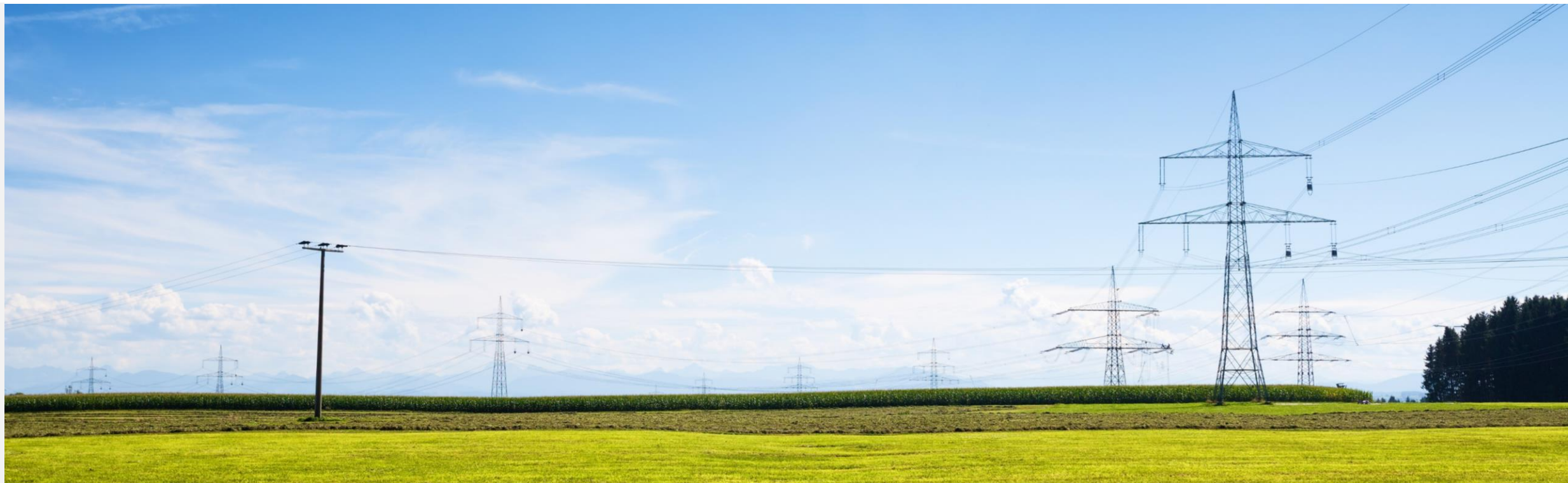


# Future Expert Groups – main comments from the survey

TOP.6

23rd GC ESC meeting, 22 September 2021



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# Topics that have been prioritized

- Harmonization of Certification and key functions of PGM / Product family grouping and EU accepted certificate for manufacturers
- Advanced Grid Services and Controls for Grids with High Penetration of DER
- Requirements for off-shore power transmission platforms / Off-shore HVDC strategy

# Main comments received for all topics 1/2

- **Requirements for off-shore power transmission platforms / Off-shore HVDC strategy**
  - Uncertain what can be achieved by GC ESC
  - First step should be the assessment of existing work in order to identify realistic objectives for an EG and relevant with connection requirements
  - Standardisation and harmonized functional, operation, maintenance are of paramount importance to reduce prices
  - Safety should be included into the list of requirements to be analysed
  - Not relevant for all stakeholders
- **LFSM - O/U: Harmonized or not settings for the droop control**
  - Important topic and requirement, need for harmonisation in the context of system splits
  - Important but not relevant for GC ESC EG, can be treated by TSOs or in Q&A/Issue Logger/dedicated workshop format
- **Weak grid supporting regulation**
  - Scope not clear and possibly could be solved via Q&A/Issue Logger/dedicated workshop
  - Harmonisation is needed but also is mainly achieved through standardisation
  - Likely to be combined with the one related to grid forming aspects since both tackle challenges from high RES penetration
- **Inconsistency amongst member states of type classification definition for synchronous generating units**
  - Not relevant for GC ESC EG and could be treated faster via Q&A/Issue Logger/dedicated workshop if needed
  - Clarifications are needed and whether it is linked to higher certification and planning costs
- **Advanced Grid Services and Controls for Grids with High Penetration of DER**
  - Important but parallel discussions e.g. in CIGRE need to be taken into consideration
  - To consider how better the RfG can cover those services – emerging issue
  - Important to explore the topic and understand the needs – requirements for such services should be equally split between operators and manufacturers
  - Opportunity to address the topic today with a view to having in the mixture of all available solutions what is needed in our future system for a stable and safe operation

# Main comments received for all topics 2/2

- **Harmonization of Certification and key functions of PGM / Product family grouping and EU accepted certificate for manufacturers**
  - See 50549-10
  - Very valuable for stakeholders to minimize all the uncertainties of compliance assurance
  - We need to rationalize the objectives and task description and benefit from whatever has already been discussed and achieved e.g. IGD
  - Add “To define the use of certified models as an acceptable tool for showing compliance with FRT requirements”. This is a BIG topic where the grid operator expects each and every unit to be tested and certified (no family definition accepted and normally forced to make FRT tests)
- **Harmonization of Communication Architectures for remote control of DER**
  - Already available standards e.g. from IEC TC 57. Improvements can take place through those groups if needed. No need for an EG
  - Topic can be assumed as out of the scope from connection requirements. Such topics e.g. Cybersecurity NC could be monitored and discussed maybe in specific slots at GC ESC in collaboration with other ESCs (SO ESC)
  - Important for development of DER
  - Add “To define measures to ensure stable grid operation in case of massive communication faults or hacker attacks (i.e. switch to autonomous operation mode)”
- **Simultaneous deviations of voltage and frequency**
  - Unclear to understand what the problem is – difficulty for equipment coping with it?
  - Could be an issue for DSOs in high DER scenarios
  - First to try to assess the likelihood and extension of this phenomena, and to characterize their values, in order to assess the reliability of the network
- **Reactive power capability**
  - Mainly a local issue - so limited benefit in trying to find a common approach beyond what's already in either the RfG or 50549
  - The regulation of market procurement is currently being developed in some countries