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 Agency for the Cooperation
of Energy Regulators

ACER Recommendation on Cross-Border Cost Allocation Requests

Part II

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Outline of Part II

- The project-specific Cost-Benefit Analysis for Electricity
- Treatment of CBCA requests
 - » Maturity of projects and completeness of the request
 - » Compensation to be provided to project promoters
 - » Allocation of compensation to the contributing countries
 - » Examples

General requirements

- Project-specific CBA
 - Disaggregated **per country**
 - Consistent with energy-system wide CBA (**Article 11, Annex IV and Annex V** of Reg. (EU) No 347/2013)
- Key dimensions to be addressed:
 - **Cost** components
 - **Benefit** components
 - Treatment of **uncertainties**
 - **Time horizon** and **discounting method**
- Also for electricity, ACER made available a template (Annex III) for project promoters to enable a clear and precise assessment of these dimensions

Costs

- Net present values of **each cost component** (investment costs and other components) per country should be presented separately
 - » Materials and assembly costs
 - » Temporary solutions
 - » Environmental costs
 - » Consenting/social costs
 - » Replacement of devices
 - » Dismantling
 - » Maintenance and other life-cycle
- Total costs before commissioning should be **yearly disaggregated**

Benefits (1)

- **At least*** the following benefits should be monetised:
 - » Socio-economic welfare SEW (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)

*A broader list of 11 benefit components is available in the ACER position on the ENTSO-E guideline to CBA of grid development projects

Benefits (2)

- For SEW benefit
 - » total surplus approach: disaggregated for stakeholder groups for country (variation of producer surplus PS, of consumer surplus CS and of congestion revenues CR)
 - » CR separately presented per border (no 50%-50% allocation to countries)
- For Losses and SoS benefit (if not zero), indicate:
 - » assumption on value of losses (€/MWh)
 - » assumption on value of lost load (€/MWh not supplied)
- Benefits should be **presented for each MS** separately
- Promoters to indicate whether the benefits of their project can be **influenced by** the potential development of **other PCIs**

Treatment of uncertainties

- ACER recommends using of an uncertainty range ($-x\%$; $+y\%$) for the assessment in each country:
 - » Expected cost; downward variation ($-x\%$); upward variation ($+y\%$)
 - » Expected benefit; downward variation ($-x\%$); upward variation ($+y\%$)
 - » Good knowledge about the factors affecting expected costs and benefits and their ranges

Time horizon and discounting method (1)

- Benefit figures:
 - » Year 2020 (mid-term)
 - » Year 2030 (long-term)
- Interpolate/extrapolate:
 - » Before 2020, mid-term backwards
 - » Between 2020-2030, linearly interpolate
 - » After 2030, use long-term value

Time horizon and discounting method (2)

- **Transparency on assumptions** used for the CBA (social discount rate, economic lifetime, residual value)
- To the extent possible, a **common approach**
 - » In its position on electricity CBA, ACER called on ENTSO-E for guidance for a common discounting method to be given by the CBA methodology
 - » In its opinion on electricity (first Union list of) PCIs, the Agency deemed reasonable Frontier's short-term approach:
 - a common discount rate of 4% (real) based on European Commission "Impact assessment guidelines"
 - a common time range of 25-years lifetime for all projects
 - a common reference year (present year) for discounting

- 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'
- PCIs are "sufficiently mature" when requesting CBCA, if:
 - » There exists **strong confidence about the expected costs and benefits** and their ranges
 - » **permitting procedures have started** in all hosting countries;
 - » **project construction is about to start** reasonably soon
- If a CBCA request is considered as incomplete, promoters should submit further info (as asked by NRAs)

Treatment of CBCA requests: Compensation to be provided to promoters

- WHEN? Compensations are provided only if at least one country hosting the project is deemed to have a negative net benefit
- TO WHOM? To all countries hosting the project and exhibiting a negative net benefit
- HOW MUCH? Compensate negative net benefit in the relevant countries as much as possible
- **Unless the relevant NRAs agree otherwise**

- Only countries with a **significant positive net benefit** should contribute to provide compensation
- 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
- A **lower significance threshold** may be considered, in particular
 - » if the net benefits above the threshold are not sufficient to cover the compensation required or
 - » if the amount of compensation places an unreasonable burden to a contributing country
- **Allocation rule** (for contributors): proportionately to the level of net benefits of each country exceeding the significance threshold

- Electricity transmission projects

PCI types	Substation / PSTS	1 country	2 countr.	3 countr.
North Seas	1	5	19	0
NSI West	4	12	11	1
NSI East	2	37	17	1
BEMIP	0	7	3	0
Total	7	61	50	2

Note: Provisional information (as of 24 July)

- Therefore:
 - » About half of projects **located in one country**
 - » About half of projects **located in two countries**

- What is the result of the “national CBA” of the country hosting the project?
 - » Benefits greater than costs → No need for a CBCA compensation
 - » Benefits lower than costs → Need for CBCA compensation to the country

	Country A	Country B
Cost	100	0
Benefit	80	40
Net benefit	-20	40

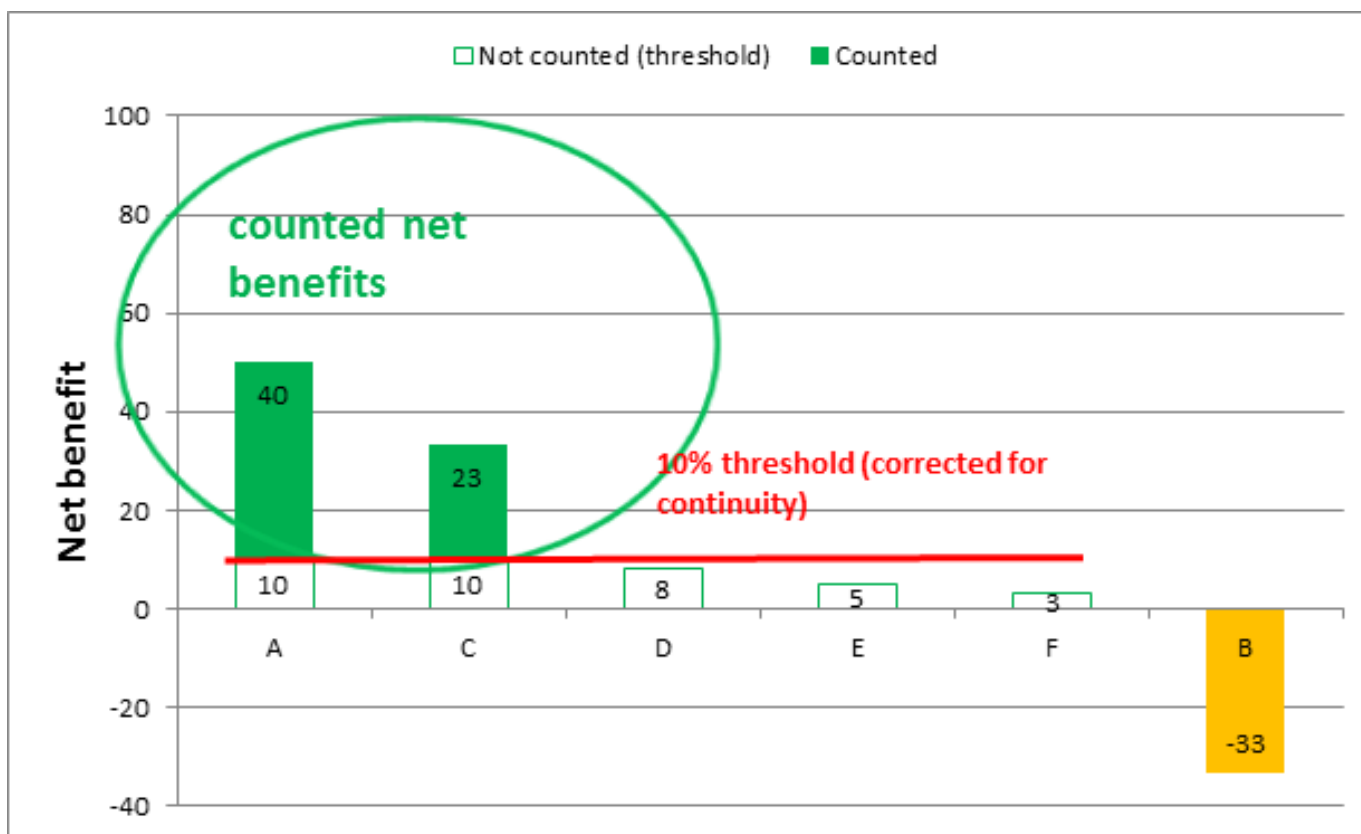
- » Contribution (payment) from country B to compensate the negative net benefit of country A

- Example of (expected average) costs and benefits
 - » Sum of positive net benefits accruing to all net benefiting countries = 100
 - » Sum of negative net benefits (of countries hosting the project) = -33

	Country A	Country C	Country D	Country E	Country F	Country B
Cost	50	0	0	0	0	50
Benefit	100	33.3	8.3	5	3.3	16.7
Net benefit	50	33.3	8.3	5	3.3	-33.3

- » Compensation for the negative net benefit of country B

- Application of the significance threshold
 - » Proportionate contribution from Countries A and C
 - » Countries D, E and F do not contribute



Thank you for your attention!



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