Change is on the cards

A discussion of the proposals to amend the tachograph regulation EEC No 3821/85
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Introduction

Tachographs are designed to record drivers’ work/rest schedules when on duty. This enables operators and law enforcement agencies to monitor drivers’ activity to prevent fatigue, protect public safety and ensure compliance with road transport law. Tachograph information or data not only offers evidence of infringements but, crucially, also provides proof of compliance and good practice for both the operator and professional driver.

Tachographs are fitted to some six million trucks and buses throughout the European Community. The European Commission (EC) says that although substantial savings have been made by moving to digital tachographs, the cost of compliance to industry is €2.7bn, which is far too high. In addition, it calculates that 45,000 trucks are in breach of tachograph rules at any one time.

Tachograph legislation is now being revisited in order to ensure that it reflects the technological possibilities of digital tachographs now and in the future; that it cuts the cost of compliance and enforcement; and that it helps to achieve enforcement targets of twice as many infringements caught at the roadside and the total elimination of the most serious infringements by 2020. The general term of reference for the proposed equipment is ‘Smart Tachograph’.

The EC is proposing substantial changes to the law in order to minimise tampering, explore the possibility of new functionality and to make it easier for enforcement officers and road transport operators to get more valuable information from the tachograph with less difficulty or cost. These proposals are due to come into force in 2017-2018.

The EC proposals state that its new regulations will save road transport operators throughout the EC €515m. However, these figures have been widely questioned. It also suggests that €34.5m will be saved by new technology available to the roadside enforcement agencies.

As such, we have endeavoured to bring all the salient points together in this document, along with the Department for Transport’s view and those of other experts we invited to our recent roundtable debate on the subject. We will explain the proposals, the issues and any national or European decisions that have so far been made.
Tachodisc says:

For more information, visit www.tachodisc.co.uk. Our special help section Ask Tachodisc has current information on relevant legislative changes:

www.tachodisc.co.uk/ask/
The key points of the proposals

- Adding a GNSS (GPS) module into the tachograph to record the start and end point of a journey
- Incorporating functionality that would allow enforcement agencies to interrogate the digital tachograph remotely at the roadside without stopping a vehicle
- Integrate the tachograph to ITS
- Extending the security encryption on both the driver card and vehicle unit
- Harmonisation of training for control officers and categorisation of the most serious offences
- Proposals have also been submitted to allow Members States to exchange information about driver cards
- Merging the digital driver card with the driving licence
- Exemptions possibly brought into line

The aims of the proposal

- Where possible reduce the administrative burden to industry
- Eliminate the commonest or most serious forms of tampering or offence
- There should be no additional cost to the EU budget
The UK government’s stance on the proposed changes

The Department for Transport’s (DfT) team, led by David Glinos, has been at each of the discussions on the new tachograph legislation. Glinos says: “Our remit is to negotiate to support those elements of the proposal that are going to reduce the burdens to industry - and minimise the risks of increased costs.”

So it would appear that the UK’s position is one of free-market pragmatism: the DfT has no wish to see unnecessary red tape binding hauliers further, nor increased costs, and it will support measures that will reduce operational or financial burdens to industry.

This seems to be a view shared by several Member States.
The significant proposals – one by one

Integrating the GPS with the digital tachograph

Article 4 says:

Location data shall be recorded to allow the identification of the starting and ending place of the daily work period. For that purpose, vehicles put into service for the first time [48 months after the entry into force of this Regulation] shall be fitted with recording equipment connected to a global navigation satellite system (GNSS).

Integrating a Global Positioning System (GPS) with the digital tachograph is intended to capture data about start and stop locations. Currently the tachograph simply captures a country code – for instance, UK. Recording where trucks start and stop will be of little additional help to hauliers who already have this information, but it is argued that it could be a valuable time-saver for roadside enforcement officers trying to determine if tachograph data is accurate.

However there are a few issues regarding this proposal that operators should be aware of:

1. The proposal is short and therefore vague on detail. Recording start/stop information but not total journey information is not an infringement of data protection laws. Operators do not need to worry about commercially sensitive or personal data – such as a driver’s route – being recorded by authorities. However, the DfT’s David Glinos says that it will be difficult to ensure that a GPS function does not automatically record intermediate or rest stops – and that may raise issues relating to data protection.

2. The proposed saving of €350m to operators is based on the time saving drivers would make by not having to press the stop/start locations buttons.

» Tachodisc says:

*In commercial terms it is hard to quantify the real value of this time-saving.*
3. The start and end locations used to be recorded manually on analogue tachos. However this was not a foolproof system as drivers could write false locations if they wished. It is enforcement officers, however, who say that it was a valuable aid to their decision-making at the roadside. Although technically the GPS locations could be recorded as a city, postcode, or region, it is likely it will record as geographical coordinates (longitude and latitude). Few people would be able to accurately decipher such data into a meaningful location quickly without recourse to another software system.

4. While the cost of integrating GPS is not a major issue, the development cycles of the individual technologies are. Fleet management systems and GPS technologies are evolving quickly – more quickly than tachograph technologies. It is possible that by incorporating the two, tachographs could end up using out of date GPS technology, which would shorten the unit’s viable lifespan.

5. Currently there is no specification to hold GPS data on a digital driver card. It would have to be downloaded to form a permanent record.

» Tachodisc says:

The question with incorporating GPS into the tachograph is: are the cost and technological changes necessary justified by the small benefit gained?

Roadside interrogation of the tachograph

Article 5 says:

“The data exchanged during communication shall be limited to the data necessary for the purpose of targeted roadside checks. Data concerning the identity of the driver, driver activities and speed shall not be communicated.”

The EC would like roadside enforcement officers to be able to wirelessly scan the tachographs of passing vehicles to assess whether or not there is reason to stop them. The cost of the technology in the vehicle units is small; but the cost to
enforcement agencies for the scanning equipment could be in the region of €3,000 per device. This proposal is designed to be optional for the national agencies involved and so many – including the UK – may choose to eschew it based on the level of capital expenditure involved.

Issues surrounding the use of roadside vehicle scanning are as follows:

- It is assumed that little data would actually be transmitted, although this has not been defined. The scan would probably be limited to a missing tachograph card, recent events and faults, if the vehicle is receiving a GPS signal, if the tachograph is receiving a signal to say it is moving etc. However, this would need to be followed up and assessed by an enforcement officer.

- Tachograph data is only one of the many issues that may prompt an enforcement officer to stop a vehicle; roadworthiness, Driver CPC entitlement, drink-driving, driver licence entitlement. The scanner will offer no indication of these.

- The UK already has its OCRS – operator compliance risk score – which the vehicle and Operator Services Agency uses to guide its roadside checks. Not all Member States have such systems so this change would be imposing a potential efficiency measure the UK does not require.

- Some provision would have to be built into the system to show those vehicles that are ‘out-of-scope’ of tachograph regulations, or those operators may be subject to a disproportionate number of roadside checks, which are commercially expensive and possibly damaging to OCRS scores.

- The data captured by the roadside scan is not allowed to be stored for more than a few hours, nor can it be transferred to other agencies. Therefore this information will be indicative only and not available as prosecution evidence.
A ‘better’ user interface for the vehicle units

Page 10 of the proposals says:

Intelligent transport systems (ITS) can help to meet the challenges faced by the European transport policy, such as increasing road transport volumes and congestion or rising energy consumption. Standardised interfaces should therefore be provided in recording equipment in order to ensure interoperability with ITS applications.

This proposal links to the issue of integrating other technologies within the tachograph itself. Generally the issue is not the end-user interface but a harmonising of the ‘back-end’ interfaces that allow different technologies to talk to one another.

» Tachodisc says:

While in theory this could open the tachograph data for easier assimilation into an operators’ fleet management system, for example, some experts believe we run two risks. One is that the tachograph loses its purity of purpose, which is as a device for recording time and activity data for compliance and public safety purposes. There is an argument that the more open and standardised the software architecture is, the more focus needs to be placed on the security aspects of anti-tampering and data protection.

Widening the functionality

Article 6 says:

The recording equipment … shall be interoperable with the intelligent transport systems applications … for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport.

The interface issues and the GPS integration are related to the idea of widening the functionality of the tachograph.
» Tachodisc says:

The general feeling of experts, as already expressed above, is that while this is technically possible, the benefits are potentially outweighed by the security issues involved; the different rates of developments of the technologies involved; and the unnecessary complexity and data protection issues of having ‘everything in one box’.

It is important to note that the legislative process is much slower than the life cycle of technology products; therefore, wholesale integration of technologies by legislative dictate will mean operators will constantly be using out of date technology. The more progressive firms will no doubt continue to prefer to get their data from cutting edge solutions, making the extra data available from the tachograph redundant.

Security

Article 15 says:

Manufacturers shall design, test and review vehicle units, motion sensors and tachograph cards put into production so as to detect vulnerabilities arising at all phases of the product life-cycle, and prevent or mitigate their possible exploitation.

The security of the unit itself and the data it contains is crucial to the ongoing use and development of tachographs. Without proper security, which is a technical and developmental issue, rather than an operational one, we cannot ensure compliance.

Equally operators have to have complete confidence in the integrity and security of their data because it is their proof of activities; can be used as evidence in a court of law; and may be commercially sensitive.

The EC proposals as they stand contain no specific reference to the need to change security levels or protocols. However, the assisting documentation does make it clear that manufacturers have a duty to ensure that systems are secure and lays out the actions that the EC will take to supplement its legislative change with necessary technical amendments to the specification.
Tachograph Seals

Currently systems are extensively tested by manufacturers and then by national Type Testing bodies before being approved.

New proposals for better tachograph seals are in the pipeline. The EC’s Roadmap for Future Activities says: “Seals are currently not required to meet a minimum performance level at European level nor to comply with a specific standard, thus making them easier to forge and subject to differentiated degradation over time.

“In order to address this issue and having regard to the provisions of Directive 98/34/EC and of rules on Information Society services, the Commission will give a mandate to CEN for developing European standards for seals to be used on tachograph systems.”

Tachograph Security Encryption

Any security changes will be handled so that operators are not inconvenienced by the new encryption methods. New cards will be issued that contain both the old and the new encryption keys to allow drivers to use them in new or legacy vehicle units. Operators will have five years to upgrade to new driver cards. The products themselves should cost no more than their predecessors despite the upgraded security.

Downloading equipment should need no more than a software upgrade to allow for new security measures.

To date no one has broken the security encryption placed on driver cards. However, that may change.
Harmonisation of the rules across the EU

Article 37 says:

The sanctions laid down by Member States for very serious infringements as defined in Directive 2009/5/EC shall be of the highest categories applicable in the Member State for infringements of road transport legislation.

There are various issues here:

1. There is a lack of a common interpretation of EU hours rules for drivers across EU Member States.

2. There are substantial differences in how certain penalties are rated in terms of significance or seriousness across the EU.

3. There is a lack of consistency about the penalties imposed.

The EU proposals here are concerned primarily with addressing the second point: how serious certain offences are seen to be. The EC wishes to achieve a broad agreement so that the most serious infringements of the rules are recognised as such by all Member States and their enforcement agencies. These infringements would then carry the maximum penalty, regardless of the level at which that penalty is set.

According to DfT’s David Glinos, we are unlikely to see penalties themselves set at universal levels because the standard of living and average incomes in Member States varies dramatically. A Romanian driver may pay a lesser fine in his home country than in the UK; but the UK fine would be disproportionately high compared to his income. Hence the playing field will not be equal, but UK drivers working abroad are as likely to benefit from lower fines as higher ones.

The important aspect is that every State is recognising and punishing those offences that have the most direct impact on public safety.
A related section of the proposals aims to boost the training of enforcement officers. Better training and a harmonisation of offences throughout the EU will help UK operators achieve a fairer competitive environment in which compliance is uniformly enforced.

**Exchange of information between Member States**

*Article 26* says:

_The Commission and the Member States shall take all necessary measures to ensure that the electronic registers are interconnected and accessible throughout the Union._

The EC says that all Member States must keep an up-to-date electronic register of licences and drivers’ cards issued, and that for the first time, interconnecting these national registers will be mandatory. This means both administrators issuing cards and control officers investigating infringements will be able to check against the whole of the EU database for previous restrictions, pre-existing cards or violations of the system.

**The integration of drivers’ cards and driving licences**

*Article 27* says:

_Driver cards shall be issued in accordance with the provisions of this Chapter until 18 January 2018. With effect from 19 January 2018, driver cards shall be incorporated into driving licences and issued, renewed, exchanged and replaced in accordance with the provisions of Directive 2006/126/EC._

The EC proposals on tachos look ahead to its predicted merger of drivers’ card (or Smartcards) and driver’s licences by 2018. On the surface, the merger of two pieces of related documentation seems straightforward and sensible. The EC believes it will not only save money but prevent the fraudulent activity of drivers’ ‘lending’ cards to one another to flout drivers’ hours rules.
However, this is one of the issues that may affect the UK more than other Member States.

- In many Member States there is a legal requirement to carry your driving licence whenever you drive. In the UK, however, we are not required to carry our drivers’ licence, although vocational drivers do have to carry their Smartcard, or driver’s card.

- A merger of the two cards would therefore mean that vocational drivers would be obliged to carry their licences with them at all times, something not required of the rest of the driving community.

- If a driver card is taken for evidence purposes, the driver would also lose his driver’s licence, potentially compromising his ability to drive outside of work.

- Many operators pay for drivers’ Smartcards. This will be complicated, and potentially costlier, if they also have to pay for a renewed licence. (The EC’s impact assessment assumes all such applications are done at work, which is not necessarily the case, although many operators provide help to less literate employees if necessary.)

- The suggestion that the EC is merging these documents as part of a ‘backdoor’ shift to ID cards – forcing workers to carry increasing amounts of ID in one document – has been raised at the talks.
Exemptions

The EC’s High Level Group of Independent Stakeholders on Administrative Burdens has proposed to widen the existing exemptions, meaning that certain types of vehicle would not require a tachograph. For instance, currently emergency services, recovery vehicles, some utilities vehicles and milk tankers do not require tachographs if working within a 50km radius. The think-tank has proposed widening this cordon to 100km.

The impact assessment carried out by the Commission concluded that the administrative burden could be cut by €53m.

There has been much discussion on this subject with some Member States wanting an even bigger increase in the exempt radius. At the moment the Commission’s initial proposal of 100km is being maintained.

» Tachodisc says:

While the purpose of this proposal should be to reduce the administrative burden to industry, this is not the whole story. While drivers would not need to use a tachograph for journeys within the 100km radius, they would still need to maintain a logbook of duty time. If a driver does go out of the exemption at any time during the week, the driver will fall under EU Driver Hours Law for the 24-hour period from the start of duty, and fall under EU Drivers Hour Law for weekly rest, which in itself will create an administrative burden.

Above all else, this will allow more commercial vehicles to operate without a tachograph.

It could also be argued that if tachograph legislation is designed to preserve road safety, local urban driving presents no less a risk than motorway trunking. Issues of fatigue from over-driving are valid in either scenario. Therefore the idea of a radius in which drivers can operate unregulated is based on flawed logic.
Related issues

There are issues that were not specifically addressed by the proposals or which were addressed but have since been dropped. They are, however, worthy of comment.

Speed data

» Tachodisc says:

*Speed data is difficult to handle with the current generations of digital tachographs if the vehicle is not equipped with a remote downloading solution. This issue is not dealt with by the EC proposals and may be an important omission. Operators have reported that their fleet management systems and telematics software is often less than accurate about speed. Currently digital tachograph speed data is only available when downloading the vehicle unit but crucially the tachograph only holds the last 24 hours of the vehicle motion, which would typically be two or three days, depending upon the operation.*

*Remote downloading will solve this problem in time, but it relies upon the cost of remote download units falling to acceptable levels.*

Workshops

Article 19 says:

*Member States shall take appropriate measures to prevent conflicts of interests between fitters or workshops and road transport undertakings. In particular, if a transport undertaking is also operating as an approved fitter or workshop, it shall not be allowed to install and calibrate recording equipment in its own vehicles.*

This part of Article 19, which prevented operators’ own workshops from calibrating their vehicle units, has now been dropped as unnecessary and unenforceable.

However the proposals do place great emphasis on the need for approval, inspection systems, audits and quality control of workshops by Member States.
Remote downloading

Operators at the roundtable debate suggested that the biggest benefit to them operationally would be the automated and remote downloading of data from driver cards. Although digital tachographs have been around since 2006, it has only been technically possible to perform remote downloading since 2009. The technology (hardware and software) to do this is not physically part of the tachograph, but is generally an aftermarket optional extra.

There are a number of hardware options available depending the business requirement and version of digital tachograph. The options include GPRS (mobile phone sim data) and wireless (PC WiFi) technologies.

The cost of remote downloads is expected to drop over time, and the cost of electronic data (GPRS) is already dropping significantly.

>> Tachodisc says:
Remote downloading will certainly be the way of the future and a natural progression of the time saving that the shift to digital tachographs has allowed. Digitachs removed the need for paper chart collection and filing; so remote downloading will remove the need for drivers to manually submit or process their cards. Operators could automate downloading for whatever proportion of their fleet would be stationary and within range at a given time.

EU Drivers Hours Law 561/2006

There was an opportunity for the EC to address the clarity of the EC 561/2006 driver’s hours regulations during this recent debate. However, it chose not to review the rules at this time. However, there remains a question within EU circles as to whether 561/2006 is still fit for purpose.
What is going to happen next?

- The closing date for tabling amendments to the proposed legislation was 15th March 2012.

- According to the initial proposal from the EC, the Smart Tachograph would enter into force 48 months after the entry into force of the regulation. However, the technical specification has not been adopted yet. The EC foresees the specification being in place by the latest of 31 December 2014 and that will then enter into force 40 months later.

- Given that the one cannot happen without the other, the full implementation date is still not definite but the Smart Tachograph should be entering into service between the beginning of 2017 and the summer of 2018.

- Tachodisc will keep you informed with all the crucial information as the legislative process develops and the specifications are defined and implementation dates are set over the coming months. We will keep you abreast of the implications for you and your operation as a result of these changes.
About Tachodisc

As leading experts in tachograph-related legislation for over 30 years, Tachodisc has been at the forefront of developing products and solutions that best suit the needs of the road transport industry. Today, this product range spans software analysis, the latest digital technologies, consultancy and training. Karen Crispe, Tachodisc’s managing director, Guy Reynolds, director of technical development, and the rest of the team in Warrington will continue to work hard to provide authoritative advice, information and products for the UK road transport industry and to help operators remain compliant with legislation at all times.