TPMSTI-CI-02-03

2nd session of the GRBP TF

TPMSTI on “Communication Interface” (TPMSTI-CI), 29 September 2020

**ECONOMIC COMMISSION FOR EUROPE**

INLAND TRANSPORT COMMITTEE

World Forum for Harmonization of Vehicle Regulations (WP.29)

Working Party on Noise and Tyres (GRBP)

Task Force on Tyre Pressure Monitoring System and Tyre Installation (TPMSTI)

**Draft Report of the 2nd meeting of the Task Force TPMSTI**

**Amendments to UN Regulation No 141**

**regarding the “Communication Interface”**

**September 29, 2020 starting at 9:15 am ending at 11:30 am (CET)**

**WebEx only !**

[**https://ecwacs.webex.com/meet/avosinis**](https://ecwacs.webex.com/meet/avosinis)

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|  |  | Working Documents\* Documents not yet available |
|  | Welcome and opening remarks |  |
|  | *Mr. Andreas Vosinis (DG-GROW), the Chair of this TF, opened the 2nd meeting of TF on TPMSTI-CI “Communication Interface” and welcomed all participants.* |  |
|  | Introduction of participants and organizations |  |
|  | *All attendees agreed to share the information, which is available on the Attendance List, and to allow uploading of the list to the UNECE Website.**All attendees agreed that information to all experts via mail will be send in such a way that every expert can see the other experts’ mail addresses.* | TPMSTI-CI-02-04\* |
|  | Adoption of the Agenda | [TPMSTI-CI-02-01](https://wiki.unece.org/download/attachments/109349466/TPMSTI-CI-02-01%20Draft%20Agenda%202nd%20meeting%20-%20UN%20R%20No%20141.docx?api=v2) |
|  | *The Group adopted the Draft Agenda.* |  |
|  | Approval of the Draft Report of the 1st meeting |  |
|  | *The Draft Report of the first meeting was approved with the remark, that the numbering of the document was wrong. It should have been* [*TPMSTI-CI-01-04*](https://wiki.unece.org/download/attachments/109349464/TPMSTI-CI-01-04%20%28Sec%29%20Draft%20Report%201st%20meeting%20-%20UN%20R%20No%20141.docx?api=v2)*. The corrected document is TPMSTI-CI-01-04 Rev.1.* | TPMSTI-CI-01-04 Rev.1\* |
|  | (EC) – Proposal for amendments to UN Regulation No. 141* Exchange of information on the documents esp. the sixth meeting of TF on TPMSTI
* Open issue: “Communication Interface” (see below)
* Key elements / Planning
* Informal document for 72nd session of GRBP
 | TPMSTI-CI-01-04 Rev.1\*TPMSTI-CI-02-03\*[TPMSTI-CI-01-03](https://wiki.unece.org/download/attachments/109349464/TPMSTI-CI-01-03%20%28CA%29%201st%20Draft%20proposal%20-%20GRBP-2020-20e%20plus%20Dta%20Com.docx?api=v2) |
|  | **Open issue for UN Regulation No. 141*** Define the requirements for the “Communication Interface” between the towing vehicle and the to be towed vehicle(s) of category O3and O4
* Paragraph 5.6. needs to be updated and Annex 5 needs to be drafted
* Paragraphs 5.5.2. and 5.5.5. need to be reviewed and updated if needed
* ***Communication Interface between N2, N3 & O3, O4***

*§5.6.*Communications interface between towing and towed vehicles*The Group discussed the first Draft Proposal and come to the conclusion, that the “wired” solution can be handled in the same way as in UN Regulation No. 13.**The Group agreed on the following wording for* *§5.6.1.* *Vehicles of category N2 or N3 authorized to tow at least one vehicle of category O3 or O4 and vehicles of category O3 and O4 shall be equipped with a communication interface to exchange TPMS data information between these vehicles. This may be realised as wired or wireless interfaces, provided that the TPMS equipment in the towing vehicle and in the towed vehicle(s) are compatible.**§5.6.1.1.**The data communication with wired equipment shall be based on the braking electric control line conforming to ISO 11992-1 :2019 and 11992-2:2014 and be a point-to-point type using the seven pin connector according to ISO 7638-1 or 7638-2:2003 or an appropriate automated connector.**Other wired specifications may be used, provided that the TPMS equipment in the towing vehicle and in the towed vehicle(s) are compatible and fulfil [the same/comparable] functional requirements related to ….. (ETRTO will provide a wording for the next meeting)**Based on the Proposal by Japan (TPMSTI-CI-02-02) the Group agreed to delete “comparable”.**The new wording is now.**Other wired specifications may be used, provided that the TPMS equipment in the towing vehicle and in the towed vehicle(s) are compatible and fulfil the same functional requirements related to ….. (ETRTO will provide a wording for the next meeting)**At this moment no other wired specifications are known.**The Group discussed the requirements for a wireless solution and come to the conclusion, that the paragraph 5.6.1.2. should be kept in this Regulation to secure design neutrality even if an open standard is not known for the time being.**If a vehicle manufacturer of vehicles of category O3 or O4 develops a wireless communication interface, the protocol of this interface needs to be made available for all other vehicle manufacturers.* *To be able to follow future developments the Group decided to introduce a footnote to §5.6.1.2.**Proposal:**"A review may be done until [2028] to check if new standards have been developed and established in the market and need to become alternative requirements of this regulation."**ETRTO will provide a proper wording for the next meeting.* *The same footnote can be added to §5.6.1.1. (see above)**On the question of the expert from The Netherland, if the example of the communication interface used for Regulation (EU) 2019/1213 can be used for this Regulation, other experts explained, that a proper standard, defining the requirements in Regulation (EU) 2019/1213, is still not finalized and therefore not available yet.**Information on Regulation (EU) 2019/1213:*Scope1.This Regulation lays down uniform conditions for the interoperability and compatibility of on-board weighing equipment installed in vehicles or vehicle combinations for the purpose of ensuring compliance with Article 10d(4) to (5) of Council Directive 96/53/EC or the requirements on maximum weight for national traffic of the Member State where the vehicle is in use. 2.This Regulation shall not apply to Member States which have not opted for the introduction of on-board weighing equipment in accordance with Article 10d(1) of Directive 96/53/EC. 3. …………Annex II4. Exchange of information between motor vehicle and trailer or semi-trailer 4.1. The information on weight between motor vehicle and the trailers or semi-trailers being towed shall be exchanged through a wireless link set up between the C-ITS stations of the motor vehicle and those of the trailers or semi-trailers, in accordance with the standards EN 302 663-V1.1.1, with the exemption of clause 4.2.1, EN 302 636-4-1-V1.3.1, EN 302 636-5.1-V2.1.1 and with the European standard on the OBW application for C-ITS that shall be developed by ETSI.*Annex 5*Compatibility between towing vehicles and trailers with respect to ISO 11992 data communication*The Group agreed to introduce a second Annex, Annex 6, providing an example of tests for better understanding, if it is needed.**§5.6.1.1.2.**……**Annex [6] to this Regulation provides an example of tests that may be used to perform this assessment.**……..**The experts from CLEPA will provide a proposal based on TPMSTI-01-03, Annex 5 & Annex (6).**On the question of the expert from Germany, whether TPMS can be used on tyres with tubes, the other experts mentioned, that this is no problem. Already today technical solutions are available, which are solving this issue.**The following were not discussed during this meeting**§5.5.2*In the case of a vehicle of category N2 or N3 towing at least one vehicle of category O3 or O4, the optical warning signal referred to in 5.5.1. must indicate whether any warning relates to the towing or to the towed vehicle.*§5.5.5.*For vehicles of category O3 and O4, the optical warning signal referred to in 5.5.1 must be displayed to the driver of the towing vehicle of category N2 or N3, as specified in paragraph 5.5.4.*Open question (see* [*TPMSTI-CI-01-02 Rev.1*](https://wiki.unece.org/download/attachments/109349464/TPMSTI-CI-01-02%20Rev.1%20%28FL%20%26%20Task%20Force%29%20Comments%20to%20R141%20Communication%20Interface.docx?api=v2)*):***Work to be done at the 3rd meeting*** Give your comments to CA’s proposal [TPMSTI-CI-01-03](https://wiki.unece.org/download/attachments/109349464/TPMSTI-CI-01-03%20%28CA%29%201st%20Draft%20proposal%20-%20GRBP-2020-20e%20plus%20Dta%20Com.docx?api=v2)
	+ regarding the needed requirements, which have to be implemented in Paragraph 5.6.
	+ regarding the new Annex 5

(see proposed Annex 5 and Annex “17” (complete copy of Annex 17 of UN Regulation No. 13)* Continue the discussions on §5.6. and Annex 5
* Work on the open questions in [TPMSTI-CI-01-02 Rev.1](https://wiki.unece.org/download/attachments/109349464/TPMSTI-CI-01-02%20Rev.1%20%28FL%20%26%20Task%20Force%29%20Comments%20to%20R141%20Communication%20Interface.docx?api=v2)

**Work to be done after the 3rd meeting*** Prepare a document for the March session of WP.29 to correct and modify the adopted document by the 72nd session of GRBP
* Inform the 73rd session of GRBP about this document

**Timeline Schedule**Third meeting of the small working group*The Group decided to organize a 3rd meeting before the small working group can present its results at the 9th Task force meeting.**The 3rd meeting will be held on 9th October 2020 and the date for the 9th Task Force meeting will be postponed to a later date.** Date: *9th October 2020*

9th meeting of the Task Force to review the work of the small working group * Preliminary date: *tbd at the 3rd meeting of TF TPMSTI-CI*

Final meeting of the small working group * Preliminary date: 23rd of October 2020

10th meeting of the Task Force to review the work of the small working group and prepare the necessary documents for GRBP and WP.29 * Preliminary date: *tbd (29th or 30th of October 2020)*

***Responsible****:*The 32 Experts of the Task Force on TPMSTI joining this small working group on “Communication Interface”, representing European Commission, Finland, The Netherlands, Japan, CLEPA, OICA. | [TPMSTI-CI-01-03](https://wiki.unece.org/download/attachments/109349464/TPMSTI-CI-01-03%20%28CA%29%201st%20Draft%20proposal%20-%20GRBP-2020-20e%20plus%20Dta%20Com.docx?api=v2)[TPMSTI-CI-02-02](https://wiki.unece.org/download/attachments/109349466/TPMSTI-CI-02-02%20%28Japan%29%20Comments%20for%20TPMSTI-CI-01-03.docx?api=v2)[Regulation (EU) 2019/1213](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1213&qid=1601907349678&from=EN) |
|  | The above mentioned **open issue** needs to be discussed and finalized during the time period from September to October 2020, if the current COVID-19 pandemic allows normal work.* *All* ***GRBP experts*** *participating in this small working group of TF TPMSTI TF are asked to check carefully the above mentioned documents and send their comments and proposals as agreed* ***above as soon as possible*** *to the Secretary and the Chair of the Task Force:*

manfred.klopotek@scania.com andreas.vosinis@ec.europa.eu(see also [TPMSTI-01-4 Rev.1](https://wiki.unece.org/download/attachments/94047573/TPMSTI-01-04%20Rev.1%20%28Chair%29%20Proposal%20-%20Guideline%20for%20TF%20TPMSTI.docx?api=v2) - Guidelines C.3.) |  |
|  | Next meeting(s) |  |
| * ***Official sessions of next TF TPMSTI-CI:***
* **3rd Meeting on UN Regulation No. 141 regarding the “Interface Communication”:**

**9th October 9:15 to 11:30 CET** |
|  | Adjourn |  |
|  | *The Chair thanked all attendees for very good and constructive discussions and closed the 2nd meeting of TF on TPMSTI-CI “Communication Interface” regarding UN Regulation No. 141.**“Keep safe and stay healthy”* |  |

All documents will be available via the UNECE website for the Task Force on Tyre Pressure Monitoring System and Tyre Installation ([TPMSTI](https://wiki.unece.org/pages/viewpage.action?pageId=94047545)).

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