



**TEHNILISE JÄRELEVALVE AMET**  
ESTONIAN TECHNICAL SURVEILLANCE AUTHORITY



## **ANNUAL REPORT OF THE ESTONIAN TECHNICAL SURVEILLANCE AUTHORITY 2009**

## **A. 1 Content of the report**

The Annual Report gives an overview of the developments in the Estonian railway sector in 2009: implementation of the Safety Directive, issue of safety certificates and state surveillance activities, and the structure and the position of the Estonian Technical Surveillance Authority ('the Authority') among the institutions of the railway sector.

All numerical tables within the report are presented bilingually in Estonian and English.

The number of accidents and casualties has decreased compared to previous years. One of the possible reasons behind this is that in 2009 the Infrastructure Managers continued to invest in raising the safety levels of Estonian railway infrastructure – level-crossing signalling systems were renewed, visibility conditions at level-crossings were improved and many platforms were replaced with 550mm high platforms, which resulted, inter alia, in safer accessibility to platforms and provided better opportunities for crossing the railway. The Estonian Technical Surveillance Authority changed its priorities in railway safety and surveillance through closer cooperation with railway undertakings, more consistent analysis of current information and activities in all structural units of the railway service of the Estonian Technical Surveillance Authority and by specifying the goals of preventive work.

Furthermore, the Authority participated as the Implementing Agency in the project "Overhaul of Tartu-Valga line" financed by the EU structural funds (CF, ERDF).

## **A.2 Summary**

**The Annual Report gives an overview of the developments in the Estonian railway sector in 2009. The report gives an overview of implementing the Safety Directive, issuing safety certificates and surveillance activities. The structure and position of the Estonian Technical Surveillance Authority among the institutions of the railway sector is also presented.**

**All numerical tables (in Annexes) within the report are presented bilingually in Estonian and English.**

**The number of accidents and the number of casualties have decreased compared to 2008. One of the reasons behind this development could be that in 2009, the Infrastructure Managers continued to invest in raising the safety levels of the Estonian railway infrastructure – level-crossings signalling systems were renewed and many platforms with a height of 200 and 1100mm were replaced by platforms with a height of 550mm.**

**The Authority changed its priorities in safety-supervision to confirm IM's and RU's capacity to apply safety measurements and manage safety systems.**

**The overhaul of the Tartu-Valga line was finished – that activity was financed by the EU structural funds (CF, EDRF). The Authority participated in this**

project as Implementing Agency. In addition, the Authority increased its role in railway safety activities (articles, banners, commercials, hand-outs etc).

## B. Introduction

### B.1 General

The Annual Report for 2009 is the fourth report of the Estonian Technical Surveillance Authority (previous reports were in 2006, 2007 and 2008).

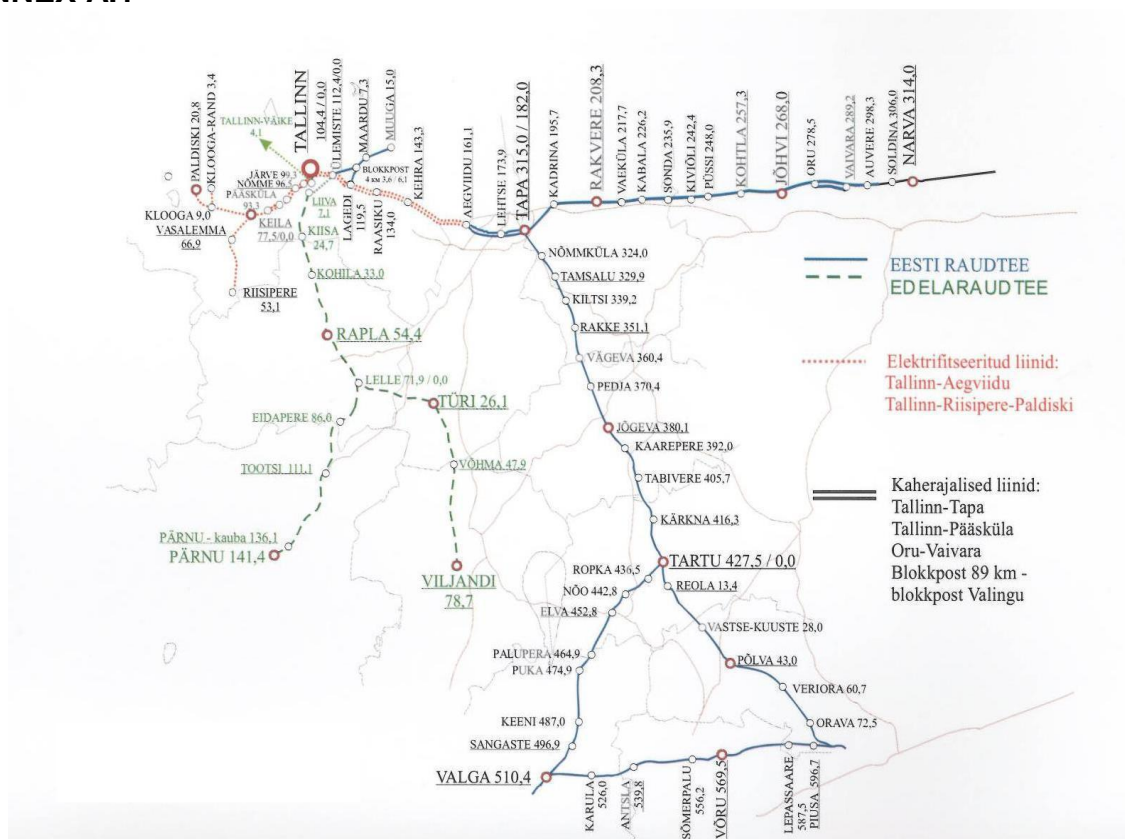
The report gives an overview of the situation of the railway sector in Estonia, focusing on the implementation of the Safety Directive. Information about railway undertakings and an overview of the Estonian Technical Surveillance Authority and railway safety activities in Estonia (legislative drafting, statistics, surveillance activities, and development trends) have been included.

The report contains an analysis of trends in only some main areas, because the statistics in the relevant field have only been systematised for the last three to four years.

### B.2 Railways in Estonia

Railway infrastructure (public railway)

#### ANNEX A.1



|                                     |   |
|-------------------------------------|---|
| EESTI RAUDTEE                       | EESTI RAUDTEE (Estonian Railways Ltd.)      |
| EDELARAUDTEE                        | EDELARAUDTEE (railway company)              |
| Elektrifitseeritud liinid           | Electrified lines                           |
| Kahe rajalised liinid               | Double-track lines                          |
| Blokkpost 89 km - blokkpost Valingu | Blocking post 89 km – Valingu blocking post |
|                                     |   |
| PÄRNU - kauba 136,1                 | PÄRNU – cargo 136.1                         |

The total length of Estonian railways in 2009 was 2 166 km of which 1 539 km were public. Public railways are managed by **AS EVR Infra** and **Edelaraudtee Infrastruktuuri AS**.

AS Eesti Raudtee is a state company which was divided in January 2009 and separated into two different companies, namely **AS EVR Infra** which is engaged in the management of railway infrastructure and **AS EVR Cargo** which is engaged in the provision of railway freight service. Thereby AS Eesti Raudtee remained the parent company of the group, being, inter alia, responsible for the organisation of the safety activities of the two separate companies.

**Edelaraudtee Infrastruktuuri AS** is the parent company of Edelaraudtee AS based on private capital.

Edelaraudtee AS and AS Eesti Raudtee are vertically integrated railway undertakings that are engaged, through their subsidiaries, in the management of the railway infrastructure as well as the provision of railway carriage services.

#### ANNEX A.2.1

| Public Railway Infrastructure Manager |   |
|---------------------------------------|---|
| 1. AS EVR Infra                       | TEN-T (except Valga-Orava, Keila-Riisipere and Klooga-Klooga-Ranna) |
| 2. Edelaraudtee Infrastruktuuri AS    | Not TEN-T   |

## ANNEX A.2.2

| <b>Railway Undertakings (cargo)</b>      |   |
|--|---|
| <b>1. AS E.R.S</b>                       | <b>Started in January 2008</b>  |
| <b>2. AS EVR Cargo</b>                   | <b>Started in January 2009</b>  |
| <b>3. Edelaraudtee AS</b>                | <b>Marginal cargo transport on Edelaraudtee infrastructure</b>                      |
| <b>Railway Undertakings (passengers)</b> |   |
| <b>1. Edelaraudtee AS</b>                | <b>Passenger-train service throughout Estonia by DMU-s</b>                          |
| <b>2. AS GoRail</b>                      | <b>International passenger-train service Tallinn-Moscow-Tallinn</b>                 |
| <b>3. Elektriraudtee AS</b>              | <b>Passenger-train service on electrified tracks in Tallinn and Harjumaa county</b> |

### B.3 Safety Directive – current status of implementation, national legal basis

The Railways Act was adopted in Estonia in 1995 and the obligation to apply for a safety certificate was established in the Railways Act adopted in 1999, which remained in force until 2004.

As of 2004 a new Railways Act entered into force, and amendments made in 2007 introduced the requirements for safety certificates of the safety management system arising from the EU Safety Directive. The safety management system has been mandatory for railway undertakings since 1 January 2009.

The entire legislative drafting process in Estonia can be viewed online on the following websites: [www.riigiteataja.ee](http://www.riigiteataja.ee); [www.ametlikudteadaanded.ee](http://www.ametlikudteadaanded.ee) and [www.tja.ee](http://www.tja.ee). All railway undertakings have the opportunity to participate in legislative drafting.

As of the end of 2009, fourteen undertakings in Estonia had freight service safety certificates (parts A and B), three undertakings had passenger transport service safety certificates (parts A and B) and two undertakings had public railway infrastructure management safety certificates (parts A and B).

Six railway freight service safety certificates, two passenger transport service safety certificates (parts A and B) and two railway infrastructure management safety certificates (parts A and B) were granted in 2009.

In 2009 the operational safety certificate (part B) of the two-part safety certificate became mandatory for transport companies that use public railways and provide

carriage services to third companies. Previously, the undertakings had to have the “one-part safety certificate”, valid only in Estonia.

## **C. Organisation**

### C.1 Estonian Technical Surveillance Authority

The Estonian Technical Surveillance Authority is a state authority that falls under the Ministry of Economic Affairs and Communications. The Authority was established on 1 January 2008 and comprises the Electronic Communication Division, the Industrial Safety Division, and the Railway Division.

The Railway Division of the Estonian Technical Surveillance Authority is engaged in activities laid down in national legislation (the Railways Act and legislation issued on the basis of it) and as the National Safety Authority monitors adherence to EU legislation in the field of interoperability and safety by railway undertakings. The authority also participates in the implementation of the relevant regulation in practice. As of 1 January 2008, railway undertakings in Estonia must hold a safety certificate from the railway safety management system and as of 2009 it is mandatory to determine safety indicators.

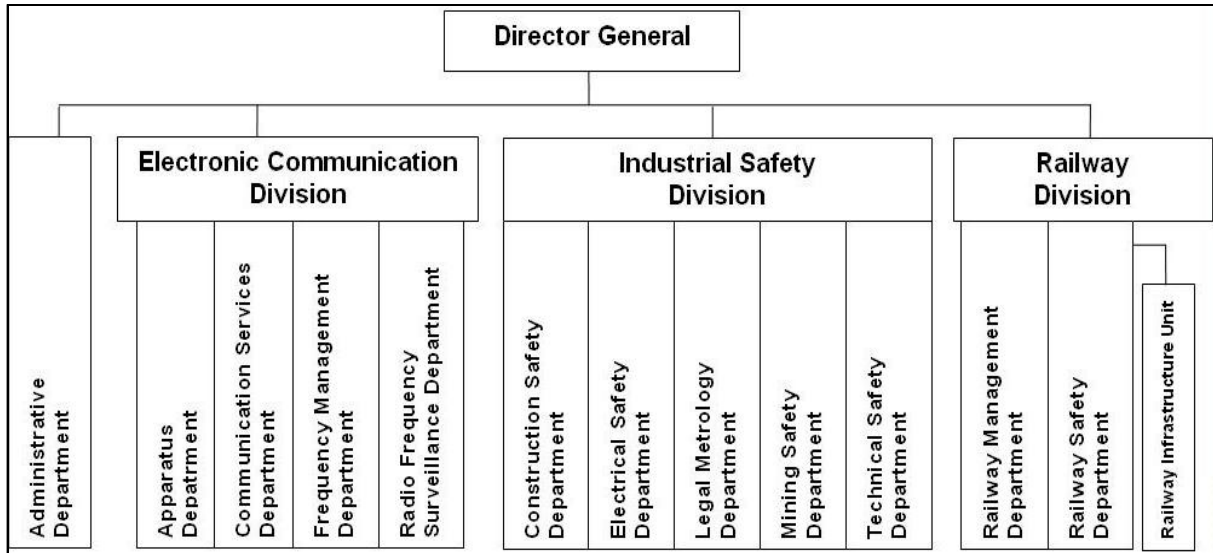
According to the Railways Act, the Railway Division of the Estonian Technical Surveillance Authority is responsible for the following: granting safety certificates and making decisions on the extension thereof; inspecting the compliance of rolling stock, railway infrastructure and railway traffic management with requirements; granting locomotive driving licences; coordinating detailed plans or design conditions of railway structures and state surveillance of railway construction; granting building and occupancy permits; allocating the capacity of the railway infrastructure; ensuring that obligations for the technical surveillance of railways in the Republic of Estonia arising from international agreements are met and, where necessary, representing the Republic of Estonia in international railway organisations; and performing other functions as required by law.

Based on the aforementioned, the Estonian Technical Surveillance Authority ensures the secure and safe development of the Estonian railway network through continuous surveillance in accordance with national legislation and European law. Additionally, the Authority harmonises and updates the legal bases of the area in Estonia jointly with the Ministry of Economic Affairs and Communications.

In 2009 the Railway Division was divided into the Railway Safety Department and the Railway Management Department and employed a total of eleven people, nine of whom were engaged in state surveillance of railway safety. Two people were engaged in development projects for the railway sector, including organising the use of EU structural assistance and determination of railway infrastructure usage fees.

Organisation chart of **Estonian Technical Surveillance Authority**

## **ANNEX B.1**



## C.2 Division of responsibilities between organisations

The Ministry of Economic Affairs and Communications has a Road and Railways Department that drafts road network, freight and passenger transport, railway infrastructure, railway transport logistics, and railway passenger and freight transport development plans, and performs supervision in these fields. Furthermore, the department is responsible for drafting national development plans in fields related to motor vehicles, rolling stock, road and railway traffic, and traffic and environmental safety, as well as for the implementation of these development plans.

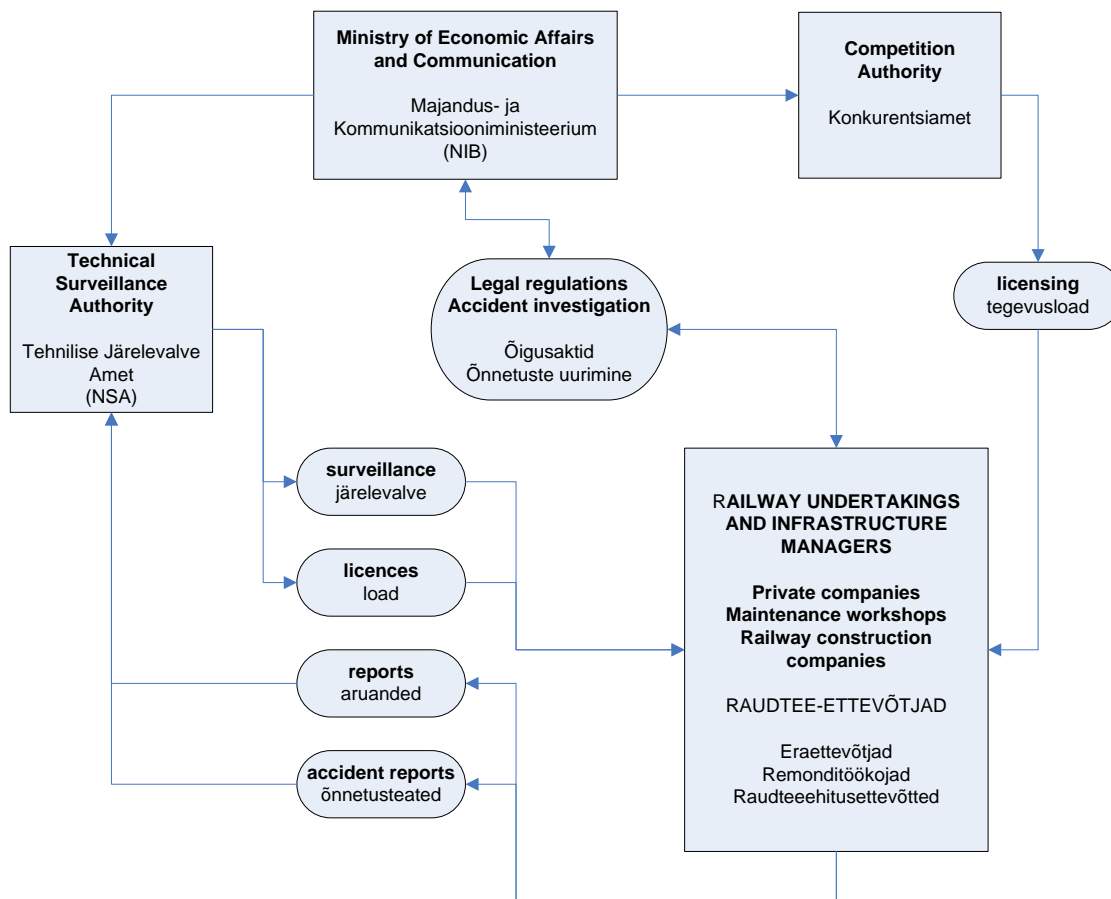
The department also prepares draft legislation regulating the field. As a National Investigation Body (NIB) the ministry also investigates railway accidents and prepares transportation risk analyses.

The Estonian Technical Surveillance Authority, as a National Safety Authority (NSA), carries out state surveillance to the extent of the functions provided for by law and exercises the enforcement powers of the state on the basis of and to the extent provided for by law. Additionally, the Railway Division grants railway structure building and occupancy permits and safety certificates to railway undertakings.

Estonian railway undertakings are obliged to ensure compliance of their activities with the requirements provided for by law regarding management of the railway infrastructure, provision of freight and passenger transport services, repairs of rolling stock, and construction of railway structures.

Organisational relationship chart  
**ANNEX B.2**





## D. Development of railway safety

### D.1 Initiative for increasing railway safety

No events leading to specific amendments to national legislation occurred in 2009. The overall level of railway safety was improved by the transposition of the requirements of the Safety Directive – the main feature of which was the introduction of the obligation for railway undertakings to have safety management systems in place and for managers of non-public train traffic to hold an operational safety certificate.

In its procedures the Estonian Technical Surveillance Authority continued to increase its attention to activities in the railway protection zone concerning both detailed plans and railway construction.

Furthermore, the Authority exercised its right to carry out surveillance of the functioning of the safety management system of railway undertakings and, when any irregularities were detected, surveillance procedures were carried out with the aim of improving the level of safety in the undertaking.



## D.2 More detailed analysis of data

The input of the Estonian Technical Surveillance Authority to the table of Common Safety Indicators (CSI) in 2009 is attached as a separate file.

### **ANNEX C – CSI data (attached separately)**

Consolidated data regarding the main safety indicators in comparison with 2006, 2007 and 2008 are given below.

| <b>Year</b> | <b>Accidents</b> | <b>Fatalities</b> | <b>Injuries</b> |
|-------------|------------------|-------------------|-----------------|
| <b>2006</b> | <b>47</b>        | <b>16</b>         | <b>21</b>       |
| <b>2007</b> | <b>46</b>        | <b>13</b>         | <b>19</b>       |
| <b>2008</b> | <b>25</b>        | <b>9</b>          | <b>10</b>       |
| <b>2009</b> | <b>19</b>        | <b>10</b>         | <b>7</b>        |

In comparison with 2008, the number of accidents and the number of people killed in railway accidents decreased in 2009. Data about accidents and incidents have been added to the CSI table (a separate file) and therefore it has not been discussed in detail in this report.

The decrease in the number of railway accidents can be attributed, inter alia, to the fact that in 2009 railway infrastructure undertakings continued to invest in raising the overall level of safety of their infrastructure: level-crossing signalling systems were renewed, visibility conditions at level-crossings were improved and many platforms were replaced with 550 mm high platforms.

The Estonian Technical Surveillance Authority itself enhanced the surveillance of the functioning of safety management systems of railway undertakings, as a result of which the safety levels of undertakings improved. In increasing cooperation, attention was also paid to providing training to railway undertakings and undertakings engaged in railway construction in issues concerning railway construction (traffic safety during construction, the need to use people with appropriate skills, correct documentation, etc.).

## D.3 Summary of safety recommendations

As a National Investigation Body, the Ministry of Economic Affairs and Communications submitted nine proposals to the Estonian Technical Surveillance Authority for improving railway traffic safety in the Annual Report of railway traffic accidents for 2009. Four of them were accepted and adopted in 2009 and the processing of five proposals will continue in 2010.

The proposals made to the Estonian Technical Surveillance Authority involved creating conditions for improving technical solutions for the railway infrastructure and the maintenance of rolling stock, more efficient organisation of self-assessment within railway undertakings and ensuring more efficient implementation of the safety management system.

## E. Major amendments to legislation

Major amendments to legislation are indicated in the Table below.

### ANNEX D

| Legal reference   | Date legislation comes into force  | Reason for introduction           | Description   |
|---|------------------------------------|-----------------------------------|---|
| <b>Decree of the Minister of Economic Affairs and Communications from 02.03.2009 No 12<br/>“Regulation for issuing, amending and extending locomotive driving licences”</b> | <b>Came into force 13.03.2009.</b> | <b>Railway Act § 45 section 7</b> | <b>Requirements for applying locomotive-driver’s licences</b> |

In 2009, work began towards updating technical standards of the railway sector, and specifications were made in connection with amendments to other laws, regulations or administrative provisions.

## F. Development and authorisation of the safety certificate

### F.1 National legal space, start of validity, availability

The entire legislative drafting process in Estonia can be viewed online on the following websites: [www.riigiteataja.ee](http://www.riigiteataja.ee); [www.ametlikudteadaanded.ee](http://www.ametlikudteadaanded.ee); <http://eoigus.just.ee/> and [www.tja.ee](http://www.tja.ee). All railway undertakings have the opportunity to directly view the railway legislation that is being approved and participate in legislative drafting.

Representatives of larger railway transportation undertakings and railway infrastructure undertakings are involved in the final phase of drafting legislation. The process of harmonisation with the Safety Directive has begun in Estonia and all interested undertakings have been able to access the draft legislation and submit their proposals. The Estonian Technical Surveillance Authority organised training to introduce the guidelines of the safety management system to all railway undertakings and, where necessary, continues to provide railway undertakings with informative support before the new legislation takes effect.

### F.3 Safety certificates

The mandatory nature of the safety certificates (parts A and B) in 2008 arose from the Safety Directive. In 2009, ten new safety certificate parts A and B were issued in connection with structural changes in railway undertakings.

The safety certificates issued have been entered in the relevant ERA register.

## G. Surveillance of railway undertakings

The Railway Division accounts for approximately 11% of the entire staff of the Estonian Technical Surveillance Authority and only two persons from the Railway Division are not engaged in surveillance activities.

In 2009 the Authority carried out 84 planned surveillance operations in the course of which the implementation of the safety management system of railway undertakings, traffic management of railway undertakings, work of rolling stock managers, maintenance of rolling stock, transportation of dangerous goods, maintenance of the railway infrastructure, and fire safety of railway transport were inspected. Planned surveillance procedure is mainly related to the surveillance of the implementation of the safety management systems of undertakings (if any).

All planned surveillance operations were carried out either with a representative of the railway undertaking or after the undertaking had been informed thereof.

No complaints from any railway undertakings regarding the activities of the Estonian Technical Surveillance Authority were received in 2009.

The total number of unplanned surveillance activities in 2009 was four. In two cases they were initiated by a complaint about the activities of a railway undertaking (abnormal use of emergency brake and issues connected with noise and vibration in the immediate vicinity of railways), in one case a railway undertaking violated the procedures established by the company itself (incorrect issue of warnings, illegal freight transport) and in one case there was a fatal accident in an undertaking engaged in a railway overhaul (disregarding issues related to traffic management).

| <b>INSPECTIONS</b>   |                    | <b>Part A<br/>Safety<br/>Certifica<br/>tes<br/>Issued</b> | <b>Part B<br/>Safety<br/>Certificat<br/>es<br/>Issued</b> | <b>Safety<br/>Authorisations<br/>Issued</b>                 | <b>Other<br/>Activities (To<br/>specify)</b>              |
|--|--------------------|---|---|---|---|
| <b>Number of<br/>inspections<br/>of RUs/IMs<br/>for 2009</b> | <b>Planned</b>     |   |   | <b>79</b> (12 different RUs/IMs with Safety Authorisations) | <b>5</b> (Private companies without Safety Authorisation) |
|  | <b>Unscheduled</b> |   |   | <b>1</b>  | <b>3</b> (complaints)                                     |
|  | <b>Carried out</b> |   |   | <b>80</b>   | <b>8</b>  |

## **H. Implementation of the Common Safety Method (CSM) Regulation**

The Common Safety Method (CSM) Regulation was adopted on 24 April 2009 and its transposition in Estonia is organised in cooperation with the Ministry of Economic Affairs and Communications. In 2009, no important amendments were made to the railway sector subsystem in Estonia that would have required the assessment of risks thereof according to the risk management process described in Article 5.

## **I. Summary, conclusions, priorities**

The planned surveillance procedure of the Estonian Technical Surveillance Authority in 2009 focused mainly on inspecting the implementation of the safety management systems of undertakings. Bilateral active communication has increased the awareness of railway undertakings and their participation in safety management processes. The Authority updates its routines on a constant basis regarding the implementation of common safety methods in Estonia.

## **J. Original sources of information**

Information gathered by the Railway Division of the Estonian Technical Surveillance Authority.