TPMSTI-09-03

9th session of the GRBP TF on

Tyre Pressure Monitoring System and Tyre Installation (TPMSTI), 3 November 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 9th meeting of the Task Force TPMSTI**

**Amendments to UN Regulation No 141**

**November 3, 2020 starting at 9:15 am ending at 12:30 am (CET)**

**WebEx only !**

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

|  |  |  |
| --- | --- | --- |
|  |  | Working Documents  \* Documents not yet available |
|  | Welcome and opening remarks |  |
|  | *The Chair of this Task Force Mr. Andreas Vosinis (DG-GROW) opened the 9thmeeting of TF on TPMSTI, welcomed all participants and pointed out that the main task of this meeting is to finalize the work on the “Communication Interface”.* |  |
|  | 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-09-04](https://wiki.unece.org/download/attachments/113345301/TPMSTI-09-04%20Attendance%20list.pdf?api=v2) |
|  | Adoption of the Agenda | [TPMSTI-09-01](https://wiki.unece.org/download/attachments/113345301/TPMSTI-09-01%20Draft%20Agenda%209th%20meeting%20-%20UN%20R%20No%20141.docx?api=v2) |
|  | *The Agenda was adopted with the additional agenda item*   * *Tyres with tubes (see TPMSTI-CI-02-03)*   *and a new document, TPMSTI-09-02, was added presented by Japan* | [TPMSTI-09-01 Rev.1](https://wiki.unece.org/download/attachments/113345301/TPMSTI-09-01%20Rev.1%20Draft%20Agenda%209th%20meeting%20-%20UN%20R%20No%20141.docx?api=v2) |
|  | Approval of the Draft Report of the 5th meeting of TPMSTI-CI | [TPMSTI-CI-05-04](https://wiki.unece.org/download/attachments/113344893/TPMSTI-CI-05-04%20Draft%20Report%205th%20meeting%20-%20UN%20R%20No%20141.docx?api=v2) |
|  | *The Draft Report was approved.* |  |
|  | (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-01-03](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-01-04 Rev.1](https://wiki.unece.org/download/attachments/109349464/TPMSTI-CI-01-04%20Rev.1%20%28Sec%29%20Draft%20Report%201st%20meeting%20-%20UN%20R%20No%20141.docx?api=v2)  [TPMSTI-CI-02-03](https://wiki.unece.org/download/attachments/109349466/TPMSTI-CI-02-03%20%28Sec%29%20Draft%20Report%202nd%20meeting%20-%20UN%20R%20No%20141.docx?api=v2)  [TPMSTI-CI-03-04](https://wiki.unece.org/download/attachments/109351463/TPMSTI-CI-03-04%20Draft%20Report%203rd%20meeting%20-%20UN%20R%20No%20141.docx?api=v2)  [TPMSTI-CI-04-04](https://wiki.unece.org/download/attachments/109352337/TPMSTI-CI-04-04%20Draft%20Report%204th%20meeting%20-%20UN%20R%20No%20141.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 and Annex 6 need to be drafted * Paragraphs 5.5.2. and 5.5.5. need to be reviewed and updated if needed   *The Group started its discussion on TPMSTI-CI-05-03, which was a “clean” version of TPMSTI-CI-04-02 Rev.1 except the open issues regarding ISO 11992.*  *The following editorial corrections were made:*   * *To the following ISO Standards the “year” was added:* * *ISO 11992-1:2019* * *ISO 11992-2:2014* * *ISO 7638-1:2018* * *ISO 7638-2:2018* * *ISO 11895:2015* * *ISO 11898-1:2015* * *ISO 11898-2:2016* * *The word “trailer” was changed to “towed vehicle” where it was not done yet.* * *The brackets for Annex 6 In paragraph 5.6.1.1.2. were deleted* * *A comma after “TPMS functionality” in paragraph 5.6.1.2 was removed*   *No further changes were proposed regarding TPMSTI-CI-05-03.*  *The Group reviewed the open questions according to*  *TPMSTI-09-02 (Japan)*  About “In the case of data communication with wireless equipment”  Question 1  In the case of data communication between tractor and trailer with wireless equipment,  should any trailer be able to communicate with any tractor?  *The Group agreed that at this moment there is no general solution available.*  *Not any towed vehicle of category O3 or O4 can communicate with any towing vehicle of category N2 or N3.*  *Paragraph 5.6.1.1. requires either that*  The data communication with wired equipment shall be based on the braking electric control line conforming to ISO 11992-1:2019 and ISO 11992-2:2014 and be a point-to-point type using the seven pin connector according to ISO 7638-1:2018 or ISO 7638-2:2018 or an appropriate automated connector.  *or that*  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.”  *If other wired specifications are defined, they should be added to this paragraph by a new amendment to UN Regulation No. 141.01.*  Question 2  In case, there are 2 combinations of tractor and trailer.  One combination communicates with wire equipment usually.  One combination communicates with wireless equipment usually.  Should these tractors and trailers be interchangeable with TPMS available?  *The Group agreed that this is not possible for the time being. A manufacturer of a towing vehicle cannot be forced to adjust its vehicle to any possible communication interface (wired or wireless) and be compatible to any towed vehicle which will be available on the market in respect to TPMS.*  *The Group agreed with the conclusions according to the Table in TPMSTI-09-02:*  Current communication cases are A1, B2. C3 is realized in the near future）  Other communication cases A2, A3, B1, B3, C1, C2. These are not compatible now.  *But it has to be kept in mind, that the 01 series of amendment to UN Regulation No. 141 describes*  **“Uniform provisions concerning the approval of vehicles with regard to their Tyre Pressure Monitoring Systems (TPMS)”**  *and does not request, that any combinations between the towing and the towed vehicle(s) have to be possible.*  *TPMSTI-CI-01-02 Rev.2*  *Question 4*  It’s usual to change the trailers behind the towing vehicle very often. The system should be capable to “understand” the changes between (multiple) trailers.  *If ISO 11992 is used, this is not an issue. Should ISO 11992 be mandated?*  *The opinion of the Group was a No, even if in other Working Parties like GRVA this is under discussion. Denis C will inform the Group about this discussion at the following meeting.*  *What will happen if ISO 11992 is not used? This is the same question as Japan noted in TPMSTI-09-02. For the time being this combination cannot be excluded and the owner of the towing vehicle and the towed vehicle have to find a solution which is compatible (see above).*  *Question 5*  What if the trailer is old and doesn’t have TPMS? Does the system understand the lack of TPMS and is there going to be an TPMS –alarm ON all the time?  *As already mentioned before, this is not an issue for the 01 series of amendments to UN Regulation No. 141 because it is not a part of the type approval process. This issue is a no issue for type approval, but an issue for the driver. He will always be confronted with an “Error” message as soon as he starts his vehicle.*  *Question 7*  §5.6. in the new version of UNECE Reg. 141 may cause a situation where the towing vehicle is type-approved according to this regulation, but still isn’t compatible with another (trailers) even if they were approved acc. to this regulation too. The technology regarding the system and interface should be compatible in between towing vehicles and trailers.  *This question is the same as Japan already mentioned (see above).*  *TPMSTI-CI-04-03 (Questions & Remarks)*  *Question 1*  What info should the driver (the truck) have when he receives no info in a legal context (no TPMS from trailer(s) due to their age)?  *This question is the same as Question 5 of TPMSTI-CI-01-02 Rev.2 (see above).*  *Question 2*  §5.4.3 does not apply but the truck cannot « guess » the legal status of the trailer  Should (how) the driver be informed of a non – legal situation when he is towing more than one vehicle and one of them is not sending the proper signal to the towing vehicle  *The Group hopes that this question will be solved during the discussions with the Convenor of ISO/TC22/SC31/WG4, responsible for ISO 11992.*  *TPMSTI-CI-05-02*  List of scenarios describing intended use of the EBS23 parameters Tyre-Pressure-Status and Tyre/Wheel ID. Use of the Tyre/Wheel ID when the value is 0x00 or 0xFF.  *At the fifth meeting of the small working group the experts agreed that this list will be the major part of the discussion with a few experts and the Convenor of ISO/TC22/SC31/WG4. The Secretary organized a meeting with the Convenor Mr. Zeltwanger which will take place after the 9th meeting of the Task Force (see also Draft Report TPMSTI-CI-05-04).*  *Regarding a review of §5.5.2 and §5.5.5. the Group agreed that at this moment there is no need to revise them.*  *§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.*  *TPMSTI-CI-02-03*  *Tubed tyres*  *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.*  *Gary G. will provide information and send them to the experts from Germany.*  *The Secretary will provide Gary G. with the information needed to take contact with the experts from Germany.*  **Work to be done after the 9th meeting**   * Meet ISO/TC22/SC31/WG 4 on ISO11992 (3 November 2020) * Prepare the Working document for the 73rd session of GRBP in January 2021 to correct and modify the adopted document by the 72nd session of GRBP   + *Daniel S. agreed to send the Figures in Annex 6 to the Secretary*   + *Gary G. agreed to support the Secretary and the Chair to prepare the Working document*   + *As soon as the Working document is available it will be distributed to the members of the small working group for comments*   + *After having received the comments the Working document will be finalized and send to GRBP* * *The Secretary will take contact with GRBP and inform the Secretary and the Chair about the coming Working document* * *The Working document needs to be sent to Geneva at the latest on Friday evening, 6 November 2020*   **Timeline Schedule**  *10th meeting of the Task Force on 16 November 2020*  *Main task is to review the open questions: Are they all solved?*    **Responsible:**  All experts of this Task Force | [TPMSTI-CI-04-02 Rev.1](https://wiki.unece.org/download/attachments/113344893/TPMSTI-CI-04-02%20Rev.1%20%28CLEPA%20%26%20TF%29%20Proposal%20for%20%C2%A7%205.6%20and%20Annexes%205%20%26%206.docx?api=v2)  [TPMSTI-CI-05-03](https://wiki.unece.org/download/attachments/113344893/TPMSTI-CI-05-03%20%28Sec%29%20Clean%20version%20of%20TPMSTI-CI-04-02%20Rev.1.docx?api=v2)  [TPMSTI-09-02](https://wiki.unece.org/download/attachments/113345301/TPMSTI-09-02%20%28Japan%29%20Comments%20for%20TPMSTI-TF-09.docx?api=v2)  [TPMSTI-CI-01-02 Rev.2](https://wiki.unece.org/download/attachments/109352337/TPMSTI-CI-01-02%20Rev.2%20%28FL%20%26%20Task%20Force%29%20Comments%20to%20R141%20Communication%20Interface.docx?api=v2)  [TPMSTI-CI-04-03](https://wiki.unece.org/download/attachments/109352337/TPMSTI-CI-04-03%20%28Volvo%29%20TPMS%20communication%20cases%20V1.pdf?api=v2)  [TPMST-CI-05-02](https://wiki.unece.org/download/attachments/113344893/TPMSTI-CI-05-02%20%28CLEPA%29%20Open%20issues%20Annex%205.pptx?api=v2)  [TPMSTI-CI-05-04](https://wiki.unece.org/download/attachments/113344893/TPMSTI-CI-05-04%20Draft%20Report%205th%20meeting%20-%20UN%20R%20No%20141.docx?api=v2)  [TPMSTI-CI-02-03](https://wiki.unece.org/download/attachments/109349466/TPMSTI-CI-02-03%20%28Sec%29%20Draft%20Report%202nd%20meeting%20-%20UN%20R%20No%20141.docx?api=v2) |
|  | * *All* ***GRBP experts*** *participating in this Task Force TPMSTI 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](mailto:manfred.klopotek@scania.com)  [andreas.vosinis@ec.europa.eu](mailto: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:***   + **Monday 16 November 2020 starting at 9:15 am ending at 12:30 pm (CET)** | | |
|  | Adjourn |  |
|  | *The Chair thanked all attendees for very good and constructive discussions and closed the 9th meeting of TF on TPMSTI 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)).

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_