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Progress since the last ESC GC

- The EG has now met three times since the last ESC GC, with the last meeting being on 27 November.
- Both the EV/EVSE and the HP workstreams have continued to meet, formally 8 times for EV/EVSE and once for HP.
- Both workstreams have continued to develop the technical input to technical annexes which may be incorporated within the NC RFG 2.0 and NC DC 2.0.

EV workstream progress - 1

Technical Annex for the RfG

- A first complete draft is being finalised and is being subject to line by line review by the workstream of all the workstream members' comments to date.
- The target is still to complete before January.
- Its main content is the split of functions between the EV and EVSE, and a series of compliance modules which are based on EN 50549-10 but updated for the RfG 2.0 requirements.
- It also includes the high level requirements for the compliance scheme although needs updating to reflect the ACEA proposal below.

Certification

- As reported at the last ESC, stakeholders have concluded that for the fixed EVSE, the existing national compliance schemes should be used to certify the EVSE
- ACEA has confirmed that manufacturers believe that the whole vehicle type approval
 approach should be used to certify EVs, and have written to the EC to confirm their view.
- The workstream has yet to consider the NC DC 2.0 implications in detail.



EV workstream progress - 2

- The WS made a presentation of its work to DG GROW's Motor Vehicle Working Group on 02/10. This was a 30 minutes slot in their all day meeting. It did not generate any questions but informal feedback is that it was well received.
- The WS had a meeting with ENTSO-e on 22 October to discuss the two letters which the WS had sent to ENTSO-e. The topics in the two letters are:
 - Definition of Pref used for LFSM-U and the accuracy requirements for LFSM-U;
 - The interpretation of "remain connected" and the challenge of active power recovery if voltage only recovers to 0.85pu.
- ENTSO-e confirmed that ENTSO-e appears to have the same view about the definition of Pref as the workstream does. The other issues are still open. The changed definition of Pref will require a modification to the consensus NC 2.0 legal text from the ACER workshops.
- ENTSO-e also raised 3 points from the workstream's first letter which need more attention workstream discussions have agreed with 2 of ENTSO-e's points, with the remaining one still being discussed.
- ENTSO-e will propose dates for a further meeting.



EV workstream progress - 3

- One issue recently debated at length V2G operating in charge-only mode
 - Irrespective of the charging mode requested by the owner of the EV, a V2G EV (connected to a V2G charge point) should still fulfil the NC RfG and local grid code requirements even if operating in charge-only mode.
 - Currently the draft standards have not fully envisaged this requirement.
 - Within the standards it is possible to ensure NC RfG compliance, but in the short term, local (potential) grid code issues such as modulation of reactive power whilst charging will not be possible.



AC connected V2G operating in charge-only mode

			V2G capable EV	
		V1G capable EV ¹⁾	Uni-directional charging (V1G mode / consume only)	Bi-directional charging (V2G mode / consume and inject)
Common requirements of NC DC 2.0 and NC RfG 2.0	Frequency and voltage operating range	No difference		
	ROCOF			
	LFSM	LFSM-UC	LFSM-U-EV	
	FRT (max. Recovery time)	< 60s	< 1s	
Additional requirements of this technical annex	Additional National requirements	Not supported	Not currently enabled ²⁾	Supported ³⁾

¹⁾ V1G EV means EV equipped with a unidirectional on-board charger (i.e. limited to NC DC 2.0 support



²⁾ Capability to apply requirements of RfG 2.0 (+technical annex) when charging is given by hardware but can only be enabled after a revision of the digital communication standard to communicate the grid code parameter.

³⁾ see table 2 of this technical annex

HP workstream progress

Technical Annex

- The first draft is nearly complete and the workstream is currently reviewing the draft.
- The workstream is continuing to develop alternative thoughts for further discussion with ENTSO-e on how LFSM-UC can be implemented by disconnexion at random frequencies and subject to a simple test regime.
- Certification discussions with the Commission
 - In preparation for further discussions on how technical requirement may be included in the Ecodesign regulations, the workstream had made draft amendments to the regulation for space heaters
 - These will need further detailed discussion with the Commission in due course.

Review of the Terms of Reference

- The Terms of Reference were originally drafted around the start of 2025, and formally approved by the ESC GC at its March 2025 meeting.
- The ToR envisaged that the work of the Expert Group might be complete around now.
- Both the realistic timeline, and some of the detail of the deliverables need to be updated.
- The timeline is proposed to be extended until October 2026.



Main additional deliverables in ToRs:

Main EG ToR:

- Recommendations for the establishment and ongoing management of compliance schemes for EVs, EVSE and heat pumps.
- Draft technical annexes which the EU Commission may wish to include in the final versions of NC RfG 2.0 and NC DC2.0.

EV ToR:

- Recommendations for the establishment and ongoing management of compliance schemes for EVs and EVSE.
- Draft technical annexes which the EU Commission may wish to include in the final versions of NC RfG 2.0 and NC DC2.0.

HP ToR:

- Recommendations for the establishment and ongoing management of compliance schemes for heat pumps.
- Draft technical annexes which the EU Commission may wish to include in the final versions of NC DC2.0.

Accept Terms of Reference Amendments?

Subject to any discussion or points at today's meeting, can the ESC accept the revised Terms of Reference?