

Informal Group on the World Light-duty Test Procedure (WLTP):
Comments by the expert from the United States of America

General Comments

The United States would like first to commend our Japanese colleagues for their early efforts on the issue of a world harmonized light-duty test procedure. We agree that the current process for exploring the need and developing a scoping plan for a world harmonized light-duty test procedure Global Technical Regulation is an important step. WP.29 and GRPE can uniquely provide the technical and policy guidance such an endeavor will require. We support the current WLTP scoping effort and we wish to highlight that the US Environmental Protection Agency has a great deal of experience in this area going back to the late 1960s with the development of our original light-duty transient Federal Test Procedure (the “FTP”).

Harmonization is an important goal when it serves to move us forward toward greater environmental protection. We must not lose sight of our primary goal which is to reduce air pollution and improve air quality around the world. This is also the reason that the United States and other Contracting Parties have signed the 1998 Agreement – to move toward greater environmental protection through harmonized requirements. This is of principle concern to the United States where the passenger car fleet is the largest source of air pollutants within the transportation sector.

Based on EPA’s decades-long experience with developing mobile source air pollutant test measurement procedures and cycles, and our review of the WLTP roadmap document, a WLTP GTR development process—should one be undertaken—will be time consuming and costly if it is going to be done right. For that reason, we believe that the roadmap must provide more clarity and detail in regards to goals, scope, timing and budget. We also believe that the roadmap should include more possible approaches and associated goals, scope, timing and budget. As an example, the WMTC GTR contains several test cycles, each applicable to motorbikes of different sizes. This may well be a viable approach for the WLTP, yet such an idea is not reflected in the current roadmap. Along those same lines, the roadmap should reflect a possible approach whereby the GTR effort focuses only on the drive cycles, with the broader test procedure issues being left for a future effort. As of now, the drive cycle is referred to as Phase I and the test procedural issues are referred to as Phase II, but these two phases together comprise the GTR effort. These could be two separate GTR efforts with associated timelines and budgets. This would provide WP.29 and AC.3 with a more comprehensive view of the possibilities prior to making a decision on a future course of action.

Additionally, while the United States is supportive of this WLTP scoping effort, we hope that our industry colleagues are prepared to undertake such a potentially large task. This highlights the importance of giving careful and complete consideration of the possible resource expectations. The roadmap effort has only recently begun, but it now

appears slated for completion in June 2009. Given such an aggressive schedule, it is not too early to begin discussing the resource implications of each of the roadmap items to ensure that we do not generate a roadmap which is too optimistic with respect to the resource implications.

The last of our general comments concerns overall timing. Controlling and reducing of greenhouse gas emissions is a concern around the globe. To be most useful, any WLTP GTR would need to be completed in a timely manner. Otherwise, different regions will move forward with revisions to existing programs or through regionally developed new programs to address their greenhouse gas concerns.

Specific Comments

- A fuller discussion or description is needed of Phase I and Phase II (refer to WLTP-02-08). These phases should be described in detail with timelines and budgets implications of each phase separately.
- In WLTP-02-07, it is implied that data analysis would be done by 3rd Parties. We need more description of the rationale. While the United States does not object to 3rd Parties analyzing the data, we would like to ensure that any GRPE participant has the opportunity to analyze any and all data generated as part of this effort.
- The United States is hopeful that off-cycle emissions can remain part of the roadmap for the WLTP GTR should it be carried out. Off-cycle emissions in the passenger car market may not be controlled properly by current regulatory drive cycles, test procedures or programs. Moreover, properly designed off-cycle drive schedules and test procedures can serve to promote technologies that are more effective at reducing emissions in the real world, as compared to a single laboratory test procedure. We concur with these items being part of the roadmap.
- While not addressed at present on the roadmap, at the June 2008 meeting (WLTP-01), there was a discussion of the potential inclusion in a WLTP process of in-use compliance testing and conformity. The United States believes that these issues should not to be covered as part of this process. However, as noted on the roadmap, we believe that durability procedures may well be appropriate for a GTR or, at this time, the WLTP roadmap. Should the possible GTR address durability procedures, the United States would recommend a review of the durability procedures used in regional legislation to serve as a starting point. For example, in the United States, durability procedures consist of, in brief:
 - Rapid aging of exhaust aftertreatment devices to determine deterioration factors;
 - Application of those deterioration factors to low mileage emission results to arrive at estimated full life emissions;
 - Testing of in-use or in-service vehicles to verify and, if necessary, adjust rapid aging procedures to ensure representative results.

The third bullet above would need to be carefully considered to ensure that the feedback or adjustment process would be uniform. This could make the inclusion of durability procedures possible, making them closely linked to emission limits but not an issue of certification or type approval procedures. Focusing on durability rather

than in-use compliance could limit the GTR scope from venturing into the area of compliance and the manner in which different Contracting Parties implement their compliance programs.

- The United States also cautions against including enforcement provisions linked to potential in-use testing. That is, the GTR should not include ramifications associated with in-use test results such as vehicle recalls or non-conformance fees. Such enforcement provisions should be left to regional legislation.
- The United States notes that air conditioning system use does not appear to be reflected in the roadmap. We should not lose sight of the use of air conditioning and its impact on emissions. While not all vehicles are equipped with air conditioning systems, any vehicle that is so equipped should be tested in a manner to ensure that operation of the system does not compromise compliance with applicable emission limits. The United States would like to see air conditioning system impacts included in the roadmap.
- Onboard diagnostics (OBD) is an item mentioned in the roadmap. Within Section B, the roadmap reads, “OBD (test conditions and threshold values)” and, within Section C, the roadmap reads, “OBD requirements must be considered”. The United States cautions against considering OBD at this time. OBD requirements could be considered as a distinct GTR development effort at some time after the WLTP GTR is completed. To address OBD within a test procedure GTR could be unnecessarily burdensome on the informal group. If the idea is simply to keep in mind the fact that a WLTP test procedure should make possible the evaluation of future OBD systems, considering OBD may be appropriate at this stage. But to go further than such consideration and into the area of developing an OBD GTR (e.g., test conditions and threshold values) might not be prudent.
- At the June 2008 WLTP meeting, there was a discussion of the vehicle classifications to be included under a potential WLTP GTR. The United States recommends that the GTR be limited in scope to complete vehicles tested on a chassis dynamometer with gross vehicle weights less than or equal to roughly 14,000 pounds (~6,350 kg). Vehicles fueled by alternative fuels should be considered, including all forms of hybrid vehicles.
- We believe that the roadmap should include some mention of, and that the group should have some discussion of, dynamometer-related issues (single roll versus double roll dynamometers, etc.).

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