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**RECOMMENDATION OF THE AGENCY FOR THE COOPERATION OF ENERGY  
REGULATORS 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**

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<sup>1</sup>, and, in particular, Article 7(2) and 17(3) thereof;

HAVING REGARD to the favourable opinion of the Board of Regulators of 25 September 2013, delivered pursuant to Article 15(1) of Regulation (EC) No 713/2009,

WHEREAS:

- (1) Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009<sup>2</sup> enables investments in projects of common interest (PCIs) by envisaging the cross-border allocation of the costs of such projects.
- (2) Negative net benefits affecting at least one country hosting<sup>3</sup> a PCI is a potential barrier for investments unless, in the case of gas, negative net benefits are offset by revenues from additional capacity bookings. For PCIs with an overall positive net benefit, it should be possible to provide compensation to eliminate the country-specific negative net benefit so as to facilitate the investment. Further, a harmonised and non-discriminatory approach should be applied in order to identify the countries which have to provide such a compensation.
- (3) Article 12(3) of Regulation (EU) No 347/2013 specifies the features of the investment request to be submitted by project promoters including a request for cross-border cost allocation (CBCA) and indicates that, for projects included in the first Union list, CBCA requests shall be submitted by 31 October 2013.

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<sup>1</sup> OJ L 211, 14.8.2009, p.1

<sup>2</sup> OJ L 115, 25.4.2013, p.39.

<sup>3</sup> For the purpose of this Recommendation, "hosting country" is a country where the project is territorially located.

- (4) However, Regulation (EU) No 347/2013 does not specify the level of detail of the information to be submitted by the project promoters under Article 12(3). Because of the importance of CBCA processes for advancing infrastructure projects of EU-wide relevance, a clarification of the details to be submitted is essential to facilitate a consistent approach among National Regulatory Authorities (NRAs). This should at the same time enable the submission of complete CBCA requests, the streamlining of the NRAs' decision-making process and the minimisation of delays. Such a clarification can benefit promoters of electricity and gas PCIs, NRAs and the Agency.
- (5) To assist NRAs and promoters of PCIs in adopting a consistent EU-wide approach to CBCA requests, a recommendation by the Agency is appropriate regarding CBCA requests submitted during 2013. In the light of the experience that will be gained throughout the year with the first CBCA requests, the Agency, before the deadline for the submission of CBCA requests following the adoption of the second Union list of PCIs, will revise and complement this recommendation with further guidance on CBCA, particularly about the relation to the ENTSOs cost-benefit analysis (CBA) methodologies, the TYNDP process and, if necessary, the approach and timing for payments, expected performance targets and conditions to favour achievement of such targets.

## **HAS ADOPTED THIS RECOMMENDATION:**

Regulation (EU) No 347/2013 allows project promoters to submit to the concerned NRAs a CBCA request as soon as the project has reached sufficient maturity and requires the NRAs to take coordinated decisions on the allocation of investment costs.

In the framework of the first Union list of PCIs, this Recommendation deals with:

- the information that is necessary to be submitted with a CBCA request (Section 1);
- high-level principles that NRAs shall follow when handling a CBCA request (Section 2).

### **1. On the information to be provided by project promoters when submitting a CBCA request**

#### **1.1 On the required information**

The Agency recommends that a CBCA request submitted by project promoters provides the following information (in hard copy and electronic form):

1. Evidence about the sufficient maturity of the project (see section 2.1);
2. A preliminary investment decision (e.g. board decision on intended investment-possibly conditional), when relevant;
3. A detailed technical description of the project, including a description of the rationales behind the choice of the technology;
4. A detailed implementation plan.

Substantial and consistent evidence about the progress achieved in the development of the project should be provided. The following steps, which include the four stages pursuant to Article 5(1) of Regulation (EU) No 347/2013, are envisaged in the general process of developing electricity transmission and gas infrastructure projects of EU-wide importance<sup>4</sup>:

- i. “under consideration” status: planning studies (pre-feasibility and feasibility, including the techno-economic analysis of the project) and consideration for inclusion in the national plan(s) (and ENTSOs’ Regional / EU-wide TYNDPs);
- ii. “planned” status: approved inclusion in the national plan(s);
- iii. preliminary design studies (basic engineering design, environmental impact assessment, etc.);
- iv. market test (when relevant for gas projects creating bookable capacity);
- v. preliminary investment decision (when relevant);
- vi. permit granting process (including a pre-application procedure and a statutory permit granting procedure);
- vii. definition of the financing scheme and cross-border cost allocation (if applicable);
- viii. final investment decision;
- ix. detailed engineering design and technical specifications as a basis for construction;
- x. tendering (if applicable), from call for tenders to contract award(s);
- xi. construction;
- xii. commissioning.

Tendering information should be included in the detailed implementation plan (e.g. call for tenders, contract award(s)).

The Agency recommends that the detailed implementation plan includes dates indicating the month and year for each stage. Dates would be either actual, as some of the stages described above will already be completed, or expected. The promoters may also provide information on any additional stage (e.g. preliminary national permits), as evidence of progress or justification of estimates;

5. 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 evidence of the start of the permitting process, e.g. application(s) in each country;
6. Evidence on TSO consultations and results of the consultations.

Regulation (EU) No 347/2013 requires promoters of relevant PCIs to submit an investment request (including a CBCA request) after having consulted the TSOs from the Member States to which the project provides a significant net positive impact.

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<sup>4</sup> The stages are not strictly time-sequential, rather they usually partly overlap

The Agency recommends that information on consultations and sharing of calculations about the (draft) project-specific CBA, as well as the substantiated feedback of “consulted” TSO(s), accompany the promoters’ CBCA request. It is particularly important that the “consulting” promoter provides its draft CBA calculations appropriately in advance of the CBCA request, allowing a thorough discussion with the concerned TSOs, and the appropriate coordination and exchange of (potentially different) views. It is also important to indicate elements where the involved TSOs can agree and where they cannot agree, including the reasons why. Indications of elements of agreement and of disagreement among TSOs are particularly important for the project-specific CBA. The Agency strongly emphasises the importance of a CBA fully agreed between project promoters.

For the CBCA requests submitted in the framework of the first Union list, it is suggested that at least all countries above a specific contribution threshold (see Section 2.3) should be deemed as having a significant net positive impact by the project. The Agency recommends that NRAs elicit early information on the concerned countries, as it could make the subsequent process more efficient;

7. A project specific CBA and accompanying studies (for more details see Annex I for electricity PCIs and Annex II for gas PCIs);
8. An analysis of the expected ITC revenues (electricity PCIs only);
9. An analysis of other revenues/charges;
10. For gas PCIs creating bookable capacity, an assessment of market demand and expected revenues from capacity selling (i.e. binding or non-binding market test results which give a sufficiently reliable insight into each project promoter’s ability to cover the efficiently incurred investment costs by revenues from capacity bookings linked to the implementation of the PCI);
11. A business plan and financing strategy (including the expected grants, differentiating national grants and European grants. Additional specific information should be provided, e.g. communal grants, national grants, EIB-grants, TEN-grants, CEF-funding);
12. A substantiated proposal for a CBCA (if agreed by project promoters).

## 1.2 On the language of the CBCA request

The CBCA request and the accompanying documents should be submitted:

- in the official languages of the concerned NRAs; and
- in English (if the official languages of the concerned NRAs is not English).

Due to the tight deadline to submit the first CBCA requests (31 October 2013), the English version could be submitted at a later stage but no later than 30 November 2013.

### 1.3 Summary data templates

The Agency recommends the use of a summary data template (see Annex III for electricity PCIs and Annex IV for gas PCIs) for submission of each CBCA request (in English) by projects promoters to the NRAs.

## **2. On the treatment of CBCA requests**

### 2.1 On project maturity and on completeness and quality check of the CBCA request

It is essential that any CBCA request is complete and of an adequate quality. The Agency recommends that particular attention is given to the sufficient maturity of the project. In the Agency's view<sup>5</sup>, a "sufficiently mature" project is a project exhibiting:

- Sufficient certainty and thus strong confidence about the expected costs and benefits assessed by the cost-benefit analysis, and
- Good knowledge about the factors affecting expected costs and benefits and their ranges.

It is up to project promoters to provide evidence about the degree of maturity of their projects, by submitting a project-specific CBA that demonstrates reasonably narrow ranges of probable values for costs and benefits accompanied by a sensitivity analysis of the results to the main variables.

In addition, the Agency recommends that, to qualify as 'sufficiently mature', a project should fulfil the following conditions:

- Permitting procedures have started<sup>6</sup> in all hosting countries;
- Construction is about to start reasonably soon.

If after a preliminary assessment, the CBCA request appears to miss relevant information, the Agency recommends that the NRAs concerned:

- request the project promoter(s) to provide the missing information within a reasonable period of time, to be set on a case-by-case basis in relation to the amount of missing information; and
- process only complete requests (within the deadline of six months under Article 12(4) of Regulation (EU) No 347/2013).

If not all requested data can be provided by the project promoter(s) within the given period of time, the CBCA request may be treated as incomplete.

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<sup>5</sup> The "sufficient maturity" is also initially discussed in the Agency Opinion on the draft regional lists of proposed gas projects of common interest 2013, 18 July 2013, Opinion No 15/2013, [http://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Opinions/Opinions/ACER%20Opinion%2015-2013.pdf](http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%2015-2013.pdf) and in the Agency Opinion on the draft regional lists of proposed electricity projects of common interest 2013, 18 July 2013, Opinion No 16/2013, [http://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Opinions/Opinions/ACER%20Opinion%2016-2013.pdf](http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%2016-2013.pdf)

<sup>6</sup> Without prejudice to specific relevant national rules and procedures.

## 2.2. On the compensation to be provided to project promoters

According to Article 12(4) of Regulation (EU) No 347/2013, the economic, social and environmental costs and benefits of the projects in the countries concerned shall be taken into account in deciding to allocate costs across borders.

The Agency is of the opinion that for the CBCA requests submitted in the framework of the first Union list of electricity and gas PCIs, the following should be considered:

- (i) Regulation (EU) No 347/2013 aims at enabling investments with cross-border impact,
- (ii) there exists limited experience in performing CBCA for energy infrastructure projects,
- (iii) the development of CBA methodologies by the ENTSOs is currently on-going,
- (iv) a pragmatic and workable approach is needed in deciding on the CBCA requests.

Therefore, the Agency recommends that, unless the relevant NRAs agree otherwise, compensations are provided only if at least one country hosting the project is deemed to have a negative net benefit. In such cases, the aim should be to compensate as much as possible the negative net benefit in the relevant countries.

As far as gas infrastructure projects are concerned, Article 12(2) of Regulation (EU) No 347/2013, limits the scope of application of CBCA 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”*. This requirement implies that compensations are provided if the net benefit occurring in one country hosting the gas infrastructure project is deemed negative and if it is expected that the said negative net benefit cannot be offset by the revenues to be derived from capacity subscriptions linked to the implementation of the PCI project in this country.

## 2.3. On the allocation of compensation to the contributing countries

In general, countries to which a project provides a net positive impact should contribute to provide compensation. However, it seems possible that not every expected positive net benefit for a country actually justifies that this country contributes to provide compensation.

This may be the case where the calculation of benefits and costs is particularly uncertain or where small contribution amounts would be allocated to a large number of countries, thus causing significant transaction and administrative costs.

Therefore, the Agency recommends that only countries with a significant positive net benefit should contribute to provide compensation.

In principle, a positive net benefit is deemed to be significant if it exceeds a “significance threshold” equal to 10 % of the sum of positive net benefits accruing to all net benefiting countries.

However, in exceptional cases, a lower significance threshold may be considered, in particular if the net benefits above the threshold of the contributing countries are not

sufficient to cover the compensation required or if the amount of compensation places an unreasonable burden to a contributing country.

The Agency recommends that the required compensation is allocated among countries exhibiting significant positive net benefits proportionately to the level of net benefits exceeding the significance threshold, according to the following Contribution Indicator (CI): [positive net benefit of the country exceeding the significance threshold] / [sum of net benefits exceeding the significance threshold of all countries exhibiting significant positive net benefits]<sup>7</sup>.

In any case, the compensation required from each country exhibiting significant positive net benefits shall not exceed the absolute value corresponding to the positive net benefits exceeding the significance threshold.

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

Done at Ljubljana on 25 September 2013.

For the Agency:

  
Alberto Pototschnig  
Director

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<sup>7</sup> For gas projects the allocation of the compensation needs to take into account the revenues generated in each country by capacity bookings related to the implementation of the PCI project.

## **Annex I – Project-specific Cost-Benefit Analysis - Electricity**

Cross-border cost allocation shall be based on a project-specific and per country disaggregated cost benefit analysis (CBA).

The methodology shall be drawn up in line 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 Annex IV of Regulation (EU) No 347/2013.

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.

The benefits of a project can be influenced by the potential development of other projects. Even though the “stand alone” CBA is the one serving as a reference for the CBCA decision, project promoters are invited to indicate potential complementary PCIs. Projects may be considered complementary if the aggregated benefits of a joint development of the relevant PCIs are higher than the sum of projects’ individual benefits estimated on a stand-alone basis. Such complementarity assessment will serve as input for NRAs to decide whether it is necessary to coordinate their decision-making processes for related CBCA requests.

### **Costs**

The following items should be taken into account:

- Expected cost for materials and assembly costs (such as masts/ basement/ wires/ cables/ substations/protection and control systems);
- Expected costs for temporary solutions which are necessary to realise a project (e.g. a new overhead line has to be built in an existing route, and a temporary circuit has to be installed during the construction period);
- Expected environmental and consenting costs (such as environmental costs avoided, mitigated or compensated under existing legal provisions, cost of planning procedures, and dismantling costs of other infrastructures);
- Expected costs for devices that have to be replaced within the given period (regard of life-cycles);
- Dismantling costs at the end of life of the equipment;
- Maintenance costs<sup>8</sup> and costs of the technical life cycle.

It is especially important to note that just the first three cost components noted above are subject to the cross-border cost allocation.

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<sup>8</sup> According to Article 12(1) of Regulation (EU) No. 347/2013, the maintenance costs are excluded from the investment costs.

The Agency recommends that the net present values of all six cost components are separately presented and disaggregated by country (assuming that each project promoter builds and pays its part of the project, where “its part” corresponds to the territorial location of the investment). Further, the Agency recommends the split of environmental and consenting costs (third bullet point above) and the yearly disaggregation of costs before commissioning for each country.

### **Benefits**

With a view to future developments of the ENTSO-E CBA methodology, the Agency already identified a broader list of 11 benefit components (see Table 2 from the Agency position on CBA<sup>9</sup>).

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

- Socio-economic welfare (calculated by a European market study);
- Variation in losses (calculated by network studies);
- Security of supply (load) (calculated by network studies);
- Relieving national constraints (SEW variation calculated by local market studies, while avoiding double counting effects with other SEW figures);
- 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 value of losses (€/MWh) has to be indicated.

In case of non-zero values for SoS benefit, the assumption on 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 for allowing provision of the estimated benefits for specific stakeholder groups within a country (variation of producer surplus PS, variation of consumer surplus CS and variation of congestion revenues<sup>10</sup> CR). In particular, the estimate variation of congestion revenues across each relevant border should be separately presented (i.e. no 50%-50% allocation of CR variation to compute the national benefits).

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<sup>9</sup> Agency position on the ENTSO-E “Guideline to Cost Benefit Analysis of Grid Development Projects”, 30 January 2013,  
[http://www.acer.europa.eu/Official\\_documents/Board\\_of\\_Regulators/Board%20of%20Regulators%20Decisions/Position%20on%20ENTSO-E%20CBA.pdf](http://www.acer.europa.eu/Official_documents/Board_of_Regulators/Board%20of%20Regulators%20Decisions/Position%20on%20ENTSO-E%20CBA.pdf)

<sup>10</sup> See total surplus approach in ENTSO-E “Guideline for Cost Benefit Analysis of Grid Development Projects Draft 12 June 2013”, page 34.  
[https://www.entsoe.eu/fileadmin/user\\_upload/library/consultations/CBA\\_2013/130612\\_CBA\\_version\\_draft\\_for\\_consultation.zip](https://www.entsoe.eu/fileadmin/user_upload/library/consultations/CBA_2013/130612_CBA_version_draft_for_consultation.zip)

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 variation of losses takes place with and without the project under analysis. This would allow promoters to provide 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 (see paragraph on *Time horizon and discounting method* below). 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<sup>11</sup>.

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

ENTSO-E defines planning scenarios to represent future developments of the energy system. The essence of scenario analysis is to come up with plausible pictures of the future. Scenarios are means to approach the uncertainties and the interaction between these uncertainties.

The Agency recommends that CBA results are provided for the reference TYNDP scenario (top down 2020 scenario) and sensitivity analysis (related to variation of major assumptions). Additional results can be provided as long as they are derived from scenarios, sensitivity analyses and planning cases considered in the TYNDP.

### **Analysis of other charges and revenues**

The Agency sees that ITC impact (revenues and contributions) where relevant and estimated with an adequate reliability, should accompany the CBCA request, disaggregated on a country basis, for year 2020.

Article 12(4) of Regulation (EU) No 347/2013 provides for NRAs, when allocating the costs, to take also into account any charges other than congestion revenues and ITC revenues.

The Agency is of the view that, where relevant, also such other charges should be submitted, disaggregated on a country basis.

### **Time horizon and discounting method**

The Agency recommends single-year benefit figures referred to year 2020 (mid-term) and to year 2030 (long-term).

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

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<sup>11</sup> Article 12(4) of Regulation (EU) No. 347/2013.

- For years from year of commission (start of benefits) to mid-term (if any), extend mid-term benefits backwards.
- For years between mid-term and long-term, linearly interpolate benefits between the mid-term and long-term values.
- 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 promoters, the Agency recommends full transparency with regard to the assumptions used in the project-specific CBA (eg. social discount rate, economic lifetime, residual value) and, to the extent possible, a common approach<sup>12</sup>.

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<sup>12</sup> See the Impact Assessment Guidelines, European Commission, 15 January 2009 ([http://ec.europa.eu/governance/impact/commission\\_guidelines/docs/iag\\_2009\\_en.pdf](http://ec.europa.eu/governance/impact/commission_guidelines/docs/iag_2009_en.pdf)); the THINK report (<http://www.eui.eu/Projects/THINK/Documents/Thinktopic/THINKTopic10.pdf>) and the Frontier study (<http://www.acer.europa.eu/Electricity/Documents/Transmission%20project%20evaluation%20and%20selection.pdf>) for relevant guidance.

## **Annex II – Project-specific Cost-Benefit Analysis - Gas**

Cross-border cost allocation shall be based on a project-specific and per country disaggregated cost benefit analysis (CBA).

The methodology shall be drawn up in line 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 Annex IV of Regulation (EU) No 347/2013.

The Agency considers that the CBA presented by project promoters shall include the following indicators:

- Total benefits (positive impacts, including positive externalities);
- Total costs (negative impacts, including negative externalities);
- Net positive effects distribution - identification of MS for which the project has net positive impacts (beneficiaries);
- Net cost distribution - identification of MS for which the project has net negative impacts (cost bearers).

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 the reasons underlying the possible variations has to accompany the uncertainty range.

### **Costs**

To be able to provide a CBCA decision it is necessary to have transparently reflected efficiently incurred investment costs, excluding maintenance costs in line with Art. 12(1) of Regulation (EU) No 347/2013. Therefore the Agency recommends that, for each country, the net present values of the cost components are separately presented and yearly disaggregated. Further, the Agency recommends segregating two additional types of investments costs from two already proposed by the ENTSOE:

- Environmental costs (e.g. cost for avoiding, mitigating or compensating negative environmental impacts), and
- Consenting/social costs.

### **Benefits**

The Agency recommends that the following benefits are monetized and separately presented per country, including the methodology used for valuations:

- Market integration and interoperability, measured as:
  - Additional value of the project to integration of market areas;
  - Additional value of the project to price convergence;
  - Additional value of the project to overall flexibility of system;
    - Including capacity level offered for reverse flows under different scenarios.
- Competition measured on the basis of diversification, including:
  - Access to indigenous sources of supply;

- *In succession*, the following:
  - Diversification by source;
  - Diversification by counterparties;
  - Diversification by routes.
- Change (impact on) HHI at capacity level for the relevant market.
- Security of gas supply, measured by the additional value of:
  - Short-term resilience of the Union gas system;
  - Long-term resilience of the gas system;
  - Improvement of the remaining flexibility of system to cope with supply disruptions to MS under various scenarios;
  - Additional capacity measured in relation to N-1 rule at regional level.
- Sustainability measured as:
  - Contribution of project to emissions reduction;
  - Project's support of back-up of renewable electricity generation;
  - Project support of power-to-gas;
  - Project support of biogas transportation.
- Disaster resilience and system security impact, notably for European critical infrastructure as defined in Directive 114/2008<sup>13</sup>;
- Climate resilience impact;
- Impact on congestion in the gas network;
- Other relevant parameters.

The benefits of a project can be influenced by the potential development of other projects. Even though the “stand alone” CBA is the one serving as a reference for the CBCA decision, project promoters are invited to indicate potential complementary PCIs. Projects may be considered complementary if the aggregated benefits of a joint development of the relevant PCIs are higher than the sum of projects' individual benefits estimated on a stand-alone basis. Such complementarity assessment will serve as input for NRAs to decide whether it is necessary to coordinate their decision-making processes for related CBCA requests.

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

The Agency recommends that CBA results are provided at least for the reference TYNDP scenario and sensitivity analysis (related to variations of major assumptions). Additional results can be provided as long as they are derived from scenarios, sensitivity analyses and cases considered in the TYNDP.

For this purpose, consideration should be given to the following critical categories of variables identified by ENTSG in its draft CBA methodology<sup>14</sup>:

<sup>13</sup> Council Directive 2008/114/EC of 8 December 2008 on the identification and designation of European critical infrastructures and the assessment of the need to improve their protection (Text with EEA relevance). OJ L 345/75, 23.12.2008.

<sup>14</sup> ENTSG Draft CBA Methodology for Public Consultation:  
[http://www.entsog.eu/public/uploads/files/publications/CBA/2013/INV146\\_130725\\_CBA-Methodology\\_DRAFT\\_PC.pdf](http://www.entsog.eu/public/uploads/files/publications/CBA/2013/INV146_130725_CBA-Methodology_DRAFT_PC.pdf)

- Supply and Demand data along different scenarios;
- Investment costs;
- Load factor;
- Operating costs;
- Commissioning data;
- Financing costs;
- Prices.

### **Time horizon and discounting method**

An 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 years of benefit analysis should be indicated and explained how they are used to derive net present values of benefits. If feasible, the Agency recommends that project promoters present their CBA results up to a time horizon of 2030.

Without prejudice to any business plan accompanying the investment requests from promoters, the Agency recommends full transparency with regard to the assumptions used in the project-specific CBA (e.g. social discount rate, economic lifetime, residual value) and, to the extent possible, a common approach<sup>15</sup>.

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<sup>15</sup> See the Impact Assessment Guidelines, European Commission, 15 January 2009 ([http://ec.europa.eu/governance/impact/commission\\_guidelines/docs/iag\\_2009\\_en.pdf](http://ec.europa.eu/governance/impact/commission_guidelines/docs/iag_2009_en.pdf)); the THINK report (<http://www.eui.eu/Projects/THINK/Documents/Thinktopic/THINKTopic10.pdf>) and the Frontier study (<http://www.acer.europa.eu/Electricity/Documents/Transmission%20project%20evaluation%20and%20selection.pdf>) for relevant guidance.

### Annex III – Summary data relevant for CBCA requests <sup>16</sup> - Electricity

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

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

Promoter	Country	Address and contact details

*Note: insert all project promoters*

Consulted TSO	Country	Date of submission of all CBA data and results	Date of feedback and reasons for disagreement (if any)

*Note: insert all TSOs with significant net positive impact.*

#### Part II: the concerned NRAs

NRA	Country	Reasons for being concerned (hosting the project / having significant positive net benefit)

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

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

Project stage	(expected) start date	(expected) end date
Consideration phase		
Planning approval		
Preliminary design studies		
Preliminary investment decision		
Permitting		
Financing and CBCA		
Final investment decision		
Detailed design		
Tendering		
Construction		

<sup>16</sup> Wherever possible, please provide numerical information in spread sheet format.

Commissioning		
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#### Part IV: the project-specific cost benefit analysis

##### Part IV.1 – money, currency and discounting method

The discounting method is in line with the ACER Recommendation on the treatment of cross-border cost allocation requests submitted in the framework of the first Union list of electricity and gas projects of common interest. The monetary values are expressed in Euro, referred to the present (year 2013).

(If applicable) the following assumptions about exchange rates are used:

Country	Currency	Assumption on exchange rate vs. Euro

##### Part IV.2 - cost - expected figures

*Note: please provide single values here, expressed in Million Euro, year 2013.*

*Please fill IV.3 below for ranges and variations*

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

Cost component	Net present value of costs [MEuro]	
	Before commissioning	After commissioning
Materials and assembly costs		
Temporary solutions		
Environmental costs		
Consenting/social costs		
Replacement of devices		
Dismantling		
Maintenance and other life-cycle		
Total		

Yearly disaggregation of costs before commissioning	Year:	Year:	Year:	Year:	Year:
Total [MEuro]					

##### Part IV.3 - cost - expected variations

Country	NPVs of costs [MEuro]	Downward variation [%]	Upward variation [%]	Reason(s)

#### Part IV.4 - benefit - expected figures

Note: please provide single values here, expressed in Million Euro, year 2013.

Please fill IV.5 below for ranges and variations

Congestion revenue at relevant border	Congestion revenue sharing	Net present variation of congestion revenue [MEuro]
Border:	<i>please specify X:Y</i>	
Border:		
Border:		
Border:		

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

Benefit component	Net present value of benefits [MEuro]	
	Producer surplus	Consumer surplus
SEW (EU-wide market study)		
National constraints (SEW local study)		
Variation of generation curtailments		
Variation in losses		
Security of supply (load)		
Other benefits		
Total		

The other benefits indicated (if applicable) correspond to these benefit components in the ACER 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:

Benefit component	Benefits year 2020 [MEuro/year]		Benefits year 2030 [MEuro/year]	
	Producer surplus	Consumer surplus	Producer surplus	Consumer surplus
SEW (EU-wide)				
National constraints				
G curtailments				
Variation in losses				
Security of supply				
Other benefits				

Note: fill non-discounted figures in Euro 2013.

#### Part IV.5 - benefits - expected variations

Country	NPVs of benefits [MEuro]	Downward variation [%]	Upward variation [%]	Reason(s)

Note: add lines of additional countries involved.

**Part V: ITC revenues and other charges**

The monetary values of the ITC revenues and other charges are expressed in Euro, referred to the present (year 2013).

Country	ITC impact in year 2020 [MEuro/year]

*Note: add as many rows as needed*

Description of other charge	Country	Net present amount [MEuro]

*Note: add as many rows as needed, please add yearly amounts in case of significant differences over the time horizon under analysis.*

**Part VI: the expected financing solution**

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

Type	Amount [MEuro]	Remarks
Debt		
Equity		
Expected national grant		
Expected European grant		

**Part VII: accompanying documents**

<i>(please include number, scope and title )</i>

*Note: add as many rows as needed.*

## **Annex IV – Summary data for CBCA requests <sup>17</sup> - Gas**

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

Promoter	Country	Address and contact details

*Note: insert all project promoters*

Consulted TSO	Country	Date of submission of all CBA data and results	Date of feedback and reasons for disagreement (if any)

*Note: insert all TSOs with significant net positive impact.*

### **Part II: the concerned NRAs**

NRA	Country	Reasons for being concerned (hosting the project / having significant net positive impact)

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

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

Project stage	(expected) start date	(expected) end date
Consideration phase		
Planning approval		
Preliminary design studies		
Market test		
Preliminary investment decision		
Permitting		
Financing and CBCA		
Final Investment Decision		
Detailed design		
Tendering		
Construction		
Commissioning		

<sup>17</sup> Wherever possible, please provide numerical information in spread sheet 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 ACER Recommendation on the template for requests for cross-border cost allocation of electricity and gas infrastructure projects.

The monetary values are expressed in Euro, referred to the present (year 2013).

(If applicable) the following assumptions about exchange rates are used:

Country	Currency	Assumption on exchange rate vs. Euro

### Part IV.2 - cost - expected figures

*Note: please provide single values here, expressed in Million Euro, year 2013.*

*Please fill IV.3 below for ranges and variations.*

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

Cost component	Net present value of costs[MEur]	
	Before commissioning	After commissioning
Materials and assembly costs <sup>18</sup>		
Temporary solutions <sup>19</sup>		
Environmental costs		
Consenting/social costs		
Operating costs <sup>20</sup>		
Decommissioning		
Total		

Yearly disaggregation of costs before commissioning	Year:	Year:	Year:	Year:	Year:
Total [MEur]					

### Part IV.3 - cost - expected variations

Country	NPVs of costs [MEuro]	Downward variation [%]	Upward variation [%]	Reason(s)

*Note: add lines for all countries involved.*

<sup>18</sup> Defined as Fixed investment costs by ENTSG.

<sup>19</sup> ENTSG: Start-up costs, e.g. during construction phase temporary connections of network are necessary, start-up costs.

<sup>20</sup> Direct costs related to consumption of materials and services, personnel, maintenance, general costs and administrative and general expenditures. They are part of CBA, but not covered by CBCA.

**Part IV.4 - benefit - expected figures**

Note: please provide single values here, expressed in Million Euro, year 2013.

Please fill IV.5 below for ranges and variations

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

	Net present value of benefits for impacted entity (TSO, consumers, shippers, other stakeholders) [MEuro]		
Benefit component	Impacted entity 1	Impacted entity 2	Impacted entity 3
<b>Priority components</b>			
Market integration and interoperability			
Competition on the basis of diversification			
Security of gas supply by the additional value to the system resilience, remaining flexibility, N-1			
Impact on congestion in the gas network <sup>21</sup>			
<b>Secondary components</b>			
Sustainability			
Disaster resilience and system security <sup>22</sup>			
Climate resilience <sup>23</sup>			
Other benefits (to be justified)			
Total			

<sup>21</sup> Avoid any double counting with Market integration.

<sup>22</sup> Avoid any double counting with Security of supply.

<sup>23</sup> Avoid any double counting with Sustainability.

Benefits year 20__ <sup>24</sup>	Benefits for impacted entity (TSO, consumers, shippers, other stakeholders) [MEuro/year]		
Benefit component	Impacted entity 1	Impacted entity 2	Impacted entity 3
Market integration and interoperability			
Competition on the basis of diversification			
Security of gas supply by the additional value to the system resilience, remaining flexibility, N-1			
Impact on congestion in the gas network			
Other benefits (to be justified)			
Total			

*Notes: fill non-discounted figures in Euro 2013 and add additional tables if necessary to provide relevant information.*

#### Part IV.5 - benefits – optional complementarity assessments

Is your project complementary to another (other) PCI project(s)? Please substantiate your response. <sup>25</sup>

#### Part IV.6 - benefits - expected variations

Country	NPVs of benefits [MEuro]	Downward variation [%]	Upward variation [%]	Reason(s)

*Note: add lines of additional countries involved.*

<sup>24</sup> Provide information for relevant year considered.

<sup>25</sup> Two projects can be considered complementary when the sum of the benefits of these PCI projects is higher in case of a joint assessment compared to an assessment of each project on a stand-alone basis.

**Part V: Market test results - expected revenues from long-term capacity bookings**

	Net Present Value of expected revenues from network users long-term commitments (regulated tariff + share of potential auction premium) [MEuro]
Country:	
Country:	
Country:	

*Note: add lines of additional countries involved.*

**Part VI: the expected financing solution**

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

Type	Amount [MEuro]	Specific information
Debt		
Equity		
Expected national grant		
Expected European grant		

**Part VII: accompanying documents**

<i>(please include number, scope and title )</i>

*Note: add as many rows as needed*



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