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Old Annex 2 Reference Fuels
moved to new Annex 3

Old Annex 3 Determination of
System Equivalence moved to new
Annex 9

New is Annex 2 Gear Selection,
Shift Point Determination

A.1 to 3: Statement of technical rational and justification

To be done by DG-ENTR

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B.1 Text of regulation, purpose, scope

Has been started.

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B.2 Application

It has yet to be determined whether this section is required at all. E.g., the section is not part of GTR 4 (gas engines) or GTR 2 (motorcycles).

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B.3 Definitions

1. EU, ECE, EPA, CARB, Korean, Chinese, Japanese, Indian definitions have been summarised in tabular form and are being grouped into subject areas. This will make an analysis of definitions by the subgroups (which ones to keep, which ones to modify) easier.

2. It was decided at the GRPE meeting in January that definitions will be listed in alphabetical order.

3. Annex 8 contains a list of definitions. Subgroup EV suggests that general definitions could be placed in Section B.3. but testing-specific EV definitions would remain in Annex 8.

4. Gaseous fuel definitions have been received but not yet incorporated into the draft text.

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B.4. Symbols and B.5.
Abbreviations

Work has been started on
these sections.



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B.6. General Requirements

This Section has not yet been addressed in detail.

It includes subjects such as equivalency, test group determination, engine families, parent engine.

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Annex 1 WLTP DHC Drive Cycle

The annex includes speed/time diagrams and tables for the various cycles. It also includes a definition of the various vehicle classifications.

This Annex is essentially complete pending modifications.

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Annex 2 Gear Selection and Shift Point Determination

The Annex contains methods to determine which gears are to be used on the concerned cycle and the respective shift schedule.

The Annex is essentially complete pending modifications.

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Annex 3 Reference Fuels
Input has been received from subgroup
Reference Fuels.

Tables describe fuels (petrol, diesel, E85,
LPG, CNG, etc.) in Europe, India, South
Africa, Japan, South Korea.

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Annex 4 Road Load Determination

The Section is currently being analysed.

Text/input has been received from Japan and has been incorporated into the draft text.

A web/telephone conference to be held at the end of June.

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Annex 5 Test equipment and Calibrations

Substantial input has been received and has been included into the draft.

Numerous web/telephone conferences and f2f meetings have taken place.

Substantial amount of text has been converted to b&w.

Open points: cooling fan speed, some PN questions (e.g. updated calibration guidance), analysis of ethanol and aldehydes.

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Annex 6 Test Procedures, Test Conditions

In the draft annex, a number of sections are dependent on results of Validation 2.

Numerous web/telephone conferences and f2f meetings have taken place.

Substantial amount of text has been converted to b&w.

Open points remain include driving procedures (starting, stalling, re-starting, choke operation, steady state driving, accelerating, etc.), semi-automatics, self-learning gearboxes, emissions sampling, regenerative systems. These points are being clarified by LabProICE.

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Annex 7 Calculations
Numerous web/telephone
conferences and f2f
meetings have taken place.

Substantial amount of text
has been converted to b&w.

This annex is almost
complete.

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Annex 8 Electrified Vehicles

A web/telephone conference and f2f meetings have taken place.

More conferences and/or meetings must take place.

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Annex 9 Determination of System Equivalence

There has in the past been no general agreement as to whether there should be an annex on this subject. However, at DTP #9, it was decided that there must be a way to demonstrate equivalency of systems, such as for measurement equipment/methods or coastdown methods. Hence, an annex on equivalency should be kept.

- DC will investigate how other GTRs and ECE regulations (e.g., 49) deal with equivalency.