





## Information on OBD System



**WWH-OBD**

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



**WWH-OBD**

*Original scope and project management*

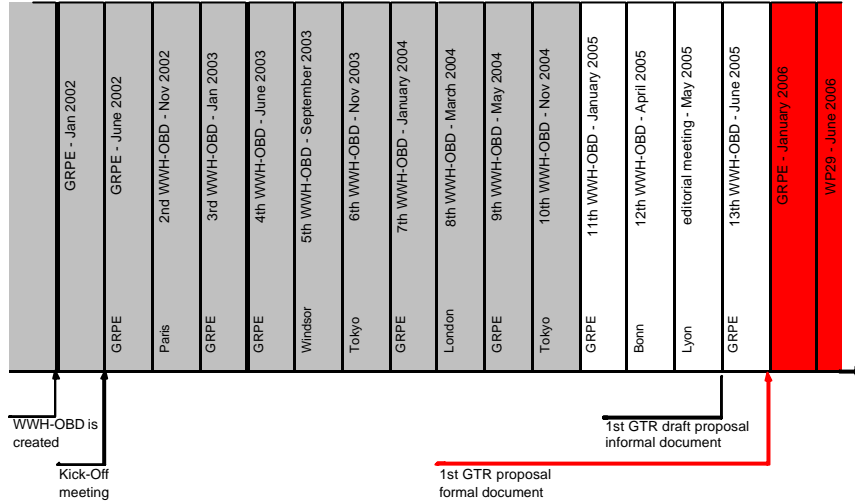
- ✿ **WP29 decided in November 2001 a GTR will be made, dealing with "On Board emission Diagnostic systems for Heavy duty vehicles and engines".**  
*It will concern Diesel fuelled compression ignition engines*
- ✿ GRPE was given the task to draft this GTR
- ✿ A GRPE informal group, named WWH-OBD, has been created for that purpose
  - Chairman: Mr. NARUSAWA, NTSEL (Japan)
  - Secretary: Mr. RENAUDIN, OICA/ISO

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## WWH-OBD

### time-schedule overview



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## WWH-OBD

### 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.

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### *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

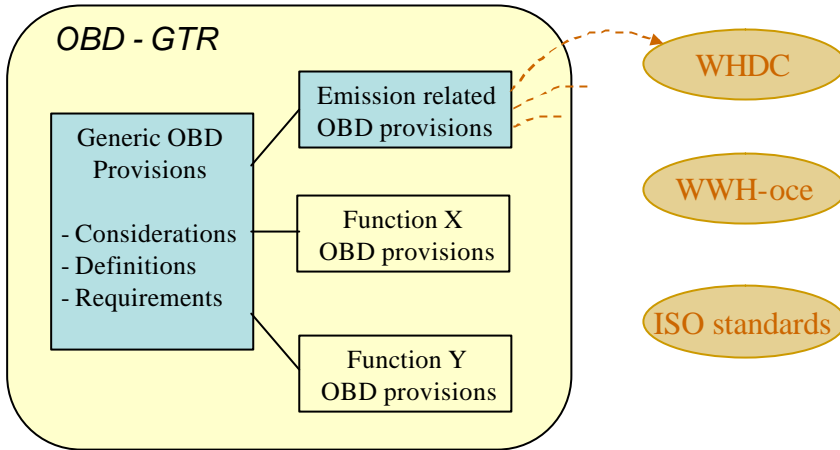


### *GTR structure – decisions from GRPE and AC3*

- ☛ Proposal (decision from GRPE; no objection from AC3)
  - ☒ Agreed structure: the GTR will consist of
    - a generic core set of requirements, and
    - specific modules.
  - ☒ Agreed conditions of success (timing issue)
    - Generic provisions will be limited to "low hanging fruits" (e.g. definitions) in this first version of the gtr
    - Generic part will be completed by technical provisions (generic communication system, generic alert system, etc..) in a later stage when the OBD modules for other functions will be decided by AC3
- ☛ Development of the GTR structure (decisions from GRPE)
  - ☒ WWH-OBD will draft both the core part and the emission related module.
  - ☒ GRRF, GRSG, and GRSP will review the content of the generic core part.



GTR structure - concept



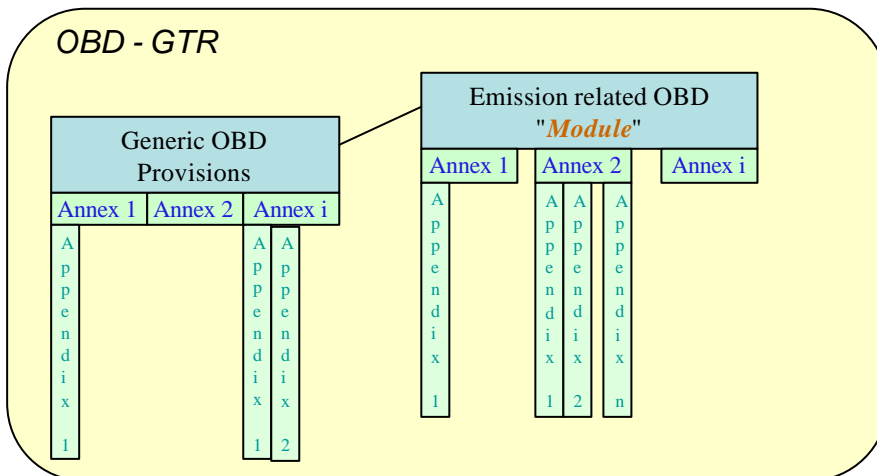
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GTR structure - editorial



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### *Content of the generic part – major elements*

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

Note: these requirements are considered as generic but are related to specific ones. It may be necessary to amend or to complete them as and when new OBD modules are introduced.

  - ▣ Alert system (Indication of a Malfunction, etc...)
  - ▣ Failure classification (when applicable)
  - ▣ Diagnosis information (DTC, freeze-frames, etc...)
  - ▣ Durability of the OBD system
  - ▣ 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 are 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 [31]\* August 2005
- ⊕ GTR submitted to GRPE as formal document in January 2006

*\*note: date to be confirmed on 30 May 2005*