Minutes of the 1st meeting of the

Task Force on Electromagnetic Compatibility (TF EMC)

Schedule: January 27th 10:00 - 17:00

Venue: Renault Technocentre, 1 Avenue du Golf, Guyancourt, France
Building: le Gradient
Room: Les Ecrins – Ground Floor (Rue Intérieure)

Secretary: Imran Cosadia (OICA)

Participants:

Hitoshi Tsukahara (Japan)
Akihiko Nojima (Japan)
Shinichiro Itoh (Japan)
Louis-Ferdinand Pardo (France)
Stephane Blanc (France)
Sergey Vylegzhanin (RF) – *by phone/WebEx*
Ekaterina Laguzina (RF) – *by phone/WebEx*
Ivan Vinogradov (RF) – *by phone/WebEx*
Frank Golisch (OICA)
Francoise Silvani (OICA)
Benoît Moreau (OICA)
Philippe Favreau (OICA)
Pascale Reyntjens (OICA)
Diego Cuartielles (OICA)
Ayhan Gunsaya (OICA)
Thomas Goldbach (OICA) – *by phone/WebEx*
Hanns-Peter Bietenbeck (OICA) – *by phone/WebEx*
Daniela Leveratto (IMMA) – *by phone/WebEx*

1. Welcome and background information

- TF Secretary introduced the first meeting of the TF EMC and welcomed participants.

2. Introduction of participants

- On-site participation included the OICA delegation, the representatives from France (Mr. Pardo and Mr. Blanc), and representatives from Japan (Mr. Nojima, Mr. Itoh and Mr. Tsukahara). Part of the OICA delegation also participated by teleconference. The representatives from the Russian Federation (Mr. Sergey Vylegzhanin, Ms. Ekaterina Laguzina, and Mr. Ivan Vinogradov) joined at the end of the meeting by teleconference. The representative of IMMA (Daniela Leveratto) joined by teleconference as well, in order to discuss specifically the proposal from China (GRE/2015/36).

3. Structure and organization of the TF

Document: WP.29/GRE/74 (Report of the GRE-74)

- TF Secretary reminded of the reasons why this TF has been created, based on the report from GRE-74 (item 24.) The main principles of a TF were also recalled, as long as the differences with an IWG. TF will be activated every time there is a need to do so (based on CP's proposals at GRE sessions). There is currently no Chair for the TF. TF thinks it would be better to have one. This has to be discussed with GRE.

4. Adoption of the agenda

Document: TF EMC-01-01e-Draft Agenda.docx

Agenda was adopted with no further modification.

5. EMC related topics and consideration of proposals

5.1 Trolley Buses

Document: GRE/2014/41 (Belgium)
GRE-73-20 (Russian Federation)
GRE-74-12 (Russian Federation)

- TF examined the documents submitted by Belgium and the proposals from the Russian Federation. The representative from France requested to recall the background of the proposals, and OICA explained the story behind the Belgium paper, on trolley buses. OICA mentioned that trolley buses are like hybrid vehicles, since they can operate either:

  (a) in bus mode (not connected to the grid)
  (b) in trolley mode (connected to the grid)
  (c) in charging mode (connected to the grid)

- OICA outlined that, currently, UN regulations needs to include one sentence saying that trolley buses, when operating in bus mode (moving) or when connected to the grid for charging, should refer to R10. Otherwise, when operating in trolley mode (moving and connected to the grid), the railway standard should be used (IEC 62236-3-1). The proposal for the sentence to be included is: **"R10 is applicable when the trolley vehicle is in motion without connection to external power source or when it is connected to the power grid for stationary charging."**

- This additional sentence should be added either in R10 or in R107. The representative from France underlined that TF should seek advice from GRE about where to include it. TF agreed with that approach and proposed to further add to the sentence some figures to make it more explanatory. OICA will then prepare a proposal and will discuss it during next TF meeting.

- Trolley buses manufacturer, present during the meeting, mentioned that they should go back and check with the representative from Belgium about retracting or amending their former document in the direction of how TF has decided to proceed.

- In addition to the sentence to be added to the UN Regulations, TF commented the document Mutual Resolution No. 2 (M.R.2) of the 1958 and the 1998 Agreements (WP.29/1121), containing Vehicle Propulsion System Definitions (VPSD), should be amended. Item 44. reads: "Electric trolley vehicles are not covered in vehicle regulations at this stage." TF commented that trolley vehicles should then be covered by vehicle regulations in the situation mentioned above (bus mode). As this document is a Resolution, and has no binding aspect, this modification could be done at later step, but it should be mentioned to GRE, and/or WP.29.

- The representative from the Russian Federation joined the meeting via teleconference at the end of the meeting, and asked about TF conclusions on trolley buses. The general opinion of the Russian Federation was to agree with the TF plan to move forward, but will proceed with further check on their end, and will comment TF activity based on the TF meeting minutes.

5.2 Devices for indirect vision

Document: GRE/2015/35 (GRSG)

- OICA recalled the background of the proposal that was adopted at last GRE-74 session. No further issue was detected by TF on that proposal.

5.3 Proposals from China

Document: GRE/2015/36 (China)

- The representative of France, Japan, OICA and IMMA expressed their views on each modifications of the proposal from China. The positions and the justification are summarized in the table below:

R10 provisions	TF opinion	Justification
1.3. (a)	OICA, France and Japan do not support the proposal. IMMA can accept the proposal, but will check with experts.	OICA: The topic is already covered by present wording of §1.3 (c) in R10.
7.4.2.1. **7.4.2.2.**	OICA supports the Chinese proposal from China *with a change of one item:* "the maximum relative voltage change dmax, shall not exceed **6 per cent**". Japan and France aligned with the OICA proposal. IMMA has no comment and will check with experts.	OICA: Vehicles in charging mode can be considered as "switched manually", therefore the "6 per cent" value for dmax is the applicable one.
Annex 4, Appendix 1, Figure 1	OICA, France and Japan do not support the proposal from China to delete the figure 1. IMMA will check.	OICA: It is an additional possibility for L-category vehicles with different requirements for test site than those defined in CISPR12. Therefore the figure shall be kept in R10.
Annex 6, paragraph 4.1.	OICA, France, Japan and IMMA do not support the proposal from China.	OICA: The table for frequency steps is already defined in ISO 11451-1 3rd edition 2005 and Amd1: 2008 which is referred in R10.04 and R10.05. Furthermore, vehicle manufacturers may choose to perform test with more frequency steps.

Annex 6, paragraph 5.1.2.	OICA, Japan, France and IMMA do not support the deletion of the sentence on TLS. The sentence should be kept.	TLS is used by some vehicle manufacturers mainly in the [20-30] MHz frequency range.
	OICA, Japan, France, IMMA do not support making distinction between vehicle categories.	ISO 11451-2 defines the use of 4-field probes method calibration in the [20 or 30 MHz and 2 GHz] frequency band whatever the vehicle category (L,M,N,O).
	OICA has a counter proposal: **"For TLS one field probe at the vehicle reference point shall be used. For antennas, four field probes at the vehicle reference line shall be used"**	

- These comments have to be transferred to the Chinese delegates in order to start discussion and potentially building an informal document for next GRE-75.

5.4 Accident Emergency Call System (AECS)

Document: Discussion paper (NL) - AECD vs R10

- OICA took the floor by reminding the audience of the background of AECS in the frame of the IWG AECS activities (under GRSG).

- The representative of Netherlands could not attend the TF meeting, but sent ahead of the session a discussion paper. During the meeting, the document was shown to the OICA delegation, and to the representative of France and Japan. The document contains questions – see 3rd paragraph of the documents – OICA answered during the session:

  "1. Does R10.04 (and any later version) fully cover the EMC aspects for AECD components to be fitted to vehicles and for vehicles with these systems installed/integrated?"
  OICA: OICA considers that when going through R10.05, paragraph 3.2.1 "Applicability of this Regulation to ESA", it is clear that AECD falls into the scope of R10.05.

  "2. In case not, what amendments can be proposed to Regulation No. 10?"
  OICA: does not apply because of the answer to previous question.

  "3. Are specific EMC provisions necessary within the Regulation on AECS?"
  OICA: general requirements of Regulation No. 10 are adequate and sufficient.

- The representative of France asked about the general aim of R10 and whether it should define functional tests or not. This was also touched during the discussion on the indirect vision device topics, regarding failure criteria and its inclusion in R10. That led to a more general exchange of ideas on the definition of the boundaries of R10 (when referring to primary safety functions).

- It was of general opinion that TF should develop a position paper about the scope of R10, otherwise the same discussion would come up along with each new system (the example of Autonomous Driving was raised). For now, TF decided to leave issue on the agenda in order to discuss it again at next meeting.

6. Any Other Business

- OICA mentioned that it will propose in the future further amendments to refine R10, based on its member's proposals.

7. Next meetings

- Possibly, there will be a short meeting ahead or during the week of GRE-75 (to be checked with UN Secretariat and GRE Chair)