2021, July 2nd

**New proposals from OICA EMC-TF for R10 revision**

Submitted by OICA EMC TF

These new proposals concern :

* Editorial changes for « e-call »
* Precisions for autonomous vehicle test in immunity (annex 6)
* Precisions on charging modes and associated cables to be used for the various annexes concerning vehicle in charging mode test
* Minimum charging current for emission test

1. **Editorial changes for e-call**

The term « e-call » is not the one used at UNECE level and proposal is to use « accident emergency call systems (AECS) »

*Note : Detailed proposal have been included directly in document TF-EMC-22-05e\_Draft R10.07-2021\_07\_02*

1. **Precisions for autonomous vehicle test in immunity (annex 6)**

In the initial proposal from OICA EMC TF for introducing autonomous vehicle and in regard to operating conditions the following wording was proposed :

« Autonomous driving system ([level 3 or higher]) shall be operational(1)

This proposal was still open to which autonomous driving systems have to be tested and OICA experts proposa lis to refer to official defintions from WP1 (see extract from document ECE/TRANS/WP1/173/Add1 in Annex) as follows

Add in R10 the 2 following definitions :

2.26 “Automated driving system” refers to a vehicle system that uses both hardware and software to exercise dynamic control of a vehicle on a sustained basis.

2.27 “Dynamic control” refers to carrying out all the real-time operational and tactical functions required to move the vehicle. This includes controlling the vehicle’s lateral and longitudinal motion, monitoring the road, responding to events in the road traffic, and planning and signalling for manoeuvres.

Replace in Annex 6 tables or concerned paragraphs « Autonomous driving system ([level 3 or higher]) » by “Automated driving system”

*Note : Detailed proposal have been included directly in document TF-EMC-22-05e\_Draft R10.07-2021\_07\_02*

1. **Precisions on charging modes and associated cables to be used for the various annexes concerning vehicle in charging mode test**

OICA EMC TF experts consider that R10 could be improved with clarification on :

* Which charging modes should be tested
* Which charging cables should be used

for all annexes which requires test on vehicle in charging mode

This proposal concerns :

* Annex 4 paragraph 2.2 and 4.3
* Annex 6 paragraph 2.2.1. and 4.1.1
* Annex 11 paragraph 2.1.
* Annex 12 paragraph 2.1.
* Annex 13 paragraph 2.1. and new paragraph 4.3
* Annex 14 paragraph 2. and new paragraph 4.3
* Annex 15 paragraph 2. and new paragraph 6
* Annex 16 paragraph 2. and new paragraph 6

*Detailed proposal have been included directly in document TF-EMC-22-05e\_Draft R10.07-2021\_07\_02*

1. **Minimum charging current for emission test**

After analysis of available data, technical constraints and discussions on this topic, OICA EMC TF experts propose :

* For emission test in AC charging mode
  + Not to change the minimum current value from 80% to 20%
  + Improve wording

As follows :

« If the current consumption can be adjusted, then the current shall be set to at least 80 per cent of its ~~nominal~~ maximum rated charging/input current value for AC charging.

* For emission test in DC charging mode
  + to change the minimum current value from 80% to 20%
  + Improve wording

As follows :

If the current consumption can be adjusted, then the current shall be set to at least ~~80~~ 20 per cent of its nominal value or to a minimum of 20 A (if the 20 per cent of its nominal value cannot be achieved in the test facility) for DC charging ~~unless another value is agreed with the type approval authorities~~. »

Proposal above is valid (for AC and DC or for AC only) for Annex 4, 11, 12, 13 and 14

In addition for the immunity test with the 20% minimum requirement it is proposed to replace

« If the current consumption can be adjusted, then the current shall be set to at least 20 per cent of its nominal value. »

By

« If the current consumption can be adjusted, then the current shall be set to at least 20 per cent of its ~~nominal~~ maximum rated charging/input current value. »

*Note : Detailed proposal have been included directly in document TF-EMC-22-05e\_Draft R10.07-2021\_07\_02*

**Annex : extract from document ECE/TRANS/WP1/173/Add1**

