

E-Control Position Paper

on the Revision of Regulation 347/2013 on guidelines for trans-European energy infrastructure (TEN-E) and Infrastructure Governance

July 2020



Executive Summary

E-Control welcomes the opportunity to provide input to the upcoming revision of Regulation 347/2013. Generally, E-Control strongly supports the intention of the TEN-E Regulation to identify, streamline and accelerate the necessary European network development. Given its role as national regulatory authority (NRA), E-Control has been able to gather vast experience with the application of the Regulation over the past years. Hence, we base our comments, feedback and improvement proposals on experiences from this work.

We would also like to refer to the joint ACER/CEER position paper¹, which we fully support. The E-Control position paper takes up many messages from the ACER/CEER position paper and is more ambitious in some respect. The revision of the TEN-E Regulation takes place in the context of the Green Deal, which calls for greater consistency of the regulatory framework for energy infrastructure with the climate neutrality objective. E-Control calls on the European Commission to align the TEN-E Regulation with the goals of the green deal and make sustainability a priority in the PCI selection process.

We also provide proposals related to the coherence with other pieces of legislation, on governance, on the underlying planning and scenarios of the PCI selection, on the assessment of projects, on the transparency of the process, on new infrastructure categories, on permit granting and on project financing.

The position paper is structured to cover all 3 areas, namely:

- Governance and framework
- Procedural aspects and timely implementation
- Criteria for project financing

¹The position paper can be found at:



Governance and framework

E-Control deems the development of the European energy infrastructure an important instrument to facilitate secure, sustainable and affordable energy for the European citizens and economy. Of course, network development must effectively and efficiently interact with system operation and market design. Hence, the strong mandate for the NRAs and ACER as stated in the Clean Energy Package should be mirrored in the TEN-E Regulation and the changed political mandate of the green deal should be carefully reflected.

Anchoring the Green Deal in the Regulation

- The sustainability criterion of Article 4 (2) should be mandatory and not discretionary for gas projects;
- The sustainability criterion needs to be strengthened in the sense that gas projects need to demonstrate positive sustainability benefits in the Cost Benefit Analysis (CBA);
- Expand the sustainability dimension in the CBA methodology;
- Add sustainability dimension to the list of positive externalities considered for Connecting Europe Facility (CEF) grants for works in Article 14(2a);
- Direct access to CEF: In case a Project of Common Interest (PCI) demonstrates significant contribution to sustainability, a share of the costs of such projects could be socialised across all Member States (MS).

Coherence of the Regulation

- Update the provisions on planning instruments (National Development Plans (NDP), Ten Year Network Development Plans (TYNDP)) of the electricity and gas directives along with the revision of the TEN-E Regulation;
- Align governance provisions with Clean Energy Package, in particular concerning the roles of NRAs and ACER;
- Align TEN-E Regulation with the EU climate objectives;
- Align TEN-E Regulation with revised CEF Regulation.

Governance of the Regulation

Align the role of ACER with the provisions in the Clean Energy Package

- The TYNDP guidelines developed by ACER should be binding to the European Network of Transmission System Operators (ENTSOs);
- ACER shall be entitled to issue binding amendment requests on the draft TYNDP;
- ACER should be requested to elaborate guidelines for the development of the CBA methodology and should be entitled to approve and to amend the CBA methodologies.

More balanced roles and responsibilities in the TEN-E processes

 The relevant NRA should have the sole powers to approve the NDP and to amend the NDP, including the removal or inclusion of specific investments where needed;



- NRAs of the countries hosting a TYNDP project should be entitled to jointly require project promoters to apply for PCI;
- The concerned NRAs should be entitled to reject an investment request if the project fails providing positive net benefits at EU level;
- The NRAs of the hosting countries should be allowed to jointly request all project promoters
 to submit a joint investment request; and each NRA should have powers to require a project
 promoter which is expected to recover costs from the national tariff to apply for Union
 financial assistance.

Improve monitoring and introduce process improvement

- The ACER PCI monitoring report should include a chapter on process improvement;
- The current yearly frequency of the ACER PCI monitoring report should change to once per PCI list;
- The unit investment cost activity should be regularly repeated (e.g. every four years). The revised TEN-E Regulation should provide for an obligation to provide the requested data.

Procedural aspects

The implementation of the TEN-E provisions and instruments is a complex task and needs proper procedures. Moreover, the monitoring should deliver valuable insights in a most efficient process. In order to support the acceptance of the local communities, a communication strategy should be developed in order to brand the PCI label as sustainable, trustworthy and transparent.

PCI selection process

Improving the underlying planning

- Establish infrastructure efficiency first principle for infrastructure development with a mandatory grid optimisation before grid strengthening before grid expansion and mandatory cross-sectoral check of infrastructure solutions;
- Each Member State should have a mandatory single national development plan for gas and for electricity transmission infrastructure on a biannual basis, irrespective of the unbundling status of TSOs;
- All projects with cross-zonal relevance should be automatically added to TYNDP as soon as they can, with each TYNDP project having a clear reference to NDPs;

Improving the underlying scenarios

- The scenario development should be performed by a neutral institution acknowledged for its scientific expertise on energy and without inherent bias towards infrastructure investment;
- The scenarios should be merged for both sectors, leading to a common set of infrastructure development scenarios;
- Scenarios should clearly indicate if they are meeting the decarbonisation targets or not;
- The scenario development process should follow binding guidelines, drafted and monitored by ACER.



Improving the assessment of projects

- Sector specific CBAs should be harmonised and a joint sector integrated CBA should be developed in the future in order to facilitate technology-neutral comparison of infrastructure solutions:
- A CBA analysis should be performed for all TYNDP projects;
- The ENTSOs should not be in charge for non-transmission CBAs;
- Main CBA principles: main inputs and outputs of the CBA including specific reference to mandatory Benefit-to-Cost ratio and Net Present Value; differentiation of benefits according to the level of reliability of their estimation methods; use of monetized benefits only;
- The PCI selection should be based on the monetised CBA analyses of the candidate projects only;
- Introduce automatic project application, using e.g. a benefit/cost ratio threshold of >1 for any TYNDP project to automatically apply for PCI.

Improving the transparency of the process

- CBA methodology and selection criteria have to be available before project promoters apply for PCI status;
- All CBA results should be available to the parties involved in the PCI selection process according to Annex III (1.1.);
- Fundamental project information (i.e. commissioning date, capacity increase, project status and project cost) shall be made publicly available.

Revised energy infrastructure categories and groups

- Allow for projects summarising smaller investments in "infrastructure programs" which show benefits in terms of the TEN-E Regulation in mass application;
- Introduce new project category for "cross-sectoral projects" and new thematic area for cross-sectoral projects;
- Add hydrogen networks to the thematic area "cross border carbon dioxide network"
- Dismiss electricity highways thematic area;
- Separate the energy storage projects from the assessment of electricity transmission investments;
- Dismiss oil projects category;
- Bring all TEN-E groups to a European dimension, serving resource efficiency and transparency and improving the process results.

Timely implementation and Permit granting

- Consequent and compliant adherence to the permit granting provisions, making the timely implementation the priority in the Regulation;
- Introduce opt-in possibility to avoid the transitional provision of Article 19;
- Make sure the indicative period for permit granting for PCI projects does not exceed the time period foreseen for non-PCI projects in national legislation;



- If permit granting exceeds the indicative time period of Article 10, the defined measures for each project to conclude permit granting process within the least possible delay should be publicly available for each project;
- The duration of permit granting should be linked to complexity and size of projects;
- Acceleration measures in general (also for permitting) should be monetised and assessed in terms of alternative scenarios of a project within the framework of the NDP or TYNDP;
- In order to support the acceptance of the local communities, a communication strategy should be developed in order to brand the PCI label as sustainable, trustworthy and transparent.

Criteria for project financing

The relationship between commercial non-viability, cross border cost allocation (CBCA) and CEF grants led to many uncertainties. Therefore, while a high level of regulatory scrutiny needs to be maintained, E-Control supports to some degree the decoupling of these processes.

- The definition of the commercial non-viability (art 14.2(c)) that is required to be eligible to the Union financial assistance should be clarified in the Regulation, as regulated infrastructure projects are, by definition, commercially viable as soon as they are integrated in the regulated asset base;
- Maintain high level of regulatory scrutiny without processing CBCA: The CEF application could be complemented by a reasoned statement by the NRAs that the CBAs provided as part of the CEF have been scrutinized by the NRA;
- NRAs should not take decisions based on incomplete investment requests whose accompanying information is insufficient;
- Efficient and transparent decision-making processes and the publication of the results, as well as clear responsibilities of decision-makers, are required to allow for a smooth implementation of the beneficial projects;
- (Partial) reimbursement of the project promotor's financial assistance (as a result of the CBCA decision) in case a project will not be completed, limits the risk of an unnecessary investment;
- Monitoring of CEF beneficiaries: In case the European Commission makes use of the provisions
 of Article 12 (CEF Regulation), this should also be part of the PCI monitoring and be made
 publicly available.
- Dismiss Article 13 on incentives, as it causes more potential danger of over-incentives than benefits from successfully promoting the establishment of PCIs.



Detailed Position Paper

Anchoring the Green Deal in the Regulation

The revision of the TEN-E Regulation takes place in the context of the Green Deal, which calls for further decarbonising the energy system to reach the EU climate objectives, as well as for greater consistency of the regulatory framework for energy infrastructure with the climate neutrality objective.

The Green Deal emphasises that the power sector must be based largely on renewable sources, complemented by the rapid phasing out of coal and decarbonising gas. At the same time, the EU's energy supply needs to be secure and affordable for consumers and businesses. For this to happen, it is essential to ensure that the European energy market is fully integrated, interconnected and digitalised.

Therefore, the Green Deal calls for a holistic view of several criteria: Renewable energy sources (RES) integration and sustainability, as well as security of supply and market integration.

Aligning the TEN-E Regulation with the objectives of the Green Deal would allow project promoters to **emphasize the value of the PCI label as sustainable, trustworthy and transparent** (see section on "timely implementation and permit granting").

Focus on sustainability in project selection

To some extent, the wording of the TEN-E Regulation already meets the criteria of the Green Deal.

In particular, regarding sustainability:

- For electricity projects, Article 4(2)(a)(ii) of the TEN-E Regulation lists sustainability, inter alia through the integration of renewable energy, as a specific criterion for electricity transmission and storage projects;
- As far as gas projects are concerned, Article 4(2)(b)(iv) of the TEN-E Regulation already identifies, among the specific criteria for gas projects: sustainability, inter alia through reducing emissions, supporting intermittent renewable generation and enhancing deployment of renewable gas;
- The cost benefit analysis methodology for electricity include benefits related to RES integration, to the reduction of losses, to the reduction of greenhouse gas emissions and of other emissions, environmental impacts and residual impacts
- Article 12(4) of the TEN-E Regulation requires the concerned NRAs, when deciding to allocate costs across borders, to take into account also the environmental costs and benefits.

However, some gaps remain in the Regulation, and in particular as far as gas projects are concerned, the above-mentioned provisions need to be filled with life, and sustainability criteria have to get the priority focus in the PCI selection.

The sustainability criterion of Article 4 (2) should be mandatory and not discretionary for gas projects. Also, the sustainability criterion needs to be strengthened in the sense that gas projects need to demonstrate positive sustainability benefits in the CBA.

Improvement should take place by expanding the sustainability dimension in the cost-benefit analysis methodology. In addition, contribution to the sustainability criterion should be assessed



according the Green classification system (DG COM TEG Report²) for environmentally sustainable economic activities in alignment with the EU Taxonomy Regulation.

Considering all benefit categories when evaluating possible CEF grants

Article 14(2)(a) of the TEN-E Regulation requires, as a mandatory criterion for CEF grants for works for the main energy infrastructure categories, that the project specific cost-benefit analysis provides evidence concerning the existence of significant positive externalities, such as security of supply, solidarity or innovation.

In line with the objectives of the Green Deal, the sustainability dimension should be explicitly added in the list of positive externalities considered for CEF grants for works.

Direct access to CEF for significant contribution to sustainability

In case a PCI demonstrates significant contribution to sustainability (the CBA shows that monetised sustainability benefits outweigh costs), and the benefits would not be limited to a certain and determinable group of Member States, a share of the costs of such projects could be socialised across all MS. It should be considered to allow such PCIs direct application for CEF grants for works, skipping the CBCA requirement.

To ensure that this instrument is used with utmost care, a comprehensive proof of non-multiple granting has to be submitted by the project promoter.

Coherence of the Regulation

Coherence of planning instruments

The TEN-E Regulation needs to be coherent with all other related pieces of legislation, especially with the electricity directive and gas directive which contain important provisions on the planning instruments (national development plans and EU TYNDPs). Since these planning instruments form the basis for the PCI selection, coherence is of utmost importance. E-Control calls on the European Commission to update the relevant provisions of the electricity and gas directive along with the revision with the TEN E Regulation.

Our concrete proposals for improvement can be found in the section "PCI selection process" of this position paper.

Align governance with Clean Energy Package:

The Clean Energy Package brought along important governance improvements compared to the 3rd energy package with regards to the roles of NRAs and ACER. These **governance improvements should be implemented in the TEN E Regulation**, too: The Clean Energy Package has systematically clarified the principle that all proposals for terms, conditions or methodologies from stakeholders with commercial interests need the neutral scrutiny of NRAs or ACER. To be effective, the obligation to scrutinise proposals from stakeholders with commercial interests must include the right to amend the respective proposals. The principle that ACER or NRAs can modify drafts submitted to them, is

https://ec.europa.eu/info/sites/info/files/business economy euro/banking and finance/documents/200309-sustainable-finance-teg-final-report-taxonomy en.pdf

² The report can be found at:



established, for the development of network codes, in Article 59(11) of Regulation 2019/943, and for terms, conditions and methodologies adopted under the network codes, in Article 5(6) of Regulation 2019/942.

Our concrete proposals for improvement can be found in the section "Governance and the roles of different actors" of this position paper.

Align TEN E Regulation with climate objectives

In order to ensure coherence with the relevant climate legislation and the EU's climate goals, the TEN-E Regulation needs to put the focus on GHG emission reductions and on sustainability. Only projects contributing to these goals should become PCIs.

Our concrete proposals for improvement can be found in the section "Focus on Sustainability" of this position paper.

Coherence of EU funding instruments

The TEN-E Regulation needs to be coherent with related EU funding instruments. The new CEF Regulation will earmark 15% of its energy budget for renewable energy projects. These projects do not have to be PCIs. On the other hand, only sustainable projects shall become PCIs in the future TEN-E Regulation. Project promoters might tend to apply for the earmarked CEF money, thus avoiding the process of long PCI selection and CBCA procedure. Consistency and a level playing field for project promoters have to be ensured.

Multiple funding possibilities exist for energy projects. These should be complementary, multiple funding possibilities for a single project should be avoided or transparently awarded.

Governance and the roles of different actors

NRA scrutiny on national development plans

The Third Energy Package Directives require NRAs to consult, to monitor and, more generally, to scrutinise the national network development plans, with differentiations depending on the unbundling status of the TSO(s).

In addition, pursuant to Article 51(5) of Directive 2019/944 and Article 22(5) of Directive 2009/73/EC, the NRA shall examine whether the national network development plan covers all investment needs identified during the consultation process and may require the transmission system operator to amend its ten-year network development plan.

According to EU legislation, these Articles currently apply only for the case of independent transmission operators. However, they were implemented in national laws of many Member States, irrespective of the unbundling status of the TSOs. In about half of the European countries, the relevant NRA has been empowered to approve the network development plans.

To offset specific market failures that could induce some TSOs not to consider specific investments that would bring greater social welfare in the long-run and to prevent inefficient investments whose costs would be borne by consumers, we recommend that, in each Member State:



- The relevant NRA should have the sole powers to approve the NDP, as NRAs are best fitted to ensure their NDPs are fit for delivering a sound infrastructure development and reach a sufficient level of quality;
- The NRA should have powers to amend the NDP, including the inclusion or removal of specific investments where needed.

ACER scrutiny upon European Ten-Year Network Development Plans

The TYNDP guidelines developed by ACER should be binding to ENTSOs, focusing on how the TYNDP is to be developed in terms of admission criteria for projects, process, stakeholder consultation and required outputs. Aspects related to the fair treatment of all project promoters and the transparency of the process also are of paramount importance. These guidelines could also cover the objectives of cross-sectoral integration and energy transition.

Moreover, ACER shall be entitled to issue binding amendment requests on the draft TYNDP, so as to cover any flaws of the draft TYNDPs that ACER and NRAs might identify, including those which require re-running simulations on certain aspects of projects' assessment that can only be done by the ENTSOs.

ACER scrutiny on methodologies for cost benefit analysis

CBAs are a cornerstone of the PCI selection and treatment process. A range of decisions depend on them, including with respect to cross-border cost allocation decisions. Insufficient robustness of CBAs undermines the legitimacy of PCI lists and forces project promoters and NRAs to conduct specific studies when submitting and processing investment requests. While specific analyses are necessary since several details are not covered by a pan-European method, methodological robustness and transparency need to be reinforced

ACER should be requested to elaborate guidelines for the development of the CBA methodology. The aim is to provide the ENTSOs with clear directions on which aspects to focus on (e.g. monetisation and quantification, security of supply, sustainability, etc.), building on medium and long-term recommendations of the previous ACER Opinions.

As a complement, **ACER should be entitled to approve and to amend the CBA methodologies**. Via the power to amend, this would ensure that CBAs evolve at a satisfactory pace through time and that previous CBAs are not considered as fallback solutions in case of rejection. ACER may be requested to run a public consultation before approval, while avoiding overlaps with the former consultation by the ENTSOs, to allow further inputs by stakeholders.

Shifting the approval power to ACER would help streamline the process, which currently requires at least two opinions (one by ACER and one by EC plus optional opinions by Member States), one new document by the ENTSOs after the opinions, and an EC approval, prolonging the process (the past two rounds in electricity and in gas lasted more than 3 years each) and creating unnecessary administrative burdens.

More balanced roles and responsibilities in the TEN-E processes

The TEN-E Regulation is currently focused on project promoters as the only parties activating several processes.

Annex III.2(1) of the TEN-E Regulation indicates that promoters wanting to obtain the status of project of common interest shall apply for it.



Some project promoters may be reluctant to carry out the efforts for PCI application, even though their projects may provide a high benefit to society and could potentially be identified as projects of common interest.

While project promoters' applications would remain the default option, if the PCI status could be supportive to successfully developing such projects (in terms of permit granting, cross-border coordination and/or EU financial support), it should be ensured that the identification of priority projects for Europe is not fully left to the willingness of promoters. Therefore, the NRAs of the countries hosting a TYNDP project should be entitled to jointly require project promoters to apply for PCI.

This proposal could also be meaningful when the promoters of different investments in a TYNDP cluster have different intentions on their applications for the PCI selection.

Selection as a PCI should imply that a project fulfils the necessary conditions in terms of net positive impact for the society. Nevertheless, the assessment of benefits is subject to methodological issues and selections often result from including qualitative aspects. As a result, the PCI status may be a presumption of positive impact.

When a project reaches sufficient maturity and the project promoters submit an investment request, they have to provide detailed information about the project, with updated information on the technical design, on costs and a benefit assessment including a split among benefitting countries.

When assessing the investment request, the concerned NRAs have to jointly check that project benefits outweigh project costs. After they have carried out such an analysis, the concerned NRAs should be entitled to reject an investment request if the project fails providing positive net benefits at EU level, taking into account potential uncertainties on benefit calculations. More generally, the PCI decision making process should ensure that no host country would be required to carry out projects if negative impacts at a national perimeter are not compensated.

Article 12(2) of the TEN-E Regulation limits the activation of cross-border cost allocation procedures (and consequently the possibility to apply for Union financial assistance in the form of grants for works) "only if at least one project promoter requests the relevant national authorities to apply this Article". While this process is to remain the default one, it has to be acknowledged that project promoters may take a private perspective in their actions regarding these procedures, while NRAs take a societal perspective. However, NRAs' powers are not always sufficient in all Member States (and should be reinforced as previously discussed). For this reason, the NRAs of the hosting countries should be allowed to jointly request all project promoters to submit a joint investment request; and each NRA should have powers to require a project promoter which is expected to recover costs from the national tariff to apply for Union financial assistance.

ACER PCI monitoring report

Process Quality Management

The TEN-E selection process is missing a clear reference to process quality management (continuing improvement of a process). Therefore, the ACER PCI monitoring report should include a chapter on **process improvements**, to determine the lessons learned and give directions to the coming process iteration. It could focus on the process planning, on process transparency, on process methodologies (in comparison to the last process iterations, on measurable KPIs that reflect the Article 4 (2) specific



criteria and sustainability and on process resource allocation (including an estimation of used process resources).

Frequency of the Report

Given that the PCI list is usually adopted at the end of a certain year (year "n"), the ACER PCI monitoring carried out in the year "n+1" (conducted during the first half of that year) does not allow sufficient time for substantial advancement of the projects in comparison to their status at the time when the projects were included in the PCI list.

The timing of such monitoring should be changed accordingly, so that a longer period elapses between the adoption of the PCI lists and the carrying out of a monitoring round, as it is already the case in the Agency's monitoring activities on TYNDPs.

Therefore, the currently yearly frequency of the ACER PCI monitoring report should change to once per PCI list. The report should be produced in due time to provide fresh inputs for the selection of the next PCI list.

Reports on unit investment costs

One of the most significant barriers to the assessment and monitoring of network developments is the incompleteness or lack of accurate, detailed and up-to-date information. For their regulatory tasks, NRAs need access to the relevant information concerning investment plans, projects and related costs (planned and actual). Article 11(7) of the TEN-E Regulation lays some groundwork for addressing these challenges, with the obligation to publish a report on unit investment cost (UIC) indicators and reference values. However, by stating a single date (by 16 May 2015) for the UIC report, the TEN-E Regulation only provides the legal basis for a one-time UIC report. The 2015 report proved to be a useful tool for project assessment, but its value is declining over time, due to changing market conditions and technologies.

Therefore, we recommend that the unit investment cost activity should be regularly repeated (e.g. every four years). The revised TEN-E Regulation should provide for an obligation on infrastructure owners, transmission system operators and third-party promoters, to provide the requested data.

PCI selection process

Establish Efficiency First Principle for infrastructure development

In order to be aligned with the Clean Energy Package's energy efficiency first principle, infrastructure development should follow the **infrastructure efficiency first principle**:

Therefore, we suggest implementing the German/Austrian **NOVA principle** (grid optimisation before grid strengthening before grid expansion) as a mandatory criterion to trans-European infrastructure development.

Infrastructure needs could potentially be covered by cross-sectoral infrastructure solutions, especially taking into consideration already existing and mature future infrastructure that might not be used or might be used in another way in the future. Therefore, a mature methodology of cross-sectoral identifications of system needs has to be developed. Additionally, there should be a mandatory cross-



check if the system need could potentially be covered by another sector or technology (mandatory cross-sectoral check).

Increased consistency between national plans, the European TYNDP and the PCI process Consistency of the NDPs and the EU TYNDPs and coherence with the PCI processes requires cooperation between the Commission, ACER, NRAs and ENTSOs. The administrative burden for promoters should be reduced and consistency of obtained information improved.

The preparation of a national network development plan should be mandatory in each Member State, even in case TSOs are under the regime of ownership unbundling.

National network development plans should be defined and published on a biennial basis. The timing of NDPs needs to be fine-tuned with the timing of the European TYNDP in order to provide proper and timely inputs and avoid discrepancies at later stages.

Each Member State should have a single national development plan for electricity infrastructure development and a single plan for gas infrastructure development. In Member States with several TSOs in a sector, NDPs should be developed by all TSOs in a joint and coordinated way. Transmission projects promoted by third parties should be assessed as part of the NDPs.

All projects of cross-zonal relevance included in any NDP should automatically be included in the EU TYNDP as soon as they can. Each TYNDP needs to have a reference to the latest approved NDPs and to draft NDPs, where applicable.

Joint scenarios for electricity and gas are to be developed in a neutral way

Scenarios are an important pillar of network development. With the current governance of scenario development, avoiding criticism of overestimation of the benefits of new investments is a difficult, if not impossible task. To help overcome any perception of bias in their development, scenarios should be elaborated in a way that guarantees they do not reflect any partial interest of project promoters. Therefore, the scenario development should be performed by a neutral institution acknowledged for its scientific expertise on energy and without inherent bias towards infrastructure investment. The selection process of such an entity should be under the governance of the European Commission. Data collection and consistency checks could stay with the ENTSOs.

Scenarios should depict a coherent evolution of the European energy system. Therefore, the scenarios should be merged for both sectors, leading to a common set of infrastructure development scenarios. They should also clearly indicate if they are meeting the EU decarbonisation targets or not. The requirement in Annex V(2) of Regulation (EU) 347/2013 (compatible data sets for electricity and gas) should be strengthened.

Scenario development should follow binding guidelines

Scenarios serve TYNDP simulations and associated tasks such as CBAs. Their design should be consistent with what is required for ENTSOs to fulfil their duties. Thus, **the scenario development process should follow binding guidelines**, including general provisions and technical guidance. The timing of the first edition of these guidelines should be defined by law, with later updates, if required.



The scenario binding guidelines to follow when developing the scenarios should encompass:

- A definition of the inputs (variables that describe scenarios, including policy objectives for the long-term) and outputs, their granularity and which entities should take part in providing inputs (e.g. European Commission, Member States through National Energy and Climate Plans, transmission and distribution system operators);
- Main procedural aspects such as mandatory milestones and stakeholder consultation procedures, including the public and specific entities to ensure neutrality and the provision of most up-to-date inputs;
- Defining which time-horizons (study years) should be covered;
- A comparison of the evolution of the main outputs of the new scenarios vs. the last ones;
- The market and network data to be made publicly available, and other transparency requirements.

ACER should be mandated to draft the binding guidelines and should be in charge of monitoring the application of the guidelines.

CBA improvements

One of the challenges of the PCI selection is to translate the general objectives of contribution to market integration, security of supply, competition and sustainability into a robust and methodologically sound PCI selection process. The backbone of this exercise is the CBA methodology which allows for assessment and comparison of candidate projects. Robust CBA indicators allow for a solid assessment of projects against the objectives of the Regulation. Some elements of the CBA methodologies are already satisfying, others need to be improved:

- Sector specific CBA methodologies for electricity and gas should be harmonised in order to facilitate a technology-neutral comparison of infrastructure solutions and the future development of a sector integrated CBA.
- Considering the necessity to equally treat projects and other potential uses of the TYNDP results,
 CBA should apply to all TYNDP projects.
- Specific provisions about the assessment of smart grids, projects providing flexibility (like power-to-gas), storage and other types of new projects should not be in the scope of ENTSOs methodology. The European Commission should be responsible for the respective CBA methodologies which should be compatible with the ENTSOs CBA in terms of monetised benefits and costs.
- We recommend streamlining the annexes IV (Rules and criteria for PCIs) and V (Energy system
 wide CBA) of the TEN-E Regulation, so that they are less prescriptive, relieving rigid constraints on
 the definition of the CBA methodology, whilst ensuring that it addresses key principles (main inputs
 and outputs of the CBA including specific reference to mandatory Benefit-to-Cost ratio and Net
 Present Value; differentiation of benefits according to the level of reliability of their estimation
 methods; use of monetized benefits only).

Trigger process automation

It could be envisaged to introduce an automatic project application, using e.g. a b/c ratio threshold of >1 for any TYNDP project to automatically apply for PCI. A mandatory TYNDP outcome of a b/c-ratio and the definition of the selection scenario would be prerequisite for that concept.



Transparency on fundamental project information

Confidentiality claims regarding fundamental project data is a re-occurring issue during different NRA/ACER activities. Some project promoters unduly claim confidentiality for a wide range of project information which requires a time-consuming process to resolve the claims.

The intended redaction of basic project data cast shadows on the reliability of the related project assessments, as it does not allow other parties to check and verify the data, while transparency may also facilitate project implementations by building trust of the stakeholders and by allowing the decision makers of different procedures to have consistent information on the projects.

Fundamental project information (i.e. commissioning date, capacity increase, project status and project cost) shall be made publicly available for projects included in the Union list of PCIs, the EU TYNDPs and the National network development plans. This may also apply to certain data currently being exclusively available within the Regional Groups (i.e. ranking of the projects, thresholds for selection, measures taken or to be taken to conclude the permit granting process with the least possible delay).

Transparency on CBA methodology and selection criteria

Having participated in four PCI selection processes, we have the following recommendations to further improve the PCI selection processes, in particular in terms of transparency and objectification of the selection process:

- The PCI selection should be based on the monetised CBA analyses of the candidate projects only.
- The CBA methodology and the selection criteria should be available before project promoters apply for PCI status,
- thereby limiting political influence over project selection to a minimum;
- All CBA results should be available to the parties involved in the PCI selection process according to Annex III (1.1.) of the current Regulation.

Several shortcomings of the past PCI selection processes were covered in the "ACER Opinion on the draft PCI list 2019", mostly covering transparency, monetisation of the CBA and the multicriteria approach.

Revised energy infrastructure categories and groups

Annex II of the TEN-E Regulation defines the energy infrastructure categories: electricity transmission and storage infrastructure (for which 4 regional groups are set up according to Annex I), electricity smart grids (1 group), electricity highways (1 group), gas infrastructures (4 regional groups), oil (1 group) and carbon dioxide networks (1 group).

As a general principle, in the context of the Green Deal, E-Control recommends revising the energy infrastructure categories to better reflect the need for addressing energy system decarbonisation. In this regard, for new sustainable infrastructure categories to be under the umbrella of the TEN-E Regulation, it would be necessary to develop specific criteria to assess them.



Bringing the Regulation to a local level

To facilitate infrastructure investments at local level which could potentially have a cross-border impact, a new concept that summarises smaller investments by one or more project promoters should be introduced.

These so called "infrastructure programs" could be defined as a set of multiple measures and / or investments regarding energy infrastructure that have a minor impact as stand-alone solution, but whose benefit is proven to be of «common interest» according the TEN-E criteria in mass application. These measures and / or investments should be of similar kind and the sum of these measures and / or investments need to be assessable in terms of the CBA. There should be no limitation in terms of the number of investment items or affected network users (such as the smart grid category). To streamline the application process for this particular concept, a possibility of multiple promoter application should be introduced.

Infrastructure programs could potentially trigger digitalisation, energy efficiency and sustainability applications across borders and there should be added value in terms of regional coordination, application and learning effects across borders.

Sector-coupling projects

Sector coupling projects like power-to-gas can have cross-border relevance depending on the size and the topology.

E-Control is very reluctant on the role of TSOs in this technology field: first, non-TSO project promoters should play a role in developing these projects, under market conditions.

But the current TYNDP process is structured around TSOs. Such process can lead to discrimination and distortions in two directions: either non-TSO project promoters may face difficulties entering the process, or the regulatory scrutiny is far less developed for such projects because of missing regulatory oversight.

E-Control considers that all (potential) PCIs should be equally treated and assessed in a thorough manner. In case of "new" projects of energy system integration nature, a due scrutiny for projects from non-regulated promoters needs to be anchored in the Regulation, too.

A new project category "Cross-sectoral projects" could be envisaged. Regarding priority corridors (Annex I) a new thematic area for cross-sectoral projects (comparable to "smart grids") could be created.

Hydrogen networks should also be eligible for PCI status. These networks could be added to the priority thematic area "cross-border carbon dioxide network".

Simplification of energy infrastructure categories

In the PCI lists, the electricity highways category resulted only in a double labelling of already selected projects. This shows that "highways" can simply be treated and assessed as electricity transmission projects. Therefore, the electricity highways thematic area should be dismissed.

In order to highlight the importance of electricity storage, which should not be assessed by ENTSOs CBA (therefore see section on "CBA improvements"), it seems preferable to **separate the energy**



storage investment category from the assessment of electricity transmission investments. This may facilitate the development and improvement of a specific methodology for energy storage projects.

As regards the smart grids category, there is room for improvement of the definition and for a clarification of the criteria (in particular, monetised benefits) to be considered for smart grid project assessment.

The categories of oil projects, which do not contribute to the current decarbonisation targets, should be dismissed.

Bringing all TEN-E groups to a European dimension

During the last PCI selections, the discussion and decision criteria have been progressively harmonised across the regional groups and to some extent across the sectors.

The logic consequence would be to **bring the groups to a European dimension, serving resource** efficiency and transparency and improving the process results. The following EU-wide groups are proposed:

- electricity transmission investments group;
- electricity smart grids and infrastructure programs group;
- gas investments group;
- carbon dioxide and hydrogen networks group;
- energy storage investments group;
- cross sectoral investments group.

This would cut the number of groups by half (from 12 to 6). Such a reduction of groups would help members of the groups keep the oversight of all activities they are potentially concerned with and reduce the number of necessary meetings. Discussing all projects of a category within one group would furthermore enhance transparency and enhance the possibilities of knowledge-sharing.

Timely implementation and permit granting processes

Current state of play

One major purpose of the Ten-E Regulation is to facilitate the timely implementation of Projects of Common Interest by streamlining, coordinating more closely, and accelerating permit granting processes and by enhancing public participation. Therefore, various instruments were introduced in the Regulation, namely in Articles 5,8, and 10, to ensure that permit granting of projects of common interests shall not exceed a period of three years and six months.

The annual ACER Consolidated Report on the progress of electricity and gas Projects of Common interests repeatedly concludes that many delays for implementing projects of common interests are caused by long permit granting processes. Therefore, a **consequent and compliant adherence to the above described instruments** is very important to ensure timely implementation of PCIs. This involves an improved application of the instruments by various stakeholders including the competent authorities, Members States, NRAs, the regional groups and the EC, **making the timely implementation the priority of the Regulation.**



Areas for further improvement

Additionally, some modifications are to be considered:

- The switch to the TEN-E permitting regime could be made optional for all projects for which the application files were submitted before the deadline mentioned in Article 19.
- Since the formal TEN-E permit granting process is even longer than the national process, the
 appetite for changing to the TEN-E regime seems limited among project promoters. In order
 to make sure EU legislation does not lag behind national legislation, a provision should be
 added to the Regulation ensuring that the indicative period for permit granting for PCI
 projects cannot exceed the time period foreseen for non-PCI projects in the national
 legislation.
- In the case of extending the duration of the permit granting process, the measures taken or to be taken to conclude the permit granting process by the competent authority with the least possible delay according to Article 10 (2) should be publicly available and this information should transparently be covered (for each single PCI, e.g. in an annex) within the ACER Consolidated Report on the progress of electricity and gas Projects of Common interests.
- While the permit granting procedure should be completed within the described period of three years and 6 months, the possibility of extending this duration according to Article 10
 (2) should be linked to the size and complexity of a PCI, as this dimension substantially affects the duration of the permit granting per se.
- A significant number of projects continues to be delayed by reasons exogenous to the
 promoters. On the other hand, timely/early implementation could also be valued in terms of
 the monetised benefits of a project, when assessed in terms of cost-benefit analyses.
 Therefore, measures to accelerate the implementation should be monetised and assessed in
 terms of alternative scenarios of a project within the framework of the NDP or TYNDP.

Sustainable PCI label

The value of identification of projects of common interest should be refocused on **labelling the PCI projects as sustainable, trustworthy and transparent** in order maximise the support of the implementation process on a local level. Therefore, a **communication strategy** should be developed and implemented that brings the PCI label from a bureaucratic to the local level, also including stakeholders like NGOs and local governments.

Criteria for project financing

The relationship between CBCA and CEF grants for works should enable the best use of available financing instruments and facilitate a timely realisation of important projects.

Current state of play

The Agency's Recommendation No 03/2014 on incentives demonstrated that existing regulatory frameworks already provide numerous measures to cover financing issues and - if necessary – provide incentives for necessary investments. There is thus no general issue of "financeability" of TSOs and investments that would need to be addressed by general measures, but rather there could be particular projects in need of tailored solutions.



According to Article 14 of the TEN-E Regulation, works are eligible for CEF-Funding if the project i.a. has received a cross-border cost allocation (CBCA) decision pursuant to Article 12, and is considered "not commercially viable". However, it should be considered that the objective of a CBCA decision is to make sure that no country bears a net negative impact due to the project, and that projects under consideration are regulated and as such, see their costs integrated in the regulated asset bases. Thus, once the CBCA decision is taken, no hosting country bears a net negative impact, and since projects are regulated (i.e. costs and adequate rate of return are covered by national tariffs), there is no issue of "commercial non-viability" per se: in theory, no projects could apply to CEF funding in a strict sense.

The criterion of "commercial viability" should be further clarified

As explained above, and as a prerequisite to any change in the CBCA and CEF relationship, the definition of the commercial non-viability (art 14.2(c)) that is required to be eligible to the Union financial assistance should be clarified in the Regulation, as regulated infrastructure projects are, by definition, commercially viable as soon as they are integrated in the regulated asset base.

However, such projects could face an issue of affordability, for instance if their inclusion in tariffs would prove too burdensome. A change in Regulation could use the definition of the EC below (taken from the FAQs of the European Commission):

"Commercial non-viability refers to a situation whereby the regulatory framework (tariffs, incentives) would not allow to fully cover the externalities provided by the project. In order to assess the commercial viability, available assessments from creditors or investors should be taken into account. An assessment carried out by the concerned national regulatory authorities shall be obtained by the project promoters and given special consideration. In any case the assessment shall not be limited to the results of the business plan by the project promoters. Applicants are encouraged to provide results of market tests, if available, and compare these to the outcome of the business plan."

CBCA - CEF Relationship

Moreover, the CBCA and CEF sequencing follows the rationale that the role of CBCAs is to make sure that all national and regional funding sources have been considered before stating that the project is commercially not viable and thus applying for CEF funding. E-Control believes that this automaticity does not lead to an acceleration of the European network development and does not facilitate the NRAs' decision-making process.

From the experience of NRAs with CBCA decisions so far, this legal relationship leads in some cases to unnecessary, contentious, time consuming CBCAs and completely detached CBCA and CEF decisions which might not solve existing issues.

These uncertainties led to 5 conditional CBCA decisions between October 2013 and August 2015, in which NRAs retained the right to revise their CBCA decisions in case the funding from external source will prove to be insufficient³.

³ ACER Summary report: Experience with Cross-Border Cost Allocation, September 2015



Areas for Improvement

As stated initially, the relationship between CBCA and CEF grants for works should enable the best use of available financing instruments to facilitate a timely realisation of important projects. In E-Control's view, a CBCA is not always needed, but a regulatory scrutiny should definitely precede an application for CEF funding.

The relationship between CBCA and CEF could be improved by the following measures:

- Maintain high level of regulatory scrutiny without processing CBCA: Any change of the CBCA/CEF relation should not endanger that information which is needed in the CEF selection process is provided by project promoters and the NRAs to INEA and the EU Commission. Until now CBCA has contributed to a high level of regulatory scrutiny.
 But this aim can be reached with far less effort and without processing CBCA. Already now, according to Article 9 of the CEF Regulation proposals shall be submitted by one or more Member States or, with the agreement of the Member States concerned, by international organisations, joint undertakings, or public or private undertakings or bodies established in Member States. This agreement could be complemented by a reasoned statement by the NRAs that the CBAs provided as part of the CEF have been scrutinised by the NRA.
- A thorough scrutiny of the project should be ensured before any decision (CBCA or CEF) is taken. If a project promoter does not provide all necessary information, then he should first be asked by affected NRAs to provide all information necessary. If that does not happen, the request should be rejected by NRAs. NRAs should not take decisions based on incomplete investment requests whose accompanying information is insufficient.
- Efficient and transparent decision-making processes and the publication of the results, as well as clear responsibilities of decision-makers, are required to allow for a smooth implementation of the beneficial projects.
- Ex ante check of benefits for CEF grants: In analogy to Article 12 of the CEF Regulation on the cancellation, reduction, suspension and termination of the grant, it should be considered to provide for similar mechanisms within the framework of the TEN-E Regulation regarding CBCA. Introducing a provision on (partial) reimbursement of the project promotor's financial assistance (as a result of the CBCA decision) in case a project will not be completed, limits the risk of an unnecessary investment and might therefore encourage projects with cross-border impact. Moreover, as the benefits are analyzed only ex ante, a CBCA holds the risk that an investment will not lead to the benefits assumed. Although an uncertainty range is inherent in CBCA itself, the TEN-E Regulation should provide for a mechanism in case an investment with cross-border impacts leads to no benefit at all.

Monitoring of CEF beneficiaries

Article 12 of the CEF Regulation provides for consequences in case project promotors do not fulfil the obligations of their CEF grant contracts. In case the European Commission makes use of the provisions of Article 12, this should also be part of the PCI monitoring and be made publicly available.



Dismiss Article 13 on incentives

According to the latest ACER PCI Monitoring Report, the project specific risk-related incentives of Regulation (EU) No 347/2013 have not been widely used by project promoters and project promoters have shown a limited interest to use them in the future.

Between 2013 and 2018, only 6 requests have been made by promoters for the granting of project-specific risk mitigating incentives under Article 13, of which 2 in electricity (2 in the Netherlands) and 4 in gas (1 in the Czech Republic, 1 in Slovakia and 2 in Lithuania). 1 request in electricity and 3 in gas eventually led to the granting of project-specific incentives. In addition to the Dutch, Lithuanian and Slovak NRAs, the Belgian NRA granted project specific incentive measures to a non-PCI electricity project.4

In E-Control's view, Article 13 causes more potential danger of over-incentives than benefits from successfully promoting the establishment of PCIs: Referring to the Capital Asset Pricing Model (CAPM) – the methodology most widely applied by European NRAs to identify an appropriate return on equity –, investors need to be compensated for assuming non-diversifiable risk. Therefore, CAPM considers not only the risk-free rate, but also a premium for equity risk as well as the beta parameter which accounts for the contribution of the specific industry to the investor's systematic risk5. To estimate an average beta parameter for the focal industry, NRAs are well advised to consider a sample of suitable firms operating under similar conditions as relevant peer group6. Consequently, the beta parameter derived from an appropriate peer group of electricity network operators correctly reflects the non-diversifiable industry specific average risk. By implication, any additional risk premia for specific projects as stated in Article 13 are only justifiable if no projects similar to the focal one have been undertaken by the average operator in the peer group. Otherwise, the estimated beta parameter would already provide sufficient remuneration.

The low number of actual and planned filing of applications for project specific risk-related incentives occurred only in a low number of cases which appear to be the exception rather than the norm. This implies that existing risk premia in national regulatory frameworks together with volume risk borne by the customers successfully cover the risk associated with infrastructure investment of any kind. Furthermore, PCIs may even have a lower risk than other infrastructure projects because of their

Cost of Equity = Risk Free Rate + β * Equity Risk Premium

⁴ ACER (2018). Summary report on project-specific risk-based incentives, p.1. Weblink: https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/ACER-summary-report-on-project-specific-risk-based-incentives 2018.pdf. Accessed on 2020-04-22.

⁵ Formally, CAPM works as follows:

⁶ European Commission & Brattle Group (2016). Review of approaches to estimate a reasonable rate of return for investment in telecoms networks in regulatory proceedings and options for EU harmonization. Weblink: https://op.europa.eu/en/publication-detail/-/publication/da1cbe44-4a4e-11e6-9c64-01aa75ed71a1/language-en . Accessed: 2020-04-22.



priority status and the political support they get from authorities⁷. Additional premia are therefore in general not necessary and would offer incentives for inefficient over-investment (known in academic literature as Averch-Johnson effect).

The Agency's Recommendation No 03/2014 on incentives demonstrated that existing regulatory frameworks already provide numerous measures to cover financing issues and – if necessary – provide incentives to ensure that the required investments are implemented8. E-Control is not aware of any evidence that the conclusions would be different for the regulatory regimes currently in place.

As the ACER and Trinomics reports show, current regulatory regimes provide all necessary incentives to ensure efficient investment spending. This conclusion is confirmed by the low number of Article 13 requests. On the other hand, additional premia imply a considerable risk of inefficient overinvestment together with unjustified returns which exceed the funds needed for financing the project. As Article 13 causes more potential danger of over-incentives than benefits from successfully promoting the establishment of projects of common interest, E-Control proposes to dismiss it.

⁷ Trinomics (2018). Evaluation of the TEN-E Regulation and Assessing the Impacts of Alternative Policy Scenarios, p. 142. Weblink: https://op.europa.eu/en/publication-detail/-/publication/81f6baae-5efc-11e8-ab9c-01aa75ed71a1/language-en. Accessed on 2020-04-22.

⁸ ACER (2014). Recommendation of the Agency for the Cooperation of Energy Regulators No 03/2014 of 27 June 2014 on incentives for projects of common interest and on a common methodology for risk evaluation. Weblink:

https://www.acer.europa.eu/Official documents/Acts of the Agency/Recommendations/ACER%20Recommendations/2003-2014.pdf. Accessed: 2020-04-22.