ROADMAP			
TITLE OF THE INITIATIVE	Electricity Network Codes and Guidelines - Requirements for generators (RfG)		
LEAD DG – RESPONSIBLE UNIT	ENER B2 [**AP 2013/ENER/076**]	**DATE OF ROADMAP**	12 / 2015
This indicative roadmap is provided for information purposes only and is 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 and problem definition

(1) What is the political context of the initiative?

(2) How does it relate to past and possible future initiatives, and to other EU policies?

(3) What ex-post analysis of existing policy has been carried out? What results are relevant for this initiative?

(1) The internal electricity market which has been progressively implemented since 1999 aims to deliver real choice for all consumers in the Union so as to achieve efficiency gains, competitive prices and higher standards of service, and to contribute to security of supply and sustainability. The full implementation of the existing Third Energy Package and the rapid adoption and implementation of the Network Codes and Guidelines are a precondition for the creation of an Energy Union.

(2) Network Codes and Guidelines are a set of rules that apply to parties operating in the European energy sector. The development and implementation of Network Codes and Guidelines is an important action to be taken in order to fully integrate the internal energy market. By creating standard rules for the operation of the electricity sectors, the Network Codes and Guidelines will provide the foundation for a reliable, sustainable and connected pan-European energy market.

The Third Energy Package has created an institutional set up for developing Network Codes with a view to harmonising, where necessary, the technical, operational and market rules governing the electricity and gas grids. In this institutional setup there is a key role for the Agency for the Cooperation of Energy Regulators ("ACER"),[1] for the European Network of Transmission System Operators ("ENTSOs")[2] and for the European Commission[3] to work in close cooperation with all relevant stakeholders on the development of Network Codes. Network Codes and Guidelines will apply in the same way as an EU Regulation.

The legal basis for the electricity Network Codes and Guidelines was created in the Third Energy Package, specifically in Articles 6, 7 and 18 of Regulation (EC) No 714/2009 on conditions for access to the network for cross-border exchanges in electricity ('Electricity Regulation').

In December 2014, Member States gave a favourable opinion on the Regulation establishing a Guideline on Capacity Allocation and Congestion Management. The Regulation has been sent to the Council and Parliament for scrutiny. Formal adoption by the Commission is expected to take place shortly after 1st July 2015. On 26 June 2015, the Member States gave a favourable opinion on the Regulation establishing a Network Code on Requirements for Grid Connection of Generators. It is not expected that during the three month scrutiny period Council or Parliament will object to the adoption, which is hence expected to take place before end-2015.

(3) Regular benchmarking reports. Supervisory roles for NRAs and ENTSO-E and core indicators of progress in the field of system operation will be set out in all codes. Article 37 of the Electricity Directive foresees very broad monitoring rights and duties for NRAs. Article 9(1) of the Electricity Regulation tasks ACER with the monitoring of all the Network Codes, to be assisted by ENTSO-E where needed on the basis of Article 8(9). Individual TSOs are obliged to cooperate with ENTSO-E according to Article 4. Additionally, the possibility for stakeholder involvement will be envisaged for all system operation and grid connection codes, in a similar manner to the Regulation establishing a Guideline on Capacity Allocation and Congestion Management.

What are the main problems which this initiative will address?

Network Codes and Guidelines aim at addressing two main problems:

1) The inefficient use of the European electricity grid. Until today, efficient rules that allow an efficient use of the EU electricity transmission network and seamless EU-wide trading of electricity have been missing. For example, obstacles to trading long-term before delivery ("forward trading") exist which prevent market

[1] http://www.acer.europa.eu/Pages/ACER.aspx
[2] For electricity: http://networkcodes.entsoe.eu/; for gas: http://www.entsog.eu/
[3] http://ec.europa.eu/energy/en/topics/wholesale-market/electricity-network-codes

participants from fully exploiting the benefits from cross-border forward electricity trade. In addition, the non-existence of a common imbalance settlement period due to historical or technical reasons leads to inefficient cross-border dispatch, a different definition of balancing needs or a different approach to TSOs procuring those balancing needs. Also, the lack of a common methodology to price and activate balancing energy leads to a situation where balancing prices not always reflect the real time situation of the grid.

2) The core task of national Transmission System Operators (TSOs) is to maintain secure and stable electricity supplies at all times, avoiding blackouts and damage to connected equipment. While TSOs operate an interconnected EU electricity network, there are currently no coherent EU-wide rules for grid operation. The absence of coordinated grid operation rules is likely to lead to significant security of supply risks in the future, notably because of:

- Increasing cross-border electricity flows/interconnection between Member States (as a consequence of the creation of the internal market for electricity).
- The connection of large amounts of electricity production from renewable electricity sources, leading to more complex grid operation due to the intermittent and non-predictable character of production from renewable energy sources.
- Unbundling rules (separation between network operation and demand/supply business) lead to an increased need for cooperation and coordination between the various operators (TSOs, DSO, generators)

In summary, there is a lack of common and sufficient rules for the electricity system and for market development and operation. Without a minimum level of harmonisation of these rules, it is not possible to create an internal market of electricity or the functioning and efficiency of the market would be hindered because of distortions caused by difference in rules. Security of electricity supply is at stake as the rules regarding system operation and grid connection are vital to keep the electricity system stable while a lot of new variable generation is connected to the grid.

For 2016, the areas of work are:[4]

1) Market operation: rules on Forward Capacity Allocation - on calculation and allocation of future transmission capacity to provide opportunities for hedging price risk across markets; and rules on Balancing – aiming at transforming the acquisition/sale of balancing energy into a market-based activity.

2) Grid connection: rules on demand connection – technical requirements for installations connected to the demand side of the grid; and rules on High Voltage Direct Current Connections - technical requirements for High-Voltage DC connections and DC-connected "Power Park Modules", typically offshore wind farms.

3) System operation: rules on transmission system operation covering various actions and processes which TSOs need to follow to ensure operational security; the operational planning and scheduling by TSOs for the prevention of incidents in the system; and the maintenance of constant frequency throughout the EU by balancing generation and demand. In addition, rules on emergency and restoration.

Who will be affected by it?

All parties involved in electricity markets: generators, grid owners and operators, traders, suppliers, power exchanges and final customers.

Is EU action justified on grounds of subsidiarity? Why can Member States not achieve the objectives of the proposed action sufficiently by themselves? Can the EU achieve the objectives better?

Common rules are developed to achieve a minimum level of binding rules to create the European electricity wholesale market through efficient cross-border trade and to create rules for electricity transmission system development and operation. Individual action by Member States would not be sufficient and efficient. EU can achieve the objectives better. Moreover, the initiative would set only the minimum degree of harmonisation necessary to achieve the intended objectives, whilst taking account of specific national and regional characteristics.

B. Objectives of the initiative

What are the main policy objectives?

Network Codes and Guidelines are an important element of the implementation process of the Third Energy Package. As such, they are expected to:

[4] Except for the rules on balancing and on emergency and restoration, in 2016 the Commission will continue the adoption phase for the other proposed areas of work after the Committee voting in 2015. For 2016 it is envisaged that the Commission will continue the development phase and start the adoption phase for the rules on balancing and on emergency and restoration. For more information, please refer to the Commission Decision on the establishment of the annual priority lists for the development of Network Codes and Guidelines for 2016 published in http://ec.europa.eu/energy/en/topics/wholesale-market/electricity-network-codes.

- Further develop the internal market for electricity. This is achieved by avoiding unnecessary barriers to electricity trade resulting from fragmented and inefficient rules.
- Introduce a clear and legally binding framework for the cooperation between transmission system operators (TSOs) and national regulatory authorities.
- Provide for harmonised forward cross-border capacity allocation and balancing rules in the EU.
- Maintain and increase security of electricity supply in the integrated EU electricity grid.

Network Codes and Guidelines will increase liquidity by allowing for more cross-border trade of electricity through a more efficient use of the existing grid. As generation and demand bids will compete on an EU-wide basis, it will also have a positive effect on competition.

Network Codes and Guidelines will reduce the increasing risk of unstable grids that is likely to occur in the absence of a more coordinated approach; they will stabilise the EU-wide grid much more efficiently than on a purely national basis. Given the significant changes the electricity system is undergoing (increasing interconnection, more intermittent energy, more complex grid operation), the risk of system failures and cross-border impacts is predicted to significantly increase in future. As experience has shown that major cross-border electricity supply problems are not only a problem for households, but can seriously harm the entire economy, the added value of binding rules for coordinated grid operation resulting in reduced risks of blackouts is considerable.

Do the objectives imply developing EU policy in new areas?

No.

C. Options

(1) What are the policy options (including exemptions/adapted regimes e.g. for SMEs) being considered?
(2) What legislative or 'soft law' instruments could be considered?
(3) How do the options respect the proportionality principle?

(1) Network Codes and Guidelines are items which are requested by the Third Energy Package. The main policy options are:

(a) To rely more on each Member State developing the rules and a voluntary approach for harmonisation; under this option, no further rules would be adopted on an EU level; any further progress would rely on the further development of bilateral and multilateral agreements and voluntary initiatives. However, voluntary cooperation between transmission system operators and regulators from different Member States has not facilitated the internal market for electricity and is unlikely to do so going forward.

(b) Provide a minimum level of harmonisation through European rules; this option would entail creating a limited set of very basic rules, describing goals and principles rather than specific obligations and rights for the different actors. This option would however not remove the potential frictions resulting from different implementation methods and approaches.

(c) Provide for a more detailed but decentralised harmonisation with derogations to address regional or technical specificities. This option would provide for harmonised rules concerning key processes or contentious issues in order to overcome the obstacles that prevent the voluntary approach and the minimum level of harmonisation from being effective. This option would leave scope for national choices in terms of some detail around terms and methodologies, and would allow for exceptions from harmonised rules if indispensable to address the specific individual situation in certain Member States.

(d) Aim at a high level of harmonisation through detailed European rules. This would entail setting up fully harmonised rules, which would not leave scope for national choices or for the possibility to exemptions or derogations. Depending on the area of work, it could even entail the creation of a single entity or several centralised entities responsible for performing certain tasks.

(2) The Network Codes and Guidelines are legally binding regulations which are inspired by voluntary actions to implement electricity market in Europe.

(3) Proportionality is taken into account in individual choices made when preparing the Network Codes and Guidelines.

D. Initial assessment of impacts

What are the benefits and costs of each of the policy options?

Options relate mainly to the level of detail of the Network Codes and Guidelines. More detailed rules would increase the level of harmonisation and would improve the efficiency of markets when properly drafted. If

however the rules are overly detailed, this might slow down the development of the market and could prevent bottom-down solutions to develop. Rules on forward capacity allocation and balancing will improve the market efficiency and competition. Grid connection and system operation rules provide for more secure network operation and development. Traders and suppliers will be confronted with new rules and new opportunities. Consumers should not be affected in a negative sense, but could rather profit from more competition and lower prices.

Could any or all of the options have significant impacts on (i) simplification, (ii) administrative burden and (iii) on relations with other countries, (iv) implementation arrangements? And (v) could any be difficult to transpose for certain Member States?

After creating the instruments in the Third Energy Package, most importantly the Agency for Cooperation of Energy Regulators (ACER) and European Network of Transmission System Operators for Electricity, the Network Codes and Guidelines (i) have no significant impact on simplification (although arguably the alignment and common language achieved between the technical national rules represents a simplification), (ii) might create extra administrative burden for regulatory authorities and transmission system operators while in the other hand operating across borders will become less burdensome and more transparent, (iii) will oblige countries to work closer together regarding electricity markets and (iv) will require common implementation of the rules. Some Member States will have difficulties in applying the rules as their electricity market is less developed as in other Member States.

(1) Will an IA be carried out for this initiative and/or possible follow-up initiatives?

(2) When will the IA work start?

(3) When will you set up the IA Steering Group and how often will it meet?

(4) What DGs will be invited?

(1 & 2) Two impact assessments for the electricity Network Codes and Guidelines listed above in the main areas of work, except for the Guideline on Balancing and the Network Code on Emergency and Restoration, were completed in 2014. The impact assessment work for the Guideline on Balancing and the Network Code on Emergency and Restoration should start in the first or second quarter of 2016. (3) For Capacity allocation and congestion management the IA Steering has been working from 2011 and they have had meetings about every three months. The same group will be used for future codes and Guidelines as well. (4) SG, GROW, COMP, CNECT, ECFIN, SANTE, RTD.

(1) Is any option likely to have impacts on the EU budget above € 5m?

(2) If so, will this IA serve also as an ex-ante evaluation, as required by the Financial Regulation? If not, provide information about the timing of the ex-ante evaluation.

(1) No

(2) Impact on budget is assessed in the impact assessments.

E. Evidence base, planning of further work and consultation

(1) What information and data are already available? Will existing IA and evaluation work be used?

(2) What further information needs to be gathered, how will this be done (e.g. internally or by an external contractor), and by when?

(3) What is the timing for the procurement process & the contract for any external contracts that you are planning (e.g. for analytical studies, information gathering, etc.)?

(4) Is any particular communication or information activity foreseen? If so, what, and by when?

(1) Impacts are largely evaluated based on the work of ACER and ENTSO-E and partly own studies by consultants. (2) Cost-benefit analysis of the work by ACER and ENTSO-E was elaborated through own analysis and through external consultant expertise in the IA. (3) External studies are included in the yearly planning. There are no studies currently planned for 2016 concerning Network Codes and Guidelines. (4) The Communication on the Internal Energy Market was published in October 2014, detailing the progress made to this end.

Which stakeholders & experts have been or will be consulted, how, and at what stage?

The elaboration of these rules according to the Third Energy Package provisions requires extensive consultation of all concerned parties. These consultations are done mainly by ACER and ENTSO-E but also by the Commission, depending on the item. The updated planning of consultations, which can be subject to modification is accessible here; http://ec.europa.eu/energy/gas_electricity/codes/codes_en.htm