

**Brief status on
CENELEC standards
related to Connection Network Code**

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**3rd Grid Connection
Stakeholder Committee
meeting**

8th September 2016

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ENTSO-E objectives

2

Network Codes match to standard

Progress on CENELEC standards

1 – ENTSO-E objectives

ENTSO-E objectives - in brief terms

- Continue the matching process on NC requirements with related standards, technical specifications, reports etc.
- Supporting / pushing / proposing the standardization institutions to develop standards of relevance for the European Network Codes and Guidelines.
- Motivate / support members of the ENTSO-E organisation in attending the standardization activities.

2 – Network code match to standards

NC RfG matching to current standards – CENELEC / IEC

In total approx. 60 individual technical requirements

Match to standards

- EN 50438 – Green:3, Red: 2
- CLC/TS 50549-1 – Green: 17, Red: 13
- CLC/TS 50549-2 – Green:17, Red: 13
- IEC60034-1 - Green: 3, Red: 1
- IEC60034-2 – Green: 3, Red: 1
- IEC/TS 62786 – doc not released yet

Green: Match OK
Red: Match NOT OK

2 – Network code match to standards

NC DCC - match to standards

- IEC 62786 Ed.1: Demand Side Energy Resources Interconnection with the Grid – potential candidate, but not yet investigated

NC HVDC - match to standards

- CLC/TR 50609 identified until now – match to NC HVDC articles to be prepared
- IEC 62747 Ed 1.0, Terminology for VSC...- match to definitions to be prepared

3 – Progress on related CENELEC standards

CLC/EN 50438-1:2015 - Requirements for micro-generating plants to be connected in parallel with public low-voltage distribution networks

- EN proposed to be discontinued and the non overlapping requirements to be merged into CLC/TS 50549-1
- Decision to be made at the TC8X meeting in Oct 2016

CLC/TS 50549-1:2015 - Requirements for generating plants to be connected in parallel with distribution networks - Part 1: Connection to a LV distribution network above 16 A

- Revision proposed for implementation – to be approved at the TC8X meeting in Oct 2016
- New revision is foreseen Q1, 2017

CLC/TS 50549-2:2015 - Requirements for generating plants to be connected in parallel with distribution networks - Part 2: Connection to a MV distribution network

- Revision proposed for implementation – to be approved at the TC8X meeting in Oct 2016
- New revision is foreseen Q1, 2017

CLC/TS 50549-10 - Requirements for generating plants to be connected in parallel with distribution networks - Part 10: Tests demonstrating compliance of units

- Proposed as a new working item proposal – to be approved at the TC8X meeting in Oct 2016
- First edition could be foreseen 2018

3 – Progress on related CENELEC standards

CLC/TR 50609:2014 Technical Guidelines for Radial HVDC Networks

- Technical report is proposed to be reviewed in 2017 by the CLC/TC 8X / WG 06 System Aspects of HVDC Grids
- Decision on revision to be made by the TC8X management board following an NWI for revision

Guideline and Parameter Lists for Functional Specifications for HVDC Grid Systems

- A technical report structure is proposed by the CLC/TC 8X / WG06 System Aspects of HVDC Grids
 - Part1: Concepts and Guidelines
 - Part 2: Operating Conditions and Performance Requirements
- Decision to be made by the TC8X management board following an NWI for development

Question and answers



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