

DOITS

Working Group Meeting Novotel -Amsterdam Airport 2015-03-09

Attendees:

Masternaut – Eric Medan
Astrata – Harry Butcher
Trimble - Frederic Boes
Transics - Joep van Poppel
Vehco – Johan Amoruso-Wennerby – Via WEB
Scania – Fredrik Callenryd
Volvo – Niclas Nygren – Via WEB

Objective with the meeting 2015.03.09

Ambitions with this meeting were two:

1. To agree on the decision on harmonized Idling measure taken on October 21:st 2014 to be the proposal to the ACEA FMS Standardization Working Group HDEI
2. To identify what next ECO-driving measures to focus on to be harmonized and proposed to be standardized in rFMS.

Proposal of the DOIT(S) Harmonized Idling Measure

The proposed definition at the DOIT(S) meeting in Gothenburg 2014.10.21 still applies with the addition of a time stamp for driver exchange.

Input to Idling cost can be % Idling of total time and Fuel consumed.

1. After Market suppliers wants OEM to calculate and present Idling total counters
2. Proposal for Total counters (time in seconds, fuel in litres)
 - a. Total idling (Engine ON, Speed = 0)
 - b. Total idling excluding PTO (Engine ON, Speed = 0, PTO = Inactive)

- c. Total engine ON
3. Could be introduced
 - a. In rFMS next version
 - b. For the current population of FMS trucks (version 1-3), these counters can be calculated by sampling the existing parameters
4. Total counters should be read as snapshots
 - a. Minimum frequency rFMS version 1: 1 hour
5. After Market additional proposals
 - a. After Market FMS suppliers would like to have higher frequency if possible for more analysis
 - b. After Market FMS suppliers would like a snapshot created based on events (e.g. Change of driver) to connect data to individual drivers
6. Time stamp Driver Change
Without this time stamp there is no possibility to create an efficient tool to develop the driver behavior. The time stamp will be the clocked time at the change.

Next step - ECO- driving parameters

As input to the discussion the following were mentioned at the Working Group Meeting on October 21:st 2014:

- Coasting/Roll out
- Overspeed
- Green band use / within economy (as defined by OEM)
 - o The amount of engine hours when the vehicle operated within the economic band
 - o Over Economy – the vehicle operates outside (higher than the economic band maximum RPM) – negative on fuel consumption
 - o Under Economy – the vehicle operates outside (under the economic band minimum RPM) – positive on fuel consumption but negative on engine performance

A discussion around Green band driving gave that there are difficulties to set the green band limits as it includes a number of use case related factors like:

- Load
- Type of trip
- RPM/ Torque/ Gear relation different in different models that makes it difficult.

Proposal of new measures

Skilled ECO-driving behavior is based on the understanding of the importance of using the inertia of the vehicle including the load to optimize speed, acceleration and braking.

Speed is directly related to fuel consumption and there are levels where a truck is over speeding i.e. run on too high revs on a specific gear that does not give the wanted speed/ torque relation.

How the interaction between acceleration and braking is performed is an important factor.

Decision was taken on the March 9:th to focus on as next step:

- Acceleration
- Deceleration
- Overspeed

Acceleration/ Deceleration

Proposed was to create a reference curve as to an algorithm that can be used to compare driver behaviour in relation to the curve.

Overspeed

Gear used time compared to ideal relation torque/ rpm.

The speed from e.g. 0 – 100 (counting 100 as illegal and always wrong) can be divided into intervals that recommend gear shift and overspeeding can be measured as a time factor or percentage when the driver has been n the wrong interval.

HDEI WG

Telematics Valley will present as a proposal from the DOIT(S) working group that Acceleration, Deceleration and Overspeed will be the next ECO-driving measures to be standardized after Idling.

Next DOIT(S) meeting

The DOIT(S) proposal will be presented for the HDEI Working Group on March 17:th in Brussels.

Next DOIT(S) Working Group meeting is planned to June 2015 and Telematics Valley will come back with proposal of date and place.

DOIT(S) meetings should be possible to attend via web or telephone connection if the process member representative is not able to attend.

Gothenburg 2015-03-26

Jan Unander
Telematics Valley