



OICA proposal on charging for each Annex, 2022-12-02 (CP SPAIN)

(Based on “IWG-EMC-29-04e (Sec) Workshop on charging cables - draft report”

and “IWG-EMC-32-06 (Sec) CPs answers to the Questionnaire-Current-Status-Vehicle-test-charging mode_20221109”)

Annex	OICA Proposal (after GRE IWG workshop)	Justification	Questionnaire Follow-up (Practical application of R10.06)	Updated OICA Proposal for R10.07	Voting CP position
Annex 4 (BB RE)	3 modes to be tested: 1) DC Charge mode (if available) AND 2) AC Mode 1 if it is the only mode available. AND 3) One of the AC modes to be selected based on the maximum total nominal charge current from Mode 2 or Mode 3 single phase or Mode 3, 3 phase.	In line with agreement from Workshop Add “total” to clarify in case of single phase versus 3-phase charging systems.	Mode 1: (Y)/N Mode 2: vehicle ICCPD (only when vehicle manufacturer provides charging cable or longest cable) Mode 3: OEM wallbox or compatible (3-phase covers single phase) Mode 4: any DC charger	Mode 1: if it is the only mode available and if it can't be covered by mode 3. Mode 2: yes, with vehicle ICCPD cable, if it is the only mode available or if ICCPD cable is not tested according to IEC 61851-21-2. Mode 3: yes, 3-phase preferred, one configuration to be selected based on the maximum total nominal charge current. Mode 4: yes, if available	NO

Annex	OICA Proposal (after GRE IWG workshop)	Justification	Questionnaire Follow-up (Practical application of R10.06)	Updated OICA Proposal for R10.07	Voting CP position
Annex 6 (RI)	Test in any one of the charge modes available in the vehicle. Exact test mode shall be agreed between manufacturer and Technical Service. (Failure criteria is independent on charge mode)	In line with agreement from Workshop	<p>Mode 1: (Y)/N</p> <p>Mode 2: vehicle ICCPD (only when vehicle manufacturer provides charging cable or longest cable), Can be covered by mode 3</p> <p>Mode 3: OEM wallbox or compatible (3-phase covers single phase)</p> <p>Mode 4: any DC charger</p>	<p>Test of one AC mode, preferably mode 3 and DC mode 4 if available.</p> <p>Exact test mode shall be agreed between manufacturer and Technical Service. (Failure criteria is independent on charge mode).</p>	YES
Annex 11 & 12 (AC, harmonic s/ flicker)	<p>2 modes to be tested:</p> <p>1) AC Mode 1 if it is the only mode available. AND</p> <p>2) One of the AC modes to be selected based on the maximum total nominal charge current from Mode 2 or Mode 3 single phase or Mode 3, 3 phase.</p>	Justification for Mode 3: no other electronic between vehicle interface and H&F analyzer if a pilot signal generator is used to set the vehicle in charging mode.	<p>Mode 1: (Y)/N</p> <p>Mode 2: vehicle ICCPD (only when vehicle manufacturer provides charging cable or longest cable)</p> <p>Mode 3: OEM wallbox or compatible (3-phase covers single phase)</p> <p>Mode 4: not applicable</p>	<p>Mode 1: if it is the only mode available.</p> <p>Mode 2: yes, with vehicle ICCPD cable, if it is the only mode available or if ICCPD cable is not tested according to IEC 61851-21-2.</p> <p>Mode 3: yes, 3-phase preferred, one configuration to be selected based on the maximum total nominal charge current.</p> <p>Mode 4: not applicable</p>	NO

Annex	OICA Proposal (after GRE IWG workshop)	Justification	Questionnaire Follow-up (Practical application of R10.06)	Updated OICA Proposal for R10.07	Voting CP position
Annex 13 (CE; AC, DC)	3 modes to be tested: 1) DC Charge mode (if available) AND 2) AC Mode 1 if it is the only mode available. AND 3) One of the AC modes to be selected based on the maximum total nominal charge current from Mode 2 or Mode 3 single phase or Mode 3, 3 phase.	It was agreed during the workshop that Annex 13 will be identical to Annex 4 except we need to define which line to measure if Modes, 3 phase is selected (proposal is to measure between L1 and neutral]. To be discussed in the next IWG meeting Justification for Mode 3: no other electronic between vehicle interface and artificial network.	Mode 1: (Y)/N Mode 2: vehicle ICCPD (only when vehicle manufacturer provides charging cable or longest cable) Mode 3: OEM wallbox or compatible (3-phase covers single phase) Mode 4: only if cable longer than 30 m	Mode 1: if it is the only mode available and if it can't be covered by mode 3. Mode 2: yes, with vehicle ICCPD cable, if it is the only mode available or if ICCPD cable is not tested according to IEC 61851-21-2. Mode 3: yes, 3-phase preferred, one configuration to be selected based on the maximum total nominal charge current. Mode 4: yes, if applicable	NO
Annex 14 (CE ; Telecom)	2 modes to be tested: 1) DC Charge mode (if available) AND 2) AC Mode 3 to be selected based on the maximum total nominal charge current from Mode 3 single phase or Mode 3, 3 phase.	Consistency with OICA proposal for emission tests. Not available for Mode 2.	Almost no experience	Mode 1: not applicable. Mode 2: not applicable. Mode 3: to be selected based on the maximum total nominal charge current from Mode 3 single phase or Mode 3, 3 phase. Mode 4: if available.	YES

Annex	OICA Proposal (after GRE IWG workshop)	Justification	Questionnaire Follow-up (Practical application of R10.06)	Updated OICA Proposal for R10.07	Voting CP position
Annex 15 (EFT)	<p>3 modes to be tested: 1) DC Charge mode (if available) AND 2) AC Mode 1 if it is the only mode available. AND 3) AC Mode 3 to be selected based on the maximum total nominal charge current from Mode 3 single phase or Mode 3, 3 phase.</p>	<p>During the workshop it was agreed to test in one of the AC charge modes, Mode 3, single phase or in 3 phases but only between L1 and Neutral. If Mode 1 is the only mode, Mode1 [Testing in Mode 4 was not discussed as it is generally excluded]</p> <p>Justification for Mode 3: no other electronic (except standardized coupling network) between vehicle interface and burst generator</p>	<p>Mode 1: (Y)/N Mode 2: vehicle ICCPD (only when vehicle manufacturer provides charging cable or longest cable), Can be covered by mode 3 Mode 3: OEM wallbox or compatible (3-phase covers single phase) Mode 4: any DC charger</p>	<p>Mode 1: if it is the only mode available. Mode 2: yes, with vehicle ICCPD cable, if it is the only mode available or if ICCPD cable is not tested according to IEC 61851-21-2. Mode 3: to be selected based on the maximum total nominal charge current from Mode 3 single phase or Mode. Mode 4: if available and applicable</p>	NO

Annex	OICA Proposal (after GRE IWG workshop)	Justification	Questionnaire Follow-up (Practical application of R10.06)	Updated OICA Proposal for R10.07	Voting CP position
Annex 16 (surge)	<p>3 modes to be tested:</p> <p>1) DC Charge mode (if available) AND</p> <p>2) AC Mode 1 if it is the only mode available. AND</p> <p>3) AC Mode 3 to be selected based on the maximum total nominal charge current from Mode 3 single phase or Mode 3, 3 phase.</p>	<p>During the workshop it was agreed to test in one of the AC charge modes, Mode 3, single phase or in 3 phases but only between L1 and Neutral. If Mode 1 is the only mode, Mode1</p> <p>[Testing in Mode 4 was not discussed as it is generally excluded]</p> <p>Justification for Mode 3: no other electronic (except standardized coupling network) between vehicle interface and surge generator</p>	<p>Mode 1: (Y)/N</p> <p>Mode 2: vehicle ICCPD (only when vehicle manufacturer provides charging cable or longest cable), Can be covered by mode 3</p> <p>Mode 3: OEM wallbox or compatible (3-phase covers single phase)</p> <p>Mode 4: any DC charger</p>	<p>Mode 1: if it is the only mode available.</p> <p>Mode 2: yes, with vehicle ICCPD cable, if it is the only mode available or if ICCPD cable is not tested according to IEC 61851-21-2.</p> <p>Mode 3: to be selected based on the maximum total nominal charge current from Mode 3 single phase or Mode.</p> <p>Mode 4: if available and applicable</p>	NO

Annexes 11-16: All requirements concerning connection to a public network shall be in line with international requirements (IEC) for equipment connected to. No relaxation/deviation (e.g. only one phase) is strongly recommended to fulfil other legal requirements.