

## **Infrastructure**

# CEER White Paper series (paper #VI) European Commission's Clean Energy Proposals 17 July 2017

## **1. Introduction**

This Regulatory White Paper provides the views of National Regulatory Authorities in the Council of European Energy Regulators (CEER) on electricity infrastructure regulation. The aim of this White Paper is to deepen understanding and to assist the EU Institutions in assessing the proposals contained in the “Clean Energy for All Europeans” legislative package<sup>1</sup>.

## **2. CEER's Key Recommendations**

CEER broadly welcomes the infrastructure-related proposals in the Clean Energy package, with the following key recommendations as detailed in the following sections:

- ***Develop interconnection based on costs and benefits***
  1. A “one-size-fits-all” interconnection target across EU Member States is unjustified and could be detrimental to consumers. Instead, the target for interconnection capacities should be separately identified for each bidding zone boundary, based on an assessment of costs and benefits.
  2. A full implementation of the Capacity Allocation and Congestion Management Guideline, allowing an efficient utilisation and valuation of all (existing and proposed) transmission infrastructure, is essential.
- ***Review proposed harmonisation of transmission tariffs***
  3. Further harmonisation of transmission tariffs is not sufficiently justified yet, as the benefits of such a harmonisation remain unclear in the short term and are highly uncertain in the future.
- ***Allow flexibility in use of interconnector congestion income***
  4. The possibility to use interconnector congestion revenues to lower transmission tariffs should be maintained as a residual option for regulators.
- ***Facilitate improvements in transmission planning***
  5. The Union-wide Ten-Year Network Development Plan (TYNDP) and the national Network Development Plans should be subject to regulatory approval.
  6. Market participants and other entities should be obliged to provide ACER (the Agency) with the information it requires to fulfil its legal mandate on the TYNDP.

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<sup>1</sup> For ease of reading, reference to the Electricity Regulation refers to the proposed recast Electricity Regulation (EC) COM/2016/0861final/2 - 2016/0379 (COD), and reference to the Electricity Directive refers to the proposed recast Electricity Directive COM/2016/0864 final/2 - 2016/0380 (COD), and reference to Governance of the Energy Union refers to 2016/0375 (COD). References to specific Articles in the proposed recast legislation relate to the revised texts (corrigenda) published by the European Commission on 23/02/2017.

### 3. Develop interconnection based on costs and benefits

Article 4(d)(1) of the proposed Regulation on the Governance of the Energy Union states that, “*the level of electricity interconnectivity that the Member State aims for in 2030 in consideration of the electricity interconnection target for 2030 of at least 15%*”.

For background, in March 2002, the European Council in Barcelona agreed on a “*target for Member States of a level of electricity interconnections equivalent to at least 10% of their installed production capacity by 2005*”. In October 2014, the Council concluded that “*the European Commission supported by the Member States will take urgent measures in order to ensure the achievement of a minimum target of 10% of existing electricity interconnections, as a matter of urgency, and no later than 2020*”. The Council also concluded that “*the Commission will also report regularly to the European Council with the objective of arriving at a 15% target by 2030, as proposed by the Commission*”. This conclusion followed a statement in the Council conclusions of March 2014 referring to “*at least 10% of their installed electricity production capacity*”.

CEER acknowledges the importance of interconnection capacities to facilitate efficient cross-border electricity trade, delivering value for the Energy Union. We deem it a European priority to avoid isolation of Member States, hence eliminating existing “electrical islands”. We also acknowledge the importance of monitoring the development of interconnection capacities.

However, a significant concern of CEER is that a single uniform target applicable for all Member States is unjustified and disproportionate. Due to significant variations in costs, needs and potential gains, a single interconnectivity target of 15% for each Member State could result in perverse incentives and inefficient solutions, leading to over- or underinvestment, both of which would be detrimental to European consumers. Indeed, in 2001 the European Commission stated that, “*a single “interconnector target” may be a crude instrument and would have to be applied on a case-by-case basis, taking into account the specific circumstances and costs and benefits*”<sup>2</sup>. There has been no impact assessment accompanying the proposed Governance of the Energy Union Regulation showing that a blanket interconnection target is efficient or proportionate. Hence, the “one-size-fits-all” interconnection target should be removed from the Clean Energy legislation, with a more appropriate approach adopted instead.

In the view of CEER, a proper development of interconnection capacities should follow the processes dedicated to this task, i.e. the ENTSO-E Ten Year Network Development Plan (TYNDP), national Network Development Plans (NDPs), and the Projects of Common Interest (PCIs), with an analysis of infrastructure investment needs, costs and benefits.

Appropriate indicators, such as the enduring high price spread between adjacent bidding zones, or an improvement of security of supply, should drive the selection of infrastructure projects through these established processes. The level of utilisation of the existing interconnectors should be an additional indicator.

The ACER-CEER Market Monitoring Report 2015 (see Annex) found that, in many instances, the already existing interconnectors are not fully utilised for commercial purposes, for two reasons:

- a) internal congestion may affect, *inter alia*, cross-border capacity; and
- b) some borders are affected by a significant amount of unscheduled flows.

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<sup>2</sup> COM (2001) 775 final, including the Proposal for a Decision on Guidelines for trans-European energy networks (later adopted as Decision No 1229/2003/EC) (p. 16).

Therefore, any future electricity infrastructure targets should also ensure that existing cross-border infrastructure is commercially utilised to a greater extent. Internal bottlenecks limiting power transfers should be identified. Economically efficient investments to reduce internal bottlenecks should be on equal footing with cross-border transmission lines.

In addition, the matter of unscheduled flows or actions to minimise these flows (e.g. through the deployment of phase shifting transformers, a different bidding zone delineation, or adjusted capacity calculation methodology) should be taken into account when determining targets for cross-border transfer capacities. Indeed, the societal valuation of transmission infrastructure projects depends on the effective usage made of these new assets. The full implementation of the Capacity Allocation and Congestion Management (CACM) Guideline and of the EU target model - requiring, in heavily meshed areas, a flow-based allocation of transmission capacities built on adequately defined bidding zones - is the agreed path towards a more efficient use of transmission capacities. This implementation is key for a good valuation of new transmission infrastructure projects.

In order to help identify an optimal level of interconnection capacity between bidding zones, in line with a recommendation in the Agency's Opinion 06/2012 on the TYNDP 2012 (see Annex), ENTSO-E introduced the definition and calculation of target capacities at each border in the TYNDP 2014 and refined them in the ENTSO-E Regional Investment Plans 2015 and in the TYNDP 2016. For every boundary between bidding zones, the target capacity corresponds - in essence - to the capacity above which additional capacity development would not be beneficial, i.e. the economic value derived from additional capacity cannot outweigh the corresponding costs. This analysis should be a basis for identifying appropriate interconnection levels. The Agency will continue to closely monitor this analysis in order to ensure efficient and effective integration of the European energy market.

Furthermore, the quantity indicator determining the interconnection target is not clearly defined in the proposed legislation. Already in 2015, the installed production capacity in the ENTSO-E system (1030 GW) reached a level twice as high as the peak load (528 GW). This situation is completely different from the one in 2002 (and 2005), when the first interconnection target was set, especially due to 260 GW of new capacity from non-hydro renewable energy sources which require a greater amount of installed capacity to meet the same level of demand. Thus, the interconnection capacity needed to reach the target (based on total installed capacity) is higher, even if consumption remains stable. Rather than the total installed generation capacity, it would be more reasonable to refer to the load.

In addition, the interconnection capacity target is currently envisaged as a capacity value per Member State. From a market perspective, the geographical scope of the Member State is of secondary importance, since price differences occur between bidding zones, which can cover several Member States (e.g. Germany/Luxembourg/Austria or Germany/Luxemburg in the future) or constitute a subdivision of a Member State (e.g. in Sweden or Italy). Therefore, to assist more price convergence and higher overall welfare for the EU, any definition of an interconnection target should be identified at each bidding zone boundary.

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#### 4. Review proposed harmonisation of transmission tariffs

Article 16(9) of the proposed recast of the Electricity Regulation states that, "*the Agency shall provide a recommendation addressed to regulatory authorities on the progressive convergence of transmission and distribution tariff methodologies*". Article 16(11) further provides that the "*Agency shall monitor the implementation of its recommendation and provide a report to the Commission by*

31st January each year". This arrangement creates a strong pressure towards further harmonisation of transmission tariffs.

At the same time, the scope of potential Commission Guidelines in Article 57(4) is widened in the sense that the Guidelines may now *"determine appropriate rules relating to charges"* rather than the underlying principles as at present. The proposal in Article 57(4) overlaps with the potential network code in the area of *"rules regarding harmonised transmission and distribution tariff structures and connection charges"* proposed in Article 55(1)(k).

Commission Regulation (EU) 838/2010 and the Agency's Recommendation No 09/2014 (see Annex) already set caps and principles, respectively, on transmission charges that European producers should pay.

The reflection on a potential further harmonisation of tariffs structure in electricity should take into account the results of the Agency's scoping activity, together with a consultancy study (see Annex), carried out in 2014 and 2015. The Agency's concluding report indicated (p.1) that *"the need for a Framework Guideline and a subsequent Network Code is not evident and that the existing policies, including implementation of the Agency's Opinion No 09/2014, are sufficient to prevent potential negative effects from any lack of harmonisation in electricity transmission tariff structures"*. The Agency's report followed the consultancy's conclusions that *"the benefits of a short-term regulatory response on harmonisation are in our view unlikely to outweigh potential costs"*. These conclusions, based on an extensive consultation with stakeholders, were presented to the European Commission during the activity.

The reflection on further harmonisation in electricity should also take into account the experience of preparing Commission Regulation (EU) 2017/460 establishing a network code on harmonised transmission tariff structures for gas.

Finally, the impact assessment published by the Commission does not provide any justification that the benefits of further harmonisation of tariffs would outweigh the costs for implementation.

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## 5. Allow flexibility in use of interconnector congestion income

Article 16(6) of the current Regulation (EC) No 714/2009 provides the following purposes for the use of interconnector congestion revenue:

- a) Guaranteeing the actual availability of the allocated capacity; and/or
- b) Maintaining or increasing interconnection capacities through network investments, in particular in new interconnectors.

When revenues cannot efficiently be used for these two purposes, the current Regulation provides for the possibility for national regulatory authorities to take into account the revenues from congestion income when calculating network tariffs, i.e. to reduce network tariffs paid for by stakeholders, including energy consumers. However, Article 17(2) of the proposed recast of the Electricity Regulation would eliminate this possibility.

The idea that congestion revenues should be used in priority for options (a) and (b) in Regulation (EC) No 714/2009 is generally agreed and supported (if investments to increase interconnection capacities are supported by a cost-benefit analysis). However, the option to consider congestion revenues when setting network tariffs, subject to national regulatory agreement, should continue, when the primary objectives (options (a) and (b)) are deemed to have been achieved. Even an

optimal level of interconnection generally implies a minimal amount of congestion - otherwise over-investment would have occurred.

Hence, suppressing the option in the proposed recast of the Electricity Regulation to use this income to lower network tariffs could result in overinvestment in interconnection capacities, which may put at risk other beneficial transmission investments and would not benefit European consumers. Therefore, CEER recommends this option be re-introduced to the proposed recast of the Electricity Regulation.

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## 6. Facilitate improvements in transmission planning

The non-binding Union-wide TYNDP is prepared biennially by ENTSO-E and it is not subject to regulatory approval. The Agency is required to issue an opinion on the draft TYNDP, as well as to assess the consistency of the TYNDP and the NDPs, and to recommend changes in the plans where necessary. These opinions are not binding on ENTSO-E and there is no explicit legal requirement on ENTSO-E to consider the Agency's opinions and revise the TYNDP.

Furthermore, while according to Regulation (EC) No 714/2009 the TYNDP shall build on national plans, the Agency identified significant and increasing inconsistencies between the TYNDP and the NDPs in its recent Opinion No 08/2017 (see Annex). Since planning of energy infrastructure is in the majority of Member States subject to NRAs' scrutiny, including via public consultation and approval, the increased mismatch between projects in the TYNDP and the NDPs raises doubts on the credibility and feasibility of the implementation of many TYNDP projects. The lack of a regulatory filter in the TYNDP may potentially lead to the incorrect estimation of the need for transmission development of European relevance. Because the selection of PCIs is based on the TYNDP, this discrepancy between TYNDP and NDPs may also lead to a sub-optimal PCI list.

At the same time, the Agency notes that NDPs are not legally mandated for all types of TSO certifications<sup>3</sup>. NDPs also significantly differ from each other in their scope (e.g. inclusion of third-party projects, studies and projects under consideration) and their time-horizon, frequency and timing, which reduces the usability of the NDPs as a solid basis for comparison for the construction of the TYNDP.

Finally, the information required by the Agency for the scrutiny and monitoring of the TYNDP is not matched by the Agency's powers to oblige the relevant TSOs and other entities to submit the required data.

With regard to the aforementioned points, CEER proposes the following amendments to the proposed recast of the Electricity Regulation:

- The non-binding Union-wide TYNDP is subject to a binding decision by the Agency on its content;
- The Union-wide TYNDP should not include investments which are explicitly objected by the Agency, after having consulted the concerned NRAs;
- NDPs - defining the transmission development on at least a 10-year time-horizon - should be published biennially and approved by the relevant NRA; and
- Market participants and other entities should be obliged to provide the Agency with the information it requires to fulfil its legal mandate on the TYNDP.

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<sup>3</sup> C.f. Article 22(1) of Regulation (EC) No 714/2009 for Independent Transmission Operators and Article 37(3)(c) of Directive 2009/72/EC for Independent System Operators.

## Annex 1: Relevant ACER/CEER Papers

This White Paper builds on the “[European Energy Regulators’ Overview Paper - Initial Reactions to the European Commission’s Proposals on Clean Energy](#)”, published by ACER and CEER on 23 January 2017. It is part of a series of regulatory White Papers covering key topics related to the Clean Energy package. For further background and positions, please see below the list of relevant publications of the European Energy Regulators.

European Energy Regulators (ACER-CEER) White Paper #1 <a href="#">Renewables in the Wholesale Market</a> , May 2017
European Energy Regulators (ACER-CEER) White Paper #2 <a href="#">Role of the DSO</a> , May 2017
European Energy Regulators (ACER-CEER) White Paper #3 <a href="#">Facilitating Flexibility</a> , May 2017
European Energy Regulators (ACER-CEER) White Paper #4 <a href="#">Efficient Wholesale Price Formation</a> , May 2017
CEER White Paper (no. I) on <a href="#">Distribution and Transmission Network Tariffs and Incentives</a> , May 2017
CEER White Paper (no. II) on <a href="#">Technology that Benefits Consumers</a> , May 2017
CEER White Paper (no. III) on <a href="#">Consumer Empowerment</a> , May 2017
CEER White Paper (no. IV) on <a href="#">Efficient System Operation</a> , June 2017
CEER White Paper (no. V) on <a href="#">the Independence of National Regulatory Authorities</a> , June 2017
ACER-CEER <a href="#">Market Monitoring Report 2015</a> , September 2016
Agency for the Cooperation of Energy Regulators, <a href="#">Opinion 06/2012 on The ENTSO-E Ten-Year Network Development Plan 2012</a> , September 2012
European Commission, Commission Regulation (EU) No 838/2010, September 2010
Agency for the Cooperation of Energy Regulators, <a href="#">Recommendation 09/2014 on The Appropriate Range of Transmission Charges Paid by Electricity Producers</a> , April 2014
Cambridge Economic Policy Associates, <a href="#">Scoping Towards Potential Harmonisation of Electricity Transmission Tariff Structures</a> .
Agency for the Cooperation of Energy Regulators, <a href="#">Scoping towards potential harmonisation of electricity transmission tariff structures, Conclusions and next steps</a> , December 2015
Agency for the Cooperation of Energy Regulators, <a href="#">Opinion No. 08/2017 on electricity projects in the national ten-year network development plans and in the union-wide ten-year network development plan 2016</a> , April 2017