Work Plan for GRPE/WLTP-IG (draft)

I. Confirmation of Tasks in a Broad Framework

(1) Confirmation of preconditions

- 1) Confirmation of applicable vehicles:
 - M₁/N₁, LDV/LDT, maximum vehicle weight, maximum gross vehicle weight
- 2) Confirmation of applicable fuels/technologies:
 - Gasoline, diesel, NG, LPG, FFV, hydrogen, HEV/PHEV/EV
- 3) Confirmation of tests to be considered for inclusion:
 - OBD, off cycle, evaporative emission
- 4) Confirmation of items not to be considered for inclusion, to be made optional for adoption, or to be considered for inclusion in the next step:
 - * In-use test, COP, durability mode
 - * Cold temperature conditions, high altitude conditions
 - * Limit values

(2) Development of the common test cycles (see Attachment 1)

- 1) Agreement on the fundamental scheme:
 - * The test cycles must be able to evaluate exhaust emissions and fuel economy/CO₂ simultaneously.
 - * The test cycles will be made available in three modes (i.e., urban, rural, highway). For determination of the final exhaust emission/fuel economy values, a WF for each of these three modes will be provided for calculation.
- 2) Determination of the countries/regions from which data will be collected: Europe, the United States, Japan, China, India

(3) Development of the test procedures

The development will be commissioned to ISO as necessary.

- 1) Definition of the applicable vehicles ("light-duty vehicles")
- 2) Cycle running conditions:
 - Gear shift points, air conditioner, electric load of auxiliary systems
- 3) Definition of the equivalent inertia weights and classes
- 4) Procedures for road-load measurement and load setting
- 5) Procedures for measurement of exhaust emissions and fuel economy/CO₂, etc.
- 6) Reference fuels
- 7) Preconditioning/soak conditions

(4) Validation

- 1) Drivability
- 2) Reproducibility of measured exhaust emissions and fuel economy/CO2 values
- 3) Detection capabilities of the OBD

II. Confirmation of the Work Schedule

III. Agreement on Establishment of Sub-Working Groups and Allocation of Tasks

In addition to the WLTP-WG for development of the common test cycles, sub-working groups will be established as necessary.

- (1) WLTP-WG: Development of the common test cycles
- (2) Sub-WGs
 - * To be established in conjunction with the test cycle development: OBD, off cycle, air conditioner
 - * To be established after the test cycles have been developed: HEV/PHEV/EV, H₂-fueled vehicles

IV. Determination of the Budget and Agreement on Sharing of the Cost

Attachment 1

Work Flow of Common Test Cycle Establishment

