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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)

{SWD(2016) 410}

{SWD(2016) 411}

{SWD(2016) 412}

{SWD(2016) 413}

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons for and objectives of the proposal

The purpose of this proposed Regulation is to ensure that all Member States put in place appropriate tools to prevent, prepare 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, a fuel shortage) cannot be excluded. In addition, given that electricity systems are integrated, 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, preparing for 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:

- (a) Member States assess different risks;
- (b) Member States take different sets of measures to prevent and manage crisis situations, and that such measures are triggered at different moments in time¹;
- (c) roles and responsibilities differ; and that
- (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 of 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/EC² and 2009/72/EC³) only sets 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.

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 information-sharing and transparency; and

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).

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

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

The proposed Regulation complements the provisions of the Third Package⁴, which is revised in parallel. The revised Third Package will aim to improve the functioning of the internal electricity market, *inter alia* by allowing for more flexibility and by limiting the scope for subsidies for generation adequacy, including via a coordinated European long-term resource adequacy assessment. It will also aim to improve system security through better cooperation between TSOs at regional level via the creation of regional operational centres.

The proposed 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 by providing common methods for assessing risks, by bringing more comparability and transparency to the preparation phase and during an electricity crisis, and by ensuring that even in the crisis electricity is delivered where it is needed most. It also provides a framework for a 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 proposed 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 Directive⁵.

Network codes and guidelines adopted pursuant to Article 6 of Regulation (EC) No 714/2009⁶ set out harmonised principles for operational planning and scheduling processes required to anticipate real-time 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.

The proposed 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 security, including in emergency situations. Those rules should allow TSOs to deal effectively with most incidents, but they do not in themselves guarantee that Member

⁴ The Third Package in electricity 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, 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 Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators.

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).

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 [...]).

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 proposed 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 as a matter of priority through a network code as foreseen in the revised Electricity Regulation, which will take account of new risks resulting from the digitalisation of energy systems. The proposed 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 risk-preparedness plans. The proposed Regulation complements also Council Directive 2008/114/EC¹⁰, which established a common procedure for identifying European critical infrastructures ('ECIs') such as e.g. infrastructures and facilities for generation and transmission and for protecting them against terrorist attacks and other physical risks. The proposed Regulation focuses more broadly on how to secure the resilience of the electricity system as a whole and how to manage crisis situations when they occur.

- **Consistency with other Union policies**

The proposed 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.

The proposed Regulation is also consistent with the Union's goal to strengthen the Energy Community. As electricity crisis situations might extend beyond the Union borders and comprise also Energy Community countries, the Union should closely cooperate with the Energy Community Contracting Parties when preventing, preparing for and handling an electricity crisis in order to ensure an efficient crisis management within the larger European territory.

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

- **Legal basis**

The proposed 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' policy-making on security of supply is necessary to ensure the functioning of the energy market and security of supply in the Union.

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

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).

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 exploited¹¹ and this is detrimental to EU consumers.

- **Proportionality**

The proposed Regulation is designed to achieve an adequate level of preparedness across Europe, enhance trust and co-operation amongst Member States, and mitigate the impact on customers in the event of such a crisis. To meet this objective, it offers common rules and principles to be respected, as well as mechanisms for cross-border co-operation. .

The proposal does not involve full harmonisation, with all measures being prescribed at EU level however.

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**

The 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 a 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

¹¹ Existing EU macro-regional strategies and the European Territorial Cooperation enhance regional cooperation among Member States, however, this regional cooperation does not encompass preventing and managing of electricity crisis situations.

overtaken by subsequent legislation (notably the Third Package and the TEN-E Regulation¹²); on the other hand there are still regulatory gaps, notably when it comes to preventing and managing crisis situations;

- intervention under the Directive is no longer relevant, as its provisions are no longer in tune with the challenges relating to security of supply we face today. As electricity systems are increasingly interlinked, purely national approaches 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 standards.

- **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 website¹³. The various opinions were reflected in the impact assessment.

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

- **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 supply¹⁴ 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 4 November 2016.

The impact assessment looked at four policy options:

¹² 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).

¹³ <https://ec.europa.eu/energy/en/consultations/public-consultation-risk-preparedness-area-security-electricity-supply>

¹⁴ <https://ec.europa.eu/energy/sites/ener/files/documents/DG%20ENER%20Risk%20preparedness%20final%20report%20May2016.pdf>

- 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.

Option 1 seeks to establish a greater comparability and transparency across Member States in the area of risk preparedness, but does not cater for the need to enhance cross-border co-operation.

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.

The preferred option is option 2.

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 simulations¹⁵ show that well-integrated markets and regional coordination during periods of extreme weather conditions are crucial in addressing the hours of system stress (high demand) and minimising the probability of interruption of electricity supply.

Most importantly, a national-level approach 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 measured through the security of supply indicator "expected energy non-served" (EENS) which is the electricity non-supplied to consumers due to a black out expressed as percentage of annual demand. When cooperation takes place among Member States the percentage of electricity non-served significantly decreases (EENS goes from a value of 0.36% in a scenario of non-cooperation to 0.02% when regional cooperation takes place).

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 12.5-40 billion in the period to 2030). However, this amount would be reduced by EUR 3-7.5 billion if Member States 'go alone' in pursuing security of electricity supply objectives¹⁶.

¹⁵ Artelys (2016): *Study S16: Analysis revenue related risks for power producers*. Artelys (2016): *Study S4: Generation and System Adequacy Analysis*.

¹⁶ *Benefits of an integrated European energy market* (2013), BOOZ&CO.

2. *Who would be affected and how?*

Option 2 will have a positive effect on society at large and on electricity consumers in particular, since it helps prevent crisis situations and unnecessary and disproportionate 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 risk-preparedness plans (see the assessment of impacts on public authorities below).

- **Regulatory fitness and simplification**

The proposal might increase administrative burdens, but only to a limited extent. In particular, national authorities will have to pre-agree on part of their risk-preparedness 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' administrations would be limited and clearly offset by the practical benefits of such cooperation¹⁷.

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 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 only budgetary impact associated to this proposal concerns the resources of the Agency for the Cooperation of Energy Regulators (ACER). This impact is described in the Legislative Financial Statement accompanying the parallel Commission proposal for a recast of the Regulation establishing ACER.

¹⁷ 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).

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 risk-preparedness 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:
 - 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 risk-preparedness plan;
 - Member States must draw up risk-preparedness plans, after consulting stakeholders, in order to ensure maximum preparedness for electricity crisis situations and an effective management of such situations should they occur. The plans should be developed on the basis of electricity crisis scenarios identified by ENTSO-E and Member States, respectively, and set out the measures planned or taken to prevent and mitigate the scenarios;
 - Before adopting a plan, the competent authority should submit a draft to the competent authorities in the region and to the Electricity Coordination Group for consultation. After consultation, 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. Non-market-based 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 security criterion¹⁸;
 - (c) consequential hazards such as fuel shortages; and
 - (d) malicious attacks;
 - For the preparation of the risk-preparedness 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, namely seasonal adequacy as well as week-ahead to intraday generation adequacy forecasts. Once this has been approved by ACER, it should be used by Member States and ENTSO-E in their short-term assessments. The short-term adequacy assessment proposed complements the long-term resource adequacy assessment proposed in the revised Electricity Regulation, which ensures a coordinated European adequacy assessment to assess the need for capacity mechanisms.
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;
 - The proposal involves systematic monitoring via the Electricity Coordination Group, of security of supply in the EU.

¹⁸ According to the "Guideline on electricity transmission system operation", '(N-1) criterion' means the rule according to which the elements remaining in operation within a TSO's control area after occurrence of a contingency are capable of accommodating the new operational situation without violating operational security limits.

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(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 Committee¹⁹,

Having regard to the opinion of the Committee of the Regions²⁰,

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 proposed Electricity Directive and Electricity Regulation*] 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) 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, such as a cold spell, a heat wave or a cyber-attack, 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 cooperate effectively across borders in a spirit of transparency and solidarity.
- (4) Directive 2005/89/EC of the European Parliament and of the Council²¹ sets out the necessary measures that the Member States should take in order to ensure security of

¹⁹ OJ C , , p. .

²⁰ OJ C , , p. .

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 cooperate to guarantee system stability²² and as regards the need to ensure that appropriate infrastructure is in place.²³ This Regulation addresses the specific issue of crisis prevention and management in the electricity sector.

- (5) The System operation guidelines²⁴ and the Network code on emergency and restoration²⁵ constitute a detailed rulebook governing how transmission system operators and other relevant actors should act and cooperate to ensure system security. 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, prepare for 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 cooperate 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)²⁶ provides general rules, while specific rules on cybersecurity will be developed through a network code as foreseen in the [*proposed Electricity Regulation*]. This Regulation complements the NIS Directive ensuring that cyber-incident are 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/EC²⁷ 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.

²¹ 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).

²² Reference to the revised Third Package

²³ 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.

²⁴ Commission Regulation (EU) .../...of XXX establishing a guideline on electricity transmission system operation, OJ [...]

²⁵ Commission Regulation (EU) .../...of XXX establishing a network code on electricity emergency and restoration, OJ [...].

²⁶ 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.

²⁷ 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).

- (9) Decision No 1313/2013/EU²⁸ of the European Parliament and of the Council on a Union Civil Protection Mechanism sets out requirements for Member States to develop risk assessments at national or appropriate sub-national level every three years, and to develop and refine disaster risk management planning. The specific risk prevention, preparedness and planning actions in this Regulation should be coherent with the wider, multi-hazard national risk assessments required under Decision No 1313/2013/EU.
- (10) 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.
- (11) 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. The Regulation identifies two indicators to monitor the security of electricity supply in the Union: 'expected energy non served' (EENS), expressed in GWh/year, and 'loss of load expectation' (LOLE), expressed in hours/year. These indicators are part of the European resource adequacy assessment carried out by the European Network of Transmission System Operators for Electricity (ENTSO-E), pursuant to [*Article 19 of the proposed Electricity Regulation*]. The Electricity Coordination Group shall carry out regular monitoring of the security of supply based on the results of these indicators. The Agency for the Cooperation of Energy Regulators (Agency) should also use these indicators, when reporting on Member States' performance in the area of security of supply in its annual electricity market monitoring reports, pursuant to [*Article 16 of the proposed ACER Regulation*].
- (12) To ensure the coherence of risk assessments that builds 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.
- (13) On the basis of this common methodology, ENTSO-E should regularly draw up and update regional crisis scenarios and identify the most relevant risks for each region such as extreme weather conditions, natural disasters, fuel shortages or malicious attacks. When considering the crisis scenario of gas fuel shortage, the risk of gas supply disruption should be assessed based on the gas supply and infrastructure disruption scenarios developed by the European Network of Transmission System Operators for Gas pursuant to *Article 6.6 of the Gas Security of Supply Regulation [proposed Gas Security of Supply Regulation]*. Member States should establish and update their national crisis scenarios on this basis, 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.

²⁸ Decision No 1313/2013/EU of the European Parliament and of the Council of 17 December 2013 on a Union Civil Protection Mechanism (OJ L 347, 20.12.2013, p 24).

- (14) 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 cooperate in a regional context.
- (15) As stated in the [*proposed 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 cooperation with relevant national authorities with a view to preventing and mitigating larger-scale incidents, the regional cooperation 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.
- (16) The [*proposed Electricity Regulation*] prescribes the use of a common methodology for the medium to long-term European resource adequacy assessment (from 10 year-ahead to year ahead), with a view to ensuring that Member States' decisions as to possible investment needs are made on a transparent and commonly agreed basis. This assessment has a different purpose than the short-term adequacy assessments which are used to detect possible adequacy related problems in short time-frames, namely seasonal outlooks (six months ahead) and week-ahead to intraday adequacy assessments. Regarding short-term assessments, there is a need for a common approach to the way possible adequacy-related problems are detected. The ENTSO-E is to issue 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.
- (17) 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, namely the week-ahead to intraday generation adequacy forecasts provided for in Commission Regulation on establishing a guideline on electricity transmission system operation.
- (18) 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.
- (19) Plans should consist of two parts, setting out national measures and regional measures agreed between the Member States in the region. Regional measures are necessary especially in the event of a simultaneous 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 regional measures agreed 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.

- (20) 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.
- (21) 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.
- (22) 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. Where this assistance goes beyond electricity security of supply, the Union Civil Protection Mechanism shall remain the applicable legislative framework.
- (23) 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, information on the causes of the deterioration, the planned measures to prevent an electricity crisis and the possible need for assistance from other Member States.
- (24) 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 a 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.
- (25) This Regulation should enable electricity undertakings and customers to rely on market mechanisms as laid down in [*proposed Electricity Directive and Electricity Regulation*] for as long as possible when coping with electricity crisis situations. 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 demand disconnection, 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. Therefore forced demand disconnection 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.

- (26) 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, thereby duly associating its national regulatory authority. Such evaluation should take into account, *inter alia*, the effectiveness and proportionality of the measures taken as well as their economic cost. It should also cover cross-border considerations such as the impact of the measures on other Member States and the level of assistance received from them.
- (27) The transparency obligations should ensure that all measures taken to prevent or manage crisis situations respect internal market rules and are in line with the principles of co-operation and solidarity which underpin the Energy Union.
- (28) 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.²⁹ 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.
- (29) 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 closely cooperate with the Energy Community Contracting Parties when preventing, preparing for and handling an electricity crisis.
- (30) 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.
- (31) 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.
- (32) Directive 2005/89/EC should be repealed,

²⁹ Commission Decision of 15 November 2012 setting up the Electricity Coordination Group (2012/C 353/02), OJ C 353, 17.11.2012, p. 2.

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 Article 2 of the Electricity Directive [proposed Electricity Directive] and Article 2 of the Electricity Regulation [proposed Electricity Regulation] 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 performance;
 - (b) 'electricity crisis' means a situation of significant electricity shortage or impossibility to deliver electricity to end-consumers, 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 a contact point and coordinating the information flow during an electricity crisis;
 - (e) 'non-market measure' means any supply- or demand-side measure deviating from 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 *Article 33 of the Electricity Regulation [proposed Electricity Regulation]*.

Article 3

Competent authority

1. As soon as possible and by [*OPOCE to insert exact date: three months after entry into force of this Regulation*] at the latest, 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

RISK ASSESSMENT

Article 4

Security of supply assessments

Member States shall ensure that all risks relating to security of electricity supply are assessed in accordance with the rules set out in this Regulation and *Article 18 of the Electricity Regulation [proposed Electricity Regulation]*. To this end, they shall cooperate with ENTSO-E and the regional operational centres.

Article 5

Methodology for identifying electricity crisis scenarios at a regional level

1. By [*OPOCE to insert exact date: two months after entry into force of this Regulation*], ENTSO-E shall submit to the Agency a proposal for a methodology for identifying the most relevant electricity crisis scenarios in a regional context.
2. 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 the N-1 security criterion;
 - (c) consequential hazards including fuel shortages;
 - (d) malicious attacks.
3. 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 in the context of identifying the risks pursuant paragraph 2(c), ENTSO-E shall use the gas supply and infrastructure disruption scenarios developed by the European Network of Transmission System Operators for Gas pursuant to *Art. 6.6 of the Gas Security of Supply Regulation [proposed Gas Security of Supply Regulation]*.

4. Before submitting the proposed methodology, ENTSO-E shall conduct a consultation exercise involving at least the industry and consumer organisations, distribution system operators, national regulatory authorities and other national authorities. ENTSO-E shall duly take into account the results of the consultation.
5. Within two months of receiving the proposed methodology, the Agency shall either approve the proposal or amend it. In the latter case, it shall consult ENTSO-E before adopting the amended version and publish it on its website.
6. ENTSO-E shall update and improve the methodology regularly in accordance with paragraphs 1 to 5. The Agency or the Commission may request such updates and improvements with due justification. Within six months from the request, ENTSO-E shall submit to the Agency a draft of the proposed changes. Within a period of two

months of receiving the draft, the Agency shall amend or approve the changes and publish it on its website.

Article 6

Identification of electricity crisis scenarios at a regional level

1. By [*OPOCE to insert exact date: ten months after entry into force of this Regulation*] and on the basis of the methodology adopted pursuant to Article 5, ENTSO-E shall identify the most relevant electricity crisis scenarios 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 at national level

1. By [*OPOCE to insert exact date: ten months after entry into force of this Regulation*], Member States shall identify the most relevant electricity crisis scenarios at the national level.
2. The crisis scenarios shall be identified on the basis of at least the risks referred to in Article 5(2) 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. By [*OPOCE to insert exact date: ten months after 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. By [*OPOCE to insert exact date: two months after entry into force of this Regulation*], ENTSO-E shall submit to the Agency a proposal for a methodology for assessing short-term adequacy, namely seasonal adequacy as well as week-ahead to intraday adequacy, which shall cover at least the following:
 - (a) the uncertainty of inputs such as the probability of a transmission capacity outage, the probability of an unplanned outage of power plants, severe weather conditions, variability of demand and variability of energy production from renewable energy sources;
 - (b) the probability of the occurrence of a critical situation;
 - (c) the probability of the occurrence of a simultaneous crisis situation.

The methodology shall provide for 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 involving at least the industry and consumer, distribution system operators, 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 the proposal or amend it. In the latter case, it shall consult 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. Within six months from the request, ENTSO-E shall submit to the Agency a draft of the proposed changes. Within a period of two months of receiving the draft, the Agency shall amend or approve the changes and publish it on its website.

Article 9

Short-term adequacy assessments

1. All short-term adequacy assessments shall be carried out according to the methodology developed pursuant to Article 8.
2. 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 adequacy assessments 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 consist of national measures and regional measures as defined in Articles 11 and 12. Without prejudice to Article 15, all measures planned or taken to prevent, prepare for and mitigate electricity crisis situations shall fully comply with

the rules governing the internal electricity market and system operation. They shall be clearly defined, transparent, proportionate and non-discriminatory.

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 competent authorities of other Member States and the Electricity Coordination Group. It shall submit the adopted plan to the Electricity Coordination Group without delay.
7. The Member States shall make the plans public, while ensuring that the confidentiality of sensitive information is preserved, notably information on measures relating to the prevention and mitigation of malicious attacks.
8. Member States shall adopt and publish the first plan by [*OPOCE to insert exact date: two years after entry into force of this Regulation*] at the latest. 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, prepare for and mitigate electricity crisis situations as identified pursuant to Articles 6 and 7. 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 risks identified pursuant to Articles 6 and 7;
 - (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. The plan shall specify which categories of electricity users are to 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 national measures shall take full account of the regional measures agreed according to Article 12 and 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 of each Member State shall include regional measures to ensure that crisis situations with a cross-border impact are properly prevented and managed. These measures shall be agreed within the region concerned and include at least:
- (a) the designation of a regional crisis manager or team;
 - (b) mechanisms to share information and cooperate 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. Such arrangements shall set out, *inter alia*, the trigger for the assistance, the calculation formula or amount, paying and receiving parties and arbitration rules;
 - (d) 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 concerned. At least eight months before the deadline for the adoption or the updating of the plan, the competent authorities shall report on the agreements reached to the Electricity Coordination Group. If the competent authorities concerned were not able to reach an agreement, they shall inform the Commission of the reasons for such disagreement. In such case the Commission may request the Agency to facilitate the conclusion of an agreement in consultation with ENTSO-E.
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) of 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, on measures taken or planned to prevent an electricity crisis and on 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. In cases where the information provided is deemed insufficient, the Commission may request the Member State concerned to provide additional information.
4. 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 fullest possible extent.

Article 14

Cooperation and assistance

1. Member States shall act and cooperate in a spirit of solidarity in order to prevent and manage electricity crisis situations, with a view to ensuring that electricity is delivered where it is most needed with a view to protecting 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 taken to prevent or 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 shall only be initiated in compliance with the rules laid down in *Article 14(2) of Electricity Regulation [proposed 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 concerned, in consultation with their national regulatory authority (where it is not the competent authority) 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 preventive, preparatory and mitigating measures taken and an assessment of their proportionality and effectiveness;
 - (c) an assessment of the cross-border impact of the measures taken;
 - (d) an account of the assistance provided to or received from neighbouring Member States and non-EU countries;
 - (e) 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 and the level of manual demand disconnection (including a comparison between the level of voluntary and forced demand disconnection);
 - (f) any possible improvements or proposed improvements to the risk-preparedness plan.
3. In cases where the information provided in the report is deemed insufficient the Electricity Coordination Group and the Commission may request the Member State concerned to provide additional information.
4. The competent authorities concerned shall present the results of the 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 discuss and review:
 - (a) the results of the 10-year network development plan in electricity prepared by ENTSO-E;
 - (b) the coherence of the risk-preparedness plans, adopted by the Member States following the procedure referred to in Article 10;

- (c) the results of the European resource adequacy assessments prepared by ENTSO-E as referred to in *Article 19 (3) of the Electricity Regulation [proposed Electricity Regulation]*;
 - (d) the performance of Member States in the area of security of supply taking into account at least the indicators calculated in the European resource adequacy assessment, namely the expected energy non served (EENS) and loss of load expectation (LOLE);
 - (e) the results of seasonal outlooks referred to in Article 9;
 - (f) the information received from the Member States according to Article 7 (3);
 - (g) the results of ex-post evaluation reports, as referred to in Article 16.
2. The Electricity Coordination Group may issue recommendations to the Member States related to the matters referred to in paragraph 1, which the Member States concerned shall take into utmost account.

CHAPTER VI

FINAL PROVISIONS

Article 18

Cooperation with the Energy Community Contracting Parties

Member States and the Energy Community Contracting Parties are invited to closely cooperate in the process of the identification of electricity crisis scenarios and the establishment of risk-preparedness plans so that no measures are taken that endanger the security of supply of Member States, Contracting Parties or the Union. In this respect, Energy Community Contracting Parties may participate in the Electricity Coordination Group upon invitation by the Commission with regard to all matters by which they are concerned.

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 [*OPOCE to 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 2016³⁰.

³⁰ OJ L 123, 12.5.2016, p.1.

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 no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament or the Council or if, before the expiry of that period, the European Parliament or the Council have both informed the Commission that they will not object. That period shall 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 twentieth 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
The President

For the Council
The President