

Implementation of the European Agreement concerning the Work of Crews of Vehicles Engaged in International Road Transport (AETR) in EECCA countries and forthcoming amendments (mandatory digital tachographs)



- 1 Presentation of CORTE and of the speaker
- 2 The AETR agreement
- 3 The digital tachograph system
- 4 Type approval of the digital tachograph/tachograph cards
- 5 Security policy
- 6 Workshop approval
- 7 Issuing of tachograph cards
- 8 Enforcement
- 9 Data protection
- 10 Risk management
- 11 Conclusion





1. Brief presentation of **CORTE**



www.corte.be





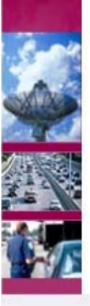
International association based in Brussels

Composed of national authorities in charge of road transport policy and/or enforcement (full members)

Open to NGOs active in this field (associate members)

Open to industrial partners (observers)

No fees to be paid by full and associate members





Full members:

Belgium Bosnia and Herzegovina

Bulgaria Croatia

Cyprus Georgia

Czech Republic Iceland

Denmark Montenegro

Estonia Norway
Greece Serbia

Hungary Ukraine

Ireland

Latvia

Luxembourg

Malta

Romania 4 → 27 members in 2 years only

Slovakia

Slovenia

Spain

Sweden

The Netherlands

UK



Full members:

Contacts to be finalised in the first part of 2007 with:

Albania

France

FYROM

Germany

Italy

Lithuania

Moldova

Turkey

Belarus would be welcome





Full members:

Objectives:

Gather all (29) EU and EEA Member States by the end of 2008

Extend to the AETR countries as soon as possible (by the end of 2009)





Associate members

ACEA → Vehicle manufacturers

CLEPA → Automotive manufacturers

European Transport Safety Council → Road Safety

European Road Federation → Infrastructures and Road Safety

European Transport Workers' Federation → Drivers' Hours Enforcement

FIA (Fédération Internationale Automobile) → Road users

International Road Union (IRU) → Drivers' Hours Enforcement

ICTCT → Road Safety and Research

Etc...



Associate members:

Objectives: associate all the major actors in the field of road traffic enforcement





Observers:

Siemens VDO

Stoneridge Electronics

Semmler

Copper Source





CORTE has initiated a process at the UNO to become an official consultative body for road transport enforcement issues





1. The speaker





Thierry GRANTURCO

GRANTURCO & Partners

Legal adviser in all the digital tachograph project since 1997

Barrister at the Bar of Paris and at the Bar of Brussels

Phd in European Law
Phd in Political science
Phd in International relations

Professor of Law

Secretary General of **CORTE**





2. The AETR Agreement





Persons and goods are transported everywhere in Europe

To cover these situations, an international agreement has been signed under the auspices of the United Nations on 1 July 1970, known under the acronym **AETR**.

"European Agreement concerning the Work of Crews of Vehicles engaged in International Road Transport"

See http://www.unece.org/trans/main/sc1/sc1doc_2004.html





Which vehicles are concerned by this Agreement?

It applies to the carriage by road:

- (a) of goods where the maximum permissible mass of the vehicle, including any trailer, or semi-trailer, exceeds 3,5 tonnes, or
- (b) of passengers by vehicles which are constructed or permanently adapted for carrying more than nine persons including the driver, and are intended for that purpose.





Some vehicles have nevertheless been exempted by the Agreement

- vehicles with a maximum authorised speed not exceeding 40 kilometres per hour;
- vehicles owned or hired without a driver by the armed services, civil defence services, fire services, and forces responsible for maintaining public order when the carriage is undertaken as a consequence of the tasks assigned to these services and is under their control;
- vehicles, including vehicles used in the non-commercial transport of humanitarian aid, used in emergencies or rescue operations;
- specialised vehicles used for medical purposes;
- specialised breakdown vehicles operating within a 100 km radius of their base;
- Etc...





Some vehicles can be exempted by national authorities

- agricultural tractors and forestry tractors used for agricultural or forestry activities, within a radius of up to 100 km from the base of the undertaking which owns, hires or leases the vehicle;
- vehicles used for driving instruction and examination with a view to obtaining a driving licence or a certificate of professional competence, provided that they are not being used for the commercial carriage of goods or passengers;
- vehicles with between 10 and 17 seats used exclusively for the noncommercial carriage of passengers;
- specialised vehicles transporting money and/or valuables;
- Etc...





Which journeys are concerned by this Agreement?





EU rules





EU rules



















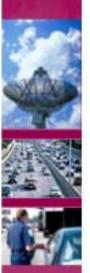
Not covered







Amendments to this Agreement are currently discussed at UN level





3.

Introduction of the digital tachograph

Annex to the AETR



Considering the constant increase of:

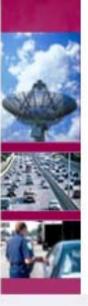
- registration of passenger cars
- registration of commercial vehicles

as a consequence of this, the constant increase of:

- road traffic congestion
- road traffic accidents
- fatalities and injuries
- the number of heavy vehicles involved in fatalities

the EU legislator has decided in 1969 to regulate the professional drivers' activities for the very first time.

Regulation (EEC) n° 543/69, Official Journal L 77, page 49 (see http://europa.eu.int/eur-lex/lex/en/index.htm)



This Regulation aimed mainly at:

- limiting driving time allowed by day and by week
- obliging professional drivers to record their activities through a recording equipment called "tachograph" or, alternatively, to use a kind of booklet



First generation of recording equipment In the EU





In the meantime, the EU signed in 1970 under the auspices of the United Nations an agreement called AETR extending the use of the recording equipment to the European but non EU Members (former Eastern countries, former Soviet republics, Balkan countries, etc...)

For EU drivers, the use of recording equipment became mandatory including outside the EU whilst for non EU AETR drivers, the use of recording equipment became mandatory for international journeys only



The UNO-AETR agreement foresees that each change of the recording equipment decided by the EU has to be implemented at AETR level so that each generation of recording equipment, as presented hereinafter, has also been the one used at AETR level



This Regulation changed considerably the drivers' behaviour

But the recording equipment was not yet mandatory in the sense that booklets could be used instead

Therefore, to avoid any distortion of competition between transport operators, the EU legislator decided to amend the 1969 Regulation in 1985 and to introduce a recording equipment on a mandatorily basis for every professional driver

Except for very few exceptions Regulation (EEC) n° 3821/85, Official Journal L 370, page 8 See http://europa.eu.int/eur-lex/lex/en/repert/0720.htm#07204020





This new Regulation:

- was much more demanding with drivers (in terms of driving, working, availability and rest times)
- increased the number of data collected by the tachograph through the charts used to record data (speed, time, distances, names of drivers/ co-drivers, locations, vehicle registration numbers, etc... have to be recorded and stored)
- introduced new obligations for transport operators (in terms of breakdown or faulty operation of their tachograph)
- introduced more stringent requirements for the repair workshops to ensure a proper calibration of these recording equipments



Over the time, the recording equipment evolved and from mechanical became electronic



First generation

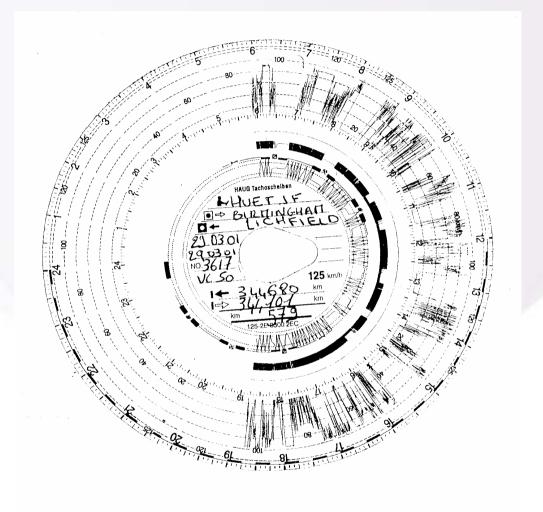


Second generation





But both generations are anyway working with paper discs





Nevertheless, it became rapidly clear that analogue tachographs were tampered (paper discs not used, destroyed, withdrawn during journeys, parameters mechanically or electromagnetically altered, etc...).

Whereas experience has shown that the economic pressures and competition in road transport have led some drivers employed by road haulage companies to flout certain rules, particularly those concerning the driving and rest times laid down in Council Regulation (EEC) n° 3820/85 of 20 December 1985 on the harmonisation of certain social legislation relating to road transport;

Whereas blatant infringements and fraud present a road safety hazard and are unacceptable for reasons of competition for the individual driver who does respect the rules;

[...]

Whereas to put an end to the most common abuses of the present system, it is therefore necessary to introduce new advanced equipment [...];

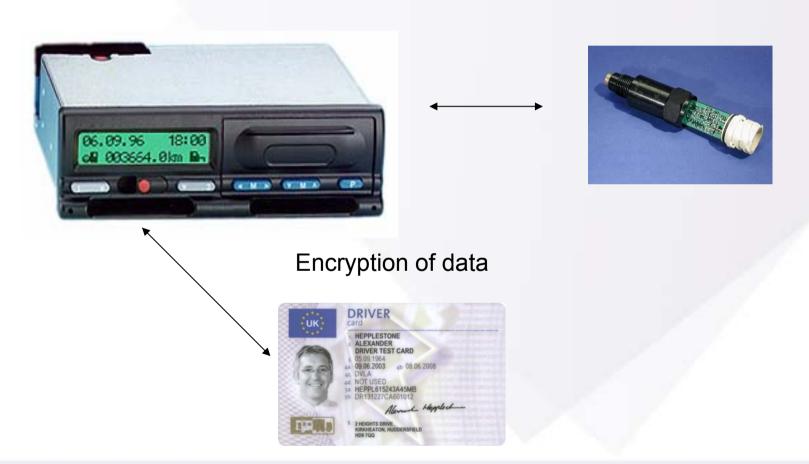
Whereas the total security of the system and its components is essential if recording equipment is to function efficiently;

Recitals 2, 3, 6 and 7 of Regulation (EC) n° 2135/98





The EU legislator decided therefore to introduce a new kind of recording equipment





AETR Contracting Parties have agreed in Geneva that:

- non EU AETR Contracting Parties will have to accept EU vehicles fitted with digital tachographs and control the drivers using them
- non EU AETR Contracting Parties have until the 16th of June 2010 to introduce the digital tachograph system on their territory

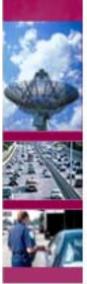


Presentation will focus on the obligations on Belarus in that respect



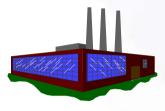


Obligations of the Contracting Parties' authorities





Situation with analogue tachographs



Manufacturers



Type approval



Control bodies



Fitters Workshops

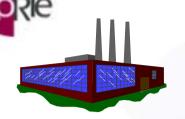


Transport companies



Drivers

Situation with digital tachographs



Manufacturers
Card / VU / Sensor



Type approval



Security Management

Card

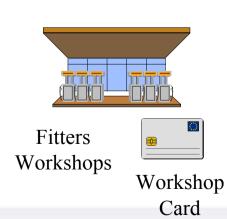


(Security) Personalisation Card / VU / Sensor















4. Type approval





- Digital tachographs and tachograph cards are not type approved if they cannot work with all types of tachograph and of tachograph cards already type approved
- With analogue tachographs, the situation is different
- They are type approved with a particular type of paper disc

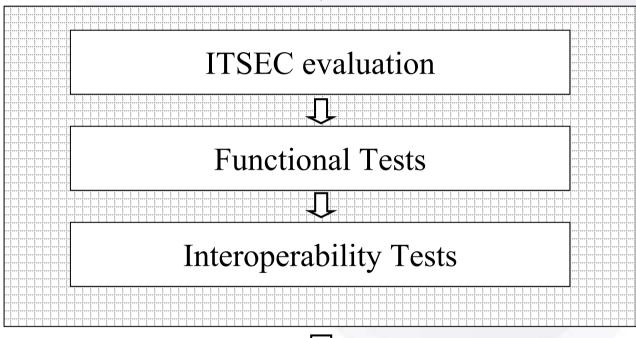


- Therefore, the applicant for a type approval has not anymore to be granted with one certificate, as it is the case with the analogue tachograph, but with four different certificates:
- a functional certificate;
- a security certificate;
- an interoperability certificate;
- a type approval certificate.



Type Approval Tests







Type approval



Analogue tachographs	Digital tachographs
No type approval required	Type approval required:
	 either full type approval (functional, security, interoperability and type approval certificates) = develop own cards
	- or simplified procedure = adaptation and type approval of a card already type approved by another Member State



The list of type approved cards can be found on the following web site:

http://dtc.jrc.it/text/39436108-13.html

Requirement 290 of Appendix 1B of the AETR

The main type approval authorities in the EU are the following:



- Ministry of Industry France
- Swedish Road Administration Sweden

Their contact details can be found on the following web site:

http://www.eu-digitaltachograph.org/ContactDisplay.asp



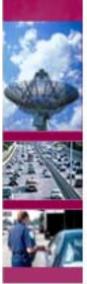


The authorities granting security certificates are (only) the following:

- BSI (Germany): http://www.bsi.bund.de/

- CESG (UK): http://www.cesg.gov.uk/

- DCSSI (France): http://www.ssi.gouv.fr/fr/dcssi/index.html





The authority granting interoperability certificates is (only) the following:

European Commission, DG JRC (Ispra, Italy): http://dtc.jrc.it/text/IOT.html

Requirement 278 of Appendix 1B of the AETR





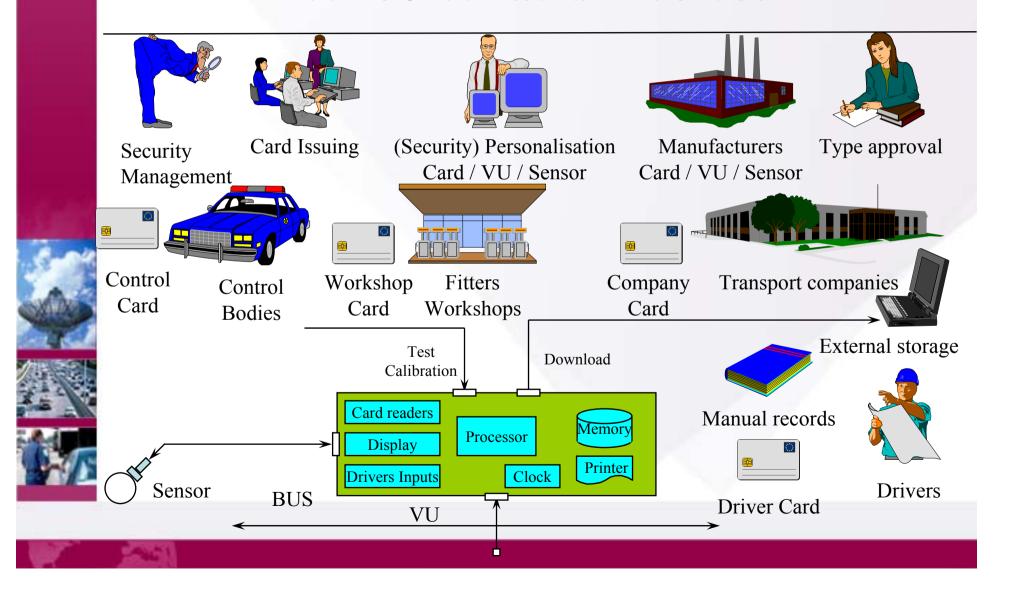
5. Security policy







Global Security Policy Who / What is involved





Contracting Parties have to ensure the maintenance of the system once deployed in the field.

Before being issued with Contracting Parties keys (to be used to cipher cards before they are issued) Contracting Parties have to submit a security policy to the ERCA (European Commission – DG JRC)

Security policy has to be maintained





In simple terms:

- the EU/AETR key has to be used to certify the AETR Contracting Parties' keys
- the AETR Contacting Parties' key has to be used to certify the equipments' and cards' keys
- equipments and keys using these cryptographic keys can then exchange encrypted and therefore secure messages



No security policy = no national key = no possibility to issue and use cards





National authorities need therefore to:

- issue a security policy
- get it approved by the ERCA
- once approved, it has to be audited and maintained

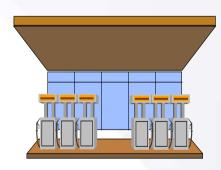
Timing: from 3 up to 6 months

Work eventually to be done in close cooperation with your smart cards supplier





6. Approval of workshops







The Requirements

All workshops should be approved against two sets of criteria:

- Technical Competence and Facilities
- Suitability of Applicant (Fitters and Workshops)



Technical Competence and Facilities

Appropriate workshop facilities

Appropriate approved equipment

Suitably trained and competent technicians

Other considerations (e.g. health and safety guidelines).





Suitability of Applicant (Fitters and Workshops)

Repute (Honesty and Integrity)

References (Business and Personal)





Workshops are basically approved to carry out:

- Installation (requirement 239)
- Activation (requirement 243)
- Calibration (requirement 248)
- Producing Plaques and Certificates (requirement 249)
- Sealing (electronic) (requirement 251)
- Periodic inspections (requirement 256)
- Downloading (requirement 260)
- Issue Undownloadability Certificates (requirement 261)





Analogue tachographs	Digital tachographs
Approval of workshops	Approval of workshops
Training of fitters Equipment	(New) Training of fitters (New) Equipment
Honesty	Honesty
Premises	(New) Premises Security
Audit	Data download Workshop card management
	Audit



Today: they check the seals







Tomorrow: they check the seals

















Today: Data Accuracy

Dates, time, speed, distances, VRN and/or VIN, etc...These data may come from different sources but some of them, at some stages, will need to be calibrated. For example:

- when the recording equipment is installed
- when it is repaired
- when it is regularly checked

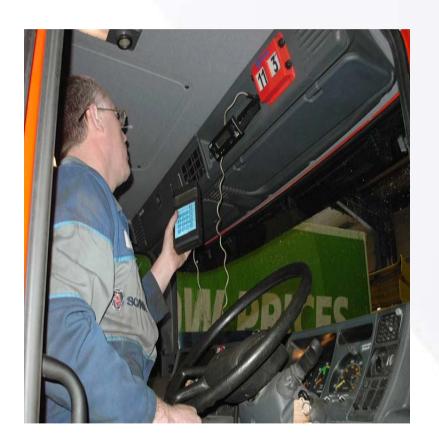








Tomorrow: programming





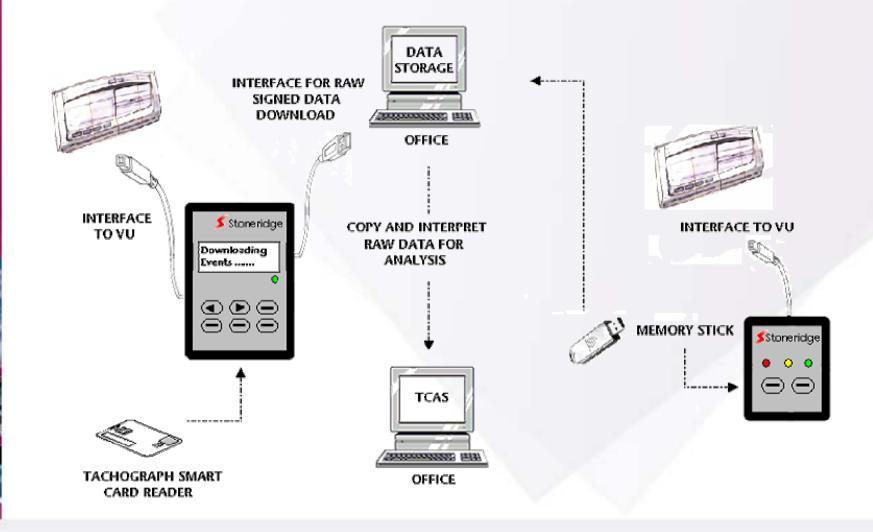


Keep The Records



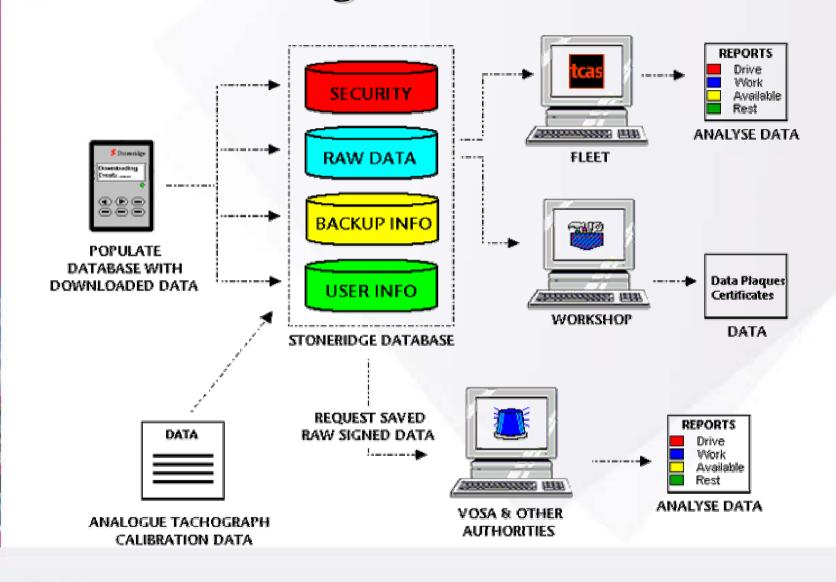


Keep the data





Legal Database





Coexistence of two systems for workshops





National authorities need therefore to:

- issue or amend their national laws on the approval of workshops
- ensure the proper training of fitters
- ensure to set up a sufficient network of approved workshops at their respective national level

Timing: from 6 up to 16 months

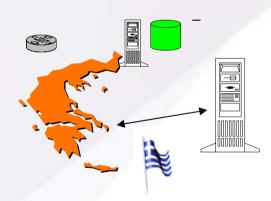
Work to be done in close cooperation with tachograph manufacturers



7. Card Issuing TACHOnet











CARD ISSUING









Driver card

Personalised for use by the Driver

- 5 Year Validity Period
- Holds an average of 28 days data
- Driver must hold one card only



Workshop card

Used by approved tachograph fitters to install, activate, calibrate and download the recording equipment.

- One year validity period
- Personalisation recommended
- Issued with a PIN



Company card

Allows the company to 'Lock and Download Data' recorded in the vehicle unit.





Control card

Used by enforcers to carry out roadside compliance checks.

• Personalisation recommended





Card Application Types

First Issue - First application for a tachograph card

Replacement - Issued when a card is lost, stolen or malfunctions

Exchange - Change of administrative data

Renewal - Issued when a card is renewed after 5 years





Card Issuing Authority (CIA) Organisation

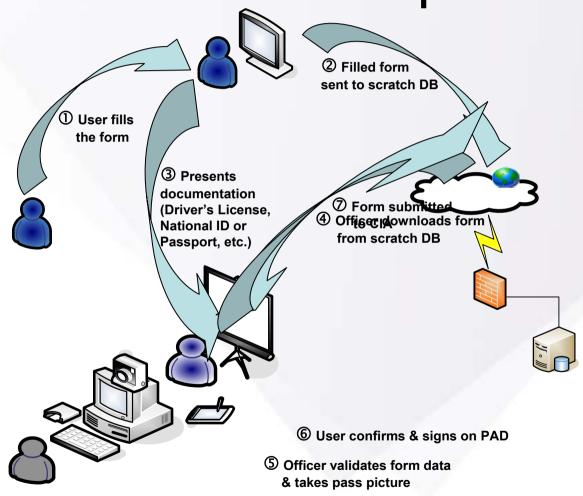
Centralised - database, application processing system, card personalisation & issue

De-Centralised - administrative desks for application processing with centralised database. Card personalisation either from central office or at administrative desks



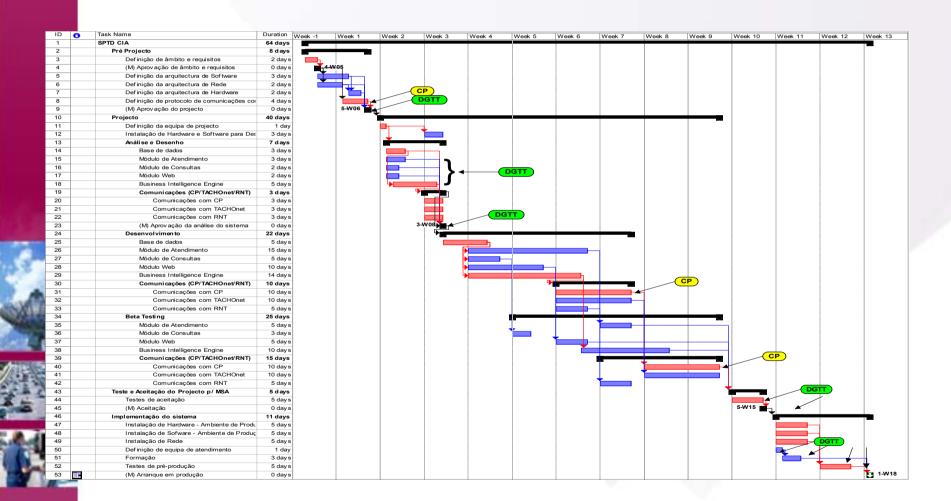


CIA Front Office
Operational concept



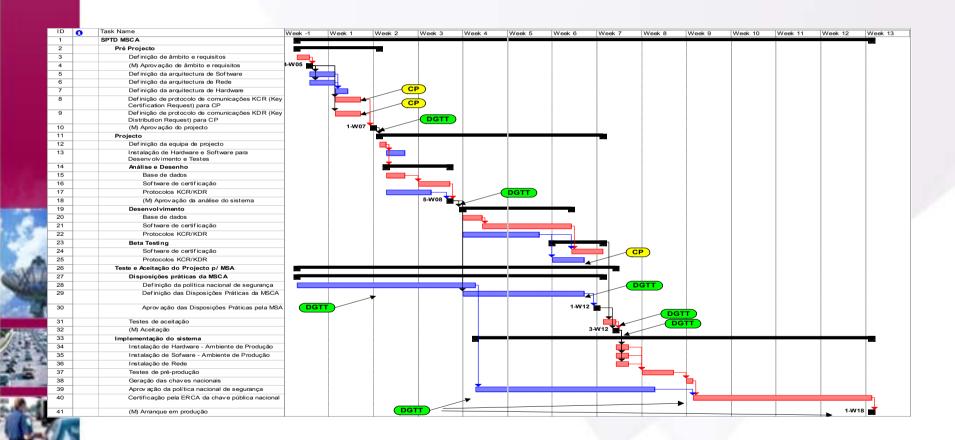


CIA Planning





MSCA Planning





TACHONET





TACHOnet Project Objectives

- Create a telematics network aiming at falicitating data exchange between national administrations in charge of issuing tachographs cards
- TACHOnet network:
 - ✓ Ensures a reliable and secure exchange of necessary and sufficient data between States issuing tachograph cards
 - ✓ Makes sure the exchange is done within the legal constraints stated in the EU-AETR rules
 - ✓ Imposes only limited constraints on the local systems managing cards in the different States

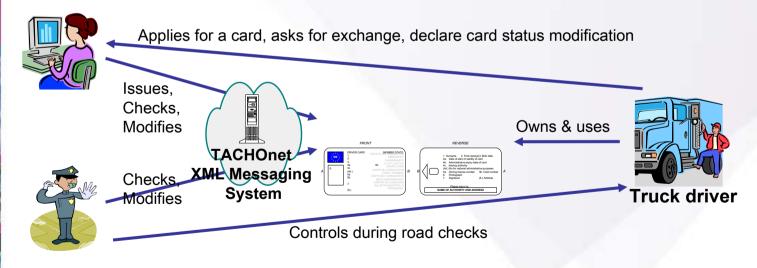


TACHOnet Business Actors

- Clerks working for National Card Issuing Authorities (CIA)
- Control officers working for National Enforcement Authorities

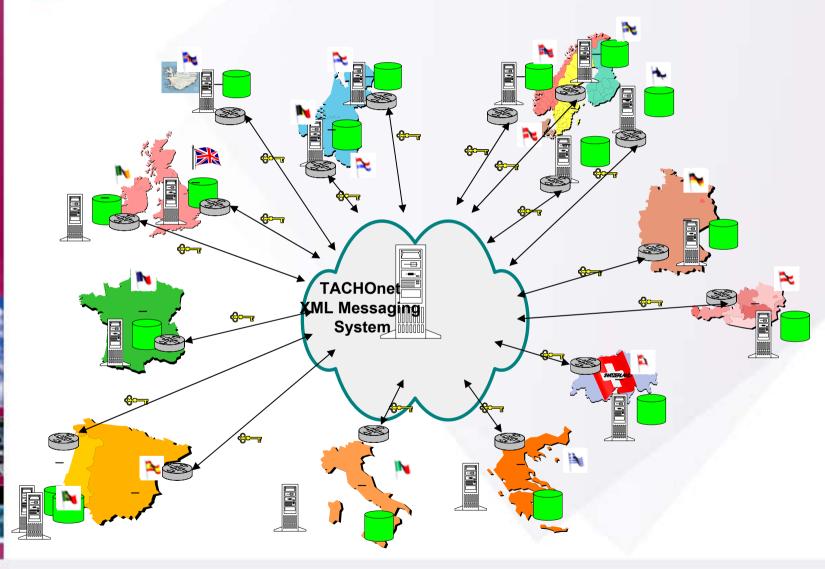
Clerk @ CIA

Control officers





TACHOnet Architecture





National authorities need therefore to:

- exchange information making sure that they do not issue a card to an applicant who already holds one
- connect to TACHOnet?
- set up an AETR net to be connected to TACHOnet?

Timing: ?

Coordination between the EC and the UN/AETR Secretariat highly recommended





Digital tachographs
- Security management
Security policy Security audits
- Issuing of cards
- Connection to a net or active exchange of information between AETR Contracting Parties



8. Enforcement







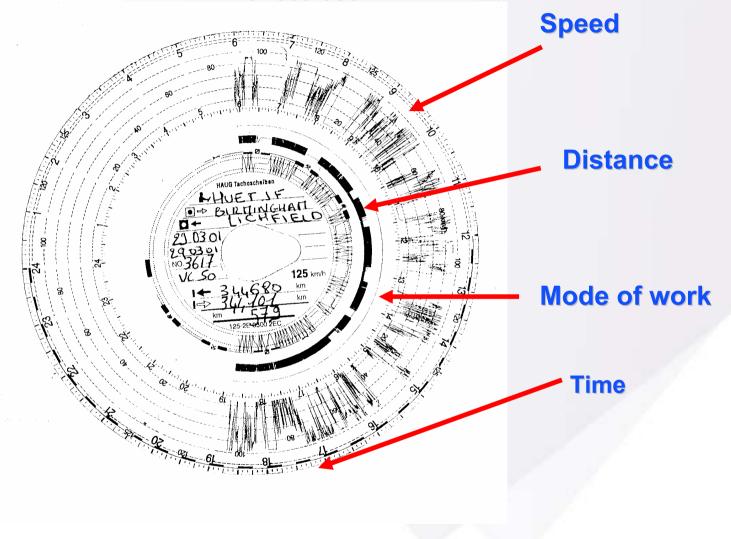
Enforcement

With analogue tachographs

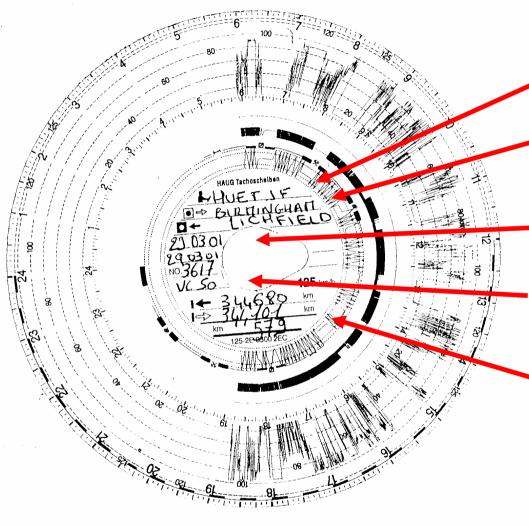




Are recorded







Drivers name

Start location

End location

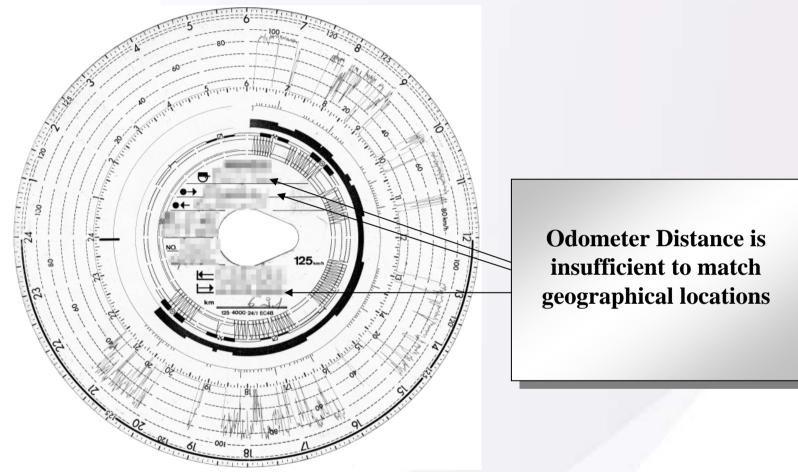
Dates

Vehicle registration

Odometer readings



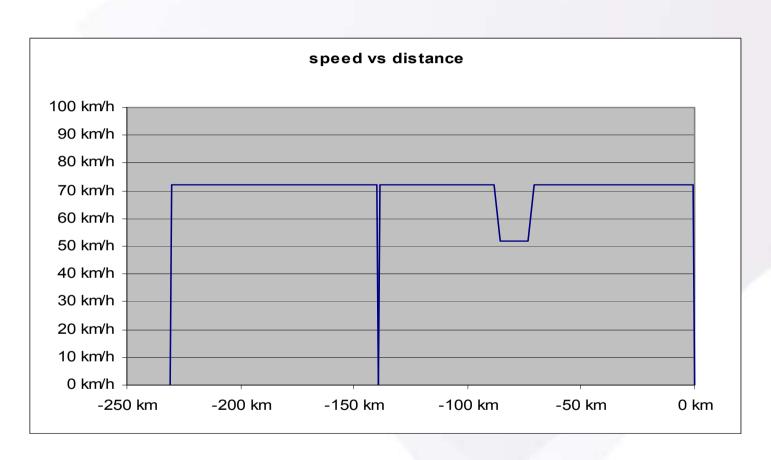
Manipulations can be detected (1)



Analogue Distance Trace



Analysis software can also be used one data are scanned (1)



Digital Distance Trace

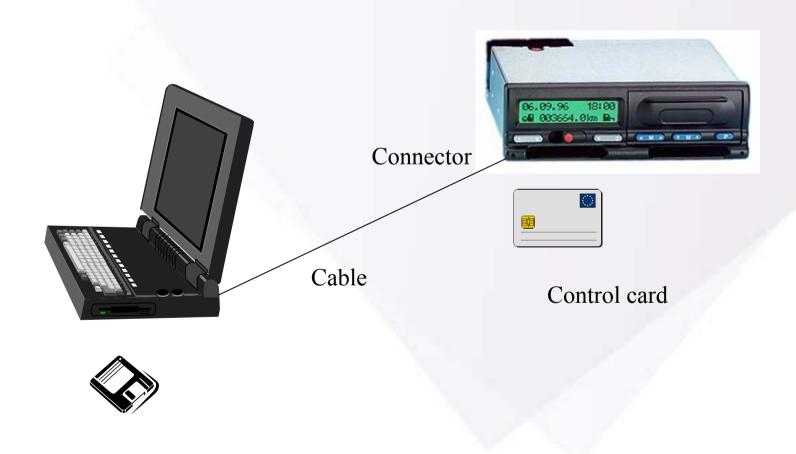


Enforcement

With digital tachographs



Data can be downloaded by control officers if issued with control cards





Alternative for the control officers to get access to the recording equipment's and card's data: printouts

6 types of print-outs, which can be selected through the recording equipment:

- 2 relate to the drivers' activities: one comes from the recording equipment, the other one from the driver card;
- 2 relate to the events and faults: one from the recording equipment, the other one from the driver card;
- 1 concerns the technical data (vehicle, recording equipment, etc...);
- 1 concerns the over speeding.





Example: drivers' activities stored on the driver's card

- ▼ 15/10/1997 15:15 (UTC)
- # DavidFish ##B/4803992633
- | | # **.**
- **■▼14/10/1997**
- MALSTER Nick D.
- **B**GB/135798642 14/05/2004
- A XAD1117483A B/PV1772

Tacho-Manufacturer Tacho-Part-Number

- T Workshop-Name
- **T**■GB/159482637
- |**†** 05/03/1997

- Printing Date & Time (UTC)
 Delimiter Print-out general information
- Controller Name
 Controller Card Number
- 3 Control Place (Hand written)
- 4 Type of Print-Out (Card) & Enquiry date
- 5 Driver Last Name Driver - First Name
- 6 Driver Card Number Driver Card - Expiry Date
- 7 Vehicle VIN Vehicle - Nation + VRN
- 8 Tachograph Manufacturer Name Tachograph - Part Number Last Inspection/Calibration - Workshop Name Workshop Card Number Date

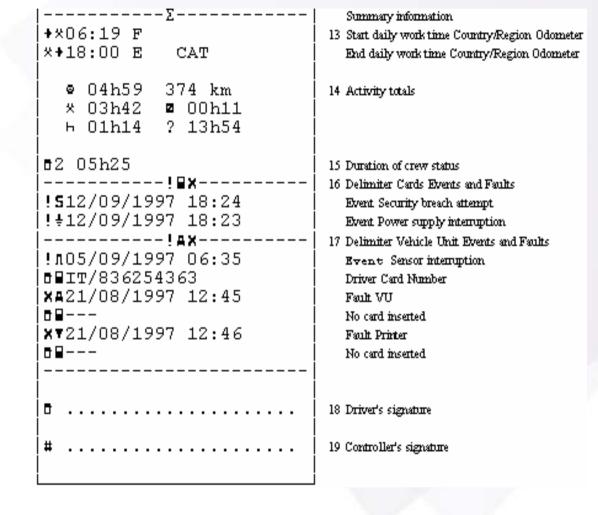


	00:00 06:17 B/PV1772 42000 km 06:18 07:42 07:43 07:53 07:54 08:00 42010 km; 10	01h25 00h11 00h07	9 Card not inserted. Activity unknown 10 Card insertion Insertion in VRN No Odometer at card insertion 11 Detailed activities with Start Time, End Time, Duration 12 Odometer, Distance travelled at Card withdrawal
Д	B/PV1772 42010 km		10 Card insertion Insertion in VRN No Odometer at card insertion
	08:01 08:13 08:14 11:20		11 Detailed activities
	11:21 12:33 42263 km 253	01h13 *	Rests above 1 hourmarked with a star 12 Odometer, Distance travelled at Card withdrawal
?	12:34 14:11	01h38	9 Card not inserted. Activity unknown 10 Card insertion
A	B/HKG264 81000 km		Insertion in VRN No Odometer at card insertion
*	14:12 16:03 16:04 18:00 18:01 18:01 81111 km; 111	01h57 00h01	11 Detailed activities 12 Odometer, Distance travelled at Card withdrawal
?	18:02 23:59	05h58	9 Card not inserted. Activity unknown

Delimiter driver information











Data analysis





Digital tachographs
- Roadside checks
- Company checks
based on paper discs based on print-outs based on digital data
New equipments required Control cards to be issued Specific training to be supplied



National authorities need therefore to:

- issue laws to allocate control officers with new powers, to regulate data download, to define under which conditions electronic data can be used before Courts, etc...
- train their control officers
- equip them appropriately

Timing: (6 to 24 months)

National authorities should seek support from EU Member States and manufacturers









- The digital tachograph falls under the scope of data protection rules for different reasons :
- The digital tachograph <u>records and stores digital data</u> concerning individuals (mainly drivers) as well as legal persons (transport companies and approved workshops)

See requirements 73 to 105 b of AETR Appendix 1B





• These data are accessible in different ways, depending on whether or not tachograph cards are used, and in case tachograph cards are used, depending on the type of cards that is used (driver, company, control or workshop cards) and of the mode of operation of the tachograph

See requirements 007 to 11 of the AETR Appendix 1B





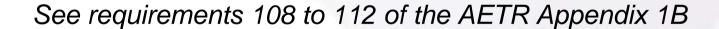
 These data are also <u>downloaded</u> and can also be <u>transferred</u> for freight and fleet management, but also for enforcement purposes

See requirements 149 to 151 of AETR Appendix 1B





• Finally, the digital tachograph <u>records and stores data on</u> <u>tachograph cards</u>, to be issued to the different persons submitted to the provisions of the AETR







 Each tachograph card contains data, that are accessible in different ways regulated notably and mainly by the AETR as far as enforcement is concerned

See requirements 194 to 212 b of the AETR Appendix 1B for the driver card

See requirements 213 to 230 a of the AETR Appendix 1B for the workshop card

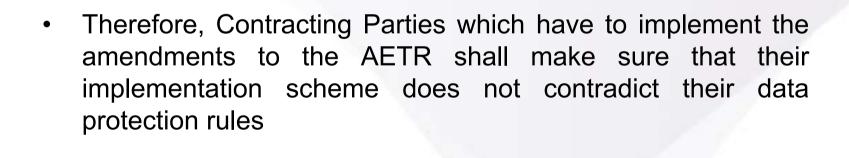
See requirements 231 to 234 of the AETR Appendix 1B for the control card

See requirements 235 to 238 of the AETR Appendix 1B for the company card





 These data, their recording, their storage, the way they can be accessed, their transfer and their use fall under the scope of the data protection rules (if any in the non EU-AETR Contracting Parties)



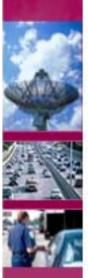




Analogue tachographs	Digital tachographs
Data protection No or few requirements	Data protection Digital tachograph's and tachograph cards' data are submitted to data protection rules (if any)



10. Risk management





Point 5.3.38 of the ERCA policy states that:

The MSA shall establish an information security management system (ISMS) based on risk assessment for all the operations involved.

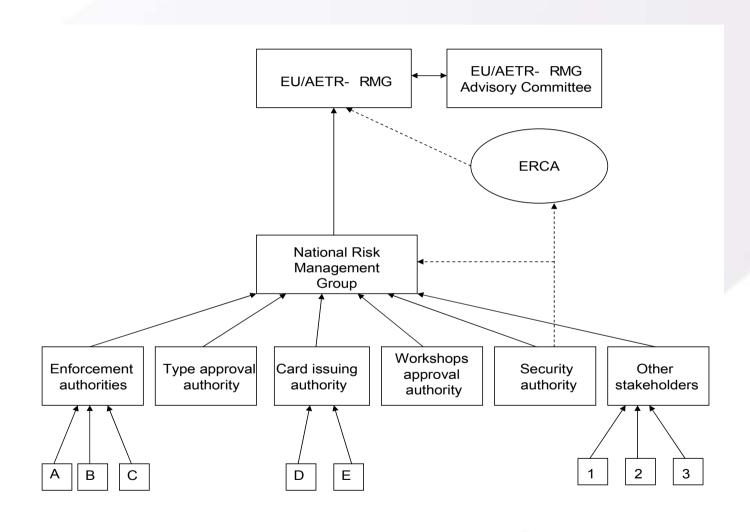
The ERCA does not cover the overall security of the digital tachograph system

→ Risk management



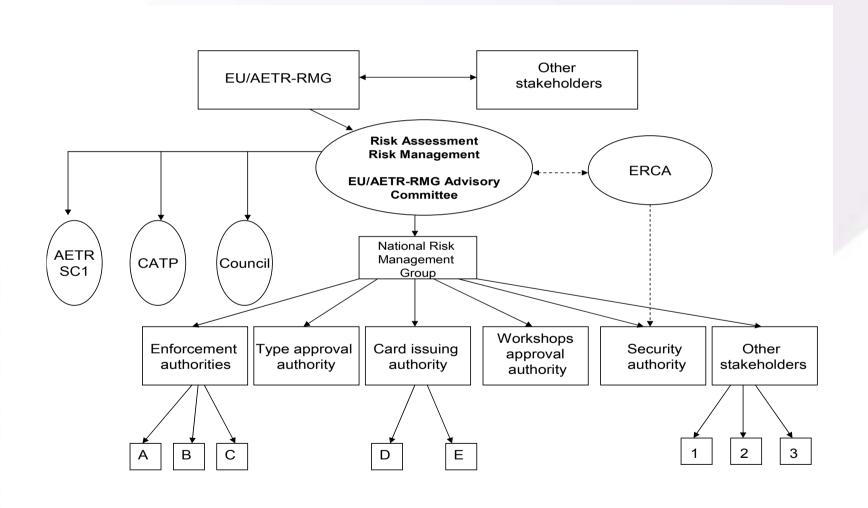


From national authorities to the EU/AETR-RMG





From the EU/AETR-RMG to national authorities





Analogue tachographs	Digital tachographs
Risk management	Risk management
No requirement	Policy to be implemented and maintained



National authorities need therefore to:

- put in place a national risk management policy
- nominate responsible bodies/persons
- maintain this policy

Timing: (2 to 6 months)





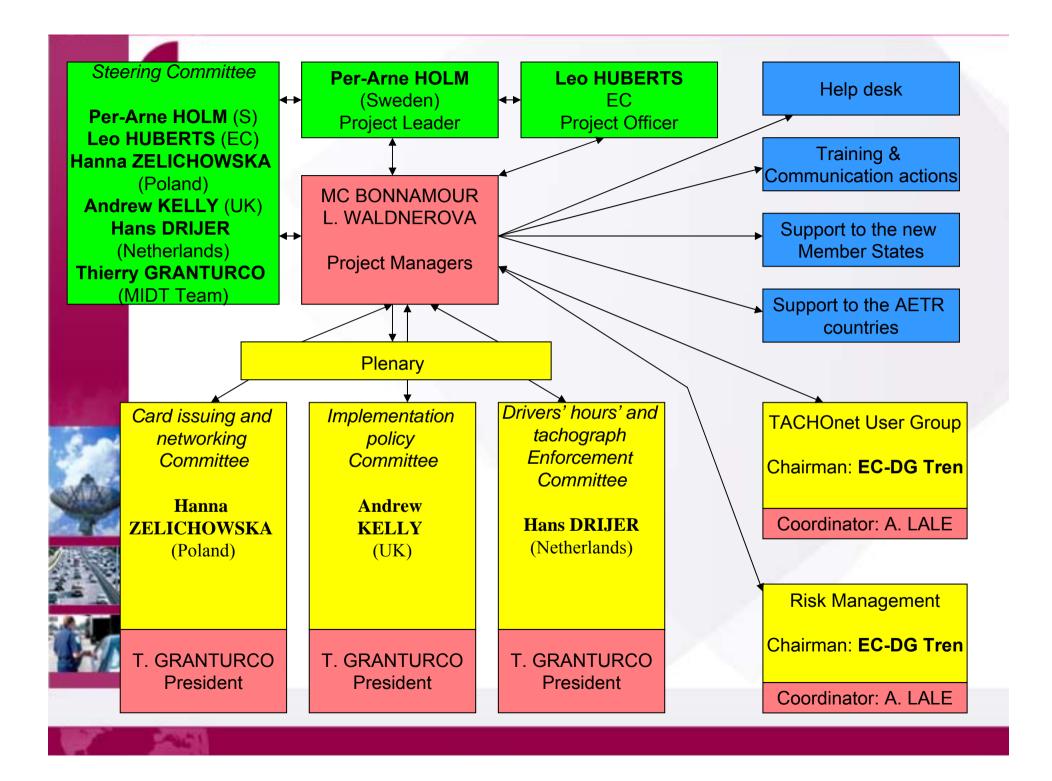
11. Conclusion





Overview of the Project Organisation







Help desk in 3 languages (EN, FR, G)

www.eu-digitaltachograph.org





THANK YOU VERY MUCH FOR YOUR ATTENTION

