

Draft minutes – Revision 1¹

3rd EPPR Informal Working Group Meeting, 7 June 2013

Summary and draft operational conclusions

- Terms of Reference was adopted and Request for mandate document were agreed by GRPE 66th session and will go to WP29.
- Following structure and deliverables were agreed:
 - o Structure under the '98 agreement:

Type I (Tail pipe), Type II (Idle) and Type VII (CO2)	amendment to GTR2
EVAP and crankcase (Type IV and III)	new GTR
OBD (Type VIII)	new GTR
Durability (Type V)	Open issue: EC proposed to put under GTR2. India preferred to create a separate GTR due to different market fuels in the different world regions
Propulsion/Performance test	new GTR

- o Two- and three-wheel vehicles to be put under common GTR's, as separate annexes, unless found not appropriate.
- o Quadricycles to be discussed under the '58 agreement first.
- EVAP, OBD and Type I will be given 1st priority. The chair and secretary will draft a proposal for a complete roadmap to be discussed at a phone/web conference in September.
- Technical discussions on prioritized subjects should start in the meeting in October in India.

Detailed meeting minutes

- **The draft Minutes of 2nd meeting**, (document EPPR-02-11e) were adopted.
- **EPPR Terms of Reference and rules of Procedure and Request for EPPR mandate** have been submitted as informal documents for the 66th session of GRPE (documents GRPE-66-11 and GRPE-66-12). GRPE adopted the Terms of Reference and agreed to the Request for mandate. The ToR document will be annexed to the report from GRPE and the Request for Mandate should be submitted for approval to WP29 (AC1 and AC3) by the sponsor (EU, represented by the European Commission).
- **Contributions from stakeholders**
 - **The European Commission** presented document EPPR-03-05e:
 - o Test type I emission laboratory test equipment can be commonly used for 2-, 3- or 4-wheeled vehicles.
 - o The only differentiation for 2-, 3- or 4-wheeled vehicles that needs to be made, is for the determination of the test bench settings: 'coast down' provisions and equivalent inertia mass & running resistances.
 - o The EC proposes all types of L-category vehicles (2-, 3- or 4-wheels) should follow the same test cycle, the WMTC.

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Part of this suggestion is to replace conventional ECE47 test cycle used to type approve L1e (mopeds and light scooters), L2 (three-wheel mopeds) and L6e (light quadricycles) with a new test cycle based on urban, low vehicle speed, part 1 of WMTC test cycle.

The EC explained that R47 is an artificial test cycle: It contains idle, wide open throttle, constant speed phases (20 and 40 km/h) and some accelerations in between, but does not allow sufficient assessment of emission performance in the part-load area. Phase 1 of the WMTC is applied for 50 cm³ motorcycles and should therefore also be applied for 49 cm³ mopeds, allowing a more realistic emission verification of low displacement vehicles operated simulating dynamic conditions occurring in modern urban traffic..

- Following the EC's explanation for Type I, IMMA expressed its concern that the group is losing the agreed emphasis for OBD and EVAP.
The chair disagreed and confirmed that OBD and EVAP remain top priorities as requested by Japan.
The chair added it was his understanding from previous working group meeting that OBD and EVAP would be dealt with as first together with Type I.
- Hungary asked for a justification to change the current test cycle for mopeds.
- India explained that WMTC was designed for L3 vehicles and that driving data was collected for the creation of it. India considered EC's synthesis a paper exercise. For expansion to other categories, India suggested collecting data or at least doing a validation.
- NL suggested that EC should not only address the problem of mopeds not able to reach the maximum speed of WMTC part 1. NL doubted that mopeds with 1 or 2 horsepower would be able to follow the trace and suggested this needs to be looked at, stating also there would be no time to do this.
- D-Heinz Steven explained that the specific dynamic behavior of vehicles cannot be ignored. If WMTC part one would need to be applied to mopeds, the whole cycle would need to be rescaled.
- The EC saw no need to collect data, as lots of data was collected for WMTC. The EC stated that the border at 50 cc is arbitrary and is not technically justified. 50cc motorcycles are already in the scope but are only limited to a certain maximum speed.. The EC said a test cycle is a compromise between regions and the same compromise for mopeds should be made.
- **Japan** presented document EPPR-03-04e:
 - o Domestic EVAP and OBD draft regulations for L3 vehicles are to be finalized by end of 2013. As such, Japan suggests to put priority on EVAP and OBD in the EPPR working group.
 - o Japan suggested having a detailed discussion in the next meeting in India. Japan outlined a draft EVAP test flow, indicating identified points for discussion.
 - o For OBD, Japan will report at next meetingThe chairman confirmed EVAP and OBD are highest priority for the group.

- **Structure of UN Regulations and GTRs with regard to EPPR.**

- **The European Commission** presented earlier document EPPR-03-05e:
 - o For regulatory structure of the EPPR-output under the 1998 Agreement, the EC proposed:
 - Expand scope of GTR2:
 - 1) Include engine displacement < 50 cm³
 - 2) Add durability (type V) apart from cold start pollutant emissions (type I), idle (II) and CO₂ (VII). The EC noted India's proposal to create a new GTR for durability, for reason of test fuel. But EC suggested to find a creative solution for the test fuel issue.
 - New GTR for crankcase and evaporative emissions (types III and IV)
 - New GTR for test type VIII, to be discussed if functional OBD can be included. In EU, OBD includes functional safety.
 - New GTR for propulsion performance (max vehicle design speed, max torque and power)
 - o For regulatory structure of the EPPR-output under the 1958 Agreement:
 - The EC sees 2 options:

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- 1) Replicate structure of R83 & R101 (include all environmental test types in one new UN Regulation and the propulsion performance requirements into another new one); or
 - 2) Mimic structure as proposed for 1998 Agreement in new "shadow" Regulations.
- EC is neutral, and is open to any of the two options above.
- The EC proposed to consider upgrading R40 and R47 with measurement equipment requirements (NOT the test cycles) from GTR No 2.
The EC suggests to discuss if categories L6 and L7 (light 4-wheel vehicles) can be included in the scope of new UN Regulations (58 Agreement only). As a principle, EC suggests to consider applying provisions for 3-wheel vehicles also to 4-wheelers.
- **India** presented their revised proposal, document EPPR-03-02e:
- India prefers to give priority for GTR's first and subsequent transposition to ECE for categories covered both in SR 1 and RE3.
 - India suggested discussing quadricycles first under the '58 agreement, as these vehicles are not included in the categorization of SR1.
 - India proposed:
 - To group tailpipe emissions: Cold start pollutant emissions (type I), Idle (II) & CO₂ (VII), and make an amendment to GTR2.
 - To group EVAP and crankcase emissions in a new GTR
 - To create a separate, new GTR for OBD
 - To create a separate, new GTR for durability
 - To create a separate, new GTR for performance related tests
 - India proposed to give priority to EVAP, OBD and tailpipe emissions.
 - India suggested to put 2-wheel (L1, L3 & L4-categories) and 3-wheel vehicles (L2 & L5-categories) under a common GTR, but separated in different annexes of the GTR. India added L3 can be given priority.
- **TRL** presented doc. EPPR-03-06e suggested following priorities:
- First: Test type I: Emissions after cold start
Test type IV: Evaporative emissions
Test type VIII: OBD
 - Second Test type V: Durability of pollution control devices
Test type III: Crankcase emissions
 - Third Test type VII: Energy efficiency, i.e. CO₂ emissions, fuel/energy consumption, electric range
Test type II: Idle emissions
 - Forth Propulsion performance requirements
 - Fifth Classification of vehicles and definitions

TRL recommended also the chair and secretary to maintain a definitions list **and made reference to a revised detailed roadmap (EPPR-03-07e.xlsx) they had developed and were proposing to the group based on the discussions in the 2nd meeting.**

With regards to structure of regulations under the '98 agreement, TRL said durability (Type V) and OBD (Type VIII) could either be grouped in GTR2, or put into separate new GTRs.

For propulsive performance TRL remained to have the idea that R68 and R85 could be expanded.

- Following the proposal by India to have 2- and 3-wheel vehicles as separate annexes in a common GTR, the chairman asked if the group could agree to amend GTR2 in order to include 3-wheel vehicles.
- IMMA raised a scrutiny reservation, and said they need to check from a technical point of view if current WMTC is suitable for 3-wheelers.
- The chairman suggested to follow a similar approach as used in the Heavy Duty Hybrid working group (under GRPE): Describe in the EPPR work plan/roadmap that the intention is to have 2- and 3-wheel vehicles as separate annexes in a common GTR, but if 'on the road' any problem is discovered with this approach, we remain having the option to split 2- and 3-wheel vehicles in separate GTR's.

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- Following a discussion, the chairman confirmed the positions as basis for the structure:
 - o Japan and India prefer priority is given on specifications 2-wheelers, especially for L3 category. They can accept to include L1 and to have 2 and 3-wheeler specifications in a same GTR.
 - o EC can accept to focus on L3, but prefers also to have L1 (lower powered vehicles) included

- The chairman summarized the position of the group for structure under the '98 agreement:

Type I, Type II and CO2 (Type VII)	amendment GTR2
EVAP and crankcase (Type IV and III)	new GTR
OBD (Type VIII)	new GTR
Durability (Type V)	Open issue: EC proposed to put under GTR2. India preferred to create a separate GTR due to different market fuels in the different world regions
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Note: 2-, 3-wheel in the same gtr's, as separate annexes **if deemed necessary**, unless found not feasible

- The proposal by India to discuss quadricycles under '58 agreement first was accepted by the group.

- **Roadmap and project planning doc.**

- TRL showed EPPR-03-07e
- The chair summarized the positions:
 - First priority: OBD, EVAP and Type I
 - Main priority: L3, also acknowledge to have L1 in the scope
- IMMA supported a broad scope for EPRP, but expressed a concern regarding feasibility to discuss L3 and L1 at the same time, considering the number of subjects. IMMA proposed to work sequentially, dealing first with L3 because this is the most important and biggest class of vehicles looking at the worldwide market. IMMA explained that only EU and China have mopeds (L1) and moped share in China is 11%, but a strong decline is observed in China as ICE-mopeds are replaced by electric vehicles.
- EC said there is an artificial threshold between L3 and L1, and added **that there is no difference between them that justifies a different assessment methodology of the environmental and propulsion performance of a 49 cm3 moped compared to a 50 cm3 motorcycle.**
- The chair proposed to combine discussions for L3 and L1 as much as possible and to work sequential on a case by case basis if there is a clear difference, focusing in that case on L3 first.
- The group accepted the proposal that chair and the secretary will draft a more detailed roadmap.

- **Next meetings**

- The chair explained his intention to have a phone/web conference in the 2nd of 3rd week of September. More details to follow.
- EPPR-04 will take place in India on 8-9 October. An invitation has been uploaded, see doc. EPPR-04-01e.
- EPPR-05 is expected to take place 8 Jan 2014, PM in Geneva, in conjunction with the GRPE-68.
- The chair repeated his requested for stakeholders to step forward for hosting future meetings.

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