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Programme of Work:

AETR Road Map

Road Map for Accession and Implementation European Agreement concerning the Work of Crews of Vehicles Engaged in International Road Transport (AETR), 1970

Note by the secretariat

This document, submitted by the secretariat, contains the revised version of the "AETR Road Map" following expert comments made at the fifteenth session of the Group of Experts on AETR (para 16, ECE/TRANS/SC.1/GE.21/37).

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I. Introduction

1. Buses and trucks are involved in 20 to 30 per cent of the road traffic accidents in many EuroMed partner countries. These types of crashes are about 50 per cent more likely to result in death or serious injury as a consequence of the large mass and volume of the vehicles involved and because a driver who has fallen asleep cannot brake or swerve to avoid or reduce the impact of a collision.
2. While it is not possible to calculate the exact number of fatigue-related crashes, research shows that driver fatigue may be a contributing factor in up to 20 per cent of all road crashes, and up to a quarter of all fatal and serious crashes.
3. Drivers are aware when they are feeling sleepy due to fatigue and can decide to stop for a rest. One reason that leads drivers to continue driving when feeling sleepy is the underestimation of the risk of actually falling asleep while driving. Another reason is that some drivers choose to ignore the risks. However, the above applies mostly to early fatigue levels. During later stages, drivers tend to be poor judges of their own fatigue level.
4. Fatigued drivers are often not aware of their condition and can lapse into a “micro sleep” that may last only a few seconds - long enough to drive off the road and crash. These crashes tend to be the most severe in terms of injury and death, as the fatigued driver makes no attempt to avoid or prevent the crash.
5. Multiple global research studies have shown that being awake for 17 hours results in an impairment equivalent to a Blood Alcohol Concentration (BAC) of 0.05, while being awake for more than 20 hours is comparable to the impairment attributable to a BAC of 0.08.

A. The Agreement

6. The AETR Agreement of 1970 is the response of European Governments to fight this silent killer - “Driver fatigue”.
7. The AETR Agreement aims to prevent drivers and crews of commercial vehicles of more than 3.5 tons, or transporting more than 9 people, engaged in international road transport, from driving excessive hours. As mentioned earlier, driver fatigue is known to increase the risk of serious road crashes. Moreover, non- standardized working hours may create disparities in the working conditions of professional drivers and impact on competition between companies.
8. To this end, the AETR Agreement regulates the driving times and rest periods of professional drivers. The AETR Agreement also defines the control devices that are used to control those periods, and sets technical requirements for the construction, testing, installation and inspection of these devices. Additionally, the AETR Agreement also lays down requirements for checking driving hours by enforcement authorities.
9. By regulating the driving times and rest periods of drivers of commercial vehicles engaged in international transport, the AETR Agreement also creates a level playing field in the road haulage industry by promoting “fair competition” and introduces appropriate social rules by imposing “decent working conditions”.

10. As of July 2016, 51 member States are Contracting Parties to the AETR Agreement and most of them apply its provisions also in domestic transport.¹

11. The AETR Agreement came into force on 5 January 1976, following a period of negotiations that lasted more than 15 years and the elaboration of a first AETR Agreement developed under the auspices of UNECE in 1962 (that did not enter into force due to an insufficient number of ratifications).

12. The tool through which compliance with the AETR is enforced is the control device (analogue or digital tachograph). The use of the digital tachograph was introduced in 2006 in the AETR Agreement.

13. The introduction of the digital tachograph was a considerable challenge, requiring advanced technical expertise, strict rules and well-functioning systems at national and international levels. The Joint Research Centre (JRC) safeguards the technical interoperability of the digital tachograph and functions as the European root certification authority for AETR countries. A number of EuroMed partner countries are considering the introduction of the digital tachograph in their home fleets to benefit from the widely harmonized AETR framework.²

B. Main Provisions of the AETR

14. The AETR applies in the territory of each Contracting Party for all international road transport performed by any vehicle registered in the territory of the said Contracting Party or in the territory of any other Contracting Party (Article 2). The same article indicates the exemptions to the applicability of the AETR.

15. Contracting Parties may apply higher minima or lower maxima than those laid down in their territories. However, the provisions of the AETR remain applicable to drivers engaged in international road transport operations in vehicles registered in another Contracting or non-Contracting State (Article 4). Article 5 defines the minimum age for drivers engaged in the carriage of goods.

16. According to the AETR, the daily driving time should not exceed nine hours and it may be extended to at most ten hours not more than twice during the week. The weekly driving time may not exceed 56 hours, while the total accumulated driving time during any two consecutive weeks may not exceed 90 hours. After a driving period of four and a half hours, a driver has to take an uninterrupted break of not less than 45 minutes, unless he/she is beginning a rest period. The AETR also provides detailed guidelines on driving, breaks and rest periods. Rest periods are divided into daily and weekly periods, and their exact duration is described in detail in Articles 6, 7 and 8.

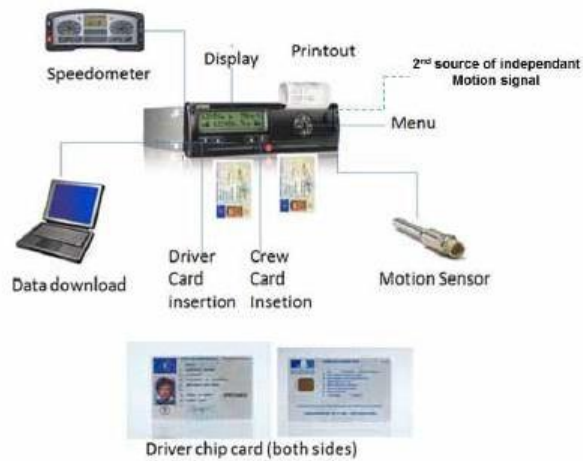
¹ At the European Union level, the same subject matter is governed by Regulation (EU) No. 165/2014, Regulation (EU) No. 2016/799 and Regulation (EC) 561/2006.

² For more information, see the text of the AETR Agreement in the annex (in the expanded version of the present document only) and the “Background paper on the Implementation of the Digital Tachograph and related Legislative Framework, EuroMed RRU, September 2012”, in the annex (in the expanded version of the present document only).

Activity	Continuous	Daily		Weekly	2-weekly	
		Normal	Extended/ reduced	Normal	Reduced	(2 consecutive weeks)
DRIVING	4h30 max	9h max	10h max (no more twice a week)	56h max	90h max	
REST	45 mini or 15 mini+ 30 mini	11h mini	9h mini (no more 3 times a week)	45h mini (taken after 6x24h the latest)	24h mini (compensation of 21h to be taken «en bloc» with a minimum 9 h rest before end of 3rd week)	Only one reduced rest authorized

17. The tachograph is the control device and detailed technical specifications are provided in Article 10, as well as in the annexes of the Agreement and its appendices. These include: guidelines for type approval, installation and inspection of equipment; use of equipment; requirements for construction, testing, installation and inspection for both analogue and digital control devices; approval marks and certificates as well as model forms for various documents.

18. The liability aspect borne by transport companies, the supervision of driving hours, provision of proper instructions to crew members, regular checks of driving, other work and rest periods and liability in the case of infringements committed by drivers are described in Article 11.



19. Enforcement is a basic pillar of the AETR and a key aspect of the implementation of the digital tachograph system in the field. Article 12 provides details on roadside controls by enforcement officers. A minimum of three per cent of the days worked by drivers of vehicles to whom the Agreement applies should be checked during each calendar year, of which not less than 30 per cent of the total number of working days checked should be checked at the roadside and not less than 50 per cent should be checked on the premises of undertakings. The elements of roadside checks and checks at premises are also indicated, as well as the fact that there should be no discrimination among vehicles, undertakings and drivers whether resident or not, and regardless of the origin or destination of the journey or type of tachograph. Article 12 also stipulates the basic principles for information exchange between countries in the framework of mutual assistance, as well as the framework of infringements and penalties.

20. The final provisions of the AETR, including eligibility for accession, dispute settlement and the procedure for amendment are provided in Articles 14-25. Newly acceding states should know that the AETR is considered to enter into force 180 days after the deposit of an instrument of accession by that state.

II. Purpose, Scope and Objectives of the Road Map

A. Purpose

21. Driver fatigue is known to increase the risk of serious road crashes. The AETR Agreement aims to prevent drivers and crews of commercial vehicles engaged in international road transport from driving excessive hours. The AETR also defines the control devices (tachographs), sets technical requirements for the construction, testing, installation and inspection of these devices and for checking driving hours by enforcement authorities.

22. However, according to Article 14, the AETR is open for accession to UNECE member countries only.

23. Recognising the vital importance of the AETR Agreement for EuroMed countries, the EuroMed RRU project has conducted focused national, demand-driven training events in Algeria, Jordan, Morocco and Tunisia. UNECE experts contributed to these events. Following these events, Algeria, Jordan, Morocco and Tunisia expressed their willingness to implement the AETR Agreement and introduce the digital tachograph in their international and domestic transport. Thus, the issue for EuroMed partner countries was how to become Contracting Parties to the AETR Agreement and to benefit from its provisions.

24. Seeking UNECE support on the opening up of the AETR Agreement to Jordan and other EuroMed countries, H.E. Ms. Lina Shbeeb, Minister of Transport of Jordan, attended the seventy-sixth session of the UNECE Inland Transport Committee in Geneva on 25-27 February 2014.

25. In her address to the ITC, Ms. Shbeeb stressed the importance of the digital tachograph system for non-UNECE Mediterranean countries and requested the Committee's support for the opening up of the AETR Agreement to non-UNECE EuroMed partner countries. The same request was also made by EuroMed partner country experts from Algeria, Jordan, Morocco and Tunisia who attended the seventh, eighth and ninth sessions of the AETR Expert Group Meeting as well as the 109th session of the Working Party on Road Transport (SC.1) in Geneva in 2014. During the discussions at the ITC, the AETR

Expert Group, and SC.1, the European Union, the ITC and the SC.1 Chairpersons also supported the request.

26. At its ninth session (Geneva, 27 October 2014), the UNECE Group of Experts on the AETR decided to support the opening up of the AETR Agreement to Algeria, Jordan, Morocco and Tunisia by revising Article 14. The Group of Experts agreed on the wording of an amendment proposal and invited an AETR Contracting Party to formally propose the amendment proposal at the earliest opportunity. At its 109th session, the Working Party on Road Transport (SC.1) (28-29 October 2014) adopted the proposed modification of Article 14 that reads as follows: Article 14 : “1. This Agreement shall be open for signature until 31 March 1971 and thereafter for accession, by member States of the Economic Commission for Europe and States admitted to the Commission in a consultative capacity under paragraph 8 or 11 of the Commission’s terms of reference. Accessions under paragraph 11 of the Commission’s terms of reference shall be limited to the following States: Algeria, Jordan, Morocco and Tunisia.”

27. Following an official request submitted to the UNECE secretariat by Turkey and Ukraine, a depositary notification for the modification of Article 14 was issued by the Treaty Section of the United Nations (18 February 2015). Contracting Parties to the AETR Agreement were given six months to express their objections to the proposal. No objections were received and the Secretary-General of the United Nations announced that the amendment entered into force on 5 July 2016.

28. The present document, prepared jointly by EuroMed RRU and UNECE with inputs from the Joint Research Centre, presents the 11 main steps and a number of sub- steps that member States wishing to accede and implement the AETR should follow (the Road Map).

29. The first two steps deal with the preparatory work for accession, including coordination and designation of responsibilities and highlight the strategic issues that need to be considered before accession. Step three is exclusively about accession to the AETR, eligibility and related procedures. The important aspects of security are explained in the three steps that follow. The issues relating to setting up the tachograph card system and workshops are next. The road map ends with steps on training, enforcement and support measures. All related legislative and explanatory documents are listed in Section E.

B. Scope and Objectives

30. Drawing upon the extensive experience of the UNECE Sustainable Transport Division, JRC and the UNECE intergovernmental bodies administering the AETR Agreement as well as the EuroMed project’s experience gained through technical assistance provided to EuroMed partner countries, this Road Map is aimed at providing concrete guidance for accession to and effective implementation of the AETR Agreement. One of the most important developments relating to the AETR Agreement in the course of the past ten years was the mandatory introduction of the digital tachograph in commercial vehicles of more than 3.5 tons, or transporting more than nine people, engaged in international road transport.

31. It should be noted that since the digital tachograph is mandatory for all newly-registered vehicles, Contracting Parties to the AETR have to be ready to handle simultaneously technical operations and checks for conformity for previous generations of driver working time recording methods and equipment (analogue tachographs). Moreover, in order to cover the cases of vehicles registered in the territory of a State which is not a Contracting Party to the AETR, the AETR offers freedom to countries that are Contracting Parties to require, in lieu of a control device, daily record sheets completed manually be

each crew member for the period of time starting from the entry into the territory of the Contracting Party³.

III. The UNECE-EU-EUROMED Road, Rail and Urban (RRU) project Road Map for accession to and implementation of the AETR

32. The Road Map aims to provide guidance to EuroMed countries on accession and implementation of the AETR Agreement.

33. The Road Map proposes the implementation of 11 main steps that if properly and timely pursued would result in the full application of the system in the territories of new Contracting Parties.

A. Step 1 Preparing for Accession

1. Coordination and responsibilities at the national level

34. AETR-related regulations may be under the responsibility of different ministries or entities depending on the administrative structure. The ministries, administrations and bodies concerned need to be identified and their representatives should be invited to take an active role in the pre-accession process.

35. A non-exhaustive list of the ministries, administrations and bodies involved could include: those in charge of transport, road controls as well as inspections, interior, labour, justice, industry, trade, finance and education.

36. Representatives of the private sector should be consulted and be involved if possible in the process as representatives of the users of the regulations i.e., transport sector, vehicle manufacturers, labour unions, associations for the prevention of accidents in the workplace and training bodies.

37. The formal coordination of all the participants in the process of pre-accession should be organized.

38. However, each country should assess and define its own administrative structure, on the basis of its culture, standard operating procedures, hierarchy schemes, staff and the availability of expertise. The sub steps presented below are recommendations only.

2. Overall coordination and supervision

39. Although the regulations on the digital tachograph may involve a number of ministries or bodies, the main responsibility should be assigned to one ministry or government agency. In several AETR Contracting Parties, this is the Ministry of Transport. In this case, the overall supervision and coordination of all AETR- related actions should be under the competent minister.

3. Establishment of a national AETR Committee

40. The AETR Agreement is a complex project to implement. Furthermore, although in many countries the regulations on the digital tachograph are under the responsibility of Ministries of Transport, the regulations cover issues of concern to other ministries or

³ See Article 3, para 2 (a) of the AETR Agreement.

administrations. As a result, coordination and cooperation between all ministries and other public bodies involved are critical for successful implementation. For this reason, it is strongly recommended that the national AETR Committee be established as a cross-Ministry body.

41. The work of the national AETR Committee may be complemented by small, theme-specific workgroups, aimed at specific aspects of the AETR, as necessary and appropriate. These could include: security issues, cards, enforcement and training.

4. Designation of a national Focal Point for the AETR

42. From an early stage, the designated supervising and coordinating authority should appoint an AETR National Focal Point (AETR-NFP), dealing full-time with AETR issues. The Focal Point's work is of great importance for the successful implementation of the AETR. The AETR-NFP will work on issues of national implementation and with public and private stakeholders in the country, taking into account the availability of expertise and resources. This focal point should have both responsibility and authority and may be expected to represent the competent authority at international meetings.

43. The work of the AETR-NFP should be supported by a team of experts as well as by external expertise as necessary and appropriate.

44. After accession, the AETR-NFP will work on issues of international cooperation with other States through the UNECE Working Party on Road Transport and the UNECE Expert Group on the AETR.

45. The necessary resources, human and financial, should be made available.

B. Step 2 Addressing Strategic Issues Prior to the Accession

1. Studying the AETR and related national legislation

46. The AETR National Focal Point and the members of the National AETR Committee study the AETR Agreement and corresponding national legislation. They also are responsible for ensuring that a translation of the AETR Agreement (if necessary) is available.

2. Deciding on the scope and applicability of the AETR

47. The AETR Agreement applies to international transport by road. However, several Contracting Parties also apply the Agreement's regulations to their domestic transport. This is the case for Turkey and EU member States. Newly acceding countries have to answer several critical questions during the pre-accession phase. These include the scope and applicability of the AETR, e.g. international only or both international and domestic transport; the transition period to be applied in case of domestic transport; and the applicability with regard to already registered vehicles.

International transport only

48. If a country decides to apply the provisions of the AETR Agreement only for international transport by road, then the only step to be taken is to transpose the Agreement into its national legislation. From this point on, the provisions of the AETR are in force. It should be noted, however, that it might be easier for acceding countries just to make a reference to the AETR Agreement in their national laws, because attempts to re-write the Agreement's content in their own legislation may lead to discrepancies and future conflicts.

International and domestic transport

49. If a country opts to apply the AETR Agreement for both its international and domestic transport then some issues need to be clarified, including identification of the necessary transitional period and determining to which vehicles it would apply. However, it is strongly recommended that countries apply exactly the same requirements avoiding differences for both international and domestic transport, which could become a source of conflict between users and enforcers.

50. It is up to the country to decide whether to apply the AETR Agreement to its domestic transport or not.

Transitional period, priorities and areas of applicability

51. The decision of a State to apply the AETR Agreement to its domestic transport is not a matter that concerns the AETR Agreement *per se*. The decision could be considered as part of the pre-accession period. In this case a transitional period may be considered as a supplementary measure. The length of the transitional period should be determined according to each country's needs, national practice and availability of resources and expertise. For more information on the timing of implementation of the AETR Agreement in international transport, see STEP 3: Accession to the AETR Agreement.

52. According to the AETR Agreement, the mandatory use of the digital tachograph applies only to newly registered vehicles engaged in international transport. The application of the AETR Agreement to domestic transport may raise further applicability questions. These are related to the possible mandatory use of the digital tachograph by some categories of domestic transport vehicle such as school buses or trucks transporting dangerous goods. For substantive and educational reasons during the transitional period, other systems for registering and controlling driver's working hours could be used, such as daily record sheets completed manually by each crew member or the analogue tachograph.

53. During the AETR national training seminars held in EuroMed countries, it was noted that climatic situations in some parts of countries (the Sahara region, for instance) may pose obstacles to full implementation of the AETR Agreement. Such cases could be covered under Article 9: Exceptions, where under certain conditions the driver may depart for the provisions of the Agreement.

C. Step 3 Accession to the AETR Agreement

54. Article 14 of the AETR Agreement stipulates the eligibility for accession. Currently, Article 14 limits accession to the AETR Agreement to UNECE member States and Algeria, Jordan, Morocco and Tunisia. Countries wishing to accede to the AETR Agreement should submit to the Secretary-General of the United Nations an "Instrument of Accession".

55. This instrument should be signed by one of three specified individuals, i.e., the Head of State, Head of Government or Minister for Foreign Affairs. There is no specific form for the instrument, but it must include the following:

- Title, date and place of conclusion of the treaty concerned;
- Full name and title of the person signing the instrument, i.e., the Head of State, Head of Government or Minister for Foreign Affairs or any other person acting in such a position or with full powers for that purpose issued by one of the above authorities.

- An unambiguous expression of the intent of the Government, on behalf of the State, to consider itself bound by the treaty and to undertake faithfully to observe and implement its provisions;
- Date and place where the instrument was issued;
- Signature of the Head of State, Head of Government or Minister for Foreign Affairs (the official seal alone is not adequate) or any other person acting in such a position for the time being or with full powers for that purpose issued by one of the above authorities.

56. An instrument of accession becomes effective only when it is deposited with the Secretary-General of the United Nations at United Nations Headquarters in New York City. The date of deposit is normally recorded as that on which the instrument is received. Countries are advised to deliver such instruments to the Treaty Section, Office of Legal Affairs of the United Nations directly to ensure that the action is promptly processed. The individual who delivers the instrument of ratification is not required to have full powers. In addition to delivery by hand, instruments may also be mailed to the Treaty Section. In accordance with the depositary practice, if a country initially faxes or sends by e-mail a signed copy of an instrument, such copy may be accepted for deposit but that State must also provide the original as soon as possible thereafter to the Treaty Section.

57. Furthermore, it should be noted that the AETR Agreement enters into force 180 days after the deposit of the instrument of accession. By that time, each country should comply with all provisions of the Agreement. However, based on the experience of European countries acceding to the AETR Agreement more than 180 days may be required before countries are able to fully implement it. For this reason, it is recommended that newly acceding countries request a transition period, in order to secure the time needed for all reforms that should take place, in order to fully comply with the AETR Agreement's provisions and requirements.

58. Such a case was presented when Georgia deposited its instrument of accession in 2011. Georgia requested a 2-year transitional period, which was granted⁴. The exact wording of the request is as follows: "The Government of Georgia reserves its right to use measures to be applied during the tolerance period with respect to the implementation of digital tachograph by the Contracting Parties to the European Agreement concerning the Work of Crews of Vehicles Engaged in International Road Transport (AETR) of 1 July 1970, during the two years period after Georgia's accession to the AETR agreement." https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XI-B-21&chapter=11&lang=en#EndDec

59. The relevant information and procedures for the accession of States to the AETR Agreement can be found in the Vienna Convention on the Law of Treaties, 1969⁵, the Treaty Handbook and other resources available on the website of the United Nations Treaty Section.

⁴ None of the other States Parties objected to this reservation by the end of six month period after the respective dates of circulation by the Secretary-General, and as a result they are deemed to have accepted the reservation and granted Georgia the 2- year transition period requested.

⁵ The Vienna Convention on the Law of Treaties (VCLT) is a treaty on the international law on treaties between States. It was adopted on 22 May 1969 and opened for signature on 23 May 1969. The Convention entered into force on 27 January 1980. The VCLT had been ratified by 114 States as of April 2014. The Convention sets out rules that are already part of customary international law.

D. Step 4 Setting Security Levels

1. Checking compatibility with data protection law

60. The protection of personal data and privacy of individuals are fundamental human rights. Data protection law grants the data subjects (individuals) certain rights and imposes certain responsibilities on data controllers.

61. Digital tachographs record and store personal data on tachograph cards. These data, their recording, their storage, the way they can be accessed, their transfer and their use fall under the scope of data protection rules. As a result, all procedures regarding the collection, use, transfer and storage of these data should be compliant with or adapted to existing national legislation on this matter.

2. Elaborating criteria to be complied with by people dealing with keys (personnel security)

62. In order to comply with the required level of security, those in charge of the management of the digital tachograph system should work according to the definition of the European Root Certification Authority (ERCA) policy. This means that personnel are assigned specific roles according to their responsibility (officer, administrator, operator and auditor) and no single person is authorized to perform more than one of the trusted roles.

E. Step 5 Establishing Security Policy

1. Developing a national security policy based on European Root Certification Authority policy and the national security policy template

63. Each country has to fulfil its obligations and develop a national security policy. This policy should be compliant with the standards and follow the ERCA template. A national security policy is needed to ensure that the keys, certificates and equipment (cards, vehicle units and motion sensors) are managed in a safe and trustworthy manner by all parties involved. The national security policy should cover the following processes, where applicable:

- issuance of tachograph cards, including keys and certificates; issuance of vehicle unit keys and certificates;
- issuance of motion sensor keys;
- management of the Contracting Party's keys.

2. Sending the policy to the Joint Research Centre and UNECE and having the policy approved by the Joint Research Centre

64. After completing the national security policy according to the prerequisites and instructions of ERCA, each country has to formally submit its policy to ERCA and have it approved. The objective of the approval process is to assure comparable levels of security in each country that has acceded to the AETR Agreement. It should be noted that ERCA provides key certification services to a country only if the outcome of the policy review provides sufficient grounds to judge that the requirements set have been met.

3. Periodical policy audits and maintenance

65. Each country has the obligation to periodically audit its security policy to confirm that the requirements of the ERCA policy are being maintained. Each country is obliged to perform the first audit within 12 months of the start of the operations covered by the

approved policy. When the audit finds no evidence of non-conformity, the next audit may be performed within 24 months. When the audit finds evidence of non-conformity, the next audit has to be performed within 12 months. Each country has to report the results of the audit and provide the audit report to ERCA. The audit report defines any corrective actions, including the implementation schedule required to fulfil the country's obligations.

4. Testing key certification requests before a live session at ERCA

66. This is a critical procedure that each country has to undertake in order to ensure that it has all prerequisites in place in order to successfully complete the official key certification procedure with ERCA. Test keys are used for preliminary checks but mainly for type approval certification. There is no obligation to pass the test keys "request for certificates" to benefit from ERCA's real key services.

F. Step 6 Putting in place and maintaining a National Risk Management Policy

67. The security of the tachograph system is one of the basic pillars. Security needs to be maintained at all stages and be adaptable to respond to any possible threat(s) as they appear. A risk management policy needs to be developed and implemented at the national and international levels so as to allow the various stakeholders to anticipate risks and define counter-measures.

68. Consequently, management of such risks is, in practice, a major task involving a series of consecutive steps. The risk management process can also be described as comprising a six-step process, ranging from identification of the problem to evaluation of control actions. The process is an iterative one and not a linear sequence of actions. The six steps can be considered as an important cyclical process to follow so Governments can make informed decisions. These steps include:

- Conducting a situation analysis/needs assessment;
- Developing the risk reduction goal, sub-goals and indicators;
- Identifying and evaluating possible risk reduction options;
- Selecting and developing the risk reduction strategy;
- Obtaining commitment from decision-makers and taking action;
- Evaluating impact.

G. Step 7 Setting up the Digital Tachograph Cards System

69. One of the core aspects of the digital tachograph is the issuance of cards to all relevant parties: there are separate and distinct cards for drivers, transport companies, workshop staff and law enforcers. Each country has to make crucial decisions and undertake specific steps in this area.

1. Deciding to develop and issue own cards or use cards that are already type approved

70. Each country has to decide whether to develop and issue its own cards, or to use cards that are already type approved. In the first case, full type approval is needed. The successful acquisition of three certificates (functionality, security and interoperability) leads to the type approval certificate. It is evident that this procedure may take a long time to accomplish.

71. In the second case, the procedure is simplified, as only the adaptation and type approval of a card already type approved by another Contracting Party to the AETR Agreement is necessary. It should be noted, however, that even in this case an interoperability check is required by JRC, ensuring that the cards of the country which are set up with the country's encryption keys are fully compatible with all approved vehicle units.

2. Establishing a card issuing authority

72. The country's Card Issuing Authority should be established. The Card Issuing Authority can either be centralized (in charge of the database, application processing system, card personalization and issuance) or de-centralized, i.e. only in charge of administrative desks for application processing with a centralized database, while the cards can be personalized either from a central office or at administrative desks.

73. The Card Issuing Authority should:

- Designate the manufacturer of the raw tachograph cards. In general, this step is subject to a tender procedure;
- Appoint a card personalizer and a Country Certification Authority, again with a tendering procedure;
- Implement the card issuing structure (set up a front desk and a card distributing system, implement working procedures, connect to the domestic driving permits database and create a tachograph card database, connect to the tachograph card databases of the participating countries of TachoNET or another equivalent system which shares information with all other Contracting Parties)⁶. It is however worth noting that TachoNET is not directly available to non- EU countries. For the time being access to it can be made only through EU members.

3. Elaborating and approving procedures for all card application types: First issuance, replacement, exchange, renewal

74. The Card Issuing Authority should elaborate and approve all appropriate procedures for the replacement, exchange and renewal of all types of cards. This step also includes the procedures to be followed between the Card Issuing Authority, the raw card manufacturer, the card personalizer and every other authority and legal entity involved in the system.

75. The Card Issuing Authority bears the responsibility for delivering/replacing cards within a short period of time (days), because driving without a card is forbidden unless the driver has made an official declaration of a lost or stolen card.

4. Creating a reliable database accessible by all parties

76. All parties involved should have sufficient knowledge of the status of implementation and use of the digital tachograph system in the country. This can be achieved by the establishment of a reliable electronic system which collects and stores data, and is accessible by all parties involved in the digital tachograph system. This database could then be used for statistical, security and reference reasons, under the provision that it complies with applicable personal data protection laws.

⁶ It is important to underline that sharing information through TachoNET or any equivalent system is not a way to share all national information with the whole AETR community, but instead a way of ensuring that a single person does not apply to several Contracting Parties for a driver card.

5. Additional features of cards to be checked by UNECE

77. The standard and additional features of cards, as they have been designed and implemented during their construction phase, should be communicated to UNECE, and be checked and approved to ensure that the cards are fully compliant with the AETR Agreement.

H. Step 8 Setting up the Workshops Network

78. All digital inspected, tachographs need to be, at some point, activated, calibrated, and, ultimately, decommissioned from service. Workshops are expected to provide this front-line support and expertise.

Analogue tachographs

79. Although the digital tachograph is mandatory for all newly-registered vehicles, countries should be ready in respect to legislation, technical capacity and control methods and equipment to handle the activation, calibration, inspection and decommissioning of analogue tachographs. This is because analogue tachographs continue to exist and will be in use until the vehicles in which they are fitted in are taken out of operation.

1. Introducing or amending national laws on the approval of workshops

80. Some countries that are not Contracting Parties to the AETR Agreement have national legislation on working and rest times for professional drivers and the use of the analogue tachograph is part of that legislation. In such cases the relevant laws should be amended, to reflect the provisions of the AETR Agreement for both analogue and digital tachographs.

81. Special attention should be paid when no system for registering and controlling professional drivers' working hours exists in a country. In this case it is imperative that national legislation on the approval of workshops for all technical operations for the digital as well as analogue tachograph equipment fitted on vehicles should be created according to the provisions of the AETR Agreement.

2. Setting criteria for workshops

82. Two sets of criteria are recommended for approval of workshops: technical competence and facilities, and the suitability of applicants (workshops and fitters). The assessment of technical competence can be best achieved by ensuring that the workshops have appropriate and/or approved equipment to allow them to carry out the required tachograph-related tasks and by ensuring that all the technicians working have successfully completed appropriate training. The technicians must be of good repute, provide a signed declaration of suitability, prove their appropriate skills and technical background and have a tachograph training certificate (analogue and digital).

83. The workshops and their staff have to be of good repute as they are in charge of sealing and calibrating systems which may be used as evidence of driving hour infringements. This level of trust/repute can be dealt with in the approval stage.

3. Designating a workshop approval authority

84. The designation of a workshop approval authority is vital for the functioning of the digital tachograph system. It is this authority that is responsible for implementing the selection criteria for workshop approval. This authority could be one of the theme-specific workgroups proposed in Activity 1. Its responsibilities should not be limited to the initial

selection and approval of workshops, but also to evaluation and certification. Therefore, the authority also needs to:

- Decide on the period of validity of workshop approvals;⁷ Establish the fees for approval and/or renewal;
- Undertake (or delegate responsibility for) periodic inspections of workshops, individual technicians, records, equipment and security aspects;
- Ensure that approval criteria are reviewed periodically to reflect changes and experience;
- Ensure that applications for workshop cards are screened and validated and that cards are not issued inappropriately.

85. This authority should be able to regularly audit workshops once approved and adopt disciplinary sanctions, and be allowed to withdraw, whenever necessary, approvals granted to workshops.

86. It should be noted that each country should be able to define their own procedure for approving workshops.

87. Finally, the designated workshop approval authority should be communicated to UNECE.

4. Establishing a (sufficient) network of authorized workshops

88. A sufficient number of workshops in the territory of the Contracting Party should be approved by the respective national authority, in order to facilitate in the most effective and efficient manner all technical operations (installation, activation, calibration, periodic inspections, downloading and decommissioning).

89. The competent authority should not attempt to intervene in the commercial setting up of workshops other than to ensure a sufficient number and that they adhere to all legal requirements.

5. Communicating to UNECE a list of authorized workshops in order to maintain a database and inform all AETR Contracting Parties

90. The initial list of approved workshops should be sent to the UNECE, so that it can keep a record and inform all other AETR Contracting Parties accordingly. This list should periodically be updated and communicated to UNECE, as a result of the checks and conformity controls conducted by the competent national authority.

91. This step is very important, in order to inform foreign drivers where they can repair tachographs in case of failure.

I. Step 9 Training

1. Development of cards and devices for training

92. To properly train all parties involved in the digital tachograph system, it is evident that training, including on cards and digital tachograph devices should be developed. The training equipment should comply with the standards for commercially

⁷ Preferably limited to one year and not renewed automatically, but after an in-depth audit.

used devices. For safety reasons, the devices, vehicle units and cards used for training purposes should be used with test keys and not “real keys”.

2. Training of drivers, companies, fitters, workshop technicians, control officers

93. The digital tachograph entails new obligations for transport companies and professional drivers. It also introduces more stringent requirements for workshops to ensure proper calibration and repair. Moreover, the implementation of the digital tachograph introduces new procedures for law enforcers to follow during the checks. It is, therefore, evident that training of all those involved, during all stages (design, implementation and use of the digital tachograph) is crucial for success. This includes training of competent authority officials, enforcement bodies, managers and office staff of transport companies, drivers, workshop technicians, fitters and safety advisors.

94. A non-exhaustive list of training actions that could be designed, implemented (or delegated for implementation) and supervised includes:

- Awareness-raising events;
- Separate training courses for transport companies, professional drivers, workshops and law enforcers;
- Field demonstrations;
- Theoretical courses.

95. Training courses for workshops are often provided by tachograph manufacturers, who have a full knowledge of workshop activities. Manufacturers can train the drivers and company's trainers, as well as law enforcement trainers.

J. Step 10 Enforcement

96. The tachograph remains the main control device used by enforcement officers to ensure the respect of AETR Agreement rules by professional drivers. Therefore, enforcement was, is and will remain the key aspect of the implementation of the digital tachograph system and should be one of the most important pillars of the risk management procedures.

1. Introducing or amending laws to empower control officers for enforcement activities

97. The Contracting Parties implementing the AETR Agreement are expected through their nominated coordination body to take into consideration the enforcement aspects at their respective national level and define an enforcement strategy. This can be achieved by the work done by a relevant workgroup, as indicated previously under STEP 1 under the National AETR Committee and/or under the responsibility of the authority for law enforcement in each country.

2. Equipping control officers appropriately

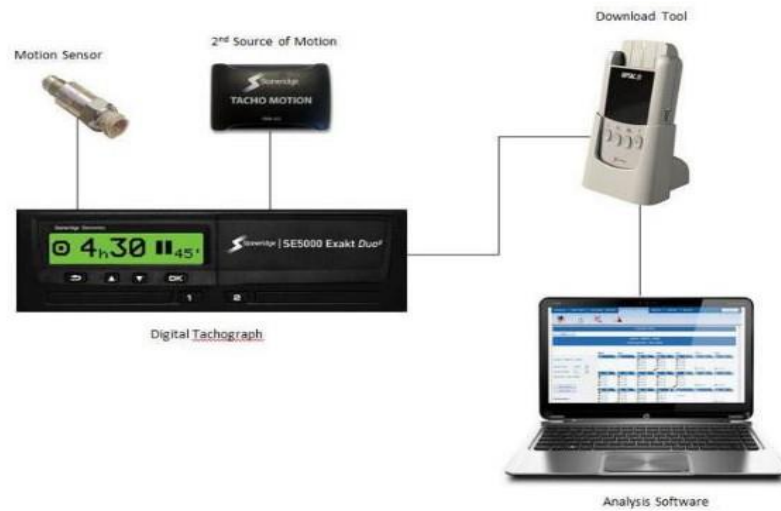
98. Law enforcers should be equipped with the necessary devices and instruments to be able to perform their duties during checks. A non-exhaustive list of these devices and equipment includes:

- Electronic cards for accessing and printing the data stored in a digital tachograph;
- Download keys for data downloading from digital tachographs;
- Computers and printers.

K. Step 11 Setting up an Operational Help Desk

99. An operational helpdesk for AETR issues would provide all parties with information and support. It would provide guidance about legislation, procedures and other AETR-related issues, as well as answers to frequently asked questions. The helpdesk support could be provided through channels such as toll-free numbers, websites, instant messaging or electronic mail.

100. National transport associations for passengers and freight transport may also contribute to the creation and functioning of this help desk and by replying to related questions raised by road transport professionals.



Summarized Road Map – Table of Actions

<i>N R.</i>	<i>Steps</i>	<i>Time of Completion</i>	<i>Responsible</i>	<i>Remarks</i>
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Step 1: Preparing for accession

1.	Coordination and responsibilities at national level	Planning period	Highest government level	
2.	Overall coordination and supervision	Planning period	Highest government level	
3.	Establishment of a National AETR Committee	Planning period	Highest government level	
4.	Designation of a national Focal Point for the AETR	Planning period	Highest government level / National Focal Point	

Step 2: Addressing strategic issues prior to accession

1.	Studying the AETR and related national legislation	Planning period	Highest government level National Focal Point / National AETR Committee / National Experts	
2.	Deciding on the scope and applicability of the AETR	Planning period	Highest government level / National Focal Point	

Step 3: Accession to the AETR

		After planning period	Highest government level	
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Step 4: Setting security levels

<i>N R.</i>	<i>Steps</i>	<i>Time of Completion</i>	<i>Responsible</i>	<i>Remarks</i>
1	Check implications on/compatibility with data protection law	Planning period	National Focal Point / National AETR Committee	
2	Elaborate criteria to be complied with by people dealing with keys (personnel security)	Within 1 month of accession	Highest government level / National Focal Point	

Step 5: Establishing Security Policy

1	Develop national security policy, based on European Root Certification Authority policy and the national security policy template	Within 3 months of accession	National Focal Point / National AETR Committee	
2.	Send policy to Joint Research Centre through UNECE and have the policy approved by Joint Research Centre	Within 3 months of accession	National Focal Point / National AETR Committee	
3.	Periodical policy audit and maintenance	Every 6 months or annually	National AETR Committee	

<i>N R.</i>	<i>Steps</i>	<i>Time of Completion</i>	<i>Responsible</i>	<i>Remarks</i>
4.	Test key certification requests before live session at European Root Certification Authority	Right before live session at European Root Certification Authority	National AETR Committee / Theme-specific Workgroup	
	Step 6: Put in place and maintain a national risk management policy	Within 6 months of accession	National Focal Point / National AETR Committee	
				/ Theme-specific Workgroup
	Step 7: Setting up the digital tachograph cards system			
1	Decide whether to develop and issue own cards or use cards that are already type approved	Within 3 months of accession	National Focal Point / National AETR Committee	

<i>N R.</i>	<i>Steps</i>	<i>Time of Completion</i>	<i>Responsible</i>	<i>Remarks</i>
2	Establish a Card Issuing Authority	Within 6 months of accession	National Focal Point / National AETR Committee	
3	Elaborate and approve procedures for all card application types: first issue, replacement, exchange, renewal	Within 9 months of accession	National Focal Point / National AETR Committee/ Theme-specific Workgroup	
4.	Create a reliable database accessible by all parties	Within first year of accession	Theme-specific Workgroup	
5.	Send to UNECE the cards' additional features to be checked by UNECE	Within 9 months of accession	National Focal Point	
Step 8: Setting up the network of workshops				
1.	Introduce or amend national laws on the approval of workshops	Within 3 months of accession	Law-making authority	

<i>N R.</i>	<i>Steps</i>	<i>Time of Completion</i>	<i>Responsible</i>	<i>Remarks</i>
2.	Set criteria for workshops	Within 3 months of accession	National Focal Point / National AETR Committee/ Theme-specific Workgroup	
3.	Designate workshop approval authority	Within 3 months of accession	National Focal Point / National AETR Committee	
			/ Theme-specific Workgroup	
4.	Establishment of a (sufficient) network of authorized workshops	Within 6 months of accession	National Focal Point / National AETR Committee	
5.	Communicate to UNECE list of authorized workshops in order to maintain a database and inform all Contracting Parties	Within 6 months of accession	National Focal Point	

<i>N R.</i>	<i>Steps</i>	<i>Time of Completion</i>	<i>Responsible</i>	<i>Remarks</i>
Step 9: Training				
1	Development of cards and devices for training	Within 3 months of accession	National Focal Point / National AETR	
2.	Training of drivers, companies, fitters, workshop technicians, control officers	3 months before rolling out the digital tachograph and for as long as needed	Theme-specific Workgroup / Designated training organization	
Step 10: Enforcement				
1.	Introduce or amend laws to empower control officers for enforcement activities	Within 3 months of accession	Law-making authority	
2.	Equip control officers appropriately	Within 6 months of accession	National Focal Point / National AETR Committee/ Theme-specific Workgroup	
Step 11: Setting up an operational help desk				
		Within 6 months of accession	National Focal Point / National AETR Committee / Theme-specific Workgroup Committee	