

ENTSO-E Connection Network Codes_revised Implementation Guidance Documents_January 2023

Overview

Background

According to Article 58 of Network Code Requirements for Generators (NC RfG), Article 56 of Network Code Demand Connection (NC DC) and Article 75 of Network Code High Voltage Direct Current (NC HVDC), ENTSO-E has the obligation to prepare non-binding guidance on implementation which shall be maintained every two years.

In the recent past, ENTSO-E produced (and when necessary improved later on) several Implementation Guidance Documents (IGDs) to support the national implementation of the Connection Network Codes (CNCs) in topics that were important and in cases complex. The list of topics that were elaborated included suggestions from stakeholders (discussed early 2016). Most IGDs were drafted by ENTSO-E while a few of them through established Technical Groups with the support of relevant stakeholders. Furthermore, several public workshops took place over the period between 2016 and 2018.

All IGDs were publicly consulted as required by the CNCs and ENTSO-E replied to the consultation feedback.

Final (current) published versions of the IGDs can be found [HERE](https://www.entsoe.eu/network_codes/cnc/cnc-igds/) <https://www.entsoe.eu/network_codes/cnc/cnc-igds/> .

Last set of updated IGDs was published in 2021, fulfilling the obligation of the two years' maintenance.

Objectives of the IGDs

The IGDs 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 objectives of the implementation guidance documents are:

- to facilitate a common understanding of technical issues specified in the connection network codes, in context of new technologies and new requirements
- to deliver broader explanations and background information and to illustrate interactions between requirements
- to recommend coordination/collaboration between network operators (TSO) where either explicitly required by the connection codes or reasonably exercised from a system engineering perspective
- to give guidance to national specifications for non-exhaustive requirements, and
- to express the need of further harmonisation beyond what is requested by the CNCs when reasonable from a system engineering perspective.

Status of the revisions

The first set of the revised IGDs includes:

- additional clarifications that were provided during the exchanges with stakeholders, mainly at Grid Connection European Stakeholder Committee level. ENTSO-E has been asked through Q&As to detail some aspects further and doing so the subsequent decision was to ensure consistency of ENTSO-E's position/reply in different publicly available material.
- needed editorial changes and format changes that were necessary considering the different publication time.

The current IGD consultation is scheduled as follows:

16 January 2023 – 10 February 2023 – ENTSO-E publishes **two (2) draft revised IGDs** for consultation (please see below). The comments received will support the finalisation of the IGDs.

A preview of all the questions in this consultation can be accessed [HERE](user_uploads/consultation_preview-1.pdf) <user_uploads/consultation_preview-1.pdf> .

The revised IGDs under consultation are listed below:

1. **IGD on Compliance Verification - Using Electrical Simulation Models** [LINK](user_uploads/igd-on-compliance-verification---using-electrical-simulation-models.pdf) <user_uploads/igd-on-compliance-verification---using-electrical-simulation-models.pdf>
2. **IGD on Compliance Verification - Compliance Monitoring after final operational notification** [LINK](user_uploads/igd-on-compliance-verification---compliance-monitoring-after-final-operational-notification.pdf) <user_uploads/igd-on-compliance-verification---compliance-monitoring-after-final-operational-notification.pdf>

For any additional comments please download the Excel File named "Consultation IGDs" [HERE](user_uploads/consultation-igds.xlsx) <user_uploads/consultation-igds.xlsx> . It can be uploaded further in Question 3 under each IGD.

Why your views matter

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

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.

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.

The IGDs are legally requested to be consulted with stakeholders before their release.

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

4 I want my answer to remain anonymous. If you tick this box, we will publish your comments but we will not publish your name and organisation.

I want my answer to remain anonymous

5 I want my answer to remain confidential - If you tick this box, we will not publish your answer to this consultation

I want my answer to remain confidential

6 I agree to ENTSO-E's Consultation Hub privacy policy

I agree to ENTSO-E's Consultation Hub privacy policy (Required)

IGD on Compliance Verification - Using Electrical Simulation Models

1 Do you consider this IGD helpful?

Please select all that apply

yes

no

2 Does the content of the IGD cover the technical issues of this topic appropriately?

Please select all that apply

yes

no

3 Comments on the technical (or other) information within this IGD

Please attach a copy of any documents you wish to include to this printout.

For any additional comments please download the excel file named "Consultation IGDs". The link can be found in the main text of consultation, fill in the excel file and upload it below.

Upload the Excel File

IGD on Compliance Verification - Compliance Monitoring after final operational notification

1 Do you consider this IGD helpful?

Please select all that apply

yes

no

2 Does the content of the IGD cover the technical issues of this topic appropriately?

Please select all that apply

yes

no

3 Comments on the technical (or other) information within this IGD

Please attach a copy of any documents you wish to include to this printout.

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