

Minutes of 9/R41WG meeting, Geneva, 07/09/03Attendance:

Italy : Messrs Erario (Chairman), Alburno
 USA : Mr Feith
 Belgium : Mr Geerts
 Switzerland : Mr Gregor SCHGUANIN
 Czech Republic : Mr Vlastimil STRNAD
 Slovakia : Mr Pavol KOTHAJ
 Poland : Mr Wojciech PRZYBYLSKI
 France : Messrs Ficheux, Le Roux
 Sweden : Mr Hedberg
 South Africa : Mr Bond
 Germany : Mr Steven, Mr Redmann, Mr Irnig (environment)
 India : Mr Raju
 JASIC,NTSEL: Messrs Inomata, Yonesawa, Oshino, Naito, Shirahashi, Ohno, Sakamoto
 JAMA : Mr Morita
 MLIT : Mr Wasa
 IMMA : Messrs Chesnel, Nakanishi, Rogers
 ISO : Messrs Moore, Segers
 NL : Messrs Stoffels, Kortbeek, De Graaff
 ETRTO : Mr Dimitri
 EU : Mr Schneider
 AMA : Mr Robert W. Rasor

1. Minutes of 7/R41WG session

Agreed : The minutes of 8/R41WG session (05-R41WG-07 of 07/02/27).

2. Outcome of 4/DEG

Noted : The minutes of 4/DEG held in Geneva on August 7-8 (Annex1.zip)

3. The Presentation from DEG to R41WG3.1 R41/ISO-362-2 comparison

Documents: 06-R41WG-07-ann1, the presentation from DEG

Noted : The Chairman acknowledged the presentation made by the Chairman of DEG
 : For example, 78dB was for Class3 the converted value with the new ISO362-2 which corresponded of the legal value of 80dB under Reg41
 : NL wanted DEG to clarify the way the standstill values had been calculated by DEG
 : The DEG Chairman replied that the standstill values had been calculated from the Lurban noise levels (Annex 3 of ISO362-2) which corresponded to the highest valid Reg41 test result

Agreed : The Standstill value were
 of 74dB for Class1
 of 75dB for Class2
 of 78dB for Class3

3.2 The ASEP procedure

3.2.1 General

- Noted : The presentation from the German Consultant (Annex4.ppt)
- : The reminder that the ASEP Reference point for each single vehicle, was defined by the maximum $L_{wot,i}$ and n_i of the ISO 362-2 test procedure in relation to available noise performance data from the final valid main database which had been approved by DEG ($L_{wot,i}$ being the test result of the ISO 362-2 wide open throttle acceleration tests in gear i , and n_i being the corresponding engine speed at PP' belonging to $L_{wot,i}$)
 - : NL and The EU Commission wanted DEG to confirm the validity of the two noise emission threshold curves (so called "ASEP limit curves") below/above this Reference point
 - *slope
 - *tolerance
 - : NL and the EU Commission considered that the two limiting case motorcycles in each end of the graph of Slide 16 of 06-R41WG-07-ann1 (from the lowest performance and highest performance standpoints) might not be good enough for confirming the ASEP limit curves
 - : Germany would like to have more time to study the validity of the ASEP limit curves
 - : The DEG Chairman expressed his disappointment for the fact that Germany was unable to attend 4/DEG
 - : The DEG Chairman replied to NL and the EU Commission that the slopes, as defined, specified the limits of acceptable performance outside the drive-by test conditions and that DEG considered that these curves would adequately detect vehicles with non-linear engine performance; as was shown by the RESS example included in the graph
 - : In addition, the tolerance of 2dB for the upper part of the graph was appropriate in terms of measurement accuracy and there was no justification to have a 3 dB value instead
 - : DEG had wanted to make sure that only properly designed vehicles had been included into the DB
 - For example data points representing vehicles which had been purposely designed for satisfying Reg41 had been removed: the focus was clearly defined and agreed by DEG
 - : Germany confirmed to R41WG that the ASEP concept had proved to work quite well since vehicles intentionally modified to meet Reg41 would be detected by ASEP which had not been the case under the current TA-Reg41 procedure
 - : Japan considered that only vehicles above the Reference point were important to consider for improving the environmental noise situation
 - : NL pointed out that the COP system should eliminate most of illegal vehicles at the first stage
 - : NL asked how many vehicles did not comply to the existing Regulation 41
 - : IMMA replied that this number should equal the number of non conformity (to TA and COP) vehicles detected during the test campaign (2 out of 38)
 - : DEG would remove the non COPs vehicles from the calculated percentage of excluded vehicles
 - : Germany, as Member of DEG, had written the specifications for the ASEP test programme
 - : Germany confirmed that CVT vehicles would be exempted if their ASEP engine speeds did not differ significantly from those reached in the ISO362-2 test
 - : Germany added that the current technology used for CVT vehicles exempted them from the ASEP testing but for future models, there was no guarantee on today that they would behave similarly
 - : IMMA proposed adding into the new text of the revised Reg41 a paragraph which would stipulate a tolerance value for CVT vehicles, as either a percentage difference above the Reference value or an absolute value
 - : NL asked if boundary acceleration conditions had been defined by DEG
 - : Germany replied that it had been decided not to have any acceleration limitation for either ASEP or the new Annex3
 - : The DEG Chairman confirmed that the technical part of the changes proposed for the amendments of Reg41 would be added to the draft new text of the revised Reg41

Agreed : DEG would develop the tolerance specification for those CVT vehicles that would not need to be covered by the ASEP requirements

3.2.2 How to use the new ASEP test procedure in the context of TA and COP

- Noted : The Chairman of the Reg51 ASEP Group explained that it had been agreed that: every M1/N1 vehicle would have to comply with the ASEP Reg51 requirements administratively, as part of the TA process, each manufacturer would have to sign that their vehicles did comply with the ASEP requirements
if a test house had any doubt concerning a vehicle, this test house would have the right to conduct the ASEP test procedure
: IMMA supported the method of application agreed for R51, as the method to be used for R41
: USA recommended focusing on the long term improvement of environment by dealing with after-market exhaust systems through regulatory requirements and in-use testing to punish motorcyclists with illegal exhausts
: IMMA reaffirmed that a proper ASEP method and a proper enforcement would solve the problem described by Germany at the first Informal Group meeting
: Germany explained that measuring noise on a roller bench was not feasible for noise, unlike for emissions, and therefore defining operating conditions was very important in order to be able to measure accurately the noise level of each vehicle on the test track
- Agreed : The ASEP procedure would be applied in R41 in the same manner agreed for R51
: The ASEP test procedure would be available at both type approval (in case of doubt by the technical service) and as part of CoP testing
: Germany and the EU Commission would study the ASEP limit curves and would communicate to the R41WG Secretariat the outcome of their study by the end of October
: DEG should be able to resolve the open questions by correspondence, but was willing to meet if necessary
: The ASEP test procedure would be included in the revised Reg41 text
: The requirement of excluding of MCs with PMR below 130 kW/t would be removed because it was redundant in the light of the decision on how to apply the ASEP procedure

4. Examples of Noise models

- Noted : The current model made by the German Consultant calculated the Leq for every hour of the day
: The fleet was split into subcategories and into emission stage categories.
: Scooters and MCs had been included without any discrimination of Classes
: The R41WG Chairman asked all CPs to deliver any other available noise models that included motorcycles before the next session
- Agreed : Germany would provide an explanatory note about its noise model to attach to the 9/R41 Minutes
: Germany would deliver to R41WG a list of scenarios to use with noise models and would deliver his own calculation using its current model & scenario(s)

5. The roadside enforcement in use testing

- Noted : The presentation from Germany *(Annex3.ppt)*
: The proposal would be to add a procedure which CP may decide to use at the national level with a set of “not to exceed” values
: Germany reminded R41WG that silencers could be tuned to perform well under the present stationary test procedure, and then to be completely different elsewhere in the engine map
: IMMA opinion that no additional test should be added to TA
: IMMA was interested to know the conclusions from BAST
: IMMA recommended using Reg92 since the vehicle was tested under load and the requirement for the RESS was based on a back-to-back comparison with the original equipment exhaust
: The NL’s support to Germany for a roadside enforcement test

- : USA cautioned Germany to consider designing a simple test procedure in light of a global application beyond the use of the TA system
- Agreed : R41WG would decide at the 10/R41WG session, which one of the 3 proposals would be included in the revised R41
- : Germany would present the results of the BASSt study as soon as they were available

6. Simplification of the testing

- Noted : The summary report from Italy on repeatability of results with 2/3/4 runs (*Annex2.zip*)
- Agreed : 3 runs for the basic WOT and cruise drive by testing would be satisfactory

7. Future meeting

- Agreed : 10/R41WG would be held on **2008/02/19** (full day)
- : Italy would provide R41WG with a draft amending text for ECE R41 with all currently unresolved sections/values in square brackets.
- : All documents should be provided to the Secretariat by 2008/01/15

Philippe C. Chesnel