# Meeting notes of the 4th meeting of the COP TF

Author: Iddo Riemersma (chair)

Meeting date: 20 February 2019

## Meeting agenda

1. Opening
2. Minutes of last meeting and open action items
3. Introduction of draft text for CoP & first responses
4. Availability of CoP data
5. A.O.B. - Presentation of ACEA
6. Timeline – next meetings

Participants are listed in the table at the end of this document.

## Opening

Iddo Riemersma (chair) opened the meeting and welcomed the participants. The proposed agenda for the meeting was adopted.

*Participants*

Notifications were received from Elodie, Celine and Norbert K. that they could not attend this meeting. The chair indicated that the following participants have been added to the group on their request:

* Pablo Hernando Anta - TME
* Duncan Lewis – Land Rover Jaguar

This meeting was also joined by Matthias Nägeli (VW), Nigel Bear (Ford), Darren Crisp (Ford) and Iain Cameron (Ford), who all requested to be added to the participant list.

*Incoming documents and agenda*

Since the last meeting, the following documents were received:

* Minutes of the 3rd meeting were distributed on 5 February, the chair has not received any comments (see the folder of the 3rd COP TF session)
* The final version of the ToR was uploaded to the UNECE website under, with all of the comments and agreements of the last meeting included (see the folder of the 3rd COP TF session).
* A draft text proposal prepared by EC for Annex 10 to GTR 15 and Annex 3 to GTR 19, document [Draft text proposal Annex 10-v1.0.docx](https://wiki.unece.org/download/attachments/78742398/Draft%20text%20proposal%20Annex%2010-v1.0.docx?api=v2)
* A document by JAMA on the Japanese CoP Procedure, document [WLTP COP Procedure.pdf](https://wiki.unece.org/download/attachments/78742398/WLTP%20COP%20Procedure.pdf?api=v2)
The chair proposed this document to be introduced under agenda point 3.
* An ACEA presentation on options for COP statistical procedures, COP statistic for UN-WLTP\_update February 2019\_v3.ppt. This document arrived well beyond the set deadline. Also, it addresses solutions for the EU-CoP before data has been shown to illustrate the problem (as was requested by the EC). The chair asked the group if there were any objections to allow this presentation. It was agreed that this could be introduced under point 5 (A.O.B.) if time allows, and that discussions are postponed to the next meeting. (see the folder of the 3rd COP TF session)
* ACEA proposal on the calculation rules for Ki, EvC and FCF (order of calculation), document calculation rules WLTP incl EvC.pdf (see the folder of the 3rd COP TF session). During the last meeting there was no time left to introduce this document, therefore it will be discussed today under agenda point 5.

The documents are uploaded to the UNECE server, in the folder of the 3rd and 4th meeting of the COP TF.

<https://wiki.unece.org/pages/viewpage.action?pageId=73925869>

### Minutes and open action items

No comments to the minutes have been received, and none of the participants had any further comments. The minutes of the 3rd CoP TF meeting were adopted. The action list with updates on the status of the actions is included as annex at the end of this document.

### Feedback to the CoP text proposal

Before introduction of the text proposal, JAMA showed their presentation of the Japanese COP procedure. Nick-san explained that JAMA discussed this issue and has chosen not to submit data because the Japanese CoP procedure would be anticipated to be too far off from the EU COP procedure and therefore the only solution for Level 2 of UNR WLTP would be to require both EU and Japan – with the additional burden that this would bring. The chair said this conclusion is premature and that first the group needs to understand the Japanese procedure before making such a decision. The requested data are necessary for this evaluation. Bart said the EC is open to consider the Japan CoP procedure, or potentially a merger of the two procedures. In order to do so, more information is needed to understand the strengths of this procedure and ideally an explanation on the criteria for justification and acceptance by MLIT. Without harmonization the consequence is that Japanese OEMs have to undertake two different CoP procedures. Nick-san replied that this is not preferable, but would accept it if that is the outcome. Alessandro is moderately optimistic, and sees opportunities for harmonization considering that the lot requirement in Japan shows similarities with the European CoP procedures. The ACEA members are also positive on the chances for harmonization with the Japanese CoP provisions. Bill asked if JAMA could explain how the procedure works for low, medium and high volume productions. Jürgen was interested in the typical lot sample size. According to Nick-san that depends on the manufacturer and the judgement of MLIT, but normally 1 to 5 vehicles are tested. Up to 10 vehicles the standard deviation is assumed to be similar to the production of the outgoing (similar) model, and then the standard deviation of the new production is determined. Miyazaki-san added that MLIT does not apply a specific default value for sigma, but base themselves on audits and explanatory information from the manufacturer. On a question about the yearly average criterion, Nick-san explained that this is done at calendar year basis, not a moving average.
The chair thanked Japan for these clarifications and asked if JAMA could reconsider to provide the missing requested information and CoP data, including the frequency of the tests which was asked for during the previous meeting. Also the Japanese run-in procedure would be interesting for the group, but apparently this is still under construction. Nick-san said he would consult JAMA again on this, and would also discuss if there is a chance to provide CoP data.

The EC has prepared a text proposal for Annex 10 to GTR 15 and Annex 3 to GTR 19, see document Draft text proposal Annex 10-v1.0.docx. The chair introduced this document briefly and asked for initial responses. It was made clear that the draft text includes administrative elements which would not be required for the GTR, but which would be needed for the UNR WLTP. Future drafting will develop a ‘GTR specific’ version. There were no concrete discussions about the contents. Bill suggested that a small drafting group would be formed to go through the document line by line. Rob Gardner offered to take an active role to organize this, in particular to split the administrative elements from the technical ones. The group is joined by Bart, Team Japan, Bill, Alessandro and the chair.

A point was raised by Franco and Jürgen on what is seen by the EC as an acceptable procedure, and which evaluation criteria would be used to determine this. Alessandro explained that one element is to have an acceptable gap between declared and tested value, but that there are also other things to keep in mind such as consumer protection. The chair remarked that we had such a discussion last meeting on the development targets in the ToR, for which there was no support from all members. Norbert L. repeated an earlier statement that margins for the measurement accuracy could be re-discussed, but only if new evidence is brought to the table. Alessandro said he will develop a guidance document on how to analyze the problem and evaluate possible alternatives. At the same time he said it is still the responsibility of the OEMs to provide data supported evidence on why the current procedure is considered inadequate.

### 4. Availability of CoP data

Arjan informed the group that RDW has received type approval data on VH, VL and declared values from 5 OEMs. They are currently analyzing the data to see what they can learn from these data. They expect to show the first results towards the next meeting. Bill asked what the connection is between these data and CoP. Arjan replied that at least the delta between declared and type approved values can be observed, and they are still in the process of gathering the accompanying CoP data for these type approvals.

Bill informed on the status of gathering data within the industry. The view of ACEA is still the same, so there will not be a coordinated activity to collect CoP data but manufacturers can decide for themselves to submit their data. A new idea among German manufacturers is to ask VDA to coordinate the anonymization of CoP data, and this approach seems promising. Bill said it is not clear what kind of data is needed, and if an Excel format could be provided to make sure that the delivered data meets the demands. The chair said that data on both CO2 and criteria pollutants are expected. Alessandro said that the JRC is starting up the activity on CoP, and that he will draft an Excel format together with Biagio. Bill could offer either the raw measured data (without declared value) or a ratio of measured versus declared value. Annette said it would work just as well if we evaluate the proposals on the basis of random samples which are generated from a given average and distribution. The chair and Alessandro expressed to have a preference for actual test data, rather than only an average and distribution. It was agreed that the details for the process of gathering CoP data will he discussed between the JRC, TNO and the OEMs. Rob suggested that also Elodie and/or Céline should be involved as they were already analyzing the CoP data that they had received.

### 6. A.O.B.

Bill showed the presentation by ACEA with a proposal on the calculation rules for Ki, EvC and FCF. Although this presentation is mainly oriented towards the European WLTP CoP, the inclusion of the evolution coefficient EvC also needs to be considered for the WLTP CoP – in particular when the EvC should come into the calculation.

Jürgen showed the ACEA presentation on options for COP statistical procedures. The chair welcomed the input from ACEA, but said we first need the CoP data before we can continue discussions on new pass/fail statistics. Nevertheless, the participants are invited to take notice of the proposals, and we can discuss this further during the next meeting.

### 6. Timeline – next meeting

The timing schedule is tight and an informal document should be prepared for the May session of GRPE. The process of gathering data, analyzing these data, preparing alternative pass/fail criteria and reviewing these will take a considerable amount of time. All participants are encouraged to proceed with the work at hand as soon as possible, and not to wait until the next meeting is near.

The next meeting is planned for Tuesday 12 March 2019 at 9:00-12:00 CET via the Webex system of Bart Thedinga (<https://ecwacs.webex.com/meet/bthedinga>).

The chair closed the meeting and thanked the participants for their input.

### Annexes

* Action list
* Participant list

## Action list

|  |  |  |
| --- | --- | --- |
| *Item* | *Name* | *Action* |
| *1-3* | *Arjan Dijkhuizen* | *Check the possibility to deliver COP data through RDW**> Type approval data on VH, VL and declared values have been received from 5 OEMs, and is now being processed. First results are expected towards the next meeting. Action ongoing.* |
| *1-4* | *Elodie Collot* | *Check the possibility to deliver COP data through UTAC**> Elodie informed the chair that at least one OEM has given consent to deliver data. Céline later said that the first data has arrived and is being studied. Action ongoing.* |
| *2-3* | *Bill Coleman*  | *Coordinate the activities to gather COP data from ACEA members**> Current idea is to ask VDA if they can anonymize CoP data for German OEMs. Individual manufacturers may deliver CoP data. Action ongoing.* |
| *2-4* | *EU-Commission* | *Prepare a draft text proposal for the WLTP COP with discussion items highlighted**> A first draft has been prepared and distributed, action completed* |
| *3-1* | *Japan* | *Inform the group on which value for σ is applied before sufficient statistics are available, inform on frequency of tests (N and n) and what the typical tolerances are in terms of CO2 emissions (3 σ/√N)> Japan will reconsider to submit requested information and data (see what has been discussed under point 3. Action ongoing)* |
| *3-2* | *Norbert Klein* | *Check if Hyundai would be willing to share CoP data with the TF> Norbert informed the chair by e-mail that there is no agreement within Hyundai to share CoP data with the group. Action completed.* |
| *3-3* | *Bill Coleman* | *Make arrangements for an NDA between VW and the Chair (Sidekick Project Support)**> New idea is to ask VDA to anonymize CoP data. Action deleted.*  |
| *4-1* | *Alessandro Marotta / Biagio Ciuffo* | Develop an Excel data format for exchange of CoP data, and a guidance document on how to analyze the problem and evaluate possible alternatives |
| *4-2* | *Rob Gardner* | Organize a drafting meeting to discuss the draft CoP text proposal |

## Participant list

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| *Name* | *Organisation* | *Present at this meeting* |
| William Coleman | VW/ACEA | Y |
| Jürgen Leu | Opel/ACEA | Y |
| Franco Guazzotti | Iveco/ACEA | Y |
| Shumpei Miyazaki | MLIT/JASIC | Y |
| Nick Ichikawa | Toyota/JASIC | Y |
| Mayumi Morimoto | Honda/JASIC | Y |
| Arjan Dijkhuizen | Netherlands/RDW | Y |
| Norbert Klein | Hyundai/KAMA | N |
| Elodie Collot | France/UTAC | N |
| Norbert Ligterink | Netherlands/TNO | Y |
| Annette Feucht | BMW/ACEA | Y |
| Stefano Malfettani | Renault/ACEA | N |
| Philippe Arribard | Renault/ACEA | N |
| Alessandro Marotta | EC | Y |
| Bart Thedinga | EC | Y |
| Rob Gardner | TRL/EC | Y |
| Biagio Ciuffo | JRC/EC | Y |
| Penny Dilara | EC | N |
| Iddo Riemersma | Sidekick/EC | Y |
| Duncan Lewis | JLR/ACEA | Y |
| Pablo Hernando  | TME | Y |
| Matthias Nägeli | VW/ACEA | Y |
| Iain Cameron | Ford/ACEA | Y |
| Darren Crisp | Ford/ACEA | Y |
| Nigel Bear | Ford/ACEA | Y |