



*European Economic and Social Committee*

**TEN/656**  
**Strengthening Europe's energy networks**

## **OPINION**

European Economic and Social Committee

**Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Communication on strengthening Europe's energy networks**

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Consultation	European Commission, 12/02/2018
Legal basis	Article 304 of the Treaty on the Functioning of the European Union
Section responsible	Transport, Energy, Infrastructure and the Information Society
Adopted in section	05/04/2018
Adopted at plenary	19/04/2018
Plenary session No	534
Outcome of vote (for/against/abstentions)	157/1/2

## 1. Conclusions and recommendations

The European Economic and Social Committee

- 1.1 **shares** the view that a sufficiently interconnected European energy grid is a prerequisite for achieving the aim of the Energy Union: to provide affordable, secure and sustainable energy that makes the energy transition to a low-carbon economy possible in a competitive way;
- 1.2 **reaffirms** that all EU climate and energy security objectives are inextricably linked, meaning that none of them should be considered secondary to the others, despite the fact that some are not binding on the Member States;
- 1.3 **considers** that investments in grid infrastructure should be implemented with the same intensity as other energy investments, and in particular in coordination with the expansion of renewables, and therefore urges the Commission and the Member States to ensure proper development of transnational and national energy networks in order to facilitate joint development that enables the EU's targets to be achieved;
- 1.4 **calls on** the Commission and the Member States to draw up two-yearly monitoring reports on the achievement of the renewable development targets and national and transnational networks, with a view to ensuring coordinated delivery of renewables and networks, focusing particularly on identifying those bottlenecks that hinder the transmission of renewable energy;
- 1.5 **confirms** that the 10% interconnection target set for 2020 will not be achieved in several Member States, and that the difficulties involved in developing these projects (complex administrative procedures, policy implications, funding, lack of public support) jeopardise the achievement of the 2030 targets, hampering the achievement of the EU's climate policy as a whole;
- 1.6 **suggests** that actively involving organised civil society in the design phases of the interconnection projects can help to mitigate the lack of public support for some projects;
- 1.7 **calls for** progress to be made on the Regulation on the Governance of the Energy Union, enabling the introduction of measures required to facilitate the development of interconnections in the areas that currently have less than the 10% target;
- 1.8 **recommends** supplementing the country interconnection share indicator with monitoring of interconnection shares per geographical area (such as the Iberian peninsula), and incorporating indicators monitoring price differences between wholesale markets with a view to prioritising implementation of PCIs in the areas where price differences are greater;
- 1.9 **recognises** that the financial support obtained through the Connecting Europe Facility (CEF), with its budget of EUR 5.35 billion for energy infrastructure up to 2020, together with the other sources of support and the work of the Regional Groups, has enabled the implementation of a growing number of projects that bring the EU closer to completing the internal energy market;

- 1.10 **calls for** a review of the budget available for supporting interconnection projects, since the current allocations might be insufficient to achieve the targets set;
- 1.11 **calls on** the Member States and the Commission to strengthen solidarity and shared security mechanisms, so as to facilitate the achievement of the energy transition and the security of supply objectives with a good cost-benefit ratio, boosting the competitiveness of industry and benefiting European citizens; and
- 1.12 **recommends** that the Commission and the Member States promote software tools that boost efficiency when operating interconnections.

## 2. **Trans-European energy networks policy**

- 2.1 To achieve its climate change, competitiveness and energy security goals, the European Union has set itself targets for the development of energy transmission networks to make the energy transition to a low-carbon economy possible.

In particular, for 2020 it has set itself the challenge of Member States achieving 10% interconnection with their neighbouring countries. In addition, in order to ensure that the implementation of the renewable generation targets is accompanied by adequate development of interconnections, the European Council agreed to raise the 2030 electricity interconnection target to 15%.

- 2.2 To ensure the 10% interconnection target is met, the EU adopted in 2013 the Trans-European Energy Networks (TEN-E) Regulation and launched the Connecting Europe Facility (CEF), laying the foundations for identifying, supporting and prioritising the implementation of the projects of common interest (PCIs) necessary to achieve a resilient trans-European energy network.
- 2.3 In the period up to 2030, EUR 180 billion in investments in European energy grids will be needed, and it is expected that, once completed, these will lead to annual savings of between EUR 40 and 70 billion in terms of avoided generation costs and more competitive gas wholesale prices, reducing the costs of the energy transition.

The third list of PCIs, which is still awaiting approval by the European Parliament, identifies 173 projects that will contribute to achieving the interconnection targets for 2020 and 2030.

Despite the aims of the list and the existing support measures, the technical difficulties inherent in the projects and the political and administrative implications and lack of public support mean that less than 30% of the 173 projects included in the third review of the PCIs carried out in 2017 will be completed by 2020.

This delay is partly due to the fact that the national application of the TEN-E rules has not been fully carried out.

2.4 In order to make progress towards achieving the targets, the Commission established four high-level groups to accelerate infrastructure development in four specific regions.

#### 2.4.1 Baltic Energy Market Interconnection Plan

The policy priority is synchronisation of the Baltic States' electricity grid with the continental European network and ending the isolation of gas networks as well as dependence on one gas source in the Baltic States and Finland.

The EESC fully supports a political agreement to boost the completion of the gas PCIs by 2021, both the Estonia–Finland interconnection and the Poland–Lithuania interconnection.

#### 2.4.2 Iberian peninsula (Madrid Declaration)

Regrettably, despite the approval of the Bay of Biscay line, the interconnections between the Iberian peninsula and the rest of Europe fall short of the targets in place for 2020, and far short of those set for 2030.

The level of interconnection between Spain and Portugal does not solve the underlying problem of the lack of connections between the Iberian peninsula and France, as the only way to connect the peninsula to Europe and integrate it into the internal market is via France, with interconnections with this country currently around 2.8%.

This low share of interconnections contributes to making electricity prices in the Iberian peninsula among the highest in Europe and means that the cost for the system of integrating renewables is also very high, with a need for large back-up power capabilities and the implementation of procedures making it possible to manage high volatility in the energy generation mix. The recent statements by President Macron show key political support for the two interconnections across the Pyrenees that are – still – in their infancy.

#### 2.4.3 Central South Eastern energy connectivity

This region is vulnerable to supply disruptions and pays a higher gas price than the rest of the EU, despite its geographical proximity to its gas supplier.

The main objectives are the launch of the Bulgaria–Serbia interconnector, the start of investment in the Krk liquefied natural gas (LNG) terminal (in the first half of 2018) and the start of construction of the Romanian part of the Bulgaria–Austria corridor.

#### 2.4.4 North Seas energy cooperation

The main objective has focused on combining renewable generation and transmission, as well as on establishing a legal and regulatory framework that is conducive to such projects in an area with a wind generating potential of between 4% and 12% of the EU's consumption, by 2030.

### 3. **Re-orienting our infrastructure policy for the longer term**

3.1 Although the Commission and the Member States have made a significant effort in driving forward PCIs, the reality is that due to technical difficulties, red tape and financial constraints, only a small number will be fully completed in 2020, meaning that it is necessary to urgently review the planned timetable for implementing the PCIs, giving priority to the areas which are furthest from achieving the interconnection objectives.

3.2 The EESC believes that cybersecurity criteria should be included in the PCIs, so as to limit the risk to the European public.

Digitalisation will mean that the proportion of new investment projects devoted to systems will be increasingly significant.

3.3 With regard to gas interconnections, priority should be given to those PCIs that contribute substantially to ensuring Member States' security of supply, both against risks arising from the actions of third countries and in light of technical limitations.

3.4 The electricity interconnection targets fall short in that they consider each Member State separately. The EESC believes that the exercise needs to be repeated by geographical area, with the necessary clusters of Member States to prevent bottlenecks in grid interconnections. This is particularly vital in cases where a Member State can only be interconnected with the rest of Europe through another Member State, such as in the case of the Iberian peninsula, Cyprus, Malta and Ireland.

3.5 The interconnections of Member States with a higher connection deficit, including the countries in the Iberian peninsula, South Eastern Europe, Poland and Ireland, should be prioritised, and the EESC calls on the Commission and the Member States to put in place the measures required to implement them without undue delay.

3.6 The 10% electricity interconnection target will not be reached by 2020 in Cyprus, Italy, Poland, Spain and the UK, and the inclusion of Ireland and Portugal on the "achieved" list is highly questionable.

According to the Commission's own data, the target of 15% electricity interconnections by 2030 seems unlikely to be achieved, especially if a proper analysis is carried out by "geographical bottleneck" rather than just by Member State.

3.7 The new thresholds that have been set to measure the needs for interconnection and integration into the internal market, with a view to achieving the 2030 targets are:

- a threshold of a EUR 2/MWh difference between the wholesale markets of each Member State, region or bidding zone, with the aim of advancing the harmonisation of markets;
- electricity supply must come from a combination of the capacity of each Member State and energy imports; where the nominal capacity of interconnectors is below 30% of their peak load, new interconnections must be investigated; and

- the third threshold concerns the optimal use of renewable energy: where the interconnection capacity (export) is below 30% of installed renewable capacity, new interconnections will need to be investigated.

These three thresholds directly link the targets for the development of renewables and integration into the internal market with the interconnection targets, thereby making positive progress towards achieving all of them.

- 3.8 Considering the new thresholds set and the limitations of the analysis by Member State, there are six countries which do not meet any of the three thresholds: Cyprus, Greece, Ireland, Italy, Spain and the UK. To these should be added Portugal and Malta, which meet two of the thresholds, but thanks to an exclusive connection to Spain and Italy respectively.

The Baltic countries, Bulgaria, Germany, Poland and Romania meet two of the three thresholds, while the remaining Member States can be considered to be fully integrated in that they meet the three thresholds.

- 3.9 Given the analysis of the share of interconnection of each Member State as well as the analysis of the three new thresholds, it is clear that various Member States will struggle to meet the targets set for 2030. One of the main problems is that the interconnection target is not binding on the Member States, a fact which, together with the delays inherent in this type of project (political consensus, financing needs, economic returns, lack of public support), makes it hard to achieve. All EU climate and energy security objectives are inextricably linked, meaning that none of them should be considered secondary to the others.

- 3.10 The EU needs to further develop and adopt its Governance Regulation, taking an ambitious approach that places the interconnections target and the renewables target on an equal footing, in order to ensure that the Member States and the Commission urgently make every effort to achieve, as soon as possible, the 10% interconnection target allowing access to the EU internal energy market.

In addition, for those projects that will significantly increase the current interconnection capacity in points which are below the 10% target, all available financial instruments, such as the CEF, the European Structural and Investment Funds and the European Fund for Strategic Investments, must be used. These projects should be subject to their own specific rules, with stronger EU governance arrangements for projects that speed up their implementation.

- 3.11 The regional groups, together with the Commission, should carry out continuous assessment on a case-by-case basis, prioritising the implementation of these PCIs, including the adoption of the necessary measures to facilitate their implementation such as cutting red tape and promoting agreement between the Member States by holding meetings at the highest level.

Concerted action is needed from all concerned, including Member States, transmission system operators, promoters and regulators. Initiatives such as the Energy Infrastructure Forum held annually in Copenhagen, in which all of those actors are able to get actively involved, are very positive in trying to find solutions to the problems of developing interconnection projects.

#### 4. **Security of supply**

- 4.1 With high dependence on external energy sources in all EU Member States, enhancing security of supply is one of the EU's primary objectives. In this respect, in recent years significant progress has been made, particularly in natural gas grids and interconnections; nevertheless, the development of those PCIs necessary to reach a point where each country's gas supply system meets the N-1 criterion defined by Regulation No 994/2010 and then succeeds as soon as possible in having three alternative sources of gas must continue to be prioritised.
- 4.2 Particular attention should be paid to the efforts required to remedy the shortcomings that can still be noted in some EU territories such as islands and peripheral areas. It is important to point out the conclusions of the European Council of 4 February 2011, in which it was agreed that no Member State should remain isolated from the European gas and electricity grids after 2015 or see its energy security impacted by a lack of suitable interconnections. To this end, despite the delay, the progress introduced by CEF coverage in 2017, with the boost to projects that will make it possible to end the isolation of islands such as Cyprus and Malta, and the PCIs that are under examination such as the EastMed gas pipeline, give grounds for optimism in the medium term.
- 4.3 It is necessary to put solidarity mechanisms in place between Member States to facilitate joint action to overcome a particular Member State's potential supply risks in emergency situations.

#### 5. **Requirements for the energy transition**

- 5.1 The progress towards a low-carbon economy and the 2030 (27% renewables) and 2050 (80% reduction in CO<sub>2</sub>) targets will stimulate electrification of transport and the household sector, driving renewable energy needs and introducing new uses for renewable energies through power to gas projects.
- 5.2 To achieve the 2050 targets, demand for investment in transmission and distribution grids should be between EUR 40 and 62 billion each year<sup>1</sup>, as opposed to the current figure of EUR 35 billion.
- 5.3 There is a clear risk that the 2030-2050 interconnection targets will not be met because of the difficulties involved in developing these projects, which would jeopardise European climate change objectives, driving up the cost of investment support for renewable energies. ,
- 5.4 The development of renewables must go hand in hand with proper development of energy networks, both transnational and national.

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<sup>1</sup> European Parliament study (ITRE Committee) — European Energy Industry Investments 2017, IP/A/ITRE/2013-46 – PE595.356.

## 6. **Progress towards a genuine internal energy market**

- 6.1 The EESC has always argued that the Energy Union is a key factor in European integration, as interconnections are crucial to achieving a genuine internal energy market and, without them, anomalous situations will be created with many areas of inefficiency.

Without interconnections, the policy of promoting renewable energies will lead to high price volatility, a need for greater investment in "support technologies" and wasted renewable energy production at times when higher generation occurs alongside a fall in consumption.

- 6.2 The Agency for the Cooperation of Energy Regulators (ACER) estimates that only 31% of the existing interconnection capacity in the countries of continental Europe is made available to the market. Therefore, in order to make progress in completing the internal market, it is recommended to adopt measures that maximise the capacity made available to the markets, which will generate more competition, greater efficiency and better use of available resources.
- 6.3 To reduce operating costs, progress needs to be made on intraday market coupling and cross-border balancing markets, taking forward the measures laid down in Regulation No 2195/2017 on electricity balancing, requiring Member States to cooperate at regional level on the development of balancing zones in interconnections that help to remove bottlenecks, optimise reserve energies among the Member States and increase the competitiveness of the markets<sup>2</sup>.

## 7. **Making the best use of funds**

- 7.1 The EESC considers that measures should be encouraged to ensure that available European funds are channelled as a priority into those projects which are most necessary from the point of view of security of supply or which guarantee higher economic returns or enable further progress to be made towards the EU's climate objectives.
- 7.2 Threshold 1 (price differential) should be decisive, from an economic perspective, when it comes to project allocation.

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<sup>2</sup>

[OJL 312, 28.11.2017, p. 6.](#)

7.3 Storage projects (pump, among others) that help minimise the needs of the generation system must be treated as higher priority than other projects that do not yet have sufficient technological support and should be financed from the research and innovation programmes – this is, for instance, the case for some projects related to CO<sub>2</sub> transport. However, regulation should not move faster than technology.

Brussels, 19 April 2018

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The President of the European Economic and Social Committee

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