



YEARBOOK 2010

Estonian Technical Surveillance Authority

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Dear reader,

A summary of the Estonian Technical Surveillance Authority's activities in 2010 has been completed.

In 2010, Estonia left behind the economic crisis that had started a few years before. The clearly visible economic recovery was positively supported by anticipation of the arrival of the euro, and continued throughout the year. None of the areas of activity of the Estonian Technical Surveillance Authority were left unaffected by these developments: the activity of the companies increased, new projects were started or old ones continued, equipment was purchased, etc. The more favourable economic situation also affected the work of the Technical Surveillance Authority. It increased the volume of national supervision carried out by us, brought more permission and harmonisation procedures, increased the number of information requests, etc.

The most common reason for ignoring valid safety requirements or complying with them insufficiently is the low level of awareness of the parties. Therefore, the Technical Surveillance Authority paid a great deal of attention to consultations and cooperation with associations of different fields and increased the volume of preventive controls. In my opinion, we have been a constructive and demanding partner to our clients.

2010 was successful for the Technical Surveillance Authority in many ways, which we will further discuss on the following pages. From our numerous challenges I would like to name two, in which long-lasting work was successfully completed and influence can be seen for many years to come. On 01.07.2010, Estonia switched over to digital television. For the Technical Surveillance Authority, this meant long and intensive work in preparations for the switchover and measuring the coverage of the digital transmission. Our work did not end with turning off the analogue signal - follow-up activities for constant improvement of the transmission quality are on-going. Secondly, in 2010, final solutions were found in the process of opening the railway transportation market that started many years ago, in which the last court actions setting a precedent on price regulation of railway infrastructure ended successfully for the Technical Surveillance Authority.

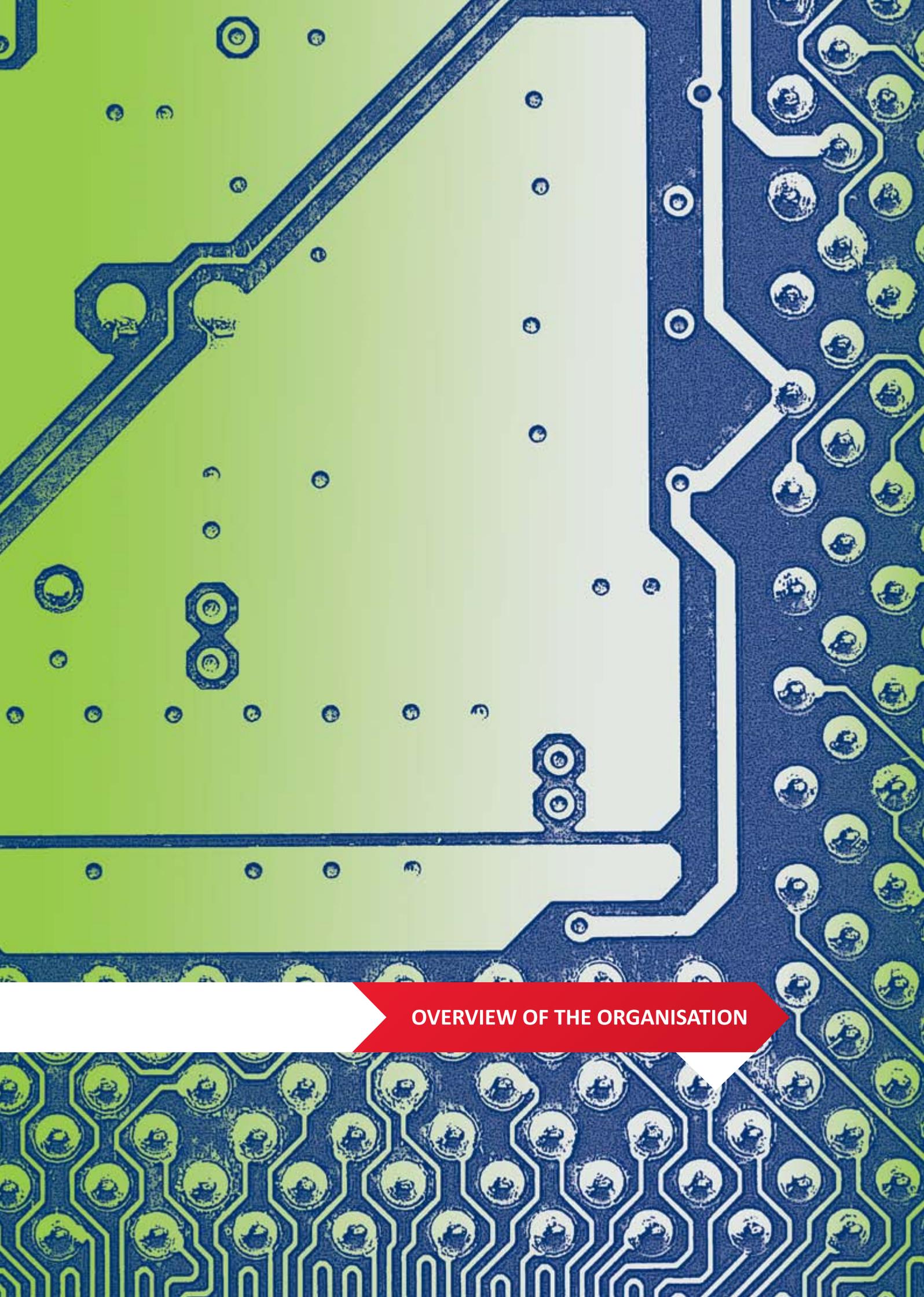
In 2011, the e-service module and safety web of the Technical Surveillance Authority will be implemented, making communication and exchange of information with clients and partners significantly more convenient and flexible. We are looking forward to it.



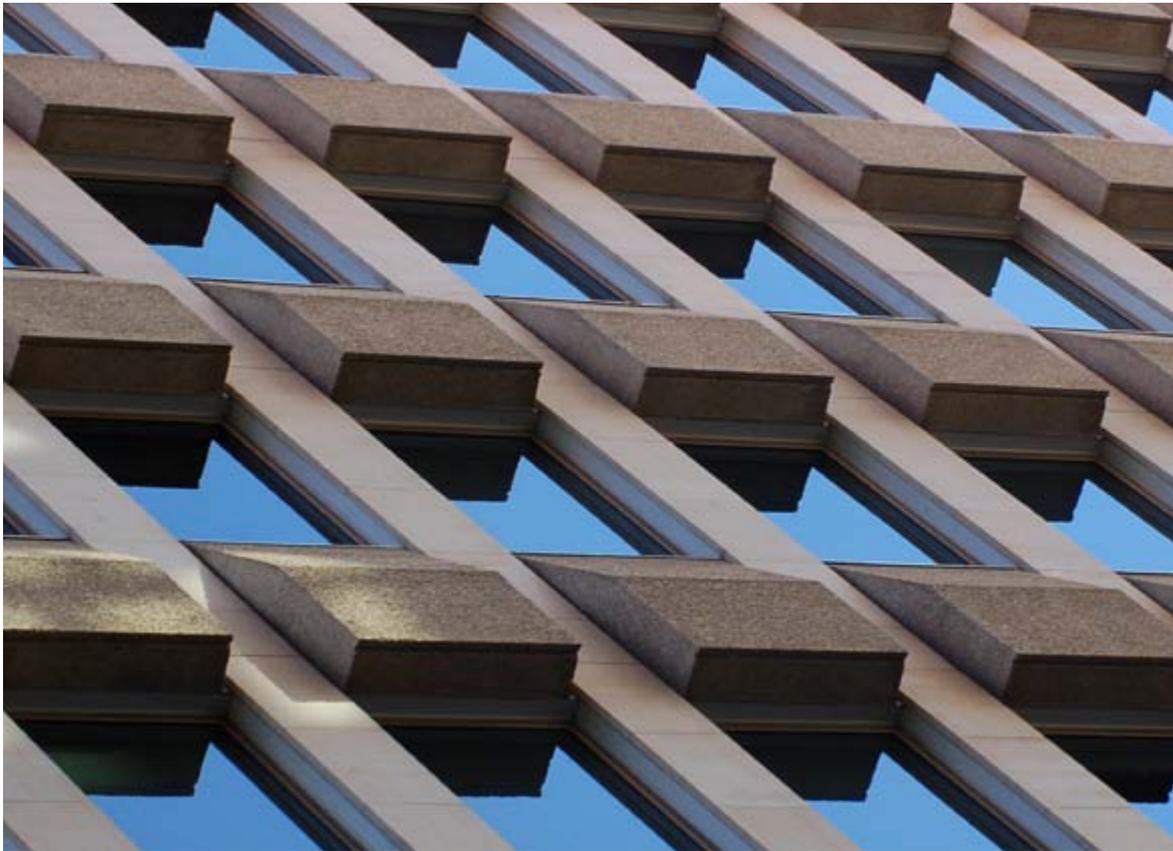
With best wishes,

Raigo Uukkivi

Director General



OVERVIEW OF THE ORGANISATION



Overview of the organisation

The Technical Surveillance Authority is an agency working under the Ministry of Economic Affairs and Communications with an objective to help implement the national economic policies through the improvement of safety, organizing sensible use of limited resources and increasing the reliability of products in the field of manufacturing environments, industrial equipment, railway and electronic communication.

In order to achieve these objectives, we supervise the implementation of requirements established by the legislation relevant to its fields of activities, participate in developing legislation and development plans, and in preparation and implementation of projects related to its fields of activities.

The structure of the Technical Surveillance Authority comprises three divisions: the Electronic Communication Division, Railway Division and Industrial Safety Division.

Values

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

The main values of the Technical Surveillance Authority are:

- Being an integral state agency with clearly understandable working principles and a good reputation, offering interesting employment which presents opportunities for development, a good working environment and competitive salaries, appreciates the initiative and competence of officials, and requires responsibility and honesty.

- Being a competent and reliable partner whose activities are transparent, solutions professional and impartial, with affairs managed in a proper manner. Prevention plays an important role in our work. The authority granted to us by legislation is exercised in a deliberate and proportionate 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 of the state; always willing to share and learn.

Purposes

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

In working towards greater safety, we have two main goals: ensuring the safety of objects and processes and increasing the corresponding awareness.

As to increasing reliability, we aim to ensure the availability of services and their conformity with the requirements, as well as compatibility of products and sustainable use of resources, and increase reliability and awareness.

In organization of the use of limited resources, the Technical Surveillance Authority aims to ensure the optimum use of limited resources and ensure their sustainable use.



INCREASING SAFETY



Increasing safety: operations and results

In the field of **construction** (buildings and facilities), we check conformity with the set requirements for construction and later use, as well as the performance of obligations of the participants in the construction process (owner, builder, authority exercising owner supervision, etc.). We also check the correctness of registration at the register of economic activities and the availability of the required specialist in charge.

As to **electrical safety**, we inspect the safety and conformity of the use of electrical installations, conformity with the safety requirements set for electrical contractors, and the competence of people in charge. We also inspect the conformity of working in protective zones of line facilities. We exercise supervision over technical inspection bodies and institutions dealing with certification of staff.

Supervision of handling of dangerous chemicals involving safety of handling, determining the category of danger, monitoring the compliance of the information sheet and safety report and fulfilling the requirement to inform about a chemical.

In the field of **mining and quarrying**, we monitor the conformity of the mining and quarrying process and the documentation related (projects, development plans, and technical documentation). We also carry out competency examinations for the specialists in charge of mining and quarrying.

In the field of **explosive substances and pyrotechnic articles**, we monitor handling (manufacturing, storing and use), compliance of the objects related to it and performance of the more dangerous blastings. In addition to that, we issue all the certificates needed to work in this field and carry out competency examinations for the staff in the sector of explosive substances and handlers of pyrotechnic articles.

In respect of **machinery safety** supervision, we inspect the conformity of machinery, including its safety components. As to cranes, freight hoists and lifting devices 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. 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 cableways** (mostly ski lifts in Estonia), we check the conformity of the technical inspection body's activity and the activity of the installers, repairers and servicers, as well as personnel certifiers. Random checks of lifts and hoists are performed.

To guarantee the safety of the use of **gaseous fuel** (natural gas, liquefied gas, biogas and derived gas), we monitor 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, as well as conformity to the requirements for installation, use, repair, alteration and production of hazardous liquid tanks, and the performance of duties of the technical inspection bodies and manufacturers. We also monitor the conformity of activities in the protected zone of pressure piping systems.

In respect to **railway safety**, we issue safety certificates to railway undertakings and safety authorisations to infrastructure managers, licences for construction and certificates of use of railway facilities, 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 Road Administration, 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 protection zone. We also 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 organization of carriage of dangerous goods.

Buildings and construction activities

In 2010, the Estonian Technical Surveillance Authority conducted 50 procedures in order to check the conformity of buildings and construction activities to the requirements, initiated 4 misdemeanour procedures and issued 9 precepts. The existence of registration at the register of economic activities and correctness of data was checked for 102 undertakings operating in this field. 41 precepts were made to restore the correctness of the register of economic activities data, and, if repeatedly ignored, registration at the register of economic activities was deleted in the case of 9 undertakings. The most common shortcomings were related to documentation of construction, for example, when solutions, materials or devices marked in the building design documentation were changed in the course of construction, but such deviations were not marked as changes to the construction project. One of the common violations was the failure by subcontractors to make entries in the record of construction work, and not preserving the documentation by the required deadline.

Documentation of construction activities

In supervising the compliance of construction activities, one of the most frequent violations found was insufficient documentation of the construction activities. According to the Building Act, the person performing the construction shall document the works performed during the construction process. Technical documentation of construction work shall include the building design documentation and its changes, as-built drawings, record of construction work, reports on covered works, minutes of the work meetings, declarations of conformity or certificates of conformity of the construction products used, and other documentation describing the construction work.

There are situations in which the solutions, materials or equipment stated in building design documentation have been changed during construction work, but such deviations were not marked as changes to the construction project nor mentioned in the record of construction work or the reports on covered works. There is also a widespread misconception that the record of construction work is kept only by the main contractor of the object and subcontractors are not obligated to do so. Such disregard of the requirement under the Building Act leads to highly perfunctory construction journals that do not present a necessary overview of the performance of the construction works, the performers, the construction materials and devices used, weather conditions, etc.

Another problem related to documentation of construction activities is not preserving the documentation for the time required. The Building Act states that the persons who document construction activities, that is, building contractors,

have a legal obligation to preserve this documentation for at least seven years or until it has been archived in accordance with the Archives Act. In addition to the compiler of the documentation, the owner of the building also shall preserve the building and the documentation on its construction process until the building is demolished or the documentation archived.

Unfortunately, non-performance of the obligation to document the construction activities leads to a situation in which supervising the construction activities, compliance of the use or maintenance of construction and later reconstruction or expansion is significantly complicated.



Survey “Estimation of the impact of snow load to the carrying capacity of quonset buildings”

Because of the snowy winters of the previous years and quonset building collapses that have taken place all over Estonia, the Technical Surveillance Authority carried out a survey in 2010 to assess the safety of quonset buildings on the basis of the current design standards, and the impact of snow load on the carrying capacity of quonset buildings. The objective of this survey is to map the risks related to the use of quonset buildings in winter periods, and the preventative measures to avoid snow-related collapses.

According to the construction register, there are approximately 500 quonset buildings in Estonia, 15% of which are being used as public buildings, i.e. shops, offices, sports halls. During the course of the survey, different types of quonset buildings in Tallinn with different applications were inspected and measured, the preserved building design documentation was reviewed, types of truss were identified and reference calculations made to estimate the impact of snow load to the carrying capacity of the quonset buildings. On the basis of on-the-spot inspections and theoretical reference calculations made during the survey, no final estimation can be made on the actual carrying capacity and operational safety of all of the quonset buildings, but the survey shows that upon exceeding a certain amount of snow load, construction halls may be in danger of collapsing.

Quonset buildings are mostly designed and built on the basis of snow load determined according to the building norms of that time, which may be up to 2.5 times lower than the current standard prescribes. Thus, the carrying capacity of quonset buildings built in accordance with the previous requirements may be jeopardised by a smaller amount of snow than was calculated during the design process. In addition, the

load bearing capacity of most of the quonset buildings may be reduced by their amortization, low construction quality, possible mistakes in their design or construction, construction works that were not in compliance with the building design documentation, replacement of original products, damage due to disassembly and reconstruction, use or maintenance not in compliance with the application of the building.

The calculations made during the survey show that the layer of fresh snow having fallen on a quonset building may not exceed 1.0 m; the layer of old snow 0.5 m and the layer of wet snow 0.25 m.

The safe use of quonset buildings is the responsibility of their owners. They have an obligation to ensure that the quonset buildings owned by them are in compliance with the requirements for safety of buildings prescribed in the Building Act.

Snow-related overload is dangerous to buildings

According to the information received by the Technical Surveillance Authority, there were 130 collapses due to snow overload in 2010. Due to snow-related collapses, the products used on constructions are the most frequently deformed or broken, i.e. corrugated sheet metal roof coverings, gutters, protruding parts of a building, i.e. balconies, canopies, etc. Snow overload is the biggest threat to light buildings of steel or wood construction, parts of buildings (shelters, canopies, cornices), buildings with a flat or inclined roof (petrol stations, sports facilities, hangars, decks) and older depreciated buildings.

Safety of the building is the responsibility of the owner. According to the Building Act, a construction shall be built in a manner that does not endanger the life, health and property of people, and that the loads affecting the construction, including snow load, would not cause the collapse of the construction or its parts. In order to prevent the dangers of snow, construction owners shall continuously monitor the amount of snow on the roof and ensure the timely removal of snow and ice. It also needs to be visually assessed whether the snow has caused visible damage to the constructions of the building.

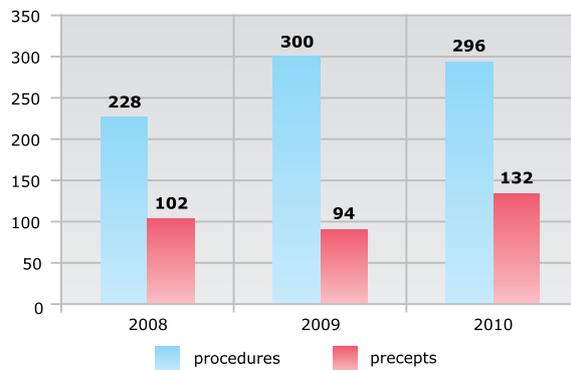
If the constructions have changed their shape, use of the building must immediately be stopped and a qualified specialist called to identify the operations for ensuring the stability and safety of the building.

Electrical installations and works

The Technical Surveillance Authority supervises electrical installations and works across Estonia.

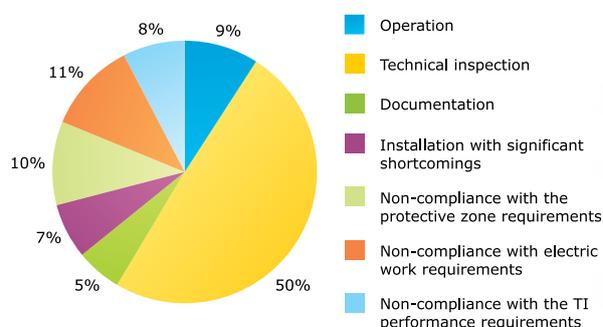
296 procedures were conducted in 2010, in the course of which 132 precepts were issued. Of those procedures, 24 were related to technical inspection bodies, 32 to electrical works, 190 to the use of electrical installations, 45 to non-compliance with the protected zone requirements and 7 to the investigation of accidents. Misdemeanour procedures were initiated on 14 occasions.

5 decisions were made to delete an undertaking as an electrical contractor or technical inspection body from the register of economic activities.



Supervision of electrical installations and works

The number of procedures in 2010 was similar to the number in 2009. The number of inspected electrical installations has decreased somewhat. At the same time, the number of procedures to identify conformity with the requirements of protective zones and electrical works was increased. In all of the prescribed areas, more precepts were made in 2010. In comparison to the previous years, the relation of the percentage to the identified shortcomings has remained the same.

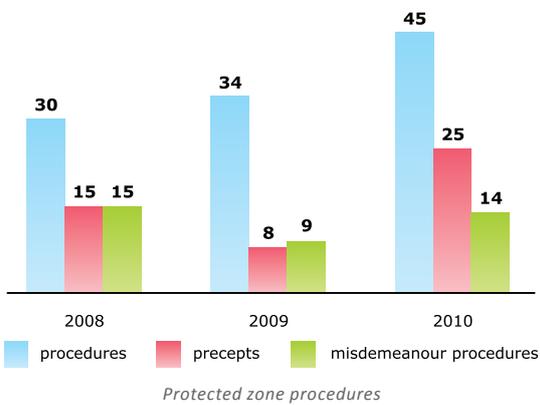


Shortcomings identified in relation to the use of electrical installations

190 procedures and 73 precepts initiated were related to the use of electrical installations. During the procedures, the following was checked:

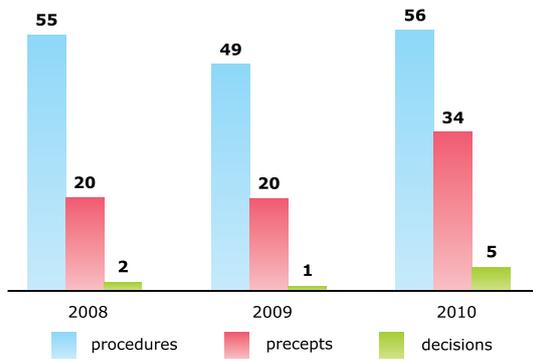
- 49 industrial installations, 23 precepts were made
- 5 objects with a risk of a major accident, 2 precepts were made
- 10 business and office buildings, 5 precepts were made
- 21 entertainment installations (mostly nightclubs), 8 precepts were made
- 14 places of commerce, 5 precepts were made
- 9 fast food restaurants, 2 precepts were made
- 9 car washes, 1 precept was made
- 9 educational and cultural objects, 4 precepts were made
- 8 medical institutions, 5 precepts were made

The main shortcomings were the lack or expiry of technical inspection, shortcomings in organization of maintenance (i.e. no person in control of an electrical installation or lack of a maintenance plan) and shortcomings in documentation of the electrical installation. The main objects inspected were industrial installations, crowded installations (nightclubs, shopping centres), network installations, etc. 45 procedures and 14 misdemeanour procedures were initiated in order to determine the violation of the requirements for the protected zone and 25 precepts were made. The main shortcoming was negligence in excavation works in protective zones of underground cables and lack of permits to work in protective zones of underground cables or overhead transmission lines.



Protected zone procedures

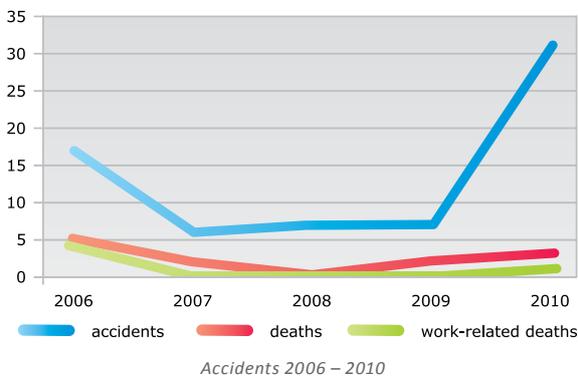
During the conformity supervision of electrical work requirements, 56 procedures were initiated, due to which 34 precepts were made, 5 undertakings were removed from the register of economic activities, and 4 certificates of adequacy issued by the technical inspection body were cancelled. The main problems were the incorrectness of the data entered in the register of economic activities by the undertakings and the mistakes made by the technical inspection body during the inspection - on 16 occasions, electrical work requirements were violated, and on 11 times, the requirements for performance of technical control.



Procedures of electrical work requirements

Electrical accidents

In 2010, Technical Surveillance Authority received 31 notifications on electrical accidents. 3 people were killed in the accidents, 4 were severely injured and 24 suffered minor injuries.



Accidents 2006 - 2010

Compared to the previous year, the number of electrical accidents has increased significantly on the chart. This is not due to considerable worsening of the electrical safety situation in Estonia. It is primarily related to the fact that since 2010, the Technical Surveillance Authority also receives information on electrical accidents from the Emergency Centre. Electrical accidents in 2010 mostly took place under domestic conditions and had minor consequences.

6 reports were received regarding electrical accidents involving small children, mostly due to the touching of live electrical wires or uncovered electric devices. According to the messages received by the Emergency Centre, most of the accidents took place during evening hours, at home, and most of the victims were male (approximately 80%).

Similarly to the previous years, most accidents took place in Northern Estonia (52%). The division of accidents in other regions of Estonia was relatively equal, remaining in the limit of 15% from the total number of accidents.

The main reason for accidents in recent years has been disregard for electrical safety requirements and wrongful operations. 2010 was no exception - more than three quarters of the accidents were caused by failure to comply with safety requirements. Less than one quarter of the accidents were caused by the use of defective electrical appliances. At that, most of the accidents were caused by the actions of the victim, or by the actions of someone else (approximately 20%).

In addition to electrical traumas, the Technical Surveillance Authority also receives messages from the Emergency Centre regarding power failures. In total, 97 such messages were received in the second half of 2010. Most of the accidents were related to overhead transmission lines, mainly to fallen power lines and the falling of posts, trees or branches onto the overhead transmission lines. There were also reports of fires in distribution centres and substations. A relatively high number of the accidents having taken place were related to storms that had hit Estonia, and took place in Southern-Estonia, mostly in Tartu County.

Safety is ensured by adherence to electrical safety requirements

According to statistics, there are almost 200 electricity-related fires in Estonia every year. In order to ensure safety, the owners and possessors of buildings shall fully conform to the electrical safety requirements. Electrical safety requirements have been laid down by the Electrical Safety Act in Estonia. The purpose of this Act is to reduce and avoid electricity-related dangers and electromagnetic disturbances to people, property and the environment. In addition to the general electrical safety requirements, the main requirements to the owners and possessors of buildings are the technical inspection of electrical installations and organization of maintenance.

During the technical inspection, the technical condition of electrical installations is inspected, documentation and the test and measurement results are viewed, and additional audit measurement tests are done when necessary. Based on the results of the inspection it is estimated whether the electrical installation is in order or not. Technical inspection may be carried out only by undertakings registered in the register of economic activities as technical inspection bodies of electrical installations. In residential buildings with several apartments, technical inspection needs to be carried out in the electrical installation jointly used by the apartment owners. These are corridors, basements, attics, etc. Regular inspection is voluntary in apartments.

The purpose of organization of maintenance is to ensure safety and functioning of the electrical installation.

The person in control of an electrical installation shall compile a maintenance plan for the electrical installation, inspect

its implementation and always be available to perform the necessary maintenance works. An electrical installation with a rated current of over 100 amps for the main circuit breaker must have a person in control of the electrical installation. A person in control of an electrical installation is not required for electrical installations with a smaller main circuit breaker, but is recommended. The person in control of an electrical installation can only be a person or an enterprise dealing with electrical works and having a corresponding certificate of competency.

Electrical and fire safety roundtables for apartment associations

In 2010, information days on electrical and fire safety were organised for apartment associations, discussing, among other things, the issues of the new and the old voltage systems, electrical and fire safety requirements and the requirements related to administration of apartment buildings. Specialists from the Technical Surveillance Authority, the North-Estonian Regional Rescue Centre and the Distribution Network of Eesti Energia made presentations and answered questions during these information days.

Machinery

The Technical Surveillance Department checks the existence and conformity of machinery with required documentation and markings, along with the presence of warning texts in Estonian, including interchangeable equipment, safety components, lifting accessories, chains, ropes and webbing, removable mechanical transmission devices and partly completed machinery. In respect of cranes, freight hoists and other machinery that require registration, checks are made on the conformity of the persons responsible and the operators,



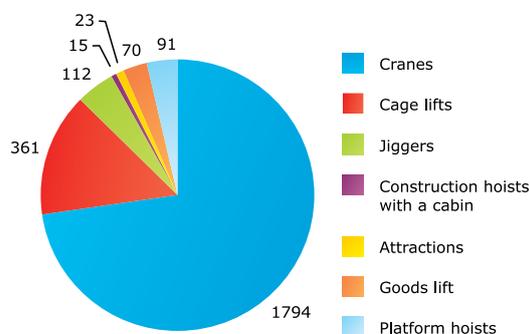
In 2010, the Technical Surveillance Authority co-operated in the field of machinery safety with the Labour Inspectorate, the Consumer Protection Board, the Technical Inspection Centre, the Estonian Centre for Standardisation, the Tax and Customs Board, the Rescue Board, the Road Administration, the Police, and Finland's Ministry of Social Affairs and Health.

The most common problem with machinery marketed in 2010 was insufficient marking and untranslated instructions. Undertakings are continually trying to place machinery without a CE-marking on the market; in some cases, manufacturer markings are missing, declarations of conformity are not provided with the machinery or cannot be presented, sometimes even user manuals are completely missing. In cooperation with the Tax and Customs Board, entry of ATVs, large quantities of lawn mowers and other particular machinery from third countries to the European Union market, was prevented, since these failed to conform to the requirements enforced to.

In 2010, the Technical Surveillance Authority carried out a misdemeanour procedure in relation to the use of an unregistered and technically unchecked mobile crane. Pecuniary punishment was also imposed to the undertaking that marketed garden shredders and sawbenches without a CE-marking.

Development of the motions to amend the Machinery Safety Act and its sub-acts was started, mostly in relation to the need to implement additional requirements on the use of devices used in amusement parks.

2466 active devices were registered in the database of the Technical Surveillance Authority as of 31.12.2010 (increase of 2.3%):



Lifts and cableways

In 2010, 56 procedures were initiated, 49 of which on the basis of the Lifts and Cableway Installations Safety Act and 11 on the basis of the Machinery Safety Act. 56 administrative acts, 31 precepts and 1 warning of penalty payment were issued as a result of these procedures.

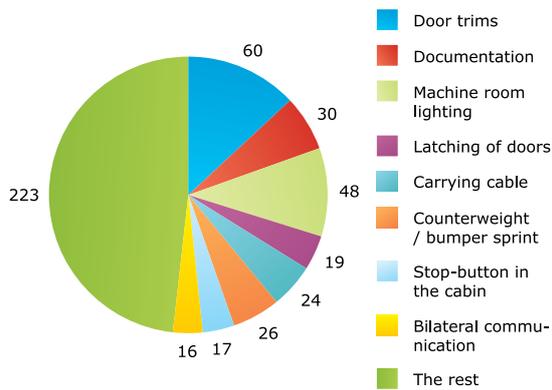
A procedure was initiated regarding the owners or possessors of 45 lifts, 8 machines (attraction, goods lift and platform hoist) and 2 cableways. In total, the use of 136 lifts, 3 goods lifts, 7 platform hoists, 11 attractions and 5 cableways was inspected in 2010. According to the Technical Surveillance Authority, no accidents involving lifts or cableways took place in 2010. According to the data presented by the technical inspection body, technical inspection of 3626 lifts and 7 cableways was carried out. 3014 (83%) of the technical inspections of lifts had a positive result.

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 2010, the Technical Surveillance Authority initiated 106 procedures, during which 256 machines and devices were inspected. Precepts were issued in 23% of the cases.

In 2010, another lift safety council meeting took place in the Technical Surveillance Authority, in which energy conservation of lifts, fire integrity of machine and lift doors, requirements for escalators, etc., were discussed. The Members of the Council were introduced to the research on the energy efficiency of the Imanta 41 lift, ordered by the Technical Surveillance Authority and carried out by the Technical Inspection Centre.

In the beginning of 2010, the Technical Surveillance Authority participated in the meeting of the cableway directive working group and market supervision authorities in Brussels. It was decided to create a working group to harmonise and specify the areas of application of the lift and cableway directives.

In 2010, 3626 technical inspections of lifts were carried out, 3014 or 83% of which had a positive result. Technical shortcomings were identified on 353 occasions. In the rest of the cases, supervisors of the use of lifts were not appointed.



The most common shortcomings found during technical inspection of lifts

The state helps to increase the energy conservation of the lifts

In February 2010, the Minister of Economic Affairs and Communications changed the programme “Renovation Loan for Apartment Buildings”, as a result of which financing lift renovations from a renovation loan for apartment buildings became eligible. Since ensuring energy efficiency is the most important aspect in the use of the means of the Structural Fund, it is necessary to perform a comparative survey on the energy efficiency of lifts that have been modernised and those that have not been modernised.

The corresponding survey was ordered by the Technical Surveillance Authority from the Technical Inspection Centre. During the survey, measurements were made in a typical 9-storey apartment building in Tallinn. The survey found that the energy consumption of a modernised lift per one ride was 2.51 times less than the energy consumption of a lift that had not been modernised.

The biggest concern in Estonia is the amortisation of the obsolete, so-called, Soviet-time lifts. It is estimated that 30% of the lifts used in Estonia are in excess of 25 years old and most of them have not undergone thorough repairs. Lift owners should critically view the condition of their lifts and, if necessary, order an additional expert analysis from a maintenance organization or a technical inspection body. Information on the financing opportunities in the programme “Renovation Loan for Apartment Buildings” is available on the webpage of the Ministry of Economic Affairs and Communications at www.mkm.ee/korterite-renoveerimislaen/.



Pressure equipment

In respect to pressure equipment, the main focus of the Technical Surveillance Authority in 2010 was the supervision of use and operation of the boilers subject to registration, and inspection of the data of the information system. According to the database, requests were sent out on carrying out the technical inspection of the boilers and confirming the data of the supervisor.

On 31 occasions, the Technical Surveillance Authority was informed of removal of the boilers from service. On five occasions, the owner performed the technical inspection and on one occasion, an undertaking received a precept on violation of the technical inspection requirements.

In addition to the request sent out, the Technical Surveillance Authority performed sample supervision in the undertakings dealing with pressure equipment, inspecting the compliance of the pressure devices owned by the undertaking and the supervisor to the requirements under the Pressure Equipment Safety Act.

The main shortcomings detected were non-performance of technical inspection, lack of a supervisor for the use of pressure equipment, and lacking qualifications.

Gas appliances and installations

In respect to gas, the main focus of the Technical Surveillance Authority in 2010 was the supervision of use and operation. The use and construction of gas installations and performance of gas works were inspected. Supervision included 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 were performed regarding the competence of personnel, the validity of professional certificates, and the existence of relevant registrations in the register of economic activities. Out of the objects checked, the Technical Surveillance Authority identified shortcomings on 21 occasions.

The main problems identified in the course of supervision of the gas installations subject to registration, were the lack of a supervisor and insufficient documentation. Also problematic

are gas devices not subject to registration that are more than 15 years old and have not undergone repeated technical inspection. The main shortcomings found in the course of market supervision were absence of the CE conformity marking and of the declaration of conformity.

Gas stoves and water heaters used in home

Safety requirements tend to be taken too lightly in ordering and performing gas works. The main problems occur when gas works are ordered from an enterprise that does not have the necessary skills or a corresponding licence. Prior to the commencement of works, the registration of the performer of the gas works in the register of economic activities should be checked. It is also important to be kept in mind that a gas device needs to be installed in such a manner that the maintenance, checking and access to the control device would not be hindered. This requirement is especially important in relatively old buildings where gas installations may have become out-dated 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 a home gas appliance, the use of which has exceeded its prescribed service life of 15 years; and the appliance may be used only if it is in good technical condition. Technical inspection shall be performed every four years on devices that are more than 15 years old.

In installing new gas installations, the project shall be ordered from a competent enterprise. A project in conformity with the requirements must include an explanatory memorandum, plans and drawings, an axonometric scheme, location of smoke flues on the facade of the building and information on the pressure test carried out. When replacing an existing gas installation with a newer one, if the power of the device does not change, a new project is not required. However, when pipes are relocated during the installation process of the new device, or a more powerful gas device is involved, a new project is necessary.

In order to avoid a situation in which a gas installation fails to pass a technical inspection due to a faulty project, it is advisable to coordinate the project beforehand with the technical inspection body. Before using a gas device, its user manual shall be read thoroughly.

Handling dangerous chemicals

The Technical Surveillance Authority performs state supervision over compliance with the requirements stated in the Chemicals Act and the legislative requirements provided on the basis of this Act, as well as performance of the requirements of calculation and notification of the chemical.

The Chemicals Act has been harmonised by several directives. From the viewpoint of the Technical Surveillance Authority, the most important of these is the Seveso II directive, involving the safe handling of dangerous chemicals, calculation of the category of harmfulness, conformity of an information sheet, risk analysis, safety assurance system and a safety report.

The database of the Technical Surveillance Authority includes 23 undertakings with category A danger of a major accident, 27 undertakings with category B danger of a major accident, and 132 dangerous undertakings.

In 2010, 51 supervision procedures were initiated in the field of dangerous chemicals. Out of the undertakings inspected, 30 were in danger of a major accident (18 of category A and 12 of category B). 4 enterprises were inspected for the first time. During the procedures, 14 precepts and one warning was made.

During 2010, the Technical Surveillance Authority received 10 risk analyses, 13 safety reports, 5 safety insurance systems and 30 information sheets.

Undertakings often regard preparation of documents as a formality, especially in the case of smaller handlers of dangerous chemicals. Generally, a work has been ordered from outside and the enterprise has not participated in its compilation. The qualifications of the persons performing risk analysis are often low, the documentation presented does not conform to the legal requirements and the supervisory officials spend a lot of time reviewing the negligently compiled works.

For example, a risk analysis is performed on the basis of area methodology, a risk class is ascertained (i.e. 3C) and nothing else is done. The danger zones are determined on the basis of the U.S. motorway accident manual and are therefore too extensive. The possible reasons for the accident and the factors causing it remain uncertain in that undertaking.

The descriptions of safety insurance systems have gradually improved. The documents presented paint quite a truthful picture of what is going on in the undertaking, and these descriptions include a decreasing amount of vision.

There have been numerous cases in which it has appeared during the on-the-spot-check that the undertaking has a working safety insurance system, but the compilers of the system description have not known how to add it to the description.

In 2010, cooperation and exchange of information with the Rescue Board continued.

In 2010, 23 CCA (Committee of Competent Authorities) meetings and seminars in Madrid were attended, as well as 24 CCA meeting and seminar in Geneva and the MJV (Mutual Joint Visits programme for inspections) in Fulda.

Changes in legislative drafting regarding handling of dangerous chemicals

1. Draft to amend the Chemicals Act

The working group for developing a new Chemicals Act was summoned already in 2007, but development of the Act was discontinued. The subject became topical again in the end of 2009, in relation to ascertaining surveillance over the REACH regulation. Representatives of the Technical Surveillance Authority participated in several working groups associated with ascertaining supervision, but REACH supervision could not be implemented without changing the law. In the beginning of 2010, the working group was summoned again. It was decided not to make a new Act, but to amend the existing one.

The amendments were divided into three large groups:

- chemical-related amendments (REACH, CLP, notification)
- handling-related amendments (activity licence, insurance)
- jurisdiction of supervision (supervision over execution of law is done by several agencies and inspections, therefore their jurisdictions needed to be clearly ascertained)

The amendments entered into force on 01.01.2011. Due to that, handlers of dangerous chemicals with a dangerous enterprise or an undertaking with a danger of a major accident, shall apply for an activity licence from the Technical Surveillance Authority. The procedure for reviewing documents also changed. All of the required documentation shall be presented to the Technical Surveillance Authority which will send it to the Rescue Board and the local government.

When the presented documents conform to the requirements, an enterprise shall be issued an activity licence, it shall be entered into the register of economic activities, and the Rescue Board and local government shall be informed.

2. Draft regulation of category

Due to long-term practice and a need to eliminate discrepancies between Annexes 1 and 2 of the regulation, a proposal was made to change the minimum danger norms on which the category is based. In making the motions to amend, the experience of other countries, especially Finland, was taken into consideration. For that, the requirements of the Finnish Chemicals Act and the corresponding regulations were thoroughly examined. By this change, retail petrol stations and smaller boiler houses will no longer be considered hazardous undertakings.

3. Draft regulation Requirements for the mandatory documentation and its preparation of dangerous enterprises and undertakings with a danger of a major accident, information given to the public and informing of an accident

In cooperation with the Rescue Board, the requirements to the documentation presented by undertakings were amended and specified. Criteria for determining danger zones on the basis of risk analysis were developed and several discussions and meetings took place. The draft is currently being harmonised.

Pyrotechnics and explosive substances

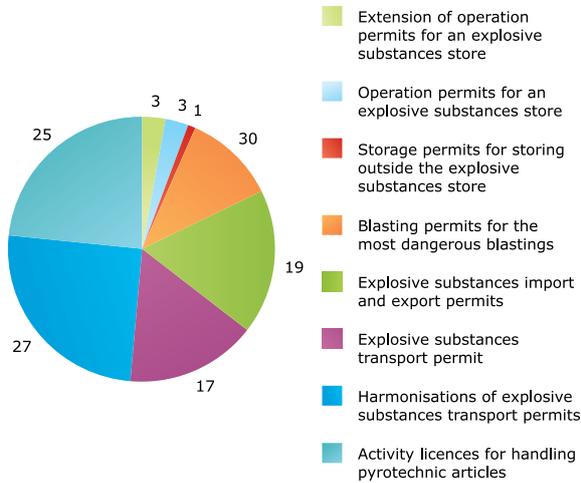
The Technical Surveillance Authority performs state supervision over compliance with the requirements stated in the Explosive Substances Act and the legislative requirements provided on the basis of this Act. It falls within the competence of the Technical Surveillance Authority to supervise the conformity 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 of explosive substances and pyrotechnical products, with the requirements.

The conformity of the objects connected with handling explosive substances to the requirements is also assessed. In addition to that, the Technical Surveillance Authority issues the permits related to pyrotechnics and explosive substances, as well as certificates of competency for the specialists in this field.

In 2010, 15 supervision procedures were initiated. In the course of these procedures, 5 precepts were made, 2 of them with a warning. All precepts were fulfilled on time.

A misdemeanour procedure was initiated against two legal and one natural person. The procedures involving the legal persons are still on-going. The natural person was issued a fine under general procedure of misdemeanour, which was contested by the person in the county court.

According to the Technical Surveillance Authority, no accidents occurred in the handling of explosive substances (including pyrotechnical products) in 2010.



Permits in the field of pyrotechnics and explosive substances issued in 2010

In 2010, 5 notices on transport of pyrotechnic articles from the European Union to Estonia were received.

84 pyrotechnic articles were added to the register of authorisations for use.

4 competency examinations in the field of pyrotechnics and explosive substances were carried out in 2010 60 persons participated in the exams. In total, 55 certificates of competency were issued, 29 of which were extended.

The regulations of the Explosive Substances Act, on regulation of staff certification and keeping of explosive substances and pyrotechnic articles, were analysed in 2010, and motions

to amend were prepared and submitted to the Ministry of Economic Affairs and Communications. As a result, instead of the previous two regulations, only one was prepared for conservation of explosive substances and pyrotechnic products.

International cooperation continued in 2010. A working group meeting, in the framework of the directive of the Council of Europe 93/15/EMC on the harmonisation of the provisions relating to the placing on the market and supervision of explosives for civil uses, took place in Brussels.

Mining and quarrying

In Estonia, approximately 850 mineral deposits are listed in the environmental register, and the number of extraction permits issued, according to the information system of environmental permits, is about 500. 340 miners, secondary utilizers of a working and designers are registered in the register of economic activities.

In 2010, 91 supervision procedures were initiated. During the procedures, 33 precepts were made, 30 of them with a warning. All precepts issued in 2010 were fulfilled on time. 3 warnings were issued on the precepts made on the procedures of 2009, and a misdemeanour procedure was initiated against two enterprises.

The main shortcomings in 2010 were in relation to documentation. Precepts were most often issued due to the lack of a development plan, risk analysis and a project, and in relation to appointing a specialist in charge, as well as restricting the danger zones.



In May and June of 2010, the Technical Surveillance Authority carried out a surveillance campaign of peat extraction areas, the objective of which was to get an overview of compliance with the safety requirements and to help the undertakings reduce the risks related to extraction of peat. Since fire hazard is one of the biggest concerns for undertakings quarrying peat in summertime, the Rescue Board was also included in this campaign. 8 peat production areas were checked, and in 6 of them, violations were found. The violations were mostly related to mandatory documentation. As a result of this campaign, proposals were made for improving the regulation. The surveillance of peat extraction areas is done every year, during peat production season, by the Technical Surveillance Authority. Consistent inspection of the peat deposits and analysis of the reasons for the shortcomings found in cooperation with the undertakings extracting peat ensures the safest extraction possible and reduces the related risks.

In 2010, the Technical Surveillance Authority inspected the organisation of removing the spring-time high water in more than ten of Estonia's largest mines and quarries. The purpose of this supervision is the management of risks related to water removal, ensuring safe performance of the mining processes in the high water period and improving the cooperation between the Technical Surveillance Authority and mining undertakings. In several mines and quarries, work was disrupted due to high water, and the water level had reached its critical limit. Preventive activities and readiness for disposal of water from the melting of an extraordinarily large amount of snow ensured the safe run of work.

The snowy winter of 2010 resulted in almost maximum water influx to the mines and quarries during the high-water period in the spring. For example, in the mine Estonia, the high water period lasted for 21 days and the maximum amount of water pumped out in a day was 500 000 m³, whereas in a normal situation this would only be 150 000 m³. The water levels were several times higher in all other mines and quarries, and the capacity of the pumping stations exceeded the amount of water pumped out in the period of high water by 1.5 times.

Two big dangers accompany the high water period - possible flowing of water into the workplaces and, in the case of oil shale mines, collapse of the roof rock of the mines due to large amounts of water. To avoid dangers, the pumping stations and electrical equipment of mines and quarries need to be designed and built in a way that would avoid all possible risks.

In August and September 2010, supervision of all of the sand and gravel quarries of Estonia's largest road constructors took place, in the course of which 14 procedures were carried out, 21 quarries were inspected and 9 precepts made. The main problem was the lack of marksheider documentation (on 6 occasions) and the development plans (on 5 occasions).

According to the data of the Technical Surveillance Authority, there were no accidents (excluding occupational accidents) in Estonian mines and quarries in 2010.

4 competency examinations in the field of mining and quarrying took place in 2010 with 21 persons examined. 18 certificates of competency were issued to specialists in charge of mining and 1 to a specialist in charge of designing projects for mining and secondary use of mines. During the year, 10 certificates of competency of persons in charge and 4 certificates of competency of the persons designing mining projects were renewed.

In relation to passing of the Rescue Act and the Fire Safety Act, the Mining Act was also changed, introducing the regulation of organisation of rescue work and making proposals for the new draft regulation of organisation of rescue work.

In cooperation with the Ministry of Economic Affairs and Communications, a draft regulation for safety requirements was prepared, changing the safety requirements of peat extraction, and implementing fire safety requirements in oil shale mines.

Both international and national cooperation continued in 2010. There were several meetings with the Environmental Inspectorate, and joint activities and objectives were formulated into a cooperative agreement. From now on, work plans are exchanged regularly and access will be granted to the databases in previously agreed upon sections.

The Technical Surveillance Authority participated in an international mining conference (XVI Meeting of European Heads of State Mining Authorities in Germany 2010) in Meissen, Germany.



International mining conference in Meissen, Germany

In 2010, working meetings of the Commission of Estonian Mineral Resources took place, in which the Technical Surveillance Authority participated as a rank-and-file member. In total, 11 meetings took place and 287 decisions were made.

Also, the work meetings of the licence committee of hydrogeological works took place, in which the Technical Surveillance Authority participated as deputy chairman. In total, 20 meetings were held and 25 licences were issued.

Railway facilities and the rolling stock

The supervisory operations of the railroad division of the Technical Surveillance Authority in 2010 were directed to implementation of the safety management system of railway undertakings and infrastructure managers (Railway Safety Directive, 2004/49/EC) that entered into force in Estonia in 2008.

The aim of the safety management system of railway undertakings and infrastructure managers is to manage the risks related to their operations as extensively as possible and to alleviate the potential consequences, using the resources of the enterprises. The safety management system reflects the circumstances caused by the railway undertakings and/or infrastructure managers and the third parties who have direct or indirect influence on railway safety.

The Technical Surveillance Authority inspected four enterprises in 2010 in the course of supervisory operations, to which 21 protocols and 4 precepts were prepared with an obligation to remove the shortcomings detected. There were significantly more railway facilities inspected in total: bridges, culverts, level crossings, communications- and safety equipment on different sections of a railroad, railway stations (buildings, passenger platforms, railway crossings, relay rooms, position of a station operator).

The increase in the number of procedures related to issuing building permits and authorisations for use for reconstruction of passenger platforms and bridges into culverts deserves separate mentioning. Also, building permits have been issued for construction of the temporary railroads, signalling and

communication equipment and overhead contact lines in the construction area of Ülemiste highway crossing in Tallinn. Compared to the previous years, the number of procedures related to activities in railway protection zone has also increased.

The Technical Surveillance Authority checked the implementation of safety management systems of railway undertakings and infrastructure managers: organisation of railway traffic, safety of passenger transportation and conformity with the standards for the freight traffic safety. Implementation of the safety management system of railway undertakings and infrastructure managers was checked on 12 occasions. In the course of supervision, the actual operation of safety management system was controlled on the level of action: in traffic management centres, railway stations and passenger trains.

At the level of railway undertaking management, the extent of measures used to achieve the railway safety targets, and competence of the arrangements and instructions laid down to implement the safety management system, was evaluated.

The organisation of railway traffic was supervised on a total of 26 occasions at the public railway infrastructure managers. The operations of passenger transportation undertakings were inspected a total of 5 times, on the lines Tallinn-Narva, Tallinn-Pärnu, Tallinn-Tartu-Valga and Tallinn-Riisipere. Activities related to freight traffic were inspected in different undertakings on 14 occasions.

An important part of safety supervision of railroad transportation is the inspection of processes and frequency related to maintenance of railway rolling stock and locomotives. Supervision of the technical condition and safety of the railway rolling stock was carried out 4 times in 2010 at the railway maintenance workshops of freight carriages in Narva, Valga and Ülemiste. Maintenance of passenger rolling stock is done at Tallinn-Väike and Pääsküla home depots and has been inspected 3 times in 2010.



Steam locomotive Kaspar in a railway station

In addition, locomotives and the work of crews are inspected in railway stations and on the track. In 2010, operations of different rolling stock keepers and operators were inspected a total of 13 times.

In 2010, the keyword in rolling stock was steam locomotive. For the first time, steam locomotive L-3297 was entered into the railway traffic register. In addition, its technical condition was estimated and supervision performed over the whole process of recovery.

In 2010, procedures for issuing authorisations for use of railway facilities at the Koidula Railway Border Station were started in the Technical Surveillance Authority. Most of the railway facilities have been completed by now: testing, receiving and putting into service of communication- and signalling equipment and the final connecting of the rail track to the Tartu-Petseri line will take place in the spring of 2011. With the opening of the Koidula Railway Border Station, train traffic intensity will increase on the section of Valga-Koidula that has been idle for a long time. That is why increased attention on 2010 was paid over the railway infrastructure of that section - rails, bridges, culverts and level crossings, during supervision procedures.

In addition, the Technical Surveillance Authority participated in the annual inspection of level crossings, which is organised once a year, during the spring or summer period. Besides the Technical Surveillance Authority, the Inspection Committee includes representatives of railway infrastructure managers, the police, local governments and possessors of highways or roads.

The purpose of such inspection is to find out the condition of road surface of level crossings, visibility, provision of technical supply and elimination of earlier shortcomings outside the everyday supervisory operations. Also, the needs are mapped to improve the ease of use of the level crossings.

On the basis of the results of the Inspection Committee and the prior analysis, the Technical Surveillance Authority gives to the possessors of roads and railway infrastructure managers orders to improve the condition of level crossings. As a result of consistent supervision over the last few years, the number of level crossings with shortcomings has significantly decreased in Estonia.

In 2010, the Technical Surveillance Authority made a total of 10 misdemeanour procedure decisions. The misdemeanour procedures were initiated to ascertain the circumstances of demolishing and construction of railway facilities without permission, violation of traffic management requirements at Nõmme Railway Station, the cutting of two communications cables being part of railway facilities, violation of winter maintenance work at three level crossings, and driving a freight train into high voltage power lines having fallen onto railway structure gauge. In addition, 2 misdemeanour procedures continued in connection with the investigation of a railway accident in which a carriage collided with a pile of reinforced concrete slabs that were stored too close to the railway track, and reception of passenger trains on roads with no waiting platforms.

Creating a railway traffic register to the information system JVIS of the Technical Surveillance Authority

In 2010, creation of the railway traffic register module to the database of equipment and installations (JVIS) of the Technical Surveillance Authority, taking into consideration European Union requirements for a railway rolling stock register. While registering the constructions of the railway infrastructure, the scope of the information/constructions due for registration has been extended.

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 sped up the obtaining of information about register entries.

Comparison of the railway rolling stock registered in the railway traffic register in 2010 and comparison of data with 2009:

Type	Subtype	Registered units as at 31.12.2010	First registered in 2010.	Registered units as at 31.12.2009	Change in registered units +/- 2009 in comparison with 2010
Locomotives	Diesel locomotives	318	20	306	12
	Steam locomotives	1	1	0	1
Passenger rolling stock	Passenger carriages of an international train	67	2	65	2
	<i>seating carriage</i>	8	0	8	0
	<i>sleeping carriage</i>	52	2	50	2
	<i>restaurant carriage</i>	4	0	4	0
	<i>postal carriage</i>	2	0	2	0
	Electric Multiple Units	55	0	55	0
	<i>leading carriage</i>	24	0	24	0
	<i>trailer carriage</i>	8	0	8	0
	<i>railcar</i>	23	0	23	0
	Diesel Multiple Units	95	0	95	0
	<i>leading carriage</i>	9	0	9	0
	<i>trailer carriage</i>	54	0	54	0
	<i>railcar</i>	32	0	32	0
Freight rolling stock	Freight carriages	17358	1090	18284	-926
	<i>closed carriage</i>	610	0	612	-2
	<i>platform carriage</i>	1189	155	1056	133
	<i>openwagon</i>	2040	16	2111	-71
	<i>rail tank wagon</i>	12346	853	13362	-1016
	<i>hopper wagon</i>	267	20	283	-16
	<i>isothermic wagon</i>	9	0	9	0
	<i>other carriages</i>	897	46	851	46
Management rolling stock	Special rolling stock	97	0	103	-6
	Specialised rail vehicles	24	0	24	0

Railway rolling stock reregistered in the railway traffic register in 2010 in relation to change of owner:

Subtype	Reregistered rolling stock in 2010
Diesel locomotives	40
Carriages of international train	2
Freight carriages	1518
Special rolling stock	27



Koidula railway frontier station

Safety certificates

The safety certificate of safety management system (A-part) issued to railway undertakings is valid in all European Union Member States and is a prerequisite for issuing an operational safety certificate (B-part) to railway undertakings. Safety certificates issued to railway undertakings shall be entered into the joint database of the European Railway Agency.

At the end of 2010, railway undertakings have a total of 36 valid safety management safety certificates (A-parts) and operational safety certificates (B-parts). In addition, in 2010, it was prescribed that a non-public railway infrastructure has an obligation to have a safety certificate when organising train traffic (B-part). In total, 40 such certificates were issued, but the issuing process will also continue in 2011.

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 safety supervision. At the same time, the obligation of railway undertakings to maintain up to date safety requirements ensures better safety and more frequent information exchange with the Technical Surveillance Authority.

Newer passenger platforms and higher speeds on the railway

Development of railway transportation has become an increasingly relevant subject to the Republic of Estonia. Large amount of the European Union funds have been invested to the development projects of railway infrastructure. Currently, a total of almost EUR 156 million worth of EU grant money has been allotted to different railway projects.

The primary role of the Technical Surveillance Authority in managing the aid funds is to monitor the legitimacy of implementing the projects and to ensure that the support money is used for the purposes it was granted. Also the Technical Surveillance Authority plays an important role in ensuring that the organised infrastructure would fully comply with the technical requirements and would be as safe as possible for the user.

The projects supported by the European Union co-financing continued in 2010 for reconstruction of the existing passenger platforms and the Tallinn-Tapa railway line. 19 new, 550 mm high passenger platforms, conforming to the needs of the new passenger trains were completed with the help of European Union Cohesion Fund and Regional Development Fund by the end of the year. The rest of the passenger platforms will be reconstructed by the end of 2012 at the latest. From the Tallinn-Tapa railway line, currently a total of 78 km has been reconstructed or undergone ballast cleaning. The works will be completed during 2011.

In 2010, reconstruction of the Türi-Viljandi track section, financed by the Cohesion Fund, began. This project is exceptional, since, for the first time in the railroad sector, EU grant money is allocated to an infrastructure manager that is fully in private ownership. The projects on the Tallinn-Paldiski and Keila-Vasalemma lines will soon begin, in order to reconstruct both the rail track and the overhead contact lines for electric trains.

The new passenger platforms are an important component in making railway travelling considerably safer and more convenient for people. Since brand new trains will also arrive along with the passenger platforms, and the condition of rail tracks will also be improved - thereby enabling the passenger trains to steadily move at a speed of 120 km/h - railway travelling will become much more convenient in the coming years.



Waiting platform in Valingu

In cooperation with Latvian and Lithuanian colleagues, the Technical Surveillance Authority will participate in an international project, in the framework of which the benefits of the European Union TEN-T aid fund will be used to find ways to build a new railway track with a track gauge of 1435 mm (European standard gauge) from Tallinn to the border of Lithuania and Poland. The procurement contract of the project was reached in 2010 and with the end of the first stage in the first half of 2011, the completed analysis should offer sufficient information to the governments of all three Baltic States to decide whether creating a new transport link to Central-Europe is economically feasible or not. The survey is funded in the total amount of 50% by the EU from its TEN-T fund.

The public railway infrastructure managers continued to invest in the reconstruction of railway infrastructure in 2010, thereby increasing the speeds and capacity.

As a result of the work carried out thus 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, which goal is to create a rail 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 to increase the speed up to 120 km/h. By the end of 2010, the Tartu-Valga and Tallinn-Tapa lines had been completely renovated, and the speed for passenger trains is now 120 km/h throughout.

Railway accidents

According to the statistics of the Technical Surveillance Authority, 30 railway accidents took place in 2010. There were 17 collisions between road vehicles and trains, in which 10 people were injured and 2 fatalities. In 13 instances, a train collided with a person on the track, in which 4 people were injured and 9 killed. The main cause of these accidents was disregard of the Traffic Code by road vehicle drivers, continuous recklessness of people and unwillingness to improve their traffic behaviour.

An increase in the number of collisions was also related to the unusually large amount of snow during the winter period. Several incidents probably took place because of the drivers' inability to select the correct speed and style of driving appropriate to the weather and road conditions. As to the technical supply of the level crossings, collisions took place at level crossings equipped with an automatic traffic light signalisation, as well as at unregulated crossings. The collisions between trains and people on the railroad in 2010 took place because people were at the places not meant for them at the railroad.

A railway accident with severe consequences took place in the early morning of 23 December 2010, on the open track of Aegviidu-Kehra, where an electric train without passengers collided with a freight train. The freight train crew were injured and the electric train driver died in this collision.

The Technical Surveillance Authority constantly analyses the circumstances of railway accidents, in order to find suitable solutions in collaboration with the railway infrastructure managers and organisations dealing with railway safety. The Technical Surveillance Authority also values strong cooperation with local governments in railway planning activities, to ensure that the railway safety activities would be, first and foremost, based on the needs of the region.

Legislation in the field of railway infrastructure

In 2010 the new draft of Appendix 4 of the rules for technical use of railway, "Requirements for the construction, maintenance and use of railway crossings" was actively developed and should enter into force in the first half of 2011. Also, a draft regulation on the requirements for construction projects of railway facilities was prepared; this regulation should also enter into force in 2011.

The amendments to the Railways Act entered into force in February 2010. One of the biggest changes is making a liability insurance contract and an obligation for non-public railway infrastructure to have a safety certificate when organising train traffic (B-part).

There were also changes in the procedure for issuing locomotive driver's licences. According to the change, the applicants for the locomotive driver's licence or its renewal do not have to personally go the Technical Surveillance

Authority to submit the requested application and pass the theory examination. An applicant may do the initial operations (submitting an application, payment of the state fee) and pass the theory examination in the closest office of the Estonian Road Administration and also receive their locomotive driver's licence from there.

Important changes were made to the Railways Act in relation to the rights and obligations of the passengers. In providing passenger transportation services on railroads, the provisions stated in Regulation (EC) No 1371/2007 of the European Parliament and of the Council on the rights and obligations of the railway passengers (with some exceptions).

The Railways Act also stipulated the role of the Competition Authority in observing the competitive situation on the market of railway services and in processing complaints.

The rest of the changes provided under the Railways Act are mostly the specifications of the former regulation, based on the circumstances and problems having arisen in practice.

Railway safety campaign of the Technical Surveillance Authority and informing the undertakings related to railway construction and winter maintenance works

In 2010, the Technical Surveillance Authority organised a railway safety campaign called "It is closer than you think! Assess the speed and distance of an oncoming train accurately!" The purpose of this campaign was to explain to people the rules and dangers of railway traffic and thus reduce the number of accidents. With this campaign, the Technical Surveillance Authority wanted to deliver to as many people in Estonia as possible the message that the railway is a place of heightened risk, where it is only possible to travel safely, if you follow the traffic light signals, road signs and safety requirements. The message of this campaign was spread through street media, the Internet, radio and television.



Poster of the railway safety campaign

In May 2010, an information day was organised for undertakers related to railway construction and representatives of local governments, introducing the information booklet on construction of railway facilities.

The road owners received a memorandum with an aim to improve the quality of winter maintenance works. The Technical Surveillance Authority received no complaints in relation to winter maintenance works in 2010.



INCREASING RELIABILITY





Increasing reliability: activities and results

In respect to 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 the 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** with requirements, we check the presence of markings and the necessary documentation, 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 to **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 to **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 2010, the Estonian Technical Surveillance Authority conducted 21 procedures, initiated 1 misdemeanour procedures and issued 5 precepts in the course of market supervision of construction products. The main shortcomings were the absence of necessary documentation or its inadequacy.

We started with the market supervision campaign of precast concrete products

Nowadays, the use of precast concrete products is very widespread in construction works. The precast concrete products used in construction are highly important construction elements in ensuring the mechanical stability and strength of a building. Keeping in mind the safety of buildings, it is important that the precast concrete products used in construction would conform to the set requirements and therefore ensure that the building would also conform to the necessary requirements.

By the second half of 2010, the co-existence periods of most of the important harmonised product standards on precast concrete products had ended. It means that using these standards in production and attestation of conformity of products has become obligatory and the products must bear a CE-marking. Since most of the precast concrete products used in Estonia come from local manufacturers, we started a supervision campaign in the second half of 2010 to check the conformity of the products of the manufacturers in this field.



Construction works of the study building of Estonian Aviation Academy in Ülenurme

Supervision procedures were initiated regarding two enterprises producing precast concrete products. One of the most important violations found during the surveillance were the hollow core floor elements, stairs and linear structural elements installed in the period of June to September 2010 in the new study building of the Estonian Aviation Academy in Ülenurme, the conformity of which was not attested and therefore, the compliance of the building to the valid requirements was not clear. The enterprise that manufactured these products received a precept to stop marketing these products. The manufacturer carried out all the necessary attestation of conformity procedures and since October 2010, all requirements for continuation of marketing of these products are fulfilled by the manufacturer. Since before October 2010, products with unattested conformity had been placed into the building, the conformity to the requirements of the building as a whole, was unclear due to that. Since the conformity of a building is the responsibility of its owner, the latter received a precept for attesting the conformity of the building through the products used in it, and evaluation of conformity of their installation. The expert analysis ascertained that the precast concrete products installed in the building prior to October 2010 are in conformity with the requirements and thus, there was no reason to question the conformity of the building.

The supervision campaign will continue in 2011.

Energy efficiency of buildings

The cooperation project, started in 2009 with the Faculty of Civil Engineering of Tallinn University of Technology to inspect the methodology of the conformity to the minimum requirements of energy efficiency of the buildings designed, was completed in 2010.

During the project, 13 project documentations submitted to apply for a building permit of a non-residential building were selected from the construction register and the compatibility of their energy calculations with the requirements stipulated in the Government of the Republic Regulation No. 258 of 20 December 2007 "Minimum Requirements for Energy Performance of Buildings" were analysed. The survey showed that most of the energy calculations were either done poorly, with unqualified calculation software or left undone. Proper methodology was used in only two cases out of thirty. On the basis of the work analysed, it can be concluded that there are significant shortcomings in the implementation of this regulation, and the objectives related to the regulation are

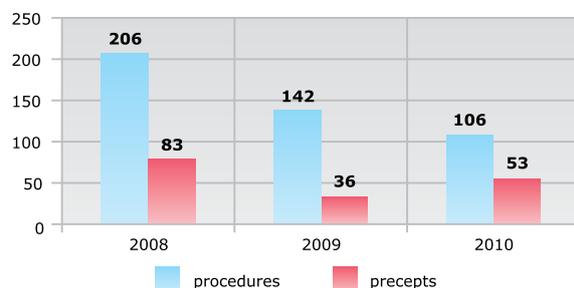
practically unfulfilled. It is partly due to the complexity of the regulation, but also to problems in the use of the computing software accepted by the regulation. The acceptable software is available only in a foreign language and its use is highly complicated and presumes significant professional knowledge and experience. The calculation processes and results are often not transparent, wherefore the inspection of adequacy of the energy calculations is complicated.

To sum the project up, the TUT organised an information day for people dealing with the area of construction in local governments. The Technical Surveillance Authority sent out

memorandums to the undertakings and local governments on the shortcomings found on the objects. Discussions have begun to find ways to specify the regulation and make supervision more effective.

Electrical devices

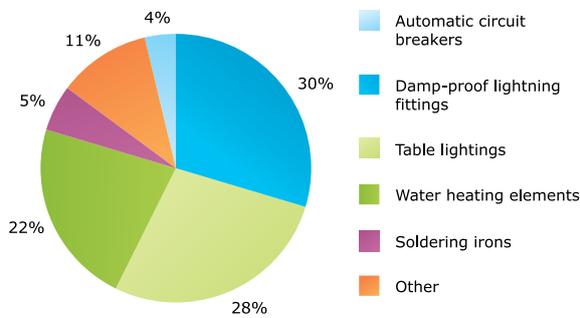
The Technical Surveillance Authority performs market supervision of electrical equipment all over Estonia. 106 procedures were conducted in 2010, in the course of which 53 precepts were issued. The decrease in the number of procedures compared to the previous years is related to the decrease of staff working in this field. At the same time, the number of shortcomings found and precepts made has increased.



Market supervision of safety requirements

Special attention in 2010 was paid to the supervision of the conformity of lighting fittings, automatic circuit breakers and Christmas lighting fixtures.

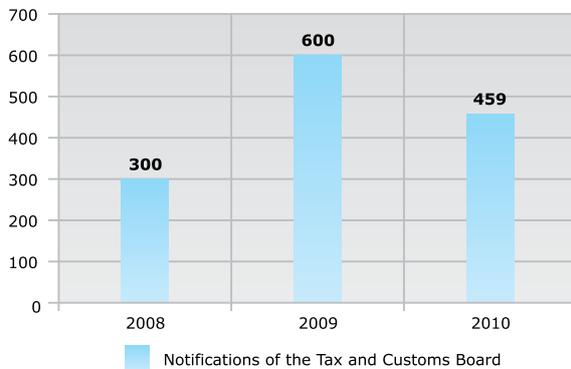
The most common mistake was the lack of a CE-marking or required labelling. The main products inspected were lighting fittings, automatic circuit breakers, extension cords, water heating elements, soldering irons.



Precepts of 2010 by product groups

In the case of non-conforming electrical equipment, the pan-European ICSMS and Rapex databases were checked; in Estonia, no products entered in these databases were found. The Technical Surveillance Authority added no notices to these databases in 2010.

In 2010, close co-operation with the Tax and Customs Board continued. Around 459 messages received from the Estonian Tax and Customs Board, concerning potentially non-conforming electrical appliances discovered at the border, were reacted to. The main products not complying with the requirements are different types of MP3 players and household electronics. The most common shortcomings were the lack of CE-marking and the lack of the producer's or the model's identification number. In the case of most of the products, the requirements for electromagnetic compatibility were not met, and there were also some non-conformities with the requirements for low-voltage electrical equipment. When necessary, compliance of the equipment with the requirements in RoHS 2002/95 (dangerous substances) and EuP 2009/125 (eco design) (existence of the directives required) was inspected. In



The notifications of the Tax and Customs Board in 2010 on potentially non-conforming electrical devices detected on the border

2010, international cooperation with other European market supervision authorities was also continued.

The Baltic Sea market supervision authorities' co-operation programme

The programme unites the market supervision institutions of Northern-Germany, Poland, Finland, Denmark, Sweden, Estonia, Latvia and Lithuania. Estonia is represented by the Technical Surveillance Authority in this organisation.

The objective of this programme is to better protect consumers from hazardous products. By exchanging information and organising joint cooperation projects, the detection and removal of dangerous products as early as possible is aimed to be achieved.

The main purpose of the operations in the previous years has been development of cooperation with the border control authorities and development of a joint database. The main initiator at this is Germany. In February 2010, a meeting was held in Tallinn, in which organisation of a joint testing campaign was discussed and Estonian practice between the market supervision authorities (Technical Surveillance Authority) and the customs authorities (Tax and Customs Board) introduced. The Technical Surveillance Authority also participated in the working meeting of the organisation in Warsaw and Hamburg. The Baltic Sea market supervision authorities' co-operation programme ended in 2010. Implementation of a further cooperation programme is being discussed.

ADCO of the low-voltage electrical equipment directive (LVD)

The administrative cooperation group of the low-voltage electrical equipment directive is an independent working group that is managed and organised by the member states. The purpose of this working group is cooperation and exchange of information between different market supervision authorities.

In 2010, the 26th LVD ADCO meeting took place in Malta. The following topics were discussed: Requirements for UV-lamps, motions to amend the standard of "hot metal surfaces", specification of the definition of external pool pumps and equipment, problems with the LED lights and travelling adapters.

ADCO of electromagnetic compatibility directive (EMCD)

The administrative cooperation group of electromagnetic compatibility is an independent working group that is managed and organised by the member states. The purpose of this working group is cooperation and exchange of information between different market supervision authorities.

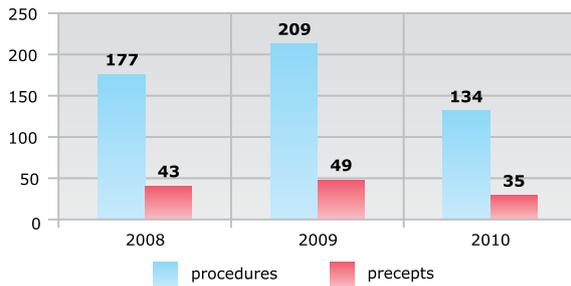
In 2010, the Technical Surveillance Authority participated in the 29th work meeting of the administrative cooperation (ADCO) group of the Directive on electromagnetic compatibility 2004/108. Topics of the meeting were acceptance of one new member (Bosnia and Herzegovina), the results of a pan-European market supervision campaign for electromagnetic compatibility requirements of 2009/1 were introduced, organisation of the next pan-European market supervision campaign of electromagnetic compatibility requirements of 2011 was discussed, a method of risk analysis of Netherlands was introduced, how to assess risks from different products and plan your surveillance accordingly; also, different issues of market supervision were discussed.

Energy efficiency of electrical devices

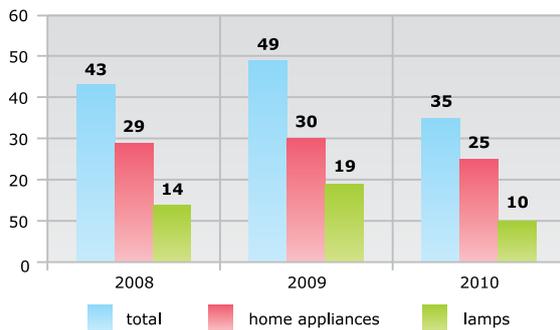
Market supervision of energy efficiency of electrical appliances is carried out by the Technical Surveillance Authority throughout Estonia. 134 procedures were conducted in 2010, in the course of which 35 precepts were issued. The decrease in the number of procedures compared to the previous years is related to the decrease of staff working in this field. The relation of procedures and the precepts made has remained at the same 23-26% level throughout the years.

The main products inspected were the so-called white household appliances (refrigerators, washing machines,

electric ovens) and electric light bulbs. The main shortcoming was the lack of the required energy-performance label. The requirements for energy efficiency of lamps were violated in 10 cases, the requirements of energy efficiency of other household appliances in 25 cases.



Procedures carried out in the course of energy efficiency supervision in 2010



Non-compliance with the requirements of energy-performance label

Gradually, the new energy efficiency requirements arising from the Ecodesign Directive 2009/125/EC are entering into force. The requirements enter into force by the EU regulations (9 by 2010):

- Standby and off mode electric power consumption of electrical and electronic household and office equipment (1275/2008)
- Basic digital convertors (107/2009)
- Non-directional household lamps (244/2009)
- Fluorescent lamps without built-in ballast, electric discharge lamps with high luminous intensity and the ballasts and lighting fittings used with these lamps (245/2009)
- External power supplies (278/2009)
- Television sets (642/2009)
- Refrigeration equipment used in households (643/2009)
- Electrical locomotives (640/2009)
- Pumps (641/2009)

The aim of these requirements is to reduce energy consumption in the European Union by 20% by the year 2020, using more energy-efficient electrical devices. One such regulation is “Non-directional household lamps” (244/2009), from which 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 regulations will enable consumers to reduce their electricity consumption by the year 2020 to the estimated 39 TWh. In order to economise energy consumption, conventional incandescent lamps will gradually drop out of use. As of September 2009, incandescent lamps with

a nominal power of more than 100 W may not be manufactured or imported from third countries onto the European Union market, while in the previous year the ban expanded to cover greater than 75 W incandescent lamps. By the year 2012 the ban will extend to all incandescent lamps.

The requirements are developed, taking into consideration the specialities of the target groups. For example, television sets, devices with a standby-mode and external power supplies have certain limit values of energy consumption that they are allowed to use when switched off/on standby. The limit value of the energy efficiency index to refrigeration equipment is laid down in accordance with their category.

The new eco design requirements will be implemented at different times and in different stages. For example, eco design requirements are applied to television sets in four stages, in the years 2010 to 2012, but for refrigeration equipment, in five stages until 2015.

The requirements are not implemented on devices already used and sold on the EU market in retail or wholesale. The requirements will only be implemented for devices imported from third countries or manufactured in the EU after the deadlines of the different stages.

Communication devices

In 2010 the updating of the Regulation issued by the European Community continued. Its purpose was to develop a more effective mechanism for the conformity of apparatuses with the requirements and thereby amending the provisions of the Directive 1999/5/EC into a simpler and clearer form. Throughout the year, meetings were held to gather opinions of the Member States on the amendments to the Directive. In December, the European Commission presented the full text of the new directive for the Member States to comment on. The Technical Surveillance Authority actively participated in the auditing process of the Directive, expressed its opinion on the amendments and commented on the full text of the new Directive.

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 entered into force in April 2010. For the first time, requirements for the use of a long-distance tracking system for hunting dogs, without a frequency authorisation, were established by the regulation.

In 2010, the Technical Surveillance Authority prepared a proposal for implementation of three European Commission decisions to impose requirements on the radio equipment of the aeronautical service that is used for terrestrial air traffic control. The regulation of the Minister of Economic Affairs and Communications “Technical requirements for radio equipment used under frequency authorisation” was supplemented and updated. The new regulation entered into force in December 2010.

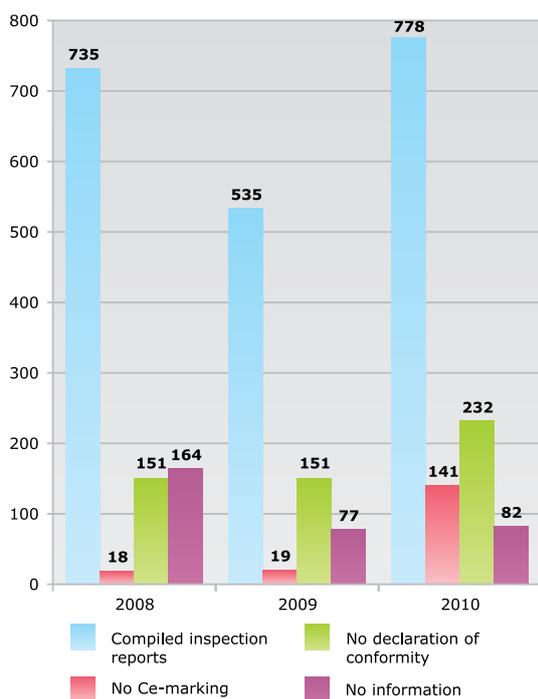
In accordance with relevant European Commission Decisions, the harmonised requirements were prepared for the network devices of terrestrial electronic communication systems in the frequency bands of 2500-2690 MHz, 3400-3800 MHz, 900 MHz and 1800 MHz.

Due to changes in the European Community's regulation, the radio equipment for aeronautical service that is used for terrestrial air traffic control was brought under the scope of Directive 1999/5/EC, wherefore it was necessary to prepare the requirements to this equipment on the basis of the Electronic Communications Act. Since these are highly specific devices, the Technical Surveillance Authority turned to Estonian Air Navigatison Services for help. Requirements for the radio equipment were developed in close coordination of these two organisations on the basis of the requirements of the International Civil Aviation Organization (ICAO) and European Organization for Civil Aviation Equipment (EUROCAE), also taking into consideration the Interoperability regulation of the European Parliament and of the Council. It is important to simultaneously take into consideration the international regulation of both radio communication and aeronautics when developing the requirements, at the same time avoiding overlapping and discrepancies between the requirements of these areas. The work process was complicated by the fact that the ETSI standards for ground-based air traffic control equipment are still being in drafting process.

In 2010, the Technical Surveillance Authority published an information booklet providing an overview of the requirements for placing the equipment on the market, marking of the equipment and the legislation regulating the requirements and use of the equipment.

Market surveillance of communication devices

The working group (ADCO R&TTE) dealing with the issues of market surveillance of Directive 1999/5/EC organised a pan-European campaign in 2010 with an aim to harmonise the measures of marketsurveillance. 30 countries participated in the campaign, including Estonia. During the campaign, all countries analysed 5 cases and gave an evaluation about them in accordance with the legislation and marketsurveillance methods developed in that country. The results of the countries will be analysed, compared and a report prepared that will be a good basis for supplementation of the Directive or changing



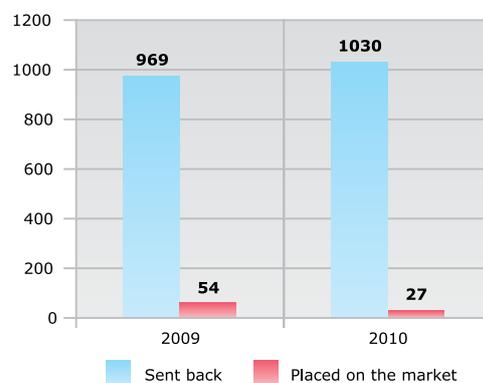
Supervision of stores in 2008–2010

of the marketsurveillance methods of the countries. The report should be ready in the first half of 2011.

In 2010, the Technical Surveillance Authority conducted 1835 conformity checks of equipment. In total, shortcomings were found on 1419 occasions. 1030 devices were banned from entering the country and 101 devices were removed from shops.

778 inspection reports were compiled during the inspection of shops. 389 shortcomings were found (120 of them in inspecting online stores). In 141 cases there was no CE-marking, in 323 cases, the declaration of conformity was missing and 82 devices lacked information about their use in Estonia.

In the course of product safety inspection, the Tax and Customs Board forwarded 1057 requests for information about the conformity of the devices. 97% of inspected devices did not conform to the requirements and were band for free circulation. The majority of the inspected devices are mobile phones, GPS receivers, radio-controlled toys, wireless computer devices, baby monitors and low-power radio transmitters.



Product safety inspection in cooperation with the Tax and Customs Board in the years 2009–2010

During the notification procedure about the intention to place on the market the radio devices that use the frequency bands whose use <http://pda.etsi.org/pda/queryform.asp> is not harmonised within Europe, Estonia received 821 notifications in 2010. Almost all notifications were submitted through the OSN system (One-Stop Notification system) established under the European Commission at the beginning of 2008. During processing of these notifications the requirements valid in Estonia for the use of radio frequencies were explained to 82 manufacturers and representatives of manufactures, and in 25 cases, the use of certain devices in Estonia was not allowed.

Many radio- and communications devices purchased from Internet stores do not comply with the requirements

The continuing problem is the non-conformity of the devices ordered from Internet shops and forums outside the European Union. In Estonia, all postal items from third countries undergo customs inspection, where conformity with the requirements is also inspected. If it is revealed in the course of the customs inspection that the device in the consignment lacks the required marking and labelling, the Tax and Customs Board suspends the free circulation and informs the Technical Surveillance Authority of this device. During the inspection of electronic devices, the Technical Surveillance Authority mainly checks the marking of the device and the existence of the

conformity mark CE. Only labelled radio-, communications- and electronic devices with a CE-marking are allowed to be imported to Estonia.

In 2010, the most numerous non-conformities with the requirements were detected in the case of mobile phones (mainly Apple iPhone alike), GPS navigation systems, MP3 players with FM transmitters to be used in cars. The main violation was the lack of a CE-marking corresponding to the European requirements, the declaration of conformity and the identification of the manufacturer, which generally indicated that the technical requirements were unfulfilled.

People's awareness of the possible risks of electronic commerce has increased. In 2010, the Technical Surveillance Authority was asked significantly more than previously about the technical and obligatory marking-related requirements applying to radio-, communications- and electronic devices. Also, the cooperation between the Technical Surveillance Authority and the Tax and Customs Board has become more effective in identifying the conformity of devices.



Implementing requirements on hunting-dog tracking devices

In the beginning of 2010, upon entry into force of the requirements set in the regulation of the Minister of Economic Affairs and Communications, Estonian hunters now have a chance to use the long-distance tracking system of hunting dogs highly popular in Sweden and Norway without the frequency authorisation. Above all, the dog distance tracking systems are meant for observing hunting-dogs on various terrains, up to a few kilometres away from the hunter. Together with the GPS receiver, it is also possible to monitor the movement of the dog on the map. Thanks to this system, hunting dogs lost in the forest can be found within a 5 km radius.

The hunting dog tracking devices in conformity with the requirements are now on sale in Estonia and have received a warm welcome from our hunters. There has been a significant decrease in the interest for import of analogous devices meant for the U.S. market and not conforming to Estonian requirements.

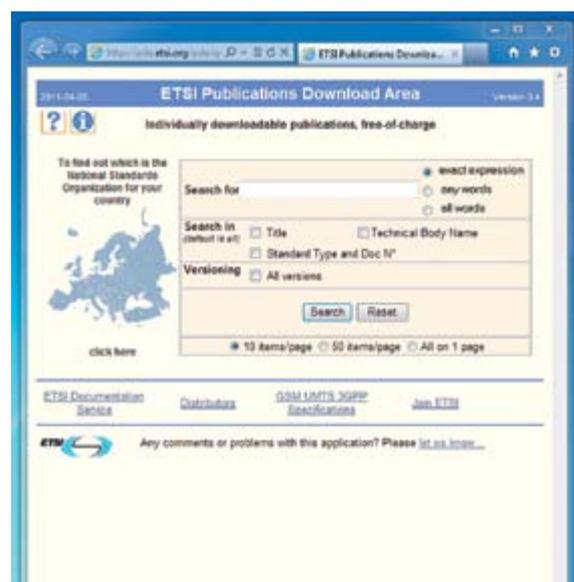
Standardization

With respect to standardisation, organised national voting process for European standards of the European Telecommunications Standards Institute (ETSI) in Estonia and 72 new ETSI standards were transposed as Estonian standards in 2010.

In relation to the switchover to the digital broadcasting of television programmes, three digital television standards were translated in the framework of the National Standardisation Programme of 2010 - EVS-EN 300 744, EVS-EN 302 755 and EVS-EN 302 304.

Also, the previously published standard EVS-EN 62106, Specification of the radio data system (RDS) for VHF/FM sound broadcasting in the frequency range from 87,5 to 108,0 MHz in Estonian was updated; all these new standards were published at the end of 2010 or will be published at the beginning of 2011. It is important that by translating these standards, valuable work was done in developing Estonian terminology.

During the ETSI Public Enquiry procedures of harmonised standards, the Estonian title was 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.

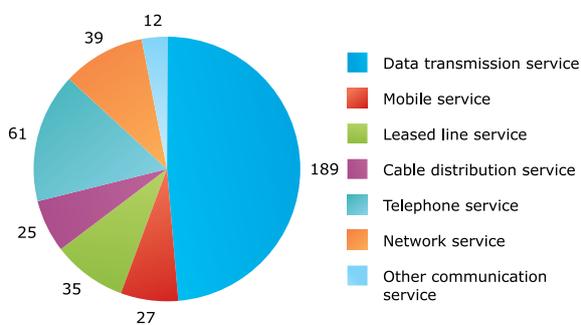


Database of ETSI (European Telecommunications Standards Institute)

Communications services

The changes in the market of communications services in 2010 were as expected. The growing popularity of mobile internet access service, transition to digital TV and the IPTV were the most important aspects of 2010, also affecting, in addition to competition, the number of smaller providers of internet access services and analogue cable-TV services.

By the end of 2010, 16 providers of internet access services 5 providers of cable distribution services had left the market. The number of telephone service providers remained stable and the list of mobile service providers was supplemented by three new undertakings.



Distribution of registered communications services in 2010

The total number of communications service providers has decreased in the previous years. In 2010, 23 undertakings ended the provision of communications services and 6 business operators presented a notification on commencing business to the Technical Surveillance Authority.

In the field of communications services, the Technical Surveillance Authority implemented 130 supervisory operations in 2010, most of it being formed by inspections of conformity with the technical requirements imposed on communications networks and services. Nine precepts for bringing the network or the service into conformity with the requirements were prepared.

The Technical Surveillance Authority checked during the year, whether the communications data that can be used in the detection of crimes is retained according to the requirements. The results showed that the data was retained in accordance with the requirements in all communications services.

Also, storing of the so-called black list register of mobile phones by the communications undertakings was inspected and it was found that a lost or stolen telephone become unusable in all Estonian mobile communications networks upon its entry into the register.

Conformity with the conditions for border regions set out in international GSM mobile communication coordination agreements was continuously checked for the Estonian-Russian and Estonian-Latvian border. There were detected violations by both Russian and Estonian mobile communications operators.



Mobile communications reached ships

In 2010, the European Commission passed a decision to allow the use of GSM mobile communications systems in the European Union's territorial waters. Its purpose is to enable communications services to be offered even when a ship is in open waters and the propagation of the land-based base stations

does not reach it. Estonian consumers also had a chance to use the new service. In May 2010, the Authority started receiving complaints about passengers of the ship Viking XPRS having received invoices regarding the use of an unknown mobile communications network, whereas the price of making calls in that network was considerably higher compared to the home network. The Technical Surveillance Authority ascertained that the operator Seanet is offering services on the ship and there was suspicion that the on-board mobile communications system is not turned off when a ship approaches shore, as stipulated by the technical norms. Informing consumers of this service and its price may have also been insufficient. The Technical Surveillance Authority informed the communications administration of the flag country of the ship, Finland, of the possible violation of requirements, and the use of the system was soon corrected to meet the given requirements.



Mobile Internet is expanding and developing

The continually developing communications service in Estonia in 2010 was the mobile Internet or the M-Internet. One of the keywords was the widespread implementation of the HSPA+ network technology by the mobile communications operators, increasing the theoretical data communication speed to 21 Mbit/sec. The results of the measurements conducted by the Technical Surveillance Authority in the middle of 2010 show that the data communication speeds of mobile Internet have increased by one third compared to the previous year. The average total download speed was 2.9 Mbit/sec while in the previous year, it was 2.2 Mbit/sec. The maximum download speeds achieved surpassed the limit of 7 Mbit/s. The inspections of the Technical Surveillance Authority in other bigger settlements of Estonia revealed that the 3G propagation areas had expanded well to these regions as well.

In 2010, the Technical Surveillance Authority helped the Consumer Protection Board in solving a consumer complaint filed against a communications undertaking. In relation to more widespread use of the mobile Internet, the number of complaints on it also increased. The main problems were related to the fact that at the location of the consumer, the data transmission service could not be used at the high speed advertised. The Technical Surveillance Authority conducted measurements of mobile Internet data transfer rates and coverage in the location of the consumer and forwarded the

results for further processing to the Consumer Protection Board. There were also some problems with so-called shock-bills, because the consumers were not aware of the taxation principle in which a person has to pay for each megabyte downloaded.

Vital services

Since 2010, the Technical Surveillance Authority is also responsible for the vital services in the field of communications in accordance with the Emergency Situation Act and the order of the Minister of Economic Affairs and Communications.

The Agency participated in several trainings and information days in this field, and also informed the providers of vital services in its domain of the requirements applying to them. Namely, it is necessary to prepare a risk analysis and a plan of continuity of operation of the service. The communications disruptions at the Elion and EMT core networks at the end of the year showed that continuity of operation of communication services today plays an important role in both the economy of the country and the smooth going of the everyday life of people.

Line facilities

With respect to damaging of and causing emergency situations to line facilities, the Technical Surveillance Authority resolved 40 misdemeanour notifications in 2010.

The misdemeanour notifications received in 2010 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 had relevant licenses and the damage to line facilities occurred in situations in which construction of other utility networks took place in the protection zone in parallel with the line facilities. It often occurred that the activity of the possessor of the line facility, in detecting its actual location in the surface and informing the persons operating in the protection zone of line facilities of the actual location of the line facility, was superficial.

Compared to 2009, the number of misdemeanour notifications received about the damage to optical communication cables decreased.



Digital signature to become international

In 2010, the Technical Surveillance Authority participated in the procedures and working group meetings of the public procurement "The development of authentication

and authorisation solutions for EU citizens based on strong certifications" called by the state. This project has lasted for 1.5 years and will end in May 2011. The procurement documents were prepared jointly, performers of the works stated in the procurement determined, development of the works observed and the works done were tested.

The Technical Surveillance Authority participated the most actively in the operations related to the II part of the procurement, "Development of the Methodology of Assessing eID". In the framework on this procurement, methodology test procedures were carried out by the providers of the certification services from at least four European countries in assessing the quality parameters of the ID-cards issued and the values determined.

The renewed requirements and fulfilling of compulsory obligations put to the Member States by the European Commission has created a need to reorganise the work of the register of certificates. The requirements for the certificates issued by providers of certification and time stamp services have increased regarding the procedure of information, dissemination of data and its confirming.

For almost a year, the register of certificates has published, in accordance with the European Commission decision, the list of Estonian digital trust services and also started to assess the certification services of other countries. The trusted list of Estonia is confirmed by the European list of trust services. Therefore, preparations were started in the end of 2010 by developing the vision of the new register of certificates. All these activities will also continue in 2011.



Generating the new certificate and key pair

In October 2010, the committee designated by the Minister of Economic Affairs and Communications generated a new public key to the Technical Surveillance Authority, as well as a personal key corresponding to it and used by the Authority in authorisation of the following procedures:

- authorisation of the public key of certification or time-stamping service provider
- authorisation of the trusted service list and the correctness of data, determined by the European Commission decision 2009/767/EC
- confirmation of a quality assessment of certificates issued by a certification service provider registered in an European Union Member State, member state of the European Economic Area or the Swiss Confederation.

Legal metrology

The Technical Surveillance Authority issued 21 national type-approval certificates of measuring instruments in 2010, including 3 amendments. 5 single type-approval certificates were issued (for 11 measuring instruments). 34 containers and pipelines connected to them, used in customs and excise measurements, were declared to be in conformity with the requirements. 53 measuring instruments were declared controlled.

In the course of supervision of verification activities, 2 procedures were implemented and 1 precept made in relation to the end of validity of the liability insurance contract.

Prepackages

In supervision of handling of prepackages, 30 procedures were initiated in 2010, 2 of which on the basis of a consumer complaint. The main shortcomings were the lack of a procedure for handling prepackages and the control results, as well as out-dated control of the measuring instruments.

All this directly compromises the correctness of actual contents of the products. One systematic occasion of handling of underfilled prepackages conditioned by inactivity was identified, during which the non-complying products were removed from sale.

No complaints were made or discovered on deliberate measuring deceits. No non-conformities were found as to placing the new measuring instruments on the market.

Meeting of the WELMEC working group nr 5 in Tallinn

In 2010, the Technical Surveillance Authority organised the 5th meeting of the working group of the European Cooperation in Legal Metrology (WELMEC) in Tallinn. The working group deals with harmonisation of the market supervision of measuring instruments in the European Union. Traditionally, the meeting is held in a different European Member State every year. 31 representatives from 20 countries participated in the meeting. Two organisations were represented - CECIP and EMETAS.

Availability of conformity assessment service

3 notified bodies have been registered in Estonia having the right to provide conformity assessment service of measuring instruments, able to provide conformity assessment of scales, heat- and water meters. There is no available conformity assessment service of other measurement devices in Estonia, i.e. gas meters, electrical energy meters, measurement systems of fluids with lasting dynamic function, automatic scales, taximeters, measures of length, dimensional measurement equipment, exhaust gas analysers, putting the manufacturers



Meeting of the WELMEC working group nr 5 in Tallinn

Use of measuring instruments and market supervision

In 2010, the Technical Surveillance Authority initiated 74 procedures on the use of measuring instruments and 13 procedures on placing the measuring instruments on the market. The main problem is exceeding the period of validity of verification or the use of a measuring instrument not in compliance with the verification requirements.

of Estonian measuring instruments at a disadvantage in comparison with other countries. Especially problematic is the lack of local availability of this service to measurement systems of fluids with a lasting dynamic effect, due to which production and implementation of several new devices has failed.



LIMITED RESOURCE



Limited resource: actions and results

We distribute the *public railway capacity* in accordance with the needs of undertakings and available resources, and determine the *fees for the use of 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 field of numeration, the most important change in 2010 was the change of the Estonian numeration plan regarding personal numbers. The seven-digit 70 service numbers previously used were turned into eight-digit numbers to create additional resource for personal numbers and new services (mass calling service). A two-year transition period was established for number owners. Also, a new numeration sequence "40" was opened for use, for the use of eight-digit fax numbers and providing e-fax services.

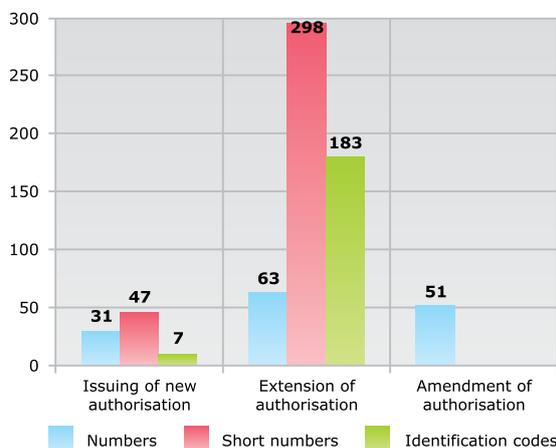
The use of mobile phones increased the most in 2010; 1.5 million numbers more were booked than in the previous year. In 2010, provision of public pay telephone service was ended in Estonia.

85 number authorisations were issued, 544 were extended and 55 amended, with a total of 684 procedures performed in 2010. In addition to the Europe-wide short number of harmonised service with a social value, 116111, two other short numbers of harmonised service with a social value, 116000 and 116117 were issued. These are short service numbers, as stated in the Annex of the decision of the Commission of the European Communities 2007/116/EC. The harmonised service with a social value shall be provided:

- to the caller to improve his or her well-being and safety
- to give messages, notifications or help
- to provide help for the user of the service in solving his or her problems
- to protect the interests of the society as a whole or a more limited circle.

No prior registration is required for the use of this service; it is free and has no time-limit. All kinds of advertising, entertainment, marketing and sales, as well as using the call to sell commercial services in the future is prohibited during a call.

The owner of the short number for searching for mission children 116000 and the child helpline 116111 is the Ministry of Social Affairs and the owner of the short number for the 24 hour service for providing medical advice 116117 is Arstlik Perenõuandla OÜ. The first two services have been put to work and implemented.



Operations of numbering authorisations in 2010

In 2010, the total sum of state fee for the operations performed in relation to numbering authorisation was EEK 39,639,377, which is 1.9% less than in 2009.

Calling to short- or service numbers

Under the cooperation agreement with the Consumer Protection Board, the Technical Surveillance Authority conducted surveillance of the price of short numbers with a special tariff and the 900-series service numbers in 2010. Control calls were made to 103 numbers with a special tariff. On 101 occasions, the price of the service was stated clearly and only on two occasions was the requirement to declare the price not fulfilled. The situation has significantly improved compared to 2009. When in 2009, 22 out of the 96 service providers supervised did not inform the consumer of the price of content services, then this year, only 2 service providers did not comply.

Providers of fee-charging content services are obligated to inform the consumer of the service or its price before implementation of the service. According to the agreement between the communications undertakings, the notification

Estonian numeration resource as at the end of 2010

Type of numeration	Total number, pcs	Booked*, pcs	Free, pcs	Percentage of free resource, %
Telephone numbers	3 100 000	936 923	1 833 839	59
Cell (Mobile) phone numbers	8 640 000	5 317 173	3 304 675	38
800 - service numbers (free for consumers)	1 018 000	1405	1 016 545	99,9
900 - service numbers (numbers with a special fee)	10 000	248	9 727	97
901 - service numbers (data transmission service numbers)	10 000	9	9 991	99,9
907 - service numbers (pay phone service numbers)	10 000	0	9 109	91
Personal numbers (for providing communications service determined by a client)	235 000	60 000	175 000	74
Mass-calling service numbers	75 000	0	75 000	100
Short numbers, including:				
3-digit	42	8	34	81
4-digit	394	173	221	56
5-digit	665	142	523	79
6-digit	5	2	3	60

Supervision of the use of numeration

The Technical Surveillance Authority supervised the performance of the requirements of the correct use of numbers by the providers of communications services and the existence of the corresponding numbering authorisations. Mostly, supervision was done over the owners of numbering authorisations that had become invalid. As a result of this supervision, it was found that 35 owners of numbers had not renewed their numbering authorisations after the end of its one-year validity. 8 of these continued to use the numbers without the valid authorisation.

The Technical Surveillance Authority initiated misdemeanour procedures against the number owners who did not conform with the requirements, and imposed fines. In comparison with 2009, the number of punished communications undertakings decreased from 14 to 8.

takes place during the first 10 seconds of the call. Depending on the call charge of the communications network, the minimum charge of fee-charging content service is EEK 0.79-4.24, which is supplemented by the special tariff of the communications service determined by the service provider after the 11th calling second.

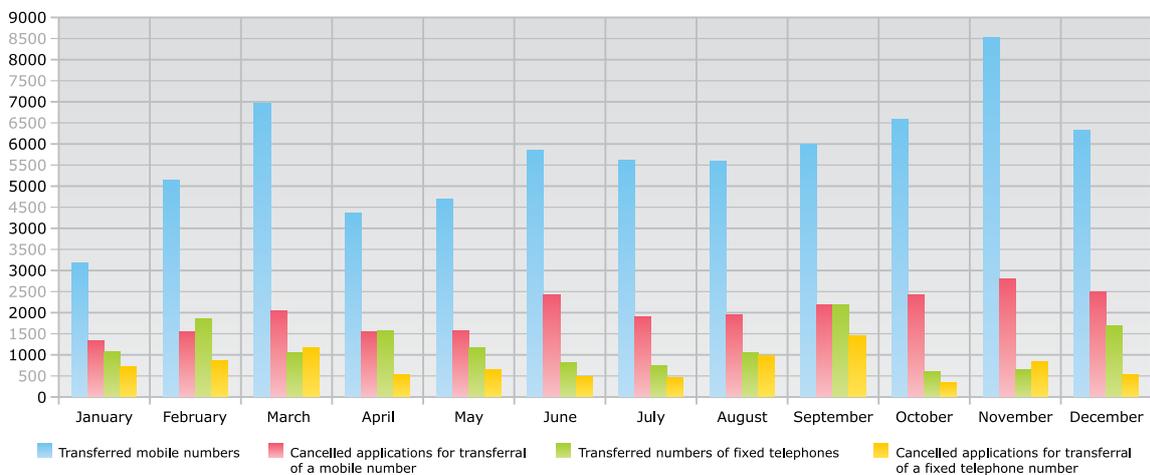
The requirement to inform of the price with a voice message does not apply to short-term content services, i.e. TV games, voting and SMS services that require answering by messages. In the case of short-term content services, the price shall be noted via a text message sent by the TV programme or the service provider.

The minimum price of a call and the content service prices do not apply to phone numbers that are exempt from tax due to legislation or decision of the service provider, i.e. the short number 112 or the numbers starting with 800 or 116.

Number portability

The Technical Surveillance Authority constantly observes the process of number portability and its functioning without disturbances, and maintains a register of the operations made under number portability. It also solves problems arising during that process.

During 2010, a total of 83,874 numbers were transferred from one network to another (in 2009, it was 76,188, and on 2008, the number was 57,951), giving an average of 6990 numbers transferred in a month. The number portability activity was the highest in the II half of 2010, when it could be noted that the communications service providers had developed more favourable packages of communication services and their introduction to the customers that are about to leave. 64% of the numbers to be transferred were mobile phone numbers and 36% fixed telephone numbers.



Number portability of 2010 by months

Similarly to previous years, a relatively high proportion of number porting applications were cancelled, altogether 33,366 applications, which is 28% of the total number of applications. The main reason was a better offer made to customers by the donor operator of the number during the portability period, thus enabling the customer to cancel the change of service provider. There were also inaccurate applications, i.e. a person with no contract with the donor operator asking for transferral of a number.

The number portability works properly in Estonia, but according to the statistical data it may be said that changing the communications service provider has been relatively stable throughout the years and not very popular among the residents of Estonia. Out of the total of all the reserved numbers, only 1.3% have been involved in the process of number portability.

Preparations for rearming of the GSM frequency band

In cooperation with the mobile communications operators, the Technical Surveillance Authority has started rearming of the GSM 900 frequency band with a purpose of dividing the frequency band between the operators into three constant frequency bands. Throughout the radio frequency band, three owners have two frequency authorisations. The rearming would ensure the more efficient use of the frequency band, promoting the use of new technologies and providing a better

service to the customers thereof. Compared to the currently valid frequency division, the new services and technologies require a wider frequency band.

In 2010, the GSM 900 frequency band was allocated between the operators into three constant frequency bands by drawing of lots. The result can be seen in the new radio frequency allocation plan and the new frequency allocation will enter into force on 02.02.2014.

Negotiations with the Russian Administration

From 11-14.05.2010, negotiations took place in Moscow between the representatives of the Russian Federation and Estonia. The administrations last met in 2006. Whereas the technology has significantly improved since then and new systems have been put into service in various frequency bands,

the negotiations filled the void in the cross-border frequency use of several frequency bands. As a result of the negotiations, 6 coordination agreements were signed and renewed in the areas of broadcasting, mobile and fixed telecom, and the future cooperation plans were agreed upon.

The purpose of the coordination agreements is to accelerate the coordination procedure, to provide equal access to radio frequency resources and to avoid radio interference.

Estonia switched to digital broadcasting

In the night before 1 July of 2010, all analogue television transmitters in Estonia were turned off and the era of analogue television, which started with the history of Estonian television in 1955, was over.

Interest in digital television arose in Europe already during the 1990s. The first pan-European conference on planning of digital television took place in Chester, England, in 1997. The communications administrations of 32 European countries participated in the conference; Estonia was represented by the Communications Board. The preliminary planning principles were developed at the conference, as well as the criteria and parameters of cross-border coordination, to enable initiating broadcasting of digital television without disturbing the reception of analogue television in neighbouring countries.

In November of 2003, the Minister of Economic Affairs and Communications at the time opened a digital television transmission environment that then broadcasted its programme only from the Tallinn TV-tower. At first, test programmes were transmitted.

In 2004, ETV's news programme *Aktuaalne Kaamera* was broadcast, being the first digital television programme in Estonian. Broadcasting on the digital platform was ended in February 2005.

In 2004 and 2006, representatives of European and African countries gathered in Geneva and the Geneva 2006 Agreement was entered into, which, in addition to the specified planning principles and cross-border coordination criteria and parameters also included an allocation plan of television channels, by which every country received 8-9 national digital television coverage areas. After the Geneva conference, implementation of digital television in Europe became more widespread and in most of the European Union countries, this transmission is hoped to be completed by 2012.

From December 2006, ZuumTV started offering a fee-based service with 19 programmes and zoomboxes started to be sold in stores.

From April 2007, ETV restarted broadcasting regularly on a digital platform.

In November 2007, a separate committee was formed by an order of the Government of the Republic to ensure smooth and problem-free transfer to digital television, and the Technical Surveillance Authority also played its part.

In March 2008, broadcasting of analogue television was ended on Ruhnu island, which was the first area in Estonia (and maybe also in Europe) that broadcast only digital television.

In July 2008, §45 (1) (15) of the Broadcasting Act entered into force, stating that broadcasting of television programmes in the analogue television network will be ended by 1 July 2010 at the latest. In August 2008, Estonian Public Broadcasting started the broadcast of digital programme on ETV2.



A large part of the preparations of the Technical Surveillance Authority for transition to digital television and closing of analogue television were completed already in 2009, and the operations continued in 2010.

In addition to transmitters with a large coverage area in Tallinn, Pärnu, Kohtla-Nõmme, Valgjärve, Koeru and Orissaare, 27 additional transmitters with smaller capacity are used to improve the coverage area.

The work of the Technical Surveillance Authority in relation to transition to digital television has mostly been related to ensuring the 100% availability required in the Public Television

Act (ETV). On one side, the planned measurements of the coverage areas in the critical areas in the viewpoint of propagation were carried out and complaints of the propagation quality checked, on the other, adding additional stations to the problem areas was coordinated with neighbouring countries.

Before switching off analogue television, 19 measurement trips and 210 field strength on-the-spot measurements were made in total. On 23 occasions, the signal level was not sufficient, of which AS Levira was immediately informed. In more complicated areas, additional transmitters were added.

The most important new TV-transmitters were added to Paldiski, Haanja, Kihnu Island, Kärdla and Vastseliina.

In order to improve the propagation area, the transmitters of Valgjärve, Tartu, Viljandi and Valga were directed to the 40 transmission channel with a lower frequency in March, due to which the propagation of Estonian TV channels improved in Southern-Estonia. In July, the TV-transmitters of Pärnu, Järvakandi, Abja-Paluoja and Kihnu were directed to the 26 transmission channel with a lower frequency, and Koeru to the 39 transmission channel.

Thanks to the cooperation, almost 100 per cent coverage was achieved by the moment of switching over. Improvement of propagation and the additional reference measurements continued until November, during which the signal improved, among other places, in Western-Hiiumaa.



Measuring the coverage of the digital transmission in Pirissaare

Transmission to digital television also brought out problems that were not directly related to the quality of the transmission network. For example, during the transmission, there were very intensive disturbances due to tropospheric ducting that caused the temporary freezing of a TV image, even in the case of a proper signal. Viewers were also not accustomed to the different nature of interferences compared to the analogue television (instead of shadows and "snow", a chequered and jumping image). However, statistically, most of the reception problems were caused by the wrong direction of the reception antenna or the use of old and low-quality cables. As to the new transmitters, there were some problems in relation to directing to them and choosing the right polarization.

The Technical Surveillance Authority shall continue its work in developing digital broadcasting in Estonia. Regarding the frequencies freed by the closing of analogue television, a public competition was announced in November 2010 for granting frequency authorisations in the frequency band 470-790 MHz to three more national coverage areas (in one of the coverage areas, Orissaare, a propagation area is missing). The results of this competition will be announced at the beginning of 2011.

In September, the Electronic Communications Committee (ECC) PT1 meeting took place in Tallinn

The Technical Surveillance Authority organised sequent meeting of the Electronic Communications Committee (ECC) working group in September 2010, which representatives of the communications administrations and telecommunication operators of 20 countries attended, as well as observers of the European Commission, ECO (European Communication Office) and other organisations in the field of radio communication. The aim of this working group is to develop a joint mobile communications and broadband systems regulation to ensure the effective use of the corresponding frequency band as a limited resource, and interference-free operation between different countries and systems.

In this meeting, the updating of the regulation was discussed, while taking into consideration the different approaches in choosing the technology. An important topic of discussion was also finding a way to coordinate radio systems between neighbouring countries in a way that would enable avoiding interferences in different frequency bands.



PT1 meeting of the Electronic Communications Committee (ECC) in Tallinn

Public competition for allocating the terrestrial frequency bands for provision of electronic communication services in the frequency band of 2500 – 2690 MHz

In August 2010, the Technical Surveillance Authority announced a public competition for granting of frequency authorisations for the use of terrestrial systems capable of providing electronic communications services in the frequency band 2500 - 2690 MHz. Six frequency authorisations were set out for public competition, granting a right to use radio frequencies

in construction and the development of national electronic communications networks. The use of the frequency band allocated is technologically neutral and enables the owner of the frequency authorisation to develop next generation (4G) wireless electronic communications services.

According to the Technical Surveillance Authority, the public competition was successful. In total, eleven offers were made for the six frequency authorisations placed in competition, the offers were made to all of the different frequency authorisation categories and all of the frequency authorisations offered were issued.

The winners of the competition were EMT AS (3 frequency authorisations), Tele2 Sverige Aktiebolag, Elisa Oyj and Elion Ettevõtte AS. The undertakings that participated in the competition and received frequency authorisations assumed an obligation to establish thousands of 4G base stations to Estonia in the next six years, which should bring considerable improvement to mobile data communication speeds in the near future. The offered time-scheme for establishment of the base stations is an important condition of the frequency authorisations allocated to the winners, and supervision over following this obligation is done by the Technical Surveillance Authority.

Implementation of a frequency band creates opportunities to create, expand and develop national third or fourth generation mobile networks, as well as use the new technologies, for example, LTE (Long Term Evolution). Development of technology enables a consumer to use mobile data transmission that is several times faster than before. Use of this frequency band also promotes additional competition on the markets of mobile phone and data transmission services.

Public competition for allocation of frequency authorisations for provision of digital broadcasting of TV broadcasts and programmes in the frequency band of 470-790 MHz

In November 2010, the Technical Surveillance Authority declared a public competition for allocation of frequency authorisations for provision of digital broadcasting of TV broadcasts and programmes in the frequency band of 470-790 MHz.

Frequency authorisations, which grant the right to broadcast television broadcasts and programmes via two national and one national (excluding the Orissaare area) multiplexes in a frequency band of 470-790 MHz, were traded at a public competition.

The frequency band of 470-790 MHz to be allocated for use was released on 01.01.2010 in relation to Estonia's transition to digital television. The freed frequency resource shall be passed into use through a public competition, according to the Estonian radio frequency allocation plan, thus creating preconditions for purposeful and effective use of the frequency resource freed by transition to digital television. Also, the development of media services is promoted, consumers' options of choice expanded by the use of different services of digital broadcast, and possibilities created for increasing the number of television channels offered and transmitting high-resolution (HD) image. The results of this competition will be announced in 2011.

Allocation of additional resources for organisation of rescue operations

The need for adoption of a new technology, new devices - a Personal Location Beacon (PLB). The PLB is a radio communications device that can be used in search of missing persons in local and large-scale rescue operations, for example, as a part of the Man Overboard System (MOB) at sea. Currently, there is no harmonised regulation on the use of PLB in Europe. Several importers or resellers of PLB have turned to TJA with a wish to use this device in Estonia to simplify the search for missing persons. A need to legislatively regulate the procedure of registration and use of the PLB and keeping the corresponding database has arisen in Estonia.

Search and rescue operations of missing persons are in the jurisdiction of the Ministry of Internal Affairs, the Police and Border Guard Board; management of radio frequency resource and providing the identification codes to the PLB-s are in the jurisdiction of Technical Surveillance Authority.



Amendment of the regulations of the Minister of Economic Affairs and Communications, "The Procedure of Issuing Qualification and Using Radio Frequencies for the Purposes of Amateur Radio communications" and "Procedure for formation and assignment of radio call signs" in relation to the ESTCube satellite

The purpose of amending these regulations is a need to specify the procedure for registration of an amateur radio station located on a satellite and to add the making of a call by an amateur radio station located on a satellite.

The Estonian Student Satellite program is a project started in 2008, in international cooperation of students at the University of Tartu, Tallinn University of Technology and Estonian Aviation Academy, with an aim to design, build and test a satellite, and to implement it at a low earth orbit. Estonia's first ESTCube will be ready in 2012 and it shall perform scientific experiments in orbit. Due to the satellite standard, the satellite will use amateur radio frequencies for communication.

At a meeting taking place on 9.02.2011 in Tartu, an overview will be given on the current situation of the student satellite and its further steps.

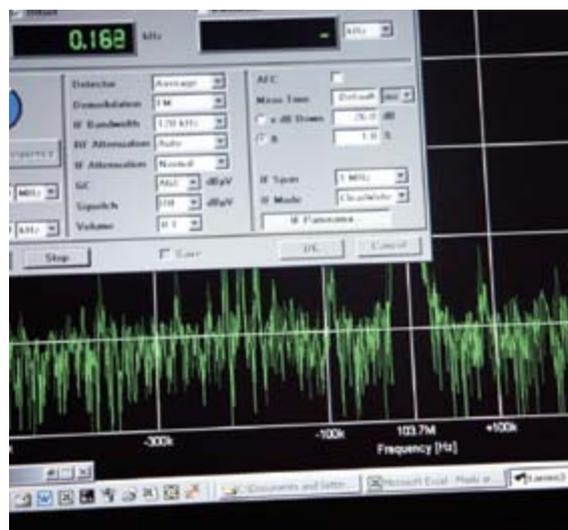
Radio frequency supervision

In the beginning of 2010, two of the Technical Surveillance Authority's measuring cars and the monitoring bus received new antenna masts. Instead of pneumatic masts, the crank mechanism of German company Geroh was used to install masts that are raised by hand. It considerably improved the use of masts on measurement trips taken during cold periods and in solving failures, since the new masts would not freeze when in an extended position.

As a task of national importance, the coverage measurements of public digital channel package MUX1 were continued in 2009. Before switching off the analogue television in 1 July 2010, 19 measurement trips and 210 field strength on-the-spot measurements were made in total. On 23 occasions, the signal level was not sufficient, of which AS Levira, the signal transmitter, was immediately informed. By regions, 3 precepts were made in Võru County, 1 in Valga County, 1 in Rapla County, 4 in Harju County and 2 in Hiiu County. As a result of the steps taken, almost 100 per cent coverage was achieved at the moment of switching over. Perfecting the propagation and ancillary audit measurement tests were continued until November, and during that time, the signal in Western Hiiumaa was improved.

A lot of attention is turned to regular measurement of FM broadcasting transmitters in Europe, since disturbances in the work of a transmitter may cause noticeable radiation products on the frequency band meant for aeronautical communication. During the year, a total of 1432 measurement procedures were made from the stationary monitoring station and by measurement vehicles. Violations of technical requirements were detected on 36 occasions, mostly of a non-dangerous nature, as the wrong RDS code or minimum surpassing of the band width. 5 warnings and 1 precept was made.

In the course of solving complaints on radio interferences, 185 interference notifications were taken, 112 of them being interferences of television reception, 36 of radio communications, 19 of reception of FM broadcasting, 4 of car alarms, 2 interferences of the GSM band and 2 occasions of generating devices in the air. Practically all interferences were resolved or of a temporary nature.



Railway infrastructure user fees

In 2010, the Ministry of Economic Affairs and Communications updated the methodology for calculating the public railway infrastructure user fee (hereinafter: Methodology). Since the implementation practice of the Methodology so far had shown that the wording of some of the provisions was not clear enough and left unjustified possibilities for the incorrect interpretation of the Methodology. Due to that, there was a need to specify the wording of the Methodology and thus simplify the understanding of its requirements and meaning.

Also, an article was added to the Methodology, according to which the Technical Surveillance Authority shall determine the new estimated user fee, if the amount of train-kilometres corresponding to the capacity parts allocated to the rail transport undertakings differs significantly from the amount of train-kilometres actually ordered during the first two calendar months of the given timetable period. The corresponding data show the actual transport and using them in determination of the new estimated user fee gives market participants a clear indication of the unit price of the main service user fee.



The total annual expenses of AS EVR Infra (publik railway infrastructure manager) decreased by approximately 10%, and direct expenses by approximately 15%.

The total annual expenses of Edelaraudtee Infrastruktuuri AS (publik railway infrastructure manager) decreased in comparison with the previous year by approximately 4%, while the direct expenses decreased by approximately 2%. With regard to the timetabling period, which will start on 30 May 2010, the unit prices of infrastructure fees predicted by AS EVR Infra were set at the lowest level the methods allowed, since the railway freight undertakings had applied for a significantly larger capacity than was indicated by the actual use of railway infrastructure.

Due to the new redaction of the Methodology, the director general of the Technical Surveillance Authority changed, with his order, the unit price of the base services of the estimated user fee of railway infrastructure of AS EVR Infra to a more precise figure. The Director General of the Estonian Technical Surveillance Authority establishes, on a monthly basis, an adjusted infrastructure fee directly on the basis of freight

capacities of railway undertakings, which serves as a basis for the infrastructure managers to submit invoices to railway undertakings, and it also makes the unit prices considerably more accurate than would be allowed by the framework of determining the predicted infrastructure fees.

New passenger trains

In 2010, a procurement contract was awarded between AS Elektriraudtee and Swiss company Stadler Bussnang AG for purchase of 18 electric and 20 diesel trains in total. Purchase of the electric trains will be supported by the Cohesion Fund with EUR 67,575,000, and the diesel trains will be purchased under financial lease. The first electric trains will arrive in Estonia in 2012, all of the currently used trains will be changed to new ones by the beginning of 2014.

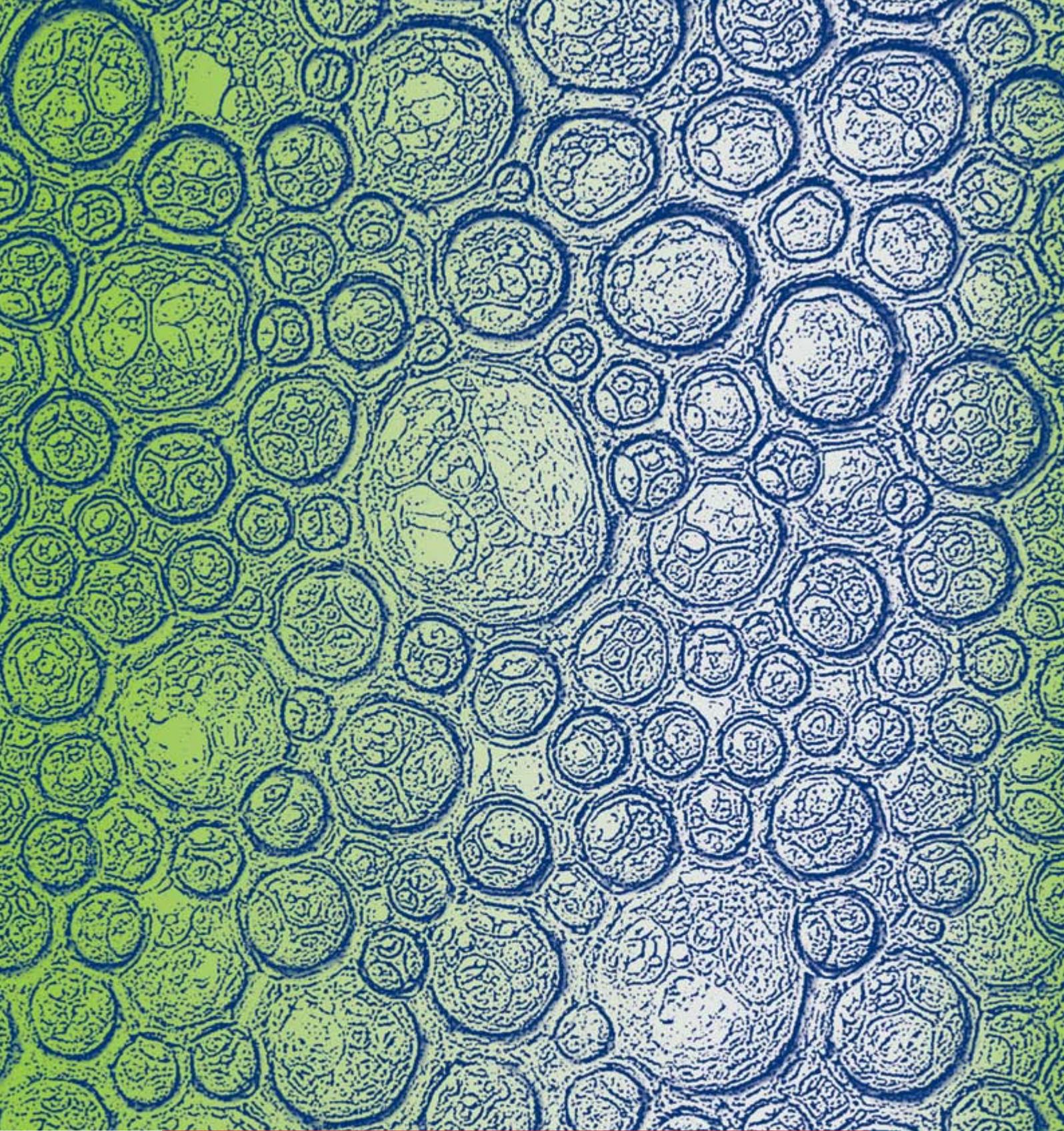
The new passenger trains are adjusted to the speed of 160 km/h and in accordance with the 550 mm high passenger platforms under reconstruction. Together with the new passenger platforms and the rail tracks enabling higher speeds, the new passenger trains will make railway travelling significantly more comfortable in the upcoming years and it may be presumed that passenger train travel will become more popular.

An overview of the developments in Estonian railway sector in 2009

The Technical Surveillance Authority compiled a report in 2009, presenting an overview of the railway safety activities, statistics of railway accidents throughout the years, impact factors of the accidents and the objectives set and operations done to prevent them.

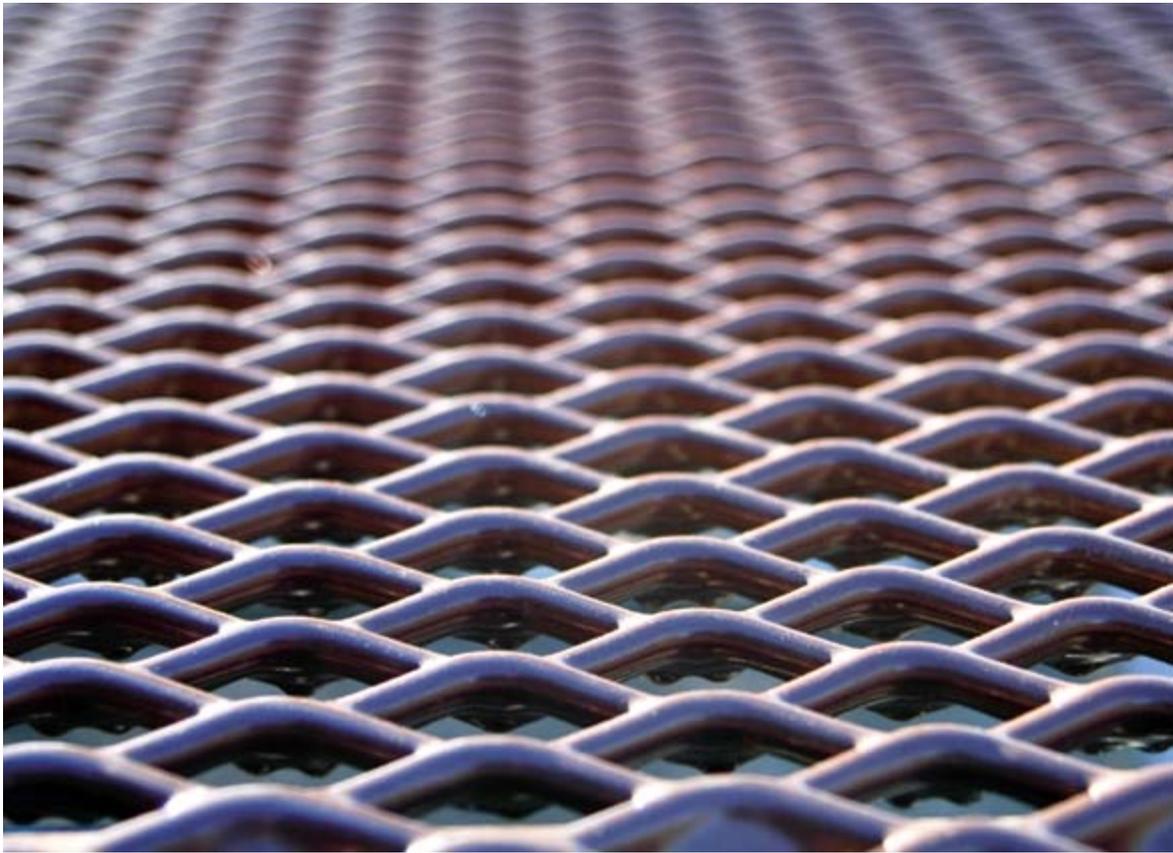
The report also describes the developments of implementation of the safety directive, issuing of safety certificates and the corresponding national surveillance in 2009, also the structure and role of the Technical Surveillance Authority in developing Estonian railway sector and its cooperation with other organisations. The report also states the most important changes in legislation.





STRUCTURE OF THE ORGANISATION, OFFICIALS, BUDGET



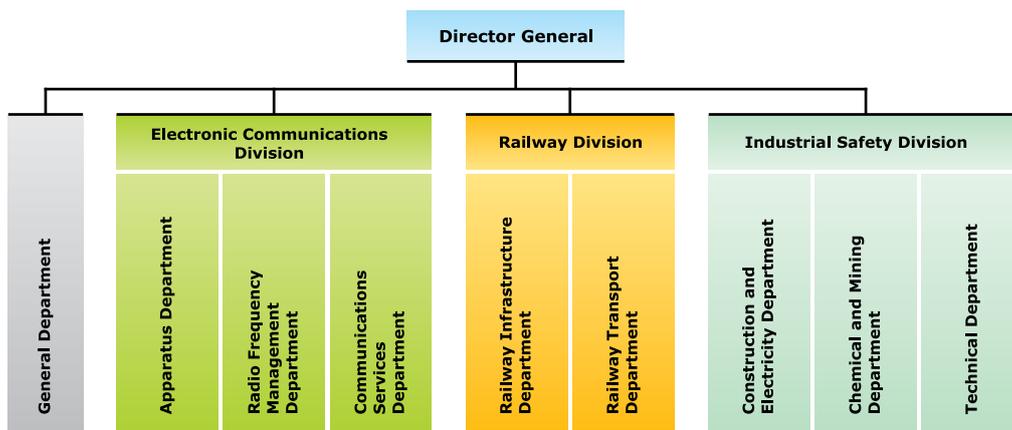


Structure of the organisation, officials, budget

Structure and purposes

From the beginning of 2010 structural changes were implemented in the Industrial Safety Division of the Technical Surveillance Authority. The Departments of Electrical Safety and Building Safety were combined, as well as the Legal Metrology Department and the Technical Department. Since 2010, three departments belong to the Industrial Safety Division - the Building and Electricity Department, the Technical

Department and the Chemicals and Mining Department. At the end of 2010, preparations were started for structural change in the Electronic Communication Division, according to which the fields of frequency management and radio frequency surveillance will be joined. The structural change will enter into force at the beginning of 2011.



Structure of the Technical Surveillance Authority

In 2010, the development plan of the Technical Surveillance Authority for 2010-2013 was supplemented. The objectives, measures needed for achievement of the objectives, and the indicators for evaluating achievement of these objectives, were renewed. For the development of the organisation, three main objectives were set again together with measures and indicators: increasing the ease of the use of public services, creating a productive work environment, and developing the professional skills of officials while ensuring their competitive remuneration.

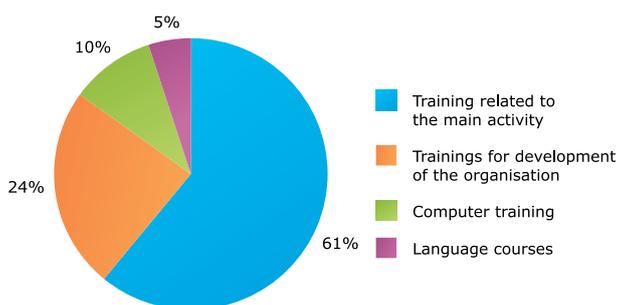
To increase the ease of use of public services for customers, the Technical Surveillance Authority continued the harmonisation of its working procedures and the development of electronic solutions and information systems for its procedures in 2010. In 2010, the Technical Surveillance Authority implemented a new extranet, the basis of which was mostly the need to improve the availability of information. The new extranet is built on the basis of three of the largest areas of the Technical Surveillance Authority - electronic communications, railway and industrial safety.

In 2010, modernisation of the register of railways and linking it to the JVIS database on the Technical Surveillance Authority devices and installations continued.

In 2010, the internal administrative instructions, for example, operations procedures and internal procedure rules were updated. The tradition of the Authority's summer gatherings was continued, as well participating in the basketball tournament of national officials.

In order to improve the officials' knowledge and skills, trainings in the total sum of EEK 426,654 were carried out in 2010. Out of the trainings of 2010, the largest part (61%) was formed by the trainings related to the Authority's main activities. One of the largest trainings was the in-service training programme for supervisory officials on performance of administration and misdemeanour procedures, the objective of which was to increase the quality and effectiveness of surveillance as the key function of the Technical Surveillance Authority. The training was financed to the extent of 85% by the European Social Fund; 70 officials participated.

In addition, trainings were organised to develop the organisation, as well as computer trainings in relation to implementation of the Office 2007 platform. Also, foreign language courses continued; 70% of the cost of which was covered by the officials themselves.

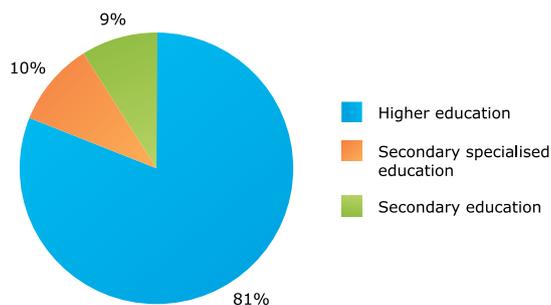


Distribution of the fields of training in 2010

Officials

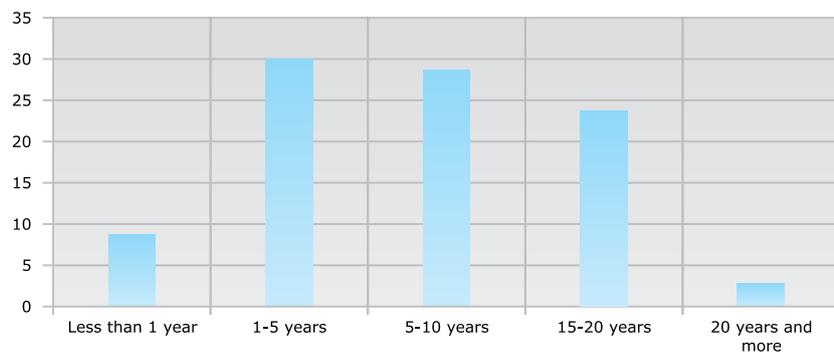
At the end of 2010, 92 officials were working in the Technical Surveillance Authority. Within the year, 12 new officials were hired and 11 officials left. Hiring and leaving of the employees was a result of changes in the legislation, which triggered the need for changes in the working organisation.

With regard to the distribution according to the level of education, the number of officials with higher education increased by 5 per cent, and constituted 81% by the end of 2010. The general educational level of the officials is sufficient for performance of the work tasks, but on certain subjects and due to specifications of their work, the officials need additional legal or in-house training.



Distribution of officials by educational level in 2010

From the distribution of the public service length of the officials, it can be seen that the interval of 1-15 years is almost equally represented. Such distribution may be considered good, because the mostly younger officials, with a length of service of 1-5 years, are supported by officials with a longer experience.



Length of service of officials in public service in 2010

Revenue of the state budget

In 2010, the state received EEK 70,895,518 for the procedures performed by the Technical Surveillance Authority.

Procedure	State fee
Procedures performed under the Mining Act	12 800
Issuing, amendment and extension of type-approval certificates	14 032
Procedures performed under the Explosive Substances Act	115 750
Entries into the Railway or Rail Vehicles Register and issuing building permits and authorisations for use	2 592 072
Issuing, amendment and extension of safety certificates	396 700
Procedures performed under the Digital Signatures Act	12 300
Procedures related to frequencies performed under the Electronic Communications Act	28 112 487
Procedures concerning numbering performed under the Electronic Communications Act	39 639 377
TOTAL:	70 895 518

Distribution of state fees by procedures

Budget

The Technical Surveillance Authority's operational expenditure budget for 2010, together with the expenditure transferred from 2009, was EEK 38,077,079.

Expenditure description	Budget of 2010*
Development of radio equipment database	190 000
Membership fees	45 000
Total personnel expenditures	31 687 287
Remuneration	23 260 469
Fringe benefits	160 000
Taxes related to staff costs	8 266 818
Total management costs	6 689 792
Administration costs	1 914 500
Research and development	220 000
Travel costs	834 000
Training costs	316 292
Management costs for registered immovables, buildings and rooms	1 311 000
Management costs for facilities	330 000
Operation and maintenance costs of vehicles	1 100 000
Information and communications technology costs 82 000	
Management costs for inventory	95 000
Management costs for machinery and equipment of various work applications	155 000
Medical and hygiene costs	27 000
Special clothing and uniforms	5 000
State fee expenditures	52 580,00

**Expenditure with funds to be transferred*

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