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RECOMMENDATION No 5/2015 OF THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS
of 18 December 2015

ON GOOD PRACTICES FOR THE TREATMENT OF THE INVESTMENT REQUESTS, INCLUDING CROSS BORDER COST ALLOCATION REQUESTS, FOR ELECTRICITY AND GAS PROJECTS OF COMMON INTEREST

THE AGENCY FOR THE COOPERATION OF ENERGY REGULATORS,

HAVING REGARD to Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009 establishing an Agency for the Cooperation of Energy Regulators\(^1\), and, in particular, Article 7(2) and 17(3) thereof,

HAVING REGARD to the favourable opinion of the Board of Regulators of 16 December 2015, delivered pursuant to Article 15(1) of Regulation (EC) No 713/2009,

WHEREAS:

(1) The European Union has set itself the objectives of accelerating the modernisation and expansion of the Union’s energy infrastructure as well as to interconnect networks across borders which is vital to achieve the Union’s energy and climate policy objectives\(^2\).

(2) 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\(^3\), provides for the identification of projects of common interest (PCIs) which are necessary to implement priority corridors and areas falling under the energy infrastructure categories in electricity, gas, oil and carbon dioxide\(^4\).

(3) A net negative impact\(^5\) affecting at least one country hosting\(^6\) a PCI constitutes a potential barrier to its development. As each PCI has an overall net positive impact, it should be possible to provide compensation to eliminate the country-specific net negative impact so as to facilitate the investment. In this context, a harmonised and non-discriminatory

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\(^2\) Recital (4) of Regulation (EU) No 347/2013.
\(^3\) OJ L 115, 25.4.2013, p. 39.
\(^5\) See Section 1.6 of this Recommendation about the term “net impact” and its calculation.
\(^6\) For the purpose of this Recommendation, “hosting country” is a country where the project is territorially located.
approach should be applied in order to identify the Member States which should provide such compensation.

(4) Regulation (EU) No 347/2013 facilitates investments in PCIs by envisaging decisions by National Regulatory Authorities (NRAs) or by the Agency for the Cooperation of Energy Regulators (the Agency) on the allocation of the costs of such projects across borders if project promoters submit an investment request, including a request for a cross-border cost allocation (CBCA).

(5) Article 12(3) of Regulation (EU) No 347/2013 specifies the features of the investment request to be submitted by project promoters. It requires that an investment request is accompanied by a project specific cost benefit analysis (CBA) consistent with the methodology drawn up pursuant to Article 11. European Networks of Transmission System Operators (ENTSOS) for Electricity and for Gas published their respective methodologies in February 2015, following approval from the European Commission. However, Article 12(3) does not specify the level of detail of the information to be submitted by project promoters. A clarification of the details to be submitted is essential to facilitate a consistent approach among project promoters and NRAs. This should at the same time enable the submission of complete investment requests of adequate quality and the minimisation of delays.

(6) Because of the importance of the cross-border cost allocation process for advancing infrastructure projects of EU-wide relevance, identification of good practices for NRAs is of utmost importance in order to facilitate treatment of the investment requests.

(7) In this context, as foreseen in the Agency’s Work Programme 2015, the Agency’s Recommendation No 07/2013 of 25 September 2013 regarding the cross-border cost allocation requests submitted in the framework of the first Union list of electricity and gas projects of common interest requires revision and completion in the light of the experience gained with the assessment of the investment requests for the PCIs included in the first Union list and the related decisions.

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7 The term "project promoters" in this Recommendation applies also to the cases of PCIs with one project promoter.
11 As summarised in the accompanying summary report “Experience with Cross-Border Cost Allocation, September 2015"
HAS ADOPTED THIS RECOMMENDATION:

1. On the submission of an investment request

1.1. Determination of complementarities between projects

The benefits of a PCI can be influenced by the potential development of other projects. Project promoters should aim at identifying significant complementarities between projects, discuss them with the relevant TSOs and should aim at preparing joint analyses and, in case of significantly complementary projects, joint investment requests.

1.2. Sufficient maturity

As soon as the project has reached sufficient maturity, Article 12(3) of Regulation (EU) No 347/2013 allows project promoters to submit an investment request including a request for cross border cost allocation.

In the Agency’s view, a “sufficiently mature” project is a project fulfilling all of the following conditions:

a) Sufficient certainty about the costs assessed by the project-specific CBA as described in Annex I to this Recommendation.

b) Good knowledge of the factors affecting expected costs and their ranges.

c) As regards investment costs, a cost uncertainty range should be identified. The maximum investment cost should not exceed the minimum investment cost by more than 20%\textsuperscript{12}. If cost uncertainty is higher, the project promoters should illustrate the underlying uncertainty factor(s) and justify why they do not adversely affect the maturity of the project.

d) Reasonable foresight of the benefits assessed by the project-specific CBA as described in Annex I to this Recommendation.

e) Reasonable knowledge of factors affecting benefits and their ranges, also with regard to different scenarios and sensitivity analyses.

f) Permitting procedures having started in all hosting countries. Where applicable\textsuperscript{13}, the project promoters should already have notified in writing the project to all competent authorities of the Member States hosting the project, pursuant to Article 10(1) of Regulation (EU) No 347/2013, and the competent authorities should have accepted in writing the notifications, confirming that they consider the project mature enough to enter the permit granting process.

\textsuperscript{12} See the Agency’s Opinion No 01/2015 on the draft ENTSO-E TVNDP 2014, cost uncertainty range for the group of mid-term mature projects (Section 7.3). When expected variations are symmetrical, this range roughly corresponds to an upward variation +10% of the expected investment cost and a downward variation -10% of the expected investment cost.

\textsuperscript{13} For projects of common interest in the permit granting process for which a project promoter has submitted an application file before 16 November 2013, the provisions of Chapter III and thus Article 10 of Regulation (EU) No 347/2013 shall not apply, pursuant to Article 19 of the same Regulation.
g) Commissioning to be achieved indicatively within 60 months\textsuperscript{14} from the date of submission of the investment request\textsuperscript{15}. If the expected commissioning date is beyond such a period, project promoters should justify the underlying reason(s).

1.3. TSO consultation

Pursuant to Article 12(3) of Regulation (EU) No 347/2013, prior to submitting an investment request, project promoters should have duly consulted the TSOs from the Member States to which the project provides a significant net positive impact. The assessment of the significant net positive impact should be based on the project-specific CBA.

For the purpose of the consultation with the TSOs, the Agency recommends that all countries above a specific significance threshold (see Section 2.6 of this Recommendation) should be deemed as being subject to a significant net positive impact by the project. In the Agency’s view, all TSOs of such countries (including non-Member States) should be consulted, in order to favour adequate quality of the project-specific CBA.

In case of doubts concerning the presence of a "significant net positive impact" for a Member State, the Agency recommends that project promoters consult also the TSOs of such a Member State, so as to ensure that the consultation requirement established by Article 12(3) of Regulation (EU) No 347/2013 would be fulfilled if the project turned out to provide a significant net positive impact to such a Member State, as well as not to unduly hinder the decision-making process.

The consultation requirement, as laid down in Article 12(3) of Regulation (EU) No 347/2013, should be considered as fulfilled, provided that the consultation meets all of the following conditions:

- a) The project promoters have formally informed the TSOs of the Member States to which the project provides a significant net positive impact that TSOs are being consulted for an investment request under Article 12 of Regulation (EU) No 347/2013;
- b) The project promoters have provided the TSOs with a detailed technical description of the project and a project-specific CBA (including input data and calculations) (see Section 1.5 of this Recommendation, points 1 and 7);
- c) The project promoters have allowed the TSOs a sufficient period of time to evaluate and provide written feedback to them on the project-specific CBA. The sufficiency of the period of time for consultation depends on a series of relevant factors, such as the complexity of the project, the previous cooperation at European, regional and bilateral level and the degree of previous knowledge of the project. The Agency recommends that the project promoters strive for a consultation period lasting indicatively 4 to 8 weeks;
- d) The project promoters have ensured appropriate coordination, exchange of (potentially different) views and a thorough discussion during and soon after the consultation period.

\textsuperscript{14} In its Opinion No 31/2015 on the draft ENTSO-E TYNDP 2014, the Agency took note of the ENTSO-E TYNDP period of 5 years adopted to distinguish mid-term projects and proposed the classification of mid-term mature projects for mature projects to be commissioned in the next 5 years.

\textsuperscript{15} The timeline for the expected commissioning date may change depending on the complexity of the project.
in order to improve the project-specific CBA before the submission of the investment request.

For the sake of proper planning and facilitating the NRAs' decision-making process, the Agency recommends that project promoters inform the NRAs of the Member States whose TSOs are consulted and provide them with the consultation documents, as soon as distributed to or received from the TSOs.

1.4. Addressees and language of the investment request

The Agency recommends that project promoters address the investment request to the NRAs of:

a) the Member State(s) hosting the project and
b) any other Member State(s) having a potentially significant net positive impact based on the project-specific CBA (i.e. the NRAs of the Member States whose TSOs should be consulted by the project promoters, see Section 1.3 and 2.6 of this Recommendation).

The investment request and the accompanying documents should be submitted:

a) in the official languages of the addressed NRAs, if so required by the law of the respective Member State; and
b) in English, which is also the internal working language of the Agency.\(^{16}\)

1.5. Information to be provided with the investment request

The Agency recommends that an investment request submitted by project promoters provides the following information and, where appropriate, supporting evidence (in hard copy and electronic form):

1. A detailed technical description of the project, including a description of the rationale behind the choice of the technology, and a map of the planned route of the project in case of transmission projects.

2. A detailed implementation plan of the project, which should provide substantial information about the progress achieved in the development of the project and its status, as well as a (probability) assessment of the critical and risk factors for the project and the risk mitigation measures adopted in relation to those factors which could have the most negative impact. The Agency recommends that, in the detailed implementation plan, the project progress and status are described with reference to the main progress steps in the development of the project, with an indication of the start and end dates for each step. Dates could be either actual, as some of the steps will already have been completed, or expected.

\(^{16}\) Decision AB No 15/2014 of the Administrative Board of the Agency for Cooperation of Energy Regulators of 18 December 2014 on the internal language regime of the Agency for the Cooperation of Energy Regulators.
In line with the Agency’s infrastructure monitoring activities, the following progress steps, which include the four stages outlined in Article 5(1) of Regulation (EU) No 347/2013, are identified in the development of electricity transmission and gas infrastructure projects of EU-wide importance, and should be used as reference for the detailed implementation plan:

i. under consideration: planning studies (power flow and hydraulic simulations, pre-feasibility and feasibility, including the techno-economic analysis of the project) and consideration for inclusion in the national plan(s) and Regional / EU-wide Ten Year Network Development Plans (TYNDPs) of ENTSOs;

ii. planned, but not yet in permitting: approved inclusion in the national plans;

iii. preliminary design studies: basic engineering design, environmental impact assessment, etc.;

iv. market test (for gas PCIIs only);

v. preliminary investment decision (if applicable);

vi. public consultation under Article 9(4) of Regulation (EU) No 347/2013;

vii. permit granting process (including a pre-application procedure and a statutory permit granting procedure when provisions of Chapter 3 of Regulation (EU) No 347/2013 apply);

viii. definition of the financing scheme;

ix. cross-border cost allocation;

x. exemption from third party access (if applicable);

xi. final investment decision;

xii. detailed engineering design;

xiii. tendering (if foreseen), from call for tenders to contract award(s);

xiv. construction;

xv. commissioning.

3. A preliminary investment decision on the investment(s) (e.g. a - possibly conditional - board decision on intended investment), if applicable.

4. A short description of the status of the project permitting process in all hosting countries, including a detailed schedule (in line with Annex VI (2) of Regulation (EU) No 347/2013) and corresponding evidence.

5. Information about the sufficient maturity of the project (see Section 1.2 of this Recommendation).

6. Information on TSO consultations and the results of the consultations. The information should describe the documents shared, the feedback (the elements on which TSOs agreed and did not agree and the reasons for agreement/disagreement) of the “consulted” TSO(s), and explain in sufficient detail how their comments were accepted and implemented or why they were rejected.

7. A project-specific CBA for the various ENTSOs’ TYNDP scenarios\(^{18}\), including:

a) a sensitivity analysis and accompanying studies (for more details see Annex I to this Recommendation);

b) an analysis of the expected impact of the project on the Inter-TSO Compensation (ITC) revenues and payments (for electricity PCIIs only);

\(^{17}\) The steps are not strictly time-sequential, rather they usually partly overlap.

\(^{18}\) Project promoters should be free to provide, in their investment requests, any other additional robust scenarios which they deem plausible, and the associated results.
c) an analysis of any other revenues/charges;
d) an assessment of market demand and expected revenues from capacity bookings linked to the implementation of the PCI, i.e. binding or non-binding market test results which give a sufficiently reliable insight on expected revenues from capacity bookings (for gas PCIs only);
e) a detailed assessment of the efficiency of the expected costs of the project\textsuperscript{19}, including their comparison with unit investment costs or other information (standard costs, historical costs) available at national, European or international level and an explanation for any deviations; and
f) a summary of national net impacts for each country.

8. A business plan including a description of the chosen financing solution (including tariffs), and information on awarded, applied for and expected grants and loans, also differentiating on national, European and other sources, as well as on the estimated financing costs (indicating an estimation of the part of financing costs to be incurred until commissioning of the project). In Member States where the tariff calculation is carried out by TSOs, a description of the respective applicable national methodologies for tariff calculation and of the project’s impact on network tariffs should be provided in sufficient detail (for more details, see Annex III to this Recommendation).

9. A substantiated proposal for cross-border cost allocation (if agreed by the project promoters).

In addition, the Agency recommends that project promoters use a summary data template (only in English) for submission of each investment request to the NRAs (see Annex IV to this Recommendation).

1.6. Calculation of national net impacts

Pursuant to Annex V(11) of Regulation (EU) No 347/2013, the CBA shall identify the Member States on which the project has net positive impacts (beneficiaries) and those Member States on which the project has a net negative impact (cost bearers).

In the Agency’s view, the calculation of the national net impact applicable to each of the countries\textsuperscript{20} affected by the project should consist of three steps: a) the analysis of costs, b) the analysis of benefits\textsuperscript{21}, and c) the analysis of other cross-border monetary flows (as listed in Annex II to this Recommendation).

The first two steps are instrumental for a system-wide CBA (where monetary flows across countries are neglected, because they offset each other), while the third step completes the calculation with an analysis of how the cross-border monetary flows associated with the project affect the net impact per country. These cross-border monetary flows may include revenues or

\textsuperscript{19} When parts of the project are already in the tendering process, tendering information (call for tenders and contract award(s)) should be provided.

\textsuperscript{20} Including non-Member States.

\textsuperscript{21} The concept of “benefit” (which potentially include negative effects) is used to measure (in monetary terms) all advantages (or disadvantages) of a project to society or to parts of society, such as TSOs. Some – but not necessarily all – of the above mentioned economic benefits (or negative effects) can translate into cash flows. When this is not the case, they constitute externalities.
payments related to capacity bookings, to Entry-Exit tariffs including surcharges resulting from auctions in gas, to congestion rents, to the ITC mechanism in electricity, to grants and to other charges.

The calculation of the national net impact should carefully avoid double-counting the effects.

Furthermore, national monetary transfers (e.g. payments of taxes and national grants) should not be considered as affecting the net impact per country, as these are offset inside the respective country. The recognition of the financing costs is dependent on the respective national regulatory systems\(^{22}\), but they should not be counted as affecting the net impact per country. Potential grants (i.e. not already awarded as of the date of the submission of the investment request) are not to be counted, but the project promoters should inform the NRAs of any potential grant and notify them without delay if a grant is actually awarded thereafter. The residual value of the project at the end of the relevant time horizon\(^{23}\) should be set at zero, as already recommended by the Agency in its Opinion No 01/2014\(^{24}\).

2. On the treatment of investment requests

2.1. Cooperation and coordination between NRAs

In order to ensure a timely and efficient treatment of an investment request, the NRAs receiving such a request should jointly define a single “coordinating NRA”. The “coordinating NRA” should be preliminarily identified as follows:

- For projects situated in one Member State, the NRA of that Member State;
- For cross-border electricity projects, the NRA of the Member State in which the longest part of the infrastructure is located; or
- For cross-border gas projects, the NRA of the Member State in which the highest investment costs are incurred.

Unless otherwise required under national law, the coordinating NRA should:

- Serve as a single point of contact for project promoters and TSOs, while circulating all documents to all other involved NRAs;
- Seek NRAs’ needs for further information, and if necessary, request it from the relevant parties (e.g. from project promoters and TSOs);
- Propose a process (timing, meetings, consultation, etc.) for NRA’s treatment of the investment request and the drafting of an agreement on the investment request;
- Organise consultation of project promoters in cooperation with the other involved NRAs.

\(^{22}\) Financing costs until commissioning of a project may be treated as investment costs under some regulatory systems.

\(^{23}\) See Annex 1.2 (for electricity) and 1.3 (for gas)

\(^{24}\) Agency’s Opinion No 01/2014 of 30 January 2014 on the ENTSO-E Guideline for Cost Benefit Analysis of Grid Development Projects, p.7: “The assumption of zero residual value is preferable because (i) it can be more easily a common assumption across all countries, (ii) the residual value of project benefits after the time horizon may not correspond to the discounted value of any net future revenue after the time horizon and (iii) such assumption allows for a more conservative estimation of project benefits".

All involved NRAs should:
  a) Cooperate fully among themselves, in particular in relation to requests for further
     information;
  b) Endeavour to meet any timeline or deadline agreed upon the proposal of the
     coordinating NRA;
  c) Keep the other involved NRAs informed of progress on the timetable for delivering the
     agreement on the investment request.

2.2. Completeness of the investment request

Given that the completeness of the investment request constitutes an essential element for
 timeliness decisions, it is essential that an investment request includes all information listed in
 Section 1.5 of this Recommendation.

The Agency recommends that NRAs conduct a preliminary assessment regarding the
 completeness of the investment request, indicatively within one month of its receipt by the last
 NRA. If the investment request lacks any of the required information as listed in Section 1.5
 of this Recommendation, the Agency recommends that the NRAs jointly request, through the
 coordinating NRA, the project promoters to provide the missing information within a
 reasonable period of time, to be set on a case-by-case basis in relation to the volume and the
 nature of the missing information.

The Agency recommends that, if the preliminary assessment reveals that some required
 information has not been provided with the investment request, NRAs consider the date of
 receipt of the last piece of missing information (to complete the required information as
 specified in Section 1.5 of this Recommendation) by the last concerned NRA as the start of the
 six-month period to take the coordinated cross-border cost allocation decisions. If all requested
 data cannot be provided by the project promoters within the given period of time, the
 investment request may be treated as incomplete. An incomplete request should not lead to
 cross-border cost allocation decisions.

In addition to the information provided by project promoters in line with Section 1.5 of this
 Recommendation, NRAs may jointly request additional information without effects on the six-
 month period to take coordinated cross-border cost allocation decisions.

2.3. Quality of the information provided with the investment request

It is essential that an investment request is of an adequate quality to enable NRAs to take well-
 informed and robust decisions. In particular, NRAs should assess the robustness of the scenario
 analysis and the quality of the CBA submitted by project promoters.

The Agency recommends that, if the involved NRAs agree that the information provided by
 the project promoters is not of adequate quality and that, therefore, the investment request
 needs to be updated with regard to certain elements, the coordinating NRA requests the project

25E.g. the information is not correct, not accurate or misleading.
promoters to provide the required information (i.e. update the investment request) accordingly, and project promoters do so. Additionally, the Agency recommends that project promoters propose an update of the information provided with the investment request in case developments become known which have a substantial influence on the investment request.

An update of the investment request does not affect the six-month period to take coordinated cross-border cost allocation decisions, unless it is significant.

In the Agency’s view, an update of the investment request should be considered as significant if it reflects one or more of the following developments:

a) a significant variation in total costs (in general the Agency deems as significant a variation in costs exceeding the cost uncertainty range identified in Section 1.2 of this Recommendation),

b) a significant change in the national net impacts calculated in the project-specific CBA such that, the latter attributes a significant net positive impact to a Member State which was not identified in the initial investment request;

c) an update of the information provided with the investment request deemed to be significant by all NRAs.

The Agency recommends that in case of a significant update of the investment request the six-month period to take coordinated cross-border cost allocation decisions should start from the date of receipt of the significant update by the last NRA.

2.4. Identification of costs to be allocated

Article 12(1) of Regulation (EU) No 347/2013 states that the efficiently incurred investment costs, which excludes maintenance costs, shall be borne by the relevant TSOs or the project promoters of the transmission infrastructure of the Member States to which the project provides a net positive impact.

Whereas a project-specific CBA accompanying an investment request has to take into account the total costs of a project, the cross-border cost allocation decisions need only to consider, as a basis for the allocation, the “efficiently incurred” investment costs of the project subject of the investment request.

Investment costs usually cover items related to the development, construction and commissioning of projects, such as those listed in the first four rows of the table in Annex II to this Recommendation. Replacement costs during the lifetime of the project are not to be considered for cross-border cost allocation purposes.

Only investment costs which are related to the project subject of the investment request and which are considered in the respective Regulatory Asset Base are to be included in the basis for cost allocation.

“Efficiently incurred” refers to the comparison with the comparable costs of an efficient TSO. In fact, the level of the efficiently incurred investment costs can only be evaluated after the realisation of the project. Therefore, a preliminary evaluation of expected efficient investment costs should be conducted during the evaluation of an investment request based on published (reference) values for unit investment costs, historic costs, or studies of the planned costs, taking into account the regulatory framework applicable in each country. The outcome of the preliminary evaluation does not prejudice that an evaluation of the efficiently incurred investment costs after the realisation of the project is carried out in line with the legislative and regulatory framework applicable in the relevant Member State.

As far as gas infrastructure projects are concerned, Article 12(2) of Regulation (EU) No 347/2013, limits the scope of application of investment requests to cases where “an assessment of market demand has already been carried out and indicated that the efficiently incurred investment costs cannot be expected to be covered by the tariffs”. Therefore, NRAs should check that such an evaluation has been appropriately conducted.

2.5 The evaluation and choice of the scenarios for calculation of benefits

The Agency considers that benefit results significantly depend on the input scenarios and assumptions. Therefore it is essential that NRAs consider uncertainties, especially with regard to long-term scenarios, and take them into account when taking decisions. The Agency recommends that the involved NRAs agree on any plausible scenario (or combination of scenarios) for the purpose of consistent calculation of benefits and of the subsequent cross-border cost allocation.

Cross-border cost allocation decisions should contain a thorough explanation of the reasoning behind the choice of scenario (or combination of scenarios).

2.6. Allocation of costs

The Agency is of the opinion that the following should be considered:

a) Regulation (EU) No 347/2013 aims at enabling investments with a cross-border impact,
b) the ENTSOs’ CBA methodologies as of February 2015 need to be further improved from a regulatory perspective,
c) any benefit analyses encompass uncertainties with respect to the future benefits per country, especially with respect to different scenarios, and
d) a pragmatic and workable approach is needed in deciding on investment requests.

Therefore, the Agency recommends that, unless NRAs agree otherwise, compensations are provided if at least one Member State hosting the project is deemed to have a net negative impact in at least one of the scenarios deemed plausible by all involved NRAs\textsuperscript{28}. In such cases, the aim should be, in general, to compensate the net negative impact in the relevant Member States. Agreements that go beyond the compensation of the net negative impact, taking into

\textsuperscript{28} See Section 1.5 and 2.5 of this Recommendation.
account the uncertainties in the analysis of benefits or unreasonably different net impacts across Member States after cost allocation, are possible.

If the net negative impact is higher than the total amount of the expected efficient investment costs\textsuperscript{29}, the cross-border cost allocation decisions should compensate the net negative impact up to the maximum amount of the expected efficient investment costs.

When deciding on cross-border cost allocation, NRAs should allocate 100\% of the expected efficient investment costs, in line with calculation of national net impacts in Section 1.6 of this Recommendation and the principles explained above.

To ensure legal certainty and clarity for all involved parties, cross-border cost allocation decisions should be definitive and not conditional on potential future public funding\textsuperscript{30}.

In general, countries to which a project provides a net positive impact should provide compensation. However, it is possible that not every expected net positive impact for a country actually justifies that this country provides compensation. This may be the case where small contributions would be required from a large number of countries, thus causing significant negotiation and administrative costs. Involvement of countries with small net positive impacts would unnecessarily increase the complexity of the procedure for the cross-border cost allocation.

As Article 12(3) of Regulation (EU) No 347/2013 states that an investment request shall be submitted after the project promoters consulted the TSOs from Member States to which the project provides a significant net positive impact, the Agency recommends that a “significance threshold” is applied such that only countries with a net positive impact exceeding the significance threshold provide compensation.

In this context, the significance threshold should be, in principle, equal to 10\% of the sum of net positive impacts accruing to all beneficiary countries.

The Agency recommends that, for the countries whose net positive impact exceeds the significance threshold, the required compensation is allocated proportionally to the following Compensation Indicator (CI): [net positive impact exceeding the significance threshold for the country] / [sum of net positive impacts exceeding the significance threshold for all countries whose net positive impacts exceed the significance threshold].

The CI ensures that the compensation is divided proportionally between the countries with significant net positive impacts according to their shares of net positive impacts exceeding the significance threshold. For equal treatment of countries below and above the threshold, the CI should be applied only to the absolute value corresponding to the net positive impacts exceeding the significance threshold.

If the net positive impacts of the contributing Member States above the 10\% significance threshold are not sufficient to cover the compensation required, the significance threshold

\textsuperscript{29} This may be the case if a project has significant operational costs.

\textsuperscript{30} There may be reasons for applying ex-ante defined adjustments to decisions on the allocation of the investment costs in line with Section 2.7 of this Recommendation.
should be lowered step-wise by 1% per step, until the sum of net positive impacts accruing to all beneficiary Member States is sufficient to cover the required compensation. Nevertheless, the threshold should not be reduced below 5% (minimum significance threshold). If the application of the minimum threshold is not sufficient to cover the compensation required, less than 100% of the costs should be allocated and any resulting “gap” explicitly calculated and mentioned in the cross-border cost allocation decisions.

NRAs may, upon joint agreement, apply a different significance threshold or other appropriate measures, especially in cases in which the significance threshold leads to unreasonably different net impacts across Member States after cost allocation or the uncertainties of benefit analyses justifies it.

2.7. Mechanisms for adjustments of the cost allocation

To facilitate the implementation of PCIs, a stable and predictable regulatory framework is key for legal certainty and clarity for all involved parties. Therefore, cross-border cost allocation decisions should be definitive and clearly specify the conditions and terms under which predefined adjustments of the cost allocation should be implemented after the commissioning of the project.

For cost variations which occur in a country hosting the project and facing a net negative impact:

a) if the actual amount of investment costs turns out to be lower than the expected costs at the time of the cross-border cost allocation decisions, the sum of the compensations from the contributing countries should be decreased by the corresponding amount and the individual compensations reduced proportionately;

b) if the actual amount of investment costs turns out to be higher than the expected costs at the time of the cross-border cost allocation decisions, the amount of compensations from the contributing countries should be left unchanged, except if NRAs agree otherwise and up to a specific threshold defined in the cross-border cost allocation decisions.

For cost variations which emerge in a country hosting the project and facing a positive or zero net impact, the Agency recommends that:

a) if the actual amount of investment costs turns out to be lower than the expected costs at the time of the cross-border cost allocation decisions, the compensations from the contributing countries should be adjusted applying the same principles adopted for cost allocation in the cross-border cost allocation decisions;

b) if the actual amount of investment costs turns out to be higher than the expected costs at the time of the cross-border cost allocation decisions, the amount of compensations from the contributing countries should be left unchanged, except if NRAs agree otherwise and up to a specific threshold defined in the cross-border cost allocation decisions.

For gas projects creating bookable capacity, the Agency recommends that NRAs define in their coordinated cross-border cost allocation decisions adjustments of the cost allocation in relation
to the updated estimate or actual amount of revenues from capacity bookings. In this respect, NRAs should aim at minimising the number and the complexity of adjustment payments.

2.8. Payments for implementation of the cost allocation

Any cross-border compensation should be expressed in monetary values of the year of the expected payment. Therefore, payments should be projected by using an appropriate rate (see Annex I to this Recommendation).

In the Agency’s view, a lump-sum payment shortly after commissioning of the project should be considered as the default option. NRAs may implement different payment schedules depending on the size of the compensations.

2.9. Agreement on the investment request and addressees of coordinated decisions

In line with Article 12(4) of Regulation (EU) No 347/2013, NRAs should reach an agreement on the investment request, to be implemented by taking coordinated cross-border cost allocation decisions after consultation of the project promoters.

The Agency recommends that the agreement on the investment request forms a solid basis for coordinated national cross-border cost allocation decisions. This agreement should:

a) Identify the Member States facing significant net positive impact, and their respective TSOs;

b) Summarise and justify the outcomes of the evaluations covered by Sections 2.4-2.8 of this Recommendation;

c) Be accompanied by a “relevant information” document, including the elements in points (a) to (d) of Article 12(5) of Regulation (EU) No 347/2013 (about the evaluation of the impacts on network tariffs, see Annex III to this Recommendation).

The agreement on the investment request may include other relevant elements, such as rules:

a) for promoting a timely implementation of the project; and

b) for ensuring technical performance (e.g. about availability rates).

Each NRA should address its coordinated decision to the project promoters and TSOs of its own Member State.

2.10. Inclusion of allocated costs in tariffs

As set out in Article 12(1) of Regulation (EU) No 347/2013, the efficiently incurred investment costs, to the extent not covered by congestion rents or other charges, shall be paid for by tariffs for network access. The Agency notes that NRAs should avoid the risks of double support for projects. Therefore, the Agency recommends carefully to consider any possible risk of double remuneration, including if also due to any other contributions from third parties, to the (positive

net) revenues deriving from the ITC mechanism in electricity and to the revenues from Entry-Exit tariffs including surcharges resulting from auctions in gas.

The Agency recommends that NRAs timely take decisions on the inclusion of the allocated investment costs in tariffs in line with Article 12(4) of Regulation (EU) No 347/2013. The Agency recommends that the allocated investment costs are included in tariffs of the respective Member State, in line with the applicable legislative and regulatory framework for transmission network elements in that Member State. The concrete way of how they are reflected in tariffs is the responsibility of the respective NRAs.

2.11 Information to be provided by NRAs to the Agency

Article 12(3) of Regulation (EU) No 347/2013 requires NRAs to inform the Agency about investment requests and to transmit a copy of each investment request to the Agency for information without delay.

The Agency expects that NRAs also keep the Agency informed about the treatment of the investment requests. In particular, NRAs should inform the Agency without delay about:

a) the receipt of an investment request and the date in which it was received by each NRA;
b) the date in which NRAs consider the six-month period pursuant to Article 12(4) of Regulation (EU) No 347/2013 to have started; and
c) requests for information, as referred to in Sections 2.2. and 2.3 of this Recommendation, sent to project promoters and the project promoters’ responses to such requests, including the relevant dates and their consequences on the treatment of the investment request.

Pursuant to Article 12(5), in case NRAs took coordinated cross-border cost allocation decisions, each involved NRA shall notify without delay to the Agency its own cross-border cost-allocation decision, together with all the relevant information with respect to the decision.

In case NRAs cannot reach an agreement within six months\(^2\), or in case of a joint request from the NRAs, the Agency recommends that NRAs submit to the Agency a joint referral report explaining:

a) their treatment of the investment request;
b) their concerns and potential agreement at least with regard to the assumptions underlying the CBA, scenarios and results.

3. On reporting requirements of project promoters

In line with Article 12 of Regulation (EU) No 347/2013, if at least one project promoter requests NRAs to apply the provisions of that Article, project promoters shall keep NRAs regularly informed, at least once per year.

\(^2\) The Agency notes that there are various reasons which may hinder an agreement. (e.g. conflicting views on maturity of the PCI or the completeness of the investment request)
The Agency recommends that, by 31 March of each year from the date of the cross-border cost allocation decisions until the commissioning of the project, project promoters submit to the NRAs which took coordinated decisions:

a) the annual report submitted to the competent authorities and to the Agency, pursuant to Article 5(4) of Regulation (EU) No 347/2013;

b) the disaggregation of the information about expected costs and incurred costs per country and the amounts of grants awarded;

c) if relevant for adjustments of the cost allocation, for gas projects creating bookable capacity only, an update of the expected revenues from capacity bookings, taking into account updates of users’ commitments in the previous year.

After commissioning, project promoters should communicate to the NRAs and TSOs of the Member States to which costs have been allocated by the cross-border cost allocation decisions,

a) the amount of the incurred investment costs, as well as provide the appropriate supporting evidence;

b) the evidence and explanations concerning deviations from the investment costs expected in the cross-border cost allocation decisions; and

c) a validated proof of commissioning of the PCI.

During the operational lifetime of the PCI, project promoters may be subject to additional reporting requirements set by NRAs to ensure a smooth implementation of the cross-border cost allocation decisions and any adjustment which is defined by them.

This Recommendation is addressed to National Regulatory Authorities and project promoters. NRAs and project promoters are invited to take the necessary measures to ensure that investment requests are in line with Section 1 of this Recommendation.

Done at Ljubljana on 18 December 2015.

For the Agency:

[Signature]

Alberto Pötotschnig
Director
Annex I – Project-specific Cost-Benefit Analysis

Annex I.1 – Common recommendations for Electricity & Gas

Article 12(3) of Regulation (EU) No 347/2013 allows project promoters to submit an investment request to NRAs, which shall include, among others, a project-specific CBA consistent with the CBA methodology and which takes into account benefits beyond the borders of the Member State concerned.

To be the basis for proper cross-border cost allocation decisions, the CBA needs to be comprehensive and comprehensible, and use comparable and monetised information on costs and benefits and other cross-border monetary flows, disaggregated per country. It is of utmost importance that input data, assumptions etc. used to derive the CBA of a project for different purposes (i.e. TYNDP, PCI selection, TSO consultation, investment request) are identical unless there exists a reasoned justification.

The project-specific CBA (submitted to TSOs during the TSO consultation, as well as submitted to NRAs as part of an investment request) needs to comply with the principles laid down in Annex V of Regulation (EU) No 347/2013 and be consistent with the rules and indicators set out in its Annex IV. In addition the Agency recommends that the project-specific CBA comprises the following:

a) Information on input data and assumptions;
b) Details underlying cost estimations;
c) Details underlying benefit determination;
d) Details underlying estimations of other cross-border monetary flows;
e) Detailed calculations in spreadsheet format (for calculation of national net impacts);
f) Summary of results (disaggregated by country): benefit for each benefit category, cost for each cost category, other cross-border monetary flows, national net impact identifying the Member State as beneficiary or cost bearer; and
g) Sensitivity analysis (please see specifications below).

Complementary and competing projects

The benefits of a project can be influenced by the potential development of other projects. In light of this, project promoters should provide additional information together with the project specific CBA as explained in the following paragraphs.

Complementary projects

Projects may be considered complementary if the aggregated benefits of a joint development of the relevant PCIs are higher than the sum of projects’ benefits estimated on a stand-alone basis for each project. Such complementarity assessment will serve as input for NRAs to decide whether it is necessary to coordinate their decision-making processes for related investment requests.

If a joint investment request for all complementary projects is not submitted, the individual investment requests should also include reference to the other complementary projects, and should explain dependencies and the reasons for separate processes.
A CBA provided for groups/clusters of projects only is not suitable for deciding on a cross-border cost allocation. Therefore, the CBA accompanying the investment request for complementary projects should be completed by evidence about the benefits and the necessity of every individual project (or investment item being part of it).

**Competing projects:**

Projects may be considered competing if the added value of one project is significantly reduced by the presence of the other project.

For the case of competing projects (where project promoters are likely different), the results of the CBA may be significantly affected by the assumptions used, in particular regarding other infrastructures. This may be risky for cross-border cost allocations as two similar and competing PCIs with similar impacts may be evaluated differently if their project-specific CBAs adopt different baselines. In cases where this risk is relevant, the Agency recommends that project promoters highlight and explain these interdependencies.

**Scenarios, sensitivity analyses and treatment of uncertainties**

In line with the Agency's Opinion No 01/2014 of 30 January 2014 on ENTSO-E Guideline for Cost Benefit Analysis of Grid Development Projects, the Agency recommends to consider a time-differentiated planning approach that includes:

a) evaluating near-term uncertainties mainly through a best-estimate scenario-complemented by sensitivity or probabilistic analyses;

b) evaluating long-term uncertainties mainly through contrasting scenarios and scenario-based analyses.

ENTSO-E defines planning scenarios to represent future developments of the power system. The essence of scenario-based analysis is to come up with plausible pictures of the long-term future, where the uncertainties increase to a level where a broad envelope of potential futures is required. Scenarios are means to approach the uncertainties on multiple parameters and the interaction between these uncertainties.

The Agency recommends that the benefit results per country for the various ENTSO-E TYNDP scenarios are provided in all investment requests. However, project promoters should also be free to provide, in their investment requests, additional robust scenarios which they deem plausible, and the associated results.

In line with Annex V(11) of Regulation (EU) No 347/2013 sensitivity analyses on the key assumptions and 'critical' parameters of the CBA (i.e. such parameters whose variations, positive or negative, have the greatest impact on a project's economic performance, e.g. commissioning date, investment costs, demand forecast, fuel prices, CO₂ price) need to accompany an investment request. In comparison to scenario analysis, which studies the impact of combinations of values taken by the critical parameters, sensitivity analysis is carried out by
varying one parameter at a time and determining the effect of that variation on the national net impacts\textsuperscript{33}.

The Agency recommends that an uncertainty range (-x\%; +y\%) with respect to the expected costs and benefits in each country is presented. A narrative description of reasons underlying the possible variations has to accompany the uncertainty range.

**Discount rate**

Within CBA, a standardised social discount rate (4\% real) should be used for the calculation of discounted national net impacts.

**Annex I.2 – Project-specific Cost-Benefit Analysis – Electricity**

**Benefits**

With a view to upcoming developments of the ENTSO-E CBA methodology, the Agency identified a list of 11 benefit components (see Table 2 from the Agency’s Position on CBA\textsuperscript{34}).

From this list, the Agency recommends that at least the following benefits are monetised and separately presented:

a) Socio-economic welfare (SEW - calculated by a European market study);

b) Variation in losses (calculated by network studies);

c) Security of supply (load) (calculated by network studies);

d) Relieving national constraints (SEW variation calculated by local market studies, while avoiding double counting effects with other SEW figures);

e) Variation in generation curtailments (SEW variation calculated by network studies, while avoiding double counting effects with other SEW figures).

In case of non-zero values for losses benefit, the assumption on the value of losses (€/MWh) has to be indicated.

In case of non-zero values for Security of Supply (SoS) benefit, the assumption on the value of lost load (€/MWh not supplied) has to be indicated.

Furthermore, market-study simulation tools should be able to identify the variation of SEW benefit in each country. They should be designed to produce estimates of benefits for specific stakeholder groups within a country (variation of producer surplus PS, variation of consumer surplus CS and variation of congestion rents CR). In particular, the estimated variation of

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\textsuperscript{33} Further information and examples for sensitivity analysis in the context of CBAs for infrastructure projects can be found in “Guide to Cost-Benefit Analysis of Investment Projects - Economic appraisal tool for Cohesion Policy 2014-2020”, December 2014, EC, chapter 2.9.1. on sensitivity analysis, p. 56 ff.

\textsuperscript{34} Agency’s Position on the ENTSO-E “Guideline to Cost Benefit Analysis of Grid Development Projects”, 30 January 2013,

congestion rents across each relevant border should be separately presented (i.e. no 50%-50% allocation of CR variation to compute national benefits).

Network-study simulation tools should be able to identify the network busses where security of supply is at risk, with potential Expected Energy Not Supplied (EENS), and to identify the network elements (lines and transformers) where variations of losses take place with and without the project under analysis. This would allow project promoters to provide country-disaggregated values for SoS benefit and for losses benefit (only when such benefits are significant).

The Agency recommends that every benefit component is disaggregated at national level for each year of analysis. A higher level of disaggregation (PS, CS, CR) is required for the SEW benefit.

Mitigation of negative externalities, such as loop flows, may not be regarded as cross-border benefit\textsuperscript{35}.

\textit{Time horizon}

The Agency recommends the use of at least single-year benefit figures referred to a mid-term study horizon (e.g. year 2020) and to a long-term study horizon (e.g. year 2030).

To evaluate projects on a common basis, benefits should be estimated across years as follows:

a) For years from the year of commissioning (start of benefits) to the mid-term year (if any), extend mid-term benefits backwards.

b) For years between the mid-term year and the long-term year, linearly interpolate benefits between the mid-term and long-term values.

c) For years beyond long-term horizon (if any), maintain benefits at long-term value.

Without prejudice to any business plan accompanying the investment requests from project promoters, the Agency recommends the following assumptions to be used in the project-specific CBA: 25 years of economic lifetime (i.e. after commissioning) and residual value of zero, in line with the Agency’s documents\textsuperscript{36}.

Annex 1.3 – Project-specific Cost-Benefit Analysis - Gas

\textbf{Benefits}

The Agency recommends that at least the following categories of benefits are monetised and separately presented per country, including the methodology used for valuations and the underlying assumptions:

a) Market integration,

b) Competition,

c) Security of supply, and

d) Sustainability.

\textsuperscript{35} Article 12(4) of Regulation (EU) No 347/2013.

\textsuperscript{36} Agency’s Opinion No 01/2014, 30 January 2014, Section 2.4.
Time horizon

Annex V(1) of Regulation (EU) No 347/2013 defines the “n+20” time horizon of the input and output data on a 5 year basis. The project-specific CBA should indicate the years of benefit analysis and explain how they are used to derive net present values of benefits.

Without prejudice to any business plan accompanying the investment requests from project promoters, the Agency recommends full transparency with regard to the assumptions used in the project-specific CBA (e.g. economic lifetime, treatment of residual value).
Annex II – Calculation of national net impacts

Costs

<table>
<thead>
<tr>
<th>Description</th>
<th>Treatment for calculation of national net impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development costs (e.g. studies, rights of way, environmental planning) and project management costs</td>
<td>Negative</td>
</tr>
<tr>
<td>Material and assembly cost, including installation and commissioning</td>
<td>Negative</td>
</tr>
<tr>
<td>Other construction costs, including temporary solutions, waste management and environmental costs</td>
<td>Negative</td>
</tr>
<tr>
<td>Consenting costs(^{38})</td>
<td>Negative</td>
</tr>
<tr>
<td>Maintenance costs</td>
<td>Negative</td>
</tr>
<tr>
<td>Replacement costs during life cycle</td>
<td>Negative</td>
</tr>
<tr>
<td>Financing costs</td>
<td>Not to be counted</td>
</tr>
<tr>
<td>Cost for taxes</td>
<td>Not to be counted</td>
</tr>
<tr>
<td>Decommissioning costs where relevant</td>
<td>Negative</td>
</tr>
<tr>
<td>Cost of variation of losses</td>
<td>Already counted as benefit</td>
</tr>
</tbody>
</table>

Benefits

Expected benefits, including losses variation, differ between the electricity and gas sectors. Therefore they have been discussed in detail in Annex 1 to this Recommendation. They should be counted as positive or negative (e.g. in case of a losses increase), depending on the sign of their variation with and without the project.

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\(^{37}\) Environmental costs are endogenous to the project. They may include costs for mitigating visual impact of overhead lines and for landscape integration of power stations.

\(^{38}\) Consenting costs are exogenous to the project and may be incurred also shortly after commissioning of the project. They may include dismantling costs of other infrastructures at the end of life time, compensation costs for land use.
Cross-border monetary flows

<table>
<thead>
<tr>
<th>Description</th>
<th>Treatment for calculation of national net impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected congestion rents for electricity PCIs</td>
<td>Already counted in SEW benefit</td>
</tr>
<tr>
<td>Expected revenues (payments) of ITC mechanism for electricity PCIs</td>
<td>Positive (negative)</td>
</tr>
<tr>
<td>Expected income (payments) for other charges</td>
<td>Positive (negative), if not already counted</td>
</tr>
<tr>
<td>Awarded non-national grants</td>
<td>Positive</td>
</tr>
<tr>
<td>Awarded national grants</td>
<td>Not to be counted</td>
</tr>
<tr>
<td>Potential grants</td>
<td>Not to be counted</td>
</tr>
<tr>
<td>Expected revenues (payments) related to capacity bookings for gas PCIs</td>
<td>Positive (negative)&lt;sup&gt;39&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>39</sup> As long as effects related to revenues from capacity bookings are not already counted in the calculation of benefits.
Annex III – **Evaluation of impacts on network tariffs**

The Agency recommends that the impact of the project implementation on network tariffs is assessed in line with the relevant national regulatory framework and provided for each Member State hosting the project and/or contributing to its financing.

In Members States where the tariff calculation is carried out by TSOs, NRAs are recommended to i) evaluate that the project promoters’ tariff assessment is done in line with the regulatory framework; ii) if appropriate, request clarifications or modifications in project promoters’ assumptions. In other cases, NRAs are recommended to directly assess tariff impacts.

In particular, the assessment of the impact on tariffs should comprise the following elements:

a) Main characteristics of the applicable regulatory framework and how it applies to the project under consideration;

b) Main characteristics of the tariff methodology as applicable to electricity projects: integrated tariff vs. network tariff, socialisation of costs in pursuit of lower network tariff levels, etc.;

c) Main characteristics of the tariff methodology as applicable to gas projects:
   i. input to the methodology: does the methodology take into account existing costs, or potential future costs (Long Run Marginal Costs)?
   ii. main cost allocation features: entry exit split (revenue collected at entry points compared to revenue collected at exit points), capacity commodity split (revenue collected from charges applied to capacity, and revenue collected from charges applied to commodity), level of multipliers (seasonal and daily differentiation of the reserve price as compared to the annual reference price);
   iii. main result of the cost allocation: domestic/cross-border split (revenue collected from domestic points compared to revenue collected from interconnection points).

d) Estimated increase of allowed revenues:
   i. eligible investment costs and operating costs.\(^{40}\)
   ii. regulatory rate of return on assets: parameters and principles behind the composition of the applicable regulatory rate of return.

e) In electricity, the effect of an investment on existing congestion rents or other charges, revenues stemming from the ITC mechanism established under Article 13 of Regulation (EC) No 714/2009. This comprises congestion rents and its main assumptions in regards to the estimation and any obligatory use of congestion rents as well as the time horizon assumed.

f) In gas, estimated revenues deriving from capacity bookings. Main assumptions with regard to the estimation of revenues (e.g. capacity bookings from a market test or an Open Season, evaluation of commitments or expression of interest declared by market players, and the respective regulated transmission tariff, as well as its calculation).

g) Time horizon of the tariff impact calculation, which should include:
   i. an explanation of the timing of the inclusion of allocated costs into tariffs, e.g. at the time of occurrence or commissioning vs. disbursement over the lifetime.

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\(^{40}\) Please see also Section 1.6 of this Recommendation. Note that, different from CBA, losses may be an operating cost in some regulatory frameworks.
of an asset/regulatory period, any assumptions in regards to a potential time lag for the revenues assumed and the reasoning, and

ii. an explanation of both the year-on-year annual tariff impact and the impact over the entire assessment period. The assessment period is related to the regulatory lifetime (depreciation) of the assets and the corresponding regulatory remuneration. Depreciation methodology for different groups of assets should be explicit and in line with the relevant national regulatory framework.

The Agency recommends that the tariff impact is presented both in relative terms (in %) and in absolute terms (total variation per unit cost of transportation).

All allocated costs should be considered in the tariff assessment as the reference scenario.

Additionally, the effect of potential external funding (e.g. grants or other financial support) on the estimated tariff impact can be presented for informative purposes. NRAs can indicate in their cross-border cost allocation decisions the possible need for financial support for the project to be implemented.

Any grants already received should be deducted from the investment costs to be considered in the tariff calculations to make sure that any double counting or remuneration is avoided. All the calculations should be presented both net of taxes and including taxes, where all the components and applicable tax rates should be set out.

Tariff assessment should be focused on the incremental impact on network tariffs of the project for which a request is submitted and which is subject of the cost-border cost allocation decisions. The effect on network tariffs of infrastructure developments other than the one(s) subject to the investment request should not be included in the tariff assessment of the project subject of the investment request, but it may be presented as complementary information.
Annex IV – **Summary data relevant for investment requests** 41 - Electricity and gas

The Agency recommends the filling of this template for each investment request (in English).

**Part I: the project promoters and the consulted TSOs**

<table>
<thead>
<tr>
<th>Project promoter</th>
<th>Country</th>
<th>Address and contact details</th>
</tr>
</thead>
</table>

*Note: insert all project promoters*

<table>
<thead>
<tr>
<th>Consulted TSO</th>
<th>Country</th>
<th>Date of submission of all CBA data and results</th>
<th>Date of feedback and reasons for disagreement (if any)</th>
</tr>
</thead>
</table>

*Note: insert all TSOs with significant net positive impact (excluding project promoters).*

**Part II: the concerned NRAs**

<table>
<thead>
<tr>
<th>NRA</th>
<th>Country</th>
<th>Reasons for being concerned (hosting the project / having significant net positive impact)</th>
</tr>
</thead>
</table>

*Note: fill NRAs of countries of project promoters first and then other concerned countries, if any.*

**Part III: the detailed implementation plan for the project**

<table>
<thead>
<tr>
<th>Project step</th>
<th>(expected) start date</th>
<th>(expected) end date</th>
</tr>
</thead>
<tbody>
<tr>
<td>“under consideration”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned but not yet in permitting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preliminary design studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market test (for gas)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preliminary investment decision</td>
<td></td>
<td></td>
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<tr>
<td>Public consultation process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permit granting process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cross border cost allocation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exemption from third party access</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

41 Wherever possible, please provide numerical information in spreadsheet format.
Part IV: the project-specific cost benefit analysis

Part IV.1 - money, currency and discounting method
The discounting method is in line with the Agency’s Recommendation No 05/2015. The monetary values are expressed in Euro, referred to the present. (If applicable) the following assumptions about exchange rates are used:

<table>
<thead>
<tr>
<th>Country and currency</th>
<th>Year(s)</th>
<th>Assumption on exchange rate vs. Euro</th>
</tr>
</thead>
</table>

Note: insert rows as needed

Part IV.2 - cost - expected figures
Note: please provide single values here, expressed in Million Euro, present year. Please fill IV.3 below for ranges and variations

Country: add name (duplicate and fill as many tables as needed)

<table>
<thead>
<tr>
<th>Cost component</th>
<th>Net present value of costs [MEuro]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development costs</td>
<td>Before commissioning</td>
</tr>
<tr>
<td>Project management costs</td>
<td></td>
</tr>
<tr>
<td>Materials and assembly costs</td>
<td></td>
</tr>
<tr>
<td>Temporary solutions</td>
<td></td>
</tr>
<tr>
<td>Environmental costs</td>
<td></td>
</tr>
<tr>
<td>Consenting costs</td>
<td></td>
</tr>
<tr>
<td><strong>Sub-total (investment costs)</strong></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td></td>
</tr>
<tr>
<td>Replacement of devices</td>
<td></td>
</tr>
<tr>
<td>Decommissioning</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note: for explanation of terms see Annex II of the Agency’s Recommendation No 05/2015.

Yearly disaggregation of costs before commissioning

<table>
<thead>
<tr>
<th>Year:</th>
<th>Year:</th>
<th>Year:</th>
<th>Year:</th>
<th>Year:</th>
</tr>
</thead>
</table>

Year:

Total [MEuro]

Part IV.3 - cost - expected variations
<table>
<thead>
<tr>
<th>Country</th>
<th>NPVs of costs [MEuro]</th>
<th>Downward variation [%]</th>
<th>Upward variation [%]</th>
<th>Reason(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

**Part IV.4e - benefit (electricity) - expected figures**

*Note: please provide single values here, expressed in Million Euro of the present year.
Please fill IV.5 below for ranges and variations*

<table>
<thead>
<tr>
<th>Congestion rent at relevant border</th>
<th>Congestion rent sharing</th>
<th>Net present variation of congestion rent [MEuro]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border:</td>
<td>please specify X:Y</td>
<td></td>
</tr>
<tr>
<td>Border:</td>
<td></td>
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<td>Border:</td>
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<tr>
<td>Border:</td>
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<td></td>
</tr>
</tbody>
</table>

**Country: add name (duplicate and fill as many tables as needed)**

<table>
<thead>
<tr>
<th>Benefit component</th>
<th>Net present value of benefits [MEuro]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Producer surplus</td>
</tr>
<tr>
<td>SEW (EU-wide market study)</td>
<td></td>
</tr>
<tr>
<td>National constraints (SEW local study)</td>
<td></td>
</tr>
<tr>
<td>Variation of generation curtailments</td>
<td></td>
</tr>
<tr>
<td>Variation in losses</td>
<td></td>
</tr>
<tr>
<td>Security of supply (load)</td>
<td></td>
</tr>
<tr>
<td>Other benefits</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

The other benefits indicated (if applicable) correspond to these benefit components in the Agency’s Position on the ENTSO-E “Guideline to Cost Benefit Analysis of Grid Development Projects”:
The value of losses (if applicable) is:
The value of lost load (if applicable) is:

<table>
<thead>
<tr>
<th>Benefit component</th>
<th>Mid-term Benefits year ____ [MEuro/year]</th>
<th>Long-term Benefits year ____ [MEuro/year]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Producer surplus</td>
<td>Consumer surplus</td>
</tr>
<tr>
<td>SEW (EU-wide)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National constraints</td>
<td></td>
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<tr>
<td>G curtailments</td>
<td></td>
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<tr>
<td>Variation in losses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security of supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other benefits</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: fill non-discounted figures in Euro of the present year.*

**Part IV.4g - benefit (gas) - expected figures**
Note: please provide single values here, expressed in Million Euro, present year. Please fill IV.5 below for ranges and variations

<table>
<thead>
<tr>
<th>Country: add name (duplicate and fill as many tables as needed)</th>
<th>Net present value of benefits [MEuro]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit component</td>
<td>Country 1</td>
</tr>
<tr>
<td>Market integration</td>
<td></td>
</tr>
<tr>
<td>Competition</td>
<td></td>
</tr>
<tr>
<td>Security of supply</td>
<td></td>
</tr>
<tr>
<td>Sustainability</td>
<td></td>
</tr>
<tr>
<td>Other benefits (to be justified)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
</tbody>
</table>

Notes: fill non-discounted figures in Euro of the present year and add additional tables if necessary to provide relevant information.

Part IV.5 - benefits - expected variations

<table>
<thead>
<tr>
<th>Country</th>
<th>NPVs of benefits [MEuro]</th>
<th>Downward variation [%]</th>
<th>Upward variation [%]</th>
<th>Reason(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Note: add lines of additional countries involved.

Part IV.6 - benefits –complementarity assessments

Is your project complementary\(^{42}\) to another (other) PCI(s)? Please substantiate your response.

Part IV.7: other cross-border monetary flows (revenues, ITC, other charges, grants)
The monetary values are expressed in Euro, referred to the present.

<table>
<thead>
<tr>
<th>ITC (electricity) Country</th>
<th>Net present ITC impact [MEuro]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: add as many rows as needed. Please specify whether net revenues or net payments

---

\(^{42}\) See Annex I.1. of the Agency’s Recommendation No 05/2015
<table>
<thead>
<tr>
<th>Market test results (gas)</th>
<th>Net Present Value of expected revenues from network users long-term commitments (regulated tariff + share of potential auction premium) [MEuro]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country:</td>
<td></td>
</tr>
<tr>
<td>Country:</td>
<td></td>
</tr>
<tr>
<td>Country:</td>
<td></td>
</tr>
</tbody>
</table>

*Note: add lines of additional countries involved. Please specify whether net revenues or net payment*

<table>
<thead>
<tr>
<th>Description of other charge</th>
<th>Country</th>
<th>Net present amount [MEuro]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: add as many rows as needed, please add yearly amounts in case of significant differences over the time horizon under analysis. Please specify whether net revenues or net payment*

<table>
<thead>
<tr>
<th>Description of grants (national / international)</th>
<th>Status (awarded and received / awarded and still to be received / requested / potential future request)</th>
<th>Net present amount [MEuro]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: add as many rows as needed*

**Part V: accompanying documents**

*(please include number, scope and title)*

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*Note: see Section 1.5 of the Agency’s Recommendation No 05/2015. Add as many rows as needed.*
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