# Meeting notes of the 9th meeting of the COP TF

Author: Iddo Riemersma (chair)

Meeting date: 12 July 2019

## Meeting agenda

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## Opening

Iddo Riemersma (chair) opened the meeting and welcomed the participants. There was a notification received from Norbert Klein and Arjan Dijkhuizen that they could not attend the meeting. The following people attended this TF meeting for the first time and indicated they wanted to be added to the distribution list: Olle Berg for Volvo, Aylin Atik for BMW, and Christophe Sierens for Honda Europe.

The list of participants to this meeting is added as annex at the end of this document.

## Adoption of the agenda

The agenda was adopted, but when open action item 7-1 was addressed, Nick-san made a suggestion to skip the agenda points 5 and 6 on the agenda as these are purely European issues. He suggested the EU should first agree on a final position and then bring this to the meeting. We could then use the time today to work on harmonizing the open issues. Bart responded by saying that until now the CoP TF has chosen to have an open discussion on the gathering of CoP data and the preparation of a proposal for CO2/FC in Europe, which is also relevant for a level 2 CoP in Japan. Therefore he prefers that the JRC will report today on their proposed approach for CoP evaluation on CO2. This triggered a lengthy discussion. Main conclusion is that the CoP TF should aim for harmonization as much as possible, including the methods for evaluating of the conformity in Europe and Japan, while taking into consideration the legislative framework in both regions. In the end, Nick-san agreed to the JRC proposal being presented today.

1. Incoming documents

Since the last meeting, the following documents were received:

* Nick-san sent the comparison table with Japanese views on 14 June, filename: CoP comparative analysis v5\_JPN updated0614.xlsx. On 11 July Nick-san sent an updated version of this document, filename: CoP comparative analysis v7.
* Alessandro sent a presentation on the data analysis by the JRC on 25 June, filename: CoP\_Proposal\_JRC\_CoP\_telco\_2019\_06\_24\_complete.pptx. For the meeting an updated presentation was sent on 10 July, file CoP\_Proposal\_JRC \_2019\_07\_12.pptx. This was presented at agenda point 5.
* Bart sent a response to the Japanese CoP procedure for CO2/FC on 10 July, filename: COP procedure for FC\_EC in JPN\_20190410\_EC.docx.
* Annette sent an updated version of the presentation on the sampling frequency on 11 July, filename: 190709\_COP\_frequency-small-large\_families\_V05.pptx. This was presented at agenda point 6.

These documents are uploaded to the UNECE server, in the folder 9th meeting of the COP TF: <https://wiki.unece.org/display/trans/CoP+TF+9th+session>.

### Minutes of last meeting and open action items

There were no comments to the minutes, and they were adopted.

The action list with updates on the status of the actions is included as annex at the end of this document.

### Data analysis by the JRC and proposal for WLTP CoP of CO2/FC

During a dedicated meeting organized on 14 June by the JRC, a first analysis of the data was shown and a new proposal for the evaluation of CO2/FC in the CoP test procedure was shown. During the meeting today, Alessandro introduced a new presentation taking into account the feedback received on the earlier analysis and proposed approach. The new proposal shows a gradual increase of the pass criterion, instead of having a forced decision coming from the 15th to the 16th test vehicle. Also the effect of the ‘A-value’ has been analysed. According to the JRC the new proposal is well-balanced between having the possibility of having a declared value at the level of the population mean, and having an acceptable average sample size. Bill said that this is moving in the right direction, although the industry would favor to get rid of declared values and only have a monitoring based on the measured values. He also expressed his sympathy for the Japanese procedure which accepts a lower confidence level. Alessandro responded that DG Clima has specifically ruled out the concept of monitoring only on the basis of measured values, and that having a declared value is a must. Increasing the A-value above 1.01 will leave room for under-declaration, which is not desirable. There is some room for finetuning, but there is no possibility to change the entire concept. Christophe asked what is seen by JRC as over-declaration. Alessandro said this is basically any value that is declared higher than the measured value at type-approval, irrespective of why that higher value is chosen. At this point, Bart suggested that we continue this discussion further within the EU. He also asked for an initial response from Nick-san, who chose not to give a detailed comment at this point. However, since there is a fundamental difference in the approach, he considers it difficult to achieve harmonization on the CO2 evaluation.

### Frequency of sampling

Annette introduced a presentation to introduce this issue, which includes a text proposal for merging different ‘emission types’ into one CoP family, and has special provisions for CoP families that are very small or very large. Alessandro said that these proposals seem quite reasonable, but wondered what would happen if within a merged family a ‘fail’ is noted. It would be difficult to find the root cause of this fail in the production, and consequently which vehicles are affected. Franco argued that there is a connection between the two proposals, since the merging of emission types into one CoP family increases the production volume for that family. Bill said that increasing the family size should not be seen as a possibility for cherry-picking; a larger family also gives a higher risk for the manufacturer, so this will be considered in the risk assessment that is performed. Annette said that merging 2WD and 4WD versions as well as MT and AT versions is therefore probably not realistic. Bart concluded that these proposals seem clear and sensible, and it will be checked by the EC to which extent they can be integrated.

### Discussion on critical elements for harmonization of CoP

Iddo introduced the CoP comparison table with latest input from Japan. The table was discussed line by line, on those elements that are seen as critical for harmonization. This is a summary of the items that were discussed.

*Item 3 and 4: Family criteria for Type 1 test and Minimum sample interval*Nick-san said that the procedure in Japan is working satisfactory, in which MLIT and the OEMs decide together which vehicles are considered to form one CoP family. Alessandro argued that this process needs to be further detailed, also in the light of Level 2 to observe which regional level is the most stringent. Nick-san responded that if the European requirements on family criteria are seen as more strict, Japan would support these for Level 2.Nevertheless, the proposals made by ACEA will be considered internally within Japan.

*Item 6: Test vehicle selection*  
Based on the discussion outcome at the previous meeting, Bart suggested the following draft text for harmonization: “A sample of three vehicles shall be selected at random in the CoP family. The manufacturer shall not undertake any adjustment to the vehicles selected.” Miyazaki-san said this proposal can be accepted for Japan. Nick-san made a scrutiny reservation on the ‘sample of three vehicles’, to see if that is appropriate for Japan. Rob G. said that if the figure in the CoP text specifies a sample of three vehicles, the text should be in line with that. Franco asked if these three vehicles should be selected in one shot, or if there could be time in between. Bart responded that the text does not specify that these need to be selected in one shot. Bill offered to have a closer look at the text proposal, and may come back with a suggestion that will consider the remark of Franco.

*Item 8: Run-in procedure*  
Due to the time constraints of the meeting today, the chair proposed that the EC and Japan organize a separate meeting after Japan has responded in writing to the feedback that the EC has given to the Japanese CoP procedure for CO2/FC. That suggestion was accepted.

*Item 9: Evolution coefficient*  
For CO2 and FC the fixed evolution coefficients are clear, they are (nearly) the same for Japan and Europe. On the pollutants there is some unclarity. Currently, Europe applies evolution factors for pollutants, but that is not the case in Japan. Nick-san said that there should be an exception for vehicles that enter into a regeneration phase while being tested. Bill argued that evolution factors for pollutants are required, specifically for PM emissions which can be higher for a new filter as there is no soot layer built up yet, which normally contributes to the efficiency of the filtration. Alessandro remarked that there is also an overlap with the durability requirements. Bart would accept the concept of evolution factors for pollutants - even if it is politically sensitive- since that is it is current practice today.

*Item 10: Fuel*  
During the discussion at the previous meeting, Europe asked Japan to reconsider their position to allow commercial fuel for CoP testing. Miyazaki-san has consulted the audit section within MLIT, and came to the conclusion that for a proper comparison against the type approval test results only reference fuel should be used for CoP testing. Commercial fuel could introduce inaccuracies due to the variation in fuel quality and composition. Bart asked if that is only required for CoP checking by the authorities, or also for the CoP tests done by the manufacturer. Miyazaki-san said that for both cases reference fuel should be used. Bill wanted to know if the EC would accept reference fuel for CoP testing, and this was confirmed by Bart. Bill will take this issue back to industry, to discuss if this is acceptable. Alessandro remarked that for European manufacturers reference fuel would only be needed to acquire Level 2 acceptance on CoP.

*Item 19 and 20: Type 4 test (evaporative emissions)*  
Based on the discussions at the previous meeting, Bart made a first draft proposal, which still needs to be verified internally. The basic proposal is to annually test one vehicle per family, on the basis of the three simplified tests specified in paragraph 7 of Annex 7 of UNR83. Only if one of these tests should fail, a full EVAP test procedure should be performed. Sophie-san commented that this is different from the current requirement where an EVAP test is only performed if the quality of the production is deemed unsatisfactory. Bart explained that we need to make it more specific how the ‘quality of the production’ is evaluated, and has therefore proposed to use the three simplified tests. Elodie confirmed that this is quite a common practice in Europe. There was a question by Franco on how the CoP family for the Type 4 family is described. Bart said this is basically the same as the interpolation family. According to Bill that should not be the case, there are family criteria specified in GTR19 which should also apply here. These criteria are wider than those of the interpolation family. This feedback will be considered by the EC.

### Timeline – next meeting

The next meeting is planned for **Wednesday 21 August** via the Webex system of Bart Thedinga (<https://ecwacs.webex.com/meet/bthedinga>).

There is also a meeting planned on **Friday 9 August** at 9:00-12:00 CET to discuss the feedback from EC on the Japanese CoP procedure.

Finally, a tentative meeting was scheduled to discuss the European proposal on **Wednesday 31 July** at 10:00 AM. Any feedback to the JRC on the current proposal should be sent to Alessandro Marotta before 24 July.

1. A.O.B.

There were no other issues brought to the table.

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

### Annexes

* Action list
* Participant list

## Action list

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| --- | --- | --- |
| *Item* | *Name* | *Action* |
| *1-3* | *Arjan Dijkhuizen* | Check the possibility to deliver COP data through RDW *> Arjan was not present, but informed the chair that the OEMs have informed they will not distribute any CoP data.  Action completed.* |
| *4-2* | *Rob Gardner* | Organize a drafting meeting to discuss the draft CoP text proposal  *> Rob is on standby until we have agreed what can be harmonized. Action on hold.* |
| *5-1* | *Alessandro Marotta* | Organize a separate meeting on the CoP data collection and analysis *> Alessandro has organized a meeting, and has addressed the open issues and feedback from this meeting. The results will be presented today. Action completed.* |
| *7-1* | *Japan /  European Commission* | Review the critical elements in the comparative analysis table, and add possible solutions to harmonize.  *> Japan has provided their input to the comparison table. This triggered a discussion on what should be on the agenda today, which has been summarized under point 2 on the agenda.  The EC has prepared an alternative text for item 6 (test vehicle selection) and 20 (EVAP) which will be discussed today.  Action completed.* |
| *7-2* | *Annette Feucht* | Send a document to outline the issue concerning the requirement to test CoP every 5000 vehicles.  *> Annette sent a presentation on 16 May and a revised version with a text proposal on 11 July. Action completed.* |
| *8-1* | *Japan* | Provide data to evaluate the accuracy of the DPA method, compared to the dyno setting procedure in GTR15 *>No documents were received. Sophie-san said no data is available, and that Nick-san already orally explained the method for which a correlation is established by testing the same vehicle at the chassis dyno used for type approval and at the chassis dyno used by the OEM for the CoP tests. The chair suggested that the EC and Japan would bilaterally continue discussions at the basis of the feedback that the EC provided to the Japanese CoP procedure for CO2/FC. Action completed.* |
| *9-1* | *Bart Thedinga/ European Commission* | Check the ACEA proposals on the frequency of sampling and on the widening of the CoP family criteria |
| *9-2* | *Japan* | Check the ACEA proposal on the widening of the CoP family criteria |
| *9-3* | *Bill Coleman/ACEA* | Review the text proposal of the EC on the test vehicle selection, specifically the part on the first three vehicles. |
| *9-4* | *Bill Coleman/ACEA* | Discuss within industry if it is acceptable to require for level 2 type approvals that all CoP tests are performed on reference fuel |

## Participant list

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| *Name* | *Organisation* | *Present at this meeting* |
| Alessandro Marotta | EC | Y |
| Annette Feucht | BMW/ACEA | Y |
| Arjan Dijkhuizen | Netherlands/RDW | Y |
| Bart Thedinga | EC | Y |
| Biagio Ciuffo | JRC/EC | N |
| Darren Crisp | Ford/ACEA | N |
| Douglas Hannah | Dep. of Transport/UK | Y |
| Duncan Lewis | JLR/ACEA | Y |
| Elodie Collot | France/UTAC | Y |
| Francois Cuenot | UN | N |
| Franco Guazzotti | Iveco/ACEA | N |
| Frank Heimlich | VW/ACEA | Y |
| Iddo Riemersma | Sidekick/EC | Y |
| Julian Michaelis | Opel/ACEA | N |
| Matthias Nägeli | VW/ACEA | Y |
| Mayumi Morimoto | Honda/JASIC | Y |
| Nick Ichikawa | Toyota/JASIC | Y |
| Nigel Bear | Ford/ACEA | N |
| Norbert Klein | Hyundai/KAMA | N |
| Norbert Ligterink | Netherlands/TNO | Y |
| Pablo Hernando Anta | TME/ACEA | Y |
| Penny Dilara | EC | N |
| Philippe Arribard | Renault/ACEA | N |
| Rob Gardner | TRL/EC | Y |
| Shumpei Miyazaki | MLIT/JASIC | Y |
| Stefano Malfettani | Renault/ACEA | Y |
| William Coleman | VW/ACEA | Y |
| Wolfgang Bier | Opel/ACEA | N |
| Christophe Sierens | Honda/ACEA | Y |
| Olle Berg | Volvo/ACEA | Y |
| Aylin Atik | BMW/ACEA | Y |
| Paul Greening | ACEA | Y |
| Saskia Dietmaier | BMW/ACEA | Y |