# Answers to the DG TREN Consultation Paper

# Digital Tachograph

DG_TREN_Consultation_Paper_EFKON_Answers_1E0.doc

Version:                        1E0
 Issue Date:                    26.02.2010
Status:                         Release
Level of Secrecy:               Only copyright terms apply
Language:                       English

Authors:                        E. Santiago, B. Rose, M. Kliché, L.Schwinger,
Document Officer:               L. Schwinger
Product/Project Manager:    L. Schwinger
Product/Project Reference: Digital Tachograph EF

# 1. Introduction

EFKON thanks for the opportunity to be involved in the process of reviewing the legislation of the recording equipment. We are willing to support DG TREN actively in the process for defining the coming generation of digital tachographs.

EFKON has taken great care with respect to all tachograph stakeholders when answering the questions from DG TREN. However, should there be any question arising, please contact EFKON for clarification. In any case we are glad to provide any further contribution.

# 2. The 18 Questions from DG TREN

## 2.1. Functioning of the Recording Equipment – Question 1

**Question 1** – Is it important that equipment of different manufacturers functions in exactly the same way? Or should legislation focus on essential requirements and give manufacturers more freedom to develop solutions and improve the equipment?

We believe that while the equipment does not have to function in exactly the same way, it makes sense to define (i) a common set of basic functionalities (ii) the necessary standards to guarantee the interoperability of the system (cards, vehicle unit and enforcement).

The interoperability of the systems is essential to be able to further develop and export the system to third countries. It is also important to enable innovation and improvement based upon system interoperability.

In those cases where essential requirements are defined a patent ambush situation should be in all cases avoided.

## 2.2. Integration of ITS Applications – Question 2

**Question 2** – Should the legislation on the tachograph already foresee the integration of the digital tachograph into an open in-vehicle platform? If so, what other regulatory applications should be integrated in this platform (e.g. e-toll, recorder for accident investigation, e-call, speed control) and why? Would it be interesting for fleet management or other applications related to safety or security of transport, or to law enforcement, to have a real-time "tracking and tracing" function?

Yes, EFKON advocates for an open platform which provides for the future integration of additional applications (e-toll, e-call, black box, speed control, tracking and tracing…). We believe there is a high potential on cost reduction to be derived from this integration. However we do not necessary believe that all the mentioned applications should be made compulsory.

## 2.3. Remote Download of Recorded Data – Question 3

**Question 3** – Should remote download of the digital tachograph be encouraged? Is a regulatory approach deemed appropriate in order to facilitate widespread introduction?

Remote Data Download should be encouraged. However, we only support a minimum regulatory approach deemed at guaranteeing the compatibility of the data obtained from the tachograph. Further standardisation is not deemed necessary since the FMS Standard has already been adopted as standard.

The possibility of two way communication with the tachograph - feeding of external data necessary for updates - may need to be regulated to avoid manipulation and thus guarantee the integrity of the system.

## 2.4. Remote Download of Recorded Data – Question 4

**Question 4** – What is your practical experience? Are there any obstacles for speedy download of data?

Since remote data download is designed to take place without interfering with the working activities of the driver, the downloading speed can be improved even when in this case we believe this objective not to be the first priority.

A speedy data download makes sense in cases where the vehicle has to stop i.e. in enforcement situations.

## 2.5. Improvement of Controls – Question 5

**Question 5** – How could the equipment be changed in order to make controls more efficient? Should the mobile control of moving vehicles be envisaged in order to reduce administrative burden for industry and enforcement bodies?

A mobile "passing-by" functionality could be implemented based on DSRC (infrared or microwave). Enforcers passing the vehicle should be in the position to decide fast, if the truck shall be stopped for deeper investigation. So we advocate for a short message system indicating specific conditions, like

- Driving time exceeded
- Security Breach /Manipulation
- Driving without a valid card
- Out of scope condition
- and others.

"Remote Enforcement" via GPRS (i.e. the enforcement offices needs not to leave his office) is a very sensitive issue. Though technically feasible, the aspects of data protection and communication costs have to be treated with great care.

## 2.6. Security Level of the System – Question 6

**Question 6** – Is the current security level proportional? Can and should there be other sources of motion? Could the authenticated time/speed/positioning data provided by the future European "GPS" system, Galileo, be used as a second and independent source of motion to ensure security of data?

The security of the system can and will always be externally challenged. Tampering a tachograph can never be fully avoided but keeping records of any attempt of manipulation is essential.

From a technical point of view the current generation of equipment is seen as secure. We believe that the current security level is proportional, especially with the introduction of the second source of movement in October 2012.

In order to make time/speed/positioning data as a secure second source of data, the following issues must be solved:

- The communication between VU and antenna should be made by the same security measures as between VU and motion sensor

- The mounting of the antenna should be made by similar security measures as the mounting of the motion sensor (sealing)

- GPS or Galileo antennas do not work in covered places (e.g. tunnels)

- Manipulation attempts for the antenna could be for example

    o shielding of the antenna by a metal cover or

    o faking wrong geographical positions by superimposing the real satellite signals with manipulated signals from a so-called "GPS repeater" mounted nearby the antenna.

- However, these attempts should be relatively easy to detect on a road-side check. Also comparing recorded geographical positions and times with respect to the road-network and the motion sensor data would give enforcers a big advantage for plausibility checks.

So at the time being, we think, until these issues are not solved, a Galileo/GPS approach will not really enhance the security of the system.

The real value of recording geographical positions lies in the multiple applications required for fleet-management purposes. Hence the Galileo antenna should be part of any future "open vehicle platform".

In order to raise the general security level of the tachograph system a system-wide approach should be undertaken:

- Introducing the second source of movement

- Additional training of enforcement bodies

- Continuous security assessments

- Sharing knowledge and data between European enforcement bodies.

- Specifying EU-wide workshop checks.

- and others

---

## 2.7.  Scope of the regulation – Question 7

**Question 7** – In case a vehicle is only occasionally used in the scope of Regulation (EC) No 561/2006, for example when exceeding from time to time the radius set in some exceptions, should it be possible to use different means of recording activities?

As long as there is no EU wide agreement on this issue, all vehicles falling in the scope of the regulation should be equipped with a digital tachograph.

## 2.8.  Compatibility and Interoperability – Question 8

**Question 8** – Which option do you prefer? In case you prefer option 2: What are the most important issues for compatibility between a new generation of tachographs and the current digital tachograph, and what other parts of the equipment, apart from driver cards, should be compatible in your view?

With our current knowledge we would advocate for keeping the system as it is (option 1) until we get to option 3. We believe this to be the ideal situation but we are aware that should the system be threatened in the meantime additional generations may have to be considered.

Option 2 is technically possible. Following issues must be considered in such a case:

   a) Vehicle units of the new generation must be compatible with tachograph cards from the current generation.

   b) Tachograph cards of the new generation must be compatible with vehicle units from the current generation.

In order to stay compatible any additional equipment or software application that deals with tachograph cards or tachographh downloads (e.g. software for analysis and archiving) must be adopted to work with both generations.

In any case a situation with more than two generations of tachographs in the field for the same time should be avoided by all means.

## 2.9.  Introduction of Equipment – Question 9

**Question 9** – Should the legislation specify how new equipment has to be introduced in the field? Should a retrofit be possible, mandatory or take place in case of replacement of defective equipment? What are the essential steps for the introduction of new equipment? Should type approval for tachographs fall under the general type approval scheme for vehicles?

The legislation should specify how new equipment is to be introduced in cases were this new equipment has also been forced by legislation. A retrofit should be encouraged when technically possible.

The essential steps for the introduction of new equipment are: define which vehicles will be involved and define a time scale where all necessary technical developments, type approvals and tests can be fitted.

---

We do not believe that type approval of digital tachographs should be included in the overall approval scheme for vehicles especially because in an open vehicle platform there are solutions which do not belong to the automobile industry like e-toll.

## 2.10. Introduction of Equipment – Question 10

**Question 10** – Should it be possible to carry out field tests before type approval is requested, while maintaining the same security standards? How should field test be limited (geographically, number of equipments, duration of the field test, etc.)?

It should be possible to carry a predefined number of tests before type approval is requested. There should be a central authorised body in charge of allocating especial permissions to carry out these tests. Alternatively a MS authority should be allowed to hand away a permission which is valid for the whole EU.

## 2.11. Equipment in Relation with Tachograph – Question 11

**Question 11** – Which option do you prefer and if you prefer option 2 or 3, for which parts: seals, downloading equipment, control equipment, calibration tools, etc.?

We prefer Option 2: Since there is currently an absence of common standards for control equipment and calibration tools it could make sense to go for a standardisation through technical bodies.

## 2.12. Adaption to Technical Progress – Question 12

**Question 12** – Is the current way of updating the specifications on the tachograph satisfying? Who should be responsible for the updating of the technical requirements? What is your preferred option?

We believe that a mixture of option 2 and option 3 would be the best solution: While the commission sets the basic principles and interoperability requirements for the tachograph system through comitology, a normative or technical body should be empowered to take care of the detailed technical specifications of the open vehicle platform.

Technical requirements which are not necessary for tachograph compatibility and deployment in an open vehicle platform should be decided by manufacturers.

## 2.13. Installation and Inspection – Question 13

**Question 13** – Should the trustworthiness of workshops be improved? If so, how? How can conflicts of interest be avoided for workshops that are living from delivering services to individual clients but play at the same time an important role in the security of the recording equipment?

We believe the workshop to be one of the main locations where the security of the system can be tampered. The MS should actively audit the workshops in a regular basis and following a pre-defined protocol.

## 2.14. Automatic and Manual Recording of Information – Question 14

**Question 14** – What kind of data should be entered manually by the driver? What kind of information should be recorded automatically by the recording equipment? Is it appropriate to record more precisely the location (via GPS or GNSS for example)?

Manual entries should be limited to a minimum. The implementation of a GPS/GNSS antenna should eventually lead to the automatic recording start and end destinations.

## 2.15. Uniqueness of the Driver Card – Question 15

**Question 15** – Should the Regulation explicitly foresee the use of electronic data exchange on cards that are issued between card issuing authorities?

The electronic data exchange on cards between member states is essential to guarantee the security of the system by avoiding card duplicates.

## 2.16. Warnings – Question 16

**Question 16** – Should the Regulation explicitly foresee warnings for the driver in order to enhance compliance with the legislation on driving times and rest periods? Should it be up to manufacturers' choice to offer such warnings as an optional tool, including additional warnings for other aspects than the continuous driving time?

Any additional warnings above the already existing ones should not be made mandatory. It should be left to the manufacturers to provide additional warnings.

## 2.17. Other Questions – Question 17

**Question 17** – Do you have any other comments or suggestions which you consider should be taken into account during the revision of the European legislation on recording equipment?

Our more urgent concerns regarding the tachograph legislation have been addresses in this document. Any additional points that may arise from Efkon's side will be forwarded to the Commission through CORTE.

## 2.18. Other Questions – Question 18

**Question 18** – Would you like to propose other measures to make the recording equipment more user-friendly and to improve the reliability of controls?

Simplifying manual entries would make the equipment more user-friendly.