

**European Commission Gives New Deadline  
of 23rd October, 2019 for Ireland  
to Remove Shannon LNG from the  
Draft Final 4th PCI List**

**Subject:** 4th PCI list - draft delegated act and accompanying staff working document

**Importance:** High

**From:** AMILHAT Jane (ENER)

**Sent:** Wednesday, October 16, 2019 6:16 PM

**To:** '[aurelia.slate@rpro.eu](mailto:aurelia.slate@rpro.eu)' <[aurelia.slate@rpro.eu](mailto:aurelia.slate@rpro.eu)>; '[barbara.rudnicka@msz.gov.pl](mailto:barbara.rudnicka@msz.gov.pl)' <[barbara.rudnicka@msz.gov.pl](mailto:barbara.rudnicka@msz.gov.pl)>; '[bogdan.popescu@diplomatie.gouv.fr](mailto:bogdan.popescu@diplomatie.gouv.fr)' <[bogdan.popescu@diplomatie.gouv.fr](mailto:bogdan.popescu@diplomatie.gouv.fr)>; '[c.syriopoulos@rp-grece.be](mailto:c.syriopoulos@rp-grece.be)' <[c.syriopoulos@rp-grece.be](mailto:c.syriopoulos@rp-grece.be)>; '[Carmel.fields@dfa.ie](mailto:Carmel.fields@dfa.ie)' <[Carmel.fields@dfa.ie](mailto:Carmel.fields@dfa.ie)>; '[clive.a.gerada@gov.mt](mailto:clive.a.gerada@gov.mt)' <[clive.a.gerada@gov.mt](mailto:clive.a.gerada@gov.mt)>; '[edwjam@um.dk](mailto:edwjam@um.dk)' <[edwjam@um.dk](mailto:edwjam@um.dk)>; '[Elina.SCHUSTER@bmeia.gv.at](mailto:Elina.SCHUSTER@bmeia.gv.at)' <[Elina.SCHUSTER@bmeia.gv.at](mailto:Elina.SCHUSTER@bmeia.gv.at)>; '[energia@rpue.esteri.it](mailto:energia@rpue.esteri.it)' <[energia@rpue.esteri.it](mailto:energia@rpue.esteri.it)>; '[energia@rpue.esteri.it](mailto:energia@rpue.esteri.it)' <[energia@rpue.esteri.it](mailto:energia@rpue.esteri.it)>; '[giuliana.delpapa@esteri.it](mailto:giuliana.delpapa@esteri.it)' <[giuliana.delpapa@esteri.it](mailto:giuliana.delpapa@esteri.it)>; '[guy.lentz@mae.etat.lu](mailto:guy.lentz@mae.etat.lu)' <[guy.lentz@mae.etat.lu](mailto:guy.lentz@mae.etat.lu)>; '[Inga.Iljina@mfa.gov.lv](mailto:Inga.Iljina@mfa.gov.lv)' <[Inga.Iljina@mfa.gov.lv](mailto:Inga.Iljina@mfa.gov.lv)>; '[ioan.pogea@rpro.eu](mailto:ioan.pogea@rpro.eu)' <[ioan.pogea@rpro.eu](mailto:ioan.pogea@rpro.eu)>; '[iria.alvarez@reper.maec.es](mailto:iria.alvarez@reper.maec.es)' <[iria.alvarez@reper.maec.es](mailto:iria.alvarez@reper.maec.es)>; '[jml@reper-portugal.be](mailto:jml@reper-portugal.be)' <[jml@reper-portugal.be](mailto:jml@reper-portugal.be)>; '[jolanta.navickaite@eu.mfa.lt](mailto:jolanta.navickaite@eu.mfa.lt)' <[jolanta.navickaite@eu.mfa.lt](mailto:jolanta.navickaite@eu.mfa.lt)>; '[kristiina.tammeraid@mfa.ee](mailto:kristiina.tammeraid@mfa.ee)' <[kristiina.tammeraid@mfa.ee](mailto:kristiina.tammeraid@mfa.ee)>; '[ltheodoridou@mcit.gov.cy](mailto:ltheodoridou@mcit.gov.cy)' <[ltheodoridou@mcit.gov.cy](mailto:ltheodoridou@mcit.gov.cy)>; '[maria.jimenez@reper.maec.es](mailto:maria.jimenez@reper.maec.es)' <[maria.jimenez@reper.maec.es](mailto:maria.jimenez@reper.maec.es)>; '[marian.husarik@mzv.sk](mailto:marian.husarik@mzv.sk)' <[marian.husarik@mzv.sk](mailto:marian.husarik@mzv.sk)>; '[marianna.jakab@mfa.gov.hu](mailto:marianna.jakab@mfa.gov.hu)' <[marianna.jakab@mfa.gov.hu](mailto:marianna.jakab@mfa.gov.hu)>; '[martin.pitorak@mzv.sk](mailto:martin.pitorak@mzv.sk)' <[martin.pitorak@mzv.sk](mailto:martin.pitorak@mzv.sk)>; '[martin\\_pejrimovsky@mzv.cz](mailto:martin_pejrimovsky@mzv.cz)' <[martin\\_pejrimovsky@mzv.cz](mailto:martin_pejrimovsky@mzv.cz)>; '[maud.foucher@diplomatie.gouv.fr](mailto:maud.foucher@diplomatie.gouv.fr)' <[maud.foucher@diplomatie.gouv.fr](mailto:maud.foucher@diplomatie.gouv.fr)>; '[Michael.STEURER@bmeia.gv.at](mailto:Michael.STEURER@bmeia.gv.at)' <[Michael.STEURER@bmeia.gv.at](mailto:Michael.STEURER@bmeia.gv.at)>; '[miika.tommila@formin.fi](mailto:miika.tommila@formin.fi)' <[miika.tommila@formin.fi](mailto:miika.tommila@formin.fi)>; '[p.icheva@me.government.bg](mailto:p.icheva@me.government.bg)' <[p.icheva@me.government.bg](mailto:p.icheva@me.government.bg)>; '[Paul.Hagan@fco.gov.uk](mailto:Paul.Hagan@fco.gov.uk)' <[Paul.Hagan@fco.gov.uk](mailto:Paul.Hagan@fco.gov.uk)>; '[petr\\_binhack@mzv.cz](mailto:petr_binhack@mzv.cz)' <[petr\\_binhack@mzv.cz](mailto:petr_binhack@mzv.cz)>; '[Petya.Icheva@bg-permrep.eu](mailto:Petya.Icheva@bg-permrep.eu)' <[Petya.Icheva@bg-permrep.eu](mailto:Petya.Icheva@bg-permrep.eu)>; '[raluca.florescu@rpro.eu](mailto:raluca.florescu@rpro.eu)' <[raluca.florescu@rpro.eu](mailto:raluca.florescu@rpro.eu)>; '[rasa.engstedt@gov.se](mailto:rasa.engstedt@gov.se)' <[rasa.engstedt@gov.se](mailto:rasa.engstedt@gov.se)>; '[Sandra.moreau@diplobel.fed.be](mailto:Sandra.moreau@diplobel.fed.be)' <[Sandra.moreau@diplobel.fed.be](mailto:Sandra.moreau@diplobel.fed.be)>; '[Sandra.Vainute@eu.mfa.lt](mailto:Sandra.Vainute@eu.mfa.lt)' <[Sandra.Vainute@eu.mfa.lt](mailto:Sandra.Vainute@eu.mfa.lt)>; '[Sanna.Ek@formin.fi](mailto:Sanna.Ek@formin.fi)' <[Sanna.Ek@formin.fi](mailto:Sanna.Ek@formin.fi)>; '[sophie-van.eck@minbuza.nl](mailto:sophie-van.eck@minbuza.nl)' <[sophie-van.eck@minbuza.nl](mailto:sophie-van.eck@minbuza.nl)>; '[Szilvia.Zombory@mfa.gov.hu](mailto:Szilvia.Zombory@mfa.gov.hu)' <[Szilvia.Zombory@mfa.gov.hu](mailto:Szilvia.Zombory@mfa.gov.hu)>; '[tomasz.bak@msz.gov.pl](mailto:tomasz.bak@msz.gov.pl)' <[tomasz.bak@msz.gov.pl](mailto:tomasz.bak@msz.gov.pl)>; '[urska.dolinsek@gov.si](mailto:urska.dolinsek@gov.si)' <[urska.dolinsek@gov.si](mailto:urska.dolinsek@gov.si)>; '[wi-5-eu@brue.auswaertiges-amt.de](mailto:wi-5-eu@brue.auswaertiges-amt.de)' <[wi-5-eu@brue.auswaertiges-amt.de](mailto:wi-5-eu@brue.auswaertiges-amt.de)>; '[wi-bim-1-eu@brue.auswaertiges-amt.de](mailto:wi-bim-1-eu@brue.auswaertiges-amt.de)' <[wi-bim-1-eu@brue.auswaertiges-amt.de](mailto:wi-bim-1-eu@brue.auswaertiges-amt.de)>; '[Will.Francis@fco.gov.uk](mailto:Will.Francis@fco.gov.uk)' <[Will.Francis@fco.gov.uk](mailto:Will.Francis@fco.gov.uk)>; '[wolfgang.dinnocenzo@mise.gov.it](mailto:wolfgang.dinnocenzo@mise.gov.it)' <[wolfgang.dinnocenzo@mise.gov.it](mailto:wolfgang.dinnocenzo@mise.gov.it)>; '[zeljko.krevzelj@mvep.hr](mailto:zeljko.krevzelj@mvep.hr)' <[zeljko.krevzelj@mvep.hr](mailto:zeljko.krevzelj@mvep.hr)>; '[zsuzsa.beres@mfa.gov.hu](mailto:zsuzsa.beres@mfa.gov.hu)' <[zsuzsa.beres@mfa.gov.hu](mailto:zsuzsa.beres@mfa.gov.hu)>  
**Cc:** REUNIONS COMMISSION / EXPERTS NATIONAUX (EP) <[Reunions-Comm-ExpNat@europarl.europa.eu](mailto:Reunions-Comm-ExpNat@europarl.europa.eu)>; '[service.courrier-actesdelegues@consilium.europa.eu](mailto:service.courrier-actesdelegues@consilium.europa.eu)' <[service.courrier-actesdelegues@consilium.europa.eu](mailto:service.courrier-actesdelegues@consilium.europa.eu)>; ENER B1 PROJECTS <[EN](mailto:ENER-</a></p></div><div data-bbox=)

[B1-PROJECTS@ec.europa.eu](mailto:B1-PROJECTS@ec.europa.eu)>

**Subject:** 4th PCI list - draft delegated act and accompanying staff working document

**Importance:** High

Dear Madam/ Sir,

Following discussions with experts from your Member State in the context of the Regional Groups as laid down in Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure and, in line with the commitments undertaken by the Commission in light of the Interinstitutional Agreement on Better Legislation, we are consulting you on the **final draft Commission Delegated Regulation amending Regulation (EU) 347/2013 as regards the Union list of Projects of Common Interest and the accompanying final draft Commission staff working document.**

The attached draft delegated act includes the 4th list of PCIs as adopted by the High-level decision making body of the Regional Groups. Please note that, in line with article 3(4) of the above mentioned Regulation "*the Commission shall ensure that the Union list is established every two years, on the basis of the regional lists adopted by the decision-making bodies of the Groups as established in Annex III.1(2), following the procedure set out in paragraph 3 of this Article*".

Also in accordance with the above Regulation, representatives of the Member States, national regulatory authorities, transmission system operators, ACER, ENTSO-G and ENTSO-E have been involved in the drawing up of the 4th list of PCIs. Several consultations have been carried out during the process. Regional Group meetings have been webstreamed and open to a broad range of stakeholders, including consumer and environmental organizations.

Should you have any final comments to the attached draft delegated act, please let us know by 23 October 2019.

Yours sincerely,

**Jane Amilhat**

Acting Head of Unit

Networks and regional initiatives



Brussels, **XXX**  
[...](2019) **XXX** draft

**COMMISSION STAFF WORKING DOCUMENT**  
*Accompanying the document*

**COMMISSION DELEGATED REGULATION**

**amending Regulation (EU) No 347/2013 of the European Parliament and of the Council  
as regards the Union list of projects of common interest**

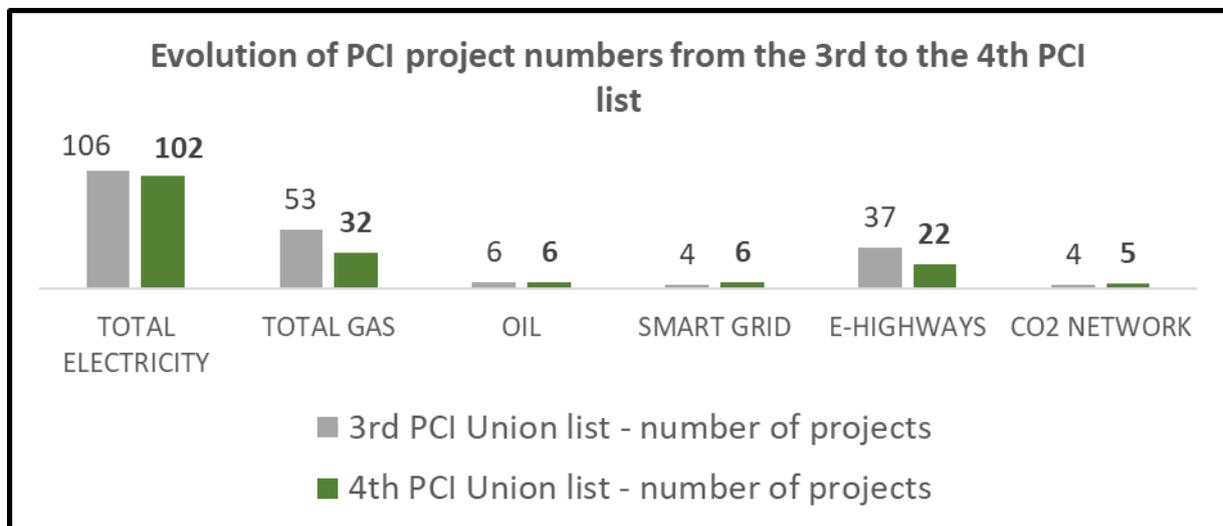
[...]

## 1. Introduction

A well-interconnected energy infrastructure is a pre-condition for establishing an integrated, competitive and sustainable internal energy market in the European Union. It is also a pre-requisite for a resilient Energy Union which provides EU consumers with secure, sustainable, competitive and affordable energy.

Development in good time of the critical energy infrastructure projects, i.e. projects of common interest (PCI), is indispensable for the achievement of the EU's ambitious climate and energy policy objectives laid down in the Paris Agreement, the 2020 and the 2030 targets and the Energy Union Strategy. The TEN-E Regulation adopted in 2013 provides for a set of tailor-made measures that aim at ensuring timely development of PCIs, in particular by facilitating and accelerating their permit granting process, allowing for early assessment of possible environmental impacts and mitigation measures, and enhancing the involvement of the larger public and local communities in the planning and implementation on the ground, improving regulatory treatment, and providing, under specific conditions, for Union financial assistance under the Connecting Europe Facility (CEF).<sup>1,2</sup>

A new Union list of PCIs is adopted every two years. So far, four Union lists have been prepared in cooperation by the Commission, Member States, promoters, transmission system operators, regulators and the wider stakeholder community. The (third) Union list of PCIs adopted in 2017 includes 173 PCIs<sup>3</sup>. The new (fourth) Union list of PCIs adopted in 2019 includes 151 PCIs.



<sup>1</sup> 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, 25.4.2013, p.39).

<sup>2</sup> Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010 (OJ L 348, 20.12.2013, p.129).

<sup>3</sup> Commission Delegated Regulation (EU) 2018/540 of 23 November 2017 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest C/2017/7834, (OJ L 90, 6.4.2018, p. 38–58).

The experience gained in the first six years of the application of the TEN-E Regulation confirms that the legal framework has addressed many of the challenges identified and has delivered tangible results. This could be achieved thanks to the enforcement of the TEN-E Regulation and to the closely monitoring of PCIs to ensure their timely implementation. The policy priority in the starting years was to improve energy security, now the focus is shifting towards the accelerated integration of increasing amounts of renewable energy in line with the ambitious energy and climate targets, related energy security and the completion of the internal energy market by addressing remaining bottlenecks.

## 2. Achievements and Impact

TEN-E policy has enabled over 30 projects to be implemented by the end of 2018 and further 75 projects are expected to be implemented by 2022.

PCIs on the fourth list respond to the upcoming challenges. To meet the **EU's energy and climate policy objectives** and to honour its obligations under the **Paris Agreement**, the energy sector needs to be decarbonised. A strong and resilient electricity network will be vital to enable the necessary shift to low-carbon generation. The energy transition relies on an electricity system to which renewables will contribute over half of the generation by 2030 and that should be fully decarbonised by 2050. Well interconnected and integrated trans-European electricity grids and storages are therefore indispensable to accommodate, via optimised cross-border exchanges, increasing levels of variable renewable sources. Interconnections have also long been identified as key vectors towards affordable electricity prices and security of supply in the internal market. This will require sustained high amounts of investment in the power grid. The high number of electricity PCIs reflects these objectives.

Electricity PCIs will also contribute to reaching the 10% **electricity interconnection target** for 2020 and to meeting the 2030 interconnection target of at least 15%, as set in Regulation (EU) 2018/1999 on the governance of the Energy Union and Climate action. The Commission has been assisting Member States reaching these targets, notably by facilitating close regional cooperation. The well-established four regional High-Level Groups ('Baltic energy market interconnection plan', 'Central-Europe & South-Eastern Europe Energy Connectivity', 'South-West Europe' and 'Northern Seas Energy Cooperation') provide a suitable context to enhance regional cooperation underpinned by the highest political support. The EU's macro-regional strategies<sup>4</sup> can also contribute to enhancing regional cooperation in the field of energy connectivity.

---

<sup>4</sup> [https://ec.europa.eu/regional\\_policy/en/policy/cooperation/macro-regional-strategies/](https://ec.europa.eu/regional_policy/en/policy/cooperation/macro-regional-strategies/)



## ENERGY

Innovation  
and Networks  
Executive Agency

### Infrastructure that connects

Projects of common interest completed and kick-started during 2015-2019



- |  |  |
|--|--|
| Electricity substation                   | High-voltage electricity line (completed)          |
| Phase-shift transformer                  | Gas pipeline (completed)                           |
| Terminal for liquefied natural gas (LNG) | High-voltage electricity line (under construction) |
| Under ground gas storage                 | Gas pipeline (under construction)                  |
| Gas reverse flow                         | Electricity Synchronisation                        |
| Gas compressor station                   | Smart Grid   |

Copyright ENEA, 2019  
ENEA is a public institution of the Italian State  
ENEA is a public institution of the Italian State

## 2.1. Main achievements

While the challenges remain important for peripheral or isolated Member States (e.g. Spain, Portugal, Ireland, Cyprus), the situation has greatly improved in several parts of the EU. For example:

- The interconnection capacity between Spain and France has doubled with the INELFE project completed in 2014 and will again double with Biscay Bay project<sup>5</sup>.
- The Celtic Interconnector between France and Ireland will establish the first electricity interconnection between Ireland and the continent and prevent that Ireland would be fully isolated with no direct electricity interconnection to the EU energy market after the United Kingdom leaves the EU. In October 2019, CEF Energy financial assistance of €530 million was awarded to build the Celtic Interconnector by the mid-2020s. The implementation of this PCI will also enhance the development and integration of more renewable energy in Ireland.
- The isolation of Malta's power grid from the European network was ended in 2015 with the inauguration of its interconnector to Italy.
- Thanks to the completion of key interconnectors, including Nordbalt (Lithuania–Sweden; 700 MW), Litpol Link (Lithuania–Poland; 500 MW) and Estlink 1 and 2 (Estonia–Finland, 350 MW, 650 MW) the Baltic region has become one of the most interconnected regions in Europe. Moreover, the completion of the third and final stage of the Kurzeme Ring reinforcements in Western Latvia has considerably increased the security of supply in the region and the robustness of the electricity grid.
- 2019 marked the completion of Kriegers Flak Combined Grid Solution PCI between Ishøj / Bjæverskov in Denmark and Bentwisch in Germany via offshore windparks, tapping into the offshore wind potential of the Baltic Sea.
- As regards gas, the EU gas grid has developed considerably following the 2009 gas crises – also thanks to political support and funding from the European Commission. Several reverse flow projects were rapidly implemented to better connect the networks between Member States in the West and East.
- Furthermore, a number of PCI projects have already been completed, such as the Trans Anatolian Pipeline (TANAP), which brings gas from Azerbaijan to the European continent contributing to the diversification of gas sources.
- The Balticconnector has ended the gas isolation of Finland.
- The “Val de Saône project” has removed congestions on the French gas network and established an essential link to improve the fluidity of transmission between the gas markets of the North and the South of Europe.

## 2.2. Remaining challenges

Despite good track record in implementing the regulation, a number of challenges remain for the years to come:

---

<sup>5</sup> The EUR 578 million grant agreement for the Biscay Bay project that was signed at the Lisbon Summit in July 2018 – the largest Connecting Europe Facility-Energy grant ever awarded. Once completed, by 2025, this new interconnector will double the interconnection capacity between Spain and France to 5000 MW.

- The **synchronisation of the three Baltic States' electricity grid with the continental European network** remains a key political priority. In 2018, Heads of State and Governments of the three Baltic States, Poland and the President of the European Commission signed a *Political Roadmap on the synchronisation of the Baltic States' electricity networks with the Continental European Network via Poland* agreeing on a process and a solution for synchronising through the existing double-circuit AC line between Lithuania and Poland known as 'LitPol Link', complemented with an additional direct current submarine cable between Poland and Lithuania known as 'Harmony Link', as well as other optimization measures. In June 2019, the Parties reconfirmed their political commitment to achieving the synchronisation by signing a *Political Roadmap on implementing the synchronisation of the Baltic States' electricity networks with the Continental European Network via Poland*. This Implementing Roadmap recognizes the progress achieved and sets clear milestones and objectives for achieving the synchronisation by 2025. The European Commission remains committed to support the Baltic States to this effect. The Commission has granted financial assistance for the internal reinforcements in the Baltic States' grid under the Connecting Europe Facility amounting to EUR 323 million.
- Whereas gas grids in Western Europe are closely interlinked (as a result of which there remain only three gas PCIs in Western Europe), poorly interconnected gas networks in the **Central European and South-East European** countries and their historical dependence on Russian gas imports made them vulnerable to supply shocks and hindered their full integration into the EU internal energy market.

In addition to the success stories described in section 2.1, a number of key PCIs are currently in an advanced stage of implementation, in particular in the region that was most affected by past gas crises: the Trans-Adriatic Pipeline (TAP), the liquefied natural gas (LNG) terminal in Krk in Croatia, the Bulgaria-Romania-Hungary-Austria (BRUA) pipeline corridor, the gas interconnector between Poland and Lithuania (GIPL), the Interconnector Greece-Bulgaria (IGB) and others. These projects will help vulnerable countries to diversify their gas supply and give them access to three sources of gas.

- Some further bottlenecks, however, exist and may necessitate targeted infrastructure developments, in particular infrastructure giving access to a liquid global LNG market and new gas sources in EU countries (e.g. offshore gas fields in the Eastern Mediterranean and the Black Sea).

A well-interconnected gas infrastructure will thus remain necessary. Demand for natural gas will decrease as the EU moves towards a carbon-neutral economy. At the same time, biogas and renewable hydrogen are expected to play an important role in the future EU energy mix. In the implementation of the gas PCI's, it should be ensured that they are future proof (i.e. ready for transporting low carbon gases such as e-gases, biogas, or hydrogen, as appropriate).

Based on the above developments and considerations, the number of gas projects was gradually reduced over the years: while the first PCI list had 104 gas projects, the third list included 53, and the fourth PCI list includes only 32. The new, streamlined gas PCI list is in line with the agreed EU energy and climate goals and objectives. It contains the elements that

will ensure a competitive and secure gas supply for EU companies and citizens, while avoiding the risk of creating large scale stranded fossil fuel assets.

By the early 2020s, when the gas PCIs currently under implementation will be in operation, Europe should achieve a well-interconnected and shock-resilient gas grid and all Member States will have access to at least three gas sources or the global liquefied natural gas (LNG) market. 23 Member States will have access to the global LNG market with increasing liquidity which is a key element to improve the Union's energy security through the diversification of gas sources.

### **3. CEF Energy to support the development of PCIs**

EU financing under the Connecting Europe Facility has helped the development of PCIs which may otherwise not be implemented or with significant delay. CEF Energy may provide financial support for studies and the construction of PCIs.

Since its launch in 2014, CEF Energy financial assistance of EUR 3.7 billion has been provided to 139 actions supporting the development and implementation of more than 90 projects of common interest. When allocating CEF Energy financial assistance the Commission has given due consideration to electricity projects, with the aim of making the major part of the CEF Energy financial assistance available to these projects over the period 2014 and 2020 with **the majority of CEF financial assistance allocated so far to electricity projects (including smart grids) (59%)**. Around 40% of CEF Energy financial assistance was provided to gas projects.

### **4. The fourth Union list of PCIs**

The fourth Union list identifies 151 PCIs which are deemed necessary to implement the TEN-E priority corridors and the priority thematic areas, including 102 electricity projects, 32 gas projects, 6 oil projects, 6 smart grid projects, and 5 cross-border carbon dioxide network projects. Furthermore, in total 22 electricity projects have been labelled as electricity highways.

The selected electricity PCIs will address the specific infrastructure needs of the priority regions, as follows:

- (a) In the Northern Seas region the projects will further integrate the markets around the North Sea, which used to act as a natural barrier to interconnection. The expected future development of significant additional offshore wind capacity further underlines the importance to ensure that power can flow freely throughout the region.  
The interconnector between Ireland and France (Celtic Interconnector) will provide a first connection between Ireland and Continental Europe. The interconnectors between Denmark and Germany and the related internal grid reinforcements in Northern Germany will further enable the integration of significant amounts of offshore wind. A number of storage projects will increase system flexibility.
- (b) In Western Europe the electricity PCIs will further help complete the integration of the Iberian Peninsula with the European electricity market and thus help reach the European energy and climate objectives. The implementation of the Biscay Bay interconnector will be instrumental in this respect. It demonstrates a consequent implementation of the objectives agreed in the Madrid Declaration and confirmed in the Lisbon Declaration in July 2018.

The internal German lines will contribute to a better integration of renewable energy and will enhance security of supply through increased grid resilience and flexibility.

Other PCIs will contribute to a better market integration by increasing electricity exchange capacity between Portugal and Spain, Italy and France, as well as Ireland and Northern Ireland. Several storage projects will increase system flexibility.

- (c) In Central Eastern and South Eastern Europe the electricity PCIs will strengthen the existing electricity grid and provide for additional cross-border transmission capacity needed for the integration of renewable energy sources.

To address the issue of uncontrolled energy flows ("loop-flows"), projects in Poland and the Czech Republic are underway. The implementation of HVDC cables linking the north and south of Germany (SuedLink and SuedOstLink) will create additional capacity for transporting renewable power within Germany and reduce the pressure on the neighbouring countries's electricity grids.

In South Eastern Europe several clusters of projects containing interconnectors as well as internal reinforcements will increase cross-border transmission capacity and increase the stability and resilience of the national grids, e.g. between Bulgaria and Greece (Black Sea Corridor), from Italy to Romania via the Balkans (East-West corridor comprising of 3 project clusters), and the new interconnectors between Hungary and Slovenia and Hungary and Slovakia. New interconnections between Italy and Austria and Italy and Slovenia aim to alleviate the congestion on the Northern Italian border, allowing for the better integration of renewable electricity and enabling more cross-border trade for the benefit of consumers.

- (d) In the Baltic Sea region (BEMIP) the key objective of electricity PCIs is to further integrate the three Baltic States into the European networks, inter alia by synchronising them with the continental European network and to remove the existing bottlenecks on the borders between them. The insufficient transmission capacity creates congestions and efficiency losses also on the Northern border, especially between Finland and Sweden and determines high price differences between the two areas. The third interconnection Finland – Sweden will add up to 800 MW capacity on the border, decreasing the existing bottleneck and increasing the security of supply in Finland. Increasing transmission capacity will also be achieved by completing the Estonia-Latvia third electricity interconnection and building internal reinforcements in Poland and Sweden, which are necessary for the full utilisation of the LitPol Link (between Lithuania and Poland) and the Nordbalt interconnections (between Lithuania and Sweden). Two hydro-pump storage projects in Estonia and Lithuania will provide further balancing and flexibility services and improve the security of supply and system stability in the Baltic region in view of the synchronisation with the European continental grid.

The synchronisation of the Baltic States' electricity systems with the European networks by the end of 2025 has been a long-term objective of the Baltic States in view of achieving independence in the operation of their electricity systems. A cluster of PCIs aiming at the integration of the Baltic States' electricity network into the European networks and their synchronisation will contribute to reinforcing the Baltic system and implementing the technical conditions required for the formal extension of the continental European network to the Baltic States.

When compared to the previous Union lists, the fourth Union list provides for fewer, but better focused **gas** projects addressing the critical infrastructure bottlenecks.

In line with the Union's ambitious 2030 decarbonisation objectives, and to provide for consistency with regard to the underlying scenarios used for the assessment of projects in the electricity and gas sector, the gas regional groups have assessed benefits of the candidate gas PCIs against one scenario, the so-called "distributed generation" scenario. The "distributed

generation" scenario is one of the three assessment scenarios presented in the TYNDP 2018, which results in the lowest gas demand by 2030. Furthermore, the gas regional groups took due account of the analysis by ENTSOG indicating that the current gas infrastructure is in general already today well equipped to face the challenges of the future, it allows for a wide range of supplies and is resilient to a number of disruption cases. The remaining and already well-identified infrastructure needs primarily in the Eastern Baltic Sea region, the Central and South-Eastern part of Europe and in the Iberian Peninsula can be effectively addressed by a limited number of projects.

The good state of the infrastructure (particularly in the Western part of Europe), together with the potentially decreasing gas demand, high investment and operating costs of new infrastructure, and long lifetime of (large-scale) energy infrastructure projects require a cautious approach to new investments in the gas sector in order to avoid over-investment and additional costs for consumers. Priority should be given to the more efficient use of the existing infrastructure at regional level and to better enforcement of the existing market and regulatory-based measures, including the gas network codes. At the same time, priority should be given to the projects which have been carefully planned, considering the EU's long term energy and climate policy objectives and which can prove technological readiness for transporting low carbon gases such as e-gases, biogas, hydrogen (i.e. which are future proof infrastructure).

The selected gas PCIs will contribute significantly to meeting the EU's key energy policy objectives and will address the remaining infrastructure bottlenecks identified by the Regional Groups. They will end the gas isolation of the three Baltic States and Finland. They will provide for further diversification of sources and routes by developing the Southern Gas Corridor and the Norwegian Corridor. The gas PCIs will develop missing or enhance existing interconnections to increase security of gas supply, cross-border trade and competition. Concerning the gas projects giving connection to new sources of gas, the benefits of supply diversification should be balanced with the risk of lock-in, which would not be in line with the EU's long term energy and climate policy objectives.

The selected gas PCIs will address the specific infrastructure needs of the priority regions, as follows:

- (a) In Western Europe gas interconnections will increase short-term gas deliverability and further diversify routes of supply.

PCIs include the Shannon LNG terminal and connecting pipeline in Ireland that will diversify supply sources and enhance energy security as well as enhance competition. In addition, a pipeline project between Malta and Italy was identified in view of Malta's physical isolation from the European gas network.

Furthermore, the adaptation from low- to high-calorific gas in France and Belgium will address energy security related challenges in that region due to the decreasing low calorific gas production from the Groeningen gas field in the Netherlands.

- (b) In Central Eastern and South Eastern Europe the PCI projects address important challenges such as security of supply, market integration and competition. The PCIs include priority projects agreed within the High-Level Group on Central and South Eastern Europe Energy Connectivity (*CESEC*) that was established to speed up the construction of missing gas infrastructure links and to tackle the remaining technical and regulatory issues, to improve market functioning and ensure access to three supply sources for the consumers in the region.

Gas PCIs, such as LNG terminals in Croatia (Krk) and Poland will address the limited diversity of gas supply sources in the region. Other projects, such as the Poland-Slovakia, Romania-Hungary (BRUA) and Greece-Bulgaria (IGB) interconnectors will expand the existing transmission capacity and diversify gas supply, including by giving access to new offshore gas fields in the Black Sea. These missing infrastructure links and the underground storage projects will enable a closer integration of the region's markets which is necessary in the shift from long-term contracts towards shorter-term and liquid supply arrangements, offer a secure and competitive gas supply to consumers and increase resilience to possible external gas supply shocks.

- (d) In the Southern Gas Corridor PCIs will allow the EU energy market to connect to new sources of gas in the Caspian region, Central Asia and the eastern Mediterranean.

In particular the integrated system of gas pipelines including a trans-Caspian pipeline (between the shores of Turkmenistan and Azerbaijan), the expansion of South-Caucasus Pipeline (linking Azerbaijan, Georgia and Turkey), Trans Anatolian Natural Gas Pipeline (east-west across Turkey) and Trans-Adriatic Pipeline (stretching from the Greek-Turkish border, across Albania to Italy) will give the EU access to natural gas from the fields in the gas-rich Caspian Sea region. The construction works are almost complete and the first gas from Azerbaijan will reach the EU in 2020.

With the Eastern Mediterranean region now emerging as an important producer of natural gas, the EU is looking to further diversify its supply sources. The primarily offshore pipeline between Cyprus and Greece (EastMed Pipeline) allows the EU to tap into the EastMed gas resources.

Furthermore, together with the development of gas transmission infrastructure in Cyprus, the PCIs will end the isolation of the island from the EU gas market and allow the country to reduce its carbon footprint from electricity production.

- (c) In the Baltic Sea region (BEMIP) the key objective of PCIs is to end the gas isolation of the three Baltic States and Finland by connecting their networks with the Continental European gas grid. First accomplishments have been already achieved as the Balticconnector and the interconnection between Latvia and Estonia will be complete by the end of 2019. The most relevant integration with the European continental grid will be achieved notably by building the gas interconnection between Poland and Lithuania (GIPL) as well as by reinforcing existing gas interconnection between Lithuania and Latvia. The Baltic Pipe will bring gas from the North Sea directly to the region further adding to its diversification and enhancing market liquidity. In recognition of the significant regional benefits to be brought by GIPL, the Baltic Pipe and the strengthening of the interconnection between Lithuania and Latvia, the Commission is supporting their construction with grants under the CEF programme.

The six **oil PCIs** will address the need of the Central Eastern European region for diversified oil supplies. These projects enhance the energy security of the countries in the region by (a) interconnecting the Eastern and Western European crude oil pipeline systems; (b) increasing the capacity of sea imports of crude oil from the Baltic Sea, Adriatic Sea and the Black Sea; (c) linking the different arms of the Druzhba pipeline and, (d) creating South-North pipeline connections. Oil PCI's are not eligible for funding under CEF.

The six **smart grids** projects involving eight Member States have different focus areas and reached different status of maturity. In general, they will allow for more resilience of the networks, the deployment of more renewable generation, and involvement of demand response.

The fourth Union list also includes five PCIs that aim at developing **carbon dioxide transport infrastructure** between Member States and neighbouring third countries. CO<sub>2</sub> transport infrastructure is a vital chain in carbon dioxide capture and storage and, so far, in Europe, no transport infrastructure for CO<sub>2</sub> has been developed. The projects are all located around the North Sea and involve Belgium, the Netherlands, the United Kingdom and Norway.

Although the PCI status signifies the importance of a project for the attainment of the Union's ambitious climate and energy policy objectives and implies its significant regional socio-economic benefits, the status itself does not guarantee the successful development of that project. In the PCI selection process some PCIs were identified as being able to address the same infrastructure needs. These projects are marked on the (fourth) Union list as (potentially or fully) competing, and the market is to decide if and which of them will be developed. Furthermore, each of the PCIs needs to successfully undergo a full permit granting process, including environmental impact assessments and public consultations, as well as obtaining all necessary regulatory approvals. All PCIs must be developed in full compliance with the EU *acquis*, including internal energy market legislation, environmental rules, public procurement and competition law. The selection of a given project as a PCI does not prejudice in anyway the outcome of these processes.

### **3. The work leading to the (fourth) Union list of PCIs**

The Union list adopted end October was prepared following a rigorous, open, transparent and inclusive process involving numerous organisations.

The identification and selection process of PCIs is based on regional cooperation and it was managed by the regional groups established under the TEN-E Regulation. The regional groups for electricity, smart grids, and gas comprise of representatives of the Commission, the Member States, national regulatory authorities (NRAs), transmission system operators (TSOs), European Networks of Transmission System Operators for gas and electricity (ENTSOG and ENTSO-E), the Agency for the Cooperation of Energy Regulators (ACER), and the Commission. The regional groups for oil and carbon dioxide transport projects comprise representatives of the Commission, the Member States, and project promoters. All parties involved in the PCI process brought their knowledge and expertise with regard to the underlying methodologies for assessing regional infrastructure needs and individual candidate projects against these needs from a Union energy policy perspective.

The PCIs process was launched in October 2018 ending in October 2019 with the adoption of the delegated regulation that will be submitted to the the European Parliament and the Council who will have 2 months time to accept or to object to the list. This 2 months period can be extended by another 2 months.

The PCIs identification process started with the identification of the specific and most pressing infrastructure needs and bottlenecks in the electricity and gas priority corridors that could not be effectively addressed by more efficient use of the existing infrastructure and/or market measures, and thus require an investment in a new infrastructure. The lists of the infrastructure needs prepared and agreed by the regional groups with the involvement of the broad spectrum of stakeholders, constituted the basis of the 2019 assessment process of the PCI candidates.

The calls for gas and electricity PCI candidates took place between 15 October - 15 November 2018 and 20 November 2018 - 16 February 2019, respectively, resulting in numerous submissions. PCIs candidates in the electricity and gas sectors originated from the 2018 10-year network development plans (TYNDP) developed by ENTSO-E and ENTSOG.

For oil PCIs, a call for candidate projects took place in June 2019. For Smart Grid candidate projects the call was announced on 19 December 2018 and ended on 7 March 2019.

Each regional group carried out a comprehensive assessment of candidate PCIs proposed for its priority corridor. Projects were assessed with regard to their compliance with the general criteria - laid down in Articles 4(1) of the TEN-E Regulation – including, their contribution to the objectives of the corridor and their cross-border dimension. Subsequently, the regional groups assessed the projects' contributions to the specific criteria - laid down in Article 4(2) of the TEN-E Regulation - according to the dedicated assessment methodologies agreed by the regional groups. The needs identification methodology and the project candidates' assessment was done using the same methodologies for the gas and electricity groups respectively, resulting in a consistent identification and assessment of the projects in each sector.

For the assessment and comparison of projects, electricity and gas candidate PCIs were subject to cost-benefit analyses (CBA) carried out according to the methodologies developed by ENTSO-E and ENTSG. In the priority thematic area of smart grid deployment, the cost-benefit analysis was prepared by the Commission's Joint Research Center on the basis of input from the promoters in accordance with the agreed assessment framework.

The process of assessing the PCI candidates in all the priority corridors and priority thematic areas was concluded on 4 October 2019 with the adoption of the regional lists of the PCI candidates by the (high-level) decision-making bodies of the regional groups.

Recognising the important role of the energy regulators in the process of developing energy infrastructure, the Commission invited ACER and the NRAs – being members of the regional groups – to actively engage into the process. The process granted the regulators possibility to provide input at every stage of the process, including at the infrastructure needs identification, at the development of the PCI assessment methodologies, and at the assessment of the PCI candidates on the basis of the CBA analysis.

Detailed findings of ACER and the NRAs were presented to the regional groups and were taken into account by the latter in the process of agreeing on the regional lists.<sup>6</sup>

The 2019 PCI identification process provided for greater transparency. In addition to the defined members of the regional groups, the process involved relevant stakeholders acting in the field of energy, such as consumer and environmental protection organisations that actively participated in the regional group meetings. Meetings of the regional groups were open to stakeholders and were made remotely accessible by webstreaming, allowing organisations to be involved in the process at every stage, to obtain information on the PCI candidates and to provide feedback. In addition, in line with the Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on Better Law-Making and the Framework Agreement on relations between the European Parliament and the European Commission, the meetings of regional groups have been open to the European Parliament and information related to the preparation of the delegated act containing the fourth Union list of PCIs were shared before adoption.

Public consultations were organised to obtain the views of stakeholders and the larger public on the necessity of the candidate projects from the European Union's energy policy perspective. The public consultations were organised in line with the Commission's better-regulation principles. A public consultation on electricity candidate PCIs was carried out between 22 November 2018 and 28 February 2018, on gas between 26 February and 29 March 2019, on smart grids on cross-border carbon dioxide transport projects between 18

---

<sup>6</sup> [http://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Opinions/Opinions/ACER%20Opinion%2013-2017.pdf](http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%2013-2017.pdf).  
[http://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Opinions/Opinions/ACER%20Opinion%2014-2017.pdf](http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%2014-2017.pdf).

March and 9 June 2019, whilst on oil the consultation was held between 4 July and 26 September 2019.

In addition to the online consultation process, several meetings were held between the interested stakeholders and project promoters which allowed for indepth and constructive discussions on the projects characteristics and their potential impact on the society and environment.

The increased transparency of the PCI process, and the greater involvement of stakeholders, allowed consumer and environmental protection organisations to prepare several positions papers that were shared with the regional groups.



Brussels, **XXX**  
[...](2019) **XXX** draft

**COMMISSION DELEGATED REGULATION (EU) .../...**

**of **XXX****

**amending Regulation (EU) No 347/2013 of the European Parliament and of the Council  
as regards the Union list of projects of common interest**

## EXPLANATORY MEMORANDUM

### 1. CONTEXT OF THE DELEGATED ACT

#### **Objective and legal basis of the proposed action**

This Delegated Regulation establishes a Union list of projects of common interest (PCIs) to replace the list, as established by the Commission Delegated Regulation (EU) 2018/540 of 23 November 2017<sup>7</sup>

PCIs are specific energy infrastructure projects that are critical for completing the European internal energy market, achieving the Union's energy policy objective of providing affordable, secure and sustainable energy to all Europeans, and for attaining the Union's climate objectives.

Article 3(4) of Regulation (EU) No 347/2013 on guidelines for trans-European energy infrastructure (the TEN-E Regulation) requires the Commission to adopt, every two years, a delegated act that establishes a Union list of PCIs.<sup>8</sup> The Union list is based on the regional lists of candidate PCIs prepared and adopted by the regional groups established by the TEN-E Regulation.

This Delegated Regulation takes the form of an annex to the TEN-E Regulation.

#### **General context of the Delegated Regulation**

The TEN-E Regulation provides for a legislative framework which aims at facilitating and accelerating the implementation process of PCIs.

The TEN-E Regulation establishes nine strategic geographical infrastructure priority corridors in the areas of electricity, gas and oil, and three Union-wide infrastructure priority thematic areas for smart grids, electricity highways and cross-border carbon dioxide network. It provides for an open, transparent and inclusive process of identifying specific PCIs that are needed to implement these priority corridors and areas.

The TEN-E Regulation also lays down a set of measures to ensure that PCIs are implemented in good time, including:

- strengthened transparency and improved public consultation;
- accelerated and streamlined permit granting procedure, including a binding three-and-a-half-years' time limit for this procedure;
- a single national competent authority acting as a one-stop-shop for permit granting procedures;
- improved regulatory treatment by allocating costs according to the net benefits, and regulatory incentives; and
- possibility of receiving financial assistance under Connecting Europe Facility (CEF) in the form of grants and innovative financial instruments.

### 2. CONSULTATIONS PRIOR TO THE ADOPTION OF THE ACT

---

<sup>7</sup> Commission Delegated Regulation (EU) 2018/540 of 23 November 2017 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest, (OJ L 90, 6.4.2018, p. 38).

<sup>8</sup> OJ L 115, 25.4.2013, p.39.

## **PROCESS PRIOR TO THE ADOPTION OF THE UNION LIST OF PCIS**

The process of establishing the Union list of PCIs started in October 2018 and ends with the the entry into force of this Delegated Regulation.

The identification process of PCIs is based on regional cooperation and it was managed by the regional groups. Regional groups for electricity, smart grids, and gas comprise representatives of the Member States, national regulatory authorities (NRAs), transmission system operators (TSOs), European Networks of Transmission System Operators for gas and electricity (ENTSOG and ENTSO-E), the Agency for the Cooperation of Energy Regulators (ACER), and the Commission. Regional groups for oil and carbon dioxide transport projects comprise representatives of the Member States, project promoters and the Commission.

In addition to the legal provisions of the TEN-E Regulation on the specific role of Regional Groups in establishing the regional lists of PCIs, the Commission acted on political commitments stemming from the Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on Better Law-Making and the Framework Agreement on relations between the European Parliament and the European Commission. The meetings of regional groups have been open to the Parliament and information related to the preparation of this delegated act have been shared before adoption.

The PCI process also involved exchanges with relevant stakeholders acting in the field of energy, such as consumer and environmental protection organisations. Furthermore, five public consultations were carried out by the Commission to obtain views of stakeholders and the larger public on the necessity and merits of the proposed projects from a Union energy policy perspective.

The process of establishing the Union list consisted of the following main stages:

### **(a) Identification of the infrastructure needs, and the improved assessment methodology**

The PCI selection process in the electricity and gas sectors started in October 2018 with the identification at regional level of specific infrastructure needs that should be addressed by new infrastructure projects and that cannot be effectively resolved by other non-infrastructure means, including regulatory or market-based measures.

The infrastructure needs identified by the regional groups constituted the basis of the improved 2019 assessment methodologies of electricity and gas PCI candidates. These methodologies were developed within the Cooperation Platform comprising representatives of the Commission, ACER, ENTSOG and ENTSO-E as well as representatives of NRAs on ad-hoc basis. The Cooperation Platform was established to ensure better coordination of the PCI process between the key participants, and to provide for greater transparency.

The assessment framework for the assessment of candidate PCIs in the priority area of smart grid deployment followed the same process as for the thrid Union list of PCIs.

### **(b) Submission of candidate PCIs by project promoters**

In accordance with point 2(3) and 2(4) of Annex III to the TEN-E Regulation, electricity and gas infrastructure projects submitted by promoters during the dedicated calls as candidate PCIs were part of the 10-year network development plans (TYNDPs) for gas and electricity developed by ENTSOG and ENTSO-E respectively.

### **(c) Assessment of candidate PCIs by the regional groups**

Each regional group carried out an assessment of the candidate PCIs proposed for its priority corridor.

In the first place, projects were assessed with regard to their compliance with the general criteria laid down in Articles 4(1) of the TEN-E Regulation, including their contribution to the objectives of the corridor and their cross-border dimension.

Subsequently, the regional groups assessed projects' contributions to the specific criteria laid down in Article 4(2) of the TEN-E Regulation according to the agreed dedicated methodologies developed

within the Cooperation Platform (for electricity and gas PCI candidates) or by the respective working group (for oil and cross-border carbon dioxide network PCI candidates). Furthermore, electricity and gas candidate PCIs were subject to cost-benefit analysis carried out according to the methodologies developed by ENTSO-E and ENTSO-G. In the priority thematic area of smart grid deployment, the cost-benefit analysis was prepared by the promoters themselves and the application for PCI was assessed in accordance with the Assessment Framework and the legal provisions.

#### **(d) Consultation of stakeholders on candidate PCIs**

Provisions of Annex III to the TEN-E Regulation provide for enhanced transparency and public participation in the PCI process. Each regional group should consult the organisations representing relevant stakeholders — and, if deemed appropriate, stakeholders directly — including producers, distribution system operators, suppliers, consumers, and organisations for environmental protection. The regional group may also organise hearings or consultations, where relevant for the accomplishment of its tasks.

Five public consultations on electricity, gas, smart grids, cross-border CO<sub>2</sub> networks and oil candidate PCIs were carried out during the period from 22 November 2018 to 26 September 2019 complying with Commission's better-regulation principles. Overall, 720 contributions from 22 Member States were submitted via the EU Survey consultation platform representing a wide range of citizens and stakeholders, including environmental and organisations, trade associations, small and medium enterprises (SMEs) etc. Furthermore, several position papers were submitted via a functional mailbox communicated to the public. In summary, the respondents largely supported the inclusion of smart grids and CO<sub>2</sub> network candidate projects in the Union list. With regards to electricity and gas consultations, a number of environmental stakeholders emphasised the need to take into account the environmental merits of individual candidate projects in the course of the PCI identification and selection process. The main goal of the consultation process was to assess the necessity of the proposed projects – taking account of their socioeconomic benefits and costs - from the Union energy policy perspective. All PCIs must comply with Union legislation and undergo a complete permit granting procedure, including an environmental impact assessment and public consultation. Should a PCI be found not to be in compliance with Union legislation, it may be removed from the Union list.

In addition to the online consultation process, bilateral meetings with representatives of consumer and environmental organisations were held to allow for more in-depth discussions on the methodology underpinning the assessment of PCIs.

Moreover, stakeholders were regularly invited to, and participated in meetings of the regional groups which discussed the needs in each corridor, assessed the PCI candidates and drew up the regional lists of PCIs.

#### **(e) Check of the criteria and the cross-border relevance by the NRAs**

The NRAs (coordinated by ACER) cross-checked, for the electricity, gas and smart grids PCI candidates, the consistent application of the criteria/cost-benefit analysis methodology and their cross-border relevance. Overall, the NRAs assessment has been positive and only some NRAs have expressed their reservations with regard to a handful of projects. Detailed findings were submitted to the regional groups.

#### **(f) Agreement of the decision-making bodies on the draft regional lists of candidate PCIs**

Following the assessment of candidate PCIs by the regional groups, their decision-making bodies at technical level (composed of the Commission and Member States representatives) agreed on the draft regional lists and the preliminary ranking of candidate PCIs. Meetings of the technical decision-making bodies of the regional groups were held on 5 July for electricity, smart grids and gas projects,

and on 17 July for oil projects. In the case of cross-border carbon dioxide network projects, the draft regional list was agreed in written form by in July 2019.

**(g) ACER's opinions on the draft regional lists**

In line with point 2(12) of Annex III to the TEN-E Regulation, ACER provided its opinions on the *draft* regional lists of electricity (including smart grids) and gas PCIs on 25 September 2019. ACER assessed the consistent application of the assessment criteria and of the cost/benefit analysis across the regions.

**(h) Adoption of the final regional lists of PCIs by the decision-making bodies**

The *final* regional lists in all nine priority corridors and all three priority thematic areas were adopted by the decision-making bodies of the regional groups on 4 October 2019. The decision-making bodies adopted the final regional lists on the basis of the draft regional lists and by considering the ACER's opinion, the NRAs' assessments and in the case of oil and carbon-dioxide transport projects the Working Group's assessment. The Gothenburg LNG terminal in Sweden was removed from the BEMIP gas regional list agreed by the relevant decision-making body following the Swedish authorities' decision denying authorization for a connection of the LNG terminal to the gas transmission grid, without which the project does not have a cross border impact as required by the TEN-E Regulation.

**3. LEGAL ELEMENTS OF THE DELEGATED ACT**

**Summary of the proposed action**

This Delegated Regulation identifies 151 PCIs which are deemed necessary to implement the priority corridors in the electricity, gas and oil sectors and the priority thematic areas: smart grids, electricity highways and the cross-border carbon-dioxide networks, as identified in the TEN-E Regulation.

This Delegated Regulation is adopted pursuant to Article 3(4) of the TEN-E Regulation, which empowers the Commission to adopt, every two years, a delegated act establishing the Union list of PCIs. This list is to replace the third Union list of PCIs established by Commission Delegated Regulation (EU) 2018/540 of 23 November 2017. This Delegated Regulation takes the form of a new Annex VII to the TEN-E Regulation.

This Union list provides for 151 PCIs, including 102 in electricity, 32 in gas, 6 in oil, 6 smart grids, and 5 cross-border carbon dioxide network projects. In total 22 electricity PCIs have been labelled as 'electricity highways' where they also fulfil the criteria in sub-point 11 of Annex I and point 1(b) of Annex II to the TEN-E Regulation.

The Union list includes projects that are critical for completing the European internal energy market, for achieving the Union's energy policy objective of affordable, secure and sustainable energy, and for attaining the Union's climate objectives. PCIs include all the priority projects agreed by the High Level Groups established to facilitate at regional level development of cross-border and trans-European projects as well as implementation of harmonised rules. When completed, electricity PCIs will help Member States to comply with the 2030 climate and energy policy targets, and the 2020 and 2030 electricity interconnection targets. Gas PCIs will allow all Member States to have access to at least three sources of gas and to liquefied natural gas, and will ensure that no Member State remains in energy isolation.

This Union list contains in total 21 PCIs fewer than the (third) Union list adopted in 2017. 20 gas projects have been removed from the list, along with one project for smart grids and one for cross-border carbon-dioxide networks. The lower number of gas PCIs results mainly from (i) the completion of some projects, (ii) a more robust PCI selection process, and (iv) the prioritisation of projects addressing the remaining and most urgent essential bottlenecks taking into account the estimated gas demand in line with the European Union's decarbonisation objectives.

PCIs included in this Delegated Regulation are to be implemented only after successful completion of permit granting procedures in all countries concerned, including environmental impact assessments and public consultations. PCIs should comply with Union and national legislation, including environmental legislation and the unbundling provisions in Directive (EU) 2019/944 and Directive 2009/73/EC.<sup>9,10</sup>

---

<sup>9</sup> Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU OJ L 158, 14.6.2019, p. 125).

<sup>10</sup> Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (OJ L 211, 14.8.2009, p.94).

## COMMISSION DELEGATED REGULATION (EU) .../...

of **XXX**

### **amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest**

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,  
Having regard to Regulation (EU) No 347/2013 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 (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009<sup>11</sup>, and in particular Article 3(4) thereof,  
Whereas:

- (1) Regulation (EU) No 347/2013 establishes a framework for the identification, planning and implementation of projects of common interest ('PCIs') which are required to implement the nine strategic geographical energy infrastructure priority corridors identified in the fields of electricity, gas and oil, and the three Union-wide energy infrastructure priority areas for smart grids, electricity highways and carbon dioxide transportation networks.
- (2) The Commission is empowered to establish the Union list of PCIs ('Union list').
- (3) The list of PCIs is established every two years, thus, it is necessary to replace it.
- (4) Projects proposed for the inclusion in the Union list have been assessed by the regional groups referred to in Article 3 of Regulation (EU) No 347/2013 who confirmed that they meet the criteria laid down in Article 4 of that Regulation.
- (5) The draft regional lists of PCIs were agreed by the regional groups at technical-level meetings. Following the opinions of the Agency for the Cooperation of Energy Regulators ('ACER') on 25 September 2019 on the consistent application of the assessment criteria and the cost/benefit analysis across regions, the regional groups' decision-making bodies adopted the regional lists on 4 October 2019. Pursuant to Article 3(3)(a) of Regulation (EU) No 347/2013, prior to the adoption of the regional lists, all proposed projects were approved by the Member States to whose territory the projects relate.
- (6) Organisations representing relevant stakeholders, including producers, distribution system operators, suppliers, and consumer and environmental protection organisations were consulted on the projects proposed for inclusion in the Union list.
- (7) PCIs should be listed per strategic trans-European energy infrastructure priorities in the order laid down in Annex I to Regulation (EU) No 347/2013. The Union list should not contain any ranking of projects.
- (8) PCIs should be listed either as stand-alone PCIs or as a part of a cluster of several PCIs because they are interdependent or (potentially) competing.

---

<sup>11</sup> OJ L 115, 25.4.2013, p. 39.

- (9) The Union list contains projects at different stages of their development, including pre-feasibility, feasibility, permit-granting and construction. For PCIs at an early development stage, studies may be needed to demonstrate technical and economic viability and compliance with Union legislation, including environmental legislation. In this context, potential negative impacts on the environment should be adequately identified, assessed and avoided or mitigated.
- (10) The inclusion of projects on the Union list is without prejudice to the outcome of the relevant environmental assessment and permit procedure. Under Article 5(8) of Regulation (EU) No 347/2013, a project that does not comply with Union law may be removed from the Union list. The implementation of PCIs, including their compliance with the relevant legislation, should be monitored in accordance with Article 5 of that Regulation.
- (11) Regulation (EU) No 347/2013 should therefore be amended accordingly,

HAS ADOPTED THIS REGULATION:

*Article 1*

Annex VII to Regulation (EU) No 347/2013 is amended in accordance with the Annex to this Regulation.

*Article 2*

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 Commission*  
*The President*  
*Jean-Claude JUNCKER*



Brussels, **XXX**  
[...](2019) **XXX** draft

ANNEX

ANNEX

to

**COMMISSION DELEGATED REGULATION (EU) .../...**

**amending Regulation (EU) No 347/2013 of the European Parliament and of the Council  
as regards the Union list of projects of common interest**

## ANNEX

Annex VII to Regulation (EU) No 347/2013 is replaced by the following:

"Annex VII

### **UNION LIST OF PROJECTS OF COMMON INTEREST ('UNION LIST'), referred to in Article 3(4)**

#### **A. PRINCIPLES APPLIED IN ESTABLISHING THE UNION LIST**

##### **(2) Clusters of PCIs**

Some PCIs form part of a cluster because of their interdependent, potentially competing or competing nature. The following types of cluster of PCIs are established:

- a **cluster of interdependent PCIs** is defined as a "Cluster X, including the following PCIs:". Such cluster has been formed to identify PCIs that are all needed to address the same bottleneck across country borders and provide synergies if implemented together. In this case, all the PCIs have to be implemented to realise the EU-wide benefits;
- a **cluster of potentially competing PCIs** is defined as a "Cluster X, including one or more of the following PCIs:". Such cluster reflects an uncertainty around the extent of the bottleneck across country borders. In this case, not all the PCIs included in the cluster have to be implemented. It is left to the market to determine whether one, several or all PCIs are to be implemented, subject to the necessary planning, permit and regulatory approvals. The need for PCIs shall be reassessed in a subsequent PCI identification process, including with regard to the capacity needs; and
- a **cluster of competing PCIs** is defined as a "Cluster X, including one of the following PCIs:". Such cluster addresses the same bottleneck. However, the extent of the bottleneck is more certain than in the case of a cluster of potentially competing PCIs, and therefore only one PCI has to be implemented. It is left to the market to determine which PCI is to be implemented, subject to the necessary planning, permit and regulatory approvals. Where necessary, the need for PCIs shall be reassessed in a subsequent PCI identification process.

All PCIs are subject to the same rights and obligations established under Regulation (EU) No 347/2013.

##### **(3) Treatment of substations and compressor stations**

Substations and back-to-back electricity stations and gas compressor stations are considered as parts of PCIs if they are geographically located on transmission lines. Substations, back-to-back stations and compressor stations are considered as stand-alone PCIs and are explicitly listed on the Union list if their geographical location is different from transmission lines. They are subject to the rights and obligations laid down in Regulation (EU) No 347/2013.

##### **(4) Projects that are no longer considered PCIs and projects that became part of other PCIs**

- Several projects included in the Union lists established by Regulation (EU) No 1391/2013 and Regulation (EU) No 2016/89 are no longer considered PCIs for one or more of the following reasons:

- the project has already been commissioned or is to be commissioned by the end of 2019 and so it would not benefit from the provisions of Regulation (EU) No 347/2013;
- according to new data the project does not satisfy the general criteria;
- a promoter has not re-submitted the project in the selection process for this Union list; or
- the project was ranked lower than other candidate PCIs in the selection process.

These projects (with the exception of the projects commissioned or to be commissioned by end 2019) may be considered for inclusion in the next Union list if the reasons for non-inclusion in the current Union list no longer apply.

Such projects are not PCIs, but are listed for reasons of transparency and clarity with their original PCI numbers in Annex VII(C) as "**Projects no longer considered PCIs**".

- Furthermore, some projects included in the Union lists established by Regulation (EU) No 1391/2013 and Regulation (EU) No 2016/89 became during their implementation process integral parts of other (clusters of) PCIs.

Such projects are no longer considered independent PCIs, but are listed for reasons of transparency and clarity with their original PCI numbers in Annex VII(C) as "**Projects that are now integral parts of other PCIs**".

#### (5) Definition of "PCIs with double labelling as electricity highways"

"PCIs with double labelling as electricity highways" means PCIs which belong to one of the priority electricity corridors and to the priority thematic area electricity highways.

### B. THE UNION LIST OF PROJECTS OF COMMON INTEREST

#### (6) Priority Corridor Northern Seas Offshore Grid ("NSOG")

No.	Definition
1.3	Cluster Denmark — Germany, including the following PCIs: 1.3.1 Interconnection between Endrup (DK) and Klixbüll (DE)
1.6	France — Ireland interconnection between La Martyre (FR) and Great Island or Knockraha (IE) [currently known as "Celtic Interconnector"]
1.7	Cluster France — United Kingdom interconnections, including one or more of the following PCIs: 1.7.1 Interconnection between Cotentin (FR) and the vicinity of Exeter (UK) [currently known as "FAB"] 1.7.3 Interconnection between Coquelles (FR) and Folkestone (UK) [currently known as "ElecLink"] 1.7.5 Interconnection between the vicinity of Dunkerque (FR) and the vicinity of Kingsnorth (UK) [currently known as "Gridlink"]
1.8	Cluster Germany — Norway [currently known as "NordLink"] 1.8.1 Interconnection between Wilster (DE) and Tonstad (NO)
1.9	1.9.1 Ireland — United Kingdom interconnection between Wexford (IE) and Pembroke, Wales (UK) [currently known as "Greenlink"]
1.10	Cluster United Kingdom — Norway interconnections, including one or more of the following PCIs: 1.10.1 Interconnection between Blythe (UK) and Kvilldal (NO) [currently known as "North Sea Link"] 1.10.2 Interconnection between Peterhead (UK) and Simadalen (NO) [currently known as "NorthConnect"]
1.12	Cluster of electricity storage facilities in United Kingdom, including one or more of the following PCIs:

	1.12. 3 Compressed air energy storage in Middlewich [currently known as "CARES"] 1.12.4 Hydro-pumped electricity storage at Cruachan II
1.14	Interconnection between Revsing (DK) and Bicker Fen (UK) [currently known as "Viking Link"]
1.15	Interconnection between the Antwerp area (BE) and the vicinity of Kemsley (UK) [currently known as "Nautilus"]
1.16	Interconnection between Netherlands and United Kingdom
1.17	Compressed air energy storage in Zuidwending (NL)
1.18	Offshore hydro-pumped electricity storage facility in Belgium [currently known as "iLand"]
1.19	One or more hubs in the North Sea with interconnectors to bordering North Sea countries (Denmark, Germany, Netherlands) [currently known as "North Sea Wind Power Hub"]
1.20	Interconnection between Germany and United Kingdom [currently known as NeuConnect"]

(7) Priority Corridor North-South Electricity Interconnections in Western Europe ("NSI West Electricity")

No.	Definition
2.4	Interconnection between Codrongianos (IT), Lucciana (Corsica, FR) and Suvereto (IT) [currently known as "SACOI 3"]
2.7	Interconnection between Aquitaine (FR) and the Basque country (ES) [currently known as "Biscay Gulf"]
2.9	Internal line between Osterath and Philippsburg (DE) to increase capacity at western borders [currently known as "Ultranet"]
2.10	Internal line between Brunsbüttel/Wilster and Großgartach/ Bergrheinfeld-West (DE) to increase capacity at northern and southern borders [currently known as "Suedlink"]
2.13	Cluster Ireland — United Kingdom interconnections, including the following PCIs: 2.13.1 Interconnection between Woodland (IE) and Turleenan (UK) [currently known as "North-South interconnector"] 2.13.2 Interconnection between Srananagh (IE) and Turleenan (UK) [currently known as "RIDP1"]
2.14	Interconnection between Thusis/Sils (CH) and Verderio Inferiore (IT) [currently known as "Greenconnector"]
2.16	Cluster of internal lines, including the following PCIs: 2.16.1 Internal line between Pedralva and Sobrado (PT), formerly designated Pedralva and Alfena (PT) 2.16.3 Internal line between Vieira do Minho, Ribeira de Pena and Feira (PT), formerly designated Frades B, Ribeira de Pena and Feira (PT)
2.17	Portugal — Spain interconnection between Beariz — Fontefría (ES), Fontefria (ES) — Ponte de Lima (PT) (formerly Vila Fria / Viana do Castelo) and Ponte de Lima — Vila Nova de Famalicão (PT) (formerly Vila do Conde) (PT), including substations in Beariz (ES), Fontefría (ES) and Ponte de Lima (PT)
2.18	Capacity increase of hydro-pumped electricity storage in Kaunertal, Tyrol (AT)
2.23	Internal lines at the Belgian north border between Zandvliet and Lillo-Liefkenshoek (BE), and between Liefkenshoek and Mercator, including a substation in Lillo (BE) [currently known as "BRABO II + III"]
2.27	2.27.1 Interconnection between Aragón (ES) and Atlantic Pyrenees (FR) [currently known as "Pyrenean crossing 2"] 2.27.2 Interconnection between Navarra (ES) and Landes (FR) [currently known as "Pyrenean crossing 1"]
2.28	2.28.2 Hydro-pumped electricity storage Navaleo (ES)

	2.28.3 Hydro-pumped electricity storage Girones & Raimats (ES) 2.28.4 Hydro-pumped electricity storage Cúa (ES)
2.29	Hydroelectric Power Station Silvermines (IE)
2.30	Hydro-pumped electricity storage Riedl (DE)

(8) Priority Corridor North-South Electricity Interconnections in Central Eastern and South Europe ("NSI East Electricity")

No.	Definition
3.1	Cluster Austria — Germany, including the following PCIs: 3.1.1 Interconnection between St. Peter (AT) and Isar (DE) 3.1.2 Internal line between St. Peter and Tauern (AT) 3.1.4 Internal line between Westtirol and Zell-Ziller (AT)
3.4	Interconnection between Wurmlach (AT) and Somplago (IT)
3.7	Cluster Bulgaria — Greece between Maritsa East 1 and N. Santa and the necessary internal reinforcements in Bulgaria, including the following PCIs: 3.7.1 Interconnection between Maritsa East 1 (BG) and N. Santa (EL) 3.7.2 Internal line between Maritsa East 1 and Plovdiv (BG) 3.7.3 Internal line between Maritsa East 1 and Maritsa East 3 (BG) 3.7.4 Internal line between Maritsa East 1 and Burgas (BG)
3.8	Cluster Bulgaria — Romania capacity increase [currently known as "Black Sea Corridor"], including the following PCIs: 3.8.1 Internal line between Dobrudja and Burgas (BG) 3.8.4 Internal line between Cernavoda and Stalpu (RO) 3.8.5 Internal line between Gutinas and Smardan (RO)
3.9	3.9.1 Interconnection between Žerjavenec (HR)/ Hévíz (HU) and Cirkovce (SI)
3.10	Cluster Israel — Cyprus — Greece [currently known as "EUROASIA Interconnector"], including the following PCIs: 3.10.1 Interconnection between Hadera (IL) and Kofinou (CY) 3.10.2 Interconnection between Kofinou (CY) and Korakia, Crete (EL)
3.11	Cluster of internal lines in Czechia, including the following PCIs: 3.11.1 Internal line between Vernerov and Vitkov (CZ) 3.11.2 Internal line between Vitkov and Prestice (CZ) 3.11.3 Internal line between Prestice and Kocin (CZ) 3.11.4 Internal line between Kocin and Mirovka (CZ) 3.11.5 Internal line between Mirovka and line V413 (CZ)
3.12	Internal line in Germany between Wolmirstedt and Isarto increase internal North-South transmission capacity [currently known as SuedOstLink]
3.14	Internal reinforcements in Poland [part of the cluster currently known as "GerPol Power Bridge"], including the following PCIs: 3.14.2 Internal line between Krajnik and Baczyna (PL) 3.14.3 Internal line between Mikułowa and Świebodzice (PL) 3.14.4 Internal line between Baczyna and Plewiska (PL)
3.16	3.16.1 Interconnection Hungary – Slovakia between Gabčíkovo (SK) and Gönyű (HU) and Veľký Ďur (SK)
3.17	Interconnection Hungary – Slovakia between Sajóvánka (HU) and Rimavská Sobota (SK)
3.21	Interconnection between Salgareda (IT) and Divača — Bericevo region (SI)
3.22	Cluster Romania — Serbia [currently known as "Mid Continental East Corridor"], including the following PCIs: 3.22.1 Interconnection between Resita (RO) and Pancevo (RS) 3.22.2 Internal line between Portile de Fier and Resita (RO)

	3.22.3 Internal line between Resita and Timisoara/Sacalaz (RO) 3.22.4 Internal line between Arad and Timisoara/Sacalaz (RO)
3.23	Hydro-pumped electricity storage in Yadenitsa (BG)
3.24	Hydro-pumped electricity storage in Amfilochia (EL)
3.27	Interconnection between Sicily (IT) and Tunisia node (TU) [currently known as "ELMED"]

(9) Priority Corridor Baltic Energy Market Interconnection Plan ("BEMIP Electricity")

No.	Definition
4.2	Cluster Estonia — Latvia between Kilingi-Nõmme and Riga [currently known as "Third interconnection"], including the following PCIs: 4.2.1 Interconnection between Kilingi-Nõmme (EE) and Riga CHP2 substation (LV) 4.2.2 Internal line between Harku and Sindi (EE) 4.2.3 Internal line between Riga CHP 2 and Riga HPP (LV)
4.4	4.4.2 Internal line between Ekhyddan and Nybro/Hemsjö (SE)
4.5	4.5.2 Internal line between Stanisławów and Ostrołęka (PL)
4.6	Hydro-pumped electricity storage in Estonia
4.7	Capacity increase of hydro-pumped electricity storage at Kruonis (LT)
4.8	Integration and synchronisation of the Baltic States' electricity system with the European networks, including the following PCIs: 4.8.1 Interconnection between Tartu (EE) and Valmiera (LV) 4.8.2 Internal line between Balti and Tartu (EE) 4.8.3 Interconnection between Tsirguliina (EE) and Valmiera (LV) 4.8.4 Internal line between Viru and Tsirguliina (EE) 4.8.7 Internal line between Paide and Sindi (EE) 4.8.8 Internal line between Vilnius and Neris (LT) 4.8.9 Further infrastructure aspects related to the implementation of the synchronisation of the Baltic States' system with the continental European network 4.8.10 Interconnection between Lithuania and Poland [currently known as "Harmony Link"] 4.8.11 Upgrades in Alytus substation (LT) 4.8.12 Reconstructions in North-Eastern Lithuania (LT) 4.8.13 New 330kV Mūša substation (LT) 4.8.14 Internal line between Bitenai and KHAE (LT) 4.8.15 New 330kV Darbėnai substation (LT) 4.8.16 Internal line between Darbenai and Bitenai (LT) 4.8.17 Internal line between LE and Vilnius (LT) 4.8.18 Internal line between Dunowo and Żydowo Kierzkowo (PL) 4.8.19 Internal line between Piła Krzewina and Żydowo Kierzkowo (PL) 4.8.20 Internal line between Krajnik and Morzyczyn (PL) 4.8.21 Internal line between Morzyczyn-Dunowo-Słupsk-Żarnowiec (PL) 4.8.22 Internal line between Żarnowiec-Gdańsk/Gdańsk Przyjaźń-Gdańsk Błonia (PL) 4.8.23 Synchronous condensers providing inertia, voltage stability, frequency stability and short-circuit power in Lithuania, Latvia and Estonia
4.10	Cluster Finland – Sweden [currently known as "Third interconnection Finland – Sweden"], including the following PCIs: 4.10.1 Interconnection between northern Finland and northern Sweden 4.10.2 Internal line between Keminmaa and Pyhänselkä (FI)

(10) Priority Corridor North-South Gas Interconnections in Western Europe ("NSI West Gas")

No.	Definition
5.3	Shannon LNG Terminal and connecting pipeline (IE)
5.19	Connection of Malta to the European gas network — pipeline interconnection with Italy at Gela
5.21	Adaptation low to high calorific gas in France and Belgium

(11) Priority Corridor North-South Gas Interconnections in Central Eastern and South Eastern Europe ("NSI East Gas")

No.	Definition
6.2	Interconnection between Poland, Slovakia and Hungary with the related internal reinforcements, including the following PCIs: 6.2.1 Poland — Slovakia interconnection 6.2.2 North — South Gas Corridor in Eastern Poland and 6.2.13 Development and enhancement of transmission capacity of Slovak-Hungarian interconnector
6.5	Cluster Krk LNG terminal with connecting and evacuation pipelines towards Hungary and beyond, including the following PCIs: 6.5.1 Development of a LNG terminal in Krk (HR) up to 2.6 bcm/a— Phase I and connecting pipeline Omišalj — Zlobin (HR) 6.5.5 "Compressor station 1" at the Croatian gas transmission system
6.8	Cluster of infrastructure development and enhancement enabling the Balkan Gas Hub, including the following PCIs: 6.8.1 Interconnection Greece — Bulgaria [currently known as "IGB"] between Komotini (EL) and Stara Zagora (BG) and compressor station at Kipi (EL) 6.8.2 Rehabilitation, modernization and expansion of the Bulgarian transmission system 6.8.3 Gas interconnection Bulgaria — Serbia [currently known as "IBS"] (6.10 on the 3 <sup>rd</sup> PCI list)
6.9	6.9.1 LNG terminal in northern Greece
6.20	Cluster increase storage capacity in South-Eastern Europe, including one or more of the following PCIs: 6.20.2 Chiren UGS expansion (BG) 6.20.3 South Kavala UGS facility and metering and regulating station (EL)  and one of the following PCIs: 6.20.4 Depomures storage in Romania 6.20.6 Sarmasel underground gas storage in Romania
6.23	Hungary — Slovenia - Italy interconnection (Nagykanizsa (HU) — Tornyiszentmiklós (HU) — Lendava (SI) — Kidričevo (SI) — Ajdovščina (SI) — Šempeter (SI) — Gorizia (IT))
6.24	Cluster phased capacity increase on the (Bulgaria) — Romania — Hungary — (Austria) bidirectional transmission corridor (currently known as "ROHUAT/BRUA") to enable a capacity at the Romania-Hungary interconnection of 1.75 bcm/a in the 1 <sup>st</sup> phase, 4.4 bcm/a in the 2 <sup>nd</sup> phase, and including new resources from the Black Sea in the 2 <sup>nd</sup> phase:  6.24.1 ROHU(AT)/BRUA — 1 <sup>st</sup> phase, including: - Development of the transmission capacity in Romania from Podișor to Recas, including, a new pipeline, metering station and three new compressor stations in Podișor, Bibesti and Jupa

	6.24.4 ROHU(AT)/BRUA –2 <sup>nd</sup> phase, including: <ul style="list-style-type: none"> <li>- Városföld compressor station (HU)</li> <li>- Expansion of the transmission capacity in Romania from Recas to Horia towards Hungary up to 4.4 bcm/a and expansion of the compressor stations in Podisor, Bibesti and Jupa</li> <li>- Black Sea shore — Podișor (RO) pipeline for taking over the Black sea gas</li> <li>- Romanian-Hungarian reverse flow: Hungarian section 2<sup>nd</sup> stage compressor station at Csanádpalota (HU)</li> </ul>
6.26	6.26.1 Cluster Croatia — Slovenia — Austria at Rogatec, including: <ul style="list-style-type: none"> <li>- Interconnection Croatia — Slovenia (Lučko — Zabok - Rogatec)</li> <li>- Compressor station Kidričevo, 2nd phase of upgrade (SI)</li> <li>- Compressor stations 2 and 3 at the Croatian gas transmission system</li> <li>- GCA 2015/08: Entry/Exit Murfeld (AT)</li> <li>- Upgrade of Murfeld/Ceršak interconnection (AT-SI)</li> <li>- Upgrade of Rogatec interconnection</li> </ul>
6.27	LNG Gdansk (PL)

(12) Priority Corridor Southern Gas Corridor ("SGC")

No.	Definition
7.1	PCI Cluster of integrated, dedicated and scalable transport infrastructure and associated equipment for the transportation of a minimum of 10 bcm/a of new sources of gas from the Caspian Region, crossing Azerbaijan, Georgia and Turkey and reaching EU markets in Greece and Italy, and including the following PCIs: <ul style="list-style-type: none"> <li>7.1.1 Gas pipeline to the EU from Turkmenistan and Azerbaijan, via Georgia and Turkey, [currently known as the combination of "Trans-Caspian Gas Pipeline" (TCP) and "South-Caucasus Pipeline FutureExpansion" (SCPF)]</li> <li>7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as "Trans-Adriatic Pipeline" (TAP)], including metering and regulating station and compressor station at Nea Messimvria, as well as the TAP Interconnection.</li> </ul>
7.3	PCI Cluster infrastructure to bring new gas from the East Mediterranean gas reserves, including: <ul style="list-style-type: none"> <li>7.3.1 Pipeline from the East Mediterranean gas reserves to Greece mainland via Crete [currently known as "EastMed Pipeline"], with metering and regulating station at Megalopoli and dependent on it the following PCIs: <ul style="list-style-type: none"> <li>7.3.3 Offshore gas pipeline connecting Greece and Italy [currently known as "Poseidon Pipeline"]</li> <li>7.3.4 Reinforcement of internal transmission capacities in Italy, including reinforcement of the South-North internal transmission capacities [currently known as "Adriatica Line"] and reinforcement of internal transmission capacities in Apulia region [Matagiola - Massafra pipeline]</li> </ul> </li> </ul>
7.5	Development of gas infrastructure in Cyprus [currently known as "Cyprus Gas2EU"]

(13) Priority Corridor Baltic Energy Market Interconnection Plan in Gas ('BEMIP Gas')

No.	Definition
8.2	Cluster infrastructure upgrade in the Eastern Baltic Sea region, including the following PCIs: <ul style="list-style-type: none"> <li>8.2.1 Enhancement of Latvia — Lithuania interconnection</li> <li>8.2.4 Enhancement of Inčukalns Underground Gas Storage (LV)</li> </ul>
8.3	Cluster infrastructure, including the following PCIs: <ul style="list-style-type: none"> <li>8.3.1 Reinforcement of Nybro — Poland/Denmark Interconnection</li> <li>8.3.2 Poland–Denmark interconnection [currently known as "Baltic Pipe"]</li> </ul>

8.5	Poland-Lithuania interconnection [currently known as "GIPL"]
-----	--

(14) Priority Corridor Oil Supply Connections in Central Eastern Europe ("OSC")

No.	Definition
9.1	Adamowo — Brody pipeline: pipeline connecting the JSC Uktransnafta's handling site in Brody (Ukraine) and Adamowo Tank Farm (Poland)
9.2	Bratislava — Schwechat — Pipeline: pipeline linking Schwechat (Austria) and Bratislava (Slovak Republic)
9.4	Litvinov (Czechia) — Spergau (Germany) pipeline: the extension project of the Druzhba crude oil pipeline to the refinery TRM Spergau
9.5	Cluster Pomeranian pipeline (Poland), including the following PCIs: 9.5.1. Construction of oil terminal in Gdańsk (phase II) 9.5.2. Expansion of the Pomeranian pipeline: the second line of the pipeline
9.6	TAL Plus: capacity expansion of the TAL pipeline between Trieste (Italy) and Ingolstadt (Germany)

(15) Priority Thematic Area Smart Grids Deployment

No.	Definition
10.3	SINCRO.GRID (Slovenia, Croatia) - An innovative integration of synergetic, mature technology-based solutions in order to increase the security of operations of the Slovenian and Croatian electricity systems simultaneously
10.4	ACON (Czechia, Slovakia) - The main goal of ACON (Again COnnected Networks) is to foster the integration of the Czech and the Slovak electricity markets
10.6	Smart Border Initiative (France, Germany) - The Smart Border Initiative will connect policies designed by France and Germany in order to support their cities and territories in their energy transition strategies and European market integration
10.7	Danube InGrid (Hungary, Slovakia) – the project enhances cross-border coordination of electricity network management, with focus on smartening data collection and exchange
10.8	Data Bridge (Estonia, Latvia, Lithuania, Denmark, Finland, France) – aims to build a common European Data bridge Platform, to enable integration of different data types (smart metering data, network operational data, market data), with a view to develop scalable and replicable solutions for the EU
10.9	Cross-border flexibility project (Estonia, Finland) –aims to support RES integration and increase security of supply by cross-border provision of flexibility services to Estonia, Finland and Aaland provided by distributed generation.

(16) Priority Thematic Area Electricity Highways

List of PCIs with double labelling as electricity highways

No.	Definition
Priority Corridor Northern Seas Offshore Grid ('NSOG')	
1.3	Cluster Denmark — Germany, including the following PCIs: 1.3.1 Interconnection between Endrup (DK) and Klixbüll (DE) 1.3.2 Internal line between Niebüll and Brunsbüttel (DE)
1.6	France — Ireland interconnection between La Martyre (FR) and Great Island or Knockraha (IE) [currently known as "Celtic Interconnector"]
1.7	Cluster France — United Kingdom interconnections, including one or more of the following PCIs: 1.7.1 Interconnection between Cotentin (FR) and the vicinity of Exeter (UK) [currently known as "FAB"]

	1.7.3 Interconnection between Coquelles (FR) and Folkestone (UK) [currently known as "ElecLink"] 1.7.5 Interconnection between the vicinity of Dunkerque (FR) and the vicinity of Kingsnorth (UK) [currently known as "Gridlink"]
1.8	Cluster Germany — Norway [currently known as "NordLink"] 1.8.1 Interconnection between Wilster (DE) and Tonstad (NO)
1.10	Cluster United Kingdom – Norway interconnections, including one or more of the following PCIs: 1.10.1 Interconnection between Blythe (UK) and Kvilldal (NO) [currently known as "North Sea Link"] 1.10.2 Interconnection between Peterhead (UK) and Simadalen (NO) [currently known as "NorthConnect"]
1.14	Interconnection between Revsing (DK) and Bicker Fen (UK) [currently known as "Viking Link"]
1.15	Interconnection between the Antwerp area (BE) and the vicinity of Kemsley (UK) [currently known as "Nautilus"]
1.16	Interconnection between Netherlands and United Kingdom
1.19	One or more hubs in the North Sea with interconnectors to bordering North Sea countries (Denmark, Germany, Netherlands) [currently known as "North Sea Wind Power Hub"]
1.20	Interconnection between Germany and United Kingdom [currently known as NeuConnect"]
Priority Corridor North-South Electricity Interconnections in Western Europe ('NSI West Electricity')	
2.7	Interconnection between Aquitaine (FR) and the Basque country (ES) [currently known as "Biscay Gulf"]
2.9	Internal line between Osterath and Philippsburg (DE) to increase capacity at western borders [currently known as "Ultranet"]
2.10	Internal line between Brunsbüttel/Wilster and Großgartach/ Bergrheinfeld-West (DE) to increase capacity at northern and southern borders [currently known as "Suedlink"]
2.13	Cluster Ireland — United Kingdom interconnections, including the following PCIs: 2.13.1 Interconnection between Woodland (IE) and Turleenan (UK) 2.13.2 Interconnection between Srananagh (IE) and Turleenan (UK)
Priority Corridor North-South Electricity Interconnections in Central Eastern and South Europe ('NSI East Electricity')	
3.10	Cluster Israel — Cyprus — Greece [currently known as "EUROASIA Interconnector"], including the following PCIs: 3.10.1 Interconnection between Hadera (IL) and Kofinou (CY) 3.10.2 Interconnection between Kofinou (CY) and Korakia, Crete (EL) )
3.12	Internal line in Germany between Wolmirstedt and Isar to increase internal North-South transmission capacity [currently known as SuedOstLink]

(17) Cross-border carbon dioxide network

No.	Definition
12.2	CO <sub>2</sub> -Sapling Project is the transportation infrastructure component of the Acorn full chain CCS project (United Kingdom, in further phases Netherlands, Norway)
12.3	CO <sub>2</sub> TransPorts aims to establish infrastructure to facilitate large-scale capture, transport and storage of CO <sub>2</sub> from Rotterdam, Antwerp and the North Sea Port
12.4	Northern lights project – a commercial CO <sub>2</sub> cross-border transport connection project between several European capture initiatives (United Kingdom, Ireland, Belgium, the Netherlands, France, Sweden) and transport the captured CO <sub>2</sub> by ship to a storage site on the Norwegian continental shelf
12.5	Athos project proposes an infrastructure to transport CO <sub>2</sub> from industrial areas in the

	Netherlands and is open to receiving additional CO2 from others, such as Ireland and Germany Developing an open-access cross-border interoperable high-volume transportation structure is the idea.
12.6	Ervia Cork project aims to repurpose onshore and offshore existing natural gas pipelines and construct new dedicated CO2 pipeline to transport captured CO2 from CCUS of heavy industry and combined cycle GTs to a storage facility.

**C. LISTS OF THE "PROJECTS NO LONGER CONSIDERED PCIS" AND OF THE "PROJECTS THAT BECAME INTEGRAL PARTS OF OTHER PCIS IN THE SECOND AND/OR THIRD LIST OF PCIS"**

(1) Priority Corridor Northern Seas Offshore Grid ("NSOG")

PCI numbers of the projects no longer considered PCIs
1.1.1
1.1.2
1.1.3
1.2
1.3.2
1.4
1.5
1.7.4
1.8.2
1.9.2
1.9.3
1.9.4
1.9.5
1.9.6
1.11.1
1.11.2
1.11.3
1.11.4
1.12.1
1.12.2
1.12.5

(2) Priority Corridor North-South Electricity Interconnections in Western Europe ("NSI West Electricity")

PCI numbers of the projects no longer considered PCIs
2.2.1
2.2.2
2.2.3
2.2.4
2.3.1
2.3.2
2.5.1
2.5.2
2.6
2.8

2.11.1
2.11.2
2.11.3
2.12
2.15.1
2.15.2
2.15.3
2.15.4
2.16.2
2.19
2.20
2.21
2.22
2.24
2.25.1
2.25.2
2.26
2.28.1

Projects that became integral parts of other PCIs in the second and/or third list of PCIs	
Original PCI number of the project	Number of a PCI in which the project was integrated
2.1	3.1.4

(3) Priority Corridor North-South Electricity Interconnections in Central Eastern and South Europe ("NSI East Electricity")

PCI numbers of the projects no longer considered PCIs
3.1.3
3.2.1
3.2.2
3.2.3
3.3
3.5.1
3.5.2
3.6.1
3.6.2
3.8.2
3.8.3
3.8.6
3.9.2
3.9.3
3.9.4
3.10.3
3.13
3.14.1
3.15.1
3.15.2
3.16.2
3.16.3
3.18.1

3.18.2
3.19.2
3.19.3
3.20.1
3.20.2
3.22.5
3.25
3.26

Projects that became integral parts of other PCIs in the second and/or third list of PCIs	
Original PCI number of the project	Number of a PCI in which the project was integrated
3.19.1	3.22.5

(4) Priority Corridor Baltic Energy Market Interconnection Plan ("BEMIP Electricity")

PCI numbers of the projects no longer considered PCIs
4.1
4.4.1
4.5.1
4.5.3
4.5.4
4.5.5
4.8.5
4.8.6

Projects that became integral parts of other PCIs in the second and/or third list of PCIs	
Original PCI number of the project	Number of a PCI in which the project was integrated
4.3	4.8.9
4.9	4.8.9

(5) Priority Corridor North-South Gas Interconnections in Western Europe ("NSI West Gas")

PCI numbers of the projects no longer considered PCIs
5.1.1
5.1.2
5.1.3
5.2
5.4.1
5.4.2
5.5.1
5.5.2
5.6
5.7.1
5.7.2
5.9
5.10
5.11
5.12
5.13
5.14

5.15.1
5.15.2
5.15.3
5.15.4
5.15.5
5.16
5.17.1
5.17.2
5.18
5.20

Projects that became integral parts of other PCIs in the second and/or third list of PCIs	
Original PCI number of the project	Number of a PCI in which the project was integrated
5.8.1	5.5.2
5.8.2	5.5.2

(6) Priority Corridor North-South Gas Interconnections in Central Eastern and South Eastern Europe ("NSI East Gas")

PCI numbers of the projects no longer considered PCIs
6.2.10
6.2.11
6.2.12
6.2.14
6.3
6.4
6.5.3
6.5.4
6.5.6
6.7
6.8.3
6.9.2
6.9.3
6.11
6.12
6.16
6.17
6.19
6.20.1
6.20.5
6.21
6.22.1
6.22.2
6.24.1
Removed item: Romanian-Hungarian reverse flow: Hungarian section 1st stage compressor station at Csanádpalota
Removed item: GCA Mosonmagyaróvár compressor station (development on the Austrian side)
6.24.4
Removed item: Ercsi-Százhalombatta pipeline (HU)

Removed item: Romanian-Hungarian reverse flow: Hungarian section 1st stage compressor station at Csanádpalota;
6.24.10
6.25.1
6.25.2
6.25.4

Projects that became integral parts of other PCIs in the second and/or third list of PCIs	
Original PCI number of the project	Number of a PCI in which the project was integrated
6.1.1	6.2.10
6.1.2	6.2.11
6.1.3	6.2.11
6.1.4	6.2.11
6.1.5	6.2.11
6.1.6	6.2.11
6.1.7	6.2.11
6.1.8	6.2.2
6.1.9	6.2.11
6.1.10	6.2.2
6.1.11	6.2.2
6.1.12	6.2.12
6.2.3	6.2.2
6.2.4	6.2.2
6.2.5	6.2.2
6.2.6	6.2.2
6.2.7	6.2.2
6.2.8	6.2.2
6.2.9	6.2.2
6.5.2	6.5.6
6.6	6.26.1
6.8.4	6.25.4
6.13.1	6.24.4
6.13.2	6.24.4
6.13.3	6.24.4
6.14	6.24.1
6.15.1	6.24.10
6.15.2	6.24.10
6.18	7.3.4
6.24.2	6.24.1
6.24.3	6.24.1
6.24.5	6.24.4
6.24.6	6.24.4
6.24.7	6.24.4
6.24.8	6.24.4
6.24.9	6.24.4
6.25.3	6.24.10
6.26.2	6.26.1
6.26.3	6.26.1

6.26.4	6.26.1
6.26.5	6.26.1
6.26.6	6.26.1

(7) Priority Corridor Southern Gas Corridor ("SGC")

PCI numbers of the projects no longer considered PCIs
7.1.1
Removed item: Trans Anatolian Pipeline
7.1.2
7.1.5
7.1.7
7.2.1
7.2.2
7.2.3
7.4.1
7.4.2

Projects that became integral parts of other PCIs in the second and/or third list of PCIs	
Original PCI number of the project	Number of a PCI in which the project was integrated
7.1.6	7.1.3
7.1.4	7.3.3
7.3.2	7.5

(8) Priority Corridor Baltic Energy Market Interconnection Plan in Gas ("BEMIP Gas")

PCI numbers of the projects no longer considered PCIs
8.1.1
8.1.2.1
8.1.2.2
8.1.2.3
8.1.2.4
8.2.2
8.2.3
8.4
8.6
8.7
8.8

(9) Priority Corridor Oil Supply Connections in Central Eastern Europe ("OSC")

PCI numbers of the projects no longer considered PCIs
9.3

(10) Priority Thematic Area Smart Grids Deployment

PCI numbers of the projects no longer considered PCIs
10.1
10.2
10.5

(11) Priority Thematic Area Electricity Highways

PCI numbers of the projects no longer considered PCIs
1.5
1.7.4
2.2
2.4
2.5.1
3.1.3
4.1

(12) Priority Thematic Area Cross-border Carbon Dioxide Network

PCI numbers of the projects no longer considered PCIs
12.1

“