European Commission

INCEPTION IMPACT ASSESSMENT			
TITLE OF THE INITIATIVE	Initiative to improve the security of electricity supply		
LEAD DG – RESPONSIBLE UNIT – AP NUMBER	DG ENER - B4 - AP 2016/ENER/026	**DATE OF ROADMAP**	10/2015
LIKELY TYPE OF INITIATIVE	Review of Directive 2005/89/EC on the security of electricity supply		
ADDITIONAL INFORMATION	*http://ec.europa.eu/energy/en*		

This Inception Impact Assessment is provided for information purposes only and can be subject to change. It does not prejudge the final decision of the Commission on whether this initiative will be pursued or on its final content and structure.

A. Context, Subsidiarity Check and Objectives

Context

Better energy security, based on solidarity and trust, is the first dimension of the Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy (COM(2015)80).

As the Energy Union Strategy points out, different, often un-coordinated national frameworks for electricity security of supply can lead to distortions and inefficiencies in the electricity internal market. This is particularly relevant given the work to improve the electricity market design to make it suitable for the energy transition. This work could include changes to the role of network operators and the adaptation of the regulatory framework to make it suitable for the energy transition.

The Strategy also emphasises that Member States should coordinate and cooperate with their neighbours when developing their energy policies. The Energy Union Strategy therefore announces a new legislative framework on electricity security of supply to be adopted in 2016. This call was endorsed by the European Council in March 2015.

This initiative will be very closely linked to the initiative to improve the electricity market design, and is part of a larger set of initiatives, including the revision of Energy Efficiency legislation and Renewables Directive 2009/28/EC, as well as Energy Union governance.

Issue

Directive 2005/89/EC created a general framework on security of supply. The Third Energy Package (Directive 2009/72/EC and Regulation 714/2009/EC) developed this further, in particular as regards the role of transmission system operators (TSOs), the creation of ENTSO-E as well as the development of network codes and guidelines to harmonise standards and operating procedures, including as regards operational security. However Member States are free to define their own security of supply standards and frameworks.

In 2010, the Commission conducted an evaluation of Directive 2005/89/EC, which led to the publication of an implementation report (COM(2010)330 final). Whilst the evaluation showed that Member States had properly implemented the Directive, it also pointed at clear gaps in the current legal framework, which allows different and uncoordinated national policy approaches to persist and fails to secure a minimum level of co-operation and co-ordination.

The upcoming electricity market design initiative will change how the electricity market is organised in order make it suitable for the transformed electricity system. It is important to ensure that the overall security of supply framework is kept well aligned to these arrangements and fit to meet the challenge of the transformation of the electricity system, which is creating new concerns related to security of supply.

In particular, the security of supply framework needs to be adapted to electricity systems which are:

- increasingly inter-linked across borders,
- with increasingly decentralised operations,
- with higher shares of variable generation,

- and facing new risks, such as risks related to cyberattacks.

Complementing electricity market design, the electricity security of supply framework should be adapted to address the following shortcomings:

1) **Different national rules and procedures hamper security of supply**

Currently Member States define risks, decide what levels of risks are acceptable, how to assess and mitigate risks and what to do in situations of emergency. A particular example of divergent approaches is where conditions for suspending normal market and system operation activities differ between Member States

With markets and systems increasingly integrated,

- divergent national actions to address security of supply creates a risk of contradictory or counterproductive actions being taken at national level, which may actually increase security of supply risks and/or undermine the proper functioning of the market;
- Where risks materialise in a cross-border context, purely national responses might lead to inadequate, inefficient, or too costly solutions;
- Under-protection in some Member States could have spill-over effects elsewhere;
- Purely national responses also risk undermining the spirit of solidarity on which the Energy Union is founded.

2) **Insufficient cross-border co-operation and joined-up action by national authorities hampers security of supply**

Today's EU legislation assigns broad responsibilities for ensuring security of supply to Member States. There are only very limited rules or mechanisms ensuring co-ordination and co-operation between national governments and other relevant authorities in a cross-border context in relation to the steps they take to safeguard security of electricity supply.

Regional co-operation (e.g., within the context of initiatives such as the Pentalateral Forum[1]), is voluntary and is limited in scope. The Electricity Co-ordination Group offers a forum for debate, but performs an advisory role only.

The absence of clear roles and responsibilities of national authorities and other relevant authorities risks resulting in non-transparent decision-making and hampering effective cross-border co-operation.

The initiative will seek to address the aforementioned shortcomings. To this end, it will seek to encompass both short-term security of supply issues (prevention of black-outs and other system failures) as well as longer-term concerns related to adequacy (by looking e.g., at the way assessments are conducted to analyse whether sufficient generation capacity is maintained).

Subsidiarity check

The planned measures are to be adopted on the basis of Article 194 (2) TFEU together with Article 114 (1) TFEU. In the field of energy, the European Union has a shared competence pursuant to Article 4 (2) (i) TFEU. This competence has already been used within the so-called first, second and third energy packages and the existing security of supply measures. The issues to be addressed in the present initiative also have as their objective to enhance the functioning of the internal market for electricity and ensuring electricity security of supply in the meaning of Article 194(2) and Article 114 (1).

The objectives of this initiative cannot be achieved at the national level. The main aim is to achieve a more co-ordinated policy response to security of supply, with the view to overcoming the distortive effects of current, fragmented policy initiatives. Such co-ordinated approach cannot be achieved at the national level alone but requires action at the EU level.

Main policy objectives

The main objective is to better align national policies relating to security of electricity supply and create a framework for cross-border co-operation, with a view to improving security of electricity supply across Europe whilst achieving better functioning markets. This will complement the initiative to improve the electricity market design.

[1] The Pentalateral Energy Forum is the framework for regional cooperation in Central Western Europe (BENELUX-DE-FR-AT-CH).

Today, there is wide variety of national standards, policies, rules, procedures. Member States still see security of supply as a matter of national competence, not as a shared responsibility. Given that electricity systems are increasingly interlinked, a more joined-up approach to electricity is expected to lead to:

- Higher level of overall security of supply (better preparedness for risks, better means to respond to crisis situations) at a lower cost (e.g., analysis indicates that risks linked to variable generation tend to flatten out if analysed in a larger, cross-border regional context);
- Better functioning markets, with less distortion (which can flow from national, unilateral responses to risks);
- Enhanced regional co-operation among Member States in the area of electricity security of supply based on existing and the creation of new fora (close link with the Energy Union governance system);
- More solidarity (avoid 'over-protection' of some MS to the detriment of others);
- More transparency & accountability.

B. Option Mapping

To address the issues set out above, and as a preliminary matter, we intend to analyse the following options:

Option 1 – No further action;

Option 2 – Take 'soft' (non-legislative) measures to improve security of supply (e.g., sharing of best practice), combined with targeted enforcement action (against national measures which are clearly discriminatory);

Option 3 - Adopt legislation coordinating national rules and requirements relating to security of supply;

Option 4 - Adopt legislation coordinating national rules and requirements (see above) and, in addition, providing a framework for a more structured co-operation at a regional and/or EU level.

The options are further analysed below.

Baseline scenario – no EU policy change

Option 1 – No further action

Under the baseline scenario, no new EU framework governing security of supply will be developed. This means that the current state of national, un-coordinated rules and approaches to security of supply policies would be continued. The impact of the base-line option will be considered. First evaluations and studies already indicate however that the baseline scenario may lead to suboptimal results as regards security of supply (less security, less cost-effective solutions) and can have a negative effect on the internal energy market and the energy union as a whole, in particular given the open-ended nature of this Directive.

Options of improving implementation and enforcement of existing legislation or doing less/simplifying existing legislation

Option 2 – Take 'soft' (non-legislative) measures to improve security of supply (e.g., sharing of best practice)

Whilst more effective and regular co-operation within the current set-up (e.g., through a more regular exchange of best practices), might entail some positive effects, that may not on their own suffice to address the issues reflected above.

Doing less / simplifying existing legislation does not appear to be a valid option either, given that the current EU framework leaves responsibility almost entirely with the Member States.

Alternative policy approaches

Option 3 - **Adopt legislation coordinating national rules and requirements relating to security of supply**

Under this option, we will explore the benefits and drawbacks of defining (minimum) rules and standards at the EU level. At this stage, the following elements could be considered (this list is indicative only and not exhaustive):

- An EU-level definition of categories of risks;
- More co-ordination at the EU-level of standards of acceptable risks, e.g., through the introduction of a range of acceptable risks to be chosen / implemented at the national level;

- Development of a common approach to the way risks are assessed;
- Specific EU rules on how to address risks relating to cybersecurity;
- EU rules clarifying the roles and responsibilities of all relevant players as regards electricity SoS (e.g., clarifying the roles of DSO's, creating one national competent authority) and ensuring that in a cross-border context responsibilities do not stop at the national borders (which is the case currently for TSO's);
- EU rules imposing an obligation to draw up risk preparedness plans (which identify measures to mitigate risks and to deal with emergency situations);
- EU rules securing a more transparent and harmonised response in situations of emergency (e.g., through more harmonised conditions for the suspension of market activities).

Option 4 - Adopt legislation coordinating national rules and requirements (see above) and, in addition, providing a framework for a more structured co-operation at a regional and/or EU level.

Under this option, we will consider legislation including the elements developed under (iii), but combined with tools for a stronger co-operation at the regional or EU level.

Such additional rules could include:

- An obligation to assess risks at a regional level (e.g., to carry out adequacy assessments at a regional level);
- An obligation to draw up risk preparedness plans in a regional context (for instance, regional plans, or national plans with a mandatory peer review in a regional context, etc);
- A stronger mandate for the electricity co-ordination group (e.g., peer review);
- Possible IT solutions to facilitate co-operation amongst relevant authorities.

The development of these options will also take account of / have an impact on the emergent network code on emergency and restoration.

Governance aspects have to be looked at in the context of implementing a cost-effective and coherent delivery of climate and energy objectives including the targets for energy efficiency, greenhouse gas emission reduction and the share of renewable energy. This will be done in the context of streamlining the reporting and monitoring obligations within the Energy Union governance initiative.

Alternative policy instruments

As an alternative to the aforementioned legislative options, **non-legislative options** will be considered.

One option is to further foster the exchange of best practice (e.g., within the Electricity Coordination Group or through the creation of new cooperation fora) as well as to further support voluntary co-operation.

Given that electricity networks are interlinked and that measures taken in one Member State can have cross-border impacts, some Member States already cooperate on security of supply questions[2]. However, cross-border cooperation is voluntary only, and takes place in a very limited part of Europe.

It should be noted that 'soft' options will be explored not only as an alternative to legislation, but also as a possible complement thereto.

Alternative/differentiated scope

Cross-border cooperation already exists between the TSOs and will be further strengthened via the Network Codes. Improved TSO co-operation might not, however, on its own lead to better security of supply. Co-operation between all relevant players should be reinforced.

Options that take account of new technological developments

The options described above will take account of new technological developments, particularly ones which could facilitate cross-border coordination as well as the ones related to the further development of smart grids and smart metering solutions, which will facilitate integration of demand side resources.

[2] Within the Pentalateral Energy Forum which is the framework for regional cooperation in Central Western Europe (BENELUX-DE-FR-AT-CH).

We will also consider the use of IT tools to foster better co-operation amongst relevant players.

Preliminary proportionality check

An EU legislative framework for the security of electricity supply is a proportionate response to the objective to achieve a high level of security of electricity supply, enabling for the most cost-efficient operation of the electricity system at all times. It does not go beyond what is necessary to achieve this objective. Important national prerogatives, such as the Member State's right to determine the conditions for exploiting their energy resources, their choice between different energy sources and the general structure of their energy supply, remain untouched.

C. Data Collection and Better Regulation Instruments

Data collection

Usage will be made of existing and projected econometric tools, existing and projected studies, and other data available inside and outside the Commission.

Existing and projected studies contracted by the Commission:

- "Identification of appropriate generation and system adequacy standards for the internal electricity market". (ENER/B2/FV2014-501/SI2.691913). Interim report submitted in June 2015
- "Review of current national rules and practices relating to risk preparedness in the area security of electricity supply ("Risk preparedness fact finding study")". To be launched in Autumn 2015.

Econometric tool contracted by the Commission:

- METIS (Markets for Energy and Technology Integrated Systems) modelling and software tool[3]

Other relevant studies (non-exhaustive list):

- Prognos Study: "Security of supply: a pan-European approach". July 2015
- Pentalateral Energy Forum: "Generation Adequacy Assessment" (March 2015)
- ENTSO-E publications (e.g. Scenario Outlook & Adequacy Forecast, Summer/Winter Supply Outlooks, document on "Current practices in Europe on Emergency and Restoration")
- Council of European Energy Regulators (CEER): "Assessment of electricity generation adequacy in European countries" (Ref: C13-ESS-32-03 – March 2014)

Consultation approach

A wide stakeholder consultation was launched on 15 July 2015 through the Communication on a new energy market design, as complemented by the consultation paper on risk preparedness in the area of security of supply.[4]

Stakeholder engagement is planned in H2 2015 and beyond, including through existing fora (e.g., the Florence Forum).

Targeted discussions with Member States will also take place in the framework of the Electricity Coordination Group in Q3 2015 and over the course 2016.

Will an Implementation plan be established?

■ **Yes** ☐ **No**

D. Information on the Impact Assessment Process

The work on the impact assessment has started.

[3] focusing on highly disaggregated energy systems, and the development of a short-to-medium term of EU electricity, gas, heat, energy demand, and capacity expansion and investment.

[4] See the "Consultation on a new Energy Market Design" on the EUROPA site at: http://ec.europa.eu/energy/en/consultations/public-consultation-new-energy-market-design

The initiative will be guided by the already existing Inter-service group on Energy market design comprising: the Legal Service, the Secretariat-general, DG Budget, DG Agriculture and Rural development, DG Climate action, DG Communications Networks, Content and Technology, DG Competition, DG Economic and Financial Affairs, DG Employment, Social affairs and Inclusion, DG Energy, DG Environment, DG Financial stability, Financial services and Capital markets, DG Internal market, Industry, Entrepreneurship and SMEs, the Joint Research Centre, DG Justice and Consumers, DG Mobility and Transport, DG Regional and urban development, DG Research and innovation, DG Taxation and Customs Union.

Impact assessment preparations for this initiative and for the aforementioned renewable energy, electricity market design and energy efficiency initiatives (see point A.) will be closely integrated to ensure consistent coverage of the post-2020 period from these different interrelated angles.

E. Preliminary Assessment of Expected Impacts

Likely economic impacts

Expected impacts should be positive: through a more co-ordinated and more transparent approach to security of supply, the Union and Member States should be able to achieve a high level of protection throughout the EU, at a lesser cost (synergies in a cross-border context will be fully exploited, solutions proposed will be more in line with the needs of neighbours and the internal market in general, thus creating less distortions of competition).

Likely social impacts

Security of electricity supply is of central concern to all people and businesses in Europe. A high level of security of supply, at a lesser cost and with an increased solidarity across Member States, is likely to have broad positive social effects.

Likely environmental impacts

No immediate environmental impacts are foreseen. However, the creation of a pan-European framework for responding to security of supply risks is expected to

- Facilitate the integration of renewable energy sources into the electricity system
- reduce current practices whereby (some) Member States continue promote the use of carbon-intensive electricity sources as a response to possible risks of scarcity.

Likely impacts on simplification and/or administrative burden

A more co-ordinated and more transparent approach, with clearer roles and responsibilities, is likely to lead to more efficiency and therefore reduce administrative burden. The use of IT tools to facilitate exchanges of information and co-operation should reinforce this positive effect.

Likely impacts on SMEs

Positive: SMEs as energy consumers will overall be better protected against security risks, and SMEs that produce energy should be better able to compete in a better organised internal electricity market.

Likely impacts on competitiveness and innovation

No direct effect, but fostering a pan-European approach to electricity security of supply, will reduce current tendencies at the national level to continue to use outdated technologies to respond to risks of scarcity.

Likely impacts on public administrations

Public administrations will have to develop more transparent, more joined-up approaches to security of supply, in co-operation with administrations of other Member States. We intend to intensively work via the Electricity Co-ordination Group to help facilitate this transition, which overtime should lead to less burdens at the national level.

Likely impacts on third countries, international trade or investment

More transparency and co-operation on security of supply issues within Europe, is likely to enhance the overall competitiveness of Europe and its global investment climate. It should be noted that the extension of the new rules to the Energy Community will be considered as well.