DOITS

Working Group Meeting
Sheraton Amsterdam Airport
2019.04.16

Attendees:

Robin Quittard	alertgasoil
Mickaël Drombry	alertgasoil
Sjef van Gool	Astrata
Kurt Kunz	Krone
Allan Herbert	Microlise
Fredrik Callenryd	Scania
Yvan Girud	TIP
Martijn.Stokman	TIP
Robin Fellows	TomTom
Giovanni Cacciola	Trimble
Jan Unander	UNIC
Anna Stoldt	Vehco
Peter E Petersen	Vehco
Arie van der Jagt	Wabco Auto

INTRODUCTION

DOITS role as forum is to support the transport industry and the actors in the transport ECO-system to become more efficient through harmonization of selected key data and the way this data is generated and made useful.

The method used in DOITS to accomplish this is based on the belief that it is effective to let strong commercial actors on the market come to an agreement on how to best harmonize or standardize to support the whole industry. This method does also minimize the time from decision to implementation compared to e.g. in politically initiated projects.

Therefore DOITS carry this out by building co-operation between key stakeholders in the industries involved in the delivery of a specific function.

DOITS FOLLOW THE EU "FAIR COMPETITION LAWS" AND NO COMMERCIAL DISCUSSIONS ARE ALLOWED DURING THE DOITS MEETINGS.

Alertgasoil

Alertgasoil was invited to this DOITS meeting to inform us about the EU ambitions to create a standardised way of measuring the fuel consumption with the target to

calculate the CO2 emission per vehicle. The fuel consumption value has to be reliable and with high precision. The objective is to give the EU a tool that can be used to measure and govern their activities to reach CO2 reduction targets in the transport industry.

Alertgasoil's solution requires a standardised physical gauge fitted on the tank that delivers a high precision value of the fuel volume. To capture the data from the gauge, alertgasoil install a separate electronic box with the software that deliver the data (most likely) to a tachograph to make it available for the authorities that are responsible for reducing the CO2 emissions.

The deadline for this EU project is 2021.

Alertgasoil is hardware agnostic as regards the gauge and their core offer is it's own software to deliver a number of information services to transporters. That includes functions and tools to e.g. reduce fuel theft, avoid unnecessary idling, reduce dead weight carried by being smart when filling up the fuel tank.

Find more information on alertgasoil on www. alertgasoil.com.

Delivery of trailer VIN over CAN to truck

The meeting on April 16:th had as focus to come to an agreement on how to take the next step towards the implementation of the function that the truck captures the trailer VIN over CAN.

To this meeting TIP was invited to give their views on the trailer market challenges and needs.
(See enclosed presentation from TIP – NOTE THIS PRESENTATION IS SHARED WITH THE TRUST THAT YOU AS MEMBERS OF DOITS WILL NOT DISTRIBUTE IT)

Total numbers of semitrailers that are managed by TIP are over 124,000 and only approximately one of ten is fitted with a telematics solution. That mirrors also the total market for semitrailers in the world. However, according to surveys the penetration rate of trailer telematics solutions is increasing 10-15% y/y.

TIP asked 67 of their key clients and 2 of 3 claims that more than half of their semitrailers are connected. The solutions used by them were 1 of 3 track and trace only, 1 of 3 track and trace + reefer information systems. TPMS is also a functionality that 1 of 7 said they use together with track and trace.

TIP has defined it's digital strategy and will develop an own digital platform with the goal to both support their internal need for data as well as offer data driven services to their customers based on TIP data as well as partner data.

A prioritized area for TIP is to implement a predictive maintenance function to be used to both reduce operating cost as well as to build the new customer services. Today TIP has 93 workshops and 201 mobile workshops that play a vital role in the service offers that will range from basic information to actual selling uptime contracts.

When implementing the digital strategy and building a service platform TIP perceive some challenges that have to be addressed:
- databases (e.g. a number of existing excel sheets) with different structure are not possible to easily merge in to one common solution
- in acquisitions a mixed fleet of semitrailers give mixed solutions that are difficult to consolidate into one solution
- when connecting external partners to the platform adaptions to their interfaces have to be done
- new internal requirements and skills are necessary to be able to carry out the strategy

TIP sees the advantages with harmonisation of key data and support DOITS work to create the exchange of trailer and truck VIN over CAN.

1) DOITS have discussed if to address trailers from 2006-2014 as the trailer VIN number is already in the EBS system. A technical challenge is that a data request for this has to be implemented in the truck's electronic system for the truck to capture these trailer VINs.

2) Another possible approach discussed is focus on trailers manufactured from 2015 up to today as they are already enabled with the function that broadcasts the trailer VIN via the Trailer CAN standard. Far from all OEMs are picking up this signal.

For the truck OEMs it is harder to motivate the development and implementation of a function to ask for the trailer VIN (1) than just to listen to the broadcasted signal (2) and make it visible.

For the truck OEMs to implement any of the two alternatives, the project has to:
- get a cost estimate
- evaluate time usage
- give priority in the organisation
- evaluate software risk

DOITS have to convince the truck OEMs the value of implementing the functionality.

As the lifetime for a semitrailer is expected to be 10 years and semitrailers made 2015 and forward represent approx. 50% of the total rolling stock today, it was decided to focus on these having a pragmatic view on what is possible to achieve.

Prove end user value

It is essential for all parties involved to understand the end user value when the truck, over CAN, gets the trailer VIN (17 characters) plus the trailers position and a timestamp when connected/disconnected.

To find the use cases and calculate the customer value(s) the following was decided:

1. Focus on upgrading trailers from 2015 that already broadcast trailer VIN

2. Get a estimate on size of numbers of trailers with wrong VIN number in the EBS system:
    a. Audit TIP penetration in own fleet full VIN number
    b. Audit Krone's penetration of full VIN numbers on trailers delivered from 2015 (deduct trailers delivered to TIP)
    c. Discuss with Cargobull to get their feedback on auditing their penetration of full VIN numbers on trailers from 2015 (deduct trailers delivered to TIP)

3. Organise a workshop to identify and evaluate use cases. Participating companies should be:
    a. TIP
    b. EBS Suppliers (Haldex, Knorr Bremse, Wabco)
    c. Trailer manufacturers (Krone, Schmitz Cargobull)
    d. After Market Fleet Management Solutions Providers
    e. End users – 3PL, 4PL, to be advised
    f. Tech provider – platforms – to be advised
    g. "Rebels" in the transport industry – to be advised

4. Make a summary of use cases and conclusions
    a. Description of use cases
        i. Consequences
        ii. Monetary implications
        iii. Environmental impact
    b. Consolidated view on the advantages of full trailer VIN over CAN to truck
    c. Create a presentation of the result for demonstration purpose

5. Demonstrate use cases to ACEA TF HDEI
    a. Show how wrong ID caused mistakes/ problems
    b. Point out values that are lost
    c. Propose a way forward

6. Conclude the result from the meeting with ACEA TF HDEI and present this at the next DOITS meeting in the autumn 2019 for a decision how to proceed.

7. If confirmed by ACEA TF HDEI, DOITS will make a road map for how to organise the implementation of the full 17 character trailer VIN numbers into all European trailers that broadcast the VIN.

8. Jan Unander was elected to coordinate steps 1-6.

New areas of interest

It was proposed to bring up one of the following subjects at the next DOITS meeting:

1. GDPR consequences what to do - vulnerability and impact of the regulations?

2. International data challenges – we see that countries like India, China, Turkey and Poland take protective steps to regulate how data can be used. What will the consequences be and are there any solutions to these obstacles?

3. Reversed discussion – we are working towards the TF HDEI FMS Standardisation group and propose changes and improvements. One suggestion at the DOITS meeting was to invite them to present their prioritised areas to see if DOITS can be of support.

4. Last mile – A hot topic that changes the logistic landscape and increases the demand for reliable real time data. Delivery time (quick delivery + accuracy on time) become an order winning factor for the transport companies. The data have to be integrated in the automated process to control and operate the transports. What implications will it have on vehicles, trucks and trailers. Light, medium and heavy vehicles.

5. Mobil units v.s. embedded – more and more functionality is delivered via the smartphones and especially in last mile deliveries are the smartphones a tool that grows in usage. What are the trends and what are the possible consequences

Jan will look into these areas, propose a subject for the next meeting and invite persons that will give a presentation of the prerequisites for the issue selected.

2019-04-23

Jan Unander
UNIC AB

Coordinator, Moderator
DOITS