



Council of the European Union
General Secretariat

Brussels, 18 March 2021

**REDACTED DOCUMENT
ACCESSIBLE TO THE PUBLIC
(04.02.2024). ONLY MARGINAL
PERSONAL DATA HAVE BEEN
REDACTED.**

WK 3909/2021 INIT

LIMITE

ENER

This is a paper intended for a specific community of recipients. Handling and further distribution are under the sole responsibility of community members.

CONTRIBUTION

From:	General Secretariat of the Council
To:	Working Party on Energy
Subject:	EE comments on Art. 1, Annex I and Annex II of the TEN-E Regulation (ST 6864/21)

Delegations will find in the annex the EE comments on Art. 1, Annex I and Annex II of the TEN-E Regulation (ST 6864/21).



Council of the
European Union

Brussels, 11 March 2021
(OR. en)

Interinstitutional File:
2020/0360(COD)

6864/1/21
REV 1

LIMITE

ENER 67
TRANS 121
RELEX 179
ECOFIN 227
ENV 132
CODEC 336

NOTE

From:	General Secretariat of the Council
To:	Delegations
No. Cion doc.:	14088/20 + ADD 1 - ADD 5
Subject:	Presidency revised proposal for Article 1 and Annex I and II of TEN-E Regulation - improved marking

Delegations will find in annex the Presidency revised proposal for Article 1 and Annex I and II of the TEN-E Regulation.

The text is the same as in the document 6864/21 published on 9 March. However, to allow better comparison to previous revisions (1798/2021, 2179/2021) and the Commission's proposal, the markings were improved.

In the current revision: new text in **bold underline**, deleted text is either ~~striketrough~~ or **~~bold striketrough~~**. Text added in the previous revisions is **bold** and deletions made are replaced with [].

Written comments can be sent to the Presidency and GSC in copy, energy@consilium.europa.eu, until 18 March.

TEN-E REVISION PROPOSAL REGARDING ARTICLE 1, ANNEX I AND ANNEX II

CHAPTER I

GENERAL PROVISIONS

Article 1

Subject matter

1. This Regulation lays down guidelines for the timely development and interoperability of the priority corridors and areas of trans-European energy infrastructure set out in Annex I ('energy infrastructure priority corridors and areas') that contribute to the Union's 2030 climate and energy targets and ~~to the pathway towards~~ the climate neutrality objective by 2050 **and to ensure interconnections, energy security, market integration and competition for all Members and energy at a price that is affordable for households and companies.**

2. In particular, this Regulation:

(a) addresses the identification of projects of common interest necessary to implement priority corridors and areas falling under the energy infrastructure categories [] set out in Annex II ('energy infrastructure categories');

(b) addresses the identification of projects of mutual interest.

(c) *(ex point b)* facilitates the timely implementation of projects of common interest **and projects of mutual interest** by streamlining, coordinating more closely, and accelerating permit granting processes and by enhancing **transparency and** public participation;

(d) *(ex point c)* provides rules [] for the cross-border allocation of costs and risk-related incentives for projects of common interest **and projects of mutual interest**;

(e) *(ex point d)* determines the conditions **and the criteria** for eligibility of projects of common interest **and projects of mutual interest** for Union financial assistance;

[] *(ex point e was deleted)*

ANNEX I

ENERGY INFRASTRUCTURE PRIORITY CORRIDORS AND AREAS

1. PRIORITY ELECTRICITY CORRIDORS

(1) North-South electricity interconnections in Western Europe ('NSI West Electricity'): interconnections between Member States of the region and with the Mediterranean area including the Iberian peninsula, notably to integrate electricity from renewable energy sources and reinforce internal grid infrastructures to foster market integration in the region.

Member States concerned: Austria, Belgium, **Denmark**, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Malta, Portugal and Spain;

(2) North-South electricity interconnections in Central Eastern and South Eastern Europe ('NSI East Electricity'): interconnections and internal lines in North-South and East-West directions to complete the internal market and integrate generation from renewable energy sources.

Member States concerned: Austria, Bulgaria, Croatia, Czech Republic, Cyprus, Germany, Greece, Hungary, Italy, Poland, Romania, Slovakia and Slovenia;

(3) Baltic Energy Market Interconnection Plan in electricity ('BEMIP Electricity'): interconnections between Member States and internal lines in the Baltic region, to foster market integration while integrating growing shares of renewable energy in the region.

Member States concerned: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden.

2. PRIORITY OFFSHORE GRID CORRIDORS

(4) Northern Seas offshore grid ('NSOG'): integrated offshore electricity grid development and the related interconnectors in the North Sea, the Irish Sea, **the Celtic Sea**, the English Channel and neighbouring waters to transport electricity from renewable offshore energy sources to centres of consumption and storage and to increase cross-border electricity exchange.

Member States concerned: Belgium, Denmark, France, Germany, Ireland, Luxemburg, the Netherlands and Sweden;

(5) Baltic Energy Market Interconnection Plan offshore grid ('BEMIP offshore'): integrated offshore electricity grid development and the related interconnectors in the Baltic Sea and neighbouring waters to transport electricity from renewable offshore energy sources to centres of consumption and storage and to increase cross-border electricity exchange.

Member States concerned: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden;

(6) South and ~~West-East~~ offshore grid: integrated offshore electricity grid development and the related interconnectors in the Mediterranean Sea (**including Cadiz Gulf**), [] and neighbouring waters to transport electricity from renewable offshore energy sources to centres of consumption and storage and to increase cross-border electricity exchange.

Member States concerned: [] France, **Greece**, Italy, Malta, [] **Portugal** [] and Spain;

(7) South and ~~East-West~~ [] offshore grid: integrated offshore electricity grid development and the related interconnectors in the [] **Mediterranean Sea, Black Sea and neighbouring waters** to transport electricity from renewable offshore energy sources to centres of consumption and storage and to increase cross-border electricity exchange;

Member States concerned: **Bulgaria, Cyprus, Croatia, Greece, Italy, Romania and Slovenia.**

(8) *(based on original point (7) Atlantic* [] offshore grid: integrated offshore electricity grid development and the related interconnectors in the North Atlantic Ocean waters to transport electricity from renewable offshore energy sources to centres of consumption and storage and to increase cross-border electricity exchange.

Member States concerned: France, Ireland, Portugal and Spain.

3. PRIORITY CORRIDORS FOR HYDROGEN AND ELECTROLYSERS

(9) Hydrogen interconnections in Western Europe ('HI West'): hydrogen infrastructure ~~including the repurposing of gas infrastructure~~, enabling the emergence of an integrated hydrogen backbone, **directly or indirectly (including through third countries)**, connecting the countries of the region and addressing their specific infrastructure needs for hydrogen supporting the emergence of an EU-wide network for hydrogen transport.

Commented [1]: We prefer reinstating this text for clarity

Electrolysers: supporting the deployment of power-to-gas applications aiming to enable greenhouse gas reductions and contributing to secure, efficient and reliable system operation and smart energy system integration. Member States concerned: Austria, Belgium, **Czech Republic**, Denmark, France, Germany, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, and Spain;

(10) Hydrogen interconnections in Central Eastern and South Eastern Europe ('HI East'): hydrogen infrastructure ~~including the repurposing of gas infrastructure~~, enabling the emergence of an integrated hydrogen backbone, **directly or indirectly (including through third countries)**, connecting the countries of the region and addressing their specific infrastructure needs for hydrogen supporting the emergence of an EU-wide network for hydrogen transport.

Commented [2]: We prefer reinstating this text for clarity

Electrolysers: supporting the deployment of power-to-gas applications aiming to enable greenhouse gas reductions and contributing to secure, efficient and reliable system operation and smart energy system integration. Member States concerned: Austria, Bulgaria, Croatia, Cyprus, Czech Republic, Germany, Greece, Hungary, Italy, Poland, Romania, Slovakia and Slovenia;

(11) Baltic Energy Market Interconnection Plan in hydrogen ('BEMIP Hydrogen'): hydrogen infrastructure, ~~including the repurposing of gas infrastructure~~, enabling the emergence of an integrated hydrogen backbone, **directly or indirectly (including through third countries)**, connecting the countries of the region and addressing their specific infrastructure needs for hydrogen supporting the emergence of an EU-wide network for hydrogen transport.

Commented [3]: We prefer reinstating this text for clarity

Electrolysers: supporting the deployment of power-to-gas applications aiming to enable greenhouse gas reductions and contributing to secure, efficient and reliable system operation and smart energy system integration. Member States concerned: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden.

4. PRIORITY THEMATIC AREAS

(12) Smart electricity grids deployment: adoption of smart grid technologies across the Union to efficiently integrate the behaviour and actions of all users connected to the electricity network, in particular the generation of large amounts of electricity from renewable or distributed energy sources and demand response by consumers.

Member States concerned: all;

(13) Cross-border carbon dioxide network: development of carbon dioxide transport **and storage** infrastructure between Member States [] in view of the deployment of carbon dioxide capture and storage **and enabling CO2 use including for synthetic fuel gases**.

Member States concerned: all;

(14) Smart gas grids: Adoption of smart gas grid technologies across the Union to efficiently integrate a plurality of renewable and low-carbon gas sources into the gas network, support the uptake of innovative solutions for network management and facilitating smart energy sector integration and demand response.

Member States concerned: all.

Commented [1]: We are doubtful that CO2 storage infrastructure has a cross-border dimension

ANNEX II

ENERGY INFRASTRUCTURE CATEGORIES

The energy infrastructure categories to be developed in order to implement the energy infrastructure priorities listed in Annex I are the following:

(1) concerning electricity:

(a) any physical equipment designed to allow transport of electricity on the high and extra-high voltage level, including high-voltage overhead transmission lines, ~~considering internal lines in MS (including connections between islands) and interconnections between MS~~ [] if they have been designed for a voltage of 220 kV or more, and underground and submarine transmission cables, if they have been designed for a voltage of 150 kV or more;

Commented []: The cross-border dimension of TEN-E regulation should be maintained. Domestic electricity connections should not fall under the scope of the regulation.

(b) ~~energy storage facilities in the electricity system~~ [] on a permanent or temporary basis in above-ground or underground infrastructure or geological sites, provided they are directly connected to high-voltage transmission lines designed for a voltage of 110 kV or more;

Commented []: Reference to the definition would be beneficial (e.g. reference to the exact directive/regulation) to ensure clarity of the scope

(c) any equipment or installation essential for the systems referred to in points (a) and (b) to operate safely, securely and efficiently, including protection, monitoring and control systems at all voltage levels and substations;

(d) Smart electricity grids: ~~regarding~~ any equipment or installation, digital systems and components integrating ICT, through operational digital platforms, control systems and sensor technologies both at transmission and medium voltage distribution level, aiming at a more efficient and intelligent electricity transmission and distribution network, increased capacity to integrate new forms of generation, storage and consumption and facilitating new business models and market structures;

(e) any equipment or installation falling under category referred to in point (a) having dual functionality: interconnection and [] offshore [] ~~grid connection system~~ from the offshore generation sites to two or more [] Member States and third countries ~~participating in projects of common interest and projects of mutual interest, including landlocked countries~~, as well as any offshore adjacent equipment or installation essential to operate safely, securely and efficiently, including protection, monitoring and control systems, and necessary substations if they also ensure technology interoperability inter alia interface compatibility between different technologies, ('offshore grids for renewable energy'). ~~And includes the onshore prolongation of this equipment and the domestic grid reinforcement necessary to ensure an adequate and reliable transmission grid and to supply electricity generated offshore to landlocked countries.~~

Commented []: Reference to the definition would be beneficial (e.g. reference to the exact directive/regulation) to ensure clarity of the scope

Commented []: If landlocked countries are included in offshore category, they should also be included in the specific offshore regional groups, together with the responsibilities arising from this.

Commented []: This falls out of the scope of the offshore grid category. If there is a lack of transmission capacity between 2 Member States onshore, such project should be addressed in p (a).

(2) concerning smart gas grids:

(a) any of the following equipment or installation aiming at enabling and facilitating the integration **a plurality** of renewable and low-carbon gases (including biomethane or hydrogen) into the **gas** network: digital systems and components integrating ICT, control systems and sensor technologies to enable the interactive and intelligent monitoring, metering, quality control and management of gas production, transmission, distribution, **storage** and consumption within a gas network. Furthermore, such projects may also include equipment to enable reverse flows from the distribution to the transmission level and related necessary upgrades to the existing network.

(3) concerning hydrogen:

(a) transmission pipelines for the transport of hydrogen, giving access to multiple network users on a transparent and non-discriminatory basis, which mainly contains high-pressure hydrogen pipelines [] ;

(b) [] storage facilities connected to the high-pressure hydrogen pipelines referred to in point (a);

(c) reception, storage and regasification or decompression facilities for liquefied hydrogen or hydrogen embedded in other chemical substances with the objective of injecting the hydrogen, **where applicable**, into the grid;

(d) any equipment or installation essential for the hydrogen system to operate safely, securely and efficiently or to enable bi-directional capacity, including compressor stations;

e) any equipment or installation allowing for hydrogen or hydrogen-derived fuels use in the transport sector within the TEN-E core network.

Any of the assets listed in points (a), (b), (c), and (d) may be newly constructed assets or **dedicated hydrogen assets** converted from natural gas [], or a combination of the two.

During a transitional period, repurposed gas assets could be used for transport or storage of higher blends of hydrogen with natural gas.

Where they involve newly constructed assets, they shall include an assessment of the hydrogen demand and be dimensioned to satisfy this demand without creating overcapacity.

Commented []: This should probably refer to TEN-T core network. Furthermore, it would be beneficial if a clarification of the exact equipment and installations would be included. If this equipment falls better under the scope of TEN-T regulation, then it shouldn't be included in TEN-E. Cross-border dimension of this equipment is also questionable.

Commented []: We have doubts about the inclusion of hydrogen blending in the gas network. We prefer the focus on repurposing of gas infrastructure.

(4) concerning electrolyser facilities:

- (a) electrolysers that: (i) have at least ☐ 50 MW capacity, (ii) the production complies with the life cycle greenhouse gas emissions savings requirement of 70 % relative to a fossil fuel comparator of 94g CO₂e/MJ ☐. Life cycle greenhouse gas emissions savings are calculated using the methodology referred to in Article 28(5) of Directive (EU) 2018/2001 or, alternatively, using ISO 14067 or ISO 14064-1. **The life-cycle GHG emissions must include indirect emissions.** Quantified life-cycle GHG emission savings are verified in line with Article 30 of Directive (EU) 2018/2001 where applicable, or by an independent third party, and (iii) have also a network-related function;
- (b) related equipment.

Commented [REDACTED]: We welcome lowering the threshold, nevertheless, the cross-border impact should remain.

(5) concerning carbon dioxide:

- (a) dedicated pipelines, other than upstream pipeline network, used to transport carbon dioxide from more than one source, i.e. industrial installations (including power plants) that produce carbon dioxide gas from combustion or other chemical reactions involving fossil or non-fossil carbon-containing compounds, for the purpose of permanent geological storage of carbon dioxide pursuant to Directive 2009/31/EC of the European Parliament and of the Council¹;
- (b) facilities for liquefaction and ☐ ~~storage~~ of carbon dioxide in view of its further transportation. ☐ This ☐ includes infrastructure within a geological formation used for the permanent geological storage of carbon dioxide pursuant to Directive 2009/31/EC and associated surface and injection facilities;
- (c) any equipment or installation essential for the system in question to operate properly, securely and efficiently, including protection, monitoring and control systems.

Commented [REDACTED]: We suggest to add 'and from at least two Member States' to ensure cross-border impact.

Commented [REDACTED]: We prefer reverting to the Commission's original proposal.

Note from the Presidency: The deadline for comments on this proposal is **March 18th**.

¹ OJ L 140, 5.6.2009, p. 114.