YEARBOOK 2012

TEHNILISE JÄRELEVALVE AMET
ESTONIAN TECHNICAL SURVEILLANCE AUTHORITY

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DEAR READER,

With the 2012 year ended, the Technical Surveillance Authority has reached its first landmark – we have been in business for five years. We started our activity in January 2008, as a result of the merger of three state agencies. Despite the reorganisations related to the merger and the economic crisis just in the start-up phase, this period has been successful for us and the employees of the Technical Surveillance Authority can be proud of what has been achieved. The merger of the agencies has been justified in every way: the use of resources is more efficient; thorough planning and well-weighted measures have made it possible to direct funds to where the risks and expectations of society demand it; the volume of information and prevention activity has increased; we have learned from experience in different business fields and are using the best tested practices; the feedback of partners and the results of the few court litigations show that the quality of procedures of the authority are at a high level. Such examples can be brought from all our business areas.

The Technical Surveillance Authority is the national regulator in many areas on which the changing economic environment and the development of technology have had different impact. Accordingly we have also experienced situations in our work where the set framework has become outdated, standards do not serve their purpose or have, indeed, become unenforceable. In 2012 we paid a lot of attention to the thorough analysis and organisation of regulation in the business areas of the Technical Surveillance Authority and are making proposals for modernisation where necessary and relevant. The key phrase over the past years has been escalation of the competence of the Technical Surveillance Authority into areas which match our goals and activity and create mutual synergy. For example, our responsibility in the energy efficiency field of buildings is increasing and starting from next year we shall assume the activities of the implementing entity of European Union transport investments in the area of waterways and roads. Riigikogu is proceeding a legislative amendment which, if adopted, will grant the competence of a media regulator in the electronic communications area to the Technical Surveillance Authority. This trend indicates that the work performed by the Technical Surveillance Authority is trustworthy and it is our task to justify this trust again in the upcoming five years.

Looking back to the first five years of operation of the Technical Surveillance Authority, I would like to thank and commend all of our employees for their good work, thanks to whom our activity has, year-on-year, become more efficient and better focused. Also I would like to thank all of our cooperation partners together with whom we have managed to accomplish a great deal in each of our business areas.

With best wishes,
Raigo Uukkivi
Director General

PURPOSES AND VALUES

PURPOSES

The Technical Surveillance Authority is an agency working under the Ministry of Economic Affairs and Communications with a broader objective to help implement 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.

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, our goals are ensuring the safety of objects and processes subject to our supervision and increasing the corresponding awareness.

As to increasing reliability, we aim to ensure the availability of services provided in our area of activity and their conformity with the requirements, as well as the 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 regulated by us and their sustainable use.

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

VALUES

The vision of the Technical Surveillance Authority is to have 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 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 an integral state agency with clearly understandable working principles and a good reputation, offering interesting employment that presents opportunities for development, a good working environment and competitive salaries, and appreciating the competence and work of the officials
- 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 that represents the interests of the state; always willing to share and learn.

INCREASING SAFETY: ACTIVITIES AND RESULTS

We engage in the supervision of safety of electric installations and works, handling dangerous chemicals, devices and installations of gaseous fuel, lifts and cableways, machinery, pressure equipment, extraction and blasting and pyrotechnics, buildings and construction, including railway construction and rolling stock and railway traffic.

In the field of construction, 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 in the register of economic activities and the availability of the required specialist in charge. We also coordinate detailed plans and design criteria regarding buildings on a public water body that have a permanent connection to the shore.

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 inspect the conformity of working in protected zones of line facilities and exercise supervision over technical inspection bodies and institutions dealing with certification of staff.

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

In the supervision of mines, quarries and peat fields, we supervise the safety of extraction technology and the conformity of the documentation related (projects, development plans, technical documentation), in addition, we monitor the compliance of the enrichment and first-stage processing processes of mineral resources with safety requirements.

In the field of explosive substances and pyrotechnic articles, we monitor compliance of handling (manufacturing, storing and use) to the requirements, and also 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 to the requirements. We also monitor the conformity of the technical inspection body and of the persons conducting examinations for persons in charge to the established requirements. Additionally, we supervise the conformity of determining potentially explosive atmospheres and the conformity of equipment and protection systems used therewith.

In respect of lifts and cableways, 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.

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.

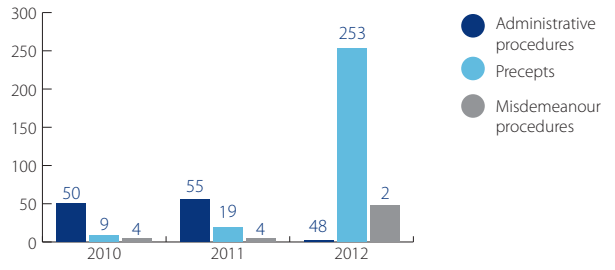
In respect of **pressure equipment**, we check its conformity, as well as conformity to the requirements for installation, use, repair, alteration and production of hazardous liquid tanks, and the performance of duties of the technical inspection bodies and manufacturers. We also monitor the conformity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

In respect of **railway safety**, we issue 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 regional offices of 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 activities in the protected railway 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 the organization of carriage of dangerous goods.

BUILDINGS AND CONSTRUCTION ACTIVITIES

In 2012, the Estonian Technical Surveillance Authority conducted 48 procedures (incl. on 20 playgrounds) in order to check if buildings and construction activities conform to the requirements, resulting in initiation of 2 misdemeanour procedures and issuing of 253 precepts. The existence of registration in the register of economic activities and correctness of data was checked for 42 undertakings operating in this field, and 16 precepts were issued to restore the correctness of the data in the register. Registration in the register of economic activities was deleted in case of 7 undertakings due to repeatedly ignoring the precept.

Supervision of the conformity of construction and buildings in 2010–2012



The general number of procedures has somewhat reduced compared to last year, while the number of precepts has increased. It is largely due to the procedure related to a building in the downtown of Tallinn with a partially cracked glass facade that was in danger of collapsing on some occasions. Since the building under consideration is under common ownership of a large number of people which also lacked a common representative organ, for example, an apartment association, the Technical Surveillance Authority was forced to make precepts to all co-owners for bringing the building into conformity with the construction requirements.

In 2012, the main problems were insufficient documentation of construction activities, and on some occasions, use of non-complying construction products. Another noticeable aspect in the field of constructions is insufficient maintenance that may lead to dangerous situations.

In addition there was participation in the investigation of 6 building accidents, half of the cases being triggered by snow load. Admittedly no individuals were injured in these accidents.

Mapping and elimination of dangerous wells

Tragic accidents due to broken hatches or uncovered wells have increased in Estonia in recent years. For example, according to the Technical Surveillance Authority, at least 10 accidents took place in 2011 involving a person falling into an uncovered well of a utility network or utility works. 6 of these accidents had tragic consequences - the person died. There are very many utility network wells, as well as old water holes and other similar structures in Estonia and finding the solutions for reducing the occurrence of such accidents is complicated by the lack of an actual overview of the locations and condition of such structures. In addition, the safe condition of these structures can turn extremely life-threatening very unexpectedly and quickly due to vandalism or theft. In many cases, owners of registered immovables do not adhere to their obligation to ensure maintenance of and safety on the registered immovable and its structures. The reason may be lack of awareness of the owner's obligations, recklessness or not being aware of the existence of wells or other potentially dangerous structures located on the registered immovable.

In order to promote building safety and to reduce the number of instances in which people fall into such "traps", the Technical Surveillance Authority called for a discussion between different organisations and agencies. The discussions were attended by local governments through their representative organisations, the Rescue Board, the Police and Border Guard Board, the Land Board, the Road Administration and the team of the Let's Do It campaign.

As a result of cooperation, the bodies came to establishment of a common notification channel for citizens for informing people of dangerous structures, and preparation of the Land Board's map application for mapping these structures and organising the necessary surveillance to ensure safety. In cooperation with the TSA, the Rescue Board and the Let's Do It team an extensive awareness campaign was held in relation to the Day of Civil Actions that took place all across Estonia on May 5. The aim of the campaign was to direct people to notify the Rescue Board of those dangerous wells found during the civil actions and after that, calling the information number 1524. According to the agreements, the Rescue Board will deliver the received information to the local government of the location of the dangerous structure whose task it is to operatively determine the person responsible for safety at the structure (owner of the structure or the registered immovable) in the course of construction supervision, and to ensure that it will become safe.

The Technical Surveillance Authority has called for notifying of dangerous structures throughout 2012 and as a result, almost 300 dangerous structures were reported from April 2012 until the end of the year. The Technical Surveillance Authority will continue informing the public and plans to introduce a public map application.

According to the information known to the Technical Surveillance Authority, considerably less analogical accidents took place in 2012 compared to 2011: 6 accidents, 2 of which unfortunately ended fatally.

A campaign call for notifying of dangerous facilities

Technical Surveillance Authority maps the condition of balconies of panel houses constructed in the period of 1960–1990

In order to determine the causes of a panel house balcony barrier collapsing in April 2012 in Lasnamäe, Kalevipoja 17, the Technical Surveillance Authority initiated a procedure in the course of which an expert assessment was carried out on the technical condition of the collapsed balcony border and the rest of the balcony borders of that building.

The inspection of the balconies revealed that the fastenings of the bordering panels of the balconies are not fixed in the required extent, the quality of fastening works is low and the fastenings are unprotected from external forces and are heavily rusted. According to the expert assessment, these fastening solutions cannot be considered good since the connecting elements made of regular steel are unprotected from the moisture from rain, melt water and humidity of the surrounding environment, and antirust materials do not remain on the fastening surfaces. Another important problem stated by the expertise was the low quality of the construction works and thus the low reliability of the fastening structures.

To solve the problem and remove the initial danger, the Technical Surveillance Authority issued a precept to the apartment association to remove the covering layer and rust on all fastenings of the front panels of the balconies of the Kalevipoja 17 building, their additional reinforcement and covering with rustproof paint.

Although the cause of this specific accident was a building defect in the apartment building, the fastening construction solution of the collapsed border (weighing almost 800 kg) is not the best one. This is why we initiated an investigation to determine the safety of the bordering panels of that balcony type.

In the first stage of the investigation we mapped the different types and subtypes of balcony borders in the risk group, and the addresses of the apartment buildings that have these types of bordering panels. There are almost 850 buildings like that in Estonia, most of them located in Tallinn (mainly in Lasnamäe and Õismäe), but there are also a lot in Tartu and in a slightly smaller extent in Pärnu, Valga, Viljandi and Ida-Viru County.

The investigation also determined that the fastening structures of the bordering panels have been designed as required and their load-bearing capacity has been ensured under the project. However, considering the fact that the structures under consideration are mainly defenceless from direct weather impacts and have not usually been maintained during the last 40–50 years of use, the current condition of these structures in unknown. Thus, the Technical Surveillance Authority will continue with the investigation in 2013 to determine how the structures have stood the test of time and whether some construction types need future reinforcement to ensure safety.

The overall condition and safety of public playgrounds in Estonia can be considered good

In 2012, the Technical Surveillance Authority carried out a monitoring campaign of public playgrounds in the larger towns of Estonia with the aim of checking compliance with the general requirements and to assess the safety and maintenance of the playgrounds. A total of 20 playgrounds were checked in the course of surveillance, 15 of which were equipped with modern attractions and 5 with older, so-called Soviet-era attractions. 14 of the checked playgrounds belong to local governments and 6 to apartment associations.

Few non-compliances were found on the checked playgrounds and their overall and safety condition can be considered good. The main problems were worn out and thus dangerous details of the attractions, unmaintained and uneven ground around the attractions and the lack of information signs with the contact data of the owner. All of the detected problems were solved operatively by the owners and there was generally no need for issuing precepts.

The most serious and dangerous shortcoming detected under the campaign was related to the risk area of a swing system of a playground located in Tallinn, in which the risk area included a surrounding metal fence with sharp spikes. The owner of the playground was informed of the danger and quickly removed the chains for the use of the swing to eliminate initial danger, and then changed the location of the attraction so that the sufficient risk area would be ensured.

Designing buildings in public water bodies

In 2012, the Technical Surveillance Authority for the first time issued a building permit and an authorisation of use for the construction of buildings in a public water body without a permanent connection to the shore. Based on the latter, the lake heating piping of the Centre for Limnology of the Estonian University of Life Sciences was built and has been used since the beginning of the heating period (at a length of approx. 6 km on an area of the size of 6000 m^2) in Lake Võrtsjärv.

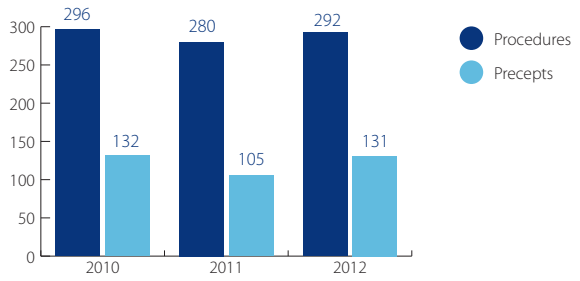
In addition, the Technical Surveillance Authority authorized the adoption of 18 detailed plans in 2012. The plans envisage the construction of buildings in public water bodies with a permanent connection to the shore with an approximate area occupied of approx. 50,000 m^2.

In 2012, the Technical Surveillance Authority coordinated the design conditions for designing 21 buildings in public water bodies with a permanent connection to the shore, with a total area occupied of approx. 32,000 m^2.

ELECTRICAL INSTALLATIONS AND WORKS

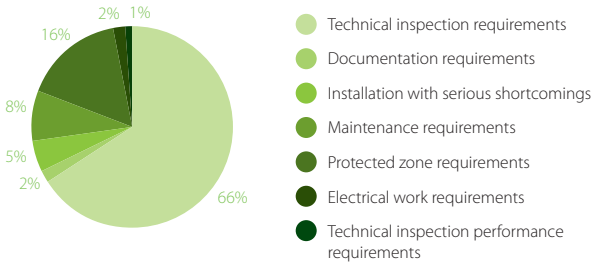
The Technical Surveillance Authority supervises electrical installations and works across Estonia. 292 procedures were conducted in 2012, in the course of which 131 precepts were issued. Of those procedures, 18 were related to technical inspection bodies, 21 to electrical works, 232 to the use of electrical installations, 27 to non-compliance with protected zone requirements and 5 to the investigation of accidents. Misdemeanour procedures were initiated on 26 occasions. 1 decision was made to delete an undertaking as an electrical contractor from the register of economic activities.

Supervision of electrical installations and works in 2010–2012



The number of procedures showed a slight increase in 2012 compared to the previous period. The number of procedures to identify conformity with the requirements of electrical works remained similar to the previous period. At the same time, the number of procedures to identify conformity with the requirements of protected zones and inspected electrical installations has increased. In comparison to the previous years, the identified shortcomings have remained the same.

Shortcomings identified in relation to the use of electrical installations



In 2012, 232 procedures were conducted and 125 precepts made regarding the use of electrical installations.

During the procedures, the following objects were inspected:

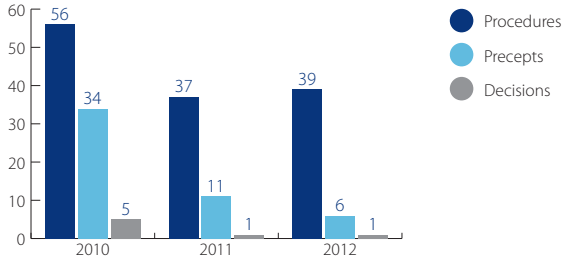
- 84 local authorities with respect to child care institutions owned by them, 71 precepts were issued;
- 51 industrial installations, 27 precepts were issued;
- 36 network installations, 4 precepts were issued;
- 18 medical institutions, 8 precepts were issued;
- 16 other educational, cultural or social institutions, 3 precepts were issued;
- 14 accommodation establishments;
- 13 apartment buildings, 2 precepts were issued;
- 12 business and office buildings, 5 precepts were issued;
- 4 gas stations, 3 precepts were issued;
- 3 temporary electrical installations (temporary installations of entertainment establishments)

The main violations were the lack or expiry of technical inspection, shortcomings in the organization of maintenance (lack of maintenance organiser or plan) and shortcomings in the documentation of an electrical installation.

27 procedures and 26 misdemeanour procedures were initiated in order to determine the violation of the requirements of protected zones and 1 precept was made. Compared to previous years, the number of procedures has notably increased, since the number of violation notices of electrical installations received from the network operator has increased. The main shortcoming was negligence during the excavation works in protected zones of underground cables or overhead transmission lines; there were also violations in clearing protected zones from trees and scrub.

During the conformity supervision of electrical works, 39 procedures were conducted, 6 precepts made, and 1 undertaking was deleted from the register of economic activities. The main problems were the incorrectness of data entered in the register of economic activities and mistakes made by the technical inspection body during the inspection.

Procedures regarding the compliance of electrical work with requirements in 2010–2012



Electrical accidents

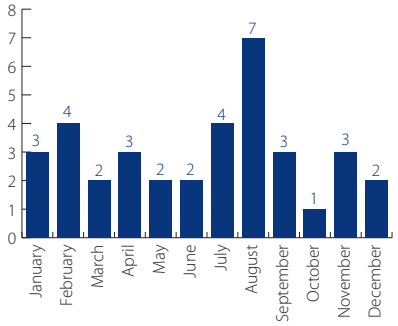
In 2012, there were 36 accidents related to electricity, with 36 people injured (mainly burns and heart rate problems), but no fatalities. The number of accidents has decreased by one third compared to 2011, when 51 accidents happened. The main reasons for accidents caused by electricity were failure to comply with safety requirements, negligence and use of defective electrical appliances.

Most of the accidents (86%) occurred in domestic conditions i.e. at home or in the vicinity, 14% of the accidents were occupational accidents and related to substations and hubs. Accidents in domestic conditions occurred during repair work carried out at home and due to using damaged electrical wires or devices. The main cause for occupational accidents was failure to comply with electrical safety requirements, as well as wrongful operation of work equipment and failure to use personal protective equipment.

By areas, most accidents occurred – similarly to the previous years – in Northern Estonia, in Tallinn, Harjumaa and Ida-Virumaa, 18 accidents (50% of all recorded accidents) and in Southern Estonia, 13 accidents (36% of all recorded accidents). No accidents were recorded last year in Western Estonia.

By months, most accidents occurred in the summer months – in August (7) and in July (4). In the remaining months, the number of accidents remained between 1 and 3. Growth in the number of accidents in the summer months was caused by increased use of electrical devices in the summer period.

Accidents caused by electricity in 2012 across the months



Most accidents happened to children up to 9 years of age (25% of all recorded accidents) and to the age group 30-49 years (25% of all recorded accidents). The main reason for accidents with children was their lack of awareness of dangers related to electricity, as well as situations caused by negligence of parents, where damaged or uncovered live electrical devices or wires were accessible to children.

The Technical Surveillance Authority receives notifications of electrical accidents from the Emergency Centre and the owners or users of electrical installations.

In addition to electrical accidents, the Emergency Centre also communicates information regarding power failures. In 2012, the number of such messages was 234 (360 in 2011). Most of the emergency notifications were related to overhead transmission lines – mainly trees fallen on the overhead transmission lines, and fallen power lines or posts. There were also reports of fires occurring in distribution centres and substations.

The Technical Surveillance Authority conducted a national supervision campaign of electrical installations of municipal childcare institutions

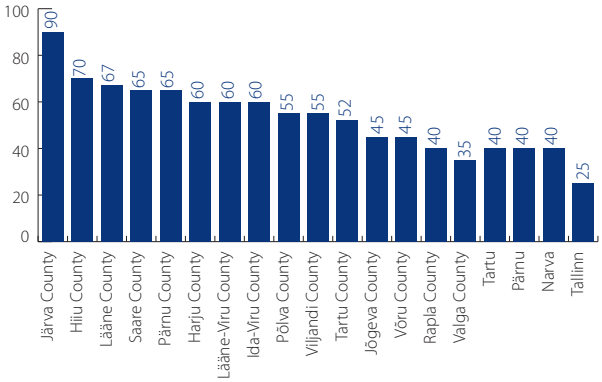
In 2012, the Technical Surveillance Authority conducted a national supervision campaign of electrical installations of municipal childcare institutions to get an overview of the condition of the installations and their conformity to the requirements of the Electrical Safety Act. Within the campaign, data was collected on the mandatory technical inspection carried out in the electrical installations of childcare institutions and on the organisation of maintenance.

Based on the collected data, all electrical installations of childcare institutions were in conformity with the requirements in 45% of the responded local authorities, in 35% of the local authorities the electrical installations of childcare institutions were partly in conformity with the requirements and in 20% of the local authorities no technical inspections of the electrical installations had been conducted in childcare institutions.

By counties, the electrical installations of the Järvamaa childcare institutions were in the best condition, where all the installations were in conformity with the requirements in 83% of the local authorities. Also Hiiu-, Saare- and Läänemaa could be considered as quite good, where 60% of the local authorities corresponded to the requirements established for the electrical installations of childcare institutions. The number of local authorities with completed technical inspections of electrical installations was lowest in Rapla-, Tartu- and Viljandi counties and in Lääne-Virumaa. The highest number of local authorities, where no technical inspections had been conducted in electrical installations was in Valga and Viljandi counties. According to the Technical Surveillance Authority, the largest local authority in Estonia, Tallinn, with 200 childcare institutions, had only 20% of electrical installations of childcare institutions that were in conformity with requirements.

The Technical Surveillance Authority issued precepts for bringing the electrical installations of childcare institutions into conformity with the requirements for local authorities, who had deficiencies in the electrical installations of childcare institutions and who had previously not submitted time-schedules for bringing the electrical installations into conformity with requirements. By the end of 2012, a lot of local authorities had brought the electrical installations of childcare institutions into conformity with requirements pursuant to the submitted time-schedules or issued precepts; accordingly, compared to the initially collected data, the condition of the electrical installations of childcare institutions had already improved.

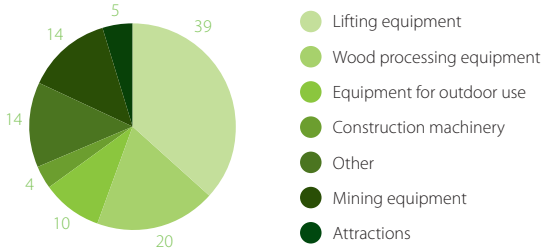
Electrical installations of childcare institutions with certificates of adequacy by counties and in major cities (%) as at December 2012



MACHINERY

In 2012, 62 supervision procedures were initiated and 4 precepts issued. In 20 cases market supervision was conducted and in 42 cases supervision of use was conducted. 117 devices and installations, most of which were lifting and wood processing equipment and lithotriptors belonging to the scope of application of the Machinery Safety Act, were inspected.

Devices inspected in 2012



In cooperation with the Chemicals and Mining Department, the machinery used in underground mines and quarries was inspected in

the form of a campaign. Within the campaign, the crushers of the Tondi-Väo, Otisaare, Lubja, Kurevere, Karinu, Vasalemma and Harku quarries were inspected. The majority of the inspected stationary crushers were of Soviet origin, except for the Harku quarry that uses the most modern crushing plant in Estonia.

The main identified shortcoming was poor delimiting of access to danger zones of the equipment – e.g. there were no proper boundaries preventing access to the danger zone or the boundaries of the danger zone were not marked. The problem was also insufficient completeness of the machinery (e.g. protective covers of different parts of the machinery were missing) and misuse of machinery (user manuals were missing or in an incomprehensible language for the user). Such deficiencies may lead to various hazards, e.g. risk of falling from a height when working, crushing hazard by moving parts of the machine, impact hazard by stones escaping from the equipment, trapping hazard by moving part of the machine, etc.

The shortcomings detected during the campaign were eliminated by the enterprises within reasonable time and there was no need to issue a precept in any of the cases.

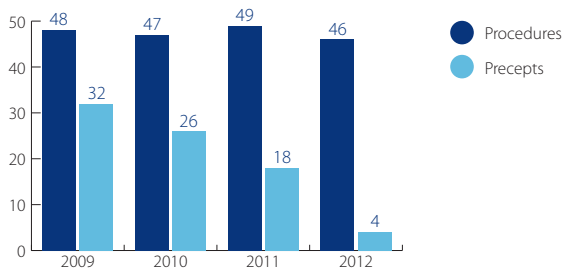
In 2012, the Technical Surveillance Authority participated in the European Union common project on the "Safety of simple log splitters and log splitting stations", in course of which all known enterprises manufacturing log splitters and log splitting stations in Estonia were visited and correspondence of their products to the requirements of the Machinery Directive inspected.

LIFTS AND CABLEWAYS

In 2012, 46 supervision procedures were initiated and 4 precepts issued. In addition, a misdemeanour procedure was initiated against a natural person regarding the use of inappropriate ski lifts. The number of procedures decreased notably compared to previous periods, mainly caused by changes in the modalities.

Throughout the year, the use and compliance with requirements of 163 lifts and 6 cableways was inspected. In addition, the conformity of the activity of an operator and technical inspection body of lifting equipment was inspected.

Supervision of lifts in 2009–2012

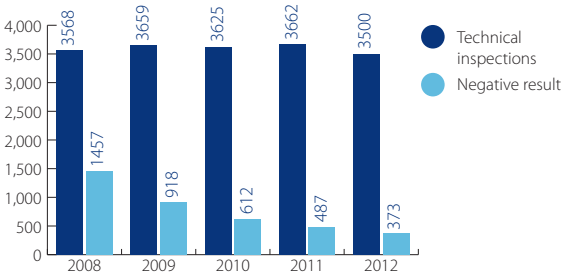


The technical inspection body Inspecta Estonia OÜ carried out 3774 technical inspections, with a positive result in 3376 cases. Starting from 2008, the number of positive technical inspections has constantly increased.

There were no accidents with serious consequences during the year, however in the second half of the year the Technical Surveillance Authority participated in the investigation of circumstances of a case related to a lift and at the end of the year in the investigation of circumstances of a case related to a ski lift.

For the fifth time, the lift safety advisory committee session took place, the main topics being the condition of drives, installation of new lifts with rack shafts, secondary equipment installed in the machine room and the need for a supervisor of use.

Results of technical inspections of lifts in 2008–2012



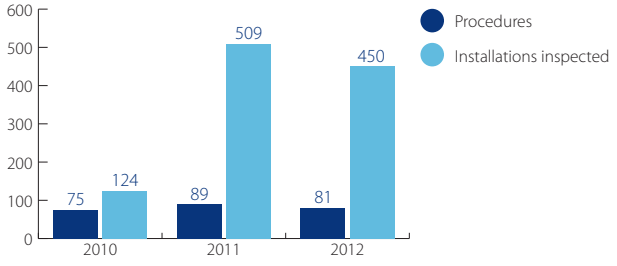
PRESSURE EQUIPMENT

In 2012, the main inspection objects within the supervision of the market and use of pressure equipment were pressure vessels subject to registration, including vessels for dangerous substances. During the year, 81 supervision procedures were initiated, 67 protocols prepared, and 14 precepts made. The main non-compliances were the absence of valid technical surveillance on the pressure equipment to be registered, and evasion of the obligation to register. No misdemeanour procedures were initiated in the field of pressure equipment.

In addition, compliances of oil shale oil mark-C (flash-point less than +55 °C) user containers were inspected. In total, 45 undertakings were inspected and various non-compliances with the Pressure Equipment Safety Act detected.

Compared with the previous period, the number of procedures decreased in 2012, but at the same time more non-compliances with the Pressure Equipment Safety Act were discovered.

Supervision in the pressure equipment in 2010–2012



In addition to equipment surveillance, the undertakings providing pressure equipment services were inspected based on complaints and data in the register of economic activities. Two undertakings received precepts on the absence of a legal relationship with a person operating the pressure equipment. Most of the undertakings renewed their information after a request from the Technical Surveillance Authority.

In 2012, the Technical Surveillance Authority participated in harmonisation of translations on welding standards by the Estonian Centre for

Map of gas accidents and emergencies in 2012

Standardisation. In total, nine standard translations on welding were reviewed.

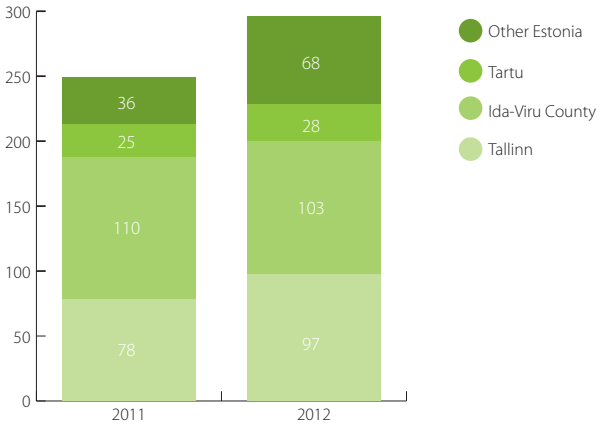
In cooperation with the Ministry of Economic Affairs and Communications, the Estonian Gas Association, performer of the technical inspection Inspecta Estonia OÜ, and the undertakings operating in the field of liquefied gas cylinder filling and sales, applicability and performance of the new conformity assessments under the Directive 2010/35/EC on liquefied gas cylinders were discussed. One of the decisions taken in the meeting was to forbid filling and marketing of non-compliant liquefied gas and other transportable cylinders starting from 01.01.2014.

GAS APPLIANCES AND INSTALLATIONS

In 2012, cooperation continued with the Rescue Board, which communicates to the Technical Surveillance Authority the information regarding gas-related incidents. In 2012, there were 296 gas-related calls, which is 18% more than in 2011. 70% of the calls involved mains gas, 20% liquefied gas cylinders and 10% involved other reasons. Likewise to previous periods, most of the calls were in Tallinn and Ida-Viru County (70% of all calls).

In 2012, 75 supervision procedures were initiated, the focus of which was on common spaces of apartment buildings (e.g. basements, stairwells). In addition, 35 memorandums were sent out to apartment owners, to draw their attention to the proprietor's obligations related to gas appliances and installations.

Gas-related emergency notifications in 2011–2012



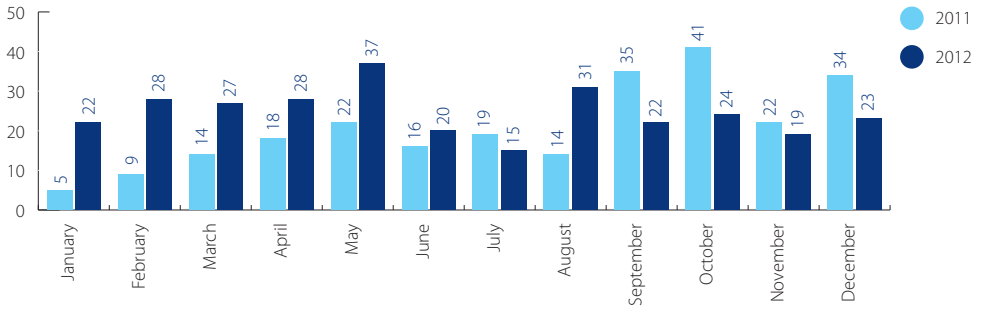
In 2012, there were 23 supervision procedures of gas installations subject to registration and every single one of them was related to an overdue deadline of technical inspection. In 17 cases technical inspection of the gas installation was conducted after bringing attention to it, in other cases the gas installation was either no longer in use or had been removed.

In addition, 13 procedures were initiated based on complaints received.

In 2012, after continuous precepts, the Technical Surveillance Authority, by decision, revoked the right of 3 enterprises to perform gas works and build gas installations. In addition, 3 enterprises performing gas works were inspected – the control involved documentation of the gas works and availability of competent persons. No significant deficiencies were observed, however the data of supervision served as an input for amending the legislation.

In cooperation with the Ministry of Economic Affairs and Communications, the Estonian Gas Association and enterprises engaged in liquefied gas, the requirements for the so-called GOST balloons were discussed – whether these can be filled and how to assess their conformity to the directives. By the decision of the workgroup, the regulation "Liquefied gas safety rules", prohibiting filling of old balloons which lack the Pi symbol, was amended.

Gas-related emergency notifications in 2011–2012



HANDLING HAZARDOUS CHEMICALS

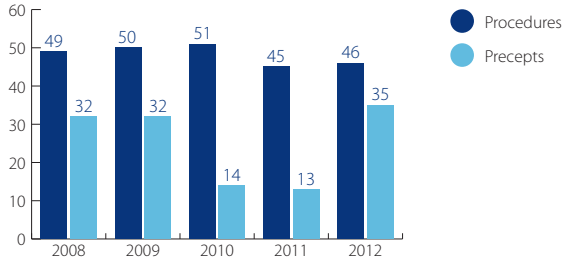
The Technical Surveillance Authority performs supervision over the maintenance of records on chemicals, over the requirements belonging to the object of inspection of activity licences, and over liability insurance requirements and is the supervision authority in charge in the field of handling hazardous chemicals.

As at the end of 2012, the database of the Technical Surveillance Authority included 34 undertakings with category A risk of a major accident, 25 undertakings with category B risk of a major accident, and 120 hazardous undertakings.

In 2012 the main focus was on mapping the hazardous undertakings. Special attention was paid to undertakings handling ammonia (cold stores) and boiler houses handling shale oil.

46 supervision procedures were initiated, in course of which 35 precepts and 1 warning were issued and 11 supervision reports prepared. Out of the undertakings inspected, 4 were liable to be affected by a major accident (category B) and 42 were hazardous undertakings. 15 enterprises were inspected for the first time.

Supervision in the hazardous chemicals sector in 2008–2012



2 activity licenses were issued for enterprises liable to be affected by a major accident and one activity license was invalidated.

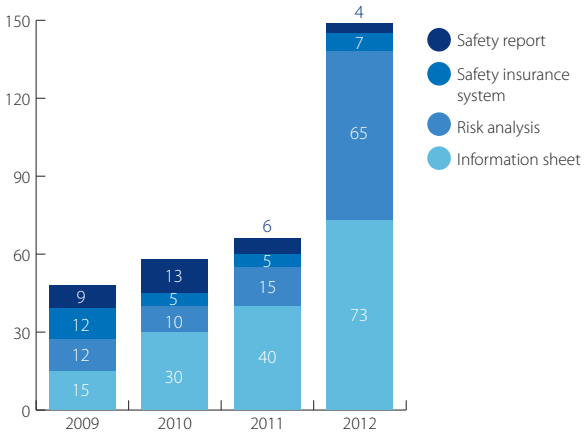
In 2012, 72 information sheets, 44 risk analyses, 7 descriptions of safety insurance systems and 4 safety reports were approved.

There are still problems with the mandatory documents submitted. Representatives of undertakings do not always participate actively in the preparation of the documents sent for approval, but sign the ordered documents without reading them. Documents are thus often sent for approval that describe the undertaking inaccurately and include incorrect data.

The qualifications of the persons performing risk analyses continue to be deficient, where descriptions and study materials are presented instead of analyses. In calculating danger zones, the parameters established in the regulation are not used, but are determined via a "conservative" approach on the basis of the U.S. motorway accident manual or based on an "expert opinion" without justifying the choice. The possible reasons for accidents and factors triggering accidents in a specific undertaking remain unidentified.

Descriptions of safety assurance systems give a relatively realistic picture of what goes on in an undertaking. These descriptions include a decreasing amount of vision; there are, instead, situations where it has appeared during an on-the-spot check that an undertaking has a functioning safety assurance system, but the compilers of the system descriptions have been unable to properly formalize it in writing.

Documents submitted to the Technical Surveillance Authority in 2009–2012



In 2012, proposals were made to the amendments of the Environmental Impact Assessment and Environmental Management System Act. In addition, the possibilities of changing the minimum and the threshold quantity of shale oil were discussed with the Ministry of Economic Affairs and Communications.

In relation to changes of the Chemicals Act, the Technical Surveillance Authority organised in March 2012 an information day for hazardous undertakings handling chemicals, in the course of which a thorough overview was given about the changed requirements and responsibilities added to dangerous undertakings. One of the major changes was the new obligation to apply for an activity license. Also the calculation of the category of hazard of the undertaking, requirements to mandatory documentation and approval of documentation were under discussion. 33 enterprises throughout Estonia, who handle chemicals, participated in the information day. In addition, also the chemical supervision specialists of the Rescue Board attended.

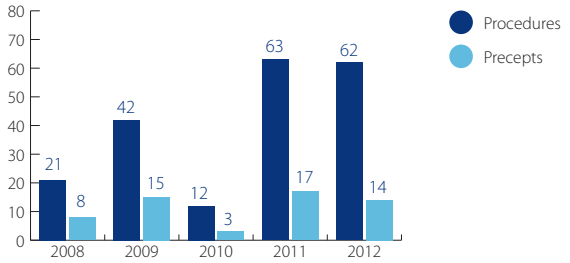
In 2012, an information folder aimed at hazardous undertakings was completed, which explains the calculation of category of hazard, content of documents (information sheet, risk analysis, safety report, descriptions of safety insurance systems) required under the Chemicals Act, submission of the documents and application for activity licenses.

In 2012, a working meeting and seminar of the expert group of competent authorities involved in the implementation of the SEVESO II directive was held in Cyprus. The theme of the seminar was "Land-use planning related to the Seveso enterprises and their danger zone". In essence, the idea of land-use planning has not changed in Seveso III Directive (maintain appropriate safety distances between establishments and living areas), the obligation to involve the public has been specified and a possibility has been given for public discussion (foreseen in the directive) together with the discussion of assessing the environmental impact. In addition, also the B category undertakings now have an obligation to give necessary information on risks, to make the planning decisions.

PYROTECHNICS AND EXPLOSIVE SUBSTANCES

In the pyrotechnics and explosive substances sector, 62 supervisory procedures were initiated in 2012, in course of which 14 precepts were issued.

Supervision in the pyrotechnics and explosive substances sector in 2008–201



In addition, 6 misdemeanour procedures were initiated, one of which included two persons subject to proceedings. Misdemeanour proceedings were ended against four legal persons.

In 2012, 15 facility-based blasting locations were inspected. The blasting performance, availability of certified personnel, conformity with the project requirements and the overall technical safety requirements were inspected at the facilities..

Within the inspections 14 reports were formulated and 1 precept issued..

In September 2012, conformity of the quantities of explosive substances and pyrotechnical articles to the operation permit was inspected in an explosive substances store together with the Tax and Customs Board. As a result of supervision it appeared that one store contained more explosives than was permitted and in another store the pyrotechnical articles were stored in a part of the building, where it was not allowed to store them.

In November 2012, correspondence of pyrotechnical articles, imported from China with an import permit, to the prescribed conditions was inspected together with the Tax and Customs Board. No violations were detected in terms of quantities; however there were differences in weights. Consequently, five products were sent to the Estonian Forensic Science Institute for expert analysis and the proceeding will continue in 2013.

At the end of 2012, 37 market supervisory procedures of pyrotechnical products were carried out, resulting in 17 precepts. Main violations were lack of the required training of vendors, insufficient or incorrect information on the products and lack of permit for use and CE markings on the products.

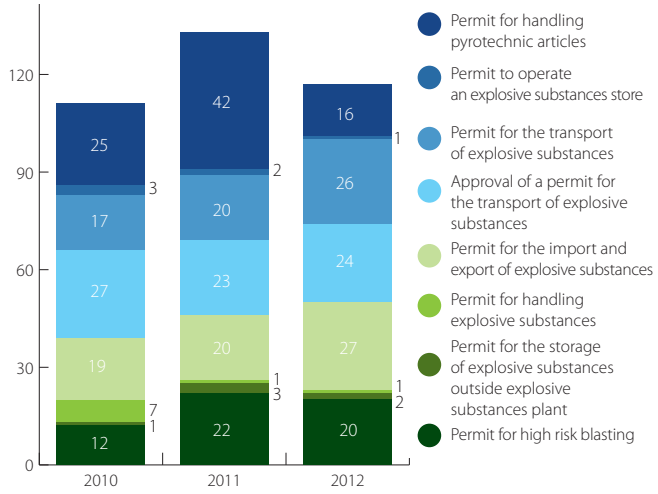
According to the Technical Surveillance Authority, there was one accident in a mine in 2012 caused by handling explosives, where part of the charge did not explode during blasting but exploded during clean-up works, causing minor personal injuries.

In 2012, 2 competency examinations were conducted and 2 certificates of competency were issued.

In 2012, a new regulation on the storage of explosive substances and pyrotechnical products "Requirements for the explosive substances store, storage of explosive substances and pyrotechnical products" entered into force. In addition, opinions and proposals were collected during several briefings and workgroups with a purpose to present motions to amend the regulations "Requirements for a blasting project" and "Rules of handling explosive substances". These two regulations were revised, made simpler and a number of updates were introduced.

In 2012, the bottlenecks of the Explosive Substances Act were mapped and proposals presented to the Ministry of Economic Affairs and Communications, which elaborated an intention to amend the Explosive Substances Act. In addition, meetings were arranged with the representatives of the Estonian Association of Pyrotechnicians, to discuss the reorganisation of the sales regulation of pyrotechnics.

Permits issued in the pyrotechnics and explosive substances sector in 2010–2012



Within the information and prevention activity, the Technical Surveillance Authority published an information folder 'Tikupere' (match family) on the safe use of pyrotechnical products, almost 11,000 copies of which were distributed through the enterprises at the points-of-sale of pyrotechnical products.

Information folder 'Tikupere' on the safe use of pyrotechnical products

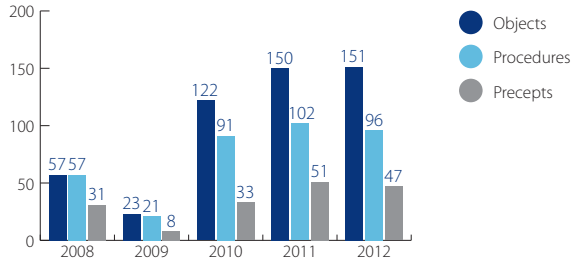
In November 2012, a memorandum was forwarded to shopping centres together with the Rescue Board in connection with planning the sale of pyrotechnical products and their points-of-sale, which draw the attention to the following issues concerning the transfer of pyrotechnical products: requirements for the handler of a pyrotechnical product, sales point, sale and product.

In June 2012, the working meeting of the Council Directive 2007/23/EC "on the placing on the market of pyrotechnic articles" was attended in Brussels. In October 2012, the workgroup meeting of the Council Directive 93/15/EEC "on the harmonization of the provisions relating to the placing on the market and supervision of explosives for civil uses" was attended.

MINING AND QUARRYING

As of 2012, approximately 880 deposits are listed in the environmental register in Estonia; 322 miners, designers and secondary utilizers of a working are registered in the register of economic activities. There are approximately 600 extraction permits.

Supervision in the mining and quarrying sector in 2008–2012



In the mining and quarrying sector, 96 supervisory procedures were initiated in 2012, 47 precepts were issued and 10 misdemeanour procedures initiated. The main shortcomings were related to documentation (precepts were most often issued for the absence of a development plan, mine surveying documentation, technological card, blast design and transport scheme), the marking and delimiting of the danger zones (unstable surface, incorrect extraction angle).

Aidu quarry trench

In June, letters were sent to 12 undertakings whose maintenance projects have passed through the Commission of Estonian Mineral Resources reminding them that pursuant to the Mining Act, a committee must be assembled in order to terminate extraction. In 2012, the Technical Surveillance Authority participated in 5 termination committees of extraction. For 2 quarries the committee made a positive decision and considered mining and quarrying terminated there. In 2012 termination work started also in the Aidu oil shale quarry – the first meeting of the termination committee was held, where the current situation was introduced and the work of the next two years that lie ahead, described. A rowing course, corresponding to international requirements, a wind park, firing range and recreational areas will be built on the Aidu quarry territory.

Reminders were sent to 23 miners whose registration of economic activity was unconfirmed. All problematic registrations have by now been approved, suspended or deleted. Documents received from the

issuers of extraction permits (107) and geological exploration permits (42) were also filed.

In 2012, the Technical Surveillance Authority was informed of nine accidents that happened in oil shale mines and quarries. The miners of other mineral resources did not report any accidents or failures.

The Technical Surveillance Authority participated in the committees "Environmental deed of the year 2012 in mining" and "Quarry of the year 2012".

In the first half of 2012, the last competency examination was organised by the Technical Surveillance Authority. All in all the authority issued 3 certificates of competency of specialists in charge and renewed 19 certificates of competency of specialists in charge and 5 certificates of design specialists in 2012. Starting from April, the provider of the qualification entered in the register of professions is MTÜ Estonian Mining Association, which organises the provision of qualification to responsible persons in the mining sector and renewal of certificates of competency previously issued by the Technical Surveillance Authority.

In 2012, reconstruction work in the Kohtla-Nõmme mining park-museum was completed, in the course of which the supports of the underground part of the museum and the electricity supply were renewed and the underground railway renovated. After several inspections and a supervision proceeding, the Technical Surveillance Authority gave its permission for the secondary utilisation of the working.

At the beginning of 2012, self-regulation checklists were prepared for enterprises extracting in sand and gravel quarries, limestone quarries and peat production areas. All major requirements stipulated in the Mining Act and its sub-regulations were gathered by blocks on the checklists. The checklists are available on the website of the authority and these were also sent to all miners registered in the register of economic activity with the purpose of ensuring better control by the miners themselves on what's going on at the facilities. Also, a so-called set of good-bad examples was prepared, assembling photos of deficiencies detected in quarries and of good practice. The document is to be used by a miner, to illustrate the requirements of the Mining Act and the Earth's Crust Act, making them thereby more understandable.

In addition, 20 sand and gravel extraction and 10 peat extraction enterprises were sent letters to announce that the quarry at their disposal is included in the 2012 work plan of the Technical Surveillance Authority. The undertakings were informed that in the course of the supervision of mandatory documentation, condition of the quarry, works performed in the quarry and their correspondence to the requirements stipulated in the Mining Act and its sub-acts shall be inspected. The purpose of the advance notice campaign was to guide the entrepreneurs to bring their activities into conformity with the law before the supervision is carried out and to motivate them to keep their quarries constantly in a good order.

In 2012 two supervision campaigns were organised. In March and April, a supervision campaign over crushers was organised, to inspect the safety of using crushers and their correspondence to the requirements of the Machinery Safety Act. The machinery of the quarries (7) included in the sample was mostly of Soviet origin. The main deficiencies were related to insufficient restriction of access to danger zones. All deficiencies detected in the course of the proceedings were eliminated during a reasonable time and voluntarily without any precept.

In May and June, a supervision campaign of peat production areas was conducted, the purpose of which was to ensure compliance with the safety regulations in the production areas. Likewise to previous years, the supervision campaign was conducted together with the Rescue Board. 14 peat production areas of 10 deposits were inspected, whereas deficiencies were detected in 2 of the production areas. Both problematic peat production areas had deficiencies in documentation as well as in ensuring the safety of the peat production area (marking and maintenance of fire water supply points, availability of basic fire extinguishing equipment). Precepts were issued to the undertakings extracting in these production areas for eliminating the deficiencies and in addition, misdemeanour procedures were conducted against them.

In January 2012, a new regulation "Rules of mine survey operations" entered into force, which stipulated more detailed requirements compared to the previous mine surveying documentation. During the year, the Technical Surveillance Authority introduced during different events the content of the new regulation and met with the mine surveyors, in order to discuss deficiencies in their work.

In cooperation with the Ministry of the Environment we started to harmonise the regulation "The procedure for the suspension and termination of mining", established on the basis of the Mining Act and the regulation "The procedure for the restoration of the land disturbed by geological investigation, geological explorations and mining", established under the Earth's Crust Act, in order to eliminate the current overlap and partial duplication of the two regulations.

At the end of 2012, the Technical Surveillance Authority mapped the bottlenecks of the Mining Act and the Ministry of Economic Affairs and Communications developed on the basis of it an intention to elaborate a draft act to amend the Mining Act.

Crushing assembly in limestone quarry

In 2012, the Technical Surveillance Authority participated in an international conference on mining supervisory agencies in Austria, Vienna. The conference was attended by representatives of the mining supervisory organisations from 14 countries. The conference introduced the legislation and experiences of different countries in matters related to land use.

In December 2012, the Technical Surveillance Authority organised an information day targeted at the miners of construction minerals, the purpose of which was to increase the awareness of the miners by discussing state supervision, regulation of the mining sector, maintenance of quarries, certification of personnel, security of supply, worries of local authorities in connection with mining, and so on. Prominent themes included the activities related to maintenance of quarries, on which also the safety of works, excessive mining and, moreover, the reputation of

the miners depends. Altogether 79 enterprises and organisations (mining undertakings, professional associations, Tallinn Technical University, the Mining Institute and the related state authorities) attended the information day.

SUPERVISION OF RAILWAY SAFETY

The Railway Division of the Technical Surveillance Authority continued to work to ensure planning and implementation of more effective supervision and established a risk based supervision model for that purpose. The main method of safety oversight has previously been inspections, but in the recent years more attention has been turned to development of audit based supervision.

The need for auditing is decided on preparation of the annual plan and the choice is made based on the risk model output – for example, a significant decrease in an undertaking's safety level due to structural changes directly related to the main activity of the undertaking, or other indicators that may impact on the level of safety.

The safety audits carried out on different levels of the undertaking take place both as an interview and by directly inspecting the vertical processes inside the undertaking. Safety interviews are mostly held with members of the board and, if necessary, heads of structural units to involve processes that include all levels.

In 2012, the above-mentioned safety audit was carried out in two railway undertakings. The reasons for these audits were different. For example, in case of AS Eesti Raudtee, the undertaking was divided into two separate undertakings. Auditing of Elektriraudtee AS, however, was due to significantly complicated operational conditions in relation to widespread railway maintenance works on the lines operated by the undertaking.

In addition to functioning of the safety processes assessed in the course of the interview, the undertakings will also get a chance to compile their overview of safety activity and related contractual regulations. Inclusion of the key persons of an undertaking in the process of supervisory operations is mainly important for the undertaking itself because it enables to detect and map the safety-related shortcomings and assess the need for more efficient resource management. Broad-based auditing also provides an opportunity to assess the implementation of the safety management system or the need for its complementation.

Railway accidents and incidents

In 2012, a total of 16 railway accidents were registered, which is almost half less than in 2011 when 28 railway accidents took place in total.

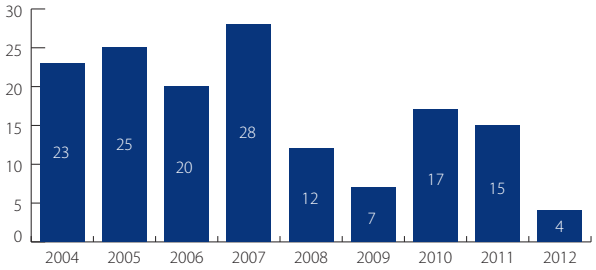
The number of incidents of a collision between motor vehicles and a train were 4, with one person injured but no fatalities. An important aspect here is an almost 4-fold reduction of collisions in comparison with the previous period (15 collisions took place on level crossings in 2011) and the fact that no people have been killed in these collisions in the last two years.

On 12 instances, a train collided with a person on the track, in which 6 people were injured and 7 killed.

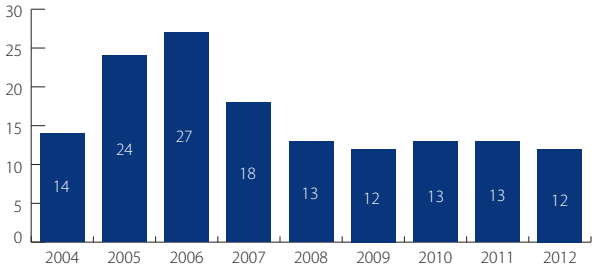
Three out of four collisions took place in the winter period on regulated crossings due to inattentiveness and the wrong choice of speed and driving style given the weather conditions. Activities in recent years have increased railway crossing safety to a satisfactory level. Thus it can be said that updating regulation, closing down of problematic level crossings and improvement of visibility on the crossings to ensure safety has started to pay off.

Similarly to collisions between vehicles, the main reason for colliding with persons is inattentiveness and disregard to the Traffic Code (8 occasions) and also being on a prohibited section of the railway (4 occasions). In order to reduce the number of accidents caused by carelessness, those places not meant for crossing a railway were fenced in last year on several junctions and inner-city open tracks (e.g. Tallinn–Balti, Lilleküla, Tapa, Tartu, Jõgeva). In addition, pedestrian tunnels were opened at Ülemiste, Lagedi and Lilleküla, making crossing the railway as safe as possible. The positive impact of these changes will be probably seen in future periods.

Collisions between railway rolling stock and road vehicles on level crossings in 2004–2012



Collisions between railway rolling stock and people in 2004–2012



Railway safety prevention

In April 2012, a railway safety week "Know Your Opponent" took place all across Estonia under the initiative of Operation Lifesaver Estonia and in cooperation with the Technical Surveillance Authority and the Police and Border Guard Board. People were invited to pay attention to a train as a larger means of transportation and to assess the power relations correctly.

The message of the railway safety week "Know Your Opponent" drew parallels between a railway and a gym. The messages of the railway safety week emphasised that people need to understand that there is no equal opponent to a train on dry land and those who assess the weight of the train and its braking distance incorrectly will always be on the losing side.

In addition, railway safety presentations were carried out in schools during the railway safety week, campaign posters were put up in cities and a video clip shown on TV. The top event of the safety week turned out to be an acknowledgement event "Golden Level Crossing Gates" for organisations and private persons active in railway safety.

Poster of the railway safety week "Know Your Opponent"

In December 2012, Operation Lifesaver Estonia organised a campaign "Let the Train Pass! You're expected home for Christmas!" The aim of the campaign was to remind the drivers and pedestrians to be attentive upon crossing a railway and ensure they will get home safe and sound for Christmas. The campaign was carried out under the European Road Safety Charter and it was supported by the Technical Surveillance Authority, the Police and Border Guard Board, the Estonian Road Administration, AS Eesti Raudtee, AS EVR Cargo, AS Edelaraudtee and AS Elektriraudtee.

Starting from June 2013, new passenger trains will start to operate on the Estonian railways, requiring even more attentiveness and observance of the rules of safety from people on crossing the railway, entering and leaving a train and being near railways. Introduction of the new trains will mean a change to the habitual routine – the new trains will be quieter, faster and have a completely new appearance. In order to prepare people for the changes brought about by the new trains, the Technical Surveillance Authority will carry out a nationwide awareness campaign in the first half of 2013 in cooperation with Elektriraudtee and Operation Lifesaver Estonia.

Changes in the judicial area

The most important technical rules in the railway sector are those rules for the technical use of the railway (TKE) that establish the general requirements for organisation of railway traffic, railway transportation, railway safety and surveillance thereof, as well as the technical requirements of the rolling stock moving on the railways, and for railway constructions, equipment and signals. The aim of the rules for technical use of the railway entered into force in September 2012 was to establish conditions for utilisation of the maximum capacity of new passenger trains, as well as to gradually increase the level of safety on Estonian railways, taking into consideration the need for higher speeds.

The most important changes brought about by the rules for technical use of railway:

- Increasing the maximum allowed speed on the railway network by steps to the limit of up to 160 km/h creates the right and opportunity for the public railway infrastructure undertakings to increase maximum travelling speeds.
- Additional requirements to rail quality inspection – implementation of the so-called condition levels that requires more sufficient self-control from the railway infrastructure operators, as well as implementation of the necessary means to prevent deterioration of the rail tracks to a state in which the speed of railway traffic has to be restricted or the respective section closed down completely.
- Enabling additional flexibility in operating with passenger trains – establishment of the technological process and the accompanying prerequisites (signals, markings) that enable to safely couple and uncouple passenger trains in the course of transportation with the aim of offering better service to the passengers, and thus ensuring a more optimum transportation process.
- Increasing the level of safety on a railway network – supplementation of the functionality of safety equipment on trains, establishment of additional buffer zones in managing train traffic, additional marking of passenger waiting platforms in a situation in which trains are simultaneously coupled and uncoupled, etc.

In order to introduce the changes to the rules for technical use of railway and the resultant practical reorganisations needed, the Technical Surveillance Authority organised an information day for the undertakings operating in the railway section.

In addition to amendments to the rules for technical use of the railways, the Technical Surveillance Authority gathered together both the experiences and information gained in the course of surveillance in 2012 and the proposals from the sector to also update the level crossing guide and the passenger waiting platform standard. For level crossings, the aim is to maintain correspondence of the judicial area with modern technical solutions and also to ensure the safety of passengers in a situation in which introduction of new trains and the possible increase in the speed limit will change the environment we are used to. The changes in the waiting platform standard are mainly brought about by reconstruction of the high waiting platforms for electric trains (1100 mm from the rail surface) to the so-called euro level (550 mm from the rail surface). As an innovation, marking of waiting platforms is planned in case there are several waiting platforms in a station or a halt. It enables the passengers to find their way more easily and safely, and catch the train on time. Passengers will also naturally have to be more attentive themselves in the renewed environment.

The Ministry of Economic Affairs and Communications also received a proposal to enact a new regulation that includes both the safety indicators and submission of reports on inspection of railway infrastructure, rolling stock and traffic regulation requirements, as well as composition of data. It simplifies the judicial area for the undertakings, making all compositions and submission deadlines of data to be periodically submitted to the Technical Surveillance Authority available in one regulation.

In December 2012, the Minister of Economic Affairs and Communications laid down a procedure for application of technical descriptions of conventional and high-speed railway system interoperability, stating the important requirements to the subsystems and components that form the basis for interoperability technical descriptions, incl. a procedure for assessment of conformity with the requirements, certification, and introduction of the subsystem. In relation to that, the officials of the Technical Surveillance Authority have actively taken part in international legislative drafting, helping to develop European Union-wide technical descriptions of interoperability in different work groups (infrastructure, energy and rolling stock). Since the Estonian railway network differs from those of Central and Western Europe by gauge and other related parameters, it was extremely important to stand for implementation of both general specifications of the 1520 mm gauge network and the specifications more narrowly characteristic to Estonia. According to the initial time plan, the above technical descriptions should enter into force in 2014.

Audit by the European Railway Agency

In October 2012, the European Railway Agency carried out an audit in the railway infrastructure and transport departments of the Technical Surveillance Authority with the aim of auditing concordance of these structural units' activity with the European law – mainly to the Railway Safety Directive and the regulations based on that.

The auditing team consisted of four auditors who carried out interviews on issuing safety certificates and permits, safety oversight, authorisation, and the functioning of the organisation itself in the course of four days.

The audit is not completed yet, but the mid-term reviews after the interviews emphasised the strengths of the Technical Surveillance Authority in compactness of its operations, and cooperation inside the organisation. Due to the smallness and historical background of the Estonian railway sector, more attention has been turned to the technical capability of undertakings in Estonian railway safety oversight, but in the last four or five years the main attention has been inclined towards inspection of the undertakings' safety awareness and effectiveness of their self analysis.

The follow-up activities of the audit will presumably end in 2014.

Authorization of rolling stock

In relation to the new Stadler Flirt passenger rolling stock arriving in Estonia, a test period for the new trains has started. Testing is a part of the conformity assessment procedure organised by the Technical Surveillance Authority in cooperation with Elektriraudtee and Stadler Bussnang AG. In the course of the conformity assessment procedure, conformity of the new rolling stock type with the requirements valid in the European Union and Estonia is inspected. The standing and driving tests of the new rolling stock are estimated to be carried out until June 2013.

The aim of the on-the-spot tests is first and foremost to verify the co-functioning of the new rolling stock and the Estonian railway network, as well as to test the rolling stock's capability to operate safely, and the possibilities of making additional adjustments to the rolling stock if necessary. The tests will be carried out in accordance with the testing programme approved by the Technical Surveillance Authority, according to which all critical sections of the rolling stock will be inspected. The Technical Surveillance Authority will turn special attention to driving safety tests in the course of the test period (braking effectiveness, driving stability) and testing the functionality aimed for passengers (access of all user groups, notification systems on a train).

In parallel with testing the trains, the Technical Surveillance Authority in cooperation with Elektriraudtee and Operation Lifesaver Estonia will initiate an awareness campaign to inform the target groups of the changed conditions due to the introduction of new trains.

In 2012, the Technical Surveillance Authority authorised permission for use on the Estonian railway network of the Plasser&Theurer tamping machine type USP 2005 SW for the first time following application for such use.

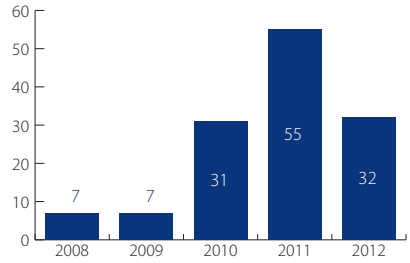
Infrastructure construction permits and authorisations for use

In relation to introduction of the new passenger trains and reconstruction of the waiting platforms as a prerequisite to that, a large part of the Technical Surveillance Authority's railway infrastructure department's operations in 2012 was made up of construction supervision of waiting platforms and accesses. Mostly the platforms in Tallinn were reconstructed in 2012. It also meant heightened attention from the Technical Surveillance Authority since the locations and use of the waiting platforms required a large number of people to be redirected and notifying the bordering neighbours of all the waiting platforms. Operative information on the waiting platforms to be built or already being completed were provided via a safety portal www.ohutus.ee. An authorisation for use was issued to 32 fully reconstructed waiting platforms in total. In addition, partial use of 4 platforms was granted, with full use to be granted in 2013.

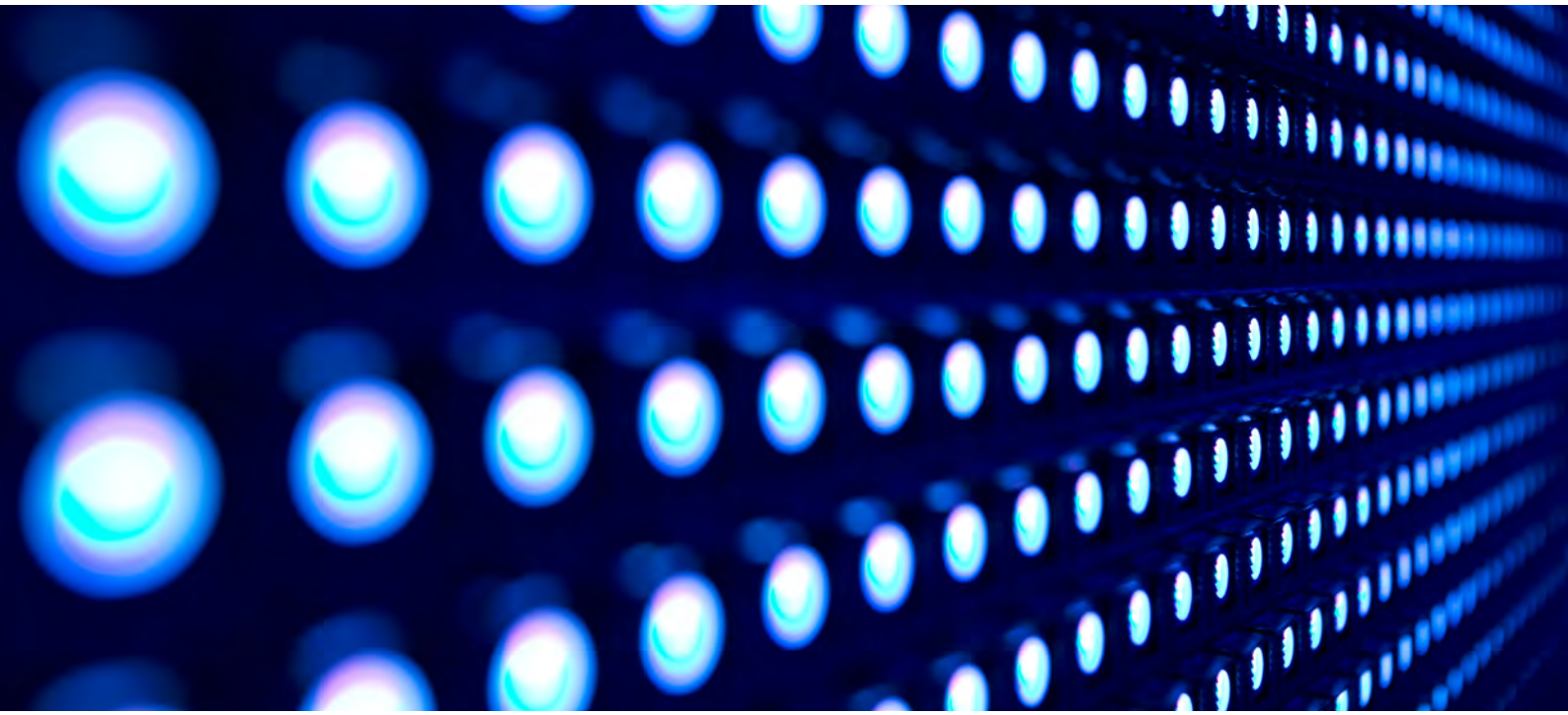
Kivimäe waiting platform No. 1 that was completed in 2012

The Technical Surveillance Authority has actively provided consultations for undertakings and local governments on the technical issues regarding reconstruction of the waiting platforms that are yet to be rebuilt. As a result, preconditions have been established to successfully complete reconstruction of waiting platforms on all railway lines in 2013.

New passenger platforms that received a permit for use in 2008–2012



Together with reconstructing the waiting platforms moving paths were also made safer. In addition to waiting platforms, existing crossings have also been reconstructed in all stations and halts, or new ones built. A pedestrian tunnel was introduced at Lilleküla halt which is one of the most used in Tallinn, undoubtedly making the current situation in which people constantly took risks by crossing four lines safer. The multi-level solution is also more convenient since people no longer have to wait for a train to pass. Another important keyword in increasing the safety of people is erecting boundaries on railways to avoid individuals spending time in places not prescribed for access and to direct people crossing railways and using waiting platforms across the tracks in safer conditions.



INCREASING RELIABILITY: ACTIVITIES AND RESULTS

We engage in the supervision of conformity of electronic communication network terminal and radio equipment, construction products, electrical and electronic equipment, gas installations, machinery, pressure equipment, measuring devices and measurement activity, prepackages, electronic communication services, digital signature service, line facilities, radio interference, electromagnetic compatibility and energy efficiency and marking to requirements.

In respect of radio equipment, electrical devices and machinery, we check the compliance of the documentation (CE markings and user manuals) and the performed procedures (conformity assessment), that 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.

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 devices 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 devices, carry out legal metrological expert analyses and issue national type-approval certificates for measuring instruments.

In respect of **communication services**, our task is to inform and consult the end user in the matters of requirements set for the services, enabling comparison between different service providers and supervision of the conformity of the provision of communication services. We also check the conformity of 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 2012, the Estonian Technical Surveillance Authority conducted 8 procedures inspecting 11 different construction products, and issued 5 precepts (4 of them on stopping of product marketing) in the course of market supervision of construction products. The main shortcomings were the absence of necessary documentation or its inadequacy and the failure to attest conformity. The main products to be checked were heat insulation products, fire doors and mixed concrete. 4 notifications from the Estonian Tax and Customs Board on construction products were replied to. In addition, 2 misdemeanour procedures were carried out on non-compliance with the requirements on marketing of construction products.

Control tests on product samples revealed non-conformity

In 2012, the Technical Surveillance Authority carried out market supervision proceedings with the aim of checking compliance of the products by control tests. In the course of the proceedings, samples of two products were taken from product distributors and the control tests in notified bodies revealed that the checked products did not comply with

the relevant requirements under the European Union approximation legislations. To be more precise, the distributor made available construction products that did not correspond to the information declared on the CE-marking of the products.

The distributor received a precept to immediately stop making the products available on the market until the additional documentation stated in the precept had been submitted and the Technical Surveillance Authority had given it a positive evaluation. The submitted documentation revealed that the problem related to the products was caused by human error in the product marking process and there were also some shortcomings in the undertaking's quality management system. The manufacturer submitted a specific action plan on solving the problem and improvements were made to the production process and production control of the undertaking, helping to avoid a possible recurrence of the problem. All of the above-mentioned activities were evaluated by a certification body acting as a designated body.

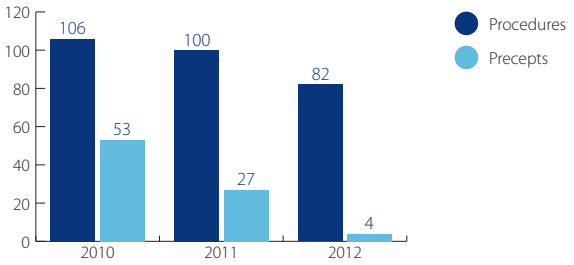
Based on the results of the manufacturer's internal investigation, improvement parameters of the quality system management, new test results from an acknowledged test laboratory, and a summary by the notified body, the Technical Surveillance Authority found no further reason to doubt the compliance of the manufacturer's products, the precept was deemed to be observed and the distributor was allowed to make the products available on the market again.

ELECTRICAL DEVICES

In 2012, 184 procedures were conducted and 35 precepts issued within the framework of the market supervision of safety, energy efficiency and performance labels of electrical devices; in addition 530 Tax and Customs Board messages were answered.

In 2012, 82 procedures were conducted within the framework of the market supervision of safety requirements of electrical devices, in the course of which 4 precepts were issued. The number of procedures has decreased to some extent compared to the previous period. A decrease in the procedures and established shortcomings is related to paying greater attention in the supervision to energy efficiency requirements and upsurge in the number of messages received from the customs office.

Market supervision of electrical devices in 2010-2012



The main violations were the lack of CE marking or the required indications and labels. The main inspected products were various lamps, distribution centres (module switchboards), extension cords, immersion heaters and small consumer electronics.

In the case of non-conforming electrical devices, the pan-European ICSMS and Rapex databases were checked. In Estonia, there were no products entered in these databases and no notices were submitted by the Technical Surveillance Authority.

In 2012, close co-operation with the Tax and Customs Board continued. Around 530 messages received from the Estonian Tax and Customs Board, concerning potentially non-conforming electrical appliances discovered at the border, were responded to. The number of messages increased notably in 2012. The main inspected products were LED lamps, car cameras, car multimedia centres, lights, memory sticks, electric motors, power adaptors, etc. The most common shortcomings were the lack of CE-marking and the lack of the producer's or the model's identification number. In most of the products, the requirements for electromagnetic compatibility were not met, and also some non-conformity with the requirements for low-voltage electrical equipment were identified. In addition, compliance of the equipment with the requirements in RoHS 2002/95 (dangerous substances) and EDD 2009/125 (eco design) (existence of the directives required) was inspected.

Low-voltage directive working group (ADCO) meeting

In 2012, the Technical Surveillance Authority participated in the ADCO meeting in Spain, discussing the issues whether modul-bathroom is an LVD device or a construction product; strengthening and developing cooperation and elaborating common approaches, a proposal to establish a minimal cross-section of 1.5 mm2 for cable reels, implementation of CIRCA ABC, launching a common project of extension cords, formalising a working group of plug connectors for preparing a new standard.

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

Market supervision of the requirements for the content of dangerous substances in electrical and electronic equipment

In 2012, 6 supervision procedures were conducted to inspect conformity to the requirements of the content of dangerous substances in electrical and electronic equipment. 8 different products to be launched in Estonia by 6 companies were inspected. 5 of the inspected products were lighting installations (incandescent lamps and LEDs) and 3 household appliances (microwave oven, sewing machine, vacuum cleaner). The control involved documentation; no testing was performed. No shortcomings were identified during inspection.

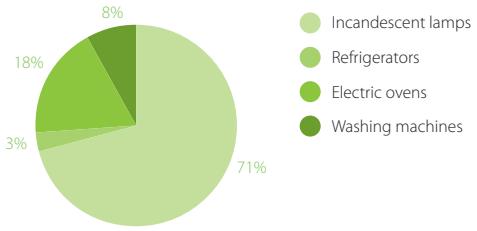
For problem products, the Technical Surveillance Authority has limited its inspection to documentation control, since no deficiencies have been detected in documentation when inspecting specific devices. In the course of ordinary market supervision in cooperation with the Tax and Customs Board, some ten designations of electrical and electronic equipment (mostly different LED lamps) have been detected, for which the manufacturer has failed to submit the RoHS documentation as part of the technical documentation. Content of dangerous substances has not been of primary importance in the specific cases, however in the course of inspecting the correspondence to the requirements of the LVD and EMC directives, lack of documentation concerning the content of dangerous substances has appeared. As a rule, equipment without a marking is also lacking technical documentation. Accordingly, it may be said that in most cases a device without the CE-marking does not correspond to the RoHS requirements, as it is stipulated in the new directive 2011/65/EU. Consequently, the Technical Surveillance Authority has banned the sale/import of about 100 electrical devices, which fail to conform to the requirements of the LVD, EMC and ROHS directives.

Energy efficiency of electrical devices

90 procedures were conducted in 2012 in relation to the market supervision of energy efficiency of electrical appliances, in the course of which 31 precepts were issued. The number of procedures increased compared to the previous period; also the number of devices with detected deficiencies increased.

The main products inspected were incandescent lamps and so-called white goods (refrigerators, washing machines, electric ovens). Main violations were the sale of incandescent lamps, the use of which in households has been prohibited and lack of energy performance labels on household appliances.

Product groups lacking in energy efficiency



Gradually, the new energy efficiency requirements arising from the Ecodesign Directive 2009/125/EC have entered and are entering into force. The purpose of the requirements is to reduce the energy consumption of the European Union by about 20% by the year 2020, using more energy-efficient electrical devices. In 2007, the estimated electrical consumption of household lamps in the European Union was 112 TWh. This way, consumption would increase to 135 TWh by 2020. The measures to be implemented with the regulation enable to reduce electrical consumption by the year 2020 to an estimated 39 TWh. In order to economise energy consumption, conventional incandescent lamps will gradually drop out of use. When, as of September 2009, incandescent lamps with a nominal power of over 100 W cannot be imported from third countries to the European Union market or produced, then in 2011, the same ban was extended to cover also incandescent lamps of over 75 W. By 2012, the ban extended to all conventional incandescent lamps.

The requirements will be developed taking into account the particular features of equipment groups. For example, television sets, devices with a standby-mode and external power supplies will 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 in stages by different deadlines. 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 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.

Requirements to the placing on the market of incandescent lamps

Starting from September 2012, incandescent lamps, meant to be used in a household cannot be produced in Europe or imported from third countries into Europe. Whereas the following must be kept in mind:

- Placing special-purpose incandescent lamps on the market is not prohibited provided that these have been marketed accordingly;
- It is allowed to resell those incandescent lamps, which were brought into Europe before the respective prohibition date (dates are different depending on the nominal power of the lamp).

Accordingly, there may be lamps on the market in retail sale, which originate from old stock (above all lamps with lower, up to 60W, nominal power) or that are marked as special-purpose incandescent lamps. No other conventional incandescent lamps may be sold.

The European Commission has on 16.05.2012 given an explanation on selling special-purpose lamps. According to this, special purpose lamps would still be allowed on the market if they displayed on the packaging that they are not suitable for household illumination.

The Technical Surveillance Authority has requested documentation from the importers of special-purpose incandescent lamps in order to ascertain whether the sold incandescent lamps are special-purpose lamps. The importers have submitted the requested documents (declarations, protocols) to the authority and the special-purpose incandescent lamps on sale do contain a marking that these incandescent lamps are not designed for using in a household.

COMMUNICATION DEVICES

In 2012, the updating of the regulation issued by the European Community continued. The purpose was to develop a more effective mechanism for ensuring the conformity of apparatuses with requirements to and amend the provisions of the Directive 1999/5/EC, to be simpler and clearer. 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. In November, the European Commission presented the revised directive to the European Parliament. The new directive is to be adopted in 2013 and amendments in the regulation concerning communication devices can already be expected in the coming years.

The regulation on the conditions for using radio frequencies and technical requirements for radio equipment exempted from a frequency authorisation was supplemented and updated. The regulation that entered into force in December specified the harmonised technical requirements and the user conditions for the terminal equipment of new electronic communication networks in the 800 Hz, 900 MHz and 1800 MHz radio frequency bands. In connection with the adaptation of the 800 MHz radio frequency band by new electronic communication networks, the frequency band used by radio microphones was changed. According to, as stipulated in the effective regulation, radio microphones can be used in the frequency band of 470–786 MHz. The technical requirements of hunting dog tracking devices were supplemented by adding a new radio frequency, which enables use of the devices more efficiently. For the first time requirements were introduced for the radio equipment of a road communication system within the frequency band of 5805–5815 MHz. This equipment is designed for forwarding road information to the communication systems between roads and vehicles. To increase the functionality of the devices, the frequency band of automotive short-range radars operating in the frequency band of 24.05–24.25 GHz was expanded to 24.500 GHz.

The regulation on the conditions for using radio equipment under frequency authorisation was supplemented and updated. The draft was prepared through the information system of drafts (EIS) at the end of

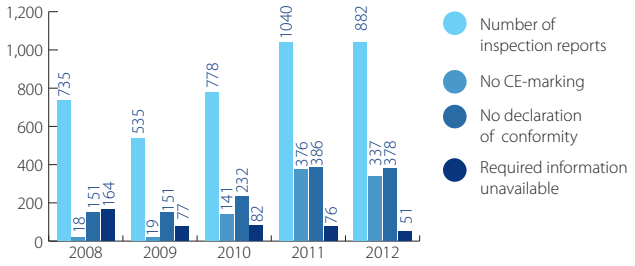
December and the European Commission was notified of its preparation. Compared to the effective regulation, the harmonised technical requirements and the user conditions for base stations and repeaters of electronic communication networks in 800 MHz, 900 MHz and 1800 MHz radio frequency bands were introduced. For the first time, requirements were established for the radio equipment of radio links. In addition, the requirements of terrestrial air traffic control equipment were updated. Compared to the effective regulation, the requirements for the radio equipment of the Microwave Landing System (MLS) in radio frequencies 5000-5150 MHz will be introduced to the regulation with a draft, in conformity with the ICAO convention. The applications of air radio-navigation facilities were specified and new azimuth beacons and range measurement devices were added.

Market surveillance of communication devices

In 2012, the Technical Surveillance Authority conducted 1695 conformity checks of equipment. Shortcomings were found in 1257 instances, 791 devices were banned from entering the country and 197 devices were removed from shops.

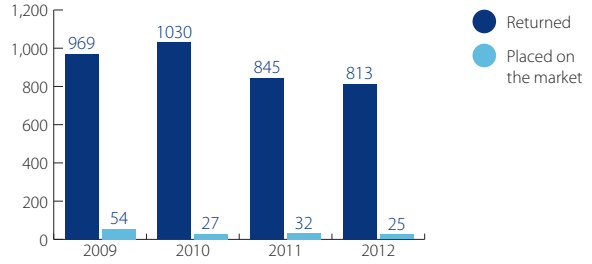
882 inspection reports were compiled during the inspection of shops (including online shops). 466 different shortcomings were identified, while there were products with several shortcomings.

Supervision of stores in the period of 2008–2012



During the product safety inspection, the Tax and Customs Board submitted 813 inquiries to the Technical Surveillance Authority concerning radio equipment in the case of which there were doubts about their conformity with the requirements. Of the inspected devices, 97% did not conform to the requirements of the European Union and they were not allowed to enter the country.

Product safety inspection in cooperation with the Tax and Customs Board in the period of 2009–2012



The inspected devices were mainly mobile phones, tablets, GPS receivers, radio controlled toys, wireless computer equipment, baby monitors, dog fences and training equipment as well as low voltage radio transmitters.

In 2012, in the course of the procedure for notifying the intention to place on the market radio equipment using frequency bands the use of which is not harmonised in Europe, 767 notifications were sent to Estonia, while all of them were submitted through the common notification system OSN of the European Commission. When processing the notifications, the requirements for using radio frequency bands applicable in Estonia were explained to the producers and producers' representatives, of which in 6 cases it was replied that it was impossible to use the equipment in Estonia.

A lot of radio, communications and electronic equipment ordered from online shops do not conform to requirements

There are still problems with electronic equipment offered by online shops, since a lot of these do not conform to the requirements effective in the European Union and accordingly, it is prohibited to sell or use these in the European Union. It is not allowed to bring such radio, electrical and electronic equipment into Estonia, which do not conform to requirements. The Tax and Customs Board will either destroy them or return to the sender.

In Estonia, all postal items arriving from outside the European Union are submitted for customs inspection, a part of which is control over the correspondence to the requirements. It is allowed to bring into Estonia only such radio, communication and electronic equipment, which bears the CE-marking. The Technical Surveillance Authority inspects the existence of the CE-marking.

In 2012, the Tax and Customs Board sent out over 800 requests to the Technical Surveillance Authority to inspect the conformity of almost 5000 devices to requirements.

In recent years, most cases of non-conformity have been identified in mobile phones, tablets, various GPS devices (navigators, surveillance equipment), LED-lamps, car multimedia centres and video recorders. The main violation was the lack of a CE-marking corresponding to European requirements, the declaration of conformity and the identification of the manufacturer, which indicates that the technical requirements are not fulfilled.

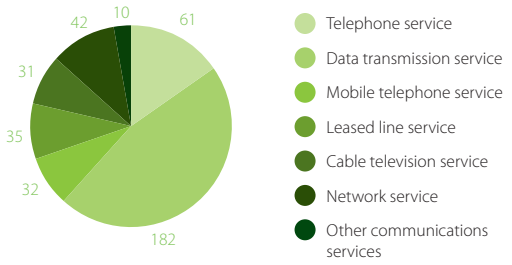
Standardization

As regards standardisation, voting of the EN drafts of the European standards of the ETSI (European Telecommunications Standards Institute) was organised in 2012 and 92 new ETSI standards were adopted as Estonian standards. The Technical Surveillance Authority participated in the voting of 54 ETSI standard drafts (incl. one-stage voting), in 18 public enquiry procedures and in 12 votes by the members. In ten cases 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.

COMMUNICATIONS SERVICES

The key word of 2012 concerning the entry into or departure from communications market was stability. 15 business operators presented a notification on commencing business to the Technical Surveillance Authority, 2 operators extended their activities and 10 undertakings ended the provision of communications services. By the year-end, 236 communications undertakings were listed in the register of economic activities.

Distribution of registered communications services in 2012



4G mobile Internet brings service quality to a new level

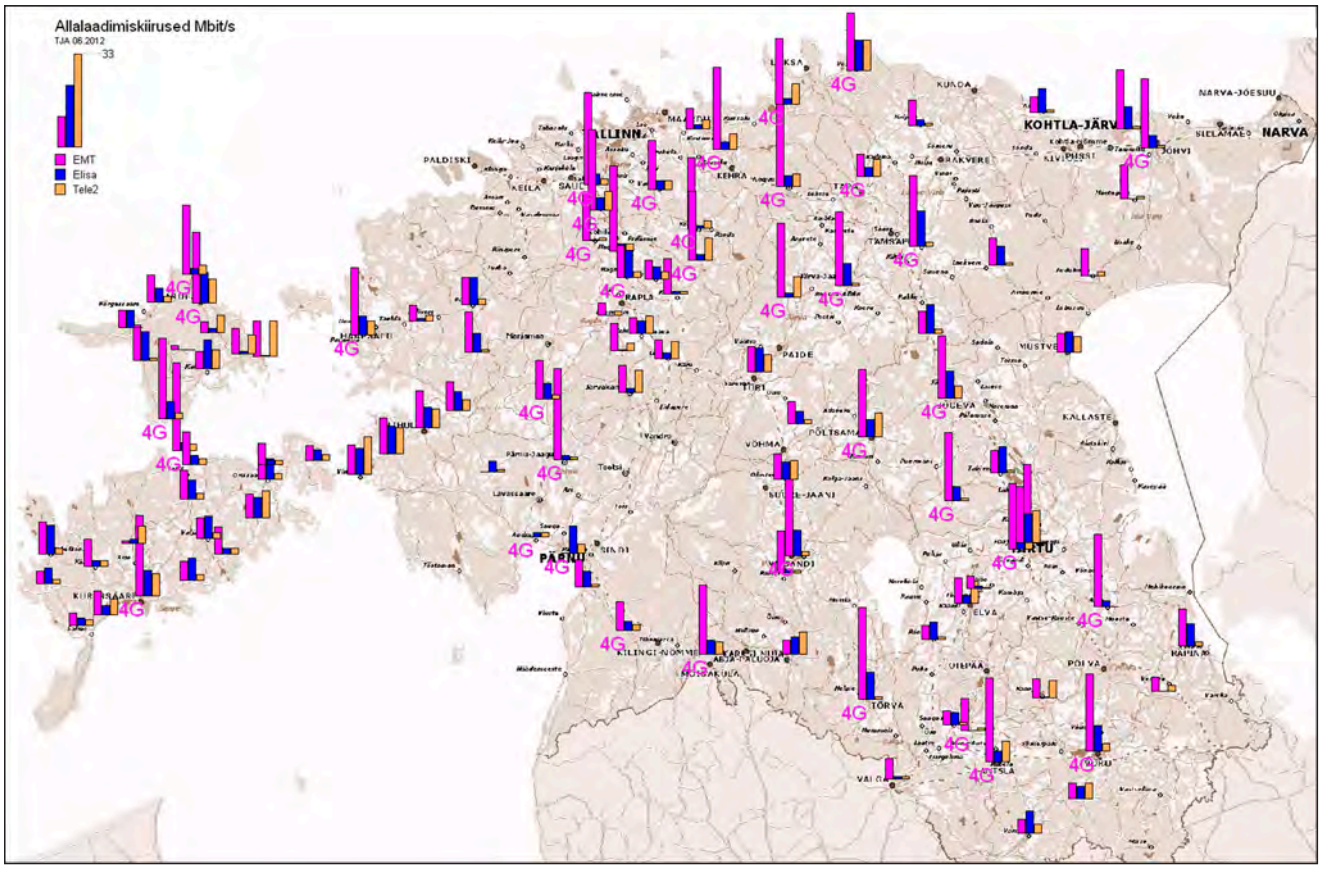
In the summer of 2012, the Technical Surveillance Authority conducted measurements of mobile Internet data transfer rates, to check the availability and quality of mobile Internet service over Estonia. The measurement locations were to a large extent the same as 2011 – all in all 105 locations over Estonia.

The results of the measurements indicated that 3G mobile Internet covered almost all the measuring points and in more than 90% of the locations the data transfer rate exceeded 1 Mbit/s. Very good results were achieved by EMT, who besides the 3G service also had 4G service available at 41% of the measuring points, which increased the average measured data transfer rate three times above that of their competitors, reaching 14 Mbit/s (2.61 Mbit/s in 2011). Compared to 2011, the 3G network coverage of Elisa has notably improved, but at some points still only the slow 2G service was available. The average download speed on the Elisa network was 5.1 Mbit/s (2.9 Mbit/s in 2011). On the Tele2 network, the 3G service was available at all measuring points and the average download speed was 3.8 Mbit/s (last year 2.1 Mbit/s).

Since in the course of the year one could hear a lot of criticism of people from the media complaining that the use of mobile Internet becomes practically impossible in the evenings due to network overload, then for the first time, the Technical Surveillance Authority decided to conduct measurements of mobile Internet during the peak time of 15 to 21 hours in the evening. The results of measurements indicated that during the evening peak time the download speed in mobile networks drops ca 20% and upload speed ca 40%.

Protection of interests of communications service users

One of the main goals of the supervision activities of the Technical Surveillance Authority is to improve the reliability of communications services. We continue cooperation with the Consumer Protection Board to ensure the protection of consumers' interests concerning the quality and reliability of the service obtained. The cooperation with the Consumer Protection Board this year was marked by the key words of 'unlimited' calling minutes and 'free' mobile phones, very aggressive customer campaigns by mobile operators and ambiguous advertising of Internet coverage and data transfer rates. To address these topics, several



Download speeds of mobile Internet

meetings were organised with communications undertakings, where good solutions were developed to increase customer awareness. Regular meetings will also continue in 2013.

Vital services, security and integrity of communications networks

According to the Emergency Act, the vital communications services are mobile telephone service, data communication service, broadcasting service, cable network service and marine radio communication service.

There were no events, which would have significantly influenced the continuity of a vital service in 2012. There were still noticeable interruptions in providing communications services, however their duration was either short-term or the provision of communications services was disturbed across regions and their impact as a whole was not considerable.

In October 2012, the sea cables connecting Estonia with Sweden were vandalized. It took several days to repair the damage while waiting for the weather to improve. The incident disturbed the work of communications undertakings (Linxtelecom Estonia OÜ and Elion Ettevõtted AS), who had to use other methods for routing their services; still it had no impact on regular consumers.

Certification services and digital signatur

In 2012, entries were made in the register of certificates to amend data 15 times, 2 new certificates were added to the register and 7 expired certificates were archived, while the trusted list of Estonian certification services maintained by the Technical Surveillance Authority was updated.

Line facilities

In relation to damage caused to line facilities and causing emergencies for line facilities, the Technical Surveillance Authority settled 20 misdemeanour notifications in 2012.

The misdemeanour notifications received showed that the majority of line facilities were damaged when a person acting in the protected zone of a line facility held a relevant permit and the line facility was damaged in a situation where the line facility was in a compacted road or street embankment or in frozen soil i.e. in circumstances, where manual digging was difficult and time-consuming. Also damage to a line facility placed in soil happened during filling a trench and compacting the soil.

Compared to 2011, the number of misdemeanour notifications submitted concerning damage caused to optical communications cables decreased.

LEGAL METROLOGY

In 2012, 34 national type approvals were issued, including 10 amendments. On 6 occasions, issuing a national type approval was refused on the grounds of failure to submit the necessary documentation to verify compliance of the measuring instrument. In addition, 1 single exemplary type approval certificate was issued.

34 notifications declaring compliance with the requirements were issued on containers used in customs and excise measurements and the piping connected to them, and 5 notifications were refused, but later accepted. The problems were related to data submitted on the verification and calibration certificates.

122 measuring instruments were declared verified and a total of 114 verification marks were placed on documents and measuring instruments. 50 measuring instruments were not declared verified, the main reasons being the presence of a verification opportunity of measuring transducers in Estonia, absence of type approval, or non-compliance with it.

In the field of handling prepackaging, 26 supervision proceedings were carried out, 5 of which were initiated due to consumer complaint. Shortcomings were detected in 23 undertakings, 7 precepts were made for their elimination. The main violation was insufficient documentation.

A prepackaging monitoring campaign was carried out in 2012. 6 packagers of eco products were inspected, 4 of them packaging food, 1 cosmetics and 1 construction products. All of the inspected undertakings lacked documentation on prepackaging handling, and 4 undertakings did not have a proper actual contents verification system for products that are packaged based on their volume.

10 procedures were carried out on undertakings that package industrial commodities, shortcomings were detected in 7 undertakings as to performance of prepackaging handling requirements. All of the 7 undertakings had insufficient prepackaging handling documentation and 4 undertakings had problems with performing the obligation to verify the measuring instruments used for checking the actual contents of prepackaging.

43 procedures were conducted and 9 precepts were issued in monitoring of use of measuring instruments.

21 procedures were conducted and 4 precepts were issued in monitoring of use of consumption meters. 16 procedures were conducted and 3 precepts were issued for elimination of shortcomings in monitoring of use of non-automatic scales in scrap metal purveyance points.

In 2012, the Technical Surveillance Authority participated in a working group meeting of a European legal metrology organisation WELMEC WG5 (market surveillance), WG6 (prepackaging), and WG11 (consumption meters), discussing topical problems in the field and upgrading the instruction materials.

LIMITED RESOURCE: ACTIVITIES AND RESULTS

We plan and coordinate radio frequencies, electronic communications numbering and railway capacity, and organise and monitor the use thereof. In addition, we fulfil the role of the final beneficiary in the allocation process of the European Union structural funds for railway development.

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

Being the final beneficiary of 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 the conformity of work and 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 will be available. We also issue authorisations for the use of radio frequencies, check 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 undertakings have a sufficient resource of numbers with which to provide their services. We also check compliance with the number usage requirements.

NUMBERING

In 2012 the use of numbering increased, mainly in the field of mobile phones that were taken into use by an additional 0.7 million numbers. Foreign companies, such as communication undertakings from Latvia, Finland, Sweden and other countries demonstrated a large interest in obtaining the rights to use the numbering. In 2012, 105 new number authorisations were issued, 482 were extended and 74 amended. In total, 663 different transactions were made with number authorisations, remaining on the same level as in 2011. The total sum of state fees received for operations performed in relation to numbering authorisation was EUR 3,683,935, which is 18% more than in 2011 (EUR 3,054,029 in 2011).

It should be noted that mobile phone numbers beginning with 5 are about to run out, but in order to ensure continued resources, 81 and 82 numbering areas are already in use. The use of telephone number resources is on a downward trend which can be explained by the general drop in the use of the telephone service.

Estonian numbering resource as at the end of 2012

Type of numeration	Total number (pc)	Booked (pc)	Free (pc)	Percentage of free resource, %
Telephone numbers	3,100,000	893,852	2,206,148	71.2
Mobile phone numbers	8,643,000	6,957,089	1,685,911	24.7
800 – service numbers (free for consumers	1,018 000	1,567	1,016,400	99.8
900 – service numbers (free for consumers)	10,000	209	9,747	97.9
901 – service numbers (data transmission service numbers)	10,000	7	9,991	99.9
E-fax numbers	1,000,000	14,000	986,000	98.6
Personal numbers (for providing communications service determined by a client)	235,000	49,801	166,000	70.6
Mass-calling service numbers	75,000	0	75,000	100
Short numbers, including:				
3-digit	42	7	35	83
4-digit	392	171	221	56
5-digit	668	152	516	77
6-digit	5	3	2	40

Supervision of the use of numbering

In the field of controlling the use of numbering, the Estonian Technical Surveillance Authority provides supervision in two aspects mainly – whether the numbering is used with permission and whether it is used in accordance with its purpose. In relation to development of services, the difference between mobile phone numbers and telephone numbers is becoming smaller year on year. A good example of this was Tele2 that entered the market with the Kodutelefon service in which a telephone service is provided via mobile network and a client receives a telephone number.

There were relatively few cases of unauthorised use of numbering in 2012 among service providers. 13 inspection reports were prepared in the course of inspection. Only two users committed an offence against timely extension of the number authorisations, and misdemeanour matters were initiated against them.

In 2012, the control of communications undertakings over legality of application of numbering continued.

There were events where communication undertakings handed their numbers over to foreign clients who in turn used their numbers for provision of international special tariff services.

Three misdemeanour matters were initiated and one warning of a precept was made.

In cooperation with both Estonian and foreign communications undertakings, necessary actions were taken to reduce the occurrence of fraud schemes. Fraud schemes and wrongful use of numbers brought about large invoices for callers or losses to the communications undertakings that initiated the calls. As a result of the measures taken, the number of notifications on the use of Estonian numbers in fraud schemes has decreased compared to 2011.

In order to reduce the use of Estonian numbering in frauds, the Technical Surveillance Authority found that there is a need to change some of the provisions of the Electronic Communications Act that regulate the effective use of numbering, and issuing and voiding of number authorisation. Preparation of these proposals started in 2012.

Number portability

The Technical Surveillance Authority is responsible for the disturbance-free operation of number portability, solving problems arising during that process and maintaining a register of the operations made under number portability.

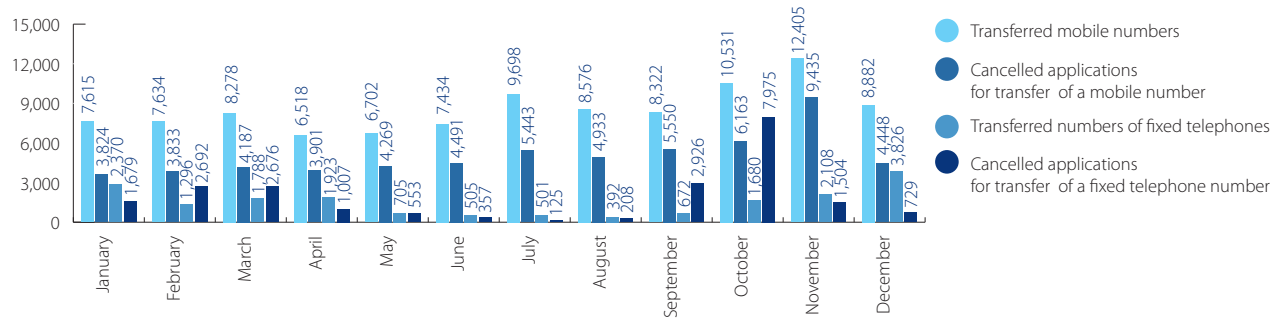
During 2012, a total of 120,368 numbers were transferred from one network to another, giving an average of 10,000 numbers transferred per month. Activity of transferring mobile phone numbers increased noticeably. For the first time, the number of transferred mobile phone numbers exceeded the limit of 100,000.

The possibility of transferring service numbers was used minimally – only seven numbers were transferred in a year and they all belonged to the numeration area 800.

The time of number transferral continued to be perfectly short, 5-6 working days on an average.

In the beginning of 2012, the transition process as to the length of personal numbers starting with 70 was completed. No more seven-digit personal numbers that start with 70 may be used.

Number portability of 2012 by months

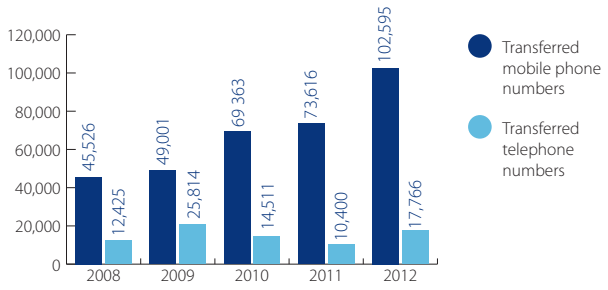


Similarly to previous years, a relatively high proportion of number porting applications were cancelled in 2012, altogether 82,908 applications. The main reason for cancellation was voluntary relinquishment of number transfers by customers, achieved by negotiations with the communications service providers as to the price packages.

In 2012, conformance with the number movement requirements was also continued. There were situations in close competition in which communications undertakings cancelled number movement without a client's permission, to win the client back. The Technical Surveillance Authority received several complaints on this topic and violations of number movement requirements were discovered, as to which five misdemeanour procedures were initiated against the communications undertakings.

In general, number movement takes place as required in Estonia. Transferral of a number from one network to another has become more convenient and less time-consuming for consumers from year on year. When the trend is relatively stable as to regular telephone numbers, the level of activity is increasingly growing as to mobile phone numbers.

Number portability in 2008–2012



RADIO FREQUENCY MANAGEMENT

Estonian Technical Surveillance Authority participated in the World Radiocommunication Conference in Geneva

In January and February 2012, the World Radiocommunication Conference (WRC-12) was held in Geneva, organised by the International Telecommunication Union (ITU). WRC is a conference that is held every three or four years and coordinates the use of radio frequency in the member states with the aim to update the Radio Regulations that regulates the use of radio frequencies and satellite orbits on an international level. The conference was participated in by delegations of 165 ITU member states and more than 100 organisations active in the fields of information technology and telecommunications from all over the world, with 3000 delegates in total. Estonia was represented at the conference by the Estonian Technical Surveillance Authority, General Staff of the Defence Forces and the Ministry of Economic Affairs and Communications.

World Radiocommunication Conference (WRC-12) in Geneva

The international regulation on the use of radio frequencies was reviewed and amended at the conference with the aim of ensuring as efficient use of radio frequencies as possible, introduction of new technologies, and ensuring availability of communication services to as many people as possible and at any point in time.

The items on the agenda especially important to Estonia were simplification of international regulation, frequency needs for unmanned aerial vehicles, introduction of digital technology in maritime communications, as rapid an implementation of the 800 MHz frequency range mobile communications as possible, and elimination of radio interruptions in the 160 MHz frequency range in case of introduction of space radar. The conference was a success for Estonia. Thanks to good preparatory work (negotiations and coordination agreement with Russia), Estonia was included in footnote 5.316A of the frequency table, enabling to use this frequency range initially meant for broadcasting for mobile data communication already before 2015. The possibility of using space surveillance radar in the 160 MHz frequency range was provided together with an obligation to previously harmonise their use with neighbouring countries, ensuring protection to Estonian users. In aviation communication, frequency ranges for unmanned aerial vehicles (UAV) in the range of 5 GHz were determined and the topic is to be discussed further at the next conference. In maritime communication, the plan of VHF channels was changed to support the use of digital technology and introduction of additional channels for simplex communication, and short-wave

frequency ranges for digital data communication from 2017 were determined. In the course of the conference, after negotiations with Russia, Estonia was added to footnote 5.296 of the frequency table, enabling international protection to broadcast-supporting applications in the frequency range of 470–790 MHz (e.g. radio microphones).

The other important topics determined in the conference included setting of frequency ranges for different scientific studies, including ocean monitoring for radar in the frequency range of less than 50 MHz, expansion of the application possibilities of aviation frequency ranges, and allocation of a new frequency range of 472–479 kHz for radio amateurs on a secondary basis.

Simplification of the use of radio frequencies was postponed until the next conference since representatives of some of the regions consider that this topic needs a more thorough investigation.

The next World Radiocommunication Conference will be held in 2015.

World Conference of the International Telecommunications Union was held in Dubai

In December 2012, a second World Conference of the International Telecommunications Union – World Conference on International Telecommunications (WCIT) was held in Dubai. The aim of the conference was to update the International Telecommunications Regulation (ITR) that regulates international fixed communications, since the current redaction was approved in 1988 and a lot of changes have taken place in the development of telecommunications since then, including privatisation of undertakings and introduction of new technologies.

The conference was attended by delegations of 151 ITU member states with a total of almost 1600 delegates. Estonia was represented at the conference by the Estonian Technical Surveillance Authority and the Ministry of Economic Affairs and Communications. The Ministry of Foreign Affairs also provided valuable assistance throughout the conference.

Estonia joined the European joint proposal submitted at the conference, the main content being simplification of the existing agreement, except the parts that no longer belong to the competence of the states due to privatisation of telecommunication undertakings. Estonia also joined the proposals of amending the necessary sections of the agreement so that they would ensure unrestricted development of technology and services in the future. At that, it is important to consider the European view that the scope of the agreement should not be extended to other fields, for example the matters of contents of communications. Europe also found it important to ensure that Internet regulation would remain the same and would not be reflected in the new agreement.

Most of the developed countries, including USA, Canada, Japan, Australia and many South American and Asian countries took similar positions. At the same time, proposals were also made on amending Internet regulation, monitoring the contents of telecommunications and national regulation of telecommunication services and the networks.

Since the proposals and views were conflicting, the conference turned out to be extremely tense. Although the agreement drawn up can be considered good and progressive mainly thanks to the efforts of the conference chairman and the member states, the clauses added to the agreement on the last days of the conference caused a situation in which 89 countries signed the agreement, whereas 55, including all European Union member states, did not.

Regardless of Estonia not having signed the agreement, the conference cannot be considered a failure since the agreement is still promoting the development of telecommunication for the most part and the few problematic clauses that can be interpreted differently will hopefully not affect the future development of telecommunications. Since most of the topics covered by the agreement are solved under commercial agreements between undertakings in Estonia, the WCIT results will have no significant impact on the field of our telecommunications.

Estonian Technical Surveillance Authority held an ECC work meeting in Tallinn

In May and June 2012, a working group of the ECC (Electronic Communications Committee) gathered in Tallinn. The ECC is an autonomous committee of the European Conference of Postal and Telecommunications Administrations (CEPT) that is dealing with the issues of electronic communications. The ECC includes regulators of the CEPT member states, advisers at the Commission of the European Communities, and representatives of different international organisations.

The main topic of discussion at the ECC in recent years in close cooperation with the European Commission has been the introduction of a digital dividend, renewal of the regulation and its amendment to accommodate the new broadband technologies that enable, among other things, providing mobile data transmission services in almost all frequency ranges allocated to Estonian mobile telecommunication operators.

Keeping in mind developments in the near future, the ECC is active in looking for possibilities of introduction of cognitive radio systems and software guided radio equipment to make the use of the radio spectrum as a limited resource as effective as possible. In addition, solutions are being developed to find harmonised frequencies to meet the broadband service needs of ensuring public security.

Estonian and Latvian communications administrations entered into coordination agreements

In September 2012 negotiations between Estonian and Latvian communications administrations were held in Riga on coordination of the use of mobile terrestrial communication and broadcasting frequencies. As a result of the negotiations, an agreement was found on the use and further actions of the frequency ranges 450.000-457.475/460.000-467.475 MHz and 790-862 MHz.

Follow-up negotiations were held in Tallinn in December, the main topics being renewal of and entering into the coordination agreements on the use of broadband systems in different frequency ranges.

As a result of the follow-up negotiations:

- an FM radio-broadcasting agreement was entered into, establishing the fundamental principles of FM coordination of radio stations between the countries and simplifying and accelerating finding and implementation of a new frequency resource in South Estonia.
- Amendments were made to the agreement regarding the use of broadband systems in the frequency ranges 900 MHz and 1800 MHz with an aim of using these ranges also for mobile Internet in addition to GSM. These amendments now enable Estonian communications operators to use the frequency resource on the near-border areas in provision of mobile Internet services.
- Actions on the use of the 800 MHz frequency range were specified – Latvia plans to close down the DigiTV stations in the 800MHz frequency range that interfere with the use of Estonian mobile

Internet in this range. Unfortunately, the time period for closing down one television channel is substantially long – the deadline is in the first half of 2015.

Processing of frequency authorisations

The number of transactions regarding frequency authorisations has remained stable in recent years.

State fees in the amount of EUR 1,900,000 were estimated for 2012 on frequency authorisation transactions, but considerably more were received – EUR 1,923,704.27.

Statistics on processing of frequency authorisations in 2009–2012

	2009	2010	2011	2012
Issuing of new authorisations	465	445	428	350
Renewal of authorisations	3514	3376	3424	3362
Restoration of authorisations (not renewed in time)	–	171	259	187
Changing the data or conditions of valid authorisations	436	427	472	375
Refusal to grant or renew authorisations	31	13	9	3
Authorisations cancelled at the wish of the authorisation holder	100	64	50	27
Authorisations for amateur radio stations	413	224	127	284
Harmonised qualification certificate of a radio amateur	17	21	5	4
Coordination of frequencies for neighbouring countries	498	739	495	926
Coordination of frequencies for Estonia	347	394	497	571
Notification	182	46	85	59

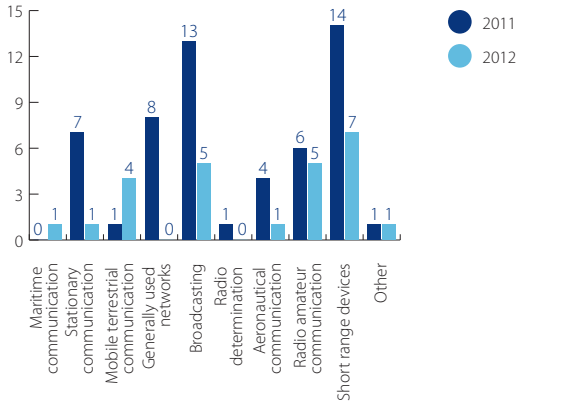
Radio frequency supervision

Supervision in 2012 was closely related to the changeover to 4G long-term evolution (LTE) technology in Estonia. In the beginning of the year, compliance of Estonia's first 4G network was tested. AS EMT fulfilled its obligation to establish at least 100 LTE base stations to the 2.5 GHz frequency range by the beginning of the year. In 2013, the LTE inspection of that frequency will continue in a significantly larger volume, because in addition to EMT, the first base stations also have to be built by AS Tele2 and AS Elisa, whereat the number of new base stations must be at least 385.

In the second half of the year, the main task was to measure the transmitters of the Latvian digital television for the 800 MHz competition. As the close neighbours will not allocate that frequency range for LTE in the near future, it is important to find a solution together so that people in South Estonia could also use the possibilities of fast wireless data connection.

In 2012, the number of interference notifications compared to 2011 reduced significantly. It has been in a constant downward trend in recent periods, but 2012 was the first time in which the Technical Surveillance Authority monitored the interference notifications systematically. There were approximately 50 complaints on transmission of digital television, which is five times less than in 2011. It shows that people have adapted to the new method of TV transmission and made the necessary changes and adaptations for this changeover. At that, it is important that in all interference notifications, the problem lay in the person's antenna system. When the most common complaints about digital television are excluded and a look is taken at a cross-section of the other interference notifications, a twofold decrease can be seen also here.

Interference notifications in 2011–2012



One of the most notable supervision projects of 2012 was searching for interference caused to the EMHI Harku weather radar. Solving this interference problem will also go on in 2013. It is highly likely that interference is caused by WiFi routers working on the 5 GHz frequencies, and radio links of Internet service providers that are extremely complicated to detect. It is a widely known problem in the world and thus we can help other countries with our practice and experiences.

Measurements of FM radio broadcasting transmitters that has been going on for several years also continued, checking all 167 broadcast transmitters in Estonia at least once a year. When until now, it has been mainly observed that the transmitters would work in the spectral mask established under the regulation, a more extensive monitoring campaign is planned to be organised in 2013, also assessing compliance with the radiated power requirements.

Measurements of FM radio broadcasting transmitters

Radio amateur communications

In 2012, the Technical Surveillance Authority made a proposal to the Ministry of Economic Affairs and Communications to supplement the regulation "Procedure for formation and assignment of radio call signs" to bring it into conformity with the WRC-12 and ITU-R recommendations. Amendments to this regulation are meant to be taken into consideration by radio amateurs in their everyday activities since they use radio call signs in radio communication. Amendment of the regulation was passed on 21.12.2012 and it enters into force in January 2013.

In addition, the Technical Surveillance Authority made a proposal to the Ministry of Economic Affairs and Communications to amend the regulation "The Procedure of Issuing Qualification and Using Radio Frequencies for the Purposes of Amateur Radio communications". The amendments were harmonised with the Estonian Radio Amateurs Union. With the amendments to this regulation, the period of validity of an amateur radio station is brought into conformity with the Electronic Communications Act (5 years instead of the current 3), issuing of a work permit will extend to six weeks instead of 15 working days, and the frequency range of 472–479 kHz with an e.i.r.p. of up to 1 W is given to the use of radio amateurs.

RAILWAY INFRASTRUCTURE

Railway infrastructure user fees

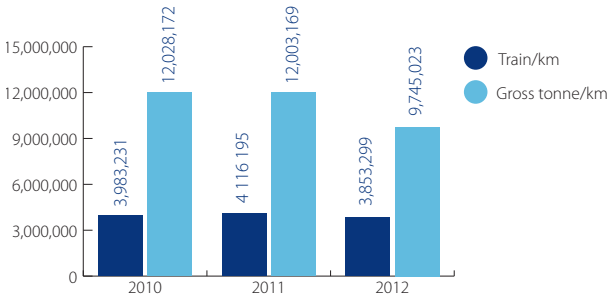
The expenditure of railway infrastructure undertakings increased by approximately 10% in the transport schedule period that began in 2012, compared to earlier times. The main reasons for an increase in the total expenses was estimated inflation and investment expenditure to the railway infrastructure.

In accordance with the methodology, the Technical Surveillance Authority assessed the current state of the economy and future estimations before determining the user fees, concluding that no slowing down of increase in prices can be seen in the near future. Due to that, the operational costs of railway infrastructure undertakings were determined to be estimated higher by the consumer price index of the last economic year (5%) published by Statistics Estonia.

Out of investments made by the railway infrastructure undertakings, the largest impact to the total costs of AS Eesti Raudtee was the acquisition of the Koidula border railway station, waiting platforms built with the help of European Union structural funds on the Tallinn-Tapa railway route, and initiation of reconstruction works of the contact network of the electrified railway lines. The largest investment of the Edelaraudtee Infrastruktuuri AS was reconstruction of the Türi-Viljandi railway section, also co-funded from the European Union Cohesion Fund. According to the methodology, aid provided by the European Union structural funds is not included in expenses in the full extent when determining the user fee, but only in the part that is to be financed by the railway infrastructure undertaking itself (the so-called self-financing part).

In the traffic schedule period commenced in 2012, similarly to the previous periods, the minimum limits established in the methodology were determined to be the unit prices of the forecast user fee of the railway infrastructure of AS Eesti Raudtee as the goods conveyors had once again applied for a significantly higher capacity than demonstrated by the use of railway infrastructure. At the same time, a railway infrastructure undertaking will submit an actual use of capacity each month to the Technical Surveillance Authority, based upon which a specified user fee is determined, providing the exact unit prices and forming a basis for invoices issued by the infrastructure undertaking to the railway transportation undertakings. Due to the fact that the unit prices of the user fees are directly related to the total number of gross ton/km-s and train/km-s transported on the railway infrastructure, the user fee unit prices increased by almost 16% as to the fixed costs and almost 25% as to the operational costs in 2012. The reason is a decrease in the number of transportation of goods since June and the resulting reduction of the total amount of transported gross ton/km-s and train/km-s.

The volumes transported by railway undertakings on the AS Eesti Raudtee infrastructure in 2010–2012



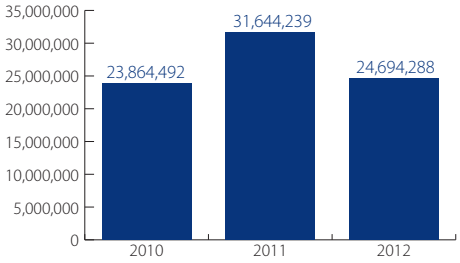
Railway projects

The first railway infrastructure investment projects were completed in 2012. Both reconstructed railway sections of Tallinn–Tapa and Türi–Viljandi were completed. Among other things, reconstruction of the passenger waiting platforms to a height of 550 mm was continued. As at the end of the year, most of the waiting platforms on the Tapa–Narva and Tallinn-Pärnu direction were yet to be reconstructed. They will presumably be completed by the beginning of 2014 when the new Stadler Flirt passenger trains will start to operate on the entire railway network. The first trains for test-drives arrived Estonia at the end of 2012 and they are planned to be introduced from the beginning of 2013.

At the end of 2002, the reconstruction of contact lines of electric trains commenced in west Harju County, and the reconstruction of rail tracks on the Tallinn–Paldiski and Keila–Vasalemma lines was also commenced.

In relation to the upcoming final deadline of implementation of these projects, the intensive disbursement period is about to end, which is why less disbursements were made in 2012 than in 2011.

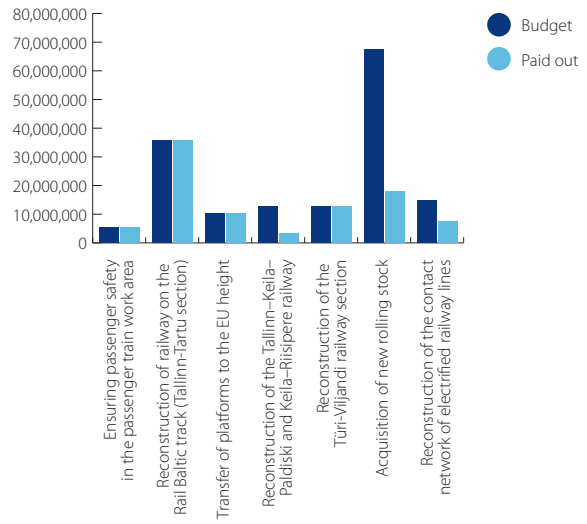
Disbursements from the European Social Fund in the period 2010–2012



Source: Structural Funds Central System

In 2012, the Ministry of Economic Affairs and Communications passed a resolution that the tasks of the final beneficiaries coordinating the funding of the European Union support funds in the field of transportation shall be assembled under the Technical Surveillance Authority. Starting from the beginning of 2013, the Authority will coordinate the infrastructure of waterways and harbours, and the investment projects related to acquisition of ships. In 2014, the functions currently managed by the final beneficiary of the Estonian Road Administration will also be assumed.

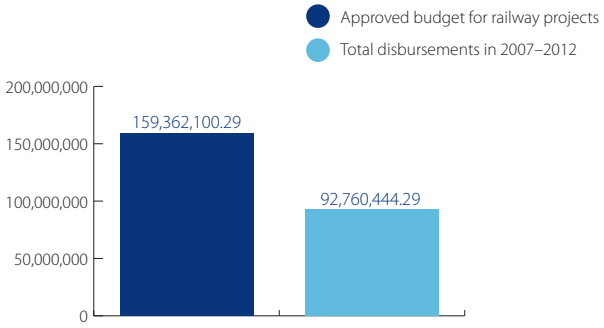
Comparison of the budget and disbursements by projects in 2012



Source: Structural Funds Central System

In addition to the projects funded by the European Union Cohesion Fund and the Regional Development Fund, the Technical Surveillance Authority was also active in 2012 in the preparation works of a comprehensive joint project of Estonia, Latvia and Lithuania – a new Rail Baltic railway line with a 1435 mm gauge. At the beginning of the year, an international Task Force was formed with the aim to coordinate international cooperation under the Rail Baltic project. The Technical Support Authority participated actively in the work of the task force and two public procurements were announced under the project.

Used budget funds in 2007–2012



Source: Structural Funds Central System

The aim of the study related to establishment of the Rail Baltic joint undertaking is to analyse the legal and economic aspects regarding establishment of a joint undertaking, cover the issues related to structure of the undertaking, and to determine the most optimal management structure for the undertaking. As a final outcome of the study, a decision can be made on the location, structure and future funding of the joint undertaking.

Also a public procurement was announced to prepare thematic plans for Harju, Rapla and Pärnu counties, in the course of which a final route for the 1435 mm gauge will be determined and a preliminary design of the railway prepared. After completion of the abovementioned tasks, design and construction procurements can be started to initiate construction of the new railway line during the European Union financial period of 2014–2020.

50% of the activities related to the new Rail Baltic line are funded by the European Union's TEN-T project „Euroopa standardrööpmelaiusega liini Rail Baltica (Eesti raudteelõiku) käsitlevad uuringud" (Studies on the (Estonian railway section) of Rail Baltica standard gauge railway line).

Railway infrastructure capacity

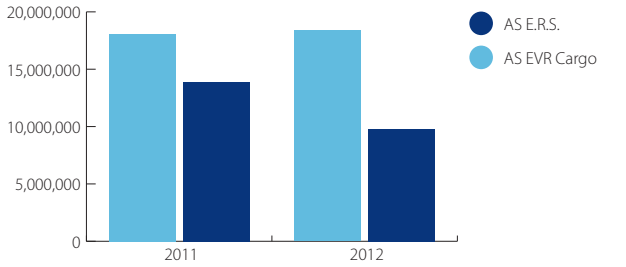
The conditions of the use of railway infrastructure capacity and the number of undertakings applying for capacity has not changed significantly in recent years. The undertakings apply for conservative capacity for the traffic schedule period, i.e. only for satisfaction of their minimum transportation needs. At that, considerably larger capacity needs are operated with in the current calendar month applications with an aim of planning transportation as optimally as possible.

The number of applications for allocation of unallocated capacity sections in comparison of 2011 and 2012

In December 2012, the Technical Surveillance Authority in cooperation with the undertakings changed the terms and conditions for applying for capacity sections, thus making transportation planning even more flexible.

The changes in capacities were different for the larger transportation undertakings on the market. The trade flows of AS EVR Cargo increased in 2012 in comparison with 2011 by 1.69%, whereas the total volume of goods transported by AS E.R.S. was reduced by 30%. Thus, the summarised trade flows decreased in 2012 in comparison with 2011.

Change in capacity at the AS Eesti Raudtee infrastructure in comparison of 2011 and 2012



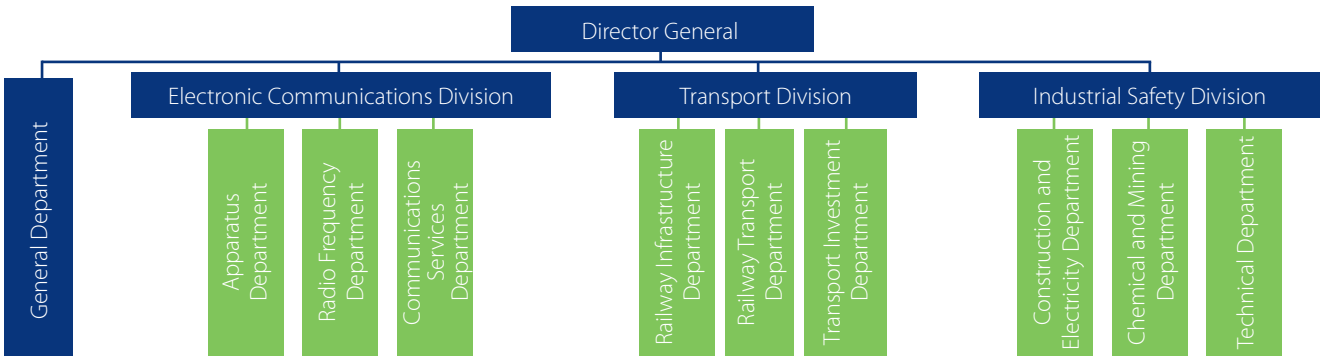
Equipment on an open rolling stock at Ülemiste station (author: Rain Dorbek)

OVERVIEW OF THE ORGANISATION, ITS STRUCTURE, OFFICIALS AND BUDGET

The structure of the Technical Surveillance Authority comprised three divisions in 2012: Electronic Communications Division, Railway Division and Industrial Safety Division. The divisions are in turn divided into departments based on activities, and their work is supported by the general department. The structure of the Technical Surveillance Authority is set up with the aim to increase synergy, raise efficiency of supervision processes and harmonise management levels.

Starting from 2013, we are going to implement a new structure in which the Railway Division is replaced by the Transport Division that has three departments - railway infrastructure department, railway transportation department, and transport investments department. The change was brought about by expansion of the Technical Surveillance Authority's activities in the field of transportation – in addition to railway projects, monitoring of other transportation projects funded from the means of the European Union will also gradually be gathered under the Technical Surveillance Authority starting from 2013. In 2013, our area of activity will expand to maritime and waterway projects. The main purpose of this aggregation is to give up on the side tasks by reducing the areas of activity of the institutions under the Ministry of Economic Affairs and Communications and to focus on performance of the main tasks, thus increasing the quality of the implementation and monitoring of the European Union projects and to enhance the control system of the external instruments.

Structure of the Technical Surveillance Authority



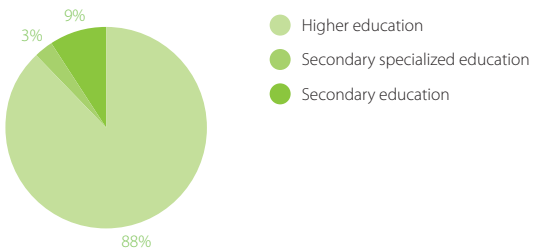
To increase the ease of use of public services for customers and cooperation partners, the Technical Surveillance Authority continued the development of electronic solutions and information systems for its procedures in 2012. We tested the e-service environment introduced in 2011 both inside our authority and through partners (http://emoodul.tja.ee/web/) with the aim of making the use of services as fast and convenient as possible. Development of e-services will also continue in 2013. The objective of the e-environment is to provide a compact and convenient electronic communication channel where both individuals and companies can have a full real-time overview of the registry data related to their activities or the equipment owned by them, and the processing of applications. The e-service environment enables to make miscellaneous procedural operations in the area of railway, industrial safety and electronic communication, which previously had to be done on paper via regular mail or e-mail.

OFFICIALS

At the end of 2012, 88 officials were working at the Technical Surveillance Authority. Within the year, 7 new officials were hired and 6 officials left. Officials are our most important resource, skilful use of whom ensures success of the organisation in performance of its tasks and solving of problems.

With regard to the division according to educational level, the number of officials with higher education was 77 making up 88% of the entire staff. The general educational level of the officials is sufficient for the performance of the work tasks but due to the specific nature of their work, the officials need additional legal training

Division of officials by education in 2012



In improving the skills of our officials, complementing professional and teamwork skills is a priority. Each official is supported in their personal career and professional self-development within the possible means. We organised training courses to increase the professional competence of the officials, with the employees of the Technical Surveillance Authority and experts from outside the institutions sharing their knowledge. The

volume of training increases every year, mainly with the support of the European Union structural funds and the Nordic Council of Ministers.

To develop the knowledge and skills of officials, training was carried out in the total amount of EUR 30,406, EUR 11,000 of which came as aid from the Nordic-Baltic Mobility Programme for Public Administration. Of the training carried out in 2012, the major part was made up of training related to the main activities of the authority. To increase efficiency, quality and performance of the work of officials, training concerning administrative and misdemeanour proceedings, legislative drafting and legal language was carried out.

With the support of the Nordic-Baltic Mobility Programme for Public Administration, the officials of the electricity and construction department and Railway Division visited Norway and Sweden, getting to know implementation of the European Union legislation and performance of monitoring thereof, and acquiring experiences and knowledge for enhancement of the Estonian monitoring system.

There were also several internal training courses to improve the skills and knowledge of officials and develop the organisation.

In addition to professional competence, we also regard good staff relations as highly important in ensuring the success of the organisation, which is why we organise events every year to develop in-organisation relations. Elections of the best colleague, a photo competition, celebration of the authority's anniversary and participation in national officials' sports competitions has become a tradition in the Technical Surveillance Authority.

RECEIPT OF STATE FEES TO THE STATE BUDGET

In 2012, the state received state fees in the amount of EUR 5,887,470 for the procedures performed by the Technical Surveillance Authority.

Procedure	State fee, EUR
Procedures performed under the Mining Act	262
Issuing, amendment and extension of type-approval certificates	1,182
Procedures performed under the Explosive Substances Act	5,829
Entries into the Railway or Rail Vehicles Register and issuing building permits and authorisations for use	263,075
Issuing, amendment and extension of safety certificates	8,628
Procedures performed under the Digital Signatures Act	38
Frequency-related procedures performed under the Electronic Communications Act	1,923,704
Procedures related to numbering performed under the Electronic Communications Act	3,683,935
Issuing building permits or authorisations for structures that are built on a public water body and that do not have a permanent connection to the shore	114
Activities requiring an activity licence performed under the Chemicals Act	703
Total	5,887,470

Division of the state fee by procedures in 2012.

BUDGET

The operational costs budget of 2012 of the Technical Surveillance Authority together with the expenditure transferred from 2011 was EUR 2,289,903.

Expenditure description	Budget of 2012*
Sõle 23a surveillance system	20,923
Acquisition of measurement vehicles	27,597
Frequency planning software	140,280
Membership fees	4,080
Total personnel expenditure	**1,897,103**
Remuneration	1,413,833
Fringe benefits	11,700
Taxes related to staff costs	471,570
Total management costs	**392,800**
Administration costs	86,700
Research and development	12,000
Travel costs	63,100
Training costs	20,200
Management costs for registered immovables, buildings and rooms	85,300
Management costs for facilities	24,600
Operation and maintenance costs of vehicles	76,000
Information and communications technology costs	4,500
Management costs for inventory	8,000
Management costs for machinery and equipment of various work applications	9,200
Medical and hygiene costs	2,900
Special clothing and uniforms	300
Tax and state fee expenditures	2,109

**Expenditure with funds to be transferred.*

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