Diesel Heavy Duty emission related OBD
A module within a more generic GTR

Original scope and project management

- WP29 decided in November 2001 a GTR will be made, dealing with "On Board emission Diagnostic systems for Heavy duty vehicles and engines". It will concern Diesel fuelled compression ignition engines.

- GRPE was given the task to draft this GTR.

- A GRPE informal group, named WWH-OBD, has been created for that purpose:
  - Chairman: Mr. NARUSAWA, NTSEL (Japan)
  - Secretary: Mr. RENAUDIN, OICA/ISO
The OBD concept
Diagnosing, Recording, Communicating

"On Board Diagnostic system (OBD)" means a system on-board a vehicle or engine which has the capability of
- detecting malfunctions,
- indicating their occurrence by means of a malfunction indicator,
- identifying the likely area of these malfunctions by means of diagnostic elements
- storing that information in computer memory
- communicating that information off-board.
Further request from AC3

- **AC3 decided in November 2003 the GTR will be structured in such a manner as to enable its future extension to other functions of the vehicle.**

Notes:
1- the scope of the task given to GRPE / GRPE WWH-OBD has not been modified (emission related / Heavy Duty Diesel vehicles)
2- GRPE has been mandated to propose the requested structure

GTR structure – decisions from GRPE

- Further to AC3 request, GRPE agreed to the following:
  - The GTR will consist of:
    - a generic core set of requirements and
    - specific modules.
  - WWH-OBD will draft both the core part and the emission related module.
  - GRRF, GRSG, and GRSP need to review the content of the generic core part.
  - WP29/AC3 will be consulted on the best way to involve the other concerned GRs. In the mean time, they will be kept informed by WWH-OBD.
**GTR structure - concept**

**OBD - GTR**

- Generic OBD Provisions
  - Considerations
  - Definitions
  - Requirements
- Emission related OBD provisions
- Function X OBD provisions
- Function Y OBD provisions

**GTR structure - editorial**

**OBD - GTR**

- Generic OBD Provisions
- Emission related OBD provisions
- "Module"

**Annex 1**

**Annex 2**

**Annex i**

**Annex 1**

**Annex 2**

**Annex i**

Other emissions related GTRs and standards

WHDC

WWH-oce

ISO standards
Content of the generic part – major elements

- Generic definitions
  - OBD
  - Types of malfunctions (functional, electrical, rationality, etc...)

- Generic requirements
  - Indication of a Malfunction (MI)
  - Failure classification (structure)
  - Storage of OBD information (DTC, freeze-frames, etc...)
  - Access to OBD information (com. Protocol, connectors, etc...)
  - Electronic security
  - Documentation requirements

GTR – drafting process

- Information to GRRF, GRSG and GRSP in spring 2005
- Joint informal meeting to finalise the generic part scheduled on Monday morning, 30 May 2005
  - Delegates of GRRF, GRSG, GRSP to be invited
- Complete draft GTR submitted to GRPE on Thursday, 02 June 2005 as informal document
- Comments of GRPE, GRRF, GRSG, and GRSP on the gtr to be provided by [16]* September 2005
- GTR submitted to GRPE as formal document in January 2006

*note: date to be confirmed on 30 May 2005