

Justification of Flowcharts + phrase

The origin of the introduction of the flowcharts proposed by OICA has its motivation in section 7.1.3, within 7 which refers to the configuration of the vehicle in mode coupled to the grid for recharging the traction battery:

7. Additional specifications in the configuration "REESS charging mode coupled to the power grid."

7.1.3. A vehicle in configuration "REESS charging mode coupled to the power grid" should be tested with the **charging harness delivered by the manufacturer**. In this case, the cable shall be type approved as part of the vehicle.

In the opinion of Spain and France, the flow diagrams proposed for Mode 2 charging (CCPD cables) did not respect section 7.1.3 since they proposed not carrying out the tests applicable to all cables supplied by the manufacturer.

The justification for the proposal was that manufacturers had many cables (>50, according to OICA representatives in off meeting) and that the manufacturers of these cables sometimes modified them, and the vehicle manufacturers could not take new measures for these changes. To avoid these measures, in the OICA proposal the possibility of avoiding these tests on all cables was introduced in the flow diagrams, if they had a test report according to IEC 61851-21-2 if this report was issued by a laboratory. accredited by ISO 17025.

This standard has some tests similar to R10, but not all, and also the test conditions are different (**a resistive load is used instead of a vehicle**) to those described in R10, with the vehicle connected, so **the results are not comparable, especially in conducted emission disturbances** (annex 13).

Spain and France did not agree with this from the beginning, but after many conversations and arguments on both sides, a consensus was reached at the IWG, accepting flow charts. but with the condition of the introduction of the described phrase (highlighted in yellow):

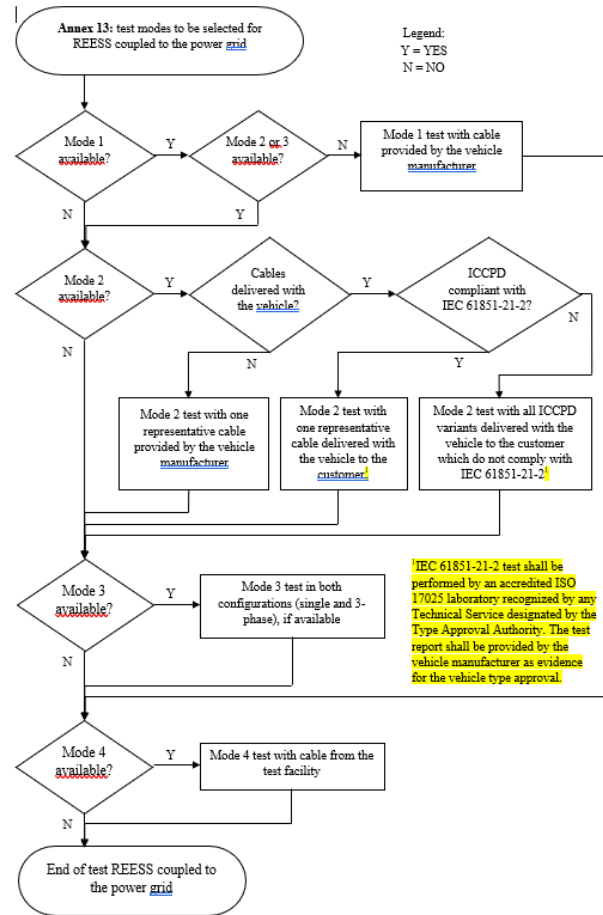


Figure 1: Charging mode configuration for Annex 13

The IEC 61851-21-1 test shall be performed by an ISO 17025 accredited laboratory recognized by **ANY** technical service designated by the Type Approval Authority. The vehicle manufacturer will submit the test report as evidence for vehicle type approval. This paragraph is included in the regulations in many places.

This means that any technical service designated by the type approval authority can accept any ISO 17025 laboratory accredited for IEC 61851-21-1 that it trusts.

The importance of including this phrase is a matter of responsibility of the technical service, and therefore of the approval authority, and on the other hand, of trust in its accredited laboratory.

We are proposing to include charging cables in the approval without testing them according to the regulations, accepting test reports external to the vehicle approval supervision process, and this responsibility is the responsibility of the approval authority and the technical services designated and recognized by this authority.

For all these reasons, the proposal for flowcharts is complete, flowchart plus sentence, if not, the proposed flowcharts must be deleted completely.