ENTSO-E Connection Network Codes Implementation Guidance Documents_Cost Benefit Analysis

Overview

Europe currently has three connection network codes: Requirements for generators (RfG), Demand Connection (DCC) and High Voltage Direct Current (HVDC). RfG has entered into force on 17 May 2016, the DCC on 18 August 2016 and the HVDC on 8 September 2016.

The Member States have the obligation to implement these codes no later than three years after their entry into force. Within this timeframe the relevant system operators or TSOs have 2 years to define and submit the national specifications, for the so-called non-exhaustive requirements, for approval by the competent entity.

In order to support the implementation at national level and also in line with the legal requirements of these network codes, ENTSO-E has drafted and when necessary improved nonbinding implementation guidance documents (IGDs), one of which we currently put forward for consultation.

The guidance documents are primarily addressed to the transmission system operators and other system operators concerning the elements of the codes requiring national decisions. They shall explain the technical issues, conditions and interdependencies which need to be considered when complying with the requirements of these Regulations at national level.

The current IGD consultation is scheduled as follows:

29 January 2018 – 2 March 2018 – ENTSO-E publishes **one (1) draft IGD** for consultation (please see below). The comments received will support the finalisation of the IGD.

The current IGD has been prepared by an Expert Group which was formed and kicked off its work in April 2017 as a result of a relevant **public workshop** *<https://www.entsoe.eu/newsevents/events/Pages/Events/2017-03-02-cnc-cba.aspx?EventWorkshopId=284>* that took place in March 2017. The Terms of Reference of this Expert Group as well as the type of stakeholders that have worked on this draft can be found **here** *<https://docs.entsoe.eu/cncal/docs/170518 ToR CNC expert group CBAs.pdf>*. The IGD is an updated version of an IGD

that was published in November 2016.

More information can be read **here** <user_uploads/180129_cnc_igd-cba_introductiondocument.pdf> .

A preview of all the questions in this consultation can be accessed here.

The IGD under consultation is listed below and can be downloaded from the following **link** <*user_uploads/igd-on-cba---supporting-documents.zip*>.

1. Cost Benefit Analyses

Why we are consulting

ENTSO-E is consulting the IGDs for three main reasons:

- 1. Although the main addressees of the IGDs are the system operators, the connection codes have a significant impact on manufacturers, power generating module operators, demand facilities and distribution networks.
- 2. The IGDs are drafted as supporting material for the connection codes implementation at the member state level and shall aim to give guidance for national specifications for non-exhaustive requirements.
- 3. The IGDs are legally requested to be consulted with stakeholders before their release within the six month of the entry into force of the Regulations.

Introduction

1 What is your name?

Name

2 What is your email address?

If you enter your email address then you will automatically receive an acknowledgement email when you submit your response.

Email

3 What is your organisation?

Organisation

Cost Benefit Analysis IGD

This Guidance Document provides general methodological principles and examples in order to guide Member States in the application of the Connection Network Code (CNC) provisions related to the CBA process.

This IGD aims to facilitate and to harmonize the elaboration of a detailed CBA methodology to be applied when necessary within the remit of the NC RfG, NC DCC and NC HVDC national implementation processes.

It addresses fundamental methodological principles and the main steps of a cost-benefit analysis to be applied to assess potential monetary impacts of retrospective applications of or derogations from DCC, HVDC and RfG CNC requirements for grid connection.

As this process applies to a variety of cases explained below each Member State remains free to provide more detailed and appropriate methodological provisions at national level, in order to take into account all the typology of cases to be encountered, and to account for the wide variation in users' equipment, configurations or scenarios that could be subject to any assessment.

Note that not all impacts are easily monetized. In this case a different type of analysis (multi-criteria assessment - MCA) can be performed. It allows multiple indicators (including non-monetary ones) to be taken into account also considering relative priorities. If applying a MCA, special care should be taken to avoid double counting of costs or benefits.

Some illustrative examples of particular CBA settings are also addressed noting the need for pragmatism and that any example will probably be specific to the application and should not be treated as a gold standard.

Where text is quoted from RfG, please note that to keep the document to a reasonable length, where similar provisions exist in DCC and HVDC these are referenced but not quoted.

1 Do you consider this IGD helpful to reasonably support the national implementation process? (Please select only one item)

Please select all that apply

🗌 yes 🗌 no

2 Does the content of the IGD cover the technical issues of this topic appropriately? (Please select only one item)

Please select all that apply

_ yes __ no

3 Comments on the technical information within this IGD

Technical Comments

4 General (other) comments

General Comments