II

*(Non-legislative acts)*

# REGULATIONS

## COMMISSION DELEGATED REGULATION (EU) 2016/89

**of 18 November 2015**

**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 ([1]), 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) Pursuant to Article 3(4) of Regulation (EU) No 347/2013, the Commission is empowered to adopt delegated acts to establish the Union list of PCIs ('Union list').

(3) Projects proposed for the inclusion in the Union list have been assessed by the regional groups and meet the criteria laid down in Article 4 of Regulation (EU) No 347/2013.

(4) The draft regional lists of PCIs were agreed by the regional groups at technical-level meetings. Following positive opinions of the Agency for the Cooperation of Energy Regulators ('ACER') on 30 October 2015 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 3 November 2015. 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.

(5) 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.

(6) 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.

([1]) OJ L 115, 25.4.2013, p. 39.

(7) PCIs should be listed either as stand-alone PCIs or as a part of a cluster of several PCIs. However, certain PCIs should be clustered because they are interdependent or (potentially) competing.

(8) 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.

(9) 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.

(10) Pursuant to the second paragraph of Article 3(4) of Regulation (EU) No 347/2013, the Union list is established every two years, therefore the Union list established by Commission Delegated Regulation (EU) No 1391/2013 ([1]) is no longer valid and should be replaced.

(11) Pursuant to Article 3(4) of Regulation (EU) No 347/2013, the Union list is to take the form of an annex to that Regulation.

(12) 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, 18 November 2015.

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

([1]) Commission Delegated Regulation (EU) No 1391/2013 of 14 October 2013 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council on guidelines for trans-European energy infrastructure as regards the Union list of projects of common interest (OJ L 349, 21.12.2013, p. 28).

*ANNEX*

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

*'ANNEX VII*

**The Union list of projects of common interest ("Union list"), referred to in Article 3(4)**

A. PRINCIPLES APPLIED IN ESTABLISHING THE UNION LIST

(1) **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.

(2) **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.

(3) **Definition of "No longer considered a PCI"**

The phrase "No longer considered a PCI" refers to projects from the Union list established by Regulation (EU) No 1391/2013 that are no longer considered PCIs for one or more of the following reasons:

— according to the new data the project does not satisfy the eligibility criteria;

— a promoter has not re-submitted it in the selection process for this Union list;

— it has already been commissioned or is to be commissioned in the near future and so it would not benefit from the provisions of Regulation (EU) No 347/2013; or

— it was ranked lower than other candidate PCIs in the selection process.

Such projects are not PCIs, but are listed with their original PCI numbers on the Union list for the sake of transparency and clarity.

They may be considered for inclusion in the next Union list if the reasons for not-inclusion in the current Union list no longer apply.

(4) **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

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

Construction of the first interconnection between Belgium and United Kingdom:

| No. | Definition |
|---|---|
| 1.1 | Cluster Belgium — United Kingdom between Zeebrugge and Canterbury [currently known as "NEMO" project], including the following PCIs:<br>1.1.1 Interconnection between Zeebrugge (BE) and the vicinity of Richborough (UK)<br>1.1.2 Internal line between the vicinity of Richborough and Canterbury (UK)<br>1.1.3 No longer considered a PCI |
| 1.2 | No longer considered a PCI |

Increase of the transmission capacity between Denmark, Germany and the Netherlands:

| | |
|---|---|
| 1.3 | Cluster Denmark — Germany between Endrup and Brunsbüttel, including the following PCIs:<br>1.3.1 Interconnection between Endrup (DK) and Niebüll (DE)<br>1.3.2 Internal line between Brunsbüttel and Niebüll (DE) |
| 1.4 | Cluster Denmark — Germany between Kassø and Dollern, including the following PCIs:<br>1.4.1 Interconnection between Kassø (DK) and Audorf (DE)<br>1.4.2 Internal line between Audorf and Hamburg/Nord (DE)<br>1.4.3 Internal line between Hamburg/Nord and Dollern (DE) |
| 1.5 | Denmark — Netherlands interconnection between Endrup (DK) and Eemshaven (NL) [currently known as "COBRAcable"] |

Increase of the transmission capacity between France, Ireland and United Kingdom:

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|---|---|
| 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:<br>1.7.1 France — United Kingdom interconnection between Cotentin (FR) and the vicinity of Exeter (UK) [currently known as "FAB" project]<br>1.7.2 France — United Kingdom interconnection between Tourbe (FR) and Chilling (UK) [currently known as "IFA2" project]<br>1.7.3 France — United Kingdom interconnection between Coquelles (FR) and Folkestone (UK) [currently known as "ElecLink" project] |
| 1.8 | Germany — Norway interconnection between Wilster (DE) and Tonstad (NO) [currently known as "NordLink"] |
| 1.9 | Cluster connecting Ireland to United Kingdom, including one or more of the following PCIs:<br>1.9.1 Ireland — United Kingdom interconnection between Wexford (IE) and Pembroke, Wales (UK) [currently known as "Greenlink"]<br>1.9.2 Ireland — United Kingdom interconnection between Coolkeeragh — Coleraine hubs (IE) and Hunterston station, Islay, Argyll and Location C Offshore Wind Farms (UK) [currently known as "ISLES"]<br>1.9.3 No longer considered a PCI<br>1.9.4 No longer considered a PCI<br>1.9.5 No longer considered a PCI<br>1.9.6 No longer considered a PCI |
| 1.10 | Norway — United Kingdom interconnection |
| 1.11 | No longer considered a PCI |
| 1.12 | Compressed air energy storage in United Kingdom — Larne |
| 1.13 | Interconnection between Iceland and United Kingdom [currently known as "Ice Link"] |
| 1.14 | Interconnection between Revsing (DK) and Bicker Fen (UK) [currently known as "Viking Link"] |

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

| No. | Definition |
|---|---|
| 2.1 | Austria internal line between Westtirol and Zell-Ziller (AT) to increase capacity at the Austrian/German border |

Increase of the transmission capacity between Belgium and Germany — construction of the first interconnection between both countries:

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|---|---|
| 2.2 | Cluster Belgium — Germany between Lixhe and Oberzier [currently known as the ALEGrO project], including the following PCIs:<br>2.2.1 Interconnection between Lixhe (BE) and Oberzier (DE)<br>2.2.2 Internal line between Lixhe and Herderen (BE)<br>2.2.3 New substation in Zutendaal (BE) |

| | |
|---|---|
| 2.3 | Cluster Belgium — Luxembourg capacity increase at the Belgian/Luxembourgian border, including the following PCIs:<br>2.3.1 No longer considered a PCI<br>2.3.2 Interconnection between Aubange (BE) and Bascharage/Schifflange (LU) |
| 2.4 | No longer considered a PCI |
| 2.5 | Cluster France — Italy between Grande Ile and Piossasco, including the following PCIs:<br>2.5.1 Interconnection between Grande Ile (FR) and Piossasco (IT) [currently known as "Savoie-Piemont" project]<br>2.5.2 No longer considered a PCI |
| 2.6 | No longer considered a PCI |
| 2.7 | France — Spain interconnection between Aquitaine (FR) and the Basque country (ES) [currently known as "Biscay Gulf" project] |
| 2.8 | Coordinated installation and operation of a phase-shift transformer in Arkale (ES) to increase capacity of the interconnection between Argia (FR) and Arkale (ES) |

Cluster North-South-West corridor in Germany to increase the transmission capacity and to integrate renewable energy:

| | |
|---|---|
| 2.9 | Germany internal line between Osterath and Philippsburg (DE) to increase capacity at Western borders |
| 2.10 | Germany internal line between Brunsbüttel-Großgartach and Wilster-Grafenrheinfeld (DE) to increase capacity at Northern and Southern borders |
| 2.11 | Cluster Germany — Austria — Switzerland capacity increase in Lake Constance area, including the following PCIs:<br>2.11.1 No longer considered a PCI<br>2.11.2 Internal line in the region of point Rommelsbach to Herbertingen (DE)<br>2.11.3 Internal line point Wullenstetten to point Niederwangen (DE) and internal line Neuravensburg to the border area DE-AT |
| 2.12 | Germany — Netherlands interconnection between Niederrhein (DE) and Doetinchem (NL) |

Cluster of projects increasing the integration of renewable energy between Ireland and Northern Ireland:

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|---|---|
| 2.13 | Cluster Ireland — United Kingdom interconnections, including one or more of the following PCIs:<br>2.13.1 Ireland — United Kingdom interconnection between Woodland (IE) and Turleenan (UK)<br>2.13.2 Ireland — United Kingdom Interconnection between Srananagh (IE) and Turleenan (UK) |

Increase of the transmission capacity between Switzerland and Italy:

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|---|---|
| 2.14 | Italy — Switzerland interconnection between Thusis/Sils (CH) and Verderio Inferiore (IT) |
| 2.15 | Cluster Italy — Switzerland capacity increase at IT/CH border, including the following PCIs:<br>2.15.1 Interconnection between Airolo (CH) and Baggio (IT)<br>2.15.2 No longer considered a PCI<br>2.15.3 No longer considered a PCI<br>2.15.4 No longer considered a PCI |

Cluster of internal projects increasing the integration of renewable energy in Portugal and improving the transmission capacity between Portugal and Spain:

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|---|---|
| 2.16 | Cluster Portugal capacity increase at PT/ES border and connecting new RES generation, including the following PCIs:<br>2.16.1 Internal line between Pedralva and Sobrado (PT), formerly designated Pedralva and Alfena (PT)<br>2.16.2 No longer considered a PCI<br>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) |

Increase of the transmission capacity between Portugal and Spain:

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|---|---|
| 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) |

Storage projects in Austria and Germany:

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|---|---|
| 2.18 | Capacity increase of hydro-pumped storage in Austria — Kaunertal, Tyrol (AT) |
| 2.19 | No longer considered a PCI |
| 2.20 | Capacity increase of hydro-pumped storage in Austria — Limberg III, Salzburg (AT) |
| 2.21 | Hydro-pumped storage Riedl in the AT/DE border area |
| 2.22 | Hydro pumped storage Pfaffenboden in Molln (AT) |

Cluster of projects in northern and western Belgium to increase the transmission capacity:

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|---|---|
| 2.23 | Cluster of internal lines at the Belgian northern border between Zandvliet — Lillo (BE), Lillo-Mercator (BE), including a substation in Lillo (BE) [currently known as “Brabo”] |
| 2.24 | Internal line between Horta-Mercator (BE) |

Clusters of internal lines in Spain to increase the transmission capacity with the Mediterranean:

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|---|---|
| 2.25 | Cluster of internal lines in Spain to increase capacity between Northern Spain and the Mediterranean area, including the following PCIs:<br>2.25.1 Internal lines Mudejar — Morella (ES) and Mezquite-Morella (ES), including a substation in Mudejar (ES)<br>2.25.2 Internal line Morella-La Plana (ES) |
| 2.26 | Spain internal line La Plana/Morella — Godelleta to increase capacity of the north-south Mediterranean axis |
| 2.27 | Capacity increase between Spain and France (generic project) |

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

Reinforcement of the interconnection between Austria and Germany:

| No. | Definition |
|---|---|
| 3.1 | Cluster Austria — Germany between St. Peter and Isar, including the following PCIs:<br>3.1.1 Interconnection between St. Peter (AT) and Isar (DE)<br>3.1.2 Internal line between St. Peter and Tauern (AT)<br>3.1.3 No longer considered a PCI |

Reinforcement of the interconnection between Austria and Italy:

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|---|---|
| 3.2 | Cluster Austria — Italy between Lienz and Veneto region, including the following PCIs:<br>3.2.1 Interconnection between Lienz (AT) and Veneto region (IT)<br>3.2.2 Internal line between Lienz and Obersielach (AT)<br>3.2.3 No longer considered a PCI |
| 3.3 | No longer considered a PCI |
| 3.4 | Austria — Italy interconnection between Wurmlach (AT) and Somplago (IT) |
| 3.5 | No longer considered a PCI |
| 3.6 | No longer considered a PCI |

Reinforcement of the interconnection between Bulgaria and Greece:

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|---|---|
| 3.7 | Cluster Bulgaria — Greece between Maritsa East 1 and N. Santa, including the following PCIs:<br>3.7.1 Interconnection between Maritsa East 1 (BG) and N. Santa (EL)<br>3.7.2 Internal line between Maritsa East 1 and Plovdiv (BG)<br>3.7.3 Internal line between Maritsa East 1 and Maritsa East 3 (BG)<br>3.7.4 Internal line between Maritsa East 1 and Burgas (BG) |

Reinforcement of the interconnection between Bulgaria and Romania:

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|---|---|
| 3.8 | Cluster Bulgaria — Romania capacity increase [currently known as "Black Sea Corridor"], including the following PCIs:<br>3.8.1 Internal line between Dobrudja and Burgas (BG)<br>3.8.2 No longer considered a PCI<br>3.8.3 No longer considered a PCI<br>3.8.4 Internal line between Cernavoda and Stalpu (RO)<br>3.8.5 Internal line between Gutinas and Smardan (RO)<br>3.8.6 No longer considered a PCI |

Reinforcement of the interconnection between Slovenia, Croatia and Hungary, and reinforcements of the internal grid in Slovenia:

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|---|---|
| 3.9 | Cluster Croatia — Hungary — Slovenia between Žerjavenec/Hévíz and Cirkovce, including the following PCIs:<br>3.9.1 Interconnection between Žerjavenec (HR)/Hévíz (HU) and Cirkovce (SI)<br>3.9.2 Internal line between Divača and Beričevo (SI)<br>3.9.3 Internal line between Beričevo and Podlog (SI)<br>3.9.4 Internal line between Podlog and Cirkovce (SI) |
| 3.10 | Cluster Israel — Cyprus — Greece between Hadera and Attica region [currently known as "EUROASIA Interconnector"], including the following PCIs:<br>3.10.1 Interconnection between Hadera (IL) and Kofinou (CY)<br>3.10.2 Interconnection between Kofinou (CY) and Korakia, Crete (EL)<br>3.10.3 Internal line between Korakia, Crete and Attica region (EL) |

Reinforcements of the internal grid in Czech Republic:

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|---|---|
| 3.11 | Cluster Czech Republic internal lines to increase capacity at North-Western and Southern borders, including the following PCIs:<br>3.11.1 Internal line between Vernerov and Vitkov (CZ)<br>3.11.2 Internal line between Vitkov and Prestice (CZ)<br>3.11.3 Internal line between Prestice and Kocin (CZ)<br>3.11.4 Internal line between Kocin and Mirovka (CZ)<br>3.11.5 Internal line between Mirovka and Cebin (CZ) |

Cluster North-South-East corridor in Germany to increase transmission capacity and to integrate renewable energy:

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|---|---|
| 3.12 | Internal line in Germany between Wolmirstedt and Bavaria to increase internal North-South transmission capacity |
| 3.13 | Internal line in Germany between Halle/Saale and Schweinfurt to increase capacity in the North-South Corridor East |

Increase of the transmission capacity between Germany and Poland:

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|---|---|
| 3.14 | Cluster Germany — Poland between Eisenhűttenstadt and Plewiska [currently known as "GerPol Power Bridge" project], including the following PCIs:<br>3.14.1 Interconnection between Eisenhűttenstadt (DE) and Plewiska (PL)<br>3.14.2 Internal line between Krajnik and Baczyna (PL)<br>3.14.3 Internal line between Mikułowa and Świebodzice (PL) |
| 3.15 | Cluster Germany — Poland between Vierraden and Krajnik [currently known as "GerPol Improvements"], including the following PCIs<br>3.15.1 Interconnection between Vierraden (DE) and Krajnik (PL)<br>3.15.2 Installation of phase shifting transformers on the interconnection lines between Krajnik (PL) — Vierraden (DE) and coordinated operation with the PST on the interconnector Mikułowa (PL) — Hagenwerder (DE) |

Increase of the transmission capacity between Hungary and Slovakia:

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|---|---|
| 3.16 | Cluster Hungary — Slovakia between Gőnyü and Gabčikovo, including the following PCIs:<br>3.16.1 Interconnection between Gabčikovo (SK) — Gönyű (HU) and Veľký Ďur (SK)<br>3.16.2 No longer considered a PCI<br>3.16.3 No longer considered a PCI |
| 3.17 | PCI Hungary — Slovakia interconnection between Sajóvánka (HU) and Rimavská Sobota (SK) |
| 3.18 | Cluster Hungary — Slovakia between Kisvárda area and Velké Kapušany, including the following PCIs:<br>3.18.1 Interconnection between Kisvárda area (HU) and Velké Kapušany (SK)<br>3.18.2 No longer considered a PCI |
| 3.19 | Cluster Italy — Montenegro between Villanova and Lastva, including the following PCIs:<br>3.19.1 Interconnection between Villanova (IT) and Lastva (ME)<br>3.19.2 No longer considered a PCI<br>3.19.3 No longer considered a PCI |
| 3.20 | No longer considered a PCI |
| 3.21 | Italy — Slovenia interconnection between Salgareda (IT) and Divača — Bericevo region (SI) |
| 3.22 | Cluster Romania — Serbia between Resita and Pancevo [currently known as "Mid Continental East Corridor"], including the following PCIs:<br>3.22.1 Interconnection between Resita (RO) and Pancevo (RS)<br>3.22.2 Internal line between Portile de Fier and Resita (RO)<br>3.22.3 Internal line between Resita and Timisoara/Sacalaz (RO)<br>3.22.4 Internal line between Arad and Timisoara/Sacalaz (RO) |

Hydro-pumped storages in Bulgaria and Greece:

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|---|---|
| 3.23 | Hydro-pumped storage in Bulgaria — Yadenitsa |
| 3.24 | Hydro-pumped storage in Greece — Amfilochia |
| 3.25 | No longer considered a PCI |
| 3.26 | No longer considered a PCI |

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

| No. | Definition |
|---|---|
| 4.1 | Denmark — Germany interconnection between Tolstrup Gaarde (DK) and Bentwisch (DE) via offshore windparks Kriegers Flak (DK) and Baltic 1 and 2 (DE) [currently known as "Kriegers Flak Combined Grid Solution"] |
| 4.2 | Cluster Estonia — Latvia between Kilingi-Nõmme and Riga [currently known as 3rd interconnection], including the following PCIs:<br>4.2.1 Interconnection between Kilingi-Nõmme (EE) and Riga CHP2 substation (LV)<br>4.2.2 Internal line between Harku and Sindi (EE)<br>4.2.3 Internal line between Riga CHP 2 and Riga HPP (LV) |
| 4.3 | Now part of PCI no. 4.9 |
| 4.4 | Cluster Latvia — Sweden capacity increase [currently known as "NordBalt" project], including the following PCIs:<br>4.4.1 Internal line between Ventspils, Tume and Imanta (LV)<br>4.4.2 Internal line between Ekhyddan and Nybro/Hemsjö (SE) |

Reinforcements in Lithuania and Poland necessary for the operation of "LitPol Link I":

| | |
|---|---|
| 4.5 | Cluster Lithuania — Poland between Alytus (LT) and Elk (PL), including the following PCIs:<br>4.5.1 No longer considered a PCI<br>4.5.2 Internal line between Stanisławów and Olsztyn Mątki (PL)<br>4.5.3 No longer considered a PCI<br>4.5.4 No longer considered a PCI<br>4.5.5 Internal line between Kruonis and Alytus (LT) |

Hydro-pumped storages in Estonia and Lithuania:

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|---|---|
| 4.6 | Hydro-pumped storage in Estonia — Muuga |
| 4.7 | Capacity increase of hydro-pumped storage in Lithuania — Kruonis |

| | |
|---|---|
| 4.8 | Cluster Estonia — Latvia and internal reinforcements in Lithuania, including the following PCIs:<br>4.8.1 Interconnection between Tartu (EE) and Valmiera (LV)<br>4.8.2 Internal line between Balti and Tartu (EE)<br>4.8.3 Interconnection Tsirguliina (EE) and Valmiera (LV)<br>4.8.4 Internal line between Eesti and Tsirguliina (EE)<br>4.8.5 Internal line between substation in Lithuania and state border (LT)<br>4.8.6 Internal line between Kruonis and Visaginas (LT) |
| 4.9 | Various aspects of the integration of the Baltic States' electricity network into the continental European network, including their synchronous operation (generic project) |

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

Projects allowing bidirectional flows between Ireland and the United Kingdom:

| No. | Definition |
|---|---|
| 5.1 | Cluster to allow bidirectional flows from Northern Ireland to Great Britain and Ireland and also from Ireland to United Kingdom, including the following PCIs:<br>5.1.1 Physical reverse flow at Moffat interconnection point (IE/UK)<br>5.1.2 Upgrade of the SNIP (Scotland to Northern Ireland) pipeline to accommodate physical reverse flow between Ballylumford and Twynholm<br>5.1.3 Development of the Islandmagee Underground Gas Storage (UGS) facility at Larne (Northern Ireland) |
| 5.2 | No longer considered a PCI |
| 5.3 | Shannon LNG Terminal and connecting pipeline (IE) |

Projects allowing bidirectional flows between Portugal, Spain, France and Germany:

| | |
|---|---|
| 5.4 | 3rd interconnection point between Portugal and Spain |
| 5.5 | Eastern Axis Spain — France — interconnection point between Iberian Peninsula and France at Le Perthus, including the compressor stations at Montpellier and St. Martin de Crau [currently known as "Midcat"] |
| 5.6 | Reinforcement of the French network from South to North — Reverse flow from France to Germany at Obergailbach/Medelsheim Interconnection point (FR) |
| 5.7 | Reinforcement of the French network from South to North to create a single market zone, including the following PCIs:<br>5.7.1 Val de Saône pipeline between Etrez and Voisines (FR)<br>5.7.2 Gascogne-Midi pipeline (FR) |
| 5.8 | Reinforcement of the French network to support South to North flows, including the following PCIs:<br>5.8.1 Est Lyonnais pipeline between Saint-Avit and Etrez (FR)<br>5.8.2 Eridan pipeline between Saint-Martin-de-Crau and Saint-Avit (FR) |
| 5.9 | No longer considered a PCI |

| | |
|---|---|
| 5.10 | Reverse flow interconnection on TENP pipeline in Germany |
| 5.11 | Reverse flow interconnection between Italy and Switzerland at Passo Gries interconnection point |
| 5.12 | No longer considered a PCI |
| 5.13 | No longer considered a PCI |
| 5.14 | No longer considered a PCI |
| 5.15 | No longer considered a PCI |
| 5.16 | No longer considered a PCI |
| 5.17 | No longer considered a PCI |
| 5.18 | No longer considered a PCI |
| 5.19 | Connection of Malta to the European Gas network — pipeline interconnection with Italy at Gela and/or offshore Floating LNG Storage and Re-gasification Unit (FSRU) |
| 5.20 | Gas Pipeline connecting Algeria to Italy (via Sardinia) [currently known as "Galsi" pipeline] |

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

Projects allowing bidirectional flows between Poland, Czech Republic and Slovakia linking the LNG terminals in Poland and Croatia:

| No. | Definition |
|---|---|
| 6.1 | Cluster Czech — Polish interconnection upgrade and related internal reinforcements in Western Poland, including the following PCIs:<br>6.1.1 Poland — Czech Republic Interconnector [currently known as "Stork II"] between Libhošť — Hať (CZ/PL) — Kędzierzyn (PL)<br>6.1.2 Transmission infrastructure projects between Lwówek and Kędzierzyn (PL)<br>6.1.3 Now part of PCI no. 6.1.2<br>6.1.4 Now part of PCI no. 6.1.2<br>6.1.5 Now part of PCI no. 6.1.2<br>6.1.6 Now part of PCI no. 6.1.2<br>6.1.7 Now part of PCI no. 6.1.2<br>6.1.8 Now part of PCI no. 6.2.3<br>6.1.9 Now part of PCI no. 6.1.2<br>6.1.10 Now part of PCI no. 6.2.3<br>6.1.11 Now part of PCI no. 6.2.3<br>6.1.12 Tvrdonice-Libhošť pipeline, including upgrade of CS Břeclav (CZ) |

| No. | Definition |
|---|---|
| 6.2 | Cluster Poland — Slovakia interconnection and related internal reinforcements in Eastern Poland, including the following PCIs:<br>6.2.1 Poland — Slovakia interconnector<br>6.2.2 Transmission infrastructure projects between Rembelszczyzna and Strachocina (PL)<br>6.2.3 Transmission infrastructure projects between Tworóg and Strachocina (PL)<br>6.2.4 Now part of PCI no. 6.2.2<br>6.2.5 Now part of PCI no. 6.2.2<br>6.2.6 Now part of PCI no. 6.2.2<br>6.2.7 Now part of PCI no. 6.2.2<br>6.2.8 Now part of PCI no. 6.2.2<br>6.2.9 Now part of PCI no. 6.2.2 |
| 6.3 | No longer considered a PCI |
| 6.4 | PCI Bidirectional Austrian — Czech interconnection (BACI) between Baumgarten (AT) — Reinthal (CZ/AT) — Brečlav (CZ) |

Projects allowing gas to flow from Croatian LNG terminal to neighbouring countries:

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| 6.5 | Cluster Krk LNG terminal and evacuation pipelines towards Hungary and beyond, including the following PCIs:<br>6.5.1 Phased development of a LNG terminal in Krk (HR)<br>6.5.2 Gas pipeline Zlobin — Bosiljevo — Sisak — Kozarac — Slobodnica (HR)<br>6.5.3 No longer considered a PCI<br>6.5.4 No longer considered a PCI |
| 6.6 | Now PCI no 6.26.1 |
| 6.7 | No longer considered a PCI |

Projects allowing gas flows from the Southern Gas Corridor and/or LNG terminals in Greece through Greece, Bulgaria, Romania, Serbia and further to Hungary, including reverse flow capability from south to north and integration of transit and transmission systems:

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| 6.8 | Cluster Interconnection between Greece, Bulgaria and Romania, and necessary reinforcements in Bulgaria, including the following PCIs:<br>6.8.1 Interconnection Greece — Bulgaria [currently known as IGB] between Komotini (EL) — Stara Zagora (BG)<br>6.8.2 Necessary rehabilitation, modernization and expansion of the Bulgarian transmission system<br>6.8.3 Interconnection of the Northern ring of the Bulgarian gas transmission system with Podisor — Horia pipeline and expansion of capacity on Hurezani-Horia-Csanadpalota section<br>6.8.4 Gas pipeline aiming at expanding the capacity on the interconnection of the Northern ring of the Bulgarian and Romanian gas transmission networks |

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| 6.9 | Cluster LNG terminal in northern Greece, including the following PCIs:<br>6.9.1 LNG terminal in northern Greece<br>6.9.2 No longer considered a PCI<br>6.9.3 Gas compressor station at Kipi (EL) |
| 6.10 | PCI Gas interconnection Bulgaria — Serbia [currently known as "IBS"] |
| 6.11 | No longer considered a PCI |
| 6.12 | No longer considered a PCI |
| 6.13 | 6.13.1 Now PCI no. 6.24.4<br>6.13.2 Now PCI no. 6.24.5<br>6.13.3 Now PCI no. 6.24.6 |
| 6.14 | Now PCI no. 6.24.1 |
| 6.15 | Interconnection of the national transmission system with the international gas transmission pipelines and reverse flow at Isaccea (RO)<br>6.15.1 Now part of PCI 6.15<br>6.15.2 Now part of PCI 6.15 |

Project allowing gas from the Southern Gas Corridor to flow through Italy towards the North-Eastern Europe

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| 6.16 | No longer considered a PCI |
| 6.17 | No longer considered a PCI |
| 6.18 | Adriatica pipeline (IT) |
| 6.19 | No longer considered a PCI |

Projects allowing development of underground gas storage capacity in South-Eastern Europe:

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|---|---|
| 6.20 | Cluster increase storage capacity in South-Eastern Europe, including one or more of the following PCIs:<br>6.20.1 No longer considered a PCI<br>6.20.2 Chiren UGS expansion (BG)<br>6.20.3 No longer considered a PCI<br>and one of the following PCIs:<br>6.20.4 Depomures storage in Romania<br>6.20.5 New underground gas storage in Romania<br>6.20.6 Sarmasel underground gas storage in Romania |

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| 6.21 | No longer considered a PCI |
| 6.22 | No longer considered a PCI |
| 6.23 | Hungary — Slovenia interconnection (Nagykanizsa — Tornyiszentmiklós (HU) — Lendava (SI) — Kidričevo) |
| 6.24 | Cluster phased capacity increase on the Bulgaria — Romania — Hungary — Austria bidirectional transmission corridor (currently known as "ROHUAT/BRUA") to enable 1.75 bcm/a in the first phase and 4.4 bcm/a in the second phase, including new resources from the Black Sea:<br>6.24.1 Romanian-Hungarian reverse flow: Hungarian section 1st stage CS at Csanádpalota (1st phase)<br>6.24.2 Development on the Romanian territory of the National Gas Transmission System on the Bulgaria — Romania — Hungary — Austria Corridor — transmission pipeline Podișor — Horia GMS and 3 new compressor stations (Jupa, Bibești and Podișor) (1st phase)<br>6.24.3 GCA Mosonmagyarovar CS (development on the Austrian side) (1st phase)<br>6.24.4 Városföld-Ercsi– Győr pipeline (capacity 4.4 bcm/a) (HU)<br>6.24.5 Ercsi-Százhalombatta pipeline (capacity 4.4 bcm/a) (HU)<br>6.24.6 Városföld compressor station (capacity 4.4 bcm/a) (HU)<br>6.24.7 Expansion of the transmission capacity in Romania towards Hungary up to 4.4 bcm/year (2nd phase)<br>6.24.8 Black Sea shore — Podișor (RO) pipeline for taking over the Black sea gas<br>6.24.9 Romanian-Hungarian reverse flow: Hungarian section 2nd stage CS at Csanádpalota or Algyő (HU) (capacity 4.4 bcm/a) (2nd phase) |
| 6.25 | Cluster infrastructure to bring new gas to the Central and South-Eastern European region with the aim of diversification, including one or more of the following PCIs:<br>6.25.1 Pipeline system from Bulgaria to Slovakia [currently known as "Eastring"]<br>6.25.2 Pipeline system from Greece to Austria [currently known as "Tesla"]<br>6.25.3 Further enlargement of the Bulgaria — Romania — Hungary — Austria bidirectional transmission corridor [currently known as "ROHUAT/BRUA", phase 3]<br>6.25.4 Infrastructure to allow the development of the Bulgarian gas hub |
| 6.26 | Cluster Croatia — Slovenia — Austria at Rogatec, including the following PCIs:<br>6.26.1 Interconnection Croatia — Slovenia (Lučko — Zabok — Rogatec)<br>6.26.2 CS Kidričevo, 2nd phase of upgrade (SI)<br>6.26.3 Compressor stations at the Croatian gas transmission system<br>6.26.4 GCA 2014/04 Murfeld (AT)<br>6.26.5 Upgrade of Murfeld/Ceršak interconnection (AT-SI)<br>6.26.6 Upgrade of Rogatec interconnection |

(7) **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 one or more of the following PCIs:<br>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), "Expansion of the South-Caucasus Pipeline" (SCP-(F)X) and "Trans Anatolia Natural Gas Pipeline" (TANAP)]<br>7.1.2 Gas compressor station at Kipi (EL)<br>7.1.3 Gas pipeline from Greece to Italy via Albania and the Adriatic Sea [currently known as "Trans-Adriatic Pipeline" (TAP)]<br>7.1.4 Gas pipeline from Greece to Italy [currently known as "Poseidon Pipeline"]<br>7.1.5 No longer considered a PCI<br>7.1.6 Metering and Regulating Stations for the connection of the Greek transmission system with TAP<br>7.1.7 Komotini — Thesprotia pipeline (EL) |
| 7.2 | No longer considered a PCI |
| 7.3 | 7.3.1 Pipeline from offshore Cyprus to Greece mainland via Crete [currently known as "EastMed Pipeline"]<br>7.3.2 Removing internal bottlenecks in Cyprus to end isolation and to allow for the transmission of gas from the Eastern Mediterranean region |
| 7.4 | Cluster of interconnections with Turkey, including the following PCIs:<br>7.4.1 Gas compressor station at Kipi (EL)<br>7.4.2 Interconnector between Turkey and Bulgaria [currently known as "ITB"] |

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

| No. | Definition |
|---|---|
| 8.1 | Cluster diversifying supply in the Eastern Baltic Sea Region, including the following PCIs:<br>8.1.1 Interconnector between Estonia and Finland [currently known as "Balticconnector"], and<br>8.1.2 One of the following LNG terminals:<br>8.1.2.1 No longer considered a PCI<br>8.1.2.2 Paldiski LNG (EE)<br>8.1.2.3 Tallinn LNG (EE)<br>8.1.2.4 No longer considered a PCI |

Reinforcement of the transmission infrastructure in the Baltic States and modernisation of the gas underground storage in Latvia:

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|---|---|
| 8.2 | Cluster infrastructure upgrade in the Eastern Baltic Sea region, including the following PCIs:<br>8.2.1 Enhancement of Latvia — Lithuania interconnection<br>8.2.2 Enhancement of Estonia — Latvia interconnection<br>8.2.3 No longer considered a PCI<br>8.2.4 Enhancement of Inčukalns Underground Gas Storage (LV) |
| 8.3 | Poland–Denmark interconnection [currently known as "Baltic Pipe"] |
| 8.4 | No longer considered a PCI |
| 8.5 | Poland-Lithuania interconnection [currently known as "GIPL"] |
| 8.6 | Gothenburg LNG terminal in Sweden |
| 8.7 | Capacity extension of Świnoujście LNG terminal in Poland |
| 8.8 | No longer considered a PCI |

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

Enhancement of the security of oil supply in the Central Eastern European region by increasing interoperability and enabling adequate alternative supply routes:

| 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) |
| 9.3 | JANAF-Adria pipelines: reconstruction, upgrading, maintenance and capacity increase of the existing JANAF and Adria pipelines linking the Croatian Omisalj seaport to the Southern Druzhba (Croatia, Hungary, Slovak Republic); (The Hungarian — Slovak interconnection is no longer considered a PCI) |
| 9.4 | Litvinov (Czech Republic) — 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:<br>9.5.1. Construction of oil terminal in Gdańsk<br>9.5.2. Expansion of the Pomeranian pipeline: loopings and second line on the Pomeranian pipeline linking Plebanka tank farm (near Płock) and Gdańsk handling terminal |
| 9.6 | TAL Plus: capacity expansion of the TAL pipeline between Trieste (Italy) and Ingolstadt (Germany) |

(10) **Priority Thematic Area Smart Grids Deployment**

| No. | Definition |
|---|---|
| 10.1 | North Atlantic Green Zone Project (Ireland, United Kingdom/Northern Ireland) aims at lowering wind curtailment by implementing communication infrastructure, enhanced grid control and interconnection and establishing (cross-border) protocols for Demand Side Management. |
| 10.2 | Green-Me (France, Italy) aims at enhancing RES integration by implementing automation, control and monitoring systems in HV and HV/MV substations, including communication with the renewable generators and storage in primary substations, as well as new data exchange to allow for a better cross-border interconnection management. |
| 10.3 | SINCRO.GRID (Slovenia/Croatia) aims at solving network voltage, frequency control and congestion issues enabling further deployment of renewables and displacement of conventional generation by integrating new active elements in the transmission and distribution grids into the virtual cross-border control centre based on advanced data management, common system optimisation and forecasting involving two neighbouring TSOs and the two neighbouring DSOs. |

(11) **Priority Thematic Area Electricity Highways**

List of PCIs with double labelling as electricity highways

| No. | Definition |
|---|---|
| *Priority Corridor Northern Seas Offshore Grid ("NSOG")* | |
| 1.1.1 | Interconnection between Zeebrugge (BE) and the vicinity of Richborough (UK) |
| 1.3.1 | Interconnection between Endrup (DK) and Niebüll (DE) |
| 1.3.2 | Internal line between Brunsbüttel and Niebüll (DE) |
| 1.4.1 | Interconnection between Kassø (DK) and Audorf (DE) |
| 1.4.2 | Internal line between Audorf and Hamburg/Nord (DE) |
| 1.4.3 | Internal line between Hamburg/Nord and Dollern (DE) |
| 1.5 | Denmark — Netherlands interconnection between Endrup (DK) and Eemshaven (NL) [currently known as "COBRAcable"] |
| 1.6 | France — Ireland interconnection between La Martyre (FR) and Great Island or Knockraha (IE) [currently known as "Celtic Interconnector"] |
| 1.7.1 | France — United Kingdom interconnection between Cotentin (FR) and the vicinity of Exeter (UK) [currently known as "FAB" project] |
| 1.7.2 | France — United Kingdom interconnection between Tourbe (FR) and Chilling (UK) [currently known as "IFA2" project] |

| No. | Definition |
|---|---|
| 1.7.3 | France — United Kingdom interconnection between Coquelles (FR) and Folkestone (UK) [currently known as "ElecLink" project] |
| 1.8 | Germany — Norway interconnection between Wilster (DE) and Tonstad (NO) [currently known as "NordLink"] |
| 1.10 | Norway — United Kingdom interconnection |
| 1.13 | Interconnection between Iceland and United Kingdom [currently known as "Ice Link"] |
| 1.14 | Interconnection between Revsing (DK) and Bicker Fen (UK) [currently known as "Viking Link"] |

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

| | |
|---|---|
| 2.2.1 | Interconnection between Lixhe (BE) and Oberzier (DE) |
| 2.5.1 | Interconnection between Grande Ile (FR) and Piossasco (IT) [currently known as "Savoie- Piemont"project] |
| 2.7 | France — Spain interconnection between Aquitaine (FR) and the Basque country (ES) [currently known as "Biscay Gulf" project] |
| 2.9 | Germany internal line between Osterath and Philippsburg (DE) to increase capacity at Western borders |
| 2.10 | Germany internal line between Brunsbüttel-Großgartach and Wilster-Grafenrheinfeld (DE) to increase capacity at Northern and Southern borders |
| 2.13 | Cluster Ireland — United Kingdom interconnections, including one or more of the following PCIs:<br>2.13.1 Ireland — United Kingdom interconnection between Woodland (IE) and Turleenan (UK)<br>2.13.2 Ireland — United Kingdom Interconnection between Srananagh (IE) and Turleenan (UK) |

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

| | |
|---|---|
| 3.10.1 | Interconnection between Hadera (IL) and Kofinou (CY) |
| 3.10.2 | Interconnection between Kofinou (CY) and Korakia, Crete (EL) |
| 3.10.3 | Internal line between Korakia, Crete and Attica region (EL) |
| 3.12 | Internal line in Germany between Wolmirstedt and Bavaria to increase internal North-South transmission capacity |

| No. | Definition |
|---|---|
| *Priority Corridor Baltic Energy Market Interconnection Plan ("BEMIP Electricity")* | |
| 4.1 | Denmark — Germany interconnection between Tolstrup Gaarde (DK) and Bentwisch (DE) via offshore windparks Kriegers Flak (DK) and Baltic 1 and 2 (DE) [currently known as "Kriegers Flak Combined Grid Solution"]' |