, there are only very summary emergency plans. Should there be an obligation for all Member States to plan for crisis situations, e.g., by including relevant rules and measures in the overall risk preparedness plans?**

**Answer**

*Yes, we recommend to have common rules and common definitions for defining different stages of criticality. Currently, each country has different levels of obligations and tasks. These should be aligned throughout Europe. Better common understanding could also be useful regarding plans for extreme situations.*

*The tools and rules defined by the network codes will provide a sound basis for addressing crisis situations. They will efficiently define operations and market reaction in most situations from a technical point of view.*

**Background**

Furthermore, within ENTSO-E, it is standard practice for TSOs to develop and maintain plans to be activated when the system conditions deteriorate outside the predefined limits (defence plans) with the objective to restore the system back to normal (restoration plans). These plans describe the operational measures and procedures that TSOs should follow to cope with the situation (including the coordination with other TSOs) as well as the involvement of the grid users (including demand side response and load shedding).

ENTSO-E recently produced the draft network code on Emergency and Restoration for which ACER has issued a favourable opinion; the comitology processes for the adoption of this code are expected to start in 2016. The draft network code establishes the pan-European framework for the development of the defence and restoration plans, thus increasing harmonisation in crisis management. Furthermore, it provides the detailed procedures for system restoration in case of wide area events to ensure efficient TSO coordination and minimum impact for European consumers. Although the system conditions could deteriorate due to lack of generation or transmission adequacy, these two issues are outside of the scope of the code; ENTSO-E considers it important for this code to focus on the operational procedures in emergency and restoration to complement the operational procedures in the other system states as described in the first set of the operational guidelines drafted under the 3rd Energy package.

**11. If yes, what should be the minimum requirements to be included? For instance, should**

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**Member States be required to:**

**a. Identify actions and measures to be taken in emergency situations (market and nonmarket-based)?**

**Answer**

*No. This is already covered by draft NCs. It should be stressed, however, that the different levels of risk that each country accepts and prepares itself for, need to be commonly understood with common definitions.*

**Background**

The draft network code on Emergency and Restoration sets the minimum requirements for the elaboration for the defence and restoration plans that include the actions and measures to be taken in emergency situations.

The draft code also defines the framework for the load-shedding scheme per synchronous area for efficient management of under-frequency events. ENTSO-E supports the market integration of demand side response as another market participant on equitable and transparent terms with generation and storage.

To this end, the draft network code on Emergency and Restoration introduces the concept of the service provision in the defence and restoration plans and makes the voluntary participation of grid users in these plans the default solution across Europe.

**b. Set out the conditions for suspension of market activities?**

**Answer**

*No. This is already covered by draft NCs.*

**Background**

The draft network code on Emergency and Restoration establishes the framework for the suspension of market activities; the rules and conditions for market suspension are to be defined at the national level. ENTSO-E's view is that the suspension of the market activities should be the last resort and that all opportunities for market-driven solutions must first be exhausted.

The guideline on capacity allocation and congestion management has already foreseen that a common methodology concerning re-dispatching and countertrading should be developed on a regional level.

**c. Identify categories of 'protected customers' which, in case of a crisis, should not be subject to a disconnection measure (or only be disconnected by way of a last resort)?**

**Answer**

*No. This is already covered by draft NCs and current practices.*

*However, in case of an exceptional electricity situation, political discussions should be held, especially at the regional level, to define clear principles on the degree to which the allocation of available power should obey market signals or rather strategic orientations.*

**Background**

This is standard practice in the electricity sector across Europe. Furthermore, the draft network code on Operational Security as drafted by ENTSO-E foresees the elaboration of a list of high-priority grid users (generation or demand) in terms of the conditions for their disconnection and re-energising. Environmental, nuclear safety, and other issues should be taken into account in setting the priorities.

**d. Establish rules for cost compensation?**

**Answer**

*No. This is already covered by draft NCs and current practices.*

**Background**

The draft network code on Emergency and Restoration introduces the concept of the service provision in the defence and restoration plans; the terms and conditions of the service provision (including cost compensation) are to be developed at the national level.

The guideline on capacity allocation and congestion management has already foreseen that a cost sharing methodology concerning re-dispatch has to be developed on a regional level.

**e. Indicate how they intend to co-operate with other Member States?**

**Answer**

*Yes. Cooperation between Member States to prepare risk preparedness plans together with NRAs and TSOs is becoming more important due to high RES share. A framework of how MS should cooperate (e.g. in the framework of ECG) might be helpful. The ENTSO-E adequacy forecasts and RSCIs framework automatically provide a platform for active cooperation through the active involvement and cooperation of TSOs. Furthermore, the reporting of national risk-preparedness plans within the ENTSO-E forecasts provides an efficient and consistent approach.*

**Background**

*Coordination between MS:* Measures available to TSOs are basically the ‘same’, i.e. common and RSCI-coordinated processes are basically the ‘same’. Consistency of national legal and regulatory frameworks as well as market designs and rules is welcome to allow increased efficient cooperation through RSCIs.

As mentioned above, the draft network code on Emergency and Restoration enhances TSO coordination building on decades of experience in TSO cooperation. The draft code contains a detailed load shedding scheme for each synchronous area as well as the detailed procedures for system restoration in case of wide area events. Furthermore, under this code, the defence and restoration plans will elaborate on the way that TSOs should cooperate in emergency situations.

ENTSO-E also analyses the opportunities for RSCIs to contribute in crisis management. This analysis takes into account the existing RSCI capabilities and role (RSCIs are not intended to act as control centres; they provide decision-making support), as well as their potential evolution within the ENTSO-E RSCI framework. It should be kept in mind that national control centres should remain the sole responsibility of real-time operations; any other approach implies duplications in roles and introduces significant costs and risks that are not justified.

**f. Reflect any other issues in their plans?**

**Answer**

*Furthermore and in order to improve the quality of the data and accuracy of the adequacy assessments, ENTSO-E proposes to consider reporting about decommissioning or mothballing perspectives from every large (e.g. >100 MW) and ‘system-relevant’ generator, at least one year ahead on a best-effort basis (see answer 2g). This would enable discussions about the potential for MS to prevent decommissioning or*

*mothballing, for a transition time during which a power plant is shut down (providing, as well, a compensation scheme) in case a power plant is marked as system-relevant.*

*Finally, cybersecurity deserves special attention.*

### **Background**

*Regarding the anticipation of power plant decommissioning and the 'system-relevant' power plants concept: some of today's power plants are 'system relevant', i.e. relevant to ensure security of supply. However, there is no European overview, and often not a national overview, on the planning of decommissioning, mothballing, or legal tools to react in case such decommissioning would lead to serious problems. The development of a CRM or a grid reserve mechanism normally takes several years and comes too late to react in critical situations. Thus:*

A European rule could be considered where owners of large (> 100 MW) and 'system-relevant' generators shall report every year to the relevant TSO about any perspective of decommissioning or mothballing it in the coming 12 months, on a best-effort basis, and shall keep the TSO closely informed of any updates of the situation in the coming rolling 12 months.

The relevant TSO (the system in which the system-relevant power plant is located) could then propose to the relevant NRA a 'system-relevant' status for the concerned generators, accounting for their own, but also other affected TSOs', assessment.

The relevant national NRA (where the system-relevant power plant is located), taking the comments of affected TSOs into consideration, could then confirm whether the TSO assessment of system relevance is valid or not and officially notify the concerned generators.

## **ROLES AND RESPONSIBILITIES**

**12. In relation to risk preparedness, how do you see the roles and responsibilities of:**

- national governments
- national regulators
- TSO's
- DSO's
- European bodies such as ENTSO-E, ACER, and the Electricity Coordination Group?
- European Commission
- other stakeholders, such as consumers?

### **Answer**

*ENTSO-E welcomes coordination of the mid-long term risk preparedness plan by ECG. This defines roles and responsibilities of MSs, NRAs, TSOs, ENTSO-E, ACER, and EC.*

*Reporting of the mid-long term and seasonal risk preparedness plans by TSOs within the ENTSO-E adequacy forecasts ensures a common power system-wide view. The ENTSO-E Europe-wide and regional forecasts are then a complete and solid basis for ECG discussions.*

*DSOs' and market parties' (Generators', Consumers', PXs', etc.) contributions should be considered by TSOs when drafting each national risk preparedness plan.*

### **Background**

The existing strong TSO–NRA communication should be maintained. Through the RSCIs framework the link comes automatically to the group of national NRA within the given RSCI group. Overregulation by another regional body does not seem efficient. ACER is welcome to coordinate regulatory actions defined by NRAs.

Further coordination through the Electricity Coordination Group is welcome in this context by ENTSO-E.

**13. Given the fact that many actors are concerned by security of supply issues, would you see an added value in the designation by each Member State of a ‘Competent Authority’, responsible for coordinating security of electricity supply issues at national level?**

**Answer**

*Yes. If this is not already the case, each MS should designate the TSO and/or the NRA as responsible for coordinating security of supply at the national level, with clear roles about cooperation at the regional level, as well. RSCIs provide support to TSOs regarding regional cooperation.*

**Background**

TSOs and NRAs have a key role here, as TSOs are responsible for operational security under the supervision of NRAs. In order to coordinate effectively and avoid overregulation, TSOs and NRAs should be considered in this context, as well as in the context of the existing ENTSO-E RSCIs framework for TSO–TSO cooperation.

**14. If it is decided to strengthen regional co-operation on a more structural basis between various players (e.g., when drawing up risk preparedness plans), how should regions best be defined?**

**Answer**

*Regional structures are handled well and with appropriate dynamic development already in ENTSO-E’s current adequacy forecasts. The ENTSO-E adequacy forecasts framework provides a solid and complete basis for ensuring a common power system-wide view when reporting on the risk preparedness plan by TSOs.*

*Regions should be defined as driven by short-term operational planning needs. Different regions are defined in the network codes depending on the area of coordination. This approach allows Member States and TSOs to tailor solutions according to their needs and the needs of the region. To ensure the success of this approach, cross-regional coordination must be ensured. To this end, the network codes establish a sound basis that will be complemented by the methodologies to be developed under them. RSCIs will serve as the building blocks for regional TSO coordination. Interaction and responsibilities should stay between TSOs (coordinated by RSCIs and ENTSO-E) and NRAs/ACER. The Electricity Coordination Group could play an important role in this context to support the collaboration and cooperation among MS.*