

DOITS

Working Group Meeting Courtyard Marriot Amsterdam Airport 2016.10.26

Attendees:

Harry Butcher – Astrata
Fredrik Callenryd – Scania
Jan Unander – Telematics Valley
Jasper Pauwelssen – TomTom
Arie van den Jagt – Transics
Jonathan Raemdonck – Trimble
Johan Amoruso-Wennerby – Vehco (on line)
Niclas Nygren – Volvo (Phone partially)

Objective

The meeting had the following action points:

- 1) Update status on final version of rFMS 2,0
- 2) Audit of DOIT(S) Working Groups recommendation against rFMS 2,0 final specification
- 3) Packaging, Implementing and Promoting the DOIT(S) harmonized ECO-driving measures
- 4) Proposals for focus measures in rFMS 3,0

1) rFMS 2.0

Fredrik Callenryd presented the now finalised rFMS 2.0 standard.

2) AUDIT OF DOIT(S) MEASURES AGAINST rFMS 2,0

- The audit showed that we are pleased with the adoption to our proposal, as most of our recommendations have been met by the FMS Standardisation group.
- One consequence of the requested higher granularity between 0 – 1 m/sec² in the **Acceleration band**, that now is MANDATORY, is that the now set Data Block max/min band limits – 1,1 to 1,1 reduces the ability to capture harsh braking that needs deceleration measures below -1,1. Today typically down to -2,5 is used to signal harsh braking.
 - rFMS 2,0 has a new “data block” named HighAccelerationInClasses that actually is the original proposal, without the higher granularity but has speed bands from – 3,0 to 3,0 m/sec² (0,5 m/sec² bands). However, this data block is now OPTIONAL not Mandatory.
Action: Jan will contact Armin Keller, PM ACEA FMS Standardisation Group, to discuss possibilities to extend the new high granularity block to include down to -3,0 and still be Mandatory in rFMS 3,0 .

An alternative is to propose that the new HighAccelerationInClasses become Mandatory.

- **Driving without torque no brake** – it proved to be not that easy for all OEMs to deliver consolidated. The reason mentioned to not combine the measures at the rFMS standardisation meeting was:
" Keep the data as clean as possible".

The measure *Driving without torque no brake* is a bit complicated as nowadays the clutch is sometimes controlled automatically via an ECU and not the driver. Fredrik pointed out that if driver use Cruise Control configuration the computer decides on freewheeling or not. The driver can overrule the ECO control.

- **Time frequency of measure downloads to rFMS** is not harmonized between the OEMs (Scania supply the data every 1/5 or 10 minutes). Of legal reasons the OEMs are not allowed to agree on these kinds of actions.
Page 7 rFMS Standard – "Rate Limitations: The rate limitation is an optional feature and might not be available at all OEMs."

To influence to make changes the most efficient way is ***that the market (After Market Suppliers/ End users) put pressure on the OEMs to deliver the measures in a way that meet their demands.***

Jan: There is a common interest between the two parties i.e. After Market Suppliers that want to access the harmonized rFMS data and the OEMs that want to make rFMS so valuable for users so they are prepared to pay for accessing it (and don't need to install "black boxes").

If the After Market Suppliers can make joint requests a balance of interest can be created. DOIT(S) is one proof if this.

- **Idling** has been considered in DOIT(S) to be a prioritized measure. It is very important for ECO-driving management and there is a confusion amongst end users that was quoted at the meeting.

"OEMs have different idling measures – give me neutral data. It is not easy to change FMS supplier today since data is not compatible."

After Market Suppliers spend a long time on explaining differences even if the Idling case is the same.

Arie could foresee that two idling measures will be used

- A standard supplier specific measure
- An rFMS based Idling measure

3) PACKAGING, IMPLEMENTING AND PROMOTING THE HARMONIZED ECO-DRIVING MEASURES

The success of DOIT(S) work is of course connected to end users needs but also to the internal commitment from After market Suppliers and OEMs to make the harmonized measures available.

Internal promotion

Internal response is based on expected sales volumes including the Black box related business case.

Internal response will also be affected by demands from the customers. As an example "OEM Certified Idling Measures" can be a way to push implementation.

Scania have already tested rFMS ver. 1,0 and some of the required data is accessible today.

Harry pointed out that the need for development time and cost is one issue that has to be justified internally.

Johan stressed that a Pilot case would be both an efficient internal and external marketing tool.

External promotion

To reach the important target groups it is necessary to make a joint effort by the Working Group members. (see picture below)

OEM/ After Market Suppliers

- Internally in your organisations
- Externally to your customers and prospects

DOIT(S) Project Manager

- relevant media
- related organisations/ forums (Transportation/ EU)
- authorities

It should also be possible to refer to a website that updates the information on DOIT(S) Harmonization work, where also summaries from meetings should be shown.

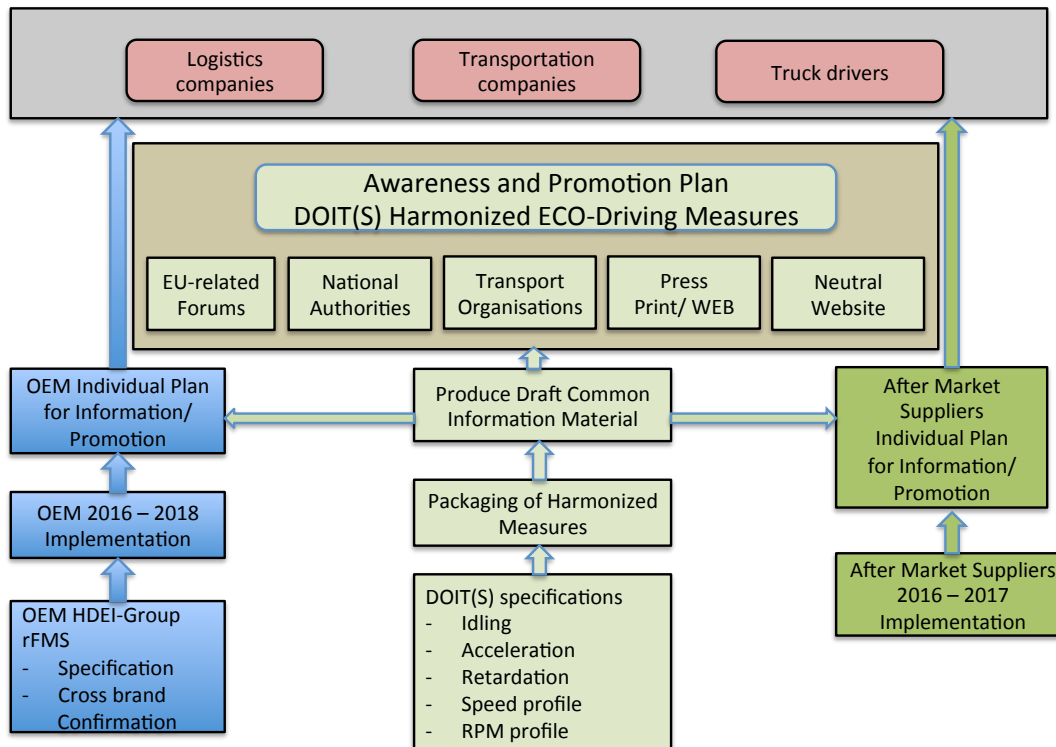
DOIT(S) is an open initiative that allows all parties interested in the work to be informed about the activities.

The overall goal is eventually that all actors in the FMS ECO-system, users and suppliers, shall be aware of the opportunities to use the harmonized measures and over time will the confusion on data comparison disappear.

A question was raised on RIO, the new MAN open platform, how this will influence tomorrows supply of data from trucks. No conclusion was made.

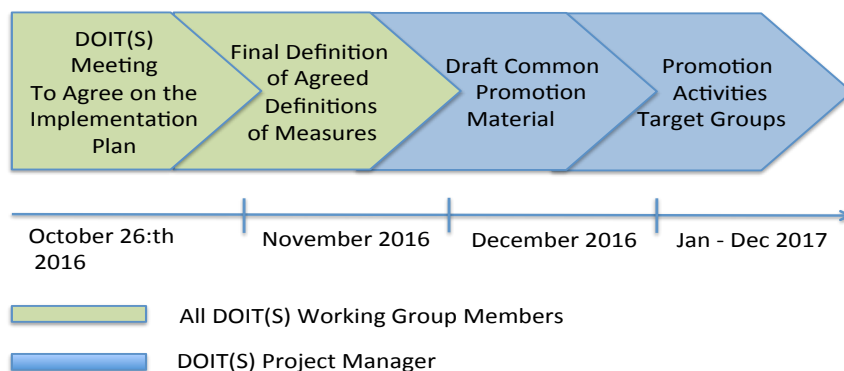
Jan's comment: Besides MAN's RIO also FleetBoard is launching its FleetBoards Store for Apps. This trend is important to follow to see what openness means in reality and if it solves the harmonization issues.

Implementation and Promotion Plan DOIT(S) Harmonized ECO-Driving Measures



Jan presented to promote the DOIT(S) ECO-Driving measures the activity plan (see picture below) for the steps in timeline.

Activity plan for DOIT(S)



DOIT(S) Working Group Meeting
Amsterdam 2016.10.26

The promotion activities will start in January 2017 to build awareness, stimulate the demand from end users and create interest from important actors in the industry.

A pilot case was proposed that is a good idea but need to be evaluated how to carry this out..

The promotion will put pressure on and motivate the FMS suppliers that don't already comply and offer the alternative of a rFMS based harmonized offer.

Action:

Nov 1:st – De 31:st

Jan will make a proposal of how the total DOIT(S) Harmonized ECO-Driving definitions can be packaged and presented. This document will be sent to all of you in the working group to get your feedback.

After summarizing the comments a draft of the edited version will be sent once more to all working group members for the final approval.

The final version will then be produced in the following formats:

- short Press release
- short article for media (English)
- summary of the DOIT(S) process for organisations, authorities

A list of relevant media and organisations/ forums will be made with identification of individuals to contact where possible.

4) PROPOSALS rFMS 3.0

The following possible areas/ measures were discussed.

Weight/over load.

The question was raised if weight and overload are important and it was confirmed by all parties that it is and that DOIT(S) should try to support

Sensors with enough accuracy are the key challenges to give accurate measures for weight and overload.

From Scania's they can get Load&Weight i.e. if the truck is 25%, 50% and 75% loaded after a period of driving.

In rFMS 2,0 *GrossCombinationVehicleWeight kg* i.e the full vehicle weight in kg is an Optional VehicleStatus Type data that can be captured.

A possible action is to influence the ACEA rFMS working group to strive for making *GrossCombinationVehicleWeight* Mandatory in rFMs 3.0.

Tachographs

Handling the Tacho data is very time consuming and After Market suppliers have to allocate large resources to be able to report driver's working hours etc. The reports have to be accurate as customers can suffer legal penalties if wrongly reported.

The future scenario is that Tacho data will come from the CAN-bus instead of separate units and RTDS will .

Stoneridge and Continental are today two Tacho-suppliers that are influencing the rFMS standardisation process. Especially Continental with 80% market share strives for a strong position in controlling vehicle data generation.

rFMS 2,0 will deliver Snapshot data:

- driver 1 working state
- driver 2 working state

However this information is Optional

DOIT(S) working group would like to have as Mandatory:

- working hours
- driver 1 working state (snapshot)
- driver 2 working state (snapshot)

There is a clear risk that the Tacho suppliers are harmonizing their data definitions and that it does not coincide with DOIT(S) work and preferences.

DOIT(S) working group expressed a wish to better understand the agendas of the Tacho suppliers to be able to adapt to or influence the data generation from the Tachos.

Action: Organise a joint workshop together with Continental (and Stoneridge) with the goal to better understand the Tacho supplier's:

- Roadmap
- Time Line

The workshop's goal is to open up for a closer collaboration between DOIT(S) working Group and the Tacho suppliers to benefit parties.

This workshop is proposed to be kept after the next DOIT(S) meeting in March 2017.

Jan will make preparations for inviting the Tacho suppliers to this workshop. Before any contact is made with the Tacho suppliers, the objective with the workshop will be defined and an agenda proposed. Jan will send this proposal to you working group members to comment and approve. Invitation to this workshop should be made before January 1:st to give time for all parties to plan for attending with the right people that date.

Truck attributes

It was proposed that the following attributes should be promoted as important to capture from the vehicles

- ADR (Dangerous Goods)
- Width of the vehicle

Trailers

In the transport process, a lot of time is spent on finding the correct trailer to be picked up by the truck. The potential is high to make this process much more efficient if the matching of truck and trailer can be improved.

The VIN of the trailer is not accessible in the truck. The driver has to carry out manual identification to ensure he picks up the right trailer and the VIN can sometimes be difficult to find on the trailer. There are numerous examples of trucks picking up wrong trailers.

Trailer related data that are interesting for transporters, logistic companies:

- which trailer
- axle weight
- number of axles
- refrigerated
- actual load

Arie raised the question if this can be an issue for DOIT(S) to address.

It was proposed a similar workshop as the one planned with Tacho suppliers, to be organised with relevant trailer suppliers.

Action: Jan will bring up the issue with Arie and come back to DOIT(S) working group with a report.

Bluetooth

Fredrik wanted feedback on the interest of accessing rFMS data via Bluetooth.

The interpretations of the answers are that interest is rather low mainly based on the complexity that different Bluetooth standards (dialects) make pairing of equipment unreliable.

Next meeting

Next DOIT(S) working group meeting is planned to March 2017. Date will be announced at latest 3 months in advance.

2016.11.01

Jan Unander
Moderator DOITS

