EU Network Codes

Energy Networks Association

DCRP Issues and Update

DCRP_18_01_03

4 January 2018

Agenda

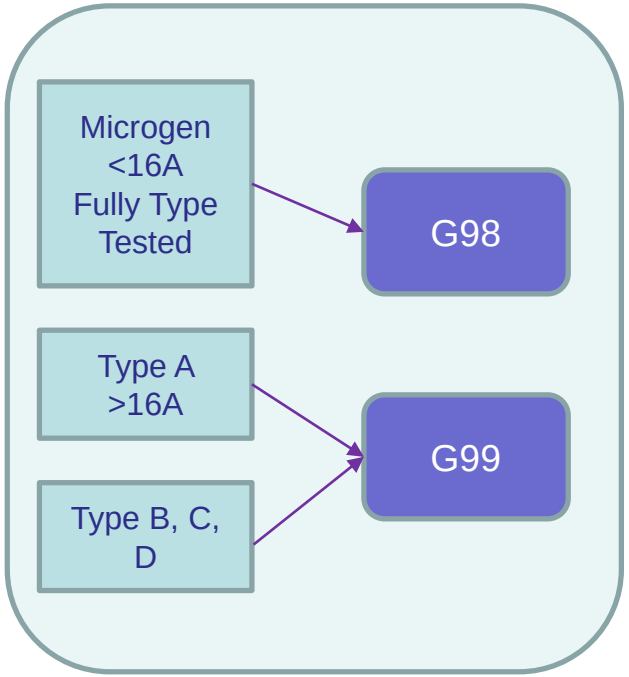
1. SOGL Update
    a) Data Exchange and KORRR
2. RfG Developments
    a) Structure of Distribution Code documents
    b) Stakeholder workshops – outcomes
    c) Timeline etc
    d) GC0102 Consultation
    e) Alternatives
3. Other Codes update
4. Issues to note

SOGL Issues

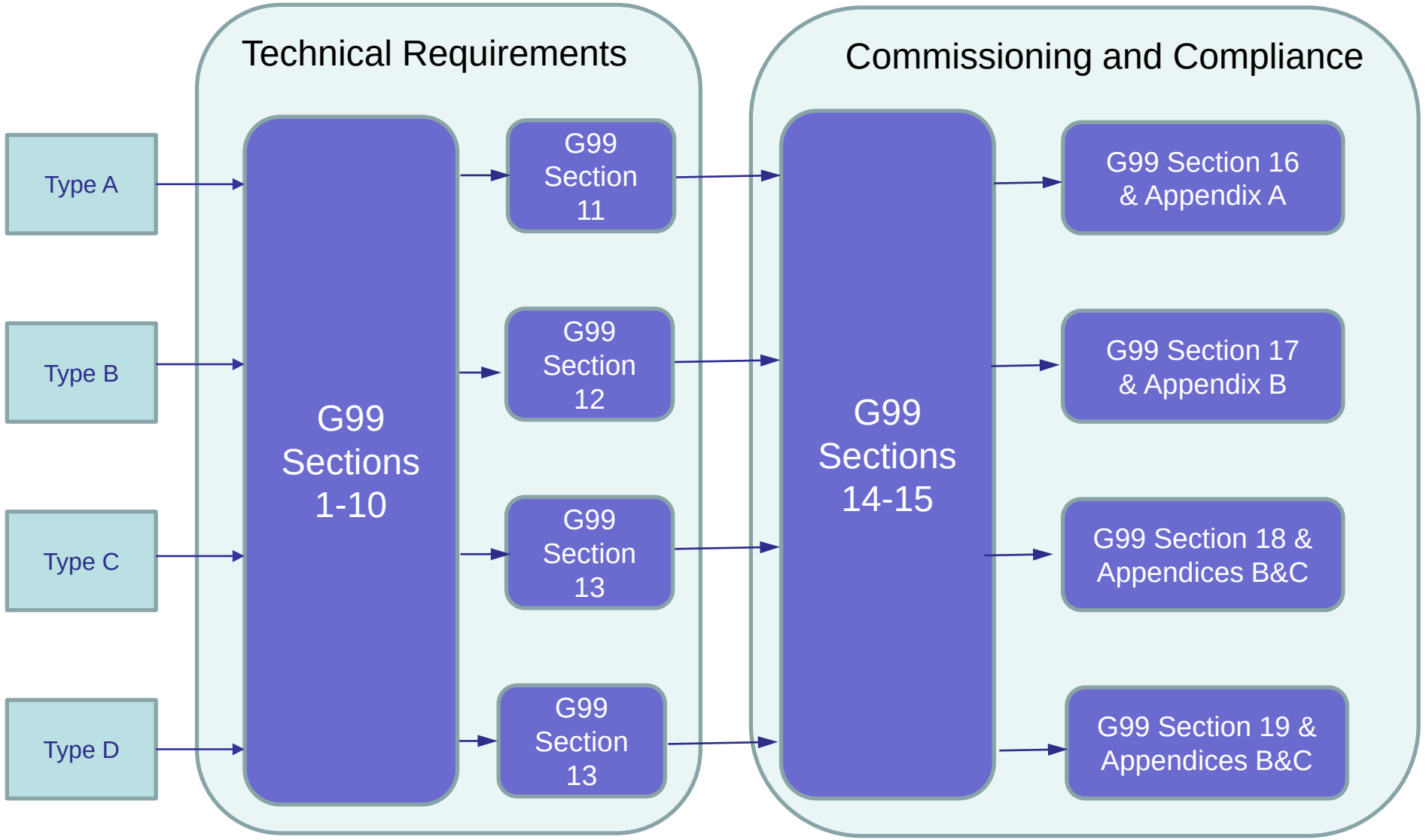
- Nomenclature changed back to SOGL from TSOG
- Entry into force - 14 September 2017
- GC0106 Joint WG now meeting to deal with Articles 40-53 dealing with real time data exchange.
- NG now proposing to make time in January to undertake a detailed mapping of the data transfer articles
- “Key Organizational Requirements, Roles and Responsibilities” (KORRR) document on data exchange as required by Article 40(6) of TSOG – has been consulted on.
- KORRR Stakeholder workshop in Brussels 14/11. Seems ENTSO-e was listening to a number of stakeholder petitions that included our concerns about the KORRR going beyond its legal remit. NG appear to be generally in the same place as GB DNOs re drafting overreach (but maybe in a minority in ENTSO-e).
- Not clear exactly what the next steps are for KORRR – but it needs to be approved by all national regulators in March 2018

- Also not yet clear when work in GB to implement the rest of the SOGL will be started.

Stakeholder support for G98/G99 division

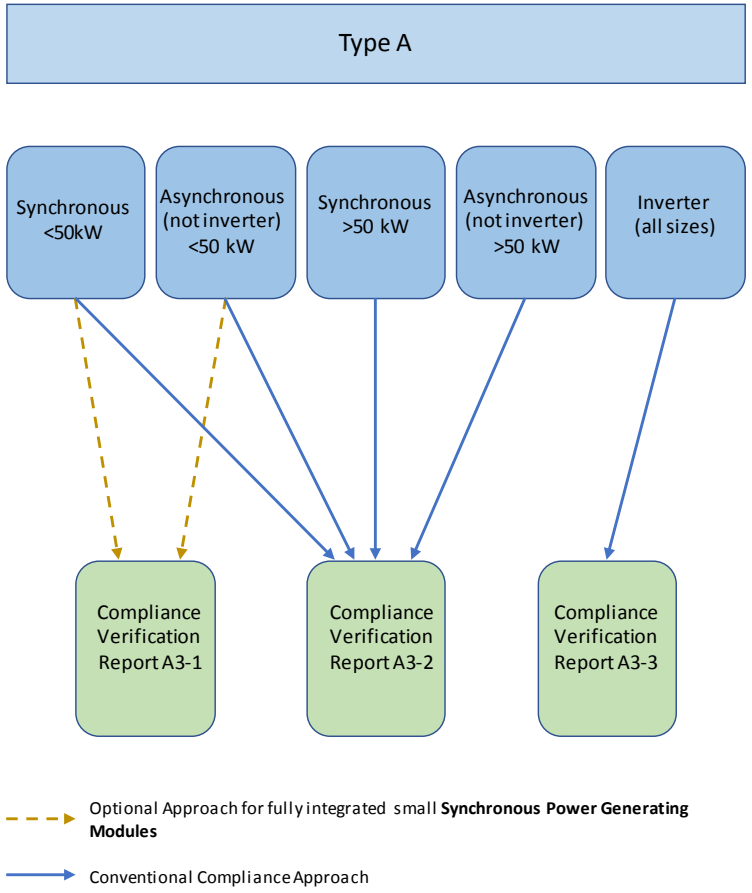


Stakeholder support for G99 structure



Compliance approach for Type A

- The approach to dealing with the variety of Type A generator technology, and the need to extend type testing capability above the historic 50kW threshold has resulted in the approach in the diagram below, following feedback at stakeholder workshops.



Outcome from Workshops - 1

- Inclusion of diagrams to assist with document structure
- Addition of example figures showing arrangements for different types / pre G99 and G99 connections
- A re-write of the Type A testing annex splitting synchronous machines and PPM – basis of this text is G83 with modifications following w/shop
- Split of Type A compliance forms (Annex A4) into <50 kW and >50kW
- Split of Testing Annexes Type B, C and D into Type B (Annex B) and Type C and D (Annex C)
- Other changes to respond to comments, remove some unnecessary type B requirements, remove some duplicated text and keep in line with NG drafting
- The need, or otherwise for accommodation of non type-tested generation of less than 16A per phase. Stakeholders seem to agree that there is no case to allow for such generation. Also Power Generating Modules of <800W will also be dealt with exclusively in G98.
- Some inappropriate requirements imported from the Grid Code drafting in error in early G99 drafts have been removed, particularly for Type B modules.

Outcome from Workshops - 2

- Relevant tests for small synchronous machines, recognizing that much of the historic testing for small machines in G59 has been based on inverter technology. The drafting has now separated synchronous machines from Power Park Modules. The current proposals do not subject small synchronous machines to physical tests for RoCoF withstand. It is expected that further international debate will occur in the future in relation to type testing etc of small synchronous machines as part of the development of EN 50549.
- The connexion application process has been substantially revised through stakeholder discussion, as laid out in the annexes to G99. Stakeholders and DNOs seemed aligned that it is inappropriate to consider extending the use of EON and ION to embedded generation smaller than Type D and will instead relay on the RfG introduced Power Generating Module Document. The draft proformas etc in the annexes have also been improved with stakeholder comments and feedback.
- Type testing can be undertaken on a whole Power Generating Module, or it can be undertaken on various components. In the latter case, sufficient commissioning checks remain necessary on site to ensure the functional integrity of the module, for which guidance has been drafted.
- Diagrams have been added to show how G99 applies to various combinations of Power Generating Modules and Generating Units, both pre RfG and RfG-compliant and including storage.

RfG Timeline

- 04/01 DCRP
- 04/01 & 05/01 G98/G99/D Code/ mapping workshops
- 09/01 Extraordinary GCRP
- 10/01 GC0102 Consultation
- 31/01 Consultation closes
- 08/02 DCRP
- 08/02 GCRP (or maybe 09/02)
- 14/02 Report to the Authority

GC0102 Consultation

- Draft DCRP consultation paper attached to these papers.
- Consultation versions of D Code, G98 and G99 will be pretty much as the copies circulated with the GC0102 report to the DCRP and GCRP – although we are continuing to make detailed improvements to the drafting based on continuing stakeholder feedback up to the consultation publication.
- The consultation will be complete before the February DCRP, by which time it is intended to have drafted the recommendation to the Authority.

Alternatives

- Banding
  - Original NG proposal 800W < Type A < 1MW < Type B < 10MW < Type C < 50MW < Type D
  - Alternative proposal 800W < Type A < 1MW < Type B < 50MW < Type C < 75MW < Type D
  - 12 WG votes for the Original; 4 WG votes for the Alternative
- More Stringent
  - The Alternative Modification suggests that there should be no formal notification stages for a Transmission connected generator of size smaller than Type D until a Final Operational Notification is issued. The Original proposes using EON and ION (although in an early drafting incarnation using different terminology).
  - 15 WG votes for the Original; 1 WG vote for the Alternative
- In both cases Ofgem will be able to chose between the Original and the Alternative.
- The Banding Alternative would have a marginal effect on Distribution Code and G99 drafting, although this has not been formally explored in detail – but mainly for Type C and D which would also be affected by LEEMPS requirements.
- The More Stringent Alternative has no effect on Generators connecting to distribution networks.

HV DC

- No update since last meeting

- It is theoretically possible that a customer will seek a HVDC connexion to a DNO's 132kV network – which would then need to be HVDC Code compliant.
- There are no HVDC requirements in the Distribution Code
- Suggested approach is to do nothing in the short term, but be prepared to create something driven by a project should one come along
- Note that internal DNO DC projects do not necessarily drive the need for D Code requirements (because do not impose requirements on Users)
- In the medium term (ie when the other EU NC pressures have abated) use DNO and NG expertise to create a light touch set of D Code requirements.

DCC Update

- GC0104 has started looking at the detail of DCC implementation
- It has been suggested that the bulk of new requirements for demand side capabilities be drafted into a new section (DPC 9) of the D Code.
- However it is still not clear that it is appropriate to essentially repeat DCC requirements in the D Code (although some additional detail over and above the DCC is required).
- Some exploratory drafting of requirements has started.

GL Electricity Balancing and TERRE

- No update since last meeting

DCRP Issues

- The DCRP is invited to note and endorse:
  - Progress in developing G98 and G99, with interested stakeholder input from ENA workshops
  - The imminent DCRP consultation on the content of G98, G99 and Distribution Code to implement the RfG (which will run in parallel with the GCRP consultation on G Code changes)
  - The intent to update the DCRP with the results of the consultation at the 08/02/18 DCRP