Project-level Benefits for Transmission Project Promoters

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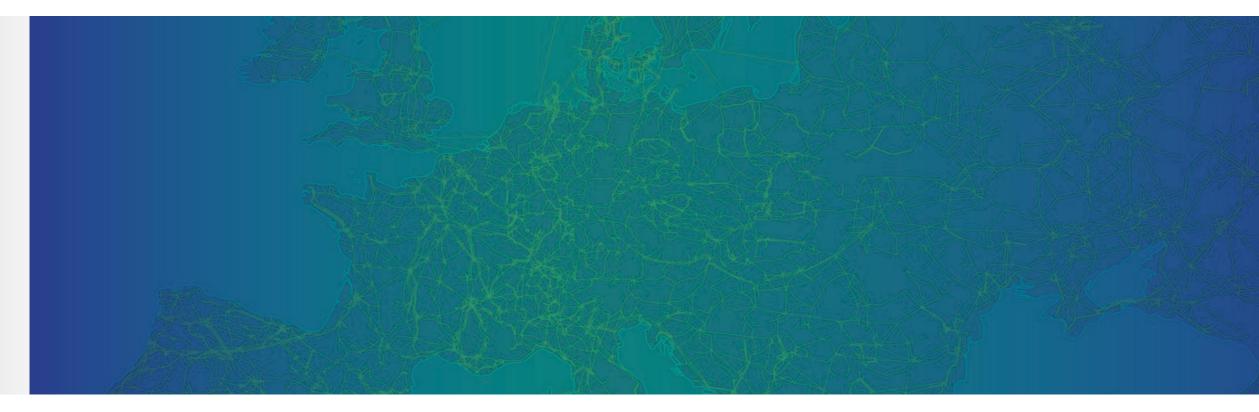


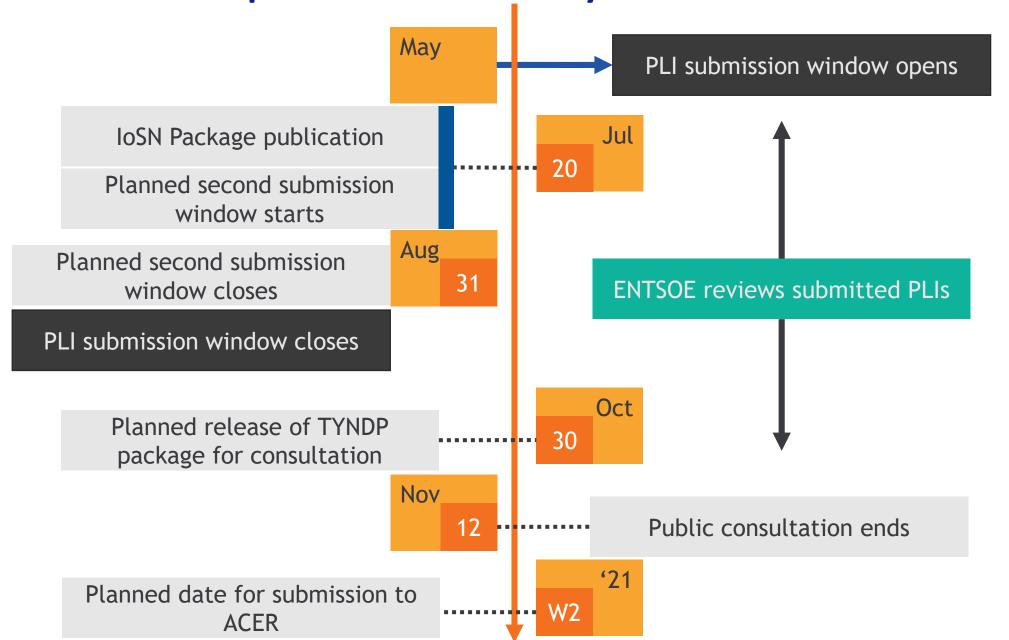


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 - Q&A

TYNDP development timeline

TYNDP2020 development timeline – Key dates



Project-level Benefits: Resources available to Promoters

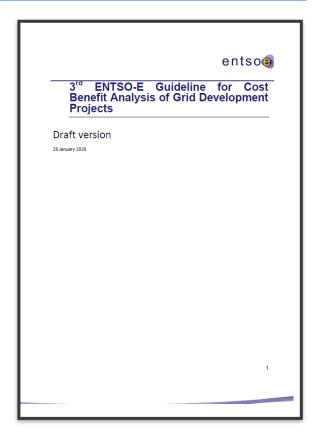
Resources available to promoters

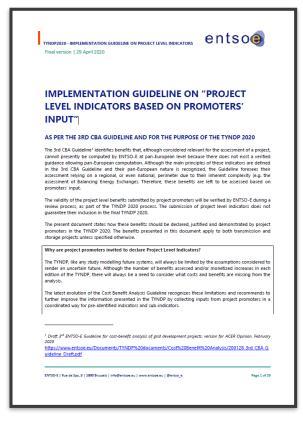
Draft CBA Guideline 3.0:

https://www.entsoe.eu/Documents/TYNDP%20documents/Cost%20Benefit%20Analysis/191023_CBA3_Draft%20for%20consultation.pdf

Implementation Guideline on "Project Level Indicators based on promoter's input": https://tinyurl.com/ycudm2a7

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About the draft project sheets shared with promoters in May 2020

Input required at a later stage

How to preview your project sheet

Information to complete in the project sheets

Mandatory information (CBA Guideline)

- Residual impact
- B8 System Stability (for transmission projects only)
- 3. Life-cycle CAPEX

Submit project-level benefits (optional)

Project-level indicators in the project sheets

Additional information on the project

- 1. Edit the description of the project
- 2. Type of project Is it an upgrade of existing infrastructure?
- 3. Specify the type of element of each investment (transmission projects only)
- Video and pictures
- Provide information on related projects
- Update field 'Additional information on the project'
- 7. Provide updated technical data (for information only, not for use in CBA)
- 8. Upload the promoters logos

Draft 3rd CBA Guideline after consultation (FOR INFO)

ENTSO-E has recently published the draft 3rd CBA Guideline in its version:

- after consultation
- for ACER submission

This new version of the draft CBA Guideline accompanied with consultation answers & consideration on the inclusion of stakeholders' input is available at this link.

The 3rd CBA Guideline learns from the TYNDP 2018 Missing Benefits experience and introduce the concept of Project level indicators based on promoters' input (Guideline chapter 3.4 and 6.26):

These indicators represent benefits or costs of a project (transmission or storage), which have been identified as important for a complete Cost-Benefit Analysis, but that ENTSO-E is not able to assess at a Pan- European level within the TYNDP process. For these indicators the 3rd CBA guideline provides a definition, a clear perimeter of application and a methodology that must be followed in order to properly assess them.

Although the Pan-European nature of these indicators is recognized, it is acceptable to assess them relying on a regional or even national perimeter to deal with their inherent complexity.

The 3rd CBA guideline then includes the possibility, within the TYNDP process, to include the submission of these indicators by the project promoter until TYNDP ENTSO-E processes are able to provide a Pan-European assessment

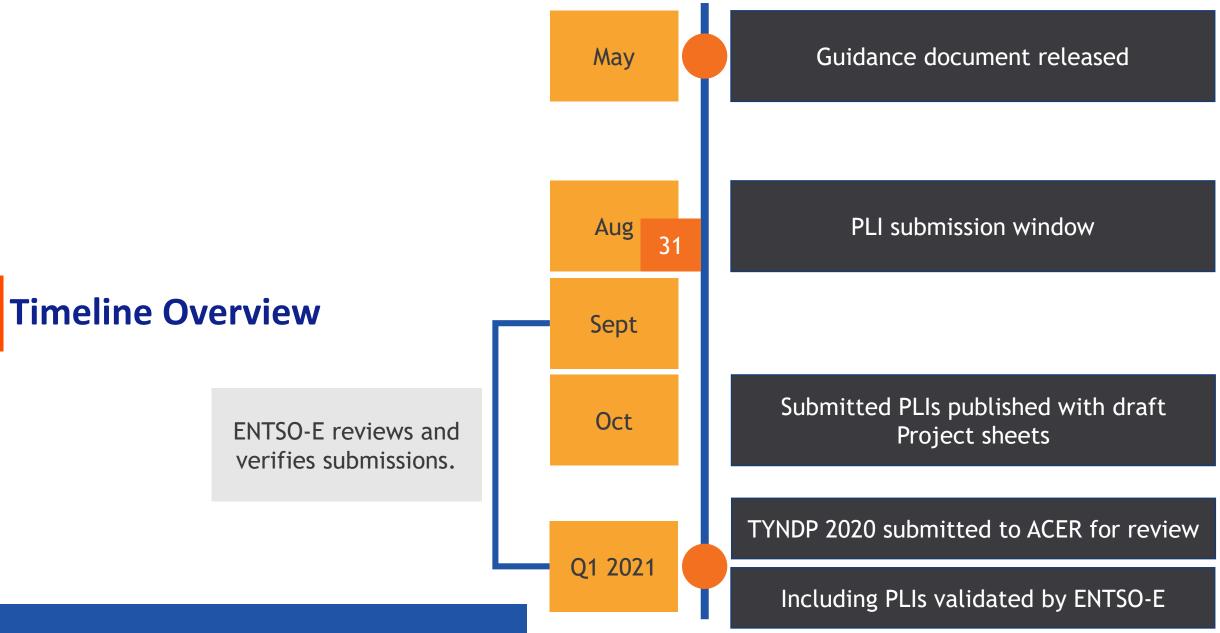
Project-level benefits Implementation Guideline Walkthrough

Available at: https://tinyurl.com/ybqot9sy

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Shared between transmission and storage projects

Exclusively for transmission projects



Project-level Benefits for Transmission

Project-level benefits for transmission

In light blue you will find in which chapter of the **3rd CBA Guideline** the indicator and the requested methodology for its computation is described

Indicators for transmission:

- B7.1 Security of supply System flexibility Balancing energy exchange (Chapter 6.10)
- B9 Avoidance of the Renewal/Replacement Costs of Infrastructure (Chapter 6.12)
- B10 Reduction of Necessary Reserve for Redispatch Power Plants (Chapter 6.13)
- B8.1 Frequency Stability focus on frequency quality targets (energy aspect) for HVDC ICs between synchronous areas (Chapter 6.11)
- B8.2 Blackstart services Specific application: Synchronization with Continental Europe (Chapter 6.11)

N.B. Re-dispatch computation for other market CBA indicators is possible only for internal projects within the TYNDP 2020 framework

Project-level Benefits: General Submission Guidelines

General PLI submission guidelines

- Submission of one or several project-level benefit(s) is optional. You are free not to submit any. Only benefits included in the presented list will be accepted.
- > Submitted benefits must be computed in line with the methodology described in the draft CBA Guideline 3.0.
- > Submitted benefits should preferably be based on any of the ENTSO-E or ENTSO-G TYNDP 2020 Scenarios. NT2025 and NT2030 are recommended. Promoters are free to submit the chosen indicator based on all ENTSO-E and ENTSOG TYNDP 2020 Scenarios (GA, DE, NT)
- Scenarios other than ENTSO-E and ENTSO-G are allowed if the promoter submits the used scenario for review (one only).
- No qualitative assessment will be accepted: all submitted benefits must be backed by a study and must be quantified or monetized.
- The study must be regarding the specific project at hand. Benefits based on generic studies (e.g. assessing the technology) will not be accepted
- In principle, the value of the benefit will be published in the projects sheets. You may only submit benefits which ENTSO-E can publicly display. The study and dataset on which the declared benefit is based will not be published, but may be shared with the EC and ACER in the context of the PCI process.
- > The mere submission of the project level benefit does not guarantee that the indicator submitted is considered valid. The validity of the project level benefit will be verified by ENTSO-E during the Public Consultation period.

Submitting a project-level benefit? (1)

In general, here is the information that will be requested for each indicator	Published in the project sheet?
Statement by the promoter that the study performed complies with the draft CBA Guideline 3.0, and explanation on how the compliance is respected.	Yes
Statement by the promoter that the indicator is submitted jointly and in agreement with all promoters of the project	No
Promoter's statement that the study has specifically assessed the selected indicator for the project	No
Is the benefit quantified (specify the unit) or monetised (in MEuro)? → If the unit of the quantified value has been already specified in the 3 rd CBA Guideline this has to be confirmed and respected	Yes

Submitting a project-level benefit? (2)

In general, here is the information that will be requested for each indicator	Published in the project sheet?
[If the study is based on ENTSO-E scenarios] Value of the benefit for 2030 (compulsory horizon) and NT2025 (optional) in MEuro or in the unit selected	Yes
[If the study is based on another scenario] Value of the benefit for each horizon (only one with 2030 and 2025 -optional- time horizon)	Only the value of the benefit is published
Name and description of the scenario (including data source); upload of scenario dataset; justification for the use of another scenario;	No

How to submit a project-level benefit? (3)

In general, here is the information that will be requested for each indicator	Published in the project sheet?
Description on the study's assumptions and justification for the assumptions taken and data source	Yes
Upload of the assumption datasets if extra assumptions, beyond the scenarios, are needed to compute the specific indicator	No
Upload of the study in English	No
Year of the study	Yes
Entity who performed the study	Yes
Indicate page of the study where assumptions are described	No
Indicate page of the study where the implemented methodology is described	No

How to submit a project-level benefit? (4)

In general, here is the information that will be requested for each indicator	Published in the project sheet?
Indicate page of the study where the results of the study declared above for your project are displayed	No
Clear statement and explanation on how the figures provided in the study relate to countries within the ENTSO-E perimeter only	Yes
Optional: short explanation on the methodology implemented	No
Optional additional information (non mandatory): specify if an external body, beyond the entity who has performed the study, has reviewed or approved the study	No

Project-level benefits specific submission criteria

B7.1: Security of supply - System flexibility – Balancing energy exchange

CBA Guidelines: Chapter 6.10

In addition to the requirements outlines on pages 11 - 16 of the Guidance, promoters must also submit:

1)Unit of the submitted value: the value submitted is monetized and can be expressed in MEuro/year only

2)Submitted value: the value submitted by the promoter will not be published in the TYNDP 2020 project sheet. This value, after validation by ENTSO-E, will be converted into a qualitative indicator applying the following equivalences:

Value submitted within the range	Corresponding qualitative indicator shown published in the Project Sheet
< 1 M€	0
[1 M€; 15 M€)	+
≥15 M€	++

B9: Avoidance of the Renewal/Replacement Costs o Infrastructure (for both Transmission and Storage projects

CBA Guideline: Chapter 6.12

In addition to the requirements outlines on pages 11 – 16 of the Guidance, promoters must also submit:

The promoter has to provide all the information requested in Chapter 3 considering the following exceptions:

- 1) Scenarios: the indicator can be provided for up to three different years (depending when the benefit materializes), it is not required to provide information on the scenarios used.
- 2) Unit of the submitted value: the value submitted is monetized and can be expressed in MEuro only
- 3) Submitted value: the value submitted must be reported together with the year (along the assessment period of the project) when this benefit materializes.

B10: Reduction of Necessary Reserve for Redispatch Power Plants

CBA Guidelines: Chapter 6.13

In addition to the requirements outlines on pages 11 - 16 of the Guidance, promoters must also submit:

The promoter must provide both quantitative and monetized values.

B8.1: Frequency Stability - focus on frequency quality targets (energy aspect) for HVDC ICs between synchronous areas

CBA Guidelines: Chapter 6.11

In addition to the requirements outlines on pages 11 – 16 of the Guidance, promoters must also submit:

Although the promoter is requested to provide all the information listed in Chapter 3, there is a specific exception that applies to this indicator:

Unit of the submitted value: the value submitted is quantified and the unit is pre-defined as in MWh/year only

B8.2: Blackstart services – Specific application: Synchronization with Continental Europe

CBA Guidelines: Chapter 6.11

In addition to the requirements outlines on pages 11 - 16 of the Guidance, promoters must also submit:

Although the promoter is requested to provide all the information listed in Chapter 3, there is a specific exception that applies to this indicator:

Unit of the submitted value: the value submitted is monetized and can be expressed in MEuro/year only

In practice – How to submit project-level benefits

B8.1 Insight on frequency stability for transmission: extra input from promoter but not a PLI

For transmission project the qualitative frequency stability indicator is kept as from the 2nd CBA Guideline

But It is now possible to add additional, quantified, non-monetized indicator on Frequency quality targets (energy aspect) for HVDC interconnectors between synchronous areas

Element	Transient Stability	Voltage Stability	Frequency Stability
New AC line	++	++	0
New HVDC	++	++	+ (between sync areas)
AC line series compensation	+	+	0
AC line high temperature conductor/conductor replacement (e.g., duplex to triplex)	-	-	0
AC line Dynamic Line Rating	-	_	0
MSC/MSR (Mechanically Switched Capacitors/Reactors)	0	+	0
SVC	+	+	0
STATCOM	+	++	0
Synchronous condenser	+	++	++

- -: Adverse effect: the technology/project has a negative impact on the respective indicator.
- No change: the technology/project has no (or just marginal) impact on the respective indicator.
- +: Small to moderate improvement: the technology/project has only a small impact on the respective indicator.
- ++: Significant improvement: the technology/project has a large impact on the respective indicator.
- N/A: Not relevant: if a particular project is located in a region where the respective indicator is seen as not relevant, 44 this should also be highlighted by reporting as N/A.

IMPORTANT: this input is not a Project Level Indicator and as such it is a requested field for Transmission projects required to complete the project sheet (Input can be provided in the Tab-CBA), it doesn't require any extra study

Questions

Thank you very much for your attention

If you have any further questions do not hesitate to contact:

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