CITA requirements for Type Approval and PTI

UNECE WP 29 ACSF: ECE R 79, Annex 6

General remarks:
Any safety relevant system / function shall be explained at the stage of type approval.
System / function limits shall be explained, threshold limits shall be agreed at type approval.
An adequate test procedure to check the hardware / software integrity of any safety relevant system / function at the PTI shall be agreed as well.

General requirements for the type approval process:

1. Detailed description and explanation of any safety relevant function / system
2. Listing of any relevant software version, incl. the debug versions since stage of type approval
3. Introduction of test procedures for PTI of those functions / systems
4. Notification of additional / updated functions / systems after first registration

Required information for PTI at the stage of type approval:

1. Test procedures for safety relevant functions / systems with an algorithmic sequence description of the selected test method and indication of the necessary test equipment, test drive, etc.
2. Status and fault information (listing and description):
    readiness codes, DTC`s, actual values of the functions / systems and its functionality
3. Agreed test routines via a harmonized access point / protocol (OBD connector, " Over the Air " access point)
4. functional test procedures, as being installed for dealership maintenance anyway incl. threshold limits for PTI
5. List with specification and explanation of the results data (limits, configurations, algorithms, position, design, ...) with assignment to the test procedures

Verification of test methods and test specifications for periodical technical inspection:

1. Proof of the effectiveness of those test methods and test specifications incl. the generation of defined faults
2. Test methods shall be capable of being carried out by a qualified and authorized person without the need for dismantling and non-destructive testing using PTI-standard test equipment, test equipment, during test driving
3. The safety, correctness, significance, robustness, efficiency and effectiveness of the test procedures must be ensured
4. Ensure that the following is possible for the electronic vehicle interface test:
    - Readout of all input variables / output variables as well as result data from (parametrizable) test routines implemented on the vehicle side
    - Control of all input variables / output variables as well as (parametrizable) test routines implemented on the vehicle side
    - Reading out relevant control unit information (data, parameters, memory)

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