DETA Feasibility Study

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Introduction

Ralf Pickelmann, T-Systems Enterprise Services
- T-Systems is the ITC provider of the German Telecom.
- Ralf Pickelmann is head of the team Type Approval Solutions.
- 20 year experience in type approval processes.
- Consulting for vehicle manufacturers and approval authorities.
- Inventor and provider of the TypMaster® concept.

History
- 1986 First projects for type approval processes.
- 1989 The Type-Approval-Team of T-Systems (former debis) was formed.
- 1994 Cooperation with German KBA for electronic data exchange with vehicle manufactures (e.g. COC data).
- 1997 The TypMaster® concept was presented.
- 2000 Roll-Out of TypMaster/DD® for 12 vehicle manufacturers.
- 2005 TypMaster/DD® Version 2 became available.
DETA Feasibility Study
Motivation

■ Electronic treatment of type approvals granted according to UNECE Regulations annexed to the 1958 Agreement.

■ One objective is the creation of an electronic database for exchange of type approvals issued by the Contracting Parties to the 1958 Agreement.

■ Based on the experience made by the existing European Type Approval Exchange System (ETAES), a new database system should be established by the UNECE.
DETA Requirements and Feasibility
Document Archive Structure

- Type approval documents should be stored in an easy accessible and worldwide available database.
- Any document format should be supported (in general PDF)
- Type documents shall include at least the Communication Form, other parts are optional.
- Key attributes are ECE Symbol, Regulation Number, Manufacturer, Type Designation, Approval Number, ...
- Additional attributes should be added if necessary.
DETA Requirements and Feasibility
System and Document Security

- There should be a registration process for users of the system.
- Administrators at UNECE and CP shall manage these users.
- Read and write rights should be assigned automatically by the system according to defined rules.
- All users shall have read rights to all documents stored in DETA.
- Users of a specific nation (the employees of the type approval authority of the CP) shall have write access to their own documents.
- There should be the possibility to add additional users to DETA (e.g. technical services, ...).
DETA Requirements and Feasibility
Management and Retrieval of Documents

- DETA shall have an easy to use user interface.
- Main management function is to store documents in DETA.
- Access rights to new documents should be set automatically.
- All documents shall remain indefinitely in DETA.
- To retrieve documents the user shall enter one or more search attributes. Found documents should be displayed in a result table.
- Retrieved documents should be displayed, printed or stored on users workstation.
DETA Requirements and Feasibility
Quantity Structure

- Size of type approval documents are in the range of 100kB to 2,500 kB depending on document’s parts (Communication Form, Information Document, ...).
- Total amount of new documents will be 30,000 per year.
- This results in needed disc capacity of appx. 50 GB per year.
- DETA should be able to handle 200 users with read rights and 100 users with read/write rights.
- Approx. there will be 100 users at the same time working with DETA.
DETA Requirements and Feasibility
Technical Requirements

- DETA shall run in an internet WEB center with adequate security infrastructure (2-Tier architecture).
- DETA shall be available 24 hours a day and 365 days a year.
- Minimum down-time in case of hardware failure.
- User access via public internet using any internet browser.
- Network security assured by HTTPS protocol.
- User identification with user-id and password.
- The service provider shall establish a User Help Desk to support administrators at UNECE and CP.
DETA Requirements and Feasibility
Required Architecture
DETA Requirements and Feasibility
Differences between DETA and ETAES

- DETA will contain a multi-level administration concept (system administrator, group administrators).
- DETA will include an automated right system (mandator capability).
- DETA will have specially adapted document management functions.
- DETA should run without installation on client workstation. ETAES uses a JAVA application.
The creation of a Database for the Exchange of Type Approval (DETA) documentation is technically feasible and shall fulfill all the technical and administrative requirements of this study.
DETA Requirements and Feasibility
Benefits

- Complete type approval documentation available online.
- Worldwide access for all participants.
- Rapid distribution to all participants (time saving).
- Avoidance of paper, no mailing costs, no media breaks.
- Easy to use (user interface especially build to support the process).
- Future-proof.
- Expandable to include other document types.
DETA Costs
Start-Up Costs

- Development costs or licensing fee for the system.
- Deployment of the system.
- Installation and configuration of WEB center software.
- Training for
  - service provider
  - administrators
  - end users.

- Total costs will be in the range of 50,000 € to 150,000 € depending on final specifications.
DETA Costs
Operating Costs

- Operating costs for running the system in a WEB center.
  - Investment and depreciation of hardware.
  - Ongoing improvement of hardware (e.g. disk capacity).
  - Running and monitoring of the system.
  - Allocation of backup procedures incl. storage medium.

- These costs will be 5,000 € to 15,000 € per month depending on required service levels.

- Operating costs for the User Help Desk.
  - Provide required service time.
  - Provide required response time.

- These costs will be 5,000 € to 15,000 € per month.
DETA Requirements and Feasibility
Tasks of User Help Desks

■ **1st Level Help Desk**
  (administrators at UNECE and CP).
  ■ End user support.
  ■ On-site at each CP.

■ **2nd Level Help Desk (system provider).**
  ■ Administrative assistance for 1st Level Help Desk.
  ■ Monitoring the system.
  ■ Customizing and configuration due to change requirements.
  ■ Allocation of a test system for debugging and improvement.

■ **3rd Level Help Desk (service provider).**
  ■ Technical assistance for 2nd Level Help Desk.