YEARBOOK 2009

Of The Estonian Technical Surveillance Authority

Contents

Dear reader,

I am glad that you are interested in the life and work of the Technical Surveillance Authority. What you are holding in your hands is our another yearbook which gives a through overview of the work and activities of the Technical Surveillance Authority in 2009.

As to the working environment, the year 2009 was complicated, but it was an interesting time. The economic crisis had reached its peak in Estonia, and several negative supplementary state budgets were approved. The public as well as the private sector had to review their activities in the new conditions and, if necessary, adjust to the situation. It goes without saying that the cuts in the state budget affected the Technical Surveillance Authority in a similar way as they did others. We reorganized the authority to make its work more effective and reduce the expenses long before the obligatory budgetary restrictions were enforced. By doing this, we achieved the flexibility necessary in the changing environment and developed the ability more quickly to various problems. We were able to select the areas for budget cuts in a calm and well-considered way, due to which the pressure on the personnel of the authority and its customers was not that huge. The Technical Surveillance Authority emerged from the general economic depression without having lost its focus or having made compromises in the quality of its work.

The Technical Surveillance Authority had a busy year as to the essential fields of its activities. The development plan for 2010-2013 was compiled, which is an important source document for our work because it formulates the main objectives of the Technical Surveillance Authority for the forthcoming years. We consider it important that the Technical Surveillance Authority would continuously improve the quality of its planning and effectiveness of work. In order to achieve this, we carefully analysed the organization of our work and we are now expecting additional synergy from the optimized structure of the Technical Surveillance Authority, which was implemented at the end of 2009. Last year we also concluded partnership agreements with several other state agencies to improve everyday information exchange and collaboration. In almost every field of activity of the Technical Surveillance Authority, there was some work in 2009 that attracted close attention of our customers as well as general public. More information about that can be found on the pages below.

The development of the Technical Surveillance Authority will surely continue in the following years. I would like to mention just a few of the challenges of 2010: Estonia switching to digital broadcasting, the launch of some of new large-scale development projects in the field of railway transport, and broadening the sphere of competence of the Technical Surveillance Authority in the fields of construction and chemical safety. This and many other issues are summarized in our yearbook of 2010.

With best wishes for further cooperation,
Raigo Uukkivi

Director General

Overview of the organisation

Overview of the organisation

The Technical Surveillance Authority, operating in the administrative area of the Ministry of Economic Affairs and Communications, is a state agency established in 2008 by merging the Communications Board, the Railway Inspectorate and the then Technical Inspectorate.

The objective of the Technical Surveillance Authority is to help implement the national economic policies through the improvement of safety, managing use of limited resources and increasing the reliability of products in the fields of manufacturing environments, products, railway and electronic communication.

The main tasks of the Technical Surveillance Authority are supervising that the requirements established by the legislation relevant to its fields of activities are fulfilled, participation in developing legislation and development plans, and the preparation and promotion of projects related to its fields of activities.

The structure of the Technical Surveillance Authority comprises three divisions:

- the Electronic Communication Division
- Railway Division
- Industrial Safety Division

Values

The Technical Surveillance Authority has a good reputation of an effectively operating, competent and reliable regulatory and supervision authority in Europe.

The main values of the Technical Surveillance Authority are the following:

- Being an integral state agency with clearly understandable working principles and a good reputation, offering interesting employment that presents opportunities for development with a good working environment and competitive salaries, appreciates the initiative and competence of the officials, and requires responsibility and honesty.
- Being a competent and reliable partner whose activities are transparent, solutions are professional and impartial and whose affairs are managed in a proper manner. Preventive activities constitute a significant part of our work. The authority granted to us by legislation is exercised in a weighted and appropriate manner.
- Being a constructive and open state agency that works as a team to achieve the established goals.
- Being a well-balanced and innovative agency on the international arena and an organisation representing the interests if its state, always willing to share and learn.

Goals

The activities of the Technical Surveillance Authority have three main goals: working towards greater safety, improving the reliability of services and products and organizing the use of limited resources.

Working towards greater safety

We supervise the safety of electrical installations and electrical works, handling hazardous chemicals, the appliances and installations using gaseous fuel, lifts and cableways, various machinery, pressure equipment, mining and blasting works and pyrotechnics, buildings and construction including railway construction, rail vehicles and railway traffic.

In working towards greater safety in its fields of activities, the Technical Surveillance Authority has two main goals: ensuring the safety of objects and processes and increasing the awareness related to that.

Increasing the reliability of services and products

We supervise the conformity of electronic communications terminal and radio equipment; of construction products, electrical and electronic equipment, gas appliances, various machinery, pressure equipment, precious metal products, measuring instruments and measuring, pre-packaging, electronic communication services, digital signature services, line facilities, radio interference, electromagnetic compatibility, energy efficiency and energy marking to the requirements.

As to increasing reliability, the Technical Surveillance Authority has three main goals: ensuring the availability of services and their conformity with the requirements, ensuring the compatibility of products and effective use of resources and increasing reliability and awareness.

MEASURES FOR WORKING TOWARDS GREATER SAFETY

Ensuring the safety of objects and processes

1. Supervising the conformity of materials and equipment to the requirements.
2. Supervising the conformity of installations, railway infrastructure and buildings to the requirements.
3. Supervising the conformity of activities, including building and installation of equipment to the requirements.
4. Supervising the competence of individuals and organizing examinations.
5. Supervising the conformity of technical inspections and personnel certification to the requirements.
6. Processing and analysing the accidents.

Increasing awareness

1. **Active informing**
2. **Passive informing**

MEASURES FOR INCREASING THE RELIABILITY OF SERVICES AND PRODUCTS

Ensuring the availability of services and their conformity with the requirements

1. Supervising the conformity of public communication services to the requirements.
2. Supervising the continuity of the supply of vital services (including emergency calls and emergency alarms).
3. Supervising the conformity of radio communication (including mobile phone communication and broadcasting) to the requirements and ensuring their problem-free functioning.
4. Supervising the reliability of measurements and measuring instruments.
5. Supervising the duly performed activities in the protected zones of civil engineering facilities (railways, gas and pressure utility lines, electricity lines and communications cables).
6. Ensuring the availability of railway transportation services (public passenger transportation).

Ensuring the compatibility of products, effective use of resources and increasing reliability

1. Supervising the conformity of products that are being placed on the market and used to the requirements.
2. Participation in standardisation.
3. Supervising the energy efficiency of products and buildings.

Increasing awareness

1. Active informing.
2. Passive informing.

Organization of use of limited resources

Planning and coordination of radio frequencies, electronic communication numbering and railway capacity, organizing and checking their use, fulfilling the role of the final beneficiary in the distribution process of Structural Funds of the European Union for the development of railways.

In the organization of use of limited resources, the Technical Surveillance Authority has two goals: ensuring the optimum use of limited resources and guaranteeing their sustainable use.

MEASURES FOR ORGANIZATION OF USE OF LIMITED RESOURCES

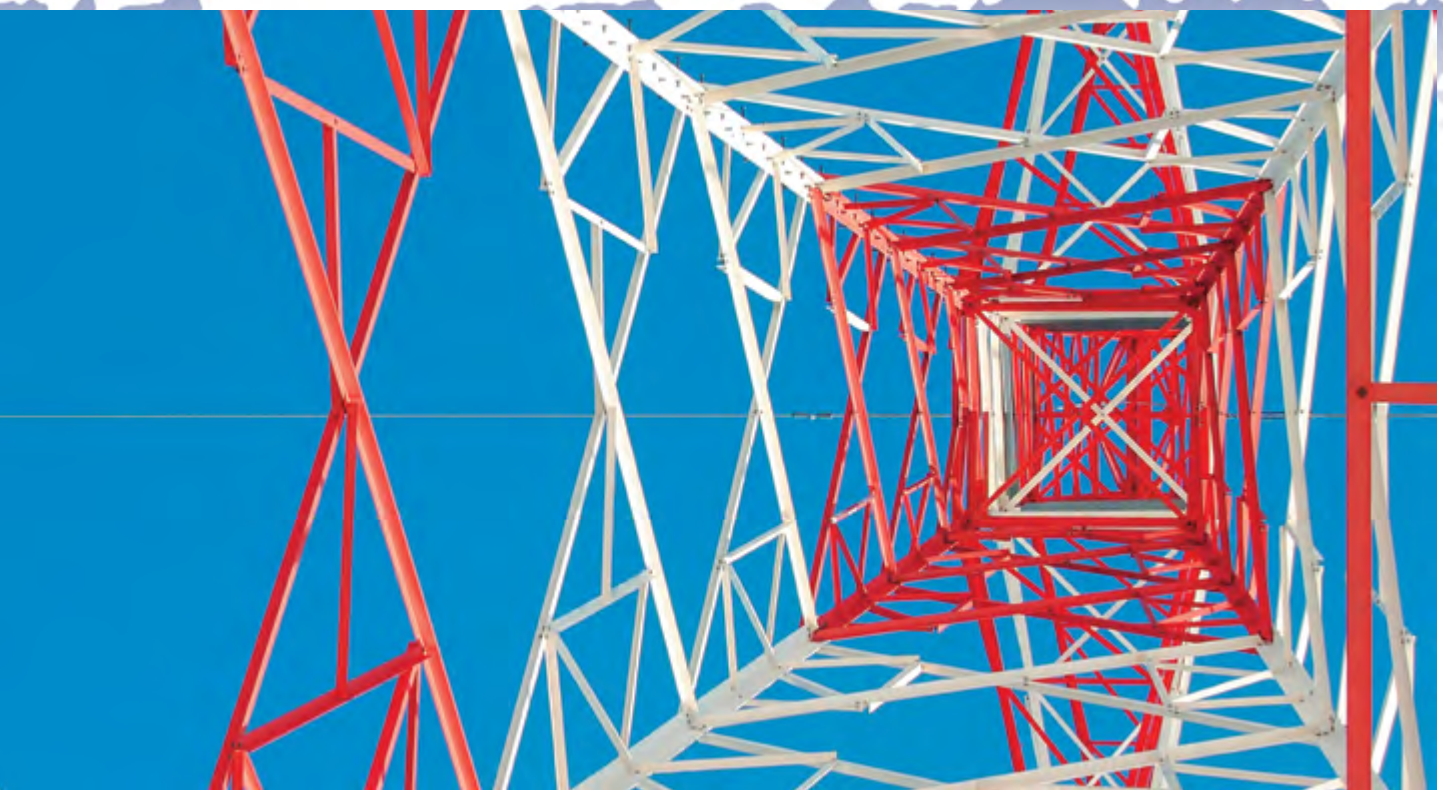
Ensuring the optimum use of limited resources

1. Distribution of railway infrastructure capacity.
2. Processing and supervising railway timetables.
3. Allocation of radio frequencies and supervising its use.

Guaranteeing sustainable use of limited resources

1. Long-term planning of the use of radio frequencies bands.
2. Ensuring the sufficient capacity of the numbering resource.
3. Organization of the use of the EU Structural Funds in the area of railways.
4. Determination of user fees for the railway infrastructure.

Maximising safety



Activities and results

In the field of ***construction***, we monitor whether the structures (buildings and facilities) conform to the requirements they are subject to during the construction and subsequent exploitation and also the performance of duties of the participants in the process of construction (the owner, the builder, the person executing owner supervision, etc.). Likewise, we check whether the registration in the Register of Economic Activities is correct and whether there is the appropriate specialist in charge.

In respect of ***electrical safety***, the safety and conformity of the use of electrical installations, electrical contractors' conformity to safety requirements, and the competence of persons in charge of electrical works are checked. We also check the conformity of operations carried out in protected zones of power lines. In addition, we supervise technical inspection bodies and the institutions operating in personnel certification.

In respect of the ***supervision of handling dangerous chemicals***, we supervise handling safety, the determination of hazard categories, the conformity of safety data sheets and safety reports, and the compliance of chemicals registration and notification about chemicals with the requirements.

In respect of the ***supervision of mines, quarries and peat lands***, we check the safety of mining technology and the conformity of mining documentation (projects, development plans and technological documentation). The conformity of the processes of enrichment and first stage processing of mineral resources to safety requirements are also monitored. We also organize competence examinations of personnel in charge in mining industry.

In respect of ***supervision of explosive substances and pyrotechnical products***, we check the conformity of handling these (production, storage and use) to the requirements and organize competence examinations for the personnel of the explosives industry and for handling operators of pyrotechnical products.

In respect of ***machinery safety supervision***, we check the conformity of machinery, including its safety components. In respect of cranes, goods lifts and hoists that require registration, we check the conformity of the persons responsible and the operators, the certificate of technical inspection and the conformity of installation, rebuilding and repairs. We also monitor the conformity of the technical inspection body and of the persons conducting examinations for persons in charge to requirements. Additionally, we supervise the conformity of determining potentially explosive atmospheres and the conformity of equipment and protection systems used therewith.

In respect of ***lifts and cableway installations*** (mostly ski lifts in Estonia), we check the conformity of the technical inspection body's actions and the actions of the installers, repairers and servicers as well as personnel certifiers. We perform random sample checks of lifts and hoists.

To guarantee the safety of the use of ***gaseous fuel*** (natural gas, liquefied gas, biogas and derived gas), we check the use and construction of gas installations and the performance of gas works. We also monitor the conformity of gas installations to safety requirements and the conformity of commercial gas appliances.

In respect of ***pressure equipment***, we check its conformity, the conformity to the requirements to installation, use, repair, alteration and production of hazardous liquid tanks, and on requirements set on the technical inspection bodies and manufacturers. We also monitor the conformity of activities in the protected zone of pressure piping systems.

In respect of ***railway safety***, we issue safety certificates to railway undertakings, licences for construction and certificates of use of railway civil engineering works, and approve the detailed plan or design criteria which constitute the basis for the building design documentation of railway civil engineering works.
In cooperation with the National Motor Vehicle Register, we issue locomotive driver's licenses. We check the construction, maintenance and use of the railway infrastructure (rail tracks, communications and safety equipment, level crossings) and the activities performed in the railway protected zone.
We monitor the competence of persons responsible for railway safety and organizing railway traffic and supervise the compliance of rail traffic to fire safety requirements and dangerous goods carriage organization.

Buildings and construction activities

In 2009, the Estonian Technical Surveillance Authority conducted 48 proceedings in order to check the conformity of buildings and construction activities to the requirements, 3 of which resulted in precepts issued. The conformity of undertakings to the requirements was checked on 57 occasions and precepts were issued on 16 occasions, 11 of which resulted in the deletion of the company registration from the register of economic activi-

ties. The Authority participated in investigating four accidents related to buildings. Assessment of conformity of the Ministry of the Environment building to the requirements was one of the largest tasks in 2009. As the structure of the building had partly deformed substantially as a result of subsidence, doubt arose over the safety of further use of the building.

The Technical Surveillance Authority ordered an expertise in order to obtain a comprehensive assessment of the condition of the load bearing structures of the building. The expertise did not detect a danger of collapse, and the damages resulting from subsidence did not pose a danger to the load bearing structures of the building. In order to ensure safe usage of the building, the Technical Surveillance Authority prepared instructions based on the expertise for the owner to comply with. Among other matters, the instructions prescribe the owner to continue subsidence measurements after every six months, perform regular technical surveillance of the building, have check measurements of the foundation of the building performed, etc.

New regulation: constructing facilities under water

Substantial changes were made in the regulation of construction in 2009. The Estonian Ports Act, entered into force on July 10, 2009, regulating the design and construction of facilities that are permanently attached to the shore in public water bodies was the most significant change. The change brought about the Technical Surveillance Authority's obligation to organize the calculation of fees in encumbrance of facilities permanently attached to the shore of a public water body and to obtain the approval of such encumbrance by the state. Growth in the expansion and rebuilding of predominantly small ports was detected in 2009. Twelve detailed plans of areas and four object design criteria planning the construction of facilities (berths, docks, ramps, etc.) permanently attached to the shore of public water bodies were submitted for approval.

What have we learned from the Solaris accident?

On October 13, 2009, the suspended ceiling of the Cinamon cinema of the Solaris Centre in Tallinn collapsed. In order to determine the circumstances that lead to the accident, the Technical Surveillance Authority initiated an enquiry with the objective to detect possible violations of the requirements of the Estonian Building Act. The Technical Surveillance Authority conducted a thorough inspection of the scene of the accident, analysed the technical documentation of the construction and took testimonies from the persons who participated in the construction process. The enquiry detected several defects related to design work, construction, project management and owner supervision of the Cinamon cinema, the most substantial of which were the following:

- an inadequate detail design of the suspended ceilings of the cinema halls
- the suspended ceilings of the cinema halls did not comply
- with the design
  the manufacturer's instructions were not followed during the installation of construction products.

The lesson to be learned from this case is that suspended ceilings cannot always be regarded as interior finishing elements and in case of complex suspended ceilings, a detailed design is required. It is also essential for all the participants of the construction process to comply with the requirements prescribed in the Building Act. The issue of low liability of undertakings in case the Building Act requirements are violated was raised and hence the need to make respective changes in the regulation. Proceedings in order to detect the reasons for and the person(s) liable for the accident have been initiated by the North Prefecture; the proceedings will be continued in 2010.

Electrical installations and works

The Technical Surveillance Authority supervises electrical installations and works in all of Estonia. In 2009, 300 proceedings were carried out and 94 precepts were issued. 144 proceedings were initiated as a result of complaints and petitions. 196 proceedings and 66 precepts initiated were related to the use of electrical installations.

- Requirements for the control of the operation of electrical installations were violated on 7 occasions.
- Nonconformity of electrical installations to the electrical safety requirements was detected on 24 occasions.
- Technical inspection of electrical installations had not been performed on 46 occasions.
- Deficiencies in the documentation of electrical installations were detected on 7 occasions.

49 proceedings of supervision of activities were conducted and 20 precepts were issued. One electrical contractor was removed from the register of economic activities.

- Requirements for performing electrical works were violated on 19 occasions.
- Requirements for technical inspection were violated on 9 occasions.

34 proceedings were initiated in order to determine the violation of the requirements for the protected zone. Misdemeanour procedures were initiated on 9 occasions, and 8 precepts for the violation of the requirements for the protected zone of electrical installations were issued.

Mandatory inspection of electrical installations that are in joint use in apartment buildings

Every year around 200 fires caused by electricity are recorded in Estonia. In order to prevent fires, building owners must order a technical inspection of the electrical installation, which can only be performed only by technical inspection bodies that are accredited and registered in the register of economic activities.

Regular technical inspections are mandatory for all electrical installations except for the ones in non-commercial buildings, such as private houses, apartments, summer houses and small buildings. Regular inspections of electrical installations that are in joint use in apartment buildings are to be carried out; such installations are generally located in hallways, basements or attics. The mandatory regular technical inspection requirement does not apply to electrical installations located in apartments. Regular inspections of electrical installations in joint use in apartment buildings must be carried out every five years.

Accidents related to electricity

In 2009 the Technical Surveillance Authority inspected 7 accidents related to electricity, which resulted in 2 persons suffering minor injuries, 3 persons suffering major injuries and in the death of 2 persons. Four of these occasions were accidents at work, and three were not related to work happened in residential conditions. No one was killed as a result or electricity related accidents at work in 2009; two people were killed in the accidents not related to work. No accidents occurred due to the violation of the requirements for the protected zone.

2009 was somewhat exceptional in terms of the regions where the accidents occurred. While the majority of accidents (52 %) in previous periods occurred in Northern Estonia (Tallinn, Harju County and Ida-Viru County); no electricity-related accidents occurred in Northern Estonia in the previous year, and the majority of accidents occurred in Southern Estonia.

Most of the recent accidents have occurred in distribution substations and in connection switchboards. A relatively large number of accidents has occurred during the work on overhead lines or performing excavation works.

Accidents related to electricity occur mostly (46% of all cases) in the third quarter, during the summer. In 2009, most accidents occurred in the second quarter. The main cause of accidents was the violation of electrical work safety requirements.

Machinery

The technical Surveillance Department checks the existence and conformity of the required documentation and marking including warning texts in Estonian of machinery including interchangeable equipment, safety components, lifting accessories, chains, ropes and webbing, removable transmission machinery and partly complete machinery. In respect of cranes, goods lifts and other machinery that require registration, checks are made on the conformity of the persons responsible and the operators, the certificate of technical inspection and the conformity of machinery handling (installation, rebuilding and repairs). Checks are also made on the conformity of the technical inspection body and the official examiner of responsible persons to the requirements as well as on the conformity of the classification of potentially explosive atmospheres and on the conformity of equipment and protection systems used there.
In 2009, the Technical Surveillance Authority initiated 51 proceeding, during which 77 machines and devices were inspected. Precepts were issued in 30% of the cases.

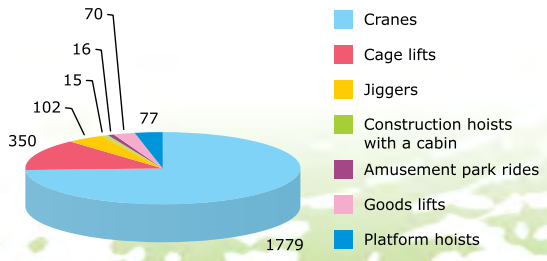
The Technical Surveillance Authority carried out joint inspections with the Consumer Protection Board and cooperated with several other institutions both on the national level (the Labour Inspectorate, the Rescue Board, the Estonian Tax and Customs Board, the Estonian Centre for Standardisation, Police and the Prosecutor's Office, the Defence Resources Agency) as well as on the EU level (European Commission, the Finnish Ministry of Social Affairs and Health) in 2009. The Technical Surveillance Authority participated in the meeting of administrative cooperation of supervision bodies of the EU member states (AdCo) in Tampere and administered the ICSMS product database (www.icsms.org) on the national level.

The most common problem of machinery marketed in 2009 was insufficient marking and untranslated instructions. A slight rise in attempts to sell machinery without the CE marking was detected. In regard to safety, self-constructed machinery whose constructors and manufacturers have insufficient knowledge of machinery safety remains the biggest issue.

Much machinery related to construction and subject to registration (cranes, cage lifts, etc) was temporary out of service due to the lack of contracts. In respect to the machinery in use, costs were cut by not having technical inspections conducted and not hiring supervisors of use.
As a result of bankruptcies or changes in the structure of companies, the machinery documentation had been lost on some occasions.

In 2009, the Technical Surveillance Authority carried out a misdemeanour procedure in respect to an accident where a person was killed as a result of manufacturing and use of a device not conforming to safety requirements. This case was a representative example of how violation of safety requirements would sooner or later lead to serious injuries.

2409 active devices were registered in the database of the Technical Surveillance Authority as of December 31, 2009:



In 2009, the Technical Surveillance Authority published an information booklet providing an overview of the procedure of conformity assessment of machinery, risk assessment, the design of machinery conforming to safety requirements, marking and standards related to machinery safety.

On the necessity of safety installations

Devices that are dangerous to humans when misused are often used in the manufacturing process, which results in serious injuries or, in the worst cases, even death. There are several methods to ensure the safety of manufacturing processes.

The most common method of preventing mechanical hazards (risk of crushing, cutting, etc) is adding guards to machinery. Guards prevent exposure to the moving parts of machinery. When access to the hazard zone can not be restricted or it is not feasible to restrict it with guards, safety components (light curtains, touch sensitive mats and edges, etc) are used. Both guards (protective equipment) and safety components are essential for ensuring the safe use of machinery.

Despite the fact that safety installations may cause some discomfort and reduce productivity and their maintenance may be costly, they cannot be removed without authorisation or damaged. The benefits of removing or "deceiving" them are short-termed, and the higher risk will inevitably result in a serious accident.

Elevators and cableways

The Technical Surveillance Authority supervises the marketing and use of lifting equipment, lifting equipment works, and over the activities of technical inspection bodies. 3594 cases of technical inspection were carried out in 2009, 3/4 of which had a positive result. No accidents related to lifts occurred in 2009.

In 2009, 60 proceedings were initiated: 46 against the owner/possessor of a lift, 10 against the owner/possessor of machinery (goods lifts and platform hoists), 2 against the owner/possessor of a cableway and 2 against a person performing lifting equipment work. 58 administrative acts were issued as a result of these proceedings, 36 of which were precepts. In total, the use of 135 lifts, 2 goods lifts, 10 platform hoists and 4 cableways was inspected.

12 cableways (in Estonia, ski lifts) and 4515 lifts, 4420 of which were in active use, were registered in the database of the Technical Surveillance Authority as of December 31, 2009.

In October of 2009, the Technical Surveillance Authority held the third regular session of the advisory committee on lift safety with participants from various institutions involved in the operational safety of lifts. The key issues of the sitting included the renovation of outdated lifts, possible inclusion of escalators into the list of equipment subject to registration, and following the requirements set for fire lifts. In the case of the latter, the existence and the conformity of fire lifts to the requirements is often neither required nor checked when building design documentation is approved. The objective of ensuring the installation of suitable fire lifts in buildings was set in cooperation with the Rescue Board.

Are old lifts an issue?

In respect of lifts, the biggest issue in Estonia is the depreciation of lifts that were manufactured in the former Soviet Union. Approximately 45 % or nearly half of the lifts currently in use are older than 25 years. Apartment associations lack the resources to renovate the lifts or to replace them with new ones.
As this is a problem nearly all over Europe, the issue has also been addressed in the European Commission, where new solutions to increase the safety level of outdated lifts and to

support the owners of lifts are being developed. In Estonia, risk assessment in order to map the dangers of outdated lifts has been carried out, and the analysis of the results will be continued in 2010.

In 2009, the Technical Surveillance Authority published an information booklet providing an overview of the key issues of lift safety. The booklet maps out the sources of danger and the main devices to prevent the danger, describes the procedure of acquiring and using lifts, lists the obligations of lift owners, and gives advice to lift users.

The lift at Tehvandi ski jumping tower

In 2009, the proceeding in connection to Tehvandi ski jumping hill was continued. In September of 2008, the Technical Surveillance Authority inspected the use of the lifting device installed in the Tehvandi ski jump tower. Upon inspection, it was discovered that a construction hoist (Geda 7P) had been permanently installed in the jump tower and it was used to service sportsmen and the visitors of the viewing platform. The Technical Surveillance Authority formed an opinion that this device must not be used by persons who do not have proper training.

As a result of the supervision, Tehvandi Spordikeskus SA was issued a precept prohibiting the use of the construction hoist until the flaws have been remedied. The precept prescribed that the construction hoist and its use must conform to the requirements established by the Lifts and Cableway Installations Safety Act. Tehvandi Spordikeskus SA appealed against the precept and formed an opinion that the precept was not in accordance with the valid law and should thus be declared invalid. The sports centre maintained that the Lifts and Cableway Installations Safety Act is not applicable to the construction hoist installed in buildings since it is used as work equipment as viewed by the Occupational Health and Safety Act. The sports centre also referred to the building and use permit issued by Otepää Rural Municipality and the legitimate expectations that the building would conform to the relevant requirements.

The Technical Surveillance Authority dismissed the appeal. Upon examining the decision on the appeal, Tehvandi sports centre decided to file an appeal against the decision and an application for provisional legal protection with the Tallinn Administrative Court. The court denied the application for provisional legal protection, referring the opinion that the appeal has no prospect of success. The court also confirmed that the lifting device installed in the ski jump tower conforms to the definition of a lift in the Lifts and Cableway Installations Safety Act and is not work equipment.

A session was held in the Tallinn Administrative court in January 2009 hearing the appeal of Tehvandi Spordikeskus SA against the precept issued by the Technical Surveillance Authority, as a result of which negotiations were initiated in order to find a solution to the issue. With counselling form the Technical Surveillance Authority, the sports centre initiated operations in order to install a new lift conforming to the requirements. OÜ Tehnokontrollikeskus (Technical Inspection Centre) carried out a technical inspection of the new lift installed in the Tehvandi ski jump tower before its use, upon which the lift was registered and deemed conforming to the requirements. This concluded the proceeding, and the Tehvandi ski jump hill has now a lift conforming to the requirements.

Pressure equipment

In respect to the supervision of pressure equipment, the Technical Surveillance Authority checks the conformity of pressure equipment (steam boilers, pressure vessels, pressure pipelines, aerosol bottle, etc) and of the installation, repairs, use, manufacturing and alteration of the equipment to the requirements.

The inspection of the technical documentation of pressure equipment constitutes a significant share of supervision activities. On the basis of the inspection, a decision is made whether the marking, technical specifications and type of the equipment match the data recorded in the documentation.

Gas appliances and installations

In respect to gas, the main focus of the Technical Surveillance Authority in 2009 was the supervision of use and operation. Nearly a hundred inspection visits were carried out, inspecting the use and construction of gas installations and gas works conforming to the requirements. Supervision includes the assessment of conformity of gas installations to safety and technical requirements. In respect to the performers of gas works and constructors of gas installations, checks are made on the competence of personnel, the validity of professional certificates, and the existence of relevant registrations in the register of economic activities.

Gas stoves and water heaters in home use

The issues related to gas appliances in home use should be especially emphasized. It is important to install a gas appliance in a way which does not impair the maintenance and inspection of or the access to the appliance. This requirement is especially important in relatively old buildings where gas installations may have become outdated and gas pipelines and gas volume meters may have been covered with tiles in the process of later alterations. A technical inspection must be ordered for home a gas appliance the use of which has extended its prescribed service life of 15 years; and the appliance may be used only if it is in a good technical condition.
Unfortunately, there have been cases where apartment possessors and apartment associations have not ordered the inspection of outdated gas appliances and installations. What is worse, sometimes gas works have been performed by unqualified persons or by the apartment possessor.

In respect to small camping stoves which are used when camping or in the close premises of summerhouses, the presence relevant warning labels in Estonian should be carefully checked. Warning labels are important means for preventing fires that could result from the misuse of gas appliances.

Gas grills are popular in Estonia

Gas grills are popular sales items in Estonia. Using gas always poses danger, so in order to prevent accidents, only operable grills conforming to safety requirements must be used, and the users' instructions must be closely observed. When purchasing a gas grill, the buyer has to make sure that the appliance is supplied with usage and maintenance instructions and the manufacturer's marking that proves its conformity to the requirements. The key parameters of a gas grill are: type of gas, operating pressure (max. 30 mbar in Estonia), and the CE marking or marking confirming its conformity to the requirements, which may be added to the gas appliance only after it has passed the conformity assessment and has been deemed conforming to safety requirements. Products without the CE marking can not be sold in the European Union.

Handling dangerous chemicals

Chemicals play an important role in our daily lives. In the production process, chemicals should be used in a way that prevents or minimises the potential damage that could result from their dangerous properties. Special attention is paid to enterprises liable to be affected by a major accident. The Technical Surveillance Authority works in close cooperation with other supervision institutions, such as the Rescue Board, the Labour Inspectorate and the Health Board. It also participates in international cooperation and legislation regarding chemical safety. A completely new legal act is going to be developed shortly.

The competency of the Technical Surveillance Authority includes the safety of chemical handling in industrial enterprises, which derives greatly from the requirements prescribed in the Seveso II (82/96/EC) directive. The aim of these requirements is to protect people, property and the environment from the risks of accidents arising from handling dangerous chemicals. Dangerous chemicals are defined as substances that are hazardous to health and to the environment; combustible liquids, natural gas, liquid gas, etc. Dangerous chemicals are handled and stored in nearly all enterprises that deal with chemical handling, such as producers of oil shale chemicals, fuel terminals, paint production, energy production, water purification, etc.

In 2009, the Technical Surveillance Authority inspected 50 enterprises, 34 of which were enterprises liable to be affected by a major accident. 34 precepts and 16 supervision reports were issued. 15 enterprises were inspected for the first time. New companies offering the services of documentation preparation (including risk analyses) to enterprises liable to be affected by a major accident or dangerous enterprises have become a problem. Their qualifications are not sufficient enough to ensure the conformity of these documents to the requirements established by the law, and supervision officials spend a lot of time and energy on reviewing of such unprofessional documents to no avail.

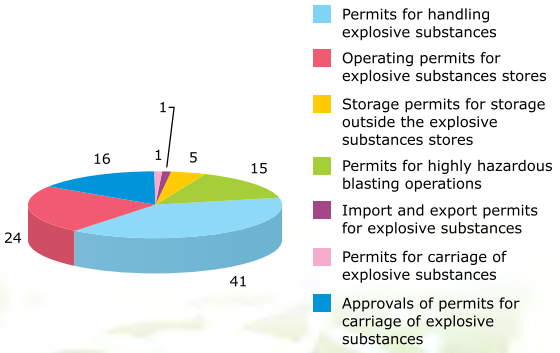
Pyrotechnics and explosive substances

It lies in the competence of the Technical Surveillance Authority to supervise the conformity of the explosive substances placed on the market, the undertakings operating in the explosive substances sector and handlers of pyrotechnic products as well as handling explosive substances and pyrotechnical products to the requirements. The conformity of the objects connected with handling explosive substances to the requirements is also assessed. The Technical Surveillance Authority issues permits related to the sector of pyrotechnics and explosive substances: permits for handling explosive substances, operating permits for factories and stores of explosive substances, import and export permits, carriage permits, and permits for most hazardous blasting operations. As for the time being there is no certifier for the personnel in the sector of pyrotechnics and explosive substances in Estonia, the Technical Surveillance Authority also issues the certificates of competency to the organizers of handling explosive substances, senior blasters, blasters and organizers of handling pyrotechnical products.

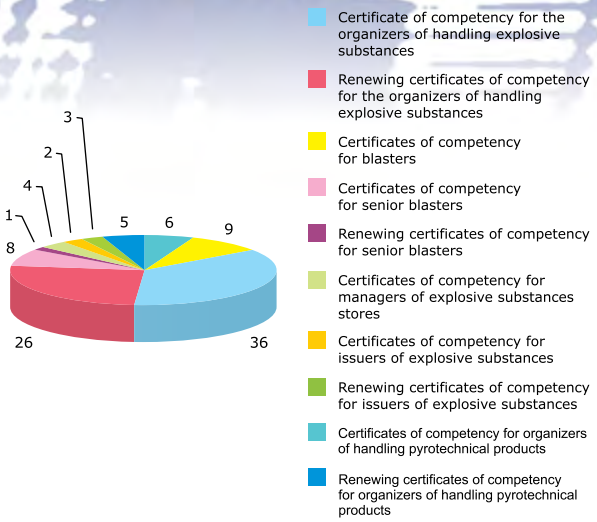
Estonia received 10 notices from the European Union concerning the transportation of pyrotechnical products. 153 pyrotechnical products were registered in the registry of permits for use.

At the time being, 12 legal persons own permits for handling explosive substances in Estonia. 27 undertakings own a lawful registration for handling pyrotechnical products (use, storage, transfer).

43 proceedings were started in 2009, fourteen of which were completed with a precept.



The permits issued in the sector of pyrotechnics and explosive substances in 2009



The certificates of competency issued in 2009 for specialists in charge

The most frequent violations discovered while checking the explosive substances stores were the excessive height of storing stacks, calculation of the distances to hazard zones, absence of microclimate equipment. In addition, three misdemeanour procedures concerning the violations of handling explosive substances were started.

In May 2009, a meeting was organized and the data concerning the issued import and export permits was compared with the information by the Estonian Tax and Customs Board. The Technical Surveillance Authority participated in the meeting of the Association for Estonian Pyrotechnicians and as an auditor in work of the committee for issuing certificates of competency.

The need for making the regulation of storing explosive substances more precise

In the spring of 2009, the National Audit Office performed an audit concerning the effectiveness of the supervision of pyrotechnics. At the same time, the Technical Surveillance Authority was occupied with developing the proposals for the amendment of the Explosive Substances Act.

In co-operation between the supervision agencies and considering the proposals of the National Audit Office, essential modifications to the Explosive Substances Act were made. As a result of these amendments, the representatives of the Estonian Security Police were incorporated as the members of the approval committee for the permits for handling explosive substances stores; the representatives of Estonian Tax and Customs Board were engaged in the work of the Committee for the permits for handling explosive substances; and the Technical Surveillance Authority was given an additional obligation to notify the local government about receiving an application for a permit to operate the explosive substances store and given the right to deliver corresponding opinions.

Since 2010, the Technical Surveillance Authority will also be obliged to inform the Estonian Security Police about issuing permits for the most hazardous blasting operations. In addition, the Estonian Security Police and the Police and Border Guard Board are to be notified about issuing permits for the carriage of explosive substances (the member states of the European Union and the European Economic Area).

The most important change for the undertakings is the obligation to observe the requirements of the Chemicals Act when applying for the permit for handling explosive substances factories and stores.

Mining

In 2009, mining supervision covered mining and enrichment of oil shale as well as limestone quarries. 20 proceedings were carried out; 6 precepts and 14 supervision reports were issued. The content of the precepts comprised the shortcomings discovered in course of the supervision, e.g., the bearing structures of the ceilings of chamber blocks, ventilation and conveyor transport as well as dewatering a limestone quarry.

Two accidents at work occurred during underground mining of oil shale. For both accidents, a precept requiring the application of additional safety measures while improving the work process was made. In addition, the accidents that occurred in the mine "Estonia" were investigated. The investigation ended with misdemeanour procedures and fines in the total amount of 65.000 kroons.

In 2009, the Technical Surveillance Authority was continuously occupied with organizing examinations for the persons in charge at mines. In addition, the Technical Surveillance Authority participated in the work of the committee of Estonian mineral resources and the licensing committee of hydrogeological drilling as well as in preparing proposals for the amendment to the Water Act.

Mining conference in Estonia

In the summer of 2009, the Technical Surveillance Authority organized the XV conference for the mining supervision agencies of the European Union in Tallinn. Since 1994, the conferences have been annually organized in the member states of the European Union and have become important events in the sector of mining technology supervision. The cross-cutting issue of the conference in 2009 was waste handling in the mining industry. The mining industry constitutes an essential part of Estonian economy forming a base for our energy industry, oil industry and the production of building materials.

The waste mining industry is an integral part of the mining process and its use in the economy is essential. Beside the economic considerations, it is also necessary to pay constant attention to the elimination of negative consequences of mining and to apply measures that ensure the safety of people, their property and the environment.

Specialists from the United Kingdom, Germany, Poland, Austria, Romania, Hungary, Finland, the Czech Republic, Slovakia, Slovenia and Estonia took part in the conference, representing the total of 11 countries. The conference ended with making conclusions and signing the memo which highlighted the importance of environmental sustainability.

Railway civil engineering works and rail vehicles

In 2009, the Technical Surveillance Authority continued the construction supervision of the construction of the railway track and other railway civil engineering works within the construction of Koidula railway frontier station. Building railway civil engineering works in Koidula is progressing without major problems.

In 2009, much attention was paid to railway bridges as important objects from the point of view of railway safety. Supervision procedures were carried out for the railway bridges in Tallinn and its closest surroundings on the lines of Tallinn–Narva, Narva, Tartu–Valga and Tartu–Orava. The situation was deemed satisfactory; some minor shortcomings were found that were eliminated by the infrastructure manager.

As a peculiar interlude, the Technical Surveillance Authority took part in the training exercises of the Pioneer Battalion of the Defence Forces carried out in the territory of the Tapa railway station of AS EVR Infra, in the course of which the three storied former building of the control and communication centre of the Tapa station was demolished, as a coordinator and observer. At the end of the year, permits for use were issued for 10 waiting platforms that were lifted to the height corresponding to the requirements of the European Union.

In everyday work of the railway infrastructure department of the Technical Surveillance Authority, the state of the railway civil engineering works belonging both to the largest railway infrastructure managers and to relatively small owners of the non-public railway infrastructure was assessed; the assessment comprised level crossings, waiting platforms, bridges and railway tracks. In the course of the supervision procedures, the total 41 protocols were compiled describing the situation at the moment of the inspection; and 10 precepts were prepared with the obligation to eliminate the discovered shortcomings.

In 2009, the Technical Surveillance Authority initiated the total of two misdemeanour procedures to investigate the circumstances of unauthorised building of railway civil engineering works and three misdemeanour procedures to find out the causes of damage to railway constructions. One misdemeanour procedure to investigate a railway accident in which a carriage collided with a pile of reinforced concrete slabs that were stored too close to the railway track was also initiated.

In 2009, the creation of the module of the national railway traffic register was started in the supervision information system (JVIS) of the Technical Surveillance Authority. In drafting the new module, the requirements set by the European Union for the registry of rolling stock were observed. While registering the constructions of the railway infrastructure, the scope of the

Koidula railway frontier station

information/constructions due for registration was extended. At the end of 2009, the saved information on the rolling stock, railway infrastructure and locomotive drivers was transferred from the national railway traffic register into the JVIS.

The registration and processing of the data on the railway sector in JVIS has created a base for registering the results of supervision procedures in the environment integrated with registry information. The application of the new module of the information system has speeded up obtaining the information about register entries.

In 2009, 2470 register entries on freight carriages and 146 register entries on locomotives were entered. The main reason for these entries was that the owners or possessors of the rolling stock had changed, which was complemented by the registration of new rolling stock.

After studying the documents declaring the procurement of passenger trains thoroughly and after consulting the supplier, the officials of the Technical Surveillance Authority participated in the work of the committee for the procurement of new electric and diesel trains in 2009 as observers. The main attraction appealing to passengers of the new passenger trains is the comfort and speed of the trains.

On launching the safety management system

Two accidents at work occurred during underground mining of oil shale. For both accidents, a precept requiring the application of additional safety measures while improving the work process was prepared. In addition, the accidents that occurred in the mine "Estonia" were investigated: a fire on the conveyor belt and the combustion of devices with diesel engines. The investigation ended with misdemeanour procedures and fines in the total amount of 65.000 kroons.

	Freight wagons			Passenger coaches				Other
	Diesel locomotive	Tank carriage	Freight carriage	Railcar of a diesel train	Railcar of an electric train	National passenger transport carriage	International passenger transport carriage	Specialised rail vehicles
Total in the register	306	13362	4922	32	23	95	65	127
Of which first registrations in 2009	-	1910	73	-	-	-	18	18

Rolling stock registered as of the end of 2009

The Technical Surveillance Authority carries out supervision over the implementation of the safety management system of railway undertakings and infrastructure managers.
The objective of the safety management system is to manage the risks related to their activities as extensively as possible and to alleviate possible consequences. The safety management system reflects the circumstances caused both by the railway undertakings, infrastructure managers and the third parties who have an indirect influence on railway safety.

The fundamentals of the safety management system for railway undertakings and infrastructure managers have been uniform for the whole European Union since 2008. Railway undertakings and public infrastructure managers should have a valid safety management safety certificate (part A) as well as the operating safety certificate (part B). The safety management safety certificate (part A) issued to the railway transport undertaking is valid in all member states of the European Union and is a prerequisite for issuing the operating safety certificate (part B) to the railway undertaking. The safety certificates issued to railway undertakings are entered into the joint database of the European Railway Agency.

A total 40 safety certificates (parts A and B) were issued to railway undertakings and public infrastructure managers, of which 10 safety certificates were issued in 2009 as "modified safety certificates". The need for modifying the safety certificates was caused by the division of a company or in-house changes.

The requirement for two-part safety certificates for railway undertakings and public railway infrastructure managers has given the Technical Surveillance Authority more opportunities to perform hazard supervision. At the same time, the railway undertakings' obligation to keep the safety requirements constantly updated ensures both the increase in safety and better information exchange with the Technical Surveillance Authority.

In 2009, 7 collisions between rail vehicles and road vehicles happened where one person was injured and three people were killed. There were 11 accidents where pedestrians were run down by rail vehicles. In these incidents, six people were injured and five people were killed. Also, in one incident two railway workers were run down and killed.

Railway platforms get a makeover

In 2009, two projects of the reconstruction of the existing stopping points financed with the help of the European Union were started. In the course of these projects, a total of about 100 passenger platforms will be renewed all over Estonia. The Cohesion Fund of the European Union is supporting the project of transferring the passenger platforms to the height meeting the requirements of EU with a total of 120,895,383 kroons and within the framework of this project the works are being carried out in the stopping points of electrified railway lines. Other stopping points will be refurbished within the framework of the project of ensuring the safety of passengers in the operation area of passenger trains which is supported by the European Regional Development Fund with a total of 86,651,446 kroons. The renovated platforms will be built with the height of 0.55 m specified in the national standard on passenger platforms instead of the currently used heights of 0.2 m and 1.1 m. The reconstructed passenger platforms will conform to the requirements of the new passenger trains to be procured. The new trains should be taken into use on our railways starting with the year 2012. Until the arrival of the new trains, some of the exits will be tailored to suit for the new platforms. The first new passenger platforms were completed by the end of the year, the projects at hand are to be completed to their full extent in 2011.

While reconstructing the passenger waiting platforms, the needs of the persons with physical disabilities have been taken into account to a larger extent than before. Beside this, there

will be markings for the visually impaired persons on the new platforms. The general accessibility and the safety marking will also be improved. Since the reconstruction of other existing infrastructure will take place simultaneously, the new passenger waiting platforms will not only bring new trains but a new quality level in the passenger transport concerning both convenience and safety.

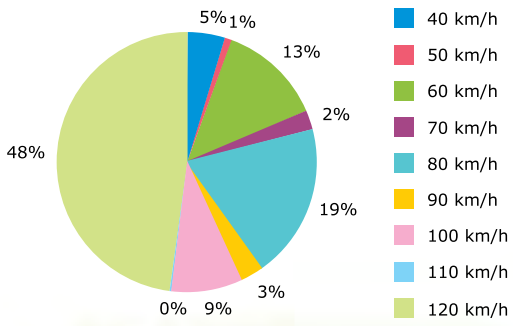
Higher speeds on the railway

The state of Estonian railways is constantly improving. While the private infrastructure managers, as a rule, do not develop the infrastructure of their railway and invest in the railway only in order to ensure the smooth operation of the company, public

Waiting platform in Laitse

infrastructure managers take public interests into consideration and contribute much more to reconstruction and thus to the increase in speeds and capacity. As a result of the work carried out this far, the maximum allowed speed has increased in many railway sections; and the number of temporary speed limits caused by the condition of the railway has decreased.

As Estonia is participating in the Rail Baltica project with the goal to create train connection between the Baltic states and central Europe, the first step on the railway lines belonging to the pan-European TEN-T network (in Estonia, the railway lines of Tallinn-Tapa, Tapa-Tartu and Tartu-Valga) will be the increase in speed up to 120 km/h. The line Tartu-Valga has been completely renovated, and the speed for passenger trains is now 120 km/h throughout. For the time being, the repair works are in progress on the Tallinn-Tapa section. In addition to the above mentioned sections of Rail-Baltica, the reconstruction of the Türi-Viljandi section with the help of European Regional Development Fund is supposed to start in 2010 as well.



Share of speed limits on public railway

Accidents at railway crossings still a problem

To increase the safety of railway crossings, the Technical Surveillance Authority has been performing extensive supervision of the state of railway crossings by assessing their safety level and by mapping relatively problematic crossings. The increased attention to railway crossings has been caused by the numerous accidents that occurred in the middle of noughties, and the first results are can be noticed. While in 2007 a total of 28 collisions between rail vehicles and road vehicles occurred, then in 2009 there were only 7 such accidents. The decrease in the number of accidents is partly caused also by the decrease in railway traffic volume. At the same time, three people were killed and one person injured in the accidents that occurred at crossings in 2009 (as a comparison, one was killed and five injured in 2008). The lack of attention on the part of car drivers could be named the main reason for the accidents at crossings concerning the collisions that occurred in 2009.

In recent years, the Estonian infrastructure managers have made large-scale investments in improving the equipment support of railway crossings. Comparing the number of shortcomings discovered by the inspection committees at railway crossings with the corresponding number in previous years, the progress is evident. Among other things, the public railway infrastructure managers are planning to replace all traffic light systems of controlled crossings with LED traffic light heads whose visibility is noticeably better compared to the lamp traffic lights used so far. If necessary, the Technical Surveillance Authority has also applied tougher measures to improve the state of railway crossings. Thus, in 2009, after the precept issued by the Technical Surveillance Authority, the railway crossings in Toila, in the close vicinity of Jõhvi, and in Paldiski notorious for numerous accidents in the previous years were equipped with automatic traffic light signalisation. In Tartu county, at the Tiksoja railway crossing, lamp traffic lights were replaced with LED traffic lights. In 2010, the Klooga-Ranna crossing on Tallinn-Paldiski road will also receive new traffic light signalisation. Design works are in progress to replace two crossings in Männiku, in the close vicinity of Tallinn, with one crossing. In the outskirts of Kaarepere, in Jõgeva county, it is planned to replace three level crossings with one overpass.

In 2010, it is planned to enforce the amendment of Appendix 4 “Requirements for the construction, maintenance and use of railway crossings” of the rules for technical use of railway which specifies the requirements set for railway crossings.

Railway crossing in Toila

Increasing reliability

Activities and results

In respect of the conformity of radio equipment, electrical devices and machinery, we check the compliance of the documentation (CE marking and user manuals) and the performed procedures (conformity assessment) which is supplemented, in case of certain radio equipment, by checking the notification about the limitations on use to avoid radio interference and the corresponding marking.

As to the conformity of construction products and precious metal products to the requirements, we check the presence of marking and the necessary documentation, the correctness of the hallmark on the precious metal products as well as the absence of substances hazardous to health (e.g. nickel).

Concerning energy efficiency, we check the presence of the energy performance label on certain types of household appliances and heating devices as well as the presence of energy performance labels on buildings and the process of issuing these.

In respect of legal metrology, we check the introduction of measuring instruments on the market, their entry into service and use as well whether the requirements for proved traceability of measurement results are met. We also monitor the activities of the conformity assessment agencies and verification laboratories for measuring instruments, carry out legal metrological expert analyses and issue national type-approval certificates for measuring instruments.

In respect of communication services, our task is to inform and consult the end user in the matters of the requirements set for the services, enabling the comparison between different service providers and the supervision of the conformity of the provision of communication services. We also check the conformity of the operations in the protected zone of line facilities and number portability functioning.

As a full member of the European Telecommunications Standards Institute (ETSI), we are also responsible for the transposition of standards in the field of telecommunications.

Construction products

In the course of the supervision of the market of construction products, the Technical Surveillance Authority performed 16 proceedings in 2009, 5 of which were completed with a precept. The main shortcomings are the absence of necessary documentation or its inadequacy.

The most serious violation discovered in the course of the supervision was the installation of almost 40 fire doors whose conformity to the requirements was not proved in Tasku shopping centre in Tartu, and the building thus did not comply with the fire safety requirements. A precept was issued to the owner of the building to prove the conformity of the doors to the requirements or to replace them with the ones complying with the requirements.

Partly insufficient legislation remains the cause of problems. Exact requirements are set only for the products for which European harmonized product standards are available. By the end of 2009, about 360 harmonized product standards were available and transposed in Estonia, but there exist significantly more products than those covered by the standards. The general requirements of the Building Act are applied to such products, according to which the building product installed in the construction must enable the whole building to comply with the requirements.
In the beginning of 2009, the situation concerning some major products improved. National requirements were set for concrete mixes, fire doors, fire retardant paints, fire extinguishing systems and bushing materials as well as the procedure of proving the conformity to the requirements was laid down.

What kind of information must accompany building materials?

As in case of many other products, the CE marking indicates the conformity of construction products to the valid requirements. Apart from the CE marking, the product must have a declaration of conformity, and a production control certificate or the certificate of conformity of the product are required for risk related products.

At the same time it is not always possible to proceed from the presence of the CE marking while selecting and purchasing the building product, because the CE marking is obligatory only in case of the products that are covered with a valid harmonized product standard. Thus, the absence of the CE marking on certain product groups does not impose a ban for selling such products. In purchasing such products, it is necessary to make sure that the installation and user instructions are available. In case of certain products (e.g. dry mixtures) the storage time of the product must be observed as well.

CE

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EN 771-1

SAVIMÜÜRIKIVI
II kategooria, LD, 250x125x65 mm,

Survetugevus:	20 N/mm²
Tuletundlikkus:	Euroklass A1
Soojuserijuhtivus:	0,1 W/mK ($\lambda_{10,dry}$)
Külmakindlus:	NPD

Conformity marking

Electrical equipment

The Technical Surveillance Authority performs market supervision of electrical equipment all over Estonia. In 2009, 142 proceedings were carried out, in the course of which 36 precepts were issued. The main shortcomings were the absence of the CE conformity marking and of the required information as well as technical safety faults. In respect of non-conforming electrical equipment, the pan-European ICSMS and Rapex databases were checked. No products entered into these databases were discovered in Estonia. The authority worked in close cooperation with the Estonian Tax and Customs Board. Around 600 messages received from the Estonian Tax and Customs Board concerning potentially non-conforming electrical appliances discovered at the border were reacted to. Special attention was paid to the supervision of the conformity of automatic circuit breakers and Christmas lighting fixtures.

In 2009, the international cooperation with other European market supervision agencies was also continued. A cooperation project of market supervision agencies of the Baltic Sea region as well as the work of the administrative cooperation group for the low voltage equipment directive and the electromagnetic compatibility directive continued. In 2009, the Technical Surveillance Authority also organized a working meeting of ADCO in Tallinn, where the principles, strategies and campaigns of market supervision of electromagnetic compatibility requirements and organization of the campaigns were discussed.

Electric Christmas candles: what to buy and how to use

At the end of 2009, the Technical Surveillance Authority conducted an especially thorough inspection of the Christmas lighting fixtures commercially available in Estonia. 23 points of sale were inspected, and the conformity of 46 products to the requirements was examined. As a result of this inspection, 10 precepts were issued and sales prohibition was imposed on 22 Christmas lighting fixtures. The main shortcomings that were discovered concerned the absence of the necessary marking, constructive faults, power cabling that was thinner than required and plugs that did not conform to the requirements. When buying Christmas lighting fixtures, one should check that the appliance is fitted with a CE marking, its package includes all the necessary data (the manufacturer, technical specifications, allowed conditions of use, etc.), and power cabling is of sufficient thickness and properly fastened.

Pan-European working meeting on electromagnetic compatibility

In April 2009, the Technical Surveillance Authority organized a meeting of the Administrative Co-operation Working Group on electromagnetic compatibility in which 33 top specialists from 21 countries participated. The major discussion issues:

- the results of the campaign on market supervision of the requirements for electromagnetic compatibility and the possibilities of introducing the campaign
- the preparations for the campaign on market supervision of the requirements for electromagnetic compatibility, the selection of product groups suitable for testing and the determination of the necessary testing capacity
- the principles and the action plan of market supervision of the requirements for electromagnetic compatibility, the review of the instructions, discussions on the harmonization of different administrative requirements applied in different countries
- problems related to electromagnetic compatibility when using PLT (power line terminal) equipment
- possible measures in case of electromagnetic interference generated or spreading in power networks.

During the meeting, some amendments to the instructions of market supervision were also made and possibilities were searched for harmonizing the practices of market supervision applied by the different member states.

Communications equipment

In 2009 the updating of the Regulation issued by the European Commission continued. Its purpose was to develop a more effective mechanism for assuring of apparatus to be in conformance to the requirements and thereby amending the provisions of the Directive 1999/5/EC simpler and clearer. Meetings were held for obtaining the opinions of the Member States, to which the Technical Surveillance Authority also contributed.

In 2009 the Technical Surveillance Authority prepared a proposal to implement six decisions of European Commission. The regulation of the Minister of Economic Affairs and Communications “Conditions for using radio frequencies, and technical requirements for radio equipment exempted from frequency authorisation” was supplemented and updated. The regulation will enter into force in April 2010.

In accordance with the request of Estonian hunters, the requirements for the use of dog distance tracking system were adopted. In the development of the requirements, the regulations for dog distance tracking systems established in Sweden and Norway served as examples. Above all, the dog distance tracking systems are meant for monitoring hunting dogs on various terrains. In accordance with relevant European Commission Decisions the terminals of the terrestrial electronic

communication systems in the frequency bands of 2500–2690 MHz, 3400–3800 MHz, 900 MHz and 1800 MHz were exempted from frequency authorisation and harmonized requirements were adopted.

In accordance with the decisions of the European Commission, the requirements for GSM system for the use of mobile communications services (MCV) on board vessels in territorial waters allowing harmonised use in the Community were adopted.

In 2009 the first phase of elaborating the technical requirements for radio equipment, the use of which requires frequency authorisation, was completed. The elaboration of these requirements is a long-term process and in 2009 the regulation of the Minister of Economic Affairs and Communications „Technical requirements for radio equipment used on the basis of frequency authorisation" was published by which general requirements for radio equipment and specific requirements for broadcasting devices were established.

In 2009, a total of 1,559 inspections of conformity to the requirements of devices were carried out. 535 inspection reports were compiled during the inspection of shops. 216 shortcomings were found. In 19 cases there was no CE-marking, in 151 cases the declaration of conformity was missing and 77 devices lacked information about their use in Estonia.

In the course of the inspection of devices placed on market, the Tax and Customs Board forwarded 1,024 requests for information about the conformity of the devices, 95 % of which did not conform to the requirements and were sent back to the consignors. The majority of the inspected devices are mobile phones, GPS receivers, radio-controlled toys, wireless computer devices, baby monitors and low-power radio transmitters.

During the notification procedure about the intention to place on the market radio devices, which using frequency bands whose use is not harmonised within Europe, Estonia received 907 notifications in 2009, almost all of which (901) were submitted through the OSN system (One-Stop Notification system established under the European Commission at the beginning of 2008). During the processing of these notifications the requirements valid in Estonia for the use of radio frequencies were explained to 80 manufacturers and representatives of manufactures, and in 28 cases the use of certain devices in Estonia was not allowed.

With respect to standardisation, votes were taken by the European Telecommunications Standards Institute (ETSI) on European standards drafted by the European Council in 2009 and 52 new ETSI standards were adopted as Estonian standards.
Three digital television standards were submitted to the National Standardisation Programme for transposing into Estonian standards through translation method in conjunction with switching to digital transmission of television programs in 2010. During the ETSI Public Enquiry procedures of harmonised standards, the Estonian titles were added, which is required for publication of the list of harmonised standards under the Directive 1999/5/EC in the Official Journal of the European Union.

The risks of online shopping

In 2009 the attempts to import from outside of the European Union of devices bought online and not conforming to the requirements became more frequent. Very popular articles of trade in the Internet shops in 2009 were various electronic commodities such as mobile phones, radiotelephones, wireless video and audio systems, wireless security devices, etc ordered from the Internet shops. People are mainly attracted by remunerative prices, however, they fail to notice that some of the goods offered on the Internet do not meet the European quality and safety requirements. Generally the goods ordered over the Internet are received by parcel post which passes through customs inspection. If in the course of the customs inspection it is revealed that the device in the consignment lacks the required marking and labelling, the Tax and Customs Board does not allow it for a free trade and informs the Technical Surveillance Authority of this device. During the inspection of electronic devices the Technical Surveillance Authority mainly reviews the marking of the device and the existence of the conformity mark CE. The CE mark is the manufacturers' proof that the device has been produced in accordance with the requirements of the European Union. In addition, the manufacturer must issue the declaration of conformity.
Devices that do not conform to the requirements are not permitted in Estonia and they are either destroyed or sent back to the consignor. Before purchasing one should inquire of the seller whether the products conform to European requirements in order to avoid the above problems. You may also inquire of the Technical Surveillance Authority whether this product has caused problems before.

On the problems of hunting-dog tracking devices

Above all, the dog distance tracking systems are meant for observing hunting-dogs on various terrains a few kilometres away from the hunter. Together with the GPS receiver it is also possible to monitor the movement of the dogs on the map.
So far there was no regulation in Estonia for hunting-dog tracking devices while the devices from the USA had appeared on our market. However, these devices operated within frequencies that according to Estonian radio frequency allocation plan are assigned for radio communication under frequency authorisation. The use of different applications within the same frequency may cause harmful interference. Norway and Sweden had previously encountered the same problem and on the initiative of the administrations of these countries the manufacturers developed dog tracking devices that conform to European requirements. Estonian hunters were interested in the new devices and suggested that the use of dog distance tracking devices should also be used in Estonia. In the development of the requirements the regulations for dog distance tracking systems established in Sweden and Norway served as examples. First of all, in the Estonian radio frequency allocation plan the operating frequency for the devices was assigned, afterward, the dog tracking systems were exempted from frequency authorisation and their technical requirements were established.

Electronic devices understand the Estonian Language

In 2008, a representative of ETSI Technical Committee Human Factors applied to the Technical Surveillance Authority with regard to drawing up an ETSI standard containing voice commands. The standard includes voice commands in all European languages. Because the Technical Surveillance Authority does not directly engage in the development of standards, we asked for the assistance of the technical committee of telecommunication technology EVS/TK3 operating in conjunction with the Estonian Centre for Standardisation. Estonian voice commands were prepared under the guidance of EVS/TK3, based on the questionnaire conducted by the students of Tallinn University of Technology. The „computer usability" for the commands was tested in the Utrecht University, the Netherlands, on the basis of common methodology. The final choice of voice commands included in the standard was made by EVS/TK3 experts. In this work several specialists of the Technical Surveillance Authority were involved. The results of the work were published in the 2009 in ETSI standard ES 202 076 V2.1.1 (2009-08): "Human Factors (HF), User Interfaces; Generic spoken command vocabulary for ICT devices and services."

Energy efficiency of electrical appliances

Market supervision of energy efficiency of electrical appliances is carried out by Technical Surveillance Authority throughout Estonia. 209 proceedings were conducted in 2009, in the course of which 49 precepts were issued. The requirements for energy efficiency of lamps were violated in 19 cases, the requirements of energy efficiency of other household appliances in 30 cases. The main omission was the absence of required energy labelling on the electrical appliances.

Gradually new energy efficiency requirements arising from the Ecodesign Directive 2009/125/EC are entering into force in Estonia. The purpose of these requirements is to reduce energy consumption in the European Union by about 20 % by the year 2020 through the increased use of electrical devices that consume energy economically. These requirements enter into force through the regulations of the Commission of the European Communities. One of such regulations is about non-directional household lamps (244/2009), from where the requirements for ordinary incandescent lamps used in households also arise. In 2007 lamps used in households of the European Union were calculated to consume 112 TWh of electricity. If we continue this way, consumption would increase to 135 TWh by the year 2020. Measures implemented by the above regulations, however, will enable the consumers to reduce their electricity consumption by the year 2020 to the estimated 39 TWh. In order to economise the energy consumption, the conventional incandescent lamps will gradually drop out of use. From September 2009 incandescent lamps imported from or manufactured in third countries with the nominal power of more than 100 W will not be allowed on the European Union market; in a year the ban will extend to more than 75 W incandescent lamps. By the year 2012 the ban will extend to all incandescent lamps.

Energy efficiency Info Day on electric lamps

In 2009 the Ministry of Economic Affairs and Communications in cooperation with the Technical Surveillance Authority and Tallinn University of Technology organized an Info Day about the new requirements for the energy efficiency of lamps. During the Info Day information was disseminated to lighting equipment importers and major retailers about the new requirements, gradually entering into force, which will be valid for the energy efficiency of lamps according to a regulation issued by the European Commission. The Info Day topics included energy saving policy of the European Union, product ecodesign directive and the organization of related market supervision, energy efficiency requirements for appliances, ecodesign regulations concerning lamps and expectations of the retailers of lamps.

Energy efficiency of buildings

At the beginning of 2009 the requirement of energy-performance label for existing buildings with more than 1,000 m2 of useful area and serving as gathering places of large crowds (e.g. offices, entertainment, education and health care buildings) was adopted. In these buildings the energy-performance label must be mounted in a prominent place for the visitors to see. In addition, the requirement of energy-performance label entered into force with the immovable property transactions. The owner of the building must turn over the energy-performance label to the purchaser when selling the whole building or a part of it. Also the owner of the building must allow the tenant or a person interested in concluding a contract of purchase and sale to access the energy-performance label.

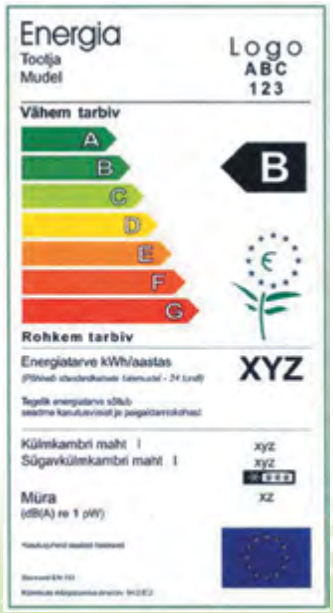
Within a year the Technical Surveillance Authority conducted 7 proceedings to check conformity to the requirements of energy-performance label issued for existing buildings, 5 of which resulted in a precept. The main issue was the deficient calculation of energy consumption of the heated area and the whole building and infringements of certain formal requirements.

From 1 July 2009 the energy efficiency regulation of new and significantly reconstructed buildings also entered into force in full, which requires that such buildings comply with the minimum requirements of energy efficiency. The conformity to the minimum requirements of energy efficiency shall be proved using the dynamic model of heat distribution already in the course of their designing. In order to obtain a building permit, the energy-performance label must be included in the design documentation to demonstrate that the proposed building meets the minimum requirements.

In order to check the methods of evaluation of the conformity to minimum requirements of energy efficiency of the buildings in the design stage the Technical Surveillance Authority collaborates with the Faculty of Civil Engineering of Tallinn University of Technology. In the course of the collaboration, the energy consumption calculations carried out by the designers and the conformity to the minimum requirements based on these is being verified for 12 buildings. The project started at the end of 2009 and will continue in 2010.

About electricity meter problems of Eesti Energia

In 2009 the Technical Surveillance Authority initiated proceedings against Eesti Energia Jaotusvõrk OÜ (Estonian Energy Distribution Network) concerning uncalibrated meters. Expert analysis was requested within the framework of the proceedings, which aimed at determining the legal metrology conformity of meters, the calibration validity period of which had expired. The sample of expert analysis consisted of 800 meters from which 10 % had electronic measurement system and 90 % had a measuring system based on the induction instrument or the so-called disc meter. The expert analysis was conducted by the Tehnokontrollikeskus OÜ (Technical Inspection Centre), which is the biggest authorised body in Estonia which performs calibration of electrical energy meters.



Energy-performance label for electrical appliances

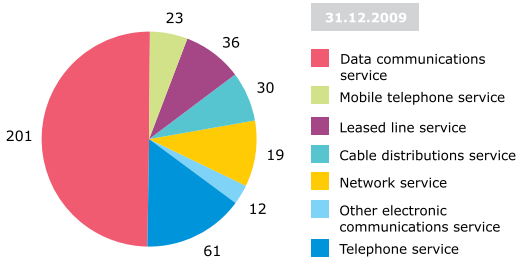
Energy-performance label for buildings

The results of the above expert analysis confirmed that the majority of the meters involved do not conform to the requirements. From 723 induction meters involved in the expert analysis 542 or about 75 % did not conform to the requirements. From among electronic measurement system meters only 1 % did not conform to the requirements. The average measurement error was significantly higher in the case of erring in favour of the customers, which means that the overall consumption of electricity was larger than what was paid for.

On the other hand, however, quite a large number of meters revealed that more was paid for the electricity than actually consumed. Eesti Energia Jaotusvõrk OÜ undertakes to replace all electricity meters, the calibration validity period of which has expired, by 1 August 2010.

Communications services

In general, no important changes have taken place in the number of communications companies in recent years. In 2009 the number of those who entered the market was equal to the number of those who left – 35. In 2009 there was a slight decrease in the number of data communication service providers, which was supposedly due to the termination of activities of the companies, or mergers. The number of cable distribution service providers began to grow. Some communications companies, due to being the owners of data communication network, started the IPTV technology based cable distribution service.



Registered communications services in 2009

There are still incidents in border regions, where the owners of mobile phones with automatic network selection receive large bills for international calls. These are caused by the fact that the phone connects to the network operator in Latvia or Russia, and therefore roaming call prices are applied to local calls. One extreme case was with a Kohtla-Järve resident, whose mobile phone entered the Russian mobile network area and a number of his calls were priced as international calls. To avoid such problems, conforming to the conditions for border regions set out in international GSM mobile communication coordination agreements was checked for the Estonian-Russian and Estonian-Latvian border. There were detected violations by both Russian and Estonian mobile communications operators.
On 15 March 2009 a new obligation entered into force for communications undertakings in accordance with the Electronic Communications Act: in addition to information on telephone and mobile phone calls they have to preserve the data on the Internet services, which can be used in solving crimes where necessary. During one year the Technical Surveillance Authority checked the compliance with this requirement, performing data communication sessions from various networks, including mobile networks. The results showed that the data was stored in accordance with the requirements.

In 2009 two major amendments of legislation, significant to the consumer, entered into force: section 60 of Electronic Communications Act prohibits the intermediation of calls from one communications network to another through terminal equipment without permission of the communications undertaking, and section 871 prohibits the cloning of the SIM card and changing of IMEI code. The first amendment will help to stop the display of false caller numbers for calls coming from abroad, and the second amendment will increase the safety of the users of communications services and make it more difficult to resell and use stolen phones. In 2009 the Technical Surveillance Authority initiated one misdemeanour matter for a call intermediation without permission.
In 2009 the Technical Surveillance Authority provided assistance to the Consumer Protection Board in resolving consumer complaints submitted against communications companies. The Technical Surveillance Authority conducted measurements of mobile Internet data transfer rates and coverage in the location of consumer and forwarded the results for further processing to the Consumer Protection Board. The misdemeanour notifications received in 2009 show that most of the cases where damage was caused to line facilities took place when the persons working in the protection zone of the line facility actually had relevant licenses and the damage to line facilities occurred because of negligence or human error. Compared to 2008 the number of misdemeanour notifications received about the damage to optical communications cables decreased.

With respect to damaging of or causing emergency situations to line facilities, the Technical Surveillance Authority resolved 65 misdemeanour notifications in 2009. 134 communications services supervision procedures were carried out in 2009. Nine precepts for bringing the network and service into conformance to the requirements were prepared, and there was one occasion when penalty payment was imposed for the failure to observe the precepts on time.

Communications cables damaged during the excavation works

Mobile Internet actually existing

In 2009 the keyword in communications services area was the increase of the number of mobile Internet users. During the year some larger mobile communications companies reported new, faster data communication solutions placed on the market, as well as significant expansion of coverage areas. Because the prices of new solutions were rising slower than the data transfer rate, it also generated greater interest in the users of mobile data communication than it had been before.
In order to provide consumers with factual information about data transfer rates of mobile Internet in Tallinn and what rates are offered through the use of 3.5 G technology, the Technical Surveillance Authority conducted relevant measurements in June. The average downloading rate of all operators of mobile Internet services in Tallinn was measured to be 2,173 kbit/s and the uploading rate 523 kbit/s. The maximum downloading rate achieved was 5,710 kbit/s and the uploading rate 974 kbit/s. These data transfer rates are already close to the rates offered by stationary networks.

Digital signature to become international

In Estonia we have grown accustomed to digital signatures but in many other countries one still needs to carry a pen. Also, the partner in a foreign country cannot use our digitally signed document, for it is not valid in the country. At the moment, for the purposes of Estonian legislation, a digital signature from a foreign country is not valid on the same bases as a handwritten signature on paper. The reason for this is the fact that digital signatures are not mutually recognised and digital signatures in different countries have different security levels.

For the recognition of digital signatures of other countries the cross-border recognition project of digital signatures in Estonia was started on the initiative of the Ministry of Economic Affairs and Communications and the Estonian Informatics Centre. Within the framework of this project the Technical Surveillance Authority participated in the public procurement „The development of authentication and authorisation solutions for EU citizens based on strong certifications“. The activities of this project will continue in 2010.

The Technical Surveillance Authority prepared proposals for amending the statutes of the Registry of Certification Services in 2009. The amendments were approved at the end of the year by a regulation of the Ministry of Economic Affairs and Communications. At the same time the activities related to the creation of this registry began, and will continue in 2010.

Limited resources

Activities and results

We distribute ***the public railway capacity*** in accordance with the needs of undertakings and the available resources, and ***determine the fees for the use railway infrastructure***.

Being the final beneficiary of the European Union structural support, we perform ***financial control over fundable railway sector projects***. We also monitor the implementation of projects in accordance with the financing decisions and conformity of work and the expenditure to the money allocation conditions.

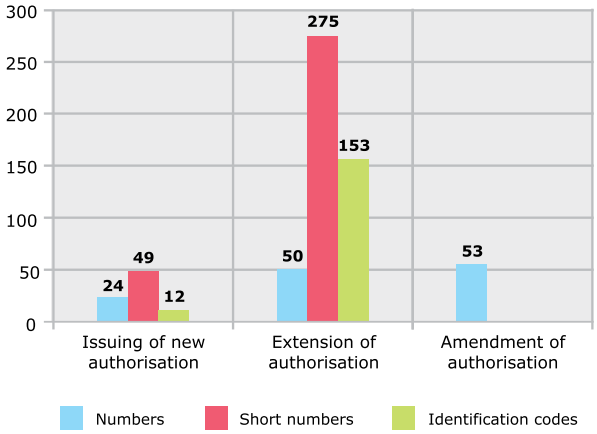
With respect to the use of ***radio frequencies***, we engage in long-term planning which will be established in the Estonian radio frequency allocation plan so that the frequency resources necessary for the development of technology would be available. We also issue authorisations for the use of radio frequencies, check the compliance with the conditions thereof and carry out general supervision over the use of radio frequencies.

With respect to ***numbering***, we ensure the management of the numbering plan so that the undertakings have a sufficient resource of numbers to provide their services with. We also check the compliance with the number usage requirements.

Numbering

In the use of numbering no significant changes occurred in 2009. The use of numbers was stable and similarly to the previous year, it was the use of mobile phone numbers that mostly increased, which was, above all, due to the provision of TravelSIM calling card service abroad. 85 number authorisations were issued, 478 were extended and 53 amended, with a total of 616 procedures performed in 2009.

Procedures concerning authorisations in 2009



In 2009 the revenue from state fees for performing the procedures concerning numbering authorisations amounted to the total of 404,121,331 kroons, which is 1 % less than in 2008.

Type of numbering number (pcs)	Total of (pcs)	Reserved* (pcs)	Unused (pcs)	Percentage of unused resource (%)
Telephone numbers	3 100 00	936 321	1 928 364	67
Mobile phone numbers	8 640 000	3 786 500	4 342 613	53
Service numbers of the numbering range beginning with 800 (free service numbers for customers)	1 018 000	1209	1 016 417	99,9
Service numbers of the numbering range beginning with 900 (service numbers with special tariff)	10 000	259	9 722	97
Service numbers of the teenusnumbrid (andme-sideteenuse numbrid)	10 000	9	9 991	99,9
Service numbers of the numbering range beginning with 907 (public pay-phone service numbers)	10 000	889	8 805	91
Service numbers of the numbering range beginning with 70 (for providing the communications services determined by the customer)	100 000	17 001	82 999	83
Short numbers, among them:				
3-digit	41	9	32	78
4-digit	386	178	208	54
5-digit	737	147	590	80

Estonian numbering resource at the end of 2009.

Since some providers of services fail to renew their numbering authorisations in a timely manner, the Technical Surveillance Authority checked 36 number owners who did not renew their right to use the number after the expiry of the number authorisation in 2009. A total of 14 number owners continued to use the numbers without a valid authorisation, so misdemeanour procedures for unauthorized use of the numbers were conducted and fines were imposed.

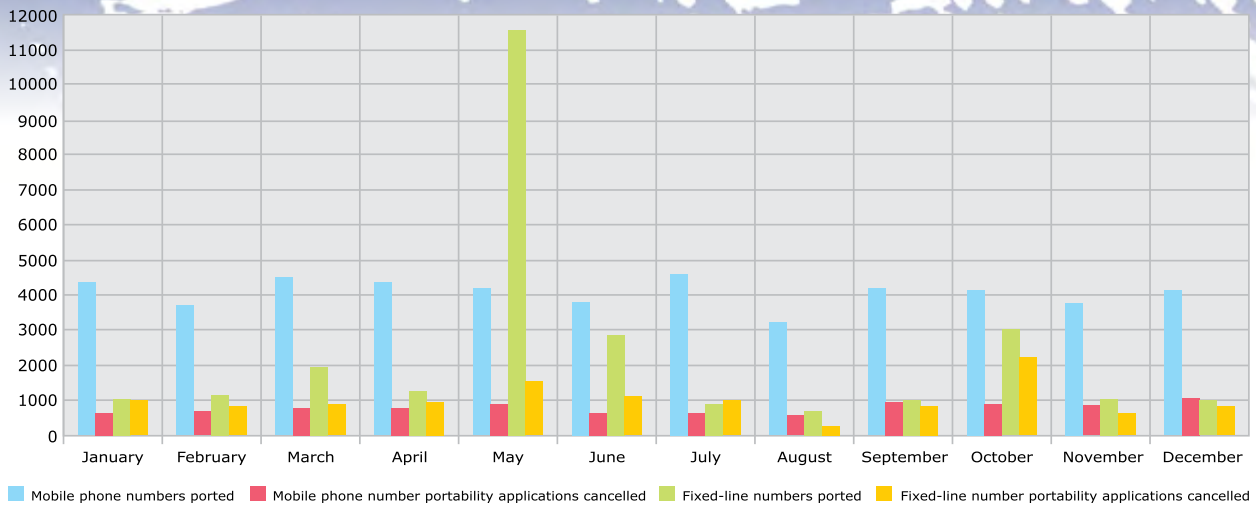
In accordance with legislation, content providers of short numbers with special tariff and 900- range numbers must inform the caller about the tariff of the service before the commencement of the service. Within the cooperation of Consumer Protection Board and the Technical Surveillance Authority 123 short numbers with special tariff and 900-range numbers were inspected to verify whether the price information was communicated and whether it was done according to the requirements. In the course of the inspection 22 content service providers who violated the above requirement were revealed. The list of violators together with inspection protocols were forwarded to the Consumer Protection Board that processes the infringements.

Number portability

The Technical Surveillance Authority is responsible for ensuring the smooth process of number porting and solving of problems that arise when this is done. Number portability statistics is compiled regularly.

76,188 numbers (57,951 last year) were transferred from one network to another in 2009, which makes on average of 6,349 number transfers in a month.

The significant contribution to the increase of transfers compared to the last year occurred due to the decision of one large company to transfer all its numbers to another operator. 64 % of transferred numbers were mobile phone numbers and 36 % the fixed-line phone numbers.



Number portability by year

Similarly to previous years a relatively high proportion of number porting applications were cancelled, altogether 21,229 applications, which is 21 % of the total of applications. As a rule, inaccuracies in the applications were the reason for cancellations.

The number portability works properly in Estonia, but according to the statistical data it may be said that switching the communications service provider is not very popular among the residents of Estonia. Out of the total of all the reserved numbers only 1,5 % have been involved in the process of number portability.

The overall trend as well as the objective of the European Commission is to minimize the time spent on number porting in order to increase competition and thereby achieve more favourable end-user prices for communications. In Estonia, it takes an average of 9 days to transfer a mobile phone number and 12 days to transfer a fixed-line phone number, which is a bit more than the European average (6 and 8 days, accordingly).

Short number and service number calling prices

In Estonia, in addition to usual numbers it is possible to receive various services both via short numbers (beginning with 1, and from 3 to 5 digits in length) as well as service numbers (800- and 900-range). Of these numbers, all numbers beginning with 800, the emergency number 112, the police number 110 and the child aid number 116111 are free of charge for the caller. The numbers beginning with 900 have special tariff and the price for calling them consists of the communication service price plus content service price.

The price is determined by the content service provider. It is also allowed to render special tariff services via short numbers. Providers of all special tariff content services must inform the caller about the tariff of the service before the commencement of the service. Notification about the tariff usually takes place within 10 seconds via an answering machine or the receiver of the call himself or herself notifies the caller about the tariff. During the 10 seconds reserved for the notification the usual tariff is applied, which is usually 3.50 kroons/min (about 60 cents, plus the call set-up fee of 42 cents which may be added) depending on the package and the service provider. During this time the caller can refuse to be served, in case he or she considers the price unsuitable. After the above time has elapsed, the special tariff applies. For short-duration content services (donations, votes, etc.) the content service tariff applies from the moment of connection of the call. In such case the notification of content service price takes place via other media (e.g. via a TV show). For short numbers, which are not used for special tariff services, the usual package tariff applies.

Use of radio frequencies

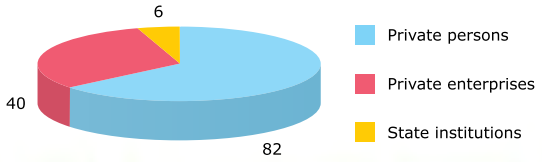
In 2009 the Technical Surveillance Authority carried out a total of 5,129 procedures concerning frequency authorisations. 465 new authorisations were issued and the use of frequency authorisation was extended in 3,514 cases. State fees in the total amount of 30,000,000 kroons were collected. Coordination of the frequency use for neighbouring countries was made in 498 cases, our frequency use was coordinated with neighbouring countries in 347 cases. About 440 applications were submitted to ITU to ensure international protection for Estonian frequency use.

In 2009 the Technical Surveillance Authority commenced 11 proceedings on the violations of frequency authorisation terms. In one case it had to do with a false identification code of RDS, in one case with exceeding of radio broadcasting radiation parameters and in three cases with the unauthorized use of frequencies. The remaining proceedings were related to the availability of free access DVB-T programs.

In 2009 the usual practice concerning radio interference continued in that only a small portion of the submitted radio interferences notified actually were radio interferences.

The main reason for resorting to the Technical Surveillance Authority was either the failure of the receiving devices or the antenna, or inadequate signal intensity, which are not regarded as radio interferences. Only 13 % of interferences notified were real radio interferences.

The number of interference notifications of digital television, which comprised 33 % of all notifications, significantly increased. Two first-priority radio interference notifications (maritime and aviation emergency channels) were submitted. All causes of interferences were determined and the problems were solved.



Persons who presented interference notifications in 2009.

To monitor the real situation of radio frequencies use, to identify the unlawful use of radio frequencies and to verify the compliance with the terms of the frequency authorisations, the frequency spectrum is monitored regularly by means of centrally managed nationwide stationary radio monitoring stations network, which are supported by mobile measuring stations where necessary.

In 2009 the Technical Surveillance Authority conducted a total 5,082 various measuring operations. The radiation parameters of broadcasting transmitters were altogether measured 1,448 times. The majority of the violations were connected with the non-conformance to the requirements of the bandwidth being engaged by a reciever. The violations were eliminated after the first reminder. Measuring operations for state institutions were performed in 1,751 cases.

In 2009 the capability of Technical Surveillance Authority to carry out technical calculations of frequency authorisations improved significantly because the software used for frequency allocation planning was updated after a number of years. Broadcasting, land mobile and fixed service communications planning software was updated and was brought up to date with technology and regulation development.

From January 2009 the Technical Surveillance Authority started issuing permits for operating an amateur radio station in a new format and with more durable plastic covering, which were received with enthusiasm.


Tehnilise Järelevalve Amet
Estonian Technical Surveillance Authority
Direction Estonienne de la Surveillance Technique
Estnische Technische Amt

AMATÖÖRRAADIOJAAMA TÖÖLUBA NR
Amateur Radio Licence
Licence de radioamateur
Amateurfunkgenehmigung

On välja antud raadioamatöörile
Sünniaeg
Isikukood
Amatöörraadiojaama registreeritud asukoht
Kvalifikatsiooniklass
Kutsung
Vastab CEPT klassile/Corresponds CEPT class/correspond CEPT Classe/entspricht CEPT-Klasse

New amateur radio station permit

As usual, so also in 2009 the Technical Surveillance Authority participated in the Defence Forces large-scale exercises Spring Storm where radio communication monitoring with the aim of checking the adherence to the frequency allocation plan was carried out.

On the one hand, the participation in such exercises has made it possible to find out the monitoring capability during intensive broadcasting over the air, and on the other hand, the deficiencies may be revealed during the simultaneous use of a large number of devices.

The Technical Surveillance Authority participates in the work of committee of licences for broadcasting created with the Ministry of Culture, which is mainly active in the organization of competitions for issuing licences for broadcasting.

In 2009, the Technical Surveillance Authority presented technical specifications to the above committee for organizing a competition for issuing licences for broadcasting for the following frequencies: Maardu 105.8 MHz, Ahtme 98.2 MHz, Kohtla 99.6 MHz and 103.3 MHz, Jõgeva 101.9 MHz, Pärnu 96.4 MHz, Tartu 101.2 MHz and Põlva 100.7 MHz. The new owners of licences for broadcasting were issued the relevant frequency authorisations.

Preparations for the switch to digital broadcasting

The year 2009 was an important year of preparations made for the switch to digital television and closing of analogue television on 1 July 2010. The preparations included the planning of new transmitters and frequency use, as well as the test measurements of signal intensity.

To ensure the nationwide receiving of public broadcasting and the free propagation programs, changes of broadcasting network plan were coordinated internationally. The most important changes consisted in the increase of the capacity of several main transmitters and adding of low-power transmitters to fill coverage gaps. Digital television signal coverage measurements were made in the course of routine inspections, and also in the course of processing radio interference notifications, as well as specifically targeted problematic areas all over Estonia in a total of 379 cases. The measurement results revealed that generally the coverage is satisfactory but improvement of the propagation conditions in some regions will be necessary in 2010.

Since the switch to digital broadcasting takes place not only in Estonia, the North-Estonian residents already saw the outcome of this in September 2009 when Finland switched off its analogue TV transmitters. The new situation made it necessary to explain to the people that Finnish television channels can no longer be aired in the accustomed way.

For organizing of the switch to digital television and closing up of analogue television a committee, where the Technical Surveillance Authority also participates, was formed with the Ministry of Economic Affairs and Communications. To promote digital television, the website www.digilevi.ee and a short number 17101 were introduced. Most of the viewers' complaints received via this short number and the majority of viewer problems are not related to distribution problems but the receiving system (antenna-digibox-TV-set).

digilevi.ee

Use of radio frequencies during public events

With regard to frequency use, the most significant public event of the year 2009 was the stage of the Cross Country Skiing World Cup held in Otepää. Public events often mean a larger number of people using radio communications services during a short period of time on a small territory, thus increasing the workload for the Technical Surveillance Authority.
When preparing for a public event, all interested parties (television stations, support teams and organizers) must be provided with the necessary frequency resource. Since participants of such events often include many countries and international radio and television channels, the range of their daily use of radio frequencies may not be compatible with the Estonian frequency use. Therefore, it is necessary to quickly look for new and alternative solutions in order to ensure undisrupted operation of all equipment. In the course of a public event, frequency use is monitored in order to detect possible interference of equipment.
A high concentration of radio equipment within a limited area may cause disturbances which are often not foreseen at the planning stage. Cases of unauthorised use of radio equipment have been also detected. This significantly increases the risk of radio interferences.

Long-term planning of radio frequencies

In the year 2009 several documents were prepared and adopted, which form the basis for long-term planning of frequency use. The Government of the Republic approved the plan for the use of radio frequency resource (digital dividend) released due to the switch from analogue to digital broadcasting, in the preparation of which the Technical Surveillance Authority also participated. The main purpose of the plan is to analyse various uses of digital dividend – which is a limited technical resource – in Estonia and to map future activities related thereto.

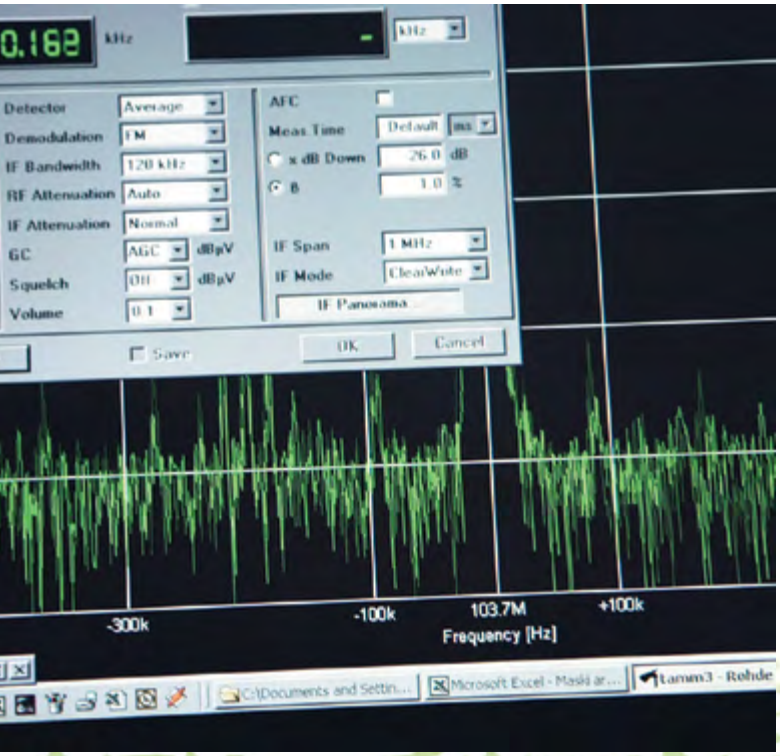
The draft regulation for public competition in the frequency band of 2.5 GHz was developed with the aim to adopt new technologies within this frequency band and to promote the development of multimedia services.

The adjustment works were started within GSM 900 and GSM 800 frequency bands with the aim to distribute frequency bands between current operators so that they could provide new services requiring the use of a larger scale of frequencies.

The adjustment works of the frequency band assigned for the use of 2.3 GHz broadband systems were also started with the aim to create unified blocks of frequency use, thus eliminating regional fragmentation which had wasted valuable frequency resources and restricted the possibilities of operators who wished to provide new services.

Within the Radio Spectrum Committee of the European Commission (RSC) and the CEPT European Conference of Postal and Telecommunications Administrations the usual international cooperation continued, and preparations were made for the International Radiocommunication Conference in 2012 within the framework of a relevant working group of CEPT.

In September 2009, the Estonian Technical Surveillance Authority organized a meeting of CEPT PT38 working group which took place in Tallinn. The main task of this working group is to resolve the radio frequency harmonisation issues. Particular attention was paid to finding additional resources for the organization of rescue operations.



European frequency use information on the Internet

The overview of the use of radio frequencies by European countries has been aggregated in the information system EFIS (www.efis.dk) and displays the use the radio frequency band 9 kHz–275 GHz in 33 countries. EFIS is based on the European Table of Frequency Allocations and Utilisations which is the source document for the harmonised use of radio spectrum and provides an overview of the various requirements set for radio transmitting equipment in European countries; it also reflects technical specifications of radio interfaces, the authorisation regime, usage restrictions and applicable standards together with references to the decisions of the Electronic Communications Committee (ECC) and the recommendations of the European Conference of Postal and Telecommunications Administrations (CEPT). In addition to information concerning the possibilities of and rules for the use of a certain frequency band, the above information system also includes national legislation related to the regulation of radio frequencies.

On 31 March 2009 an updated version of EFIS 3.0 was put into service to make the EFIS data compatible with the requirements set forth by the Commission Decision 2007/344/EC of 16 May 2007 on harmonised availability of information regarding spectrum use within the Community: to make available – as of 1 January 2010 – the information concerning the terms and conditions of frequency authorisation within the frequency band where spectrum trading has occurred or where the rights for the use of certain frequency bands have been granted by way of public competitions. In 2009, the Technical Surveillance Authority entered the relevant information into the EFIS database. As at the end of 2009, EFIS provides information on 180 Estonian radio interfaces and the use of all frequency bands. The information concerning the terms of frequency authorisations of all licence holders within 3 frequency bands (450 MHz, 3.4–3.8 GHz and 1.9–2.1 GHz) has also been entered.

Radio frequency coordination agreements

In 2009, the Estonian Technical Surveillance Authority concluded two new radio frequency coordination agreements with Latvian communications administration: arrangements on the use of the frequency bands 2500–2690 MHz and 157,4500–158,0250/162,0500–162,6250 MHz in the border areas. Negotiations and the signing of the agreements took place in Riga in December.

The purpose of the coordination agreements is to accelerate the coordination procedure, to provide equal access to radio frequency resources and to avoid radio interferences. Agreements are preceded by consultations: the parties agree on the principles relating to the use of specific ranges within border areas and, if possible, also on optimal distribution of frequency channels. After the parties have agreed on the principles and procedures, the text of the agreement and its signature are prepared. Less complicated agreements are signed by mail, in other cases the signing is preceded by negotiations.

By the end of 2009, close to 50 coordination agreements with neighbouring countries were concluded. The main goal for the year 2010 is to carry out coordination negotiations with Russian communications administration, the last meeting with whom was held in 2006. Since the technology has significantly improved over these past years and new systems have been put into service in various frequency bands, there is a lot to discuss – from the frequencies of digital television and operative radio communications service to new mobile communication and data transfer frequency bands (2500-2700 MHz and 3.4-3.6 GHz).

Railway financing projects

The year 2009 marked a breakthrough for Technical Surveillance Authority as the final beneficiary of the European Union structural support. The activities of the European Regional Development Fund for the period of 2004-2006 were concluded and the projects planned and financed by the Cohesion Fund for the period of 2004-2006 were also nearing the end, with ca 50 million Estonian kroons invested into railway infrastructure. The change in the programme periods of structural support marked the beginning of a significant increase of the European Union assistance for the development of railway infrastructure. Only in the year 2009 the structural support paid amounted to ca 200 million Estonian kroons which is much more than the total amount allocated in the period of 2004-2006.

4 large-scale projects were approved and preparations for the launching of three new infrastructure development projects were made in 2009. The total structural support to railway infrastructure allocated through various projects amounts to ca 2.3 billion Estonian kroons. In 2009, the public procurement was started for finding a supplier of new electric and diesel trains.

In cooperation with Latvia and Lithuania, the international procurement for carrying out of Rail Baltica feasibility study was initiated. As the result of the study adequate preliminary information will be gathered, so that the governments of the Baltic countries could make well-weighted decisions on the further development of Rail Baltica.

Regulation of public railway infrastructure

In 2009, the public railway infrastructure of Estonia belonged to two companies – AS EVR Infra and Edelaraudtee Infrastruktuuri AS (South-Western Railway Infrastructure). All railway transport undertakings are entitled to use public railway infrastructure on an equal basis and they are obligated to pay the respective fees. For this, the Technical Surveillance Authority distributes the railway capacity between the interested parties and establishes the fees for the use of the railway.

Distribution of railway capacity

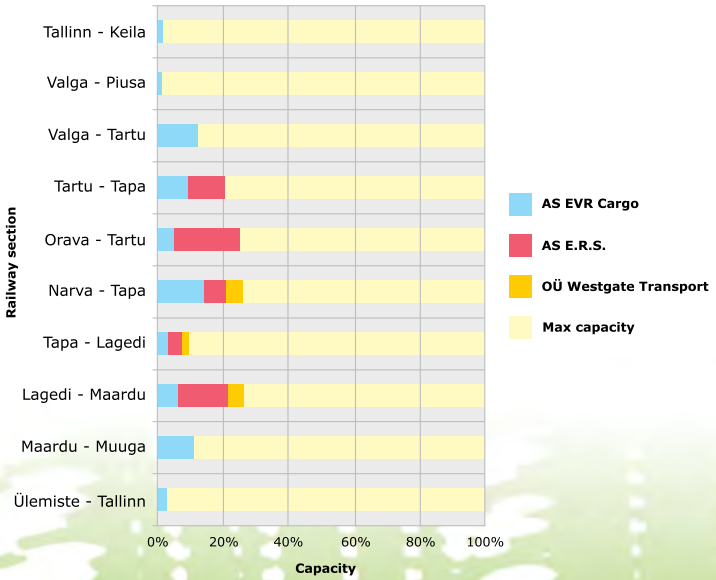
Railway infrastructure capacity is a potential to use the railway infrastructure within a certain time period, which is annually distributed among the companies who wish to use it.
The fees for the use of railway infrastructure are fees which the railway transport undertaking pays to the railway infrastructure undertaking for the use of its infrastructure. The distribution of railway infrastructure capacity and establishment of the fees for its use are the duties of the Technical Surveillance Authority.

In 2009, the capacity was distributed by summary procedure because no applications were submitted for the same or partly overlapping parts of the capacity which meant that all applications were fully acceded.

Altogether six railway transport undertakings filed an application for some parts of the infrastructure capacity of EVR Infra AS: AS GoRail, Edelaraudtee AS and Elektriraudtee AS of railway passenger transport undertakings, and EVR Cargo AS, OÜ Westgate Transport and AS E.R.S. of railway freight transport undertakings.

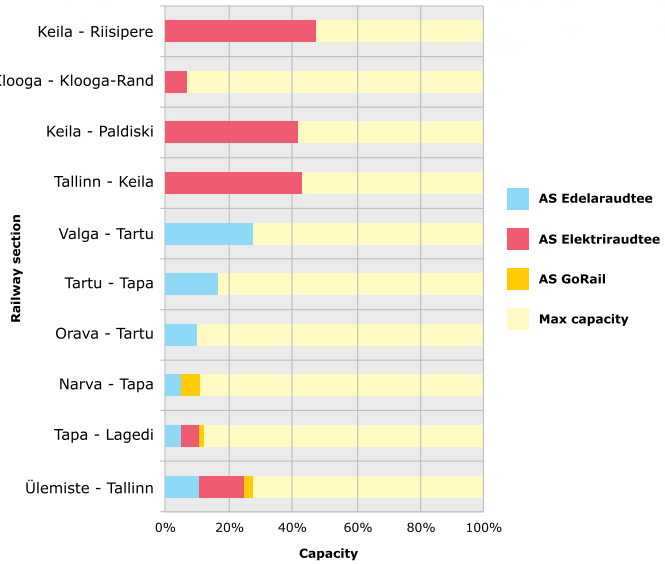
Edelaraudtee AS applied for parts of the infrastructure capacity of Edelaraudtee Infrastruktuuri AS as a railway passenger transport undertaking.

Lagedi railway station

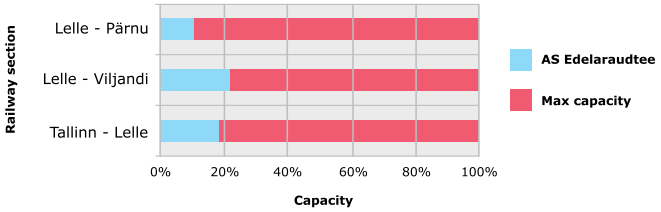


The capacity used by railway freight transport undertakings using the infrastructure of AS EVR Infra in 2009

The capacity used by railway passenger transport undertakings using the infrastructure of AS EVR Infra in 2009



The capacity used by railway passenger transport undertaking using the infrastructure of Edelaraudtee Infrastruktuuri AS in 2009



Fees for the use of railway infrastructure

In 2009, the Ministry of Economic Affairs and Communications updated the methods for calculating the fees for the use of railway infrastructure. The main purpose of the new regulation was to create preconditions necessary to prevent fees for the use from continuously increasing in the situation where the transit market had considerably decreased.

The change in the methods for calculating the fees for the use was necessary in order to maintain the competitiveness of Estonian transport sector. The new methods established the maximum and minimum fees for the use, and the regulation was established, according to which the infrastructure undertakings were provided with possibilities and directions for reducing their operating costs.

The new methods allow the railway infrastructure undertakings to reduce the fees the railway transport undertakings pay for the use of infrastructure; it is also possible to conclude contracts for the use of railway infrastructure with the term of more than one timetabling period and fees for such use will be approved by the Director General of the Estonian Technical Surveillance Authority. The total annual expenses of AS EVR Infra decreased by ca 8 %, and direct expenses by ca 14 %. The total annual expenses of Edelaraudtee Infrastruktuuri AS increased, in comparison with the previous year, by ca 6 %, while the direct expenses decreased by ca 2 %.

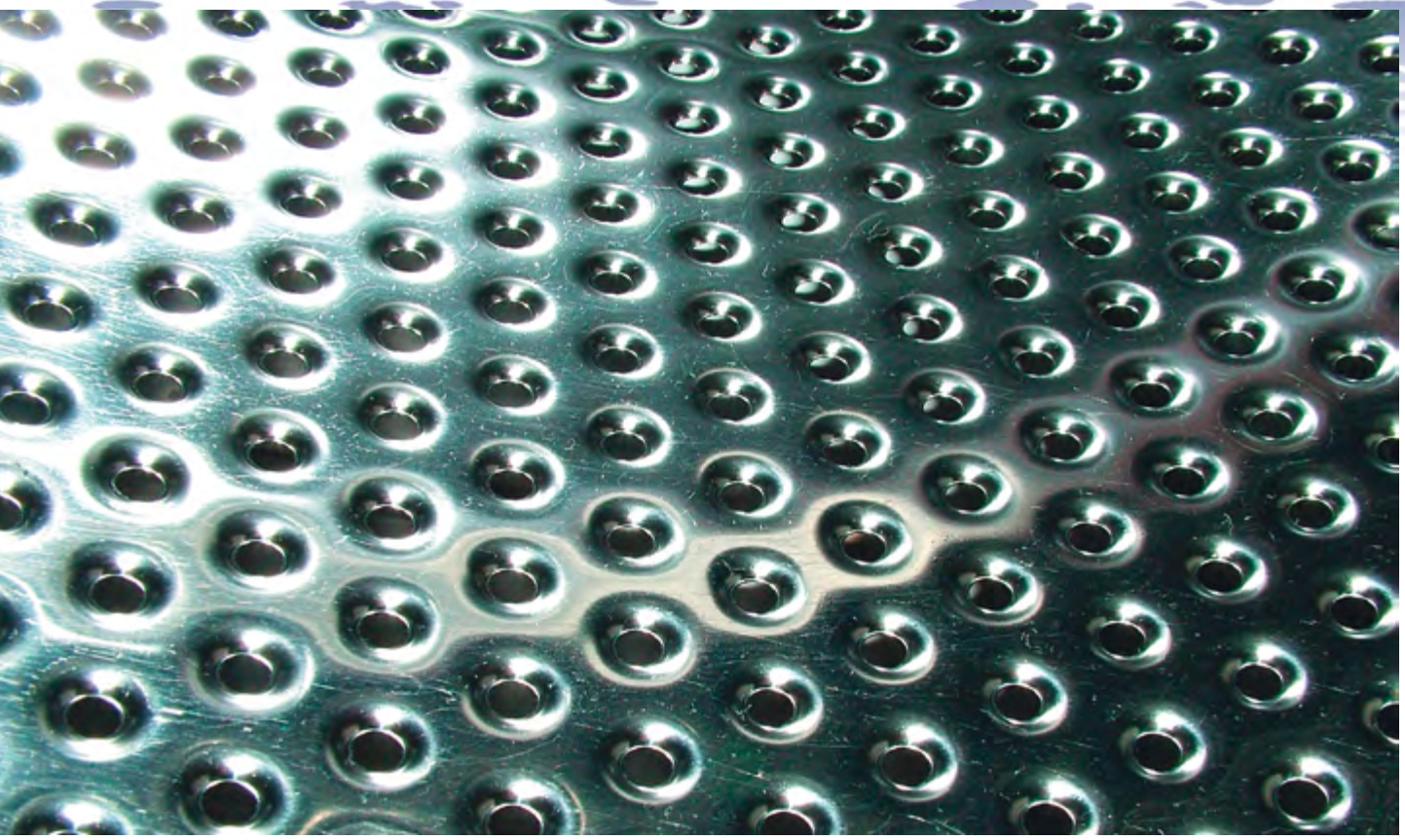
With regard to the timetabling period which started on 31 May 2009, the unit prices of user fees for the use of infrastructure predicted by AS EVR Infra were set at the lowest level the methods allowed, since the railway freight transport undertakings had applied for a significantly larger capacity than was indicated by the actual use of railway infrastructure.
The Director General of the Estonian Technical Surveillance Authority establishes, on a monthly basis, an adjusted fee for the use directly on the basis of traffic volumes of railway transport undertakings, which serves as a basis for the infrastructure undertakings to submit invoices to railway transport undertakings, and it also makes the unit prices considerably more accurate than would be allowed by the framework of determining the predicted fees for the use.

The overview of the developments in Estonian railway sector in 2008 has been completed

The Technical Surveillance Authority has completed the annual report that provides an overview of the developments in Estonian railway sector in 2008. The report focuses on the implementation of the safety directive, the issuing of safety certificates and the surveillance activities.

The structure of the Technical Surveillance Authority and its position among the agencies of the railway sector is also presented. The report includes data concerning railway undertakings and provides the description of activities concerning railway safety in Estonia (legislative drafting, statistics, directions of development). The mTheThe main safety indicators for different years have also been mapped and a summary of safety recommendations is provided.

Organisation structure, officials and budget



Structure and goals

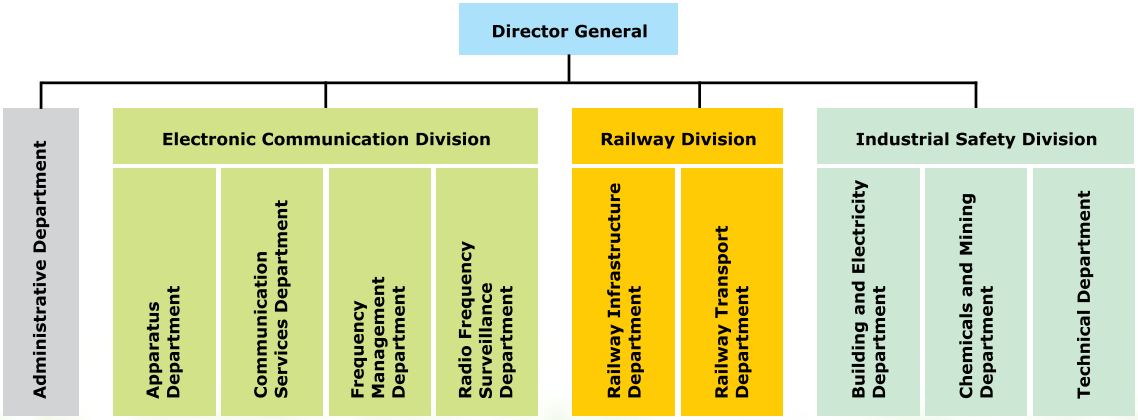
From the beginning of 2009 structural changes were implemented in two divisions. In the Electronic Communication Division, the Department of Numbering Management was joined with the Department of Communication Services, and the regional offices of Radio Frequency Surveillance Department located in Tartu, Pärnu and Kohtla-Järve were closed down.

Three units under the Railway Division were eliminated, and the responsibility for the performance of their tasks was taken over by one department head.

As the only exception, the Railway Infrastructure Unit remained a subordinate unit within the Railway Safety Department.
At the end of the year, preparations began for establishing the new structure of the Industrial Safety Division, which will start functioning from early 2010.

In 2009, the development plan of the Technical Surveillance Authority for 2010–2013 was completed; all officials could have a say in its preparation. In the course of this work, the mission of the agency, the vision for its future and three courses of its actions were formulated: enhancing safety, improving the reliability of services and products, and organizing the use of limited resources.

For each course of action, goals were set; and the measures necessary for achieving them were worded. Indicators were chosen to assess the accomplishment of the goals.



Organisation structure at the end of 2009

Three main goals with appropriate measures and indicators were also laid down for the organization development:

increasing the ease of the use of public services, creating productive work environment, and developing professional skills of the officials while ensuring their competitive remuneration.

To increase the ease of the use of public services for customers, the Technical Surveillance Authority continued the harmonization of its working procedures and the development of electronic solutions for its procedures in 2009. One large operation that will also continue in 2010 was updating the Railway Register and linking it to the surveillance information system JVIS.

In 2009, for creating a productive working environment, the computer system was upgraded, in the course of which a number of desktop computers and old laptops were replaced by new laptops. Internal administrative instructions, for instance, the guidelines for operations procedures and business trips were updated. The summer days gathering tradition of the Authority was continued; in addition to usual competitions and entertainment, lectures about Estonian economic situation and development prospects were held.

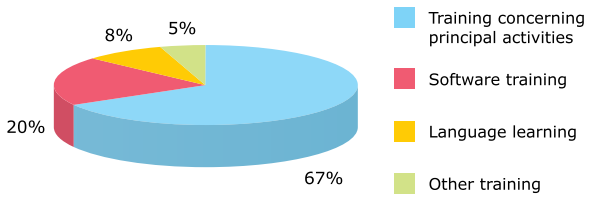
For the second time, the team of the Technical Surveillance Authority participated in the national volleyball tournament for civil servants, which it finished at the 5th place among 11 participants.

In 2009, trainings for a total 357,032 kroons were conducted to improve the professional knowledge and skills of our officials.

The main emphasis was on specific professional group trainings, among which a training course in radio frequencies planning software in Germany was held for six officials.

Foreign language courses were also conducted where 30 % of the expenses were covered by the Technical Surveillance Authority .

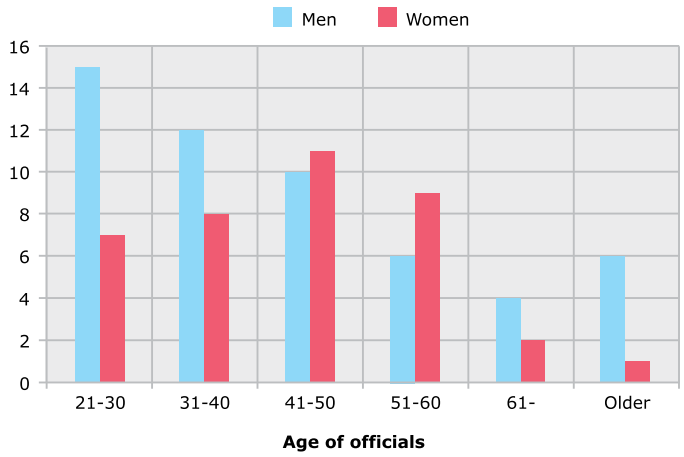
Distribution of various training courses in 2009



Officials

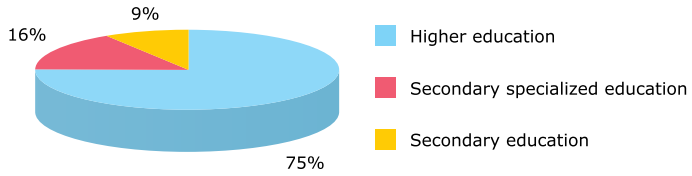
At the end of 2009, the Technical Surveillance Authority was an employer of 91 officials. Within the year, 2 new officials were hired and 9 officials left. Compared to the previous year, the share of male officials became younger, while the general division of officials below the age of 50 into age-groups remained similar to the previous year.

Gender and age distribution of officials in 2009



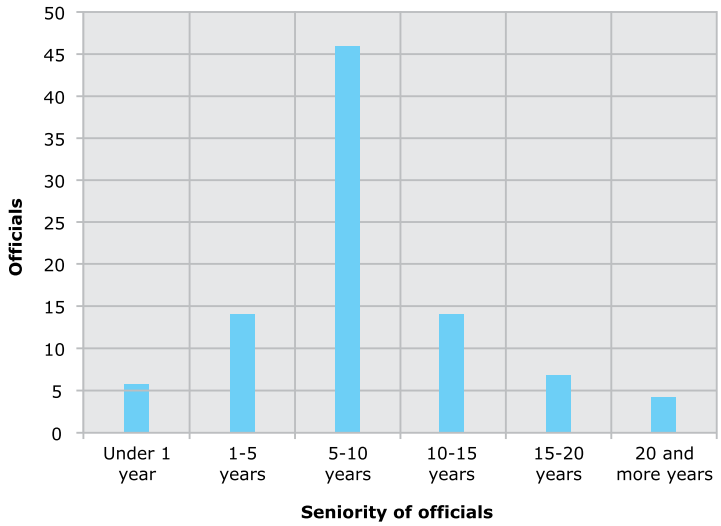
With regard to the distribution according to the level of education, the number of officials with higher education increased by 10 percent, and constituted 75 % by the end of 2009.

Distribution of officials by education in 2009



With regard to civil service seniority, there were no big changes compared to 2008: half of the officials had seniority of 5-10 years, and greater or smaller seniority distributed symmetrically around the average.

Seniority of civil service officials in 2009



Revenue of the state budget

70,987,573 kroons, which is 1 % less than in the previous year, was the some of the state fees received from the procedures performed by the Technical Surveillance Authority in 2009.

Procedure	State fee
Procedures performed under the Mining Act	**18 700**
Issuing, amendment and extension of type-approval certificates	**17 697**
Procedures performed under the Explosive Substances Act	**106 000**
Entries into the Railway or Rail Vehicles Register and issuing building permits and authorisations for use	**659 650**
Issuing, amendment and extension of locomotive driver's licences and safety certificates	**99 250**
Procedures performed under the Digital Signatures Act	**300**
Procedures related to frequencies performed under the Electronic Communications Act	**29 673 845**
Procedures concerning numbering performed under the Electronic Communications Act	**40 412 131**
TOTAL:	**70 987 573**

Distribution of state fees by procedures

Budget

In 2009, the budget for operating expenses of the Technical Surveillance Authority was 34,520,588 kroons and the budget for investments was 1,090,000 kroons, which is about 17 % and 95 % less than in 2008, respectively.

Expenditure description	Budget of 2009
Investments	**1 090 000**
Acquiring mobile monitoring stations for the Technical Surveillance Authority	**900 000**
Development of radio equipment database	**190 000**
Membership fees	**93 880**
Staff costs	**28 319 126**
Remuneration	20 833 930
Fringe benefits	173 000
Taxes related to staff costs	7 312 196
Management costs	**6 201 462**
Administration costs	1 460 000
Research and development costs	150 000
Travel costs	800 000
Training costs	360 000
Total of management costs for registered immovables, buildings and rooms	1 529 000
Management costs for facilities	330 000
Operation and maintenance costs of vehicles	1 099 000
The total of information and communications technology costs	83 000
Management costs for inventory	111 500
Management costs for machinery and equipment of various work applications	232 962
Medical and hygiene costs	42 000
Special clothing and uniforms	4 000
State fee costs	**52 580,00**

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