

Report on the informal meeting, 06/09/01, IMMA office - Geneva

Attendance:

Italy : Mr Alburno
 Germany : Mr Steven
 JASIC,NTSEL: Messrs Tanaka, Inomata, Yonesawa
 IMMA : Messrs Rogers, Tsujimura, Chesnel, Nakanishi, Jaeger
 ISO : Mr Segers
 MLIT : Mr Oketani

1. Revision of Reg41

1.1 The correlation/verification testing

1.1.1 For the ISO 362-2 test procedure

- Noted : The list of motorcycles tested by Bast and the results (*Annex1*)
 : The PMR range for that list was between 41,5 and 428,1
 : Only four vehicles had produced results higher with the new ISO test procedure than with the current R41 procedure.
 : Bast confirmed that there was no technical problem with to the test procedure
 : India, ACEM, Japan and Bast had produced a consistent picture of results.
 : TUV's request for data information from ACEM to determine what data was still missing
 : The general question was if any significant motorcycle was missing in the results
 : The general agreement that the range of motorcycles was appropriately defined
- Agreed : The repeatability and practicability of the new ISO362-2 test procedure
 : The consolidation of the DB would be done with the latest received results
 : The current test result DB represented a good, suitably representative range of motorcycles, though this would be checked
 : The testing had proved that the new ISO test procedure forced motorcycles to accelerate
 : The group would reconfirm the suitability of the data for later discussions
 : These results were a good enough basis for any later discussion on limit values

1.1.2 For Additional Sound Emission Provisions (ASEP)

- Noted : ASEP should be a test procedure to make sure that the engine would behave in a linear way in parts of the engine map not tested by ISO (e.g. linear increase in noise).
 : because of very sophisticated management systems for emission purposes, administrations wanted to check the noise emissions outside the urban conditions covered by ISO.
 : There was no rationale for having ASEP being necessarily part of the TA process from the IMMA standpoint.

- : Japan and Germany though that ASEP should be an intrinsic part of any TA process.
- : Considering that the ISO Reference “maximum” was at high engine speed Germany would like to test the noise behaviour of motorcycles at low speeds as part of their assessment of the in use driving behaviour
- : Italy reminded that possible peculiar driving behaviours of motorcyclists within urban operating conditions was not the target of an ASEP test procedure.
- : IMMA did not consider that an evaluation of noise emissions below the ISO reference point was necessary.
- : IMMA asked Germany to explain the logic to test at low speeds (e.g. below the ISO Reference point)
- : The reminder that ISO would not check the extra urban behaviour of PTWs
- : The need to produce some evidence of problems for PTWs (as had happened with sport cars) before considering any testing below the ISO Reference point.
- : The reminder that some CVT vehicles would not need the ASEP test at all.
- : The reminder that the dependence of noise with engine speed was valid for CVT vehicles.
- : For CVT vehicles since there was only one engine speed, it was possible that the ISO test procedure was implicitly covering the ASEP “area”.
- : The need to define accurately which class of vehicles would do that test.
- : The report from IMMA about the 1st version of the ASEP test procedure was that it was not practical enough.
- : For example, Italy reported higher range of exit speeds (well above 90km/h) due to long runaway leading to safety problems.
- : The report from Bast about the 1st version of the ASEP procedure that they had not experienced any difficulties with the procedure (because TUV had assisted them)
- : The reminder that 20km/h is the minimum vehicle speed in order to get stable results
- : The reconfirmation of the existing problems for ASEP by Bast:
 - * interpretation of results
 - * no repeatable results
- : The need to define clearly which engine condition to use.
- : Any engine speed above 50% would be excluded from the ASEP test
- : The plus of using an adaptation of the ASEP solution for M1 vehicles would be that it would give an engine speed range instead of having one single value to use.
- : TUV presented a motorcycle adaptation of the French/German proposal on ASEP for cars (*Annex2*)
- : for motorcycles there was no tyre noise generation to subtract, as for cars.
- : The difference with the ASEP version for M1 vehicles was that it would be engine speed related (e-g- it would not be gear related since the influence of noise would be minimal)
- : There would be no specific curve for each gear/tyre type as for cars
- : The reminder of the need for high tech equipment to measure Lmax

- : Engine load differences would be covered by such a 2dB tolerance value's proposal.
- : The need to discuss if results should be related to PP or BB.
- Agreed : R41WG should decide if ASEP would be a procedure that administrations could use if needed or if it should be part of TA as a principle.
- : The existing ASEP draft procedure was not as solid as it should be and should be more clearly detailed in order to avoid any interpretation problem.
- : An investigation of the "not to exceed" revised ASEP approach based on an adaptation of the French/German proposal on ASEP for M1 vehicles.
- : The need to confirm by testing the revised ASEP equations proposed by TUV
 - Consideration of relevant slopes around the reference ISO point
 - Considerations of tolerance to use (e.g. the 2dB value proposed to be added to the threshold dB limit value)
- : The need to construct curves for CVT vehicles to assess their inclusion or exclusion.
- : The need to confirm if the group had enough test data to be able to assess/validate the new ASEP concept or if extra testing was required.
- : The recommendation to R41WG to continue monitoring R51 ASEP TF discussions for any relevance to R41WG discussions

2. The roadside/drive-by enforcement testing

- Noted : The proposed roadside test did not produce repeatable results
- : This was confirmed by IMMA and by the (unaided) Bast results.
- : Although Bast did not test all the vehicles, Bast confirmed that engine speed was too low to be able to get a stable acceleration for some types of motorcycles.
- : The differences between the current Regulation 41 and the new drive by test
 - **much lower vehicle entrance speed
(30-35km/h depending on the PMR value)
 - **specific formula for entrance speed for CVT
- : The general opinion that this new drive by test was not a valid tool for obtaining prosecutions
- : Germany pointed out that this possible new drive-by test should be performed in parallel to the TA testing and would require 1 gear instead of 2 as for TA; this test should be a "TA based test".
- : Germany reminder that they targeted misuse of mufflers and illegal OE/RESS in the traffic
- : IMMA's view was that OE devices should not be required to undergo the possible new drive by test at type approval.
- : The reminder that stationary and that possible new drive by test would be included as optional parts to be decided by individual CPs if to be applied or not.
- : The general agreement that any new drive by test should be as simple as possible

- : Italy reminded that any drive by enforcement test had to be applied by the Police
- : The “how to apply” had to be solved by politicians as a mean for enforcement
- : The reminder that speedometers exhibited higher values than the reality
- : Differences of 5km/h in vehicle speed had been found by Bast during testing
- : This means that the vehicle’s speedometer would not be used during testing
- : Tolerance of the method should cover the intrinsic differences in vehicle speedometers.
- : A microphone position on the road side would be more crucial and a minimum tolerance of 2dB would be needed to cover that question
- Agreed : The group would look at the consolidated test results DB to see if other “enforcement reference points” were possible.
- : The group would reconsider the practicality of that test protocol before giving any recommendation

3. Next steps : process & timetable

- Noted : R41WG might start the limit values discussion in February 2007.
- : The industry wanted to minimize the amount of further testing to be done (if any)
- : The need to get agreement from R41WG to the course of actions.
- Agreed : The data collection group would consolidate the test result DB as soon as possible.
- : TUV would analyse the consolidated DB by end of October
- : The data collection group would identify datasets that could be used as Reference values for enforcement
- : R41WG would be asked to confirm the principle of the ASEP concept
- : The data collection group will keep following the car discussion by attending the M1 vehicle ASEP/TF meeting
- : A tentative date for a 2nd data collection expert group meeting would be November 22th in Ann Arbor/USA (half day meeting).

Philippe C. Chesnel