

Denmark's response to the Commission's consultation on risk preparedness in the area of security of electricity supply.

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Ministeren

No.	Question 1-9 "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)?	In Denmark, it is required that all companies active in the energy sector draw up specific emergency plans including risk and vulnerability analysis, risk preventing measures and risk mitigating steps. These plans all fit under the overall energy sector preparedness plan (in Danish the "sektorberedskabsplan") in which tasks and responsibilities are laid out ("who does what").  For Denmark the benefit of having the issue regulated at the European level would be in an enhanced cross border coordination of the risk plans preparedness plans.
2	If yes, what should be the minimum requirements such risk preparedness plans should comply with? For instance, should they:	In general the Risk Preparedness Plans should allow the market to play a central role, and only in the exceptional event that the market cannot respond adequately non-market measures should be activated.
	a. explain the various types of risks?	a. A focus should be placed on the assessment of scenarios which influence more countries where there could be a spill over effect on other countries,



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?	for example the drought and heat wave in Germany, France and Italy in the summer of 2003 and in Poland now in 2015, where it becomes an issue for the surrounding countries.  b. In case of load shedding the commission is encouraged to consider a market based solution, based on which consumers are most willing to pay for supply or who has the least to lose by being cut off from supply for a short period of time. Experience from the natural gas sector shows that it is not necessarily the protected customers who have the largest losses when not supplied. This implies that a harmonised approach across Europe would not necessarily bring the best results, as it is important that local and national specificities can be taken into account. Only after all market based tools are exhausted should non-market based load shedding be applied as a measure of last resort.  c. The application of reserves and the sharing of these across borders are relevant issues to be addressed. It is important to include electrical bottlenecks rather than only country borders.  d. Existing yes. On future interconnectors, it would be prudent to include an assessment in the development phase of interconnector projects.  e. It is imperative that it is clear to whom the roles and responsibilities are given and that this is included in the Risk Preparedness Plans.  f. Focus should be on a clear division of roles and responsibility.  g. The issue of transparency versus confidentiality should be addressed in regards to the sharing of information. Frequent emergency exercises should be an integrated part of the risk preparedness plans.
Do you think that it would be useful to establish a common template for risk preparedness plans?	The focus should rather be on content rather than templates.  If a decision is made that requires all member states to prepare Risk Preparedness Plans, it would probably be beneficial to ensure they contain roughly the same information and that they are coordinated between neighbours as some



		countermeasures might influence other member states. However, a common template might make it difficult to take national specificities into account.
4	Given that electricity markets are increasingly interlinked, should risk preparedness plans be	In general the Risk Preparedness Plans should be prepared by those who will use the plans. Be it the Member States, the regional level or EU level.
	prepared at the national, regional or EU level?	Given that, it would seem that all TSOs/countries have some considerations on how to handle risk. However, as the markets and power systems are getting more and more interconnected it is sensible to look at Risk Preparedness Plans on a larger scale than a purely national one. Given also the introduction of RSCIs across Europe, it would seem like a good place to place such considerations and development of plans.
		In terms of language the Risk Preparedness Plans should be written in the language best understood by those who will have to work with the plans.
5	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?	If the content is coordinated, meaning that the Risk Preparedness Plans cover roughly the same topics and are coordinated at the regional level, there will not be much added value of a Commission assessment and/or a peer review. Regional coordination of the plans will ensure good quality level of the plans.
	What role do you see in this context for the Electricity Coordination Group?	
6	What level of transparency should be given to the plans?	The level of transparency should be as high as possible taking into account the fact that the plans could be misused as "blueprints" for those wishing to damage the electricity supply.
	Who should be informed of what?	The risks and limits of sharing confidential information will have to be addressed.
7	How often should risk preparedness plans be made / be updated? What are the relevant time frames to be covered?	Risks can change quickly due to changes in the production and consumption patterns, changes in the grid as well as experiences gained from incidents.
		Consequently a fixed review period (for instance 3 years) needs to combined with a "if needed" criterion to be able to respond to such changes.



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?	DSOs are not necessarily central in assessing the risk and consequences for system adequacy and security when looking at the issues from a Topdown EU perspective. In Denmark the national TSO is capable of assessing the risks faced by the DSOs, DSOs could however be central in carrying out any mitigating measures needed to balance the system.
	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?	
9	Ensuring cybersecurity is an increasingly important aspect of security of supply. What measures should Member States	The member states must ensure that they provide the right framework for the energy sector to operate the supply chain and transmission grid in a secure way:
	take to protect themselves	This framework could include the following:
	against possible cyber- attacks or	a. Provide that necessary resources (financial and manpower) are available to secure the
	other cyber-related threats?	<ul><li>transmission-critical processes.</li><li>b. Support the process of implementing an Information security policy for the critical</li></ul>
	Do you see the need for specific EU rules on cyber security, targeted to	systems.  c. Facilitate that proper standards are established, an example could be a
	the energy field? Given the cross-border nature of	standard for secure communication between operators.
	cyber security risks, what scope is there for enhancing co-operation	d. Demand that there is adequate redundancy in the critical systems to minimize loss of energy.
	(for instance through the exchange of best practices)?	e. Demand that adequate cyber emergency plans are in place and that they are tested on a regular basis.
	p. dettees).	f. Process for continues mapping of data-flows.
		g. Process for identifying learning lessons



		and shearing lessons learned.  h. A procedure for sharing confidential information regarding imminent threats.  i. Demand adequate confidentiality regarding data exchange, such as cyber emergency plans, data-flows and threats.  Member states' need for confidentiality and national security should be recognised. The EU legislation regarding cyber security should recognise the security arrangements made by the individual member states, as well as the anatomy of the national and regional markets (many vs. few market participants, central production vs. decentralized and intermittent production etc).
	Question 10 -11 "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?	In Denmark, imminent decisions during crisis situations are handled by the national control centres.  It is difficult to foresee which rules and measures to follow in a crisis situation. Control centres need to have the flexibility to respond, so that both expertise and experience can be brought in to the decision process.
11	If yes, what should be the minimum requirements to be included? For instance, should Member States be required to:	Following the answer to question number 10 above any such rules and measures should allow for the needed flexibility at the level of control centres.  However, as seen in the natural gas sector, institutional measures such as the Gas Coordination
	a. Identify actions and measures to be taken in emergency situations (market- and nonmarketbased)?	Group, where member states and the EU Commission can coordinate actions and analysis in an efficient manner can be considered.  a. To the extent possible market based actions and
	b. Set out the conditions	measures should be prioritised. To build a list of



ı	for suspension of market	possible actions and measures could be beneficial
	activities?	but should not be exhaustive.
	c. Identify categories of	b. Often it is only possible to assess the need for
	'protected customers'	market suspension after an incident.
	which, in case of a crisis,	market suspension after an incluent.
	should not be subject to a	c. Denmark has only identified such protected
	disconnection measure	customers within supply of natural gas.
	(or only be disconnected	
	by way of a last resort)?	d. Should be included into the market based
	d Establish mulas for cost	solution.
	d. Establish rules for cost compensation?	D 6 : 1 1 1 1117
	compensation:	e. By focusing on roles and responsibilities any
	e. Indicate how they	legislation and cooperation might be more functional.
	intend to co-operate with	Tunononui.
	other Member States?	
	f Dofloat any other issues	
	f. Reflect any other issues in their plans?	
	in incir piurs!	
	Question 12-14	
	"Roles and	
	responsibilities"	
1.0		
12	In relation to risk preparedness, how do you	Risk Preparedness Plans will have to be a combined effort of several participants. The key
	prepareaness, now ao you	
	see the roles and	
	see the roles and responsibilities of:	participants are the member states (the national
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	responsibilities of:  national governments  national regulators  TSO's  DSO's  European bodies such as ENTSO-E, ACER, and the Electricity Coordination Group?  European	participants are the member states (the national governments or bodies appointed by them), the TSOs (and the regional RSCIs) and for coordination purposes the Electricity Coordination Group together with ENTSO-E. In Denmark the DSOs have a market based incentive to cost reduce within risk preparedness. The TSO does not have the same incentive. The single TSO is therefore a relevant supervisor for the DSOs crisis preparedness plans in the Danish
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	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,	participants are the member states (the national governments or bodies appointed by them), the TSOs (and the regional RSCIs) and for coordination purposes the Electricity Coordination Group together with ENTSO-E. In Denmark the DSOs have a market based incentive to cost reduce within risk preparedness. The TSO does not have the same incentive. The single TSO is therefore a relevant supervisor for the DSOs crisis preparedness plans in the Danish
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	value in the designation by each Member State of a 'Competent Authority', responsible for coordinating security of electricity supply issues	Authority needs to be appointed.
14	at national level?  If it is decided to strengthen regional cooperation on a more structural basis between various players (e.g., when drawing up risk	Considering that the Danish TSO is a government owned company the Regional Security Coordination Initiatives (RSCI) could be a sufficient regional structure. The RSCIs enhance the operational cooperation of the TSOs.
	preparedness plans), how should regions best be defined?	The RSCIs such as for instance the TSO Security Cooperation (TSC) in which Energinet.dk cooperates with 12 other TSOs will deliver increasingly important data and coordination to the participating TSO and thereby enabling that system security is maintained.