



DETA Next Evolution Proposal by CITA to WP.29



IWG on DETA, 07.11.2018

Agenda

- 1 Proceedings**
- 2 Motivation**
- 3 Proposal**



1 | Proceedings



Proceedings – DETA Next Evolution in WP.29

WP.29 - Session 173 (November 2017)

Report: ECE/TRANS/WP.29/1135

E. Development of an electronic database for the exchange of type approval documentation (DETA) (agenda item 4.5)

Documentation: Informal documents: WP.29-173-04, WP.29-173-13, WP.29-173-15

63. The secretariat updated WP.29 about developments on the hosting of DETA by UNECE and the discussion of the UNECE Executive Committee (EXCOM) related to financing DETA (WP.29-173-04). The representative of the European Union gave, on behalf of the Chair of the IWG on DETA, a status report of the activities of the group at its thirtieth meeting. The secretariat presented WP.29-173-15 on behalf of the Chair of the IWG, explaining (i) what DETA is, (ii) the link between DETA and the activities of the WP.29, (iii) the expected benefits, (iv) the potential additional features of DETA, and (v) three scenarios to organize the migration of DETA to UNECE. He explained that scenario

Reference to Informal document WP.29-173-15

Potential benefits*

- Software updates (e.g. Over The Air)
- Storage of software version numbers
- Storage of validation models for Automated Driving
- Available for other compliance certifications e.g. blue ribbons, CCC

Status DETA Ways forward

November 2017

* To be further elaborated

Proceedings – DETA Next Evolution in WP.29

WP.29 - Session 174 (March 2018)

Report: ECE/TRANS/WP.29/1137

E. Development of an electronic database for the exchange of type approval documentation (DETA) (agenda item 4.5)

85. The Chair of the IWG on DETA presented the existing numerous benefits of DETA as well as those of the future further development of this data exchange system, with possible linkages to other parties engaged in the vehicle regulatory process, such as vehicle certification agencies, vehicle registration authorities, vehicle testing centres, enforcement authorities or customs and thus providing a seamless flow of vehicle related technical information among themselves (WP.29-174-19).

Reference to Informal document WP.29-174-19

Further Stages V+ – ideas to be developed

- Upgrading the database as a secured document management system
- Upload of additional documents by manufacturer and authorities
→ e.g. Certificates, recall information
- Upload of single vehicle related data (new / in service)
 - e.g. Software Versions – SWIN
 - recall information
- Exchanging of structured data → xml-files
- Enable partly access to third parties (e.g. dealer / public)

Stage V+ - Benefits

- **One** combined database for vehicle types / single vehicles and components
- Transparent vehicle (type and VIN based) and component information
- Worldwide access (without request) to compliance documentation
→ verify the validity and authenticity of certificates
 - MSA / TAA / CP / member states and manufacturer
 - Importers, Dealers, Public
- Crucial for market surveillance and customs checking vehicles / components
- Important for manufacturers for easy registration of vehicles
- Important for supplier for easy market access for approved components
- Benefits for PTI (allowed software versions) and road side checks
- Prerequisite for follow up of software updates → automated driving

UN Vehicle Information
Exchange Database - DETA
- a summary about the functions and benefits -

Proceedings – DETA Next Evolution in WP.29

WP.29 - Session 175 (November 2018)

IWG ON DETA Draft Minutes: DETA-33-02e

Transmitted by the Secretary of the IWG on DETA

Document: DETA-33-02e

DRAFT REPORT OF THE 32nd SESSION OF THE IWG ON DETA

Date: Thursday 14 June 2018

Venue: The Hague, The Netherlands

Chairman: Sven Paeslack, KBA, Germany (sven.paeslack@kba.de)

Secretariat: Tim Guiting, RDW, The Netherlands (tguiting@rdw.nl)

Attendees: see Annex 1 to this draft report.

11. AOB.

a) Approach on the application of the Unique Identifier

The proposal to amend the draft guidelines (DETA-32-08e) is transmitted to the IWG IWVTA without any comments or changes.

b) Next evolution/timing

CITA will present a proposal to the WP.29 November session.

c) ToR

At due time it needs to be confirmed if the current Terms of Reference cover the newly proposed functionalities by CITA.

2 | Motivation



Motivation

Safe / valid vehicle software

With the rise of vehicle functionality realized by software – especially for the automation of vehicles – the importance of **software** for vehicle safety, environmental compatibility and compliance grows rapidly.

Therefore **vehicle software and software updates** are, respectively will soon be, a central part of Type Approval, including the validation of the conformity of production, and market surveillance, including recalls and PTI.

Key for these use cases is reliable information about the **identity of a vehicle's software versions, their validity and integrity**.

Today there is no standardized, reliable, efficient way to access this information, for example for the check of software tampering and recalls in the PTI.

Motivation

Check Software tampering and recalls in the PTI

The **detection of tampered software** and the check of **compliance with recalls** in the PTI are required in national and international legislations:

Example: UN ECE 1997 Agreement, Rule 2, Annex

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
6.1.9 Engine performance (X) ⁽²⁾	Visual inspection and/or using electronic interface	(a) Control unit modified affecting safety and/or the environment.		X	
		(b) Engine modification affecting safety and/or the environment.			X

Example: Directive 2014/45/EC, Annex I

Item	Method	Reasons for failure	Assessment of deficiencies		
			Minor	Major	Dangerous
6.1.9. Engine performance (X) ²	Visual inspection and/or using electronic interface	(a) Control unit modified affecting safety and/or the environment.		X	
		(b) Engine modification affecting safety and/or the environment.			X

Motivation

Check Software tampering and recalls in the PTI

The **detection of tampered software** and the check of **compliance with recalls** in the PTI

are also important topics in the **UN ECE IWG on PTI**.

ToR of the **UN ECE IWG on PTI**:

The ways to identify tampering of safety and environment related components and systems have to be considered, including but not limited to, the following:

- further development of inspection techniques;
- in coordination with the activities under the 1958 and 1998 Agreements and especially the issue of software identification and Over the Air Updates, the version and integrity of the software, since tampering practices may also involve software modification;

3 | Proposal



DETA Next Evolution Proposal by CITA

Extend DETA (DoC)

to store **up-to-date, VIN-related information** about **permissible vehicle software** including version numbers and integrity validation data and to **provide** this data to **all relevant stakeholders** including Approval Authorities, Technical Services and the Periodical Technical Inspection (**PTI**)

In order to support use cases like **certification**, including the validation of the conformity of production, and **market surveillance**, including recalls and PTI.

Benefit of using DETA for this purpose:

Harmonized, reliable and efficient distribution of this information