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Proposal for a

# REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

## on risk-preparedness in the electricity sector and repealing Directive 2005/89/EC

(Text with EEA relevance)

# EXPLANATORY MEMORANDUM

## 1. CONTEXT OF THE PROPOSAL

### • Reasons for and objectives of the proposal

The purpose of this draft Regulation is to ensure that all Member States put in place appropriate tools to prepared for and manage electricity crisis situations. Even where markets and systems function well, the risk of an electricity crisis as a result of a variety of circumstances (e.g. extreme weather circumstances; malicious attacks including cyber-attacks, fuel shortage) cannot be excluded. In addition, in an integrated system where crisis situations occur they often have a cross-border effect. Some circumstances (e.g., a prolonged cold spell or heat wave) might affect several Member States at the same time and even incidents that start locally they may rapidly spread across borders.

Currently, Member States behave very differently when it comes to preventing and managing crisis situations. National rules and practices tend to focus on the national context only, disregarding what happens across borders. The assessment of the national legal frameworks and current practices across Europe has shown that Member States take very different approaches, in that:

(a) they assess different risks;

(b) they take different sets of emergency related measures at different times in response[1];

(c) roles and responsibilities differ; and

(d) there is not common understanding as to what constitutes a crisis situation.

In addition, there is very limited sharing of information and transparency in Member States' preparations for and handling electricity crisis situations. For instance, when realising that their electricity systems might be under serious stress in the months ahead, Member States often take action in conjunction with their transmission system operators (TSOs), without systematically informing others.

This situation is the result of a regulatory gap. The current EU legal framework (Directives 2005/89/EC[2] and 2009/72/EC[3]) only set general objectives for security of supply, leaving Member States to decide how to achieve these. In particular, while the rules allow Member States to take ‘safeguard measures’ in crisis situations, they do not set out how Member States should prepare for and manage such situations.

The current legislation no longer reflects the reality of today’s interconnected electricity market, where the likelihood of crisis situations affecting several Member States at the same time is on the rise.

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[1] See analysis in Interim Report of the Sector Inquiry on Capacity Mechanisms (C(2016) 2107 final) and Commission staff working document accompanying this report (SWD(2016) 119 final).

[2] Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment (OJ L 33, 4.2.2006, p. 22).

[3] Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (OJ L 211, 14.8.2009, p. 55).

The problems identified in the impact assessment accompanying this proposal can be summarised as follows:

(1) crisis plans and actions remain solely national in focus;

(2) there is a lack of informationsharing and transparency; and

(3) there is no common approach to identifying and assessing risks.

- **Consistency with existing policy provisions in the policy area**

The draft Regulation complements the provisions of the Third Package[4], which is currently being revised. The revised Third Package will aim to improve the functioning of the internal electricity market, *inter alia* by allowing for more flexibility and limiting the scope for subsidies for generation adequacy. It will also aim to improve system security through better cooperation between TSOs at regional level via the creation of regional operational centres.

The draft Regulation sets out what Member States should do to prevent and manage crisis situations and how they should cooperate with each other to this end, especially bringing more transparency to the preparation phase and during an electricity crisis, and ensuring that even in the crisis electricity is delivered where is it needed most. It also provides a framework for more systematic monitoring of security of supply issues via the Electricity Coordination Group. It contributes to the revised Third Package by ensuring that, even in crisis situations, priority is given to market-based measures and that markets can work as long as possible.

The draft Regulation replaces Directive 2005/89/EC (the Security of Supply Directive), which offered a very broad framework of objectives to be achieved by Member States in the area of security of supply, but had little operational value. The Directive will therefore be repealed, as will some provisions in the current Third Package that relate to security of supply, notably Article 4 (which requires Member States to monitor security of supply via national reports) and Article 42 (which allows Member States to take 'safeguard measures' in the event of a sudden crisis in the electricity sector) of the Electricity Directive[5].

Network codes and guidelines adopted pursuant to Article 6 of Regulation (EC) No 714/2009[6] set out harmonised principles for operational planning and scheduling processes required to anticipate realtime operational security difficulties. The draft Regulation complements these technical rules by providing administrative and political mechanisms to help national authorities prevent and manage crisis situations in cooperation with each other, while avoiding undue interference with the market and the tasks of the TSOs.

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4 It refers to the latest reform of the electricity regulatory framework and it is composed by Directive (EC) No 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity.

5 Directive (EC) No 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC (OJ L 211, 14.8.2009, p. 55).

6 Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003 (OJ L 211, 14.8.2009, p. 15).

The draft Regulation builds in particular on the *System operation guidelines*[7] and the *Network code on emergency and restoration*[8], which offer technical rules for TSOs on how to ensure system stability, including in emergency situations. Those rules should allow TSOs to deal effectively with most incidents, but they do not in themselves guarantee that Member States are duly prepared for and can manage larger-scale crisis situations, in particular those that extend beyond borders and often require politically sensitive decisions to be made (e.g. on interruption of electricity supply).

The draft Regulation is consistent with existing legislation in the field of cybersecurity and critical infrastructure. On cybersecurity, Directive (EU) 2016/1148 (the NIS Directive)[9] lays down general rules, while specific rules will be developed through a network code (as provided for in the proposal for a [new Electricity Regulation]). This draft Regulation complements the NIS Directive by ensuring that cyber-incidents are properly identified as a risk and that measures taken to deal with them are properly reflected in the riskpreparedness plans. Council Directive 2008/114/EC[10] established a common procedure for identifying European critical infrastructures (ECIs, e.g. infrastructures and facilities for generation and transmission) and protecting them against terrorist attacks and other physical risks. This draft Regulation focuses more broadly on how to ensure the resilience of the electricity system as a whole and how to manage crisis situations when they occur.

- **Consistency with other Union policies**

The draft Regulation seeks to implement the key objectives of the Energy Union, as defined in the Framework Strategy for a resilient Energy Union with a forward-looking climate change policy.

## 2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

- **Legal basis**

The draft Regulation proposes measures to prevent, prepared for and handle electricity crisis situations in the EU. The legal basis for the Regulation is therefore Article 194 of the Treaty on the Functioning of the European Union (TFEU).

- **Subsidiarity (for non-exclusive competence)**

Article 194 TFEU recognises that a degree of coordination, transparency and cooperation in Member States' policymaking on security of supply is necessary to ensure the functioning of the energy market and security of supply in the Union.

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[7] Commission Regulation (EU) …/… of XXX establishing a guideline on electricity transmission system operation (OJ [...]).

[8] Commission Regulation (EU) …/… of XXX establishing a network code on electricity emergency and restoration (OJ [...]).

[9] Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union (OJ L 194, 19.7.2016, p. 1-30).

[10] Council Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection (OJ L 345, 23.12.2008, p. 75).

The need for EU action is based on evidence that national approaches not only lead to suboptimal measures, but actually make the impacts of a crisis more acute. In addition, crisis situations are often not confined to national boundaries and may directly or indirectly affect several Member States. Therefore, national action in terms of preparedness and mitigation should not be determined purely at national level, given the potential impact on security of supply in a neighbouring Member State and/or on the availability of measures to tackle possible shortages.

The increasing interconnection of EU electricity markets requires that security of supply measures are coordinated. In the absence of such coordination, measures taken at national level only are likely to jeopardise security of supply in other Member States or at EU level. Situations such as the prolonged cold spell of 2012 have shown that coordinated action and solidarity are vital to ensure that electricity is available where it is most needed. Action in one country can provoke risks of blackouts in neighbouring countries (for example, one country's unilateral decision to impose an export ban had serious adverse effects on other countries' electricity and gas sectors). On the other hand, coordination between Member States may open up a wider range of solutions.

The potential for more efficient and less costly measures as a result of regional coordination has not been fully exploited and this is detrimental to EU consumers.

- **Proportionality**

The draft Regulation is designed to achieve an adequate level of preparedness and to mitigate the impact on customers in the event of such a crisis. To meet this objective, it proposes common rules on prevention (e.g. the preparation of riskpreparedness plans), with enhanced regional cooperation. The proposed approach is based on close cooperation between Member States in a region, in particular in identifying crisis scenarios and agreeing on coordinated measures (e.g. regional load-shedding plans, mutual assistance measures).

The proposal does not involve full harmonisation, with all measures being prescribed at EU level, but ensures minimum common rules on prevention, transparency and informationsharing to enhance trust between neighbours and facilitate crossborder cooperation.

Regional cooperation across Member States is necessary to address the deficiencies of the current system, in which voluntary cooperation is limited to TSOs, and allow for problems to be solved at regional level.

- **Choice of the instrument**

Evaluation of the Security of Electricity Supply Directive (the main legal act in this area) has established that the implementation by Member States of principles established at EU level has resulted in a patchwork of national rules and practices that differ across the EU.

A Regulation is a more appropriate instrument for ensuring the coherent and transparent implementation of measures to prevent, prepare for and handle electricity crises.

## 3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- **Ex-post evaluations/fitness checks of existing legislation**

The Commission has evaluated the Security of Electricity Supply Directive by examining its performance against five criteria: relevance, effectiveness, efficiency, coherence and EU added value. The results of the evaluation are reflected in the problem identification in the impact assessment. The main conclusions can be summarised as follows:

- the Directive has been ineffective in achieving its objectives, in particular that of contributing to better security of supply in Europe. Some of its provisions have been overtaken by subsequent legislation (notably the Third Package and the TEN-E Regulation[11]), but there are still regulatory gaps, notably when it comes to preventing and managing crisis situations;
- intervention under the Directive is no longer relevant, as it does not meet current security of supply needs. As electricity systems are increasingly interlinked, purely national approaches to preventing and managing crisis situations can no longer be considered appropriate; and
- the added value of the Directive has been very limited, as it created a general framework, but by and large left Member States to determine their own security of supply standard. European electricity markets are increasingly intertwined, but there is still no common European framework governing the prevention and mitigation of electricity crisis situations. National authorities tend to decide unilaterally on the degree of security they deem desirable, how to assess risks (including emerging risks, such as those to cybersecurity) and what measures to take.

- **Stakeholder consultations**

A public consultation on risk preparedness in the area of security of electricity supply (15 July to 9 October 2015) elicited 75 responses, *inter alia* from public authorities, international organisations (the International Energy Agency), European bodies (the Agency for the Cooperation of Energy Regulators (ACER) and the European Network of Transmission System Operators for Electricity (ENTSO-E)) and most relevant stakeholders (companies and associations). The aim was to have stakeholders' views, in particular on how Member States should prepare and cooperate with others, with a view to identifying and managing risks relating to security of electricity supply. The main results of the consultation and the responses received are summarised below and are also available on the Commission's website[12]. The various opinions were reflected in the impact assessment.

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[11] Regulation (EU) 347/2003 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations No 713/2009, (EC) No 714/2009 and (EC) No 715/2009. (OJ L 115. 25.04.2013. p. 39).

[12] https://ec.europa.eu/energy/en/consultations/public-consultation-risk-preparedness-area-security-electricity-supply

The consultation showed that the majority of respondents (companies, associations and governments) are of the view that the current legal framework (the SoS Directive) is not sufficient to address the interdependencies of an integrated European electricity market.

***Assessments and plans***

A majority of stakeholders is in favour of requiring Member States to draw up **riskpreparedness plans** (see, for example, the replies from the Dutch and Latvian authorities, GEODE, CEDEC, EDF UK, TenneT, Eurelectric and Europex).

Stakeholders also see a need for the assessment of and preparation for rare/extreme risks to be **coordinated at regional level** (see, for example, the replies from the Estonian, Finnish, French, Dutch and Swedish authorities, ENTSO-E and Eurelectric). However, there is no agreement on how to define 'regions' in this context. Most stakeholders suggest using existing (voluntary) systems for regional cooperation as a starting point (e.g. the Finnish authorities) and emphasise the role of the existing Regional Security Centres (RSCs) (e.g. the Czech authorities). The European Parliament[13] takes the view that it makes sense to step up cooperation within and between regions under the coordination of ACER and together with ENTSO-E, particularly when it comes to evaluating cross-border impacts.

Stakeholders further make the case for a **common methodology** for assessing risks to ensure the comparability of results (e.g. EDF). This could be achieved through common templates (e.g. replies from the Finnish, Dutch and Norwegian authorities, and the German Association of Local Utilities). There is general acknowledgement of the importance of preventing the risks relating to cyber-attacks.

Many stakeholders stress the need to establish/clarify **roles, responsibilities and operational procedures** to be followed (e.g. who to contact in times of crisis). Stakeholders see the added value of designating one competent authority per Member State, but there is no agreement on who this should be. Some (e.g. the Norwegian authorities and the German Association of Local Utilities) argue that the choice should be left to the Member State, while others (e.g. TenneT) prefer giving a strong mandate to the TSOs.

***Crisis management***

Stakeholders, in particular from the industry, also call for more **transparency** to reduce the scope for measures that unnecessarily distort markets. A majority (e.g. EDF) see a need for clear provisions on the suspension of market activities, 'protected customers' and cost compensation.

While pointing out that the draft network codes and current practice should be taken into account, stakeholders see a need for political discussion at regional level and establishing clear principles for crisis management, as curtailment in simultaneous scarcity situations, for example, requires a political decision (e.g. ENTSO-E[14]). The need for a more common approach to managing crisis situations within the EU, while taking account of existing

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[13] See *Towards a new energy market design* (June 2016), Werner Langen, European Parliament, para. 68.

[14] See, for example, ENTSO-E's presentation on capacity mechanisms (TOP 2.4) at the Florence Forum (June 2016); https://ec.europa.eu/energy/en/events/meeting-european-electricity-regulatory-forum-florence

regional solutions, is stressed by the Dutch Presidency of the European Council[15] and the Florence Forum[16].

***Monitoring***

In order to ensure adequate oversight, most stakeholders are in favour of a system of peer reviews to be conducted in a regional context or in the framework of the Electricity Coordination Group, which could ensure the interlinkage between technical and political/ economic aspects. Monitoring could be further enhanced through a more common and transparent approach to standards. Some stakeholders call for a stronger role for ACER/ ENTSO-E and more of a facilitating role for the Commission (e.g. CEER, ENTSO-E).

- **Collection and use of expertise**

The proposed Regulation and the impact assessment were prepared on the basis of a large body of material (see footnote references in the impact assessment). A review of current national rules and practices relating to risk preparedness in the area of security of electricity supply[17] was also conducted specifically for the impact assessment.

During the drafting process, various aspects of this proposal were discussed with Member States and relevant stakeholders in the framework of the European Electricity Regulatory Forum (3-4 March 2016) and the Electricity Coordination Group (16 November 2015 and 3 May 2016).

- **Impact assessment**

All proposed measures were supported by the impact assessment.

The Regulatory Scrutiny Board issued a positive opinion on XX 2016.

The impact assessment looked at four policy options:

0+ improved implementation/enforcement (non-regulatory approach);

1. minimum rules to be implemented by Member States;
2. minimum rules to be implemented by Member States, plus regional cooperation; and
3. full harmonisation and decision-making at regional level

Option 0+ was not taken up, because better implementation and enforcement would be to no avail, as the current legislative framework sets general principles only and gives very broad discretion to Member States as to how to implement them.

From the point of view of impacts, particularly in terms of cost and administration, option 1 could in principle appear to be the best option, but its likely effectiveness and efficiency are limited as compared with options 2 and 3. Overall, the more harmonised approach to security of supply through minimum rules under option 1 would not solve all the problems identified, in particular the lack of coordination in planning and preparation ahead of a crisis.

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[15] See note to the Permanent Representatives Committee/Council: Messages from the Presidency on electricity market design and regional cooperation, para. 7.

[16] See *Conclusions from Florence Forum* (March 2016), para. 10.

[17] https://ec.europa.eu/energy/sites/ener/files/documents/DG%20ENER%20Risk%20preparedness%20final%20report%20May2016.pdf

Option 2 addresses many of the shortcomings of option 1 and provides a more effective package of solutions. In particular, regionally coordinated plans ensure that risks are identified at regional level and that consistent measures are adopted to prevent and manage crisis situations.

Option 3 represents a highly intrusive approach that seeks to address possible risks by resorting to a full harmonisation of principles and prescribing specific solutions. In addition, the impact assessment shows that the estimated impact on cost is likely to be high; given its likely performance in terms of effectiveness, this means that option 3 is disproportionate and not particularly efficient.

In the light of the assessment, **the preferred option is option 2**. This option is the best in terms of effectiveness, has been demonstrated to be the most efficient, given its economic impacts, and is consistent with other policy areas.

The following effects were considered when examining option 2:

### *1. Economic impacts*

The analysis concludes that option 2 will lead to better preparedness for crisis situations at a lower cost through enhanced regional coordination. The results of METIS simulations[18] show that wellintegrated markets and regional coordination during periods of extreme weather conditions (e.g. very low temperatures) are crucial in addressing the hours of system stress (i.e. hours of extreme electricity demand) and minimising the probability of loss of load (interruption of electricity supply).

Most importantly, a nationallevel approach to security of supply disregards the contribution of neighbouring countries in a crisis situation, while a regional approach results in better utilisation of power plants and more likely avoidance of loss of load. This is due to the combined effect of:

(i) the variability of renewable production being partly smoothed out at wider geographical scales;

(ii) demand in different countries tending to peak at different times; and

(iii) the fact that countries' power supply mixes can be quite different, leading to synergies in their utilisation.

The table below compares the 'expected energy non served' (EENS) security of supply indicator assessed by METIS for the three levels of coordination (national, regional, European)[19]. It highlights an overestimation of loss of load when measured in a scenario of non-coordination, i.e. not taking account of potential mutual assistance between countries.

**Levels of coordination: EENS as a proportion of overall demand**

| **Level** | **EENS (% of annual load) — ENTSO-E V1 scenario** |
|---|---|

[18] Study S16: *Analysing revenuerelated risks for power producers* (2016), Artelys.

[19] Study S4: *Generation and system adequacy analysis* (2016), Artelys.

| | |
|---|---|
| National level | 0.36 % |
| Regional level | 0.02 % |
| European level | 0.01 % |

*ENTSO-E 2030 v1: vision for 2030 'Slowest progress'. Vision 1 is based on a scenario in which no common European decision has been taken as to how to achieve $CO_2$ emission reductions. Each country has its own policy and methodology for $CO_2$, RES and system adequacy.*

*Source: METIS*

METIS simulations also show that, thanks to regional cooperation, stress situations would decrease and be concentrated in a limited number of hours that may occur simultaneously. This highlights the need for specific rules on how Member States should proceed in such circumstances, as proposed in option 2.

Enhanced coordination would reduce the overall cost of the system and this could have a positive impact on prices for consumers. In contrast, a lack of coordination on how to prevent and manage crisis situations would entail significant opportunity costs. A recent study showed that the integration of the European electricity market could deliver significant benefits (EUR 12.540 billion in the period to 2030). However, this amount would be reduced by EUR 37.5 billion if Member States 'go it alone' in pursuing security of electricity supply objectives[20].

***2. Who would be affected and how?***

Option 2 will have a positive effect on society at large and electricity consumers in particular, since it helps prevent crisis situations and unnecessary cut-offs. Crisis prevention and management will be made even more effective by requiring Member States to cooperate effectively and putting in place tools to monitor security of supply via the Electricity Coordination Group.

The measures will also have a positive effect on the business community, as there will be much more transparency and comparability as regards how Member States prepare for and intend to manage crisis situations. This will increase legal certainty for investors, power generators and power exchanges, but also for TSOs managing short-term crisis situations.

Among the stakeholders most affected will be the competent authorities (e.g. ministries, NRAs) as actors responsible for the preparation of the riskpreparedness plans (see the assessment of impacts on public authorities below).

- **Regulatory fitness and simplification**

The proposal will increase administrative burden to a limited extent. In particular, national authorities will have to pre-agree part of their riskpreparedness plans at regional level. However, experience shows that a more regional approach to risk assessment and preparedness is technically and legally feasible, and has important benefits for consumers and the economy as a whole. Since the regional parts of the plans would in practice be prepared by regional coordination centres between TSOs, the overall extra burden for Member States'

[20] *Benefits of an integrated European energy market* (2013), BOOZ&CO.

administrations would be limited and clearly offset by the practical benefits of such cooperation[21].

More regional cooperation will also allow Member States to create synergies, learn from each other and jointly develop best practices. Over time, this should lead to a reduction in administrative impacts.

European actors such as the Commission and ENTSO-E will provide guidance and facilitate the process of risk preparation and management. This will also help reduce impacts on Member States.

No new body or reporting obligation is being created and existing obligations are being streamlined. For example, the Electricity Coordination Group is an existing body that already meets regularly; the intention is to make it more effective by giving it specific tasks. Furthermore, national reporting obligations will be reduced (e.g. through the repeal of the obligation under Article 4 of the Electricity Directive) and EU-level reporting will take place in the context of existing reports and reporting obligations (e.g. ACER's annual report monitoring the internal electricity and natural gas markets).

## 4. BUDGETARY IMPLICATIONS

The proposal has limited implications for the EU budget related to a new task attributed to the Agency for the Cooperation of Energy Regulators (ACER) under Article 5. The draft Regulation requires that ACER approves or proposes amendments to the methodology proposed by ENTSO for Electricity for the identification of the most relevant electricity crisis scenarios in a regional context. (See legislative financial statement of ACER)

## 5. OTHER ELEMENTS

- **Implementation plans and monitoring, evaluation and reporting arrangements**

The Commission will monitor Member States' implementation of the measures in the proposed Regulation. Where necessary, it will offer to help them make the requisite changes in their national legislation and hold workshops with all Member States (e.g. via the Electricity Coordination Group) or bilateral meetings on the drafting of riskpreparedness plans. If necessary, the Commission will follow the procedure set out in Article 258 TFEU should any Member State fail in its duty to implement Union law.

The Commission will also monitor security of supply in the EU on an ongoing basis in cooperation with the Electricity Coordination Group.

- **Detailed explanation of the specific provisions of the proposal**

The proposed Regulation contains the following elements:

1. Common rules on crisis prevention and tools to ensure cross-border cooperation:

[21] The Nordic TSOs, regulators and energy authorities cooperate through the Nordic Contingency and Crisis Management Forum (NordBER). This involves information exchange, joint working groups and contingency planning for the overall Nordic power sector to complement national emergency work and TSO cooperation (www.nordber.org).

- Member States should designate a competent authority to be in charge of carrying out the tasks set out in the Regulation, in particular drafting the riskpreparedness plan;
- Member States must draw up riskpreparedness plans, after consulting stakeholders, in order to ensure maximum preparedness so as to prevent electricity crises and mitigate their effects should they nevertheless occur. The plans should be developed on the basis of regional and national electricity crisis scenarios identified by ENTSOE and Member States, respectively, and set out the measures planned or taken to prevent and mitigate the scenarios. The plans should follow the template provided in the Regulation;
- Before adopting a plan, the competent authority should submit a draft to the competent authorities of the other Member States in the region and the Electricity Coordination Group for consultation. Once approved, the final plan should be sent to the Commission, made public and updated every three years, unless circumstances warrant more frequent updates;
- Plans should consist of two parts, setting out national measures and coordinated measures agreed between the Member States in each region. They should take account of the specific characteristics of each Member State and set out clearly the roles and responsibilities of the competent authorities;
- All measures contained in the plans should be clearly set out, transparent, proportionate, non-discriminatory and verifiable. They should not endanger the security of electricity supply of other Member States or of the Union as a whole; and
- The plans should include measures to ensure that simultaneous crisis situations are properly prevented and managed. They must be agreed in a regional context and include at least:
  (a) the designation a regional crisis manager or team;
  (b) mechanisms to share, inform and cooperate within a region;
  (c) measures to mitigate the impact of a crisis, including a simultaneous crisis situation (e.g. regional load-shedding plans or other mutual assistance arrangements);
  (d) any cost compensation schemes linked to the assistance arrangements; and
  (e) procedures to carry out annual tests of the plans;

2. Managing electricity crisis situations:
   - The Regulation requires Member States to inform neighbouring Member States and the Commission without delay in the event of an electricity crisis situation. They must also provide information on the causes of the crisis, measures taken and planned to mitigate it and the possible need for assistance from other Member States;
   - Member States are required to inform the Commission and the Electricity Coordination Group if they have specific, serious and reliable information that an event may occur that is likely to result in a significant deterioration of electricity supply;

- Member States are to cooperate in a spirit of solidarity to prepare for and manage electricity crisis situations, with a view to ensuring that electricity is delivered where it is most needed, in return for compensation; and
- In the event of an electricity crisis, Member States must act in full compliance with internal electricity market rules. Nonmarketbased measures can be used only as a last resort and must be necessary, proportionate, non-discriminatory and temporary;

3. Security of supply indicators and risk assessments:
   - The proposal requires ENTSO-E to develop a methodology for identifying electricity crisis scenarios at regional level, considering at least the following risks:
     (a) rare and extreme natural hazards;
     (b) accidental hazards going beyond N-1;
     (c) consequential hazards such as fuel shortages; and
     (d) malicious attacks;
   - For the preparation of the riskpreparedness plan, ENTSO-E and Member States should use this methodology to identify the most relevant crisis scenarios; and
   - ENTSO-E should also develop a methodology for assessing short-term adequacy. Once this has been approved by ACER, it should be used by Member States and ENTSOE in their short-term assessments;
4. Evaluation and monitoring:
   - In order to ensure transparency following an electricity crisis, Member States affected should carry out an ex-post evaluation of the crisis and its impacts. This should take into account, *inter alia*, the effectiveness of the measures taken, proportionality and economic cost. It should also cover crossborder considerations such as the impact of the measures and the level of assistance received; and
   - The proposal involves systematic monitoring, via the Electricity Coordination Group, of security of supply in the EU, with the use of harmonised indicators.

Proposal for a

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on risk-preparedness in the electricity sector and repealing Directive 2005/89/EC**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 194 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Having regard to the opinion of the European Economic and Social Committee[22],

Having regard to the opinion of the Committee of the Regions[23],

Acting in accordance with the ordinary legislative procedure,

Whereas:

(1) The electricity sector in the Union is undergoing a profound transformation, characterised by more decentralised markets with more players, better interlinked systems and a higher proportion of renewable energy. In response, Directive xxx/ Regulation xxx [*Reference to the revised Third Package*] aim to upgrade the legal framework governing the Union's internal electricity market, so as to ensure that markets and networks function in an optimal manner, to the benefit of businesses and consumers.

(2) Well-functioning markets and systems are the best guarantee of security of supply. However, even where markets and systems function well, the risk of an electricity crisis (as a result of extreme weather conditions, malicious attacks or a fuel shortage, for example) can never be excluded. The consequences of crisis situations often extend beyond national borders. Even where incidents start locally their effects can rapidly spread across borders. Some extreme circumstances (e.g. a cold spell or heat wave) may affect entire regions at the same time.

(3) In a context of interlinked electricity markets and systems, crisis prevention and management cannot be considered a purely national responsibility. A common framework of rules and coordinated procedures are needed, to ensure that Member States and other actors co-operate effectively across borders in a spirit of transparency and solidarity.

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22 OJ C […], […], p. […].

23 OJ C […], […], p. […].

(4) Directive 2005/89/EC of the European Parliament and of the Council[24], which set out the necessary measures that the Member States should take in order to ensure security of electricity supply in general. The provisions of that Directive have largely been superseded by subsequent legislation, in particular as regards how markets should be organised so as to ensure that sufficient capacity is available, how transmission system operators should co-operate to guarantee system stability[25] and the need to ensure that appropriate infrastructure is in place.[26] This Regulation addresses the specific issue of crisis prevention and management in the electricity sector.

(5) The System operation guidelines[27] and the Network code on emergency and restoration[28] constitute a detailed rulebook governing how transmission system operators and other relevant actors should act and co-operate to ensure system stability. These technical rules should ensure that most electricity incidents are dealt with effectively at operational level. This Regulation focuses on electricity crisis situations that may have a larger scale and impact. It sets out what Member States should do to prevent such situations and what measures they can take should system operational rules alone no longer suffice. Even in crisis situations, however, system operation rules should continue to be fully respected.

(6) This Regulation sets out a common framework of rules on how to prevent and manage electricity crisis situations, bringing more transparency in the preparation phase and during an electricity crisis and ensuring that, even in a crisis, electricity is delivered where it is needed most. It requires Member States to co-operate at regional level, in a spirit of solidarity. It also sets out a framework for an effective monitoring of security of supply in Europe via the Electricity Coordination Group. This should result in better risk preparedness at a lower cost. It should also strengthen the internal energy market by enhancing trust and confidence across Member States and ruling out inappropriate state interventions in crisis situations, in particular avoiding undue curtailment of cross-border flows.

(7) The Directive on security of network and information systems (the NIS Directive)[29] provides general rules, while specific rules on cybersecurity will be developed through a network code as foreseen in the [*new Electricity Regulation*]. This Regulation complements the NIS Directive ensuring that cyber-incidents are

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24 Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006 concerning measures to safeguard security of electricity supply and infrastructure investment (OJ L 33, 4.2.2006, p. 22).

25 Reference to the revised Third Package

26 Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure, OJ L 115, 24.4.2013, p. 39.

27 Commission Regulation (EU) …/…of XXX establishing a guideline on electricity transmission system operation, OJ [...]

28 Commission Regulation (EU) …/…of XXX establishing a network code on electricity emergency and restoration, OJ [...].

29 Directive (EU) 2016/1148 of the European Parliament and of the Council of 6 July 2016 concerning measures for a high common level of security of network and information systems across the Union, OJ L 194, 19.07.2016, p. 1-30.

properly identified as a risk, and the measures taken to deal with them are properly reflected in the risk-preparedness plans.

(8) Council Directive 2008/114/EC[30] lays down a process with a view to enhancing the security of designated European critical infrastructure, including certain electricity infrastructure, in the Union. Directive 2008/114/EC together with this Regulation contributes to creating a comprehensive approach to the energy security of the Union.

(9) To facilitate prevention, information exchange and ex-post evaluation of electricity crises, Member States should designate one competent authority as a contact point. This may be an existing or new entity.

(10) A common approach to crisis prevention and management requires, above all, that Member States use the same methods and definitions to identify risks relating to the security of electricity supply and are in a position effectively to compare how well they and their neighbours perform in that area. For this purpose, the Regulation defines two harmonised 'security of supply indicators': 'expected energy non served' (EENS), expressed in GWh/year, 'loss of load expectation' (LOLE), expressed in hours/year. The European Network of Transmission System Operators for Electricity (ENTSO-E) should calculate the indicators for all Member States, on the basis of common methodology, as part of their Union wide resource adequacy assessment. Pursuant to [*Article [x] of the ACER Regulation*], the Agency for the Cooperation of Energy Regulators (Agency) should also use the indicators calculated by ENTSO-E when reporting on Member States' performance in the area of security of supply in its annual electricity market monitoring reports.

(11) To ensure the coherence of risk assessments that build trust between Member States in a crisis situation a common approach to identifying risk scenarios is needed. Therefore, ENTSO-E should develop a common methodology for risk identification in cooperation with the Agency, with ENTSO-E proposing the methodology and the Agency approving it.

(12) On the basis of this common methodology, ENTSO-E should regularly draw up and update regional crisis scenarios, identify the most relevant risks for each region such as extreme weather conditions, natural disasters, fuel shortages or malicious attacks, Member States should establish and update their national crisis scenarios on this basis, also in principle every three years. The scenarios should provide the basis for the risk-preparedness plans. When identifying risks on national level the Member States should also describe possible risks they see in relation to the ownership of infrastructure relevant for security of supply, and possible measures taken, if any, to address such risks (such as general or sector-specific investment screening laws, special rights for certain shareholders, etc.), with an indication why in their view such measures are justified.

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30 Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection (OJ L 345, 23.12.2008, p. 75).

(13) A regional approach to identifying risk scenarios and developing preventive and mitigating measures should bring significant benefits in terms of the effectiveness of measures and optimal use of resources. Moreover, in a simultaneous electricity crisis, a coordinated and pre-agreed approach will ensure a consistent response and reduce the risk of negative spill-over effects that purely national measures could have in neighbouring Member States. This Regulation therefore requires Member States to co-operate in a regional context.

(14) As stated in the [*revised Electricity Regulation*], the regional operational centres should regularly assess relevant risks as they are entrusted with the operational management of such situations. To ensure that they can carry out their tasks effectively and act in close co-operation with relevant national authorities with a view to preventing and mitigating larger-scale incidents, the regional co-operation required under this Regulation should build on the regional cooperation structures used at technical level, namely the groups of Member States sharing the same regional operational centre.

(15) The [*revised Electricity Regulation*] prescribes the use of a common methodology for assessing resource adequacy in the longer term, with a view to ensuring that Member States' decisions as to possible investment needs are made on a transparent and commonly agreed basis. In addition, there is a need for a common approach to the way possible adequacy-related problems are detected in shorter time-frames. The ENTSO-E issues winter and summer outlooks to alert Member States and transmission system operators to security of supply related risks that might occur in the following six months. To improve these outlooks, they should be based on a common probabilistic methodology proposed by ENTSO-E and approved by the Agency. In order to reinforce the regional approach to assessing risks, ENTSO-E should be able to delegate tasks related to seasonal outlooks to regional operational centres.

(16) Transmission system operators and regional operational centres should apply the methodology used to prepare seasonal outlooks when carrying out any other type of short-term risk assessment, such as the week-ahead to intraday generation adequacy forecasts provided for in Commission Regulation on establishing a guideline on electricity transmission system operation.

(17) To ensure a common approach to crisis prevention and management, the competent authority of each Member State should draw up a risk-preparedness plan, after consulting stakeholders. The plans should describe effective, proportionate and non-discriminatory measures addressing all identified crisis scenarios. Plans should provide transparency especially as regards the conditions in which non-market measures can be taken to mitigate crisis situations. All envisaged non-market measures should comply with the rules set out in this Regulation. Where Member States envisage introducing a strategic reserve to cope with crisis situations, the conditions in which the reserves can be activated must comply with the specific provisions on strategic reserves in the [*revised Electricity Regulation*].

(18) Plans should consist of two parts, setting out national measures and regionally coordinated measures agreed between the Member States in the region. Regionally agreed and coordinated measures are necessary especially in the event of a simultaneous electricity crisis, when a coordinated and pre-agreed approach will ensure a consistent response and reduce the risk of negative spill-over effects. Plans should take account of the specific characteristics of the Member State and set out clearly the roles and responsibilities of the competent authorities. National measures should take full account of the regionally agreed measures and take full advantage of the opportunities provided by regional cooperation. The plans should be technical and operational in nature, their function being to help prevent the occurrence or escalation of an electricity crisis and to mitigate its effects. They should be consistent with the Energy Union's strategic planning and reporting tools.

(19) Plans should be updated regularly. To ensure that the plans are always up-to-date and effective, the competent authorities of each region should organise annual simulations in cooperation with regional operational centres to test their suitability.

(20) Templates should facilitate the preparation of the plans and consultation with other Member States in the relevant region and the Electricity Coordination Group. Consultation within the region and via the Electricity Coordination Group should ensure that measures taken in one Member State or region do not put at risk the security of supply of other Member States or regions.

(21) Information exchange in the event of a crisis situation is essential in order to ensure coordinated action and targeted assistance. Therefore, this Regulation obliges Member States to inform neighbouring Member States and the Commission without delay when confronted with an electricity crisis. They should also provide information on the causes of the crisis, measures taken and planned to mitigate the crisis and the possible need for assistance from other Member States.

(22) It is important to facilitate communication and awareness between Member States, whenever they have specific, serious and reliable information that an event may occur that is likely to result in a significant deterioration of the electricity supply. In such circumstances the Member States should inform the Commission and the Electricity Coordination Group without delay, providing, in particular, of the causes of the deterioration, the planned measures to prevent an electricity crisis and the possible need for assistance from other Member States.

(23) In the event of an electricity crisis Member States should assist each other in a spirit of solidarity and ensure that electricity is delivered where it is most needed. This cooperation should be based on pre-agreed measures set out in the risk-preparedness plans. When agreeing on cooperation, Member States should take account of social and economic factors, including citizens' security and proportionality. They are encouraged to share best practice and use the Electricity Coordination Group as discussion platform to identify available options for cooperation and solidarity arrangements, including compensation mechanisms. The Commission may facilitate the preparation of the regionally coordinated measures in the concerned region.

(24) This Regulation should enable electricity undertakings and customers to rely on market mechanisms as laid down in [*reference to updated 3rd package*] for as long as possible when coping with electricity shortage. Rules governing the internal market and system operation rules should be respected even in crisis situations. This means that non-market measures, such as forced curtailments, or the provision of extra supplies outside normal market functioning should be taken only as a last resort, when all possibilities offered by the market have been exhausted. For instance, forced curtailments can be introduced only after all possibilities for voluntary demand disconnection have been exhausted. In addition, any non-market measures should be necessary, proportionate, non-discriminatory and temporary.

(25) In order to ensure transparency after an electricity crisis, the Member States affected should carry out an ex-post evaluation of the crisis and its impacts. This should take into account, *inter alia*, the effectiveness of the measures taken, proportionality and economic cost. It should also cover cross-border consideration such as the impact of the measures and the level of assistance received.

(26) The transparency obligations should ensure that all measures taken to manage crisis situations respect internal market rules and are in line with the principles of co-operation and solidarity which underpin the Energy Union.

(27) In 2012, the Electricity Coordination Group was created as a forum to exchange information and foster co-operation across Member States, in particular in the area of security of supply.[31] To date, the Electricity Coordination Group has served as a discussion forum for Member States, notably as regards security of electricity supply. Through this Regulation, its role is reinforced. It should carry out specific tasks, notably in connection with the preparation of the risk-preparedness plans, and will have a prominent role in monitoring Member States' performance in the area of the security of electricity supply, and developing best practice on this basis.

(28) An electricity crisis might extend beyond Union borders comprising also Energy Community countries. In order to ensure an efficient crisis management on borders between the Member States and the Contracting Parties the Union should aim at encompasing also the Energy Community Contracting Parties under the comon crisis management rules set out in this Regulation.

(29) To allow for a swift Union response to changing circumstances as regards risk preparedness in the electricity sector, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amendments of the templates for risk preparedness plans. It is particularly important that the Commission carry out appropriate consultations during its preparatory work, including at expert level. When preparing and drawing up delegated acts, it should ensure that relevant documents are sent simultaneously to the European Parliament and the Council, in good time and in the appropriate manner.

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[31] Commission Decision of 15 November 2012 setting up the Electricity Coordination Group (2012/C 353/02), OJ C 353, 17.11.2012, p. 2.

(30) The Member States acting on their own cannot satisfactorily achieve the objective of this Regulation, namely to ensure the most effective and efficient risk preparedness within the Union. Given the scale or effects of the action, it is better achieved at Union level. The Union may therefore adopt measures, in accordance with the principle of subsidiarity set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality set out in that Article, this Regulation does not go beyond what is necessary to achieve that objective.

(31) Directive 2005/89/EC should be repealed,

HAVE ADOPTED THIS REGULATION:

# CHAPTER I
# GENERAL PROVISIONS

*Article 1*
**Subject matter**

This Regulation lays down rules for the cooperation between Member States in view of preventing, preparing for and handling electricity crises in a spirit of solidarity and transparency and in full regard for the requirements of a competitive internal market for electricity.

*Article 2*
**Definitions**

1. For the purposes of this Regulation, the definitions in [*insert reference to updated Article 2 of Directive 2009/72/EC and Article 2 of Regulation (EC) No 714/2009 of the European Parliament and of the Council*] shall apply.

2. The following definitions shall also apply:

   (a) 'security of electricity supply' means the ability of an electricity system to guarantee an uninterrupted supply of electricity to consumers with a clearly defined level of quality;

   (b) 'electricity crisis' means a situation of significant electricity shortage, either existent or imminent;

   (c) 'simultaneous crisis' means an electricity crisis affecting more than one Member State at the same time;

   (d) 'crisis manager or team' means a person, group of persons or institution tasked with acting as contact point and coordinating the information flow during an electricity crisis;

   (e) 'non-market measure' means any supply- or demand-side measure deviating from normal market rules or commercial agreements, with a view to mitigate an electricity crisis;

   (f) 'region' means a group of Member States sharing the same regional operational centre, as created pursuant to [*reference to revised Electricity Regulation*].

*Article 3*

**Competent authority**

1. As soon as possible and no later than three months after entry into force of this Regulation each Member State shall designate a national governmental or regulatory authority as its competent authority in charge of carrying out tasks set out in this Regulation. Competent Authorities shall cooperate with each other for the purposes of this Regulation.

2. Member States shall notify the Commission without delay of the name and the contact details of the competent authority, once designated.

# CHAPTER II
# INDICATORS AND RISK ASSESSMENT

*Article 4*

**Security of supply assessments and indicators**

1. Member States shall ensure that all risks relating to security of electricity supply are assessed on a regular basis and in accordance with the rules set out in this Regulation. To this end, they shall cooperate with ENTSO-E and the regional operational centres created pursuant to [reference to revised Electricity Regulation].

2. The level of security of supply shall be measured by reference to the following indicators:

   (a) expected energy non served (EENS), expressed in GWh/year and

   (b) loss of load expectation (LOLE), expressed in hours/year.

*Article 5*

**Methodology for identifying electricity crisis scenarios at a regional level**

1. Within two months after entry into force of this Regulation, ENTSO-E shall submit to the Agency a proposal for a methodology for identifying of the most relevant electricity crisis scenarios in a regional context. The crisis scenarios shall be identified on the basis of at least the following risks:

   (a) rare and extreme natural hazards;

   (b) accidental hazards going beyond N-1;

   (c) consequential hazards including fuel shortages;

   (d) malicious attacks.

2. The proposed methodology shall include at least the following elements:

   (a) consideration of all relevant national and regional circumstances;

   (b) interaction and correlation of risks across borders;

   (c) simulations of simultaneous crisis scenarios;

   (d) ranking of risks according to their impact and probability.

When considering the risks of gas disruption, ENTSO-E shall use the gas supply and infrastructure disruption scenarios developed by the European Network of Transmission System Operators for Gas pursuant to [*currently Art. 6.6 of draft Gas SoS Regulation*].

3. Before submitting the proposed methodology, ENTSO-E shall conduct a consultation exercise involving at least the organisations representing all relevant stakeholders (and, if deemed appropriate, the stakeholders themselves), national regulatory authorities and other national authorities. ENTSO-E shall duly take into account the results of the consultation.

4. Within two months of receiving the proposed methodology, the Agency shall either approve it or propose amendments, in which case, it shall consult the ENTSO-E before adopting the amended version and publish it on its website.

5. ENTSO-E shall update and improve the methodology regularly in accordance with paragraphs 1 to 4. The Agency or the Commission may request such updates and improvements with due justification and timescales.

*Article 6*

**Identification of electricity crisis scenarios at a regional level**

1. Within seven months after entry into force of this Regulation and on the basis of the methodology adopted pursuant Article 5, the ENTSO-E shall identify the most relevant electricity crisis scenarios that could be caused by rare and extreme risks for each region. It may delegate tasks relating to the identification of regional crisis scenarios to the regional operational centres.

2. ENTSO-E shall submit the regional electricity crisis scenarios identified to the Electricity Coordination Group for consultation.

3. ENTSO-E shall update the scenarios every three years, unless circumstances warrant more frequent updates.

*Article 7*

**Identification of electricity crisis scenarios in the Member States**

1. Within seven months after the entry into force of this Regulation, Member States shall identify the most relevant electricity crisis scenarios that could be caused by rare and extreme risk within their territories.

2. The crisis scenarios shall be identified on the basis of at least the risks referred to in Article 5(1) and shall be consistent with the regional scenarios identified pursuant to Article 6. Member States shall update the scenarios every three years, unless circumstances warrant more frequent updates.

3. Within seven months after the entry into force of this Regulation Member States shall inform the Electricity Coordination Group and the Commission about possible risks they see in relation to the ownership of infrastructure relevant for security of supply, and any measures taken to prevent or mitigate such risks, with an indication of why such measures are considered necessary and proportionate.

*Article 8*

**Methodology for short-term adequacy assessments**

1. Within two months after entry into force of this Regulation, ENTSO-E shall propose to the Agency a methodology for assessing short-term adequacy, namely seasonal adequacy as well as week-ahead to intraday generation adequacy forecasts, which shall cover at least the following:

   (a) the uncertainty of inputs such as the probability of transmission capacity outage, the probability of unplanned outage of power plants, severe weather conditions, and variability of demand;

   (b) the probability of occurrence of a critical situation;

   (c) the probability of occurrence of simultaneous crisis situation.

   The assessment shall apply a probabilistic approach and consider the regional and Union wide context, including to the extent possible non-EU countries within synchronous areas of the Union.

2. Before submitting the proposed methodology, ENTSO-E shall conduct a consultation exercise involving at least the organisations representing all relevant stakeholders (and, if deemed appropriate, the stakeholders themselves), national regulatory authorities and other national authorities. ENTSO-E shall duly take into account the results of the consultation.

3. Within two months of receiving the proposed methodology, the Agency shall either approve it or propose amendments, in which case, it shall consult the ENTSO-E before adopting the amended version and publish it on its website

4. ENTSO-E shall update and improve the methodology regularly in accordance with paragraphs 1 to 3. The Agency or the Commission may request such updates and improvements with due justification and timescales.

*Article 9*

**Short-term adequacy assessments**

1. Member States shall ensure that all short-term adequacy assessments are carried out according to the methodology developed pursuant to Article 8.

2. The ENTSO-E shall carry out seasonal adequacy outlooks according to the methodology developed pursuant to Article 8. It shall publish the results at the latest by 1 December each year for the winter outlook and by 1 June for the summer outlook. It may delegate tasks relating to the outlooks to regional operational centres. It shall present the outlooks to the Electricity Coordination Group, which may give recommendations on the results, where appropriate.

3. The regional operational centres shall carry out week-ahead to intraday generation adequacy forecasts for their respective regions on the basis of the methodology adopted pursuant to Article 8.

# CHAPTER III
# RISK-PREPAREDNESS PLANS

*Article 10*

**Establishment of risk-preparedness plans**

1. On the basis of the regional and national electricity crisis scenarios identified pursuant to Articles 6 and 7, the competent authority of each Member State shall establish a risk-preparedness plan, after consulting the electricity and gas undertakings, the relevant organisations representing the interests of household and industrial electricity customers and the national regulatory authority (where it is not the competent authority).

2. The plan shall set out the measures planned or taken to prevent or mitigate the electricity crisis scenarios identified. It shall consist of national measures and regional measures.

3. The plan shall be developed in accordance with the template in the Annex. The Commission shall be empowered to adopt delegated acts in accordance with Article 19 to amend this template.

4. Before adopting a plan, the competent authority shall submit a draft to the competent authorities of the other Member States in the region concerned and the Electricity Coordination Group for consultation.

5. Within three months of the submission of the draft plan, the competent authorities of the other Member States in the region and the Electricity Coordination Group shall review it and may issue recommendations.

6. Within six months of submitting the draft plan the Member State in question shall adopt the plan, duly taking into account the results of the consultation and the recommendations of the other competent authorities and the Electricity Coordination Group. It shall send the plan to the Commission without delay.

7. The Member States shall make the plans public, while ensuring that the confidentiality of sensitive information is preserved, notably the information on measures relating to prevention and mitigation of malicious attacks.

8. Member States shall adopt and publish the first plan no later than two years after entry into force of this Regulation. They shall update them every three years, unless circumstances warrant more frequent updates.

*Article 11*

**Content of risk-preparedness plans as regards national measures**

1. Each plan shall set out all measures planned or taken to prevent and mitigate electricity crisis situations. It shall at least:

   (a) contain a summary of the electricity crisis scenario's defined for the relevant Member States and region, in accordance with the procedure in Articles 6 and 7;

(b) establish the role and responsibilities of the competent authority;

(c) describe the measures designed to prepare for and to prevent the rare and extreme risks listed in Article 5 (1);

(d) designate a national crisis manager or team and establish its tasks;

(e) establish detailed procedures to be followed in electricity crisis situations, including the corresponding schemes on information flows;

(f) identify the contribution of market-based measures in coping with electricity crisis situations;

(g) identify possible non-market measures to be implemented in electricity crisis situations, specifying the trigger, conditions and procedures for their implementation, and indicating how they comply with the requirements set out in Article 15;

(h) provide a detailed load shedding plan, stipulating when loads are to be shed, in what circumstances and what values of load are to be shed. This shall specify which categories of electricity users should receive special protection against disconnection, and justify the need for such protection, notably with regard to public safety and personal security;

(i) describe the mechanisms used to inform the public about any electricity crisis.

2. All measures set out in the plan shall be clearly defined, transparent, proportionate and non-discriminatory. They shall not endanger the security of electricity supply of other Member States or of the Union as a whole.

*Article 12*

**Content of risk-preparedness plans as regards regionally coordinated measures**

1. In addition to the measures listed in Article 11, the plan shall include measures to ensure that crisis situations with a cross-border impact are properly prevented and managed. These measures shall be agreed within the region in question and include at least:

(a) the designation of a regional crisis manager or team;

(b) mechanisms to share information and co-operate within a region;

(c) measures to mitigate the impact of a crisis including a simultaneous crisis situation. These shall include regional load-shedding plans and technical, legal and financial arrangements regarding mutual assistance to ensure that electricity can be delivered where it is most needed and in an optimal manner;

(d) any cost compensation schemes linked to the mutual assistance arrangements. Compensation scheme shall set out, *inter alia*, the trigger for the assistance, the calculation formula or amount, paying and receiving parties and arbitration rules;

(e) procedures for carrying out annual tests of the plans.

2. The regional measures to be included in the plan shall be agreed by the competent authorities of the Member States in the region in question. The competent authorities shall report to the Electricity Coordination Group on the agreements reached six months before the deadline for the adoption or the updating of the plan.

3. In cooperation with the regional operational centres and with the involvement of relevant stakeholders, the competent authorities of each region shall carry out annual crisis simulations, in particular testing the communication mechanisms referred to in point (b) in paragraph 1.

# CHAPTER IV
# MANAGING ELECTRICITY CRISIS SITUATIONS

*Article 13*

**Early warning and declaration of crisis**

1. Where a seasonal adequacy outlook or other source provides a specific, serious and reliable information that an event may occur that is likely to result in a significant deterioration of the electricity supply situation in a Member State, the competent authority of that Member State shall without undue delay give an early warning to the Commission and the Electricity Coordination Group. It shall provide information on the causes of the deterioration, planned measures to prevent an electricity crisis and the possible need for assistance from other Member States. The information shall include the possible impacts of the measures on the internal electricity market, including in other Member States.

2. When confronted with an electricity crisis situation, the competent authority of the Member State in question shall declare the electricity crisis and inform the competent authorities of the neighbouring Member States and the Commission without undue delay. It shall inform them of the reasons for declaring an electricity crisis, measures taken and planned to mitigate it and the possible need for assistance from other Member States.

3. Where a competent authority issues an early warning or declares an electricity crisis, the actions set out in the risk-preparedness plan shall be followed to the extent possible.

*Article 14*

**Cooperation and assistance**

1. Member States shall act and cooperate in a spirit of solidarity in order to pre-empt and manage electricity crisis situations, with a view to ensuring that electricity is delivered where it is most needed to protect public safety and personal security.

2. Where necessary and possible Member States shall offer each other assistance to prevent or mitigate an electricity crisis. Such assistance shall be subject to compensation.

*Article 15*

**Observance of market rules**

1. Measures planned and taken to prevent and mitigate electricity crisis situations shall comply with the rules governing the internal electricity market and system operation.

2. Non-market measures may be activated in a crisis situation and only if all options provided by the market have been exhausted. They shall not unduly distort competition and the effective functioning of the electricity market. They shall be necessary, proportionate, non-discriminatory and temporary.

3. Transaction curtailment including curtailment of already allocated cross-zonal capacity, limitation of provision of cross-zonal capacity for capacity allocation or limitation of provision of schedules can only be initiated in compliance with the rules laid down in *Article 13(5) of Electricity Regulation* [*revised Electricity Regulation*] and the rules adopted to specify this provision.

# CHAPTER V
# EVALUATION AND MONITORING

*Article 16*

**Ex-post evaluation**

1. As soon as possible and no later than six weeks after declaring an electricity crisis situation, the competent authorities in question shall provide the Electricity Coordination Group and the Commission with an evaluation report.

2. The report shall include at least:

   (a) a description of the event that triggered the crisis;

   (b) a description of measures taken and an assessment of their effectiveness

   (c) an assessment of the cross-border impact of the measures taken;

   (d) an account of assistance provided to or received from neighbouring Member States and non-EU countries;

   (e) possible improvements of the plan;

   (f) the economic impact of the electricity crisis and the impact of the measures taken on the electricity sector, in particular the volumes of energy non-served.

3. The competent authorities shall present the results of its evaluation to the Electricity Coordination Group.

*Article 17*

**Monitoring by the Electricity Coordination Group**

1. In addition to carrying out other specific tasks as set out in this Regulation, the Electricity Coordination Group shall review the performance of Member States in the area of security of electricity supply. In particular, it shall review:

(a) the Union wide resource adequacy assessments prepared by ENTSO-E, in particular taking into account the expected energy non served (EENS) and loss of load expectation (LOLE) for each Member State, as referred to in Article 4;

(b) the 10-year network development plan in electricity prepared by ENTSO-E;

(c) the results of seasonal outlooks referred to in Article 9;

(d) the results of ex-post evaluation report, as referred to in Article 16;

(e) the information received from the Member States according to Article 7 (3).

2. The Electricity Coordination Group may issue recommendations on the issues referred to in paragraph 1 if deemed necessary.

# CHAPTER VI
# FINAL PROVISIONS

*Article 18*

**Cooperation with the Energy Community Contracting Parties**

*1.* [*The second sentence of Article 3 (1), Article 11(2), 13(1) and (2), Article 14 and 15 shall create obligations for the Members States towards an Energy Community Contracting Party subject to the following procedure:*

*(a) the Ministerial Council of the Energy Community adopts and integrates this Regulation in the Energy Community by means of a Joint Act on security of supply introducing reciprocal obligations on the side of Energy Community Contracting Parties in the relations with the Member States,*

*(b) the Energy Community Contracting Party implements the Joint Act and duly notifies the full implementation to the Energy Community Secretariat, including a request for the application of this paragraph for its part and*

*(c) the Energy Community Secretariat notifies the implementation and a request to the Commission to confirm the applicability of reciprocal obligations between the requesting Energy Community Contracting Party and the Member States.*

*2. Following the notification of the Energy Community Secretariat, the Commission takes a decision confirming the applicability of reciprocal obligations between the Member States and the Energy Community Contracting Party in view of application of this paragraph, indicating the date as of which these mutual obligations apply.*

3. *After the Commission decision referred to in paragraph 1 is taken, the representatives of the Energy Community Contracting Party in question shall be invited to participate in the meetings of the Electricity Coordination Group when matters directly affecting this Contracting Party and falling within the scope of paragraph 1 are discussed.*]*[to be aligned with Gas SoS Regulation once stabilised*]

*Article 19*

**Exercise of delegation**

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.

2. The power to adopt delegated acts as referred to in Article 10(3) shall be conferred on the Commission for an indeterminate period of time from [*please insert the date of entry into force of this Regulation*].

3. The delegation of power referred to in Article 10(3) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect on the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016[32].

5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.

6. A delegated act adopted pursuant to Article 10(3) shall enter into force only if the European Parliament or the Council have expressed no objection within a period of two months of being notified of it or if, before expiry of that period, they have both informed the Commission that they will not object. That period may be extended by two months at the initiative of the European Parliament or the Council.

*Article 20*

**Repeal**

Directive 2005/89/EC is repealed.

*Article 21*

**Entry into force**

This Regulation shall enter into force on the 20th day following that of its publication in the *Official Journal of the European Union*.

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

Done at Brussels,

| | |
|---|---|
| *For the European Parliament* | *For the Council* |
| *The President* | *The President* |

[32] OJ L 123, 12.5.2016, p.1.