COMMUNICATIONS REGULATORY AUTHORITY OF THE REPUBLIC OF LITHUANIA

ANNUAL REPORT 2018

Tel. +370 5 210 5633 <u>www.rrt.lt</u> Mortos str. 14, LT-03219 rrt@rrt.lt

FORE\	NORD	3
1	MISSION AND STRATEGIC GOALS OF THE COMMUNICATIONS REGULATORY AUTHORITY .	5
2	THE ACTIVITIES OF THE COMMUNICATIONS REGULATORY AUTHORITY IN NUMBERS FOR 2	20186
3	BRIEF OVERVIEW OF THE COMMUNICATIONS SECTOR DEVELOPMENT IN 2018	7
4	FIELDS OF ACTIVITIES OF THE COMMUNICATIONS REGULATORY AUTHORITY	8
4.1	Electronic communications sector	9
4.2	Postal sector	12
4.3 5	PROMOTION OF COMPETITION IN ELECTRONIC COMMUNICATIONS AND POSTAL SECTOR	15 S 17
5.1	Competition in the electronic communications sector. Market analyses	17
5.2	Implementation of the EU Regulation on cross-border parcel delivery services	17
5.3	Supervision of fulfilment of the obligations imposed on the undertakings	18
5.4 5.5	Telephone number portability service Possiution of disputes between undertakings in PPT Commission for Disputes	20
5.5 5.6	Supervision of undertakings engaged in electronic communications and postal activities	20
6	PROTECTION OF CUSTOMER RIGHTS AND LEGITIMATE INTERESTS	23
6.1	Examination of electronic communications service users' requests (complaints)	23
6.2	Investigation of postal service users' requests (complaints)	24
6.3	Out-of-Court dispute settlement	25
6.3.1 6.3.2	Resolution of disputes between end-users and electronic communications service providers Resolution of disputes between the users and postal service providers	26 29
6.4	Supervision of international roaming services	30
6.5	The activities of the Internet hotline "Clean Internet"	32
6.6	Assurance of the quality of Communications Services	33
6.6.1 6.6.2	Supervision of universal electronic communications services	33
0.0.2 6 7	Tariffs and cost accounting of universal postal services	34
671	Supervision of the quality of universal postal services	33
6.7.2 establis	Assessment of compliance of the postal network of the universal postal service provider with the shed requirements.	37 ith the 37
6.8	The quality of public fixed telecommunication services	38
6.9	The quality of public mobile telecommunication services	38
6.9.1	The quality of wireless Internet access services	39
6.10	Protection of consumer rights and legitimate interests in the sector of equipment	40
6.10.1	Supervision of the market of radio equipment and electric and electronic devices	40
6.10.2	The activities of RRT in ensuring free movement and provision of equipment to the market	42
6.11 7	Supervision of trust services PROMOTION OF INVESTMENTS AND DEVELOPMENT OF ADVANCED ICT TECHNOLOGY	44 . 46
7.1	Development of mobile radiocommunications	48
7.2	Digital television and radio	50
7.3 7.4	Fixed radiocommunications	52
7.5	The activities of radio amateurs	55
7.6	Radio spectrum monitoring	54
7.7	Inspection of radiocommunication networks and stations	55
7.8	Elimination of radio interference	56
7.9 7.04	wanagement of other resources	5/
7.9.1 7.9.2	Internet addreses	57 58
8	INTEGRATION INTO THE EU AND INTERNATIONAL REGULATORY SPACE AND EFFIC	
ΑCΤΙV	ITIES OF RRT	59
8.1	International activities of RRT	59
8.1.1	The International Telecommunications Union (ITU)	59
8.1.2	Documents considered in the EU Council working groups	60

8.1.3	Issues discussed in the committees and working groups of the European Commission (EC)	62
8.1.4	The Body of European Regulators for Electronic Communications (BEREC)	62
8.1.5	European Regulators Group for Postal Services (ERGP)	64
8.1.6	The European Conference of Postal and Telecommunications Administrations (CEPT)	65
8.1.7	Eastern Partnership Electronic Communications Regulators Network (EaPeReg)	66
8.1.8	The International Association of Internet Hotlines INHOPE	67
8.1.9	Forum of European Supervisory Authorities for Trust Service Providers (FESA) and El	IISA
working	g group	68
8.1.10	The Universal Postal Union (UPU)	68
8.1.11	Participation in the Twinning Project	68
8.2	Effective activities of RRT	70
8.2.1	Management of RRT	70
8.2.2	In-service training for RRT employees	70
8.2.3	Consumer information measures	71
9	PERFORMANCE OF OBLIGATIONS IN THE FIELDS OF NATIONAL DEFENCE, NATIO	NAL
SECUR	RITY AND MAINTENANCE OF PUBLIC ORDER	73
10	PROMOTION OF EFFECTIVE COMPETITION ON THE RAILWAY TRANSPORT MARKET	74
10.1	Monitoring of compatition on the railway transport market	71
10.1	Supervision of the compliance with the requirements for the railway transport market players	74 74
10.2	Examination of the applicants' complaints	75
10.4	Independent Regulators' Group – Rail	77
10.5	The European Network of Rail Regulatory Bodies (ENRRB)	78
11	Supervision of the calculation of remuneration for document submission and data registration	79
12	RRT activity priorities for 2019	80
13	IMPLEMENTATION OF IMPACT EVALUATION FACTORS OF STRATEGIC OBJECTIVES IN 2018	84
14	ANNEX 1. IMPLEMENTATION OF EVALUATION FACTORS OF OBJECTIVES AND TASKS OF	тне
СОММ	UNICATIONS MANAGEMENT AND CONTROL PROGRAMME FOR 2018	90
15	ANNEX 2. IMPLEMENTATION OF EVALUATION FACTORS OF OBJECTIVES AND TASKS OF	THE
RAIIW	AY TRANSPORT MARKET REGILI ATION PROGRAMME FOR 2018	97
16		UC
PROGR	RAMME OF THE SUPERVISION OF CALCULATION OF SALARIES FOR THE REGISTRATION	AND
SUBMI	SSION OF DATA FOR 2018	98
17	ANNEX 4. RRT FINANCIAL STATEMENT OF 2018	99
18	ANNEX 5. Regulated markets of the electronic communications sector 1	03
19	ANNEX 6. The orders of Director of RRT in 2018 1	04

FOREWORD

In 2018, Lithuania celebrated the Centennial of the re-established State of Lithuania. By celebrating the historical dates of the centenary, our State entered into a new stage of new communications technologies in which the main aim is to ensure as broad application of digitisation as possible, moving to the next generation communications and, at the same time, reducing digital exclusion of all groups of society. The whole world is preparing for those challenges and Lithuania is no exception.

In 2018, the European Electronic Communications Code (hereinafter – the Code) came into force, which sets serious tasks for us and market players by the implementation whereof it is intended to achieve the main objective of the European Union (EU) electronic communications reform – to create the EU "gigabit society" by 2025 and make the high-speed Internet connection available to both all residents of the EU and business. We have two years to transpose the provisions of the Code into national law, which means that we need to consolidate the



efforts of all stakeholders in the electronic communications sector today so that the tasks provided for in the Code are implemented. The EU seeks to allocate the 3.6 GHz and 26 GHz frequency bands, and subsequently the other ones, for installation of 5G networks by the end of 2020. Today, we, as the regulator, have already done a lot of homework: we have approved the Plan for the Radiocommunications Development in the 470-790 MHz Frequency Band, released the Plan for the Radiocommunications Development in the 3400-3800 MHz Radio Frequency Band for public consultation, and negotiated the coordinated use of necessary resources with the neighbouring countries.

The international reports based on which Lithuania remains among the leaders of fibre-based internet are very satisfying. The report of the organisation "FTTH Council Europe" ¹ (Fibre to the Home) states that Lithuania is ranked the second according to the fibre network penetration in Europe. In Lithuania, the fibre network penetration stands at 46.8%.²

It must be noted that the growth of revenue of the electronic communications sector has continued for the fourth year in a row. The total revenue of electronic communications went up by 1.9%. The most significant growth was that of Internet access based on the revenue: it increased by 31.8% by using mobile technologies, mostly LTE. The growing use of mobile internet still remains one of the main drivers. In 2018, over 92% of the data were transferred through LTE network.

The statistical indicators of the postal sector have continued rising. In 2018, the revenue from transport of postal parcels went up by 15.5% – from EUR 82.97 million in 2017 to EUR 95.86 million in 2018. This growth was caused by the consistently increasing number of transported postal parcels. Regulation (EU) 2018/644 on cross-border parcel delivery services, which entered into force in 2018, will increasingly promote e-commerce and ensure higher quality of cross-border parcel delivery services to the consumers in the EU.

We have developed new digital tools for market surveillance. In 2018, we introduced the information system of operators' networks (ISON) which helps calculate the coverage of the territory of the Republic of Lithuania by fixed networks. We already have the results of the data collected. The summary of the data

¹ Data source: FTTH Council Europe and Information Society Development Committee.

² Lithuania is ranked the 13th in the world and gives way to the countries such as the United Arab Emirates, Qatar, Singapore, South Korea, Hong Kong, Japan, China, Mauritius, New Zealand, Uruguay, Latvia and Taiwan.

submitted by the operators showed that the overall coverage of residential premises located in Lithuania by fixed communications access accounted for 76.9% and the coverage by next generation access networks stood at 62.6%. We have been also developing the methodology for the calculations of LTE network speed rates (http://epaslaugos.rrt.lt/apreptis/) and have already presented the preliminary results of the calculations made. The calculation methodology will be further improved through cooperation with mobile operators and we are planning to draw up detailed speed rate maps by the end of this year. RRT is one of the first European regulators making such complex calculations and developing mobile high-speed evaluation model based on those calculations.

We, as the regulator, have been carrying out our activities in new areas as well: in the areas of the rail transport market and supervision of calculating the salary for submission of documents and data registration. The assignment of new functions required for our continuous efforts in enhancing the necessary competences and in educating the experts of new fields.

RRT continued to specifically focus on consumer protection. The increasing number of inquiries and complaints demonstrated growing awareness of consumers and knowledge of their rights. The task of RRT was to be a competent mediator between the consumers and economic operators when solving the problems, which is what preventive measures targeted at: informing the consumers about their rights and providing the undertakings with the required methodological assistance.

In 2018, we were actively participating in international initiatives and projects. We were involved in the activities of the international and European Union organisations, we shared good EU practice with the Eastern Partnership countries, we have continued the project of Safer Internet, and we, as a senior partner, were implementing the EU Twinning Project together with the German and Polish institutions. In international forums RRT is valued for in-depth expertise that we are always keen on sharing with our foreign partners by learning from them at the same time and applying gained knowledge to our activities in Lithuania.

I invite you to take notice of this report of 2018 in terms of what has been accomplished in various activities of RRT, which initiatives were implemented and which results were achieved.

Sincerely

Feliksas Dobrovolskis

1 MISSION AND STRATEGIC GOALS OF THE COMMUNICATIONS REGULATORY AUTHORITY

Mission

To ensure a wide range of technologically advanced, high-quality, secure and affordable information and communication technology (ICT) and postal services for each and every resident of the Republic of Lithuania, and effective competition in the electronic communications, postal and rail transport sectors and assess the validity of salaries for registration of the registry objects and submission of documents.

Strategic goal 1



To enhance the effective competition in the fields of electronic communications and postal activities, ensure efficient use of electronic communications resources and protect the rights of ICT and postal service users, thus accelerating the development of digital society.

Strategic goal 2



To aim for the conditions of effective competition on the railway transport service market and prevent the abuse of the market power held by the public railway infrastructure manager, railway undertakings (carriers), railway service facility operators on the railway transport service market.



To ensure supervision of the calculation of salary for registration of the registry objects and submission of documents.

2 THE ACTIVITIES OF THE COMMUNICATIONS REGULATORY AUTHORITY IN NUMBERS FOR 2018



3 BRIEF OVERVIEW OF THE COMMUNICATIONS SECTOR DEVELOPMENT IN 2018



7

4 FIELDS OF ACTIVITIES OF THE COMMUNICATIONS REGULATORY AUTHORITY



4.1 Electronic communications sector

At the end of 2018, the electronic communications activities were carried out by 117 economic operators (by 10 economic operators fewer than in 2017).

In 2018, the electronic communications market players invested EUR 80.8 million in the electronic communications network infrastructure, which was by 5.0% more than in 2017 (see Fig. 1). Operators were mostly investing in the development of fibre optic access network and 4G network infrastructure, whereby data transmission services are provided.



Fig. 1. Dynamics of investments in the electronic communications infrastructure, EUR million, 2014-2018

In 2018, the total revenue of the electronic communications sector amounted to EUR 693.4 million and, compared to 2017, increased by 1.9% or by EUR 12.6 million (see Fig. 2). The growth of revenue of the electronic communications sector has continued for the fourth year in a row. The major part of the sector revenue was the revenue from the provision of wholesale and retail telephony services (48.2%) and data transmission services (40.3%). Revenue from television and radio services comprised 10.1%, revenue from access to physical infrastructure stood at 1.4%.



* In 2018, the revenue from access to physical infrastructure covers the revenue received from WLR, the revenue received from granting full unbundled access to local line, the revenue received from granting shared unbundled access to local line, the revenue received from granting access to the communications cable duct system, and the revenue received from granting access to another physical infrastructure. In 2016, as in the previous periods, only the revenue received from granting the access to dark fibre was distinguished.

Fig. 2 Structure of the revenue of the electronic communications sector, EUR million, 2014-2018

Telephone communication. The number of active subscriber identification cards (SIM cards) used for the provision of public mobile telephone services³ went up from 3,700.3 thousand to 3,776.1 thousand or by 2.1% in 2018, compared to 2017. The number of subscribers to public fixed telephone services decreased from 485.9 thousand to 426.5 thousand or by 12.2% in 2018, compared to 2017.

As regads the use of telephone communications services, the same trend prevailed in 2018 as that in 2017: the duration of calls originated in Lithuanian public mobile communications networks increased by 0.04% compared to 2017 (it was longer by 3.7 million minutes than in 2017), whereas the duration of calls originated in public fixed telephone networks went down by 17.6% or 122.9 million minutes in 2018 compared to 2017 (see Fig. 3).





Internet. In 2018, compared to 2017, revenue from Internet access services increased by 15.6% and accounted for EUR 255.9 million (see Fig. 4). Internet access service revenues comprised from two service groups: retail Internet access services and wholesale Internet access services. In 2018, compared to 2017, the revenue from retail Internet access services grew by 17.0% and stood at EUR 252.2 million, while the revenue from wholesale Internet access services decreased by 16.2% and amounted to EUR 3.7 million.





The analysis of Internet access services revealed, that 63.5% or EUR 160.1 million of the revenue came from Internet access services provided by means of mobile communications technologies. The revenue from Internet access services provided by means of fixed communications technologies stood at 36.5% or by EUR 95.8 million. It must be noted that mobile internet revenue has grown by 31.8% over the year and it was the most rapid growth of all revenue of the electronic communications sector. The growth of increasing revenue was also reflected by the rising number of active SIM cards used to provide Internet access services, especially LTE services (see Fig. 5).

³ This number does not include SIM cards for Internet access services, where the Internet access service payment plan is applied rather than public mobile telephone service plan, as well as SIM cards for M2M services.



Fig. 5. The number of subscribers to Internet access services provided by means of mobile communications technologies, in thousands, 2014-2018

In 2018, compared to 2017, the number of subscribers to broadband Internet access services provided by means of fixed communications technologies dropped by 10.2 thousand or by 1.3% and equalled 788.6 thousand (see Fig. 6). In the last two years, the number of Internet access subscribers using fixed communications technologies has been going down in Lithuania due to the use of mobile communications technology (LTE).



Fig. 6. The number of subscribers to Internet access services provided by means of fixed communications technologies, in thousands, 2014-2018

When evaluating the the structure of subscribers by used technologies it was observed, that optical fibre communication lines (FTTx) remained the main technology used to provide Internet access services by means of fixed communications technologies in Lithuania in 2018. According to the data of 2018, there were 580.2 thousand optical fibre lines in Lithuania, i.e. by 14.6 thousand lines or 2.6% more than in 2017. As many as 73.6% of all subscribers to Internet access services were using optical fibre lines (see Fig. 7). The share of this market grew by 2.8 pp over the year, and the share of subscribers to Internet access services provided by means of the xDSL technology, which is the second most popular technology, shrank by 1.1 pp.



Fig. 7. Structure of subscribers to Internet access services provided by means of fixed communications technologies by technologies, %, 2014-2018

Internet access services (30 Mb/s and higher) were provided via optical fibre lines (FTTx), cable television networks using DOCSIS 3.0 technology, and via other lines (local networks (LAN)). The total number of subscribers receiving 30 Mb/s and higher data upload speed decreased by 2.7% over the year.⁴ On 31 December 2018, 75.2% of fixed broadband communications subscribers were using 30 Mb/s and higher Internet speed, including 46.6% who were using 100 Mb/s and higher speed.

Television. At the end of 2018, the number of subscribers to pay-TV services accounted for 676.2 thousand, which was by 4.7% less than at the end of 2017. Television services provided by means of cable television networks remained the most popular pay-TV services. In 2018, 51.8% of all pay-TV subscribers were choosing this television (by 0.7 percentage point less than in 2017) (see Fig. 8). In 2018, only the number of IPTV (Internet Protocol Television) subscribers was growing in Lithuania – such services were provided by 20 undertakings, and 258.8 thousand subscribers were watching television programmes by such means (compared to the data of 2017, the number of subscribers increased by 12.8%).



Fig. 8. Structure of pay-TV subscribers by ways of providing television services, %, 2014-2018

4.2 Postal sector

At the end of 2018, the postal services were provided by 45 undertakings, i.e. by 1 undertaking fewer than at the end of 2017.

The overall postal market covers sending and delivery of items of correspondence and parcels and other postal services. In 2018, compared to 2017, the overall postal market grew by 16.3% in terms of revenue and accounted for EUR 171.1 million (see Fig. 9).

⁴ Lower penetration is caused by a smaller average size of the household (based on the data of the Lithuanian Department of Statistics, the average size of the household was 2.08 persons in 2018 and 2.24 persons in 2017).



Fig. 9. Revenue from the provision of postal services, EUR million, 2014-2018

The largest postal market share, in terms of revenue, was held by AB Lietuvos Paštas (see Fig. 10).



Fig. 10. Market shares held by postal market players by income, %, 2018

The traditional postal market increased by 6.3% in 2018 in terms of revenue and amounted to EUR 57.2 million. In this market, in terms of revenue, the largest share was held by AB Lietuvos Paštas – 98.0%, other providers held 2.0% of the market. Compared to 2017, the non-traditional postal market (earlier known as the market of recorded hand-deliveries of postal items) grew by 22.1% in 2018 in terms of revenue and reached EUR 113.9 million. In 2018, the largest service providers in this market were: UAB DPD Lietuva, UAB DHL Lietuva and UAB Venipak LT (see Fig. 11).



Fig. 11. Market shares held by non-traditional postal market players by income, %, 2018

The total letter-post market, in terms of the volume of postal items, increased by 3.8% in 2018 and amounted to 63.8 million items of correspondence. Whereas, the number of postal parcels that were handed over increased by 23.7% in 2018, compared to 2017, and stood at 17.1 million units. Recently, it has been observed that parcels constitute an increasingly larger part of all postal items (in 2016 - 16.5% of all postal items, in 2017 - 18.4%, in 2018 - 21.1%). The number of cross-border parcels increased by 49.3% in 2018, compared to 2017, and the number of domestic parcels grew by 20.6%. The growth of the number of postal parcels was largely influenced by the increasing popularity of electronic commerce in the country.

Universal postal service

The universal postal service in Lithuania is provided by AB Lietuvos Paštas. This service is vitaly important to the residents of remote areas who are provided with an opportunity to send and receive various postal parcels or items of correspondence.

Volume of the universal postal service. In 2018, the volume amounting to 19.9 million of the universal postal service items was sent and received, which was by 4.6% more than in 2017 (see Table 12).





Revenue. The revenue received from the provision of the universal postal service stood at EUR 30.6 million in 2018 and, compared to 2017, grew by 27.1% (see Fig. 13). In 2018, the growth of revenue was more rapid than in recent years – it was caused by both the ongoing growth of e-commerce and changed (higher) tariffs of the provision of the universal postal service in 2018.



Fig. 13. Revenue from the universal postal service, EUR million, 2014-2018

4.3 Railway sector

At the end of 2018, the overall length of railway tracks was 1,911 km, of which 152 km were electrified. In 2018, the number of transported passengers grew by 9.9%, and volume of transported freight went up by 7.3% (see Fig. 13A).



Fig. 13A. Dynamics of the number of transported passengers and freight volume in 2016–2018

In 2018, the largest part of passenger train traffic, which grew by 9.4% compared to 2017, was represented by national passenger train traffic, whereas rail freight traffic, which went up by 8.7% compared to 2018, mainly consisted of international rail freight traffic.





Fig. 13B. Passenger and freight traffic distribution at national and international levels in 2018

5 PROMOTION OF COMPETITION IN ELECTRONIC COMMUNICATIONS AND POSTAL SECTORS

5.1 Competition in the electronic communications sector. Market analyses

The market analyses conducted by RRT aim is to assess whether the competition on a certain electronic communications market is effective and, if not, to prevent the abuse of the influence on that market.

In 2018, RRT commenced 4 market analyses:

- The market analysis on call termination on individual public communications networks at a fixed location;
- The market analysis on wholesale local access at a fixed location;
- The market analysis on wholesale centralised access at a fixed location for the mass-market products;
- The market analysis on access granted to customers and service recipients, except for customers, to public communications networks at a fixed location.

Undertakings operating on the market of call termination on individual public communications networks at fixed locations provide the services of call termination on own network to the other operators. The price of call termination is affected by the price of retail telephone services as well, therefore the highest possible price of those services is determined during the market analysis taking into account the costs related to the call termination service.

Undertakings operating on the market of **wholesale local access at a fixed location** grant access to local lines, optic fibre lines and communications cable duct systems.

Wholesale data traffic transmission services are provided **on the market of wholesale centralised access at a fixed location for the mass-market products**. All said services are especially important for the development of retail services, such as fixed telephone services, Internet access or pay-TV. Market regulation is therefore intended to ensure access to such wholesale services for all operators under uniform conditions.

The services provided on the **market of access to public communications network at a fixed location granted to natural and legal persons** simplify the conditions of market entry for the operators intending to start providing fixed telephone services who do not have the fully expanded electronic communications network. It must be noted that regulation of this market is becoming less and less relevant, therefore the opportunity to deregulate that market will be considered during the analysis.

The completion of all said market analyses is planned in 2019.

Information on the undertakings having significant power on relevant markets and imposed obligations thereon effective on 31 December 2018 is provided in Annex 5 to the report.

5.2 Implementation of the EU Regulation on cross-border parcel delivery services

The new regulation on cross-border parcels obliges RRT to monitor the market, collect statistical information from the parcel delivery service providers, and assess the affordability of tariffs of universal postal service provider AB Lietuvos Paštas.

Regulation (EU) 2018/644 of the European Parliament and of the Council of 18 April 2018 on cross-border parcel delivery services (OJ 2018 L 112, p. 19) came into force on 22 May 2018 (hereinafter – the Regulation).

The main objectives of the Regulation:

- promote e-commerce in the EU's single market;
- reduce tariffs applied to persons and small enterprises as well as unreasonable differences between the EU tariffs applied in Member States;
- make cross-border prices more transparent and easily comparable across the Union.

The provisions of the Regulation⁵ apply to parcel delivery service providers: express and courier service providers, agents, and service providers who are established in more than one EU Member State.

The Regulation sets the obligation for parcel delivery service providers whose activity of the provision of postal service falls within the scope of the Regulation to submit information defined in the Regulation to the **national regulatory authority** where it relates to cross-border parcel delivery – cross-border parcel delivery price, turnover in parcels, number of employees, information on subcontractors and other information provided for in the Regulation.

By this Regulation, RRT is obliged to monitor the market, collect statistical information from the parcel delivery service providers, assess the affordability of tariffs of universal postal service provider AB Lietuvos Paštas based on objective criteria and submit the assessment to the European Commission.

For the purpose of tariff transparency, the European Commission will publish the tariffs of parcel delivery service providers by 30 April of each calendar year on a specific section of the website EUROPA⁶.

To properly prepare for the implementation of the Regulation, RRT was consulting the parcel delivery service providers both orally and in writing in 2018. RRT, taking the nature of the services provided by postal service providers, flows of postal items and the other statistical information into account, established that the activity of the provision of postal service carried out by 13 postal service providers falls within the scope of the Regulation. RRT notified the European Commission of those postal service providers by submitting their contact details so that they are granted access to the parcel database.

RRT will continue its consultations in 2019 to discuss the issues related to the implementation of the Regulation.

5.3 Supervision of fulfilment of the obligations imposed on the undertakings



Audits of cost accounting system and separation of accounts of Telia Lietuva, AB and AB Lietuvos Radijo ir Televizijos Centras for 2017 were conducted.

The compliance with the relevant requirements of legal acts of AB Lietuvos Radijo ir Televizijos Centras in the provision of the services to Public Enterprise Lithuanian National Radio and Television was examined.

⁵ The Regulation does not apply to the providers whose number of employees is below 50, except for the cases, where service providers operate in more than one EU Member State.

⁶ http://ec.europa.eu/growth/sectors/postal-services/parcel-delivery_en

In 2018, in order to promote competition RRT performed supervision of how the undertakings having significant market power complied with the obligations imposed thereon⁷. The list of obligations imposed on the undertakings is provided in Annex 5 to the RRT Report.

In 2018, cost accounting system and accounting unbundling audits of **Telia Lietuva**, **AB and AB Lietuvos Radijo ir Televizijos Centras** for 2017 were **conducted**.

Result. In the the audit opinion of AB Lietuvos Radijo ir Televizijos Centras, the auditors stated that the reports on cost accounting and accounting unbundling drafted by the economic operator in 2017 were compliant with the requirements laid down in legal acts in all significant aspects, and provided a comment regarding inefficient internal control (data transfer errors were identified). The deficiencies found during the audit of Telia Lietuva, AB were related to the cost attribution contrary to the principle of causation, the auditors also specified that they were unable to ascertain if separation of fixed assets of protective tubes and related costs were properly attributed to the communications cable duct system as Telia Lietuva, AB has been collecting information on unbundling of protective tubes only since 2017 (taking account of the deficiencies found during the audit for 2016 conducted in 2017 concerning the inappropriate calculation of the costs of protective tubes). The technical errors resulting from structural changes, which leads to a possibility of cost manipulation, were also pointed out.

The following comments of an advisory nature were provided during both audits:

- 1. The auditors recommended AB Lietuvos Radijo ir Televizijos Centras to make internal control more effective, as the internal control measures implemented by AB Lietuvos Radijo ir Televizijos Centras before the audit (automated interfaces between the tables and transferred data) were insufficient and data transfer errors were identified during the audit in 2018. The audit recommended AB Lietuvos Radijo ir Televizijos Centras to create more automated interfaces between the data provided in the tables, thus ensuring the comparison and accuracy of the data transferred from one table to another, and formalise the four eyes internal control system by introducing relevant measures which would enable to identify the activity of the internal control staff.
- 2. The auditors recommended to Telia Lietuva, AB to supplement the existing methodology of cost accounting (distribution of business costs) and accounting separation with a detailed map of processes which would enable to identify a detailed path of cost movement. The auditors also suggested that the company would draft the procedure and methodology for the calculation of drivers which would apply to the activities that have a major impact on the regulated costs of services, and recommended to draw up the expertise-based descriptions of the procedure and methodology for the calculation of drivers which occur in the system due to structural changes and which pose a threat of cost manipulation, and recommended to develop the control measures for error detection and prevention.

With regard to the results of the audit, RRT addressed economic operators Telia Lietuva, AB and AB Lietuvos Radijo ir Televizijos Centras requesting to eliminate the drawbacks detected during the audit. The audit conclusions are published on the RRT website.

⁷ RRT inspected and assessed how the obligations of transparency, non-discrimination, provision of access and price control imposed on the undertakings having significant power on relevant markets were fulfilled.

In 2018, it was verified whether AB Lietuvos Radijo ir Televizijos Centras properly seperated the services provided to Public Enterprise Lithuanian National Radio and Television from other services, whether the costs for such services were correctly allocated and whether the prices did not exceed the ones set in legal acts.

Result. No irregularities were detected during the audit. The Ministry of Transport and Communications of the Republic of Lithuania was provided with the finding of the audit conducted by RRT which specified that the revenue gained by AB Lietuvos Radijo ir Televizijos Centras from the services provided to Public Enterprise Lithuanian National Radio and Television exceeded the costs incurred by 0.43%, i.e. it did not exceed the 10% threshold.

5.4 Telephone number portability service

The telephone number portability service gives the users a greater freedom to choose or replace a service provider according to the quality and variety of services, prices, loyalty systems, service advantages, etc. and other important service parameters by preserving their own telephone number.

According to the data of RRT, between the start of the provision of the number portability service (in 2004) and 31 December 2018, **1,731,981** numbers were ported to another service provider network, of which 1,647,664 were mobile telephone numbers and 84,317 were fixed telephone numbers. The number portability service has already been used by 34% of all active telephone service subscribers (see Table 1).

Table 1. Number of telephone numbers ported in 2014-2018, units

	2014	2015	2016	2017	2018
Ported mobile telecommunication service numbers	160,775	89,091	111,902	135,036	165,906
Ported fixed telecommunication service numbers	6,352	6,406	12,535	7,615	10,503

5.5 Resolution of disputes between undertakings in RRT Commission for Disputes

=	

2 – the number of disputes examined by RRT Commission for Disputes in 2018.

In 2018, RRT Commission for Disputes between Entities and Disputes between Postal Service Providers (hereinafter – the Commission for Disputes) examined one new dispute between economic operators providing electronic communications services, it also finished the examination of the dispute received and commenced at the end of 2017.

In 2018, the Commission for Disputes received the request to examine the dispute between **Telia Lietuva**, **AB and UAB Penkių Kontinentų Komunikacijų Centras** regarding the lease of electronic communications cable ducts in the communications infrastructure owned by UAB Penkių Kontinentų Komunikacijų Centras by setting the reasonable fees.

Result. The Commission for Disputes examined the dispute and adopted the decision to oblige UAB Penkių Kontinentų Komunikacijų Centras to conclude the agreement on infrastructure lease with Telia Lietuva, AB regarding a monthly fee for the lease of space in the communications cable duct system which would not exceed EUR 61 per month, to oblige UAB Penkių Kontinentų Komunikacijų Centras to conclude the agreement on infrastructure lease with Telia Lietuva, AB regarding the building internal infrastructure lease in compliance with the principles of non-discrimination and transparency established in Article 39(2) of the Law on Electronic Communications (the "LEC").

Moreover, in 2018, the Commission for Disputes finished the examination of the dispute between UAB TCG Telecom and UAB Tele2 which has arisen from the termination of SMS messaging agreement in 2017. UAB TCG Telecom requested the Commission for Disputes to recognise that UAB Tele2 wanted to terminate the agreement on unreasonable grounds. The applicant also requested to oblige UAB Tele2 to refrain from terminating the agreement until the dispute between service providers is resolved, and apply interim measures until the final settlement of the dispute between the parties.

Result. The requirements specified in the request by UAB TCG Telecom were upheld. The Commission for Disputes applied interim measures and, in the decision on dispute settlement, stated that UAB Tele2 did not have the right to terminate the agreement on the said grounds, therefore UAB Tele2 was obliged to refrain from terminating the performance of the agreement and form the provision of the services referred to therein to UAB TCG Telecom.

5.6 Supervision of undertakings engaged in electronic communications and postal activities



14 – scheduled inspections of electronic communications service providers.



13 – number of scheduled inspections of postal service providers.

In 2018, 14 planned inspections of **electronic communications service** providers were carried out (in 2017 – 20). During the inspections, the non-compliance with the requirements laid down in legal acts governing the electronic communications activity was detected in the activity of all undertakings. Undertakings were consulted over the issues of the activities of economic operators. The average duration of the planned onsite inspection of electronic communications service providers was 1 hour 40 minutes.

Result. Having provided methodological assistance, all identified cases of non-compliance with the requirements of legal acts were eliminated within the set time limits.

In 2018, 13 planned inspections of **postal service providers** were carried out (in 2017 - 17). During the inspections, the non-compliance with the requirements laid down in legal acts governing the electronic communications activity were not detected in the activity of the undertakings. The postal service providers were consulted over the issues related to the activities of undertakings. The average duration of the planned on-site inspection of postal service providers was 1 hour.

Result. Having provided methodological assistance, all identified cases of non-compliance with the requirements of legal acts were eliminated within the set time limits.

In 2018, RRT, seeking to find out the service providers' opinion about supervision of the economic operators' activities carried out by RRT, conducted the survey of economic operators⁸ engaged in electronic communications activities and of postal service providers whose planned inspections were performed in 2018 (the "respondents") (27) (see Table 2).

Table 2. Results of the survey of economic operators conducted in 2018



100% of the respondents stated that prior information (electronic notice on the future scheduled inspection and check list attached) is useful.

100% of the questioned postal service providers and 77% of the questioned electronic communications service providers stated that they found the questions presented in the check lists clear and understandable.

91% of the questioned postal service providers and 94% of the questioned electronic communications service providers were satisfied with the time limits for elimination of deficiencies set by the RRT's authorised officials.

100% of the questioned economic operators stated that they found information related to the supervision of economic operators' activities provided by RRT sufficient.

73% of the questioned postal service providers and 59% of the questioned electronic communications service providers did not know that the RRT website published the detailed description of the administrative consultancy service⁹.

100% of the questioned economic operators are positive about the work of the RRT's authorised officials.

It must be noted that the Report of the Assessment of Excellence of the Institutions Supervising the Economic Operators' Activities for 2017 (scoreboard)¹⁰ refers to RRT as to the supervising authority whose prepared check lists comply with the quality criteria. RRT is ranked the 3rd by the clarity of publicly accessible check lists and user-friendliness as only the most relevant questions are included.

The said report ranks RRT the 4th by information that is required to be published¹¹, this is the annual report of RRT which provides information on consultancy activities, inspections conducted, number of inspections, analysis of violations and duration on a yearly basis. This ensures transparency, helps the

⁸ RRT sent electronic questionnaires to every economic operator after the inspections performed.

⁹ Description of consultancy for individuals over the issues of the competence of the Communications Regulatory Authority of the Republic of Lithuania together with other descriptions of the administrative service is published on the RRT website at the address https://www.rrt.lt/paslaugos/administraciniu-paslaugu-aprasai/

¹⁰ Letter No (39.1-36)-3-5072 of the Ministry of Economy of the Republic of Lithuania of 13 December 2018 "On the Evaluation of Application of Surveillance Measures by Progressive Economic Operators in the Institutions in 2017".

¹¹ The Law on Public Administration obliges the supervisory authorities to submit the annual reports containing the information on consulting activities, conducted inspections, analysis of deficiencies and initiatives concerning legal acts.

economic operators easily and quickly find necessary information, access the main requirements, and improves the general image of the authority.

6 PROTECTION OF CUSTOMER RIGHTS AND LEGITIMATE INTERESTS

6.1 Examination of electronic communications service users' requests (complaints)





94 - number of amicably resolved complaints.

■ 12 – number of times when methodological assistance was provided where a failure to comply with legal acts was identified.



6 – number of typical agreements of electronic communications service providers reviewed.

In 2018, RRT investigated 297 requests and complaints (jointly to be referred as the "complaints") from the applicants regarding the provision of electronic communications services and questions arising out of them.

In 2018, 270 complaints from natural persons and 27 complaints from legal persons were investigated. Most questions and disagreements concerned the provision of mobile telecommunications services in 2018 (see Fig. 14).





The analysis of the grounds for complaints shows that the majority of complaints were received with regard to the payment for services in 2018 (see Table 3).

Table 3. Num	ber of cor	nplaints b	y reasons
--------------	------------	------------	-----------

Grounds for complaint	Number of complaints
Regarding payment for services	92

Regarding agreement termination consequences (penalties, losses, etc.)	46
Regarding amendment of agreement conditions	42
Regarding the implementation of agreement	40
Regarding termination of agreement	33
Regarding quality of electronic communications services	29
Regarding international roaming services	20
Regarding credit limit (financial thresholds)	5
Regarding telephone number portability	2
Other causes (regarding discrimination, security of services, etc.)	32

It must be noted that almost one third of the complaints (**94 complaints**) were **resolved amicably**, in 12 cases the non-compliance with legal acts was identified and service providers were provided with the methodological assistance, in 11 cases RRT forwarded the received complaints (or part of issues raised therein) to other authorities for investigation within their competence.

When carrying out the prevention of the breaches of the end service users' rights and legitimate interests, RRT revised 6 standard electronic communications service agreements drafted by electronic communications service providers as in how they comply with the requirements laid down in the Rules on the Provision of Electronic Communications Services in 2018. Having suspected of non-compliance with legal acts or potential risk of a failure to comply with legal acts, RRT provided consultations and recommendations to electronic communications service providers concerning the following: conditions and procedure for the termination of agreements established in contractual documents, notification of end-service users of the terms and conditions of the agreements (including all fees) and amendment thereof, compliance of the issuance of invoices to the endservice users and requirement to pay them with the provisions of legal acts, aspects of the restriction of the provision of services and termination thereof, etc.

RRT further cooperated with the State Consumer Rights Protection Authority (SCRPA) in order to ensure full protection of consumer rights in the communications sector. In 2018, RRT initiated the discussions and requested the State Consumer Rights Protection Authority to assess if the terms of the agreement on the provision of electronic communications services corresponded to the criterion of unfair terms.

In 2018, 1,000 consultations were provided by phone, including free of charge help line +370 800 20 030, and 382 consultations were given via e-mail over the inquiries related to the issues of the provision of electronic communications services.

6.2 Investigation of postal service users' requests (complaints)



46 - number of handled complaints regarding postal services.



11 – number of amicably resolved complaints.

2 – number of times when methodological assistance was provided where a failure to comply with legal acts was identified.

In 2018, RRT investigated 46 complaints from the postal service users concerning the provision of the postal service, of which 42 were received from natural persons and 4 from legal persons. Most questions and disagreements received concerned the provision of the universal postal service – in total 30 complaints in 2018. 32 complaints concerned the actions made by AB Lietuvos Paštas (regarding both the universal postal service and the provision of other services); 14 complaints were filed with regard to the other postal service providers.

The analysis of the grounds for filing a complaint shows that the main cause was the quality of the services in 2018 (see Table 4).

Grounds for complaint	Number complaints	of
Regarding the service quality (damaged, lost postal items; delayed delivery of postal items; delivered to the wrong recipient, at the wrong address, non-returned postal items, etc.)	23	
Regarding claim for damage	8	
Regarding the return of postal items	3	
Regarding payment for service	1	
Other causes (regarding customs procedures; notifications of receipt of postal items; weight of postal items; requirements for packages of postal items, etc.)	11	

Table 4. Number of complaints by reasons

11 complaints, out of all complaints handled in 2018, were handled amicably, 31 complaints were responded to following the procedure laid down in legal acts by providing the assessment of the situation by RRT, in 2 cases RRT identified a failure to comply with legal acts, where that compliance was supervised by RRT and as result methodological assistance was provided to service providers, in 3 cases RRT forwarded the complaint or part thereof to other authorities for investigation within their competence.

RRT, paying attention on the supervision of the compliance with legal acts and assurance of protection of consumer rights as well as prevention in the postal area, provided 2 additional consultations (recommendations) to the postal service providers, drew up press releases and published relevant information for the postal service users on the RRT website, organised the meetings with the postal service providers in order to raise problematic issues and find the solutions.

In 2018, 100 consultations were provided by phone and 62 inquiries of the postal service users were replied to via e-mail in relation to the provision of the postal service.

6.3 Out-of-court dispute settlement

RRT is authorised to resolve the disputes between the end users and the providers of electronic communications services and disputes between the users and the postal service providers through out-of-court settlement procedure. In order to restore the balance of violated interest, the parties may resolve the

dispute in several ways - one of them is so-called alternative dispute settlement.

Pursuant to the Law on Consumer Protection of the Republic of Lithuania¹² (hereinafter – the LCP), the Law on Electronic Communications of the Republic of Lithuania (hereinafter – the LEC), the Postal Law of the Republic of Lithuania (hereinafter – the Postal Law), RRT is authorised to resolve the disputes between the end users and providers of electronic communications services and disputes between the users and the postal service providers through an out-of-court settlement procedure.

RRT, in order to raise public awareness on out-of-court dispute settlement and encourage the end service users and other users to defend their rights in this manner, publishes information on alternative ways of settlement of disputes on its website under the title "Alternative dispute resolution", where an application template, decisions adopted by RRT, and other relevant information is published.

6.3.1 Resolution of disputes between end-users and electronic communications service providers

98 – number of resolved disputes regarding electronic communications services.



34 – number of requests to resolve a dispute containing a requirement related to payments for services.

In 2018, RRT received 102 requests to resolve the dispute between the end service users and electronic communications service providers (of which 86 were resolved in 2018, the rest of them (16 disputes) will be resolved in 2019), also 12 disputes received in 2017 were finally resolved.

In total 98 disputes were resolved (in 2017 - 72) between the end service users and electronic communications service providers in 2018. Most of the examined disputes (75%) were submitted by natural persons who were using electronic communications services for personal, family or household needs.

In 2018, the average term for RRT to resolve the disputes regarding the electronic communications services was 55 working days (legal acts provide for a period of 90 days to resolve a dispute and adopt a decision).

In 2018, the end service users were mainly (44%) addressing RRT regarding the disputes over mobile telecommunications services (Fig. 15).

¹² Pursuant to the provisions of Article 22(1)(1) of the LCP, Article 8(2)(2) and Article 36 of the LEC and Article 13 of the Postal Law, RRT is authorised to resolve the disputes between the end service users and the providers of electronic communications services and and disputes between the users and the postal service providers through an out-of-court settlement procedure.



Fig. 15. Breakdown of requests to resolve the dispute by types of services in 2018¹³, units

Figure 16 provides the schedule of the breakdown of disputes by the nature of disputes. The majority of requirements contained in the requests to resolve the dispute (37%) were related to the fees applied by the electronic communications service providers. The issues pertaining to the consequences of the amendment to the agreements on the provision of electronic communications services and termination of the agreements (penalties) were also relevant.



Fig. 16. Dispute breakdown by the nature of disputes in 2018 (some of the requests contained several reasons for applying), units

It must be noted that most (35%) of the disputes between the end service users and electronic communications service providers that were received by RRT were resolved amicably (Fig. 17).

¹³ Cases, where the request to settle the dispute covered several types of electronic communications services, are also included.



Fig. 17. Decisions on the disputes regarding electronic communications services¹⁴, units

It must be noted that RRT was handling the service users' requests not only in relation to the validity of penalties, but also to the reduction of penalties in 2018. 2 examples of how RRT, having examined the disputes, upheld the service users' requirements for reduction of penalties are provided below.

RRT practice - disputes resolved

The consumer contested 36-months period of the agreement by specifying that the initial period of the agreement may not exceed 24 months. Penalties calculated by the service provider and to be paid after the termination of the agreement after the period of 24 months (but before the expiry of the 36-month period) were also contested. The consumer believed that the service provider did not have the right to calculate the penalties as the term of the agreement may not exceed 24 months, whereas the agreement was terminated after the expiry of the 24-month period. The service provider disagreed with the statements arguing that the consumer, when signing the agreement, was acquainted with all terms and conditions provided for in the agreement, including the period of the agreement. The consumer had an opportunity to choose a shorter period as well but he agreed with the 36-month period provided for in the agreement, therefore, the service provider calculated the penalties when the agreement was terminated before the expiry of the 36-month period.

RRT, having examined the dispute, decided in favour of the consumer. RRT stated that, taking into account the fact that this was the initial agreement, the period of the agreement, in accordance with the Rules on the Provision of Electronic Communications Services, could not have been longer than 24 months. With regard to the fact that the agreement was terminated after the period of 24 months, RRT stated that the service provider did not have the right to calculate the penalty of EUR 153.32.

The service user requested to reduce the penalties of EUR 665.15 required by the service provider which, after the examination of the substance of the case, were reduced to EUR 345.76. The service user concluded 2 agreements with the service provider concerning the provisions of public mobile telephone services for 10 telephone numbers. The service user terminated the agreements 4 months before the expiry of those agreements. The service provider stated that, taking into account the fact that the service user breached

¹⁴ There were complex decisions.

the agreements and terminated them before the expiry of the minimum period of the use of services, he requested to return the discounts which were granted to the service user, namely, because the service user undertook to use the services of the service provider for at least 12 months. The service user was granted the total discounts of EUR 665.15. The service user believed that the service provider quite unfairly calculated the amounts of penalties, and requested RRT to assess the penalties calculated by the service provider and reduce them, accordingly, to the amount which would be reasonable and fair.

RRT, having compared the amount of the penalty claimed by the service

provider with the monthly fees remaining till the expiry of the minimum period of the use of services, stated that it was unreasonable, unfair and unjust to require that the service user would pay the amount of the penalty (discounts for the services) higher than the monthly fees that he would have paid for the services until the expiry of the minimum period of the use of services. RRT upheld the service user's request accordingly and recognised that the service provider did not have the right to require the amount higher than EUR 345.76 after the termination of the agreements.

6.3.2 Resolution of disputes between the users and postal service providers

10 - number of handled complaints regarding postal services.

7 – number of decisions to refuse the users' requests.

In 2018, RRT received 10 requests to resolve the dispute between the users and postal service providers of which 7 were resolved in 2018, the remaining 3 disputes will be completed in 2019, also dispute proceedings of 3 requests filed in 2017 were compleated in 2018. Thus, in total 10 disputes between the users and postal service providers were resolved in 2018 (in 2017 - 9). 4 requests concerning the dispute were submitted by legal persons, the rest of requests were filed by natural persons who were using postal services for personal, family or household needs.

In 2018, the average term for RRT to resolve the disputes regarding the postal service was 52 days (legal acts provide for a period of 90 days to resolve a dispute and adopt a decision).

Figure 18 provides the schedule of dispute breakdown by the nature of disputes. The majority (60%) of requests to resolve the dispute contained the claim for damage.



Fig. 18. Dispute breakdown by the nature of disputes in 2018 (some of the requests contained several reasons for applying), units

The users' claims specified in 8 requests to resolve the dispute were not upheld, 1 dispute was handled in favour of the user and 1 dispute was settled amicably (Fig. 19)¹⁵.



Fig. 19. Decisions on the disputes regarding postal services in 2018, units

6.4 Supervision of international roaming services



4 – number of requests for the application of an additional fee for international roaming services in the EU/EEA countries were received by RRT.



RRT allowed the service providers to apply additional fees for international roaming services to the extent that enables avoiding losses and, as a result, the the possible increase of the prices of local services.

RRT is responsible for the supervision of Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union (OJ 2012 L 172, p. 1) (hereinafter – the **Roaming Regulation**) and of Commission Implementing Regulation (EU) No

¹⁵ 1 decision was of a complex nature.

2016/2286 of 15 December 2016 laying down detailed rules on the application of fair use policy and on the methodology for assessing the sustainability of the abolition of retail roaming surcharges and on the application to be submitted by a roaming provider for the purposes of that assessment (OJ 2016 L 34 p. 46) (hereinafter – the **EC Regulation**).

The **Roaming Regulation** provides for that as of 15 June 2017 the international roaming service providers, when providing the services in the EU and European Economic Area (hereinafter – the EU/EEA) Member States, may not apply any additional fees and must apply the same pricing to their service users as in Lithuania (hereinafter – the "roam like at home" pricing).

In order to balance the implementation of the "roam like at home" pricing and stability of the prices for local services, the **Roaming Regulation** and **EC Regulation** provide for the exception and enable the providers to address the market regulator with a request to assess the losses and apply the additional fee for international roaming services in the EU/EEA countries which would be loss-making. In 2018, RRT received 4 requests from the service providers for the application of additional fees for international roaming services in the EU/EEA countries taking the assessed justified projected losses into account. After RRT had verified and clarified the submitted information and had determined the justified projected amount of losses, it set the maximum surcharges allowed to the operators (see Table 5) for a period of 12 months. It is up to the operators whether or not to apply surcharges, and to decide on the amounts of surcharges which would not exceed the allowable maximum amounts.

	From 15 June 2018 to 15 June 2019 allowable maximum additional retail roaming fee *					
	UAB Bitė Lietuva	UAB Tele2	Telia Lietuva, AB	UAB Teledema		
Calls (calling)	0.83 ct/min. Decreasing** – 28%	0.50 ct/min. Decreasing** - 62%	1.04 ct/min. Decreasing** – 40%	1.74 ct/min. Decreasing** – 55%		
Calls (answering)	Not applicable	0.50 ct/min. Decreasing** - 51%	0.91 ct/min. Decreasing** – 3%	0.91 ct/min. Decreasing** – 67%		
SMS	Not applicable	Not applicable	Not applicable	Not applicable		
Data transmission	EUR 2.37/GB Decreasing** – 56%	EUR 1.02/GB Decreasing** - 58%	EUR 2.56/GB Decreasing** – 40%	EUR 3.42/GB Decreasing** – 47%		

Table 5. Maximum additional fees allowed by RRT

Notes. Prices excluding VAT.

* These maximum additional fees were approved by RRT taking into account the terms and conditions of the provision of services referred to in operators' requests which were applied to the calculation of potential losses. In case of changing of such conditions, RRT is entitled to require that the operators recalculate the applicable additional fees or terminate application thereof.

** The change compared to the maximum additional fee which could apply between 15 June 2017 and 14 June 2018.

Result. New surcharges, which started to be applied from the middle of 2018, were significantly lower than the ones applicable earlier, which means that the prices of electronic communications services continued to go down for the travelling Lithuanians, i.e. electronic communications services they were using were even less expensive. When monitoring the implementation of the **Roaming Regulation**, several cases of failure to comply with the requirements of that Regulation were detected in 2018, e.g. not all payment plans were applied by the "roam like at home" pricing, the period of unfair use monitoring was shorter than that established in the **EC Regulation**. All violations detected by RRT were promptly eliminated by the service providers.

6.5 The activities of the Internet hotline "Clean Internet"

RRT and its partners have been carrying out the project "Safer Internet" for the twelfth year in a row. The objective of the RRT Internet hotline <u>www.švarusinternetas.lt</u> is to accept the reports of the Internet users who encountered content related to sexual abuse of children, violence or bullying, pornography, distribution of narcotic substances, incitement of racial or ethnic hatred, other unlawful or harmful information, to promptly investigate them and, if the information received is correct, forward them to the competent authorities and RRT partners.



When performing the Internet hotline functions, RRT received 3,149 reports on unlawful or harmful content on the Internet in 2018 (see Fig. 20). Compared to 2017 (3,405 reports), the number of received reports decreased by 7%.



Fig. 20 The statistics of reports to the Internet hotline in 2015–2018

Following investigations, further actions were taken in 697 cases (see Fig. 21), which accounted for 22% of all received reports.





NTD (*Notice and Take Down*) reports forwarded to Internet service providers, website owners, social network administrators in different countries notifying them of the illegal Internet content contained in their networks in order to remove it as soon as possible.

No actions were taken with regard to other reports, since they did not contain information on the Internet content which was harmful or illegal under the Lithuanian legislation or which was published by service stations of the foreign countries, where such content is not considered illegal, or it was not accessible (for instance,

password protected, published in private closed groups, etc.) or not found (content removed or link no longer active).

It must be noted that RRT, in order to inform the public, and its partners traditionally organised the social campaign to celebrate the day of Safer Internet in 2018. It was celebrated on 6 February 2018 in the whole world. Its slogan was "Create, connect and share respect: a better internet starts with you").



6.6 Assurance of the quality of communications services6.6.1 Supervision of universal electronic communications services



527 - the mandatory number of payphones set by RRT in 2018.

926 - the mandatory number of payphones set earlier.

Undertaking Telia Lietuva, AB is obliged to ensure the provision of universal electronic communications services, including the telecommunications services provided by payphones, in the territory of Lithuania.

By 31 December 2017, the minimum **threshold of 926 payphones** was set in Lithuania. Telia Lietuva, AB initiated the discussions over the reduction of the volume of services provided by payphones in 2017.

The annual payphone report of Telia Lietuva, AB submitted to RRT shows that 792 payphones were used to make calls in 2017: **611 payphones were used to call emergency numbers**, 144 payphones were not used at all, and the duration of calls made from 181 payphones was shorter than 1 minute. The analysis of the calls via payphones showed that most of calls originated from the payphones operating in prisons, remand prisons and correction houses.

RRT conducts the analysis to determine if the scale of universal services corresponds to the needs of service users on an annual basis. The population survey conducted in 2017 demonstrated that the payphones were used by less than 1% of the respondents in 2017. 90.2% of the respondents did not need to use payphones as they were using mobile telephone services. The main reason for non-use of payphones was a possibility to receive the services equivalent to the services provided by payphones in other ways.

Result. RRT, having assessed the analysis results, established that Telia Lietuva, AB must ensure that the number of access points of payphone and/or other publicly accessible public telephone services would be **at least 527** in the Republic of Lithuania as of May 2018.

It must be noted that the Rules on the Provision of Universal Electronic Communications Services (the "Rules") were amended by Order No 1V-1113 of the Director of RRT of 12 November 2018. The amendment to the rules clarified the procedure for establishing the obligations to public electronic communications service

providers subject to the provision of universal electronic communications services. Before the amendment, it was established that the public electronic communications service provider recognised as having significant market power on the market of connection to the public communications networks at a fixed location according to the procedure laid down in legal acts shall provide the universal electronic communications services from the date of recognition, i.e. the obligation to provide universal services meant that the economic operator was recognised as having significant market power. The recent intensive development of electronic communications services and trends prevailing on the electronic communications market led to the assumptions that the situation where none of the public electronic communications service providers will be recognised as having significant market power on the market of connection to the public communications networks at a fixed location according to the procedure laid down in legal acts is feasible in the future. Therefore, in order to ensure the continuous provision of universal electronic communications services in the future, the procedure for establishing the obligations to public electronic communications services was amended by providing for a separate analysis which would assess the service provider's capacity and potential to provide universal services.

6.6.2 Assurance of the quality of integrity of public communications networks

One of the tasks of RRT is to ensure that providers of public communications networks would implement appropriate technical and organizational measures necessary to ensure integrity of public communications networks they provide.



On 19 December 2017 the Parliament of the Republic of Lithuania adopted the amendments to the Law on Cyber Security which consolidated the field of information resources security, and the functions of the national incident investigation unit of electronic communications networks and information security performed by RRT were handed over to the newly established National Cyber Security Centre under the Ministry of National Defence as of 1 January 2018. For this reason, the LEC provisions defining the RRT's competence were amended, and cyber security issues were transposed into the Law on Cyber Security which preserved the RRT's competence in assuring integrity of public electronic communications networks.

According to the LEC, public communications network providers must implement the appropriate technical and organizational measures necessary to ensure the integrity of their networks so that the provision of electronic communications services would be continuous on these networks. The LEC also provides for that in the event of integrity breach which had a significant effect on the operation of the public communications network or provision of public electronic communications services, the provider of public communications networks and/or public electronic communications services shall **immediately notify RRT of this breach of integrity**.

On 26 April 2018, the Rules on Assurance of Integrity of Public Communications Networks approved by Order No 1V-394 of the Director of RRT of 25 April 2018 came into force (hereinafter – the Rules on Integrity). The Rules on Integrity define the rights and obligations of the public communications network providers by ensuring integrity of the public communications networks they provide, and the terms and procedure for submitting information on integrity breaches to RRT.

In 2018, **RRT received 9 reports** from five public communications networks and/or public electronic communications service providers on breaches of integrity of public communications networks. Two providers of public communications networks and/or public electronic communications services provided RRT with 3 reports on breaches on **mobile** communications networks, whereas the remaining 6 reports were received from 3 providers of public communications networks and/or public electronic communications services concerning breaches on **fixed** communications networks. The main reasons for breaches of integrity of public communications networks are specified in the table (see Table 6).

Table 6. Statistics of reports received from providers of public communications networks and/or public electronic communications services on breaches of integrity of public communications networks

Types of public communications network integrity breaches	Number of reports on breaches	Number of end-service users affected by breaches of integrity
Interruptions of electric power supply	2	151,200
Breaking of a cable	3	5,195
Faults of international roaming services	2	53,000
Failures of network equipment	2	220,558

In 2018, RRT determined that two breaches of integrity corresponded to the event which may cause or have caused accidents and/or emergencies, therefore it notified the Office of the Government of the Republic of Lithuania, Fire and Rescue Department under the Ministry of the Interior, State Security Department and National Cyber Security Centre under the Ministry of National Defence of those breaches of integrity.

6.7 Tariffs and cost accounting of universal postal services

One of the functions of RRT is to approve the maximum tariffs of the universal postal service which must be based on the costs of the provision of that service.



In 2018, some tariffs of the universal postal service provided by AB Lietuvos Paštas were changed.

The universal postal service in Lithuania was provided by AB Lietuvos Paštas in 2018.

In 2018, the request from AB Lietuvos Paštas regarding the change of the tariff of the universal postal service was received. Having considered the arguments provided by AB Lietuvos Paštas, i.e. the increasing salary paid to the employees, demand for investments in the long-term projects, and information on the costs of the universal postal service enclosed in the request, some tariffs of the universal postal service were changed.

New tariffs which came into force on 1 August 2018 were approved by Order No 1V-661 of the Director of RRT of 12 July 2018. New tariffs apply to small and large items of correspondence (letters and small things). It must be noted that a major part of said tariffs increased (approx. EUR 0.12 on average), and some of them went down (approx. EUR 0.09 on average).

The tariffs which apply to the domestic parcels, international items of correspondence and cross-border parcels as well as services of registration and insurance remained unchanged.


The audit of AB Lietuvos Paštas cost accounting system used in 2017 was carried out in 2018.

In 2018, the cost accounting system audit of the universal postal service provider AB Lietuvos Paštas for 2017 was carried out by UAB Rosk Consulting at the request of RRT.

Result. During the audit it was determined that the cost accounting system used by AB Lietuvos Paštas and the annual universal postal service report for 2017 as well as analytical annexes thereto were basically compliant with the requirements of legal acts. Also, the audit's finding provided a conditional opinion on the justification of the working time standards used by AB Lietuvos Paštas and included in the cost distribution which, according to the auditors, must be revised and evaluated taking into account the internal processes of the undertaking that have changed in the past 5 years. The audit conclusion is published on the RRT website.



In 2018, RRT verified whether the request from AB Lietuvos Paštas to compensate the losses from the universal postal service had any grounds.

In 2018, AB Lietuvos Paštas submitted RRT a request to compensate the losses amounting to EUR 1.24 million incurred due to the obligation to provide the universal postal service in 2017.

Result. RRT, having examined the information submitted together with the request of AB Lietuvos Paštas and other data possessed, and having determined certain cases of non-compliance with the requirements of legal acts regulating the calculation and compensation of the losses of the universal postal service, decided that the request of the undertaking had no grounds and submitted that conclusion to the Ministry of Transport and Communications of the Republic of Lithuania.



In 2018, RRT assessed and stated that the request from AB Lietuvos Paštas to compensate the losses from the service of delivery of periodical publications to subscribers in rural areas was justified.

In 2018, RRT received the request of AB Lietuvos Paštas to compensate the losses from the provision of the service of delivery of periodical publications to subscribers in rural areas incurred in the second half of 2017 and first half of 2018. The losses for the second half of 2017 calculated by the undertaking accounted for EUR 2.71 million, and for EUR 2.65 million for the first half of 2018.

Result. Having performed of the analysis of information provided by AB Lietuvos Paštas and data available to RRT, it has been determined that the requests of AB Lietuvos Paštas to compensate the losses from the provision of the service of delivery of periodical publications to subscribers in rural areas incurred in the second half of 2017 and first half of 2018 were justified. The conclusions of the analysis were submitted to the Ministry of Transport and Communications of the Republic of Lithuania.

6.7.1 Supervision of the quality of universal postal services

The results of the measurement of the quality of the universal postal service (UPS) provided by AB Lietuvos Paštas to RRT show that the requirements set for the universal postal service were basically met in 2018 (see Table 7).

The inspection of the transit time of end-to-end services for priority letter-post items conducted by UAB Spinter Tyrimai in 2018 at the request of AB Lietuvos Paštas revealed that 84.62% of priority letter-post items were delivered on the working day following the dispatch (D+1) (in 2017 – 88.60%), and 98.27% of priority letter-post items were delivered on the third working day following the dispatch (D+3) (in 2017 – 98,60%).

Year	D+1	D+2	D+3
Set requirements	85%		97%
2015	81.10.	96.30.	99.00.
2016	83.10.	98.60.	98.60.
2017	88.60.	97.50.	98.60.
2018	84.62.	96.01.	98.27.

Table 7. Indicators of the quality of UPSs provided in Lithuania in 2015-2018, %

Source: Information provided by AB Lietuvos Paštas

Note: D is the date of the acceptance of the postal item for sending. D+2 indicator has not been determined.

6.7.2 Assessment of the compliance of the postal network of the universal postal service provider with the established requirements

Article 6(2)(11) of the Postal Law stipulates that RRT shall supervise the compliance of the universal postal service provider with the characteristics of the postal network of the universal postal service provider established by the Ministry of Transport and Communications.

In October-December 2018, RRT carried out the assessment of the compliance of the postal network owned by AB Lietuvos Paštas with the characteristics of postal network of the universal postal service provider approved by Order No 3-46 of the Minister of Transport and Communications of 25 January 2013 "On the Approval of the Characteristics of the Postal Network of the Provider of the Universal Postal Services" (the "Characteristics"). To assess if AB Lietuvos Paštas complies with the requirements of the Characteristics, the public map drawing application www.arcgis.com, application "Akis" and additional data from the websites www.geoportal.lt, www.regia.lt ir www.maps.lt were used.

Result. During the assessment of the postal network owned by AB Lietuvos Paštas, minor inconsistencies with the requirements for the universal postal service access points established in the Characteristics were found.

Due to the changes in the administrative (territorial) division, expansion of the cities and changes in the population of certain areas, it must be ensured that the postal network owned by AB Lietuvos Paštas and modifications to the postal network, also the layout of the universal postal service access points would comply with the requirements established in the Characteristics. It must be noted that there are territories which make the fulfilment of the requirements established in the Characteristics impossible and unreasonable due to their geographical distinction (e.g. the Curonian Spit), besides, the number of residents in certain areas is rapidly

changing (e.g. the territories of urban areas are expanding, the population in rural areas is shrinking). As rapid response to such changes is difficult, the discrepancies between the requirements laid down in the Characteristics and actual situation of the postal network occur.

6.8 The quality of public fixed telecommunication services

In 2018, RRT measured quality indicators¹⁶ on Telia Lietuva, AB public fixed communications network and recorded the values provided below.



6.9 The quality of public mobile telecommunication services



In 2018, when performing further test measurements of the quality indicators of public mobile telecommunication services, 8,728 test voice telephony ("VT") calls were made and 8,933 short text messages ("SMS") were sent in the public mobile telecommunication networks of UAB Bite Lietuva, Telia Lietuva, AB and UAB Tele2.

Below (see Fig. 22, 23 and 24) are provided the comparisons of the values of quality indicators (VT call setup time, VT voice transmission quality, and SMS delivery time) among three operators¹⁷.

¹⁶ In order to evaluate whether service providers do not exceed limit values of service quality indicators, RRT performs independent measurements of quality indicators in the networks of service providers and publishes evaluation reports on service quality indicators.

¹⁷ The quality indicators of public mobile telecommunication services were assessed in accordance with the technical specifications ETSI TS 102 250-2 V2.2.1 (2011-04) of the European Telecommunications Standards Institute (ETSI) and the Methodology for Measuring the Quality Indicators of Public Mobile Telecommunication Services, approved by Order No 1V-260 of the Director of RRT of 3 March 2009.

Annual Report 2018 of the Communications Regulatory Authority



Fig. 22. Average values of VT call setup time (s)









6.9.1 The quality of wireless Internet access services

101,000 – number of data transmission tests performed on operators' networks.

Wireless Internet access monitoring results are regularly updated and published on the website **www.matavimai.rrt.lt.** This information is useful to the users for the evaluation of the quality of mobile Internet access services and selection of the services meeting their needs.

In 2018, 101,000 data transmission tests were performed in the networks of the operators AB Lietuvos Radijo ir Televizijos Centras, UAB Bitė Lietuva, Telia Lietuva, AB and UAB Tele2. The measurements were carried out in most of Lithuanian cities and main roads using the measuring equipment installed in a company car of RRT.

In 2018, the measurements in the rail passenger routes were commenced as well.

The data on the values of the Internet access quality indicators – the average data receipt speed rate calculated according to the data collected via the monitoring system – are provided below (see Fig. 25 and 26).



Fig. 25. The average data receipt speed rate on LTE networks in 2016-2018, Mb/s



Fig. 26. The average data receipt speed rate in 2016-2018, Mb/s¹⁸

6.10 Protection of consumer rights and legitimate interests in the sector of equipment 6.10.1 Supervision of the market of radio equipment and electric and electronic devices

RRT carries out the supervision of compliance of radio equipment existing in the Republic of Lithuania with the mandatory requirements laid down in the Technical Regulation on Radio Equipment (hereinafter – the Radio Equipment Regulation).

RRT monitors the compliance of electric and electronic devices existing on the market of the Republic of Lithuania with the mandatory requirements laid down in the Technical Regulation on Electromagnetic Compatibility (hereinafter – the EMC Regulation).

In 2018, the data on 8,163 types of radio equipment imported from the third countries were analysed (Fig. 27). Compared to 2017 (5,480 types), the number of imported types of radio equipment increased in 2018. The trend that both private entities and small-sized business enterprises usually buy electronic goods from online shops located in the third countries, especially from the People's Republic of China, prevails. The growth of the amount of goods resulted from the fact that increasingly more devices attributed to the Internet of Things (IoT) are used. Various smart domestic appliances besides mobile telephones are purchased (cameras, smart socket outlets, TV sets, etc.).

¹⁸ The results are based only on the measurements performed on the 3G technology networks; in case of LRTC – WiMAX, in 2018, the provision of Internet access via WiMAX network was terminated.



Fig. 27. Number of types of radio equipment imported from the third countries in 2015-2018, pcs.

The compliance of radio equipment with the administrative requirements of the Radio Equipment Regulation. In 2018, 71 types of radio equipment were checked for the compliance with the administrative requirements of the Radio Equipment Regulation (Fig. 28). In 2018, radio-controlled toys of 5 types without CE marking were found on the market. These toys were immediately withdrawn from the market. 23 types of radio equipment failed to comply with the administrative requirements of the Radio Equipment Regulation. 7 types of equipment were not accompanied by the manuals in the Lithuanian language and 16 types lacked the EU declarations of conformity. At the request of RRT, all irregularities were eliminated.



Fig. 28. Number of checked types of radio equipment in 2015-2018, pcs.

The compliance of radio equipment with the fundamental requirements of the Radio Equipment Regulation. In 2018, 25 types of radio equipment were taken from the market for RRT laboratory testing. 8 types of equipment were found non-compliant with the fundamental requirements of the Radio Equipment Regulation. Other devices identified as non-compliant with the requirements included 2 types of radio stations and 6 types of short range devices (remotely controlled toys, radio microphones). The main non-compliance parameter was the non-conformity of secondary radiation of the transmitter to the requirements set in the standards. Due to the significant non-compliance with the fundamental requirements, all radio-controlled toys of one Chinese manufacturer were withdrawn from the market (16 models). The placement of the other products on the market has been suspended until the irregularities are eliminated.

The compliance of electric and electronic devices with the administrative requirements of the EMC Regulation and fundamental requirements of the Radio Equipment Regulation. In 2018, 35 types of electric and electronic devices were inspected for the compliance with the administrative requirements (marking, submission of EU declaration of conformity) of the EMC Regulation. 4 types of equipment did not meet those requirements as the EU conformity declarations were not provided. The supply of these devices to the market has been suspended until the deficiencies are eliminated. Out of 35 types of equipment, 27 were taken for RRT

laboratory testing as it was decided to check for the compliance with the fundamental requirements of the Radio Equipment Regulation. 12 types of equipment out of electric and electronic devices tested in the accredited laboratory did not comply with the fundamental requirements of the EMC Regulation. The main reason for a failure to comply with the fundamental requirements of the EMC Regulation was interferences in power access and radiation of interferences. The supply of all devices causing interferences and failing to comply with the essential requirements of the EMC Regulation will be terminated so that they do not enter the national market, i.e. do not reach the customers' households.

The market surveillance authorities of the EU member states and EC were notified of all products withdrawn from the market by means of the Information and Communication System on Market Surveillance (*ICSMS*).

6.10.2 The activities of RRT in ensuring free movement and provision of equipment to the market



The total of 68 pieces of radio equipment of 60 types were tested. After 288 tests, 14 types of radio equipment were found non-compliant with the fundamental requirements for effective use of radio spectrum and electromagnetic compatibility.

Accredited Device and Equipment Electromagnetic Compatibility Control Department The RRT conducted the assessment of electric and electronic equipment and radio equipment placed on the EU market for the first time and of those taken from the market¹⁹.

The compliance of radio equipment wiht the fundamental requirements. In 2018, RRT carried out 288 tests under the harmonised EN standards in order to assess if the new radio equipment placed on the EU market and radio equipment existing in the EU market comply with the fundamental requirements for the effective use of radio spectrum and electromagnetic compatibility. The total of 68 pieces of radio equipment of 60 types were tested. It was determined that 14 types of radio equipment taken from the market and placed on the market did not meet the fundamental requirements of Directive 2014/53/EU²⁰ or Technical Regulation on Radiocommunication Equipment. **Trading** of that equipment as non-compliant with the fundamental requirements **was suspended**, **and new radio equipment was not placed on the national market** until the required level of electromagnetic compatibility was reached as well as effective use of radio spectrum.

Radio equipment which was not compliant with the fundamental requirements included **unmanned aircraft** (drones), radio-controlled security systems, short range devices (radio-controlled toys and other electronic devices), wireless broadband data transmission system (WLAN) operating at the 5 GHz frequencies, and radio microphones. The main non-compliance parameter was the **non-conformity of secondary radiation of the transmitter** to the requirements set in the harmonised EN standards. The placement of these devices on the market²¹ has been suspended until the deficiencies are eliminated.

¹⁹ Equipment shall comply with the fundamental requirements laid down in Directive 2014/30/EU on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast) (OJ 2014 L 96, p. 79) and Directive 2014/53/EU on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC (OJ 2014 L 153, p.62).

²⁰ Directive 2014/53/EC of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC,

²¹ Making available on the market means any supply of radio equipment for distribution, consumption or use in the European Union market in the course of a commercial activity, whether in return for payment or free of charge.

The compliance of devices and equipment with the electromagnetic compatibility requirements (EMC). In 2018, RRT conducted the assessment of conformity of new electric and electronic devices placed on the EU market and of those existing on the market (i.e. electrical appliances, lighting equipment, electric and electronic equipment used in industry, science and medicine as well as lifts, escalators, moving walks and vehicles) to the fundamental electromagnetic compatibility requirements.

The total of 150 electric and electronic devices as well as vehicles of 132 types were tested. After 610 tests, 35 types of devices were found non-compliant with the fundamental requirements for electromagnetic compatibility.

Having determined that devices of 35 types (domestic appliances, scientific and medical equipment, IT equipment, etc.) failed to comply with the essential requirements of the EMC Regulation, **those devices were not placed on the national market** until the sufficient level of electromagnetic compatibility was reached (in terms of disturbance radiation and disturbance resistance). This way the users were protected against devices of poor quality emitting harmful electromagnetic interferences.

In 2018, 6 vehicles and 23 types of new electronic medical devices were checked for the conformity to the requirements of the technical regulation of electromagnetic compatibility under the contracts with the manufacturers and certification bodies²². It was determined that a vehicle on one type and electronic medical devices of 2 types were not compliant with the fundamental requirements of electronic compatibility. Therefore, those new devices were not placed on the market.

When assessing conformity of electric and electronic devices and vehicles placed on the EU market to the harmonised standards, 898 electromagnetic compatibility tests in total were carried out (of which 580 electromagnetic disturbance radiation and 318 disturbance resistance tests) in 2018. As many as 192 test reports were drafted. 49 reports (26%) reports stated non-compliance of electrical and electronic devices and radio equipment with the fundamental requirements for electromagnetic compatibility and effective use of radio spectrum. Such products which are non-compliant with the requirements of the harmonised standards were prevented from entering the EU market.

In 2018, RRT took part in the 10th EU market surveillance campaign **MSC-EMC-10** under Electromagnetic Compatibility Directive 2014/30/EU²³. When carrying out that campaign, the accredited laboratory **tested power-line communication (PLC) equipment**, the tests of PLC equipment taken from the Finnish and Estonian markets were also performed at the request of the administrations of those countries. It was determined that power-line communication (PLC) equipment of 5 types were non-compliant with the fundamental requirements.

In 2018, RRT also took part in the 9th EU market surveillance campaign **MSC-RED-09** under Radio Equipment Directive 2014/53/EU²⁴. When carrying out the campaign, the accredited laboratory tested wireless broadband data transmission equipment (WLAN) operating at the 5GHz frequencies. It was determined that 2 types of data transmission devices operating at the 5 GHz frequencies did not meet the fundamental requirements.

²² According to UN Regulation No 10 on vehicles and harmonised standards under EU Directive 93/42/EEC (for medical devices)

²³ Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility (recast)

²⁴ Directive 2014/53/EC of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC

It must be noted that during the 44th meeting of the Administrative Cooperation Group in the scope of the Electromagnetic Compatibility Directive (EMC ADCO) Lithuania proposed, and the EU Member States agreed, to carry out the European market surveillance campaign MSC-EMC-12 for the assessment of the compliance of LED lights with the fundamental and formal requirements. The campaign will be carried out in the territory of the EEA countries (EU and EFTA member states). The specialists of RRT drafted and presented the procedure for the campaign.

6.11 Supervision of trust services

Trust services mean the services of creation, verification and validation of electronic signatures, electronic seals, website authentication certificates and time stamps, long-term electronic signature and electronic seal protection and electronic registered delivery services as defined in Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC (OJ 2014 L 257, p. 73) (hereinafter – the eIDAS Regulation).



3 – number of providers that were providing qualified trust services in Lithuania at the end of 2018: Identity Documents Personalisation Centre under the Ministry of the Interior of the Republic of Lithuania, State Enterprise Centre of Registers and UAB BalTstamp.

At the beginning of 2018, qualified trust services were²⁵ provided by Identity Documents Personalisation Centre under the Ministry of the Interior of the Republic of Lithuania (IDPC), State Enterprise Centre of Registers (CR), UAB Skaitmeninio Sertifikavimo Centras (SSC) and UAB BalTstamp. SSC failed to prove that the company and trust services it provides complied with the requirements of the eIDAS Regulation that apply to the company, therefore the decision to withdraw a status of the qualified trust service provider from SSC and a qualified status of qualified trust services it provided was adopted by Order of the Director of RRT of 5 February 2018²⁶.

Qualified certificates for electronic signature. Having summarised the data of 2018 received from IDPC and CR and data possessed by RRT on the last year on valid qualified certificates for electronic signature compiled by trust service providers (the "qualified certificates), it is clear that, compared to 2017, the total number of valid qualified certificates issued and created by the Lithuanian service providers decreased by approx. 27% at the end of 2018 (at the end of 2017 there were 944,127, at the end of 2018 – 688,427 valid certificates created by IDPC and CR). The total number of qualified certificates issued to the Lithuanian residents in 2018, however, dropped by mere 1.9% (at the end of 2018 there were 926,164 valid certificates).

During 2018, IDPC created and issued 309,425 qualified certificates to the Lithuanian residents, CR issued 91,849, and Estonian company SK ID Solutions – 237,737 certificates, thus in total 639,011 qualified certificates for electronic signature were issued to the Lithuanian residents in 2018.

In 2018, part of the Lithuanian mobile operators acting as the intermediaries when issuing a mobile electronic signature started to cooperate with the Estonian company SK ID Solutions, that's why there are mobile signature certificates issued by both the Lithuanian provider (Public Enterprise Centre of Registers) and Estonian

²⁵ By the resolution of the Government of the Republic of Lithuania, as of 2016 RRT was appointed the body responsible for monitoring trust services and the authority in charge of establishing, maintaining and publishing national trusted lists.

²⁶ Order No 1V-78 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 5 February 2018"On the Withdrawal of a Status of a Qualified Trust Service Provider Providing the Services of Creation of Qualified Certificates for Electronic Signature from UAB Skaitmeninio Sertifikavimo Centras, Withdrawal of a Qualified Status for the Services of Creation of Qualified Certificates for Electronic Signature for Electronic Signature Provided by UAB Skaitmeninio sertifikavimo centras and the Update of the Trusted List".

provider (SK ID Solutions) on the Lithuanian market of mobile electronic signature. It must be noted that the eIDAS Regulation which is in force in the whole of the EU allows for the provision of trust services without the restriction by the borders of nation states. In 2018, this Estonian company was granted the right to create qualified certificates and to issue them to the individuals together with application Smart-ID used on smart phones, therefore such a solution may be also regarded as a mobile signature.

The amendments that entered into force in 2018 resulted in the growth of the total number of qualified certificates issued together with the SIM cards and application Smart-ID. In 2018, the number of such certificates issued to the Lithuanian residents went up by more than 8% (at the end of 2017 there were 249,857, at the end of 2018 – 270,312). CR issued 32,575 certificates with SIM cards, the Estonian company SK ID Solutions issued 163,638 certificates with SIM cards and 74,099 certificates with application Smart-ID. Therefore an increasingly larger part of the Lithuanian population chooses electronic signature means which may be used on their mobile or smart devices.

The services of creation of qualified electronic time stamps were provided by 2 providers in Lithuania in 2018: CR and UAB BalTstamp. In 2018, the total of 35,098,008 qualified electronic time stamps were created: CR created 98,008 qualified electronic time stamps, and UAB BalTstamp created 35,000,000 qualified electronic time stamps.

On 26 April 2018, the Law on Electronic Identification and Trust Services for Electronic Transactions of the Republic of Lithuania was adopted. Its purpose is to create a legal basis for effective operation of electronic identification and the market of trust services in the Republic of Lithuania in order to ensure the best possible protection of the interests of the service users. In an attempt to help the market players to implement the provisions of the elDAS Regulation and this Law, RRT drew up the *Description of the Pocedure for Granting Status of Qualified Trust Service Providers and Qualified Trust Services and Incorporation thereof in the National Trusted List and Provision of Activity Reports of Qualified Trust Service Providers as well as the Description of the Pocedure for Electronic for Verifying the Identity and Additional Specific Attributes when Issuing Qualified Certificates for Electronic Signature, Electronic Seal and Website Authentication.*

The consultations regarding supervision of trust serviced were provided. In 350 cases, RRT provided consultations and methodological assistance to natural and legal persons regarding the creation of electronic time stamps, electronic signing services, etc. Most consultations (222) were provided with regard to the withdrawal of the SSC qualified status. In 2018, the overall number of the consultations, compared to 2017 (132 consultations), increased by almost 2.7 times.

7 PROMOTION OF INVESTMENTS AND DEVELOPMENT OF ADVANCED ICT TECHNOLOGY

 $99\,$ – percentage of the territory of Lithuania covered by (4G) radiocommunication networks.

RRT approved the Plan for the Radio Communications Development in the 470-790 MHz Radio Frequency Band: the purpose of the 694-790 MHz frequency band which may be used to install the 5G radiocommunication technology networks as well was estbalished as well as the procedure for the allocation of radio frequencies (channels) and provision of electronic communications services.



The procedures for replanning the 3400-3800 MHz frequency band related to the installation of the 5G radiocommunication technology were launched.

The year 2018 may be called the zenith of the development of the fourth-generation mobile radio communications networks – mobile radio communications operators using the 800 MHz, 1800 MHz, 2100 MHz and 2600 MHz frequency bands, **covered almost 99%** of the the territory of Lithuania by LTE (*Long Term Evolution*) (4G) radio **communications networks** and could offer high-speed broadband wireless communication services in many locations.

It must be noted that the operators demonstrated a continuing interest in the other frequency bands whose use would allow the provision of higher data transmission speed rate services as well: UAB Bité Lietuva and UAB Tele2 were issued the licences for the use of radio frequencies (channels) for experimental purposes from the 1452-1492 MHz frequency band where the capacity of LTE stations in terms of operation without interference to radiocommunication systems operating abroad was tested, whereas AB Lietuvos Radijo ir Televizijos Centras started replacing the EiMAX technology used in the 3500 MHz frequency band with the more up-to-date and proven LTE technology.

RRT understands that the mobile radio communications network operators and service users find not only the network coverage increasingly important, but also the quality of services provided, the speed of data transmission in particular, therefore it focused on the obligations related to the data transmission speed rate and drafting of the methodology for the calculation of LTE speed rate. The methodology is based on the radio wave propagation model, it is developed under Recommendation of the International Telecommunication Union ITU-R P.525 "Calculation of Free Space Attenuation" and electromagnetic *wave* diffraction model "Deygout 1994", by additionally including attenuation due to partial cover of the Fresnel zone. Data transmission speed rate via LTE networks is calculated considering that the reception antenna height is 1.5 metre. To make the calculations based on this methodology, it was intended to use the Lithuanian relief layer maps drawn up through laser measurements (scale 1:6000) considering the surface developments and impact of forests.

By applying the said methodology, RRT made the pilot calculations of the speed rate of LTE networks of mobile radio communications operators at the end of 2018. Having analysed the areas for improvement of the methodology, RRT will draft the report on the results of the calculation of the speed rate of data transmitted via LTE networks in 2019 and it will be made publicly available.

The global radiocommunication development trends show that the development of advanced ICT will go hand in hand with the **installation** and development of **fifth-generation mobile radio communications technology (5G)**. The installation of this technology will enable the operators to offer electronic service users new quality electronic communications services and increase their accessibility. The prospects of the 5G technology development are to be linked not only to the radio frequency bands already allocated to the mobile radio

communications operators which, in compliance with the principle of technology neutrality, may be used when installing the 5G technology electronic communications systems, but also to new radio frequency bands coordinated at the EU level. This resulted in the fact that the mobile radio communications operators started to take a serious interest in the next-generation (5G) technology tests. **RRT issued a licence** to Telia Lietuva, AB to use the radio frequencies (channels) from the 3700-3800 MHz frequency band for experimental purposes.

Taking into account the installation of 5G technology and its future development, RRT drafted and approved the Plan for the Radio Communications Development in the 470-790 MHz Radio Frequency Band on 10 August 2018. The Plan established the purpose of the 694-790 MHz (the "700 MHz") frequency band which may be used for the installation of the 5G radiocommunication technology networks, also the procedure for allocation of radio frequencies (channels), procedure for the provision of electronic communications services, general terms and conditions of the use of radio frequencies (channels) and minimum requirements for the development of terrestrial radiocommunication systems, as well as the terms and conditions for the use of radio frequencies (channels) from the 470-694 frequency band, including TV programme broadcasting. According to the said plan, the licences for the use of radio frequencies (channels) from the 703-733 MHz, 738-753 MHz and 758-788 MHz frequency bands will be issued as of 30 June 2022. The licence holders are obliged to install terrestrial systems and allow for the receipt of electronic communications services of at least 30 Mb/s data transmission speed rate on the highways of national importance and in the households located in a certain territory. The fortunate coincidence of the conditions related to the international coordination of radio frequencies (channels) led to a possibility to issue those licenses earlier. It has been agreed to continue the development of the arrangement of international coordination of radio frequencies (channels) from the 700 MHz frequency band in 2019 with the electronic communications regulatory authorities of the Russian Federation and Republic of Belarus.

It must be noted that the said radiocommunication development plan provided for an option to use radio frequencies (channels) from the 700 MHz frequency band in the radiocommunication systems for civil safety, provision of assistance to the affected population and dealing with the consequences of disasters.

Another frequency band harmonised for the development of 5G radiocommunication networks at the EU level is the 3400-3800 MHz frequency band. In Lithuania, a part of this frequency band is used, therefore it is necessary to rearrange the already allocated radio frequencies (channels) in the near future by replacing some of them with the other radio frequencies (channels) of the same purpose so that this frequency band could be used for the purposes related to the 5G technology installation as soon as possible.

In 2018, RRT published two public surveys regarding the prospects of the use of the 3400-3800 MHz frequency band for 5G radio communications in Lithuania and initial draft Plan for the Radio Communications Development in the 3400-3800 MHz Frequency Band. The discussion over the survey and its results showed that both license holders and potential frequency are interested in replanning the frequency band so that the licence holders use at least 100 MHz frequency blocks which could be initially used for providing 4G and then, with new technologies developing, 5G services in the future. The completion of the radio communications development plan is intended in 2019 as well as the performance of the procedures for the allocation of frequencies from the 3400-3800 MHz frequency band.

In 2018, RRT issued a licence to use the 76-77 GHz frequency band, for experimental purposes, for the automotive radar sensor tests on the Lithuanian roads. Those sensors are designed for the systems of collision avoidance, emergency braking, obstacle alert and other systems ensuring road safety.

When implementing the provisions of Commission Implementing Regulation (EU) No 1079/2012, RRT replaced part of the radiocommunication channels from the 117.975-137 MHz frequency band allocated to the aeronautics mobile service with the radiocommunication channels of the same purpose by changing the

47

radiocommunication channel unbundling from 25 kHz to 8.33 kHz by 31 December 2018. The implementation of the Commission Regulation allowed for the more effective use of the 117.975-137 MHz frequency band which is vital to aviation and handling of the scarcity of radio frequencies by increasing the number of possible channels in the same frequency band in three times. It must be noted that the European Commission, taking account of the financial difficulties encountered by the members of the Lithuanian aeronautical communication channels by using channel separation of 8.33 kHz for part of the radio frequency (channel) users by 31 December 2022.

To ensure the more efficient management and use of radio frequencies, the Rules for the Assignment and Use of Radio Frequencies (Channels) have been amended. The amendment to the rules restricted the opportunity of the radio frequency (channel) users to accumulate radio frequencies (channels) without an actual goal of using them, having only a purpose to apply them as a mean of a competitive advantage which would ensure that they are not assigned to the potential competitors. The amendment to the Rules for the Assignment and Use of Radio Frequencies (Channels) enabled allocating more radio frequencies (channels) for experimental purposes and non-commercial use, thus creating more favourable conditions for radiocommunication technology and radio equipment tests.

RRT, taking into account the arrangement signed with the Department of Telecommunications under the Ministry of Communications and Informatization of the Republic of Belarus regarding the use of the radio frequencies (channels) from the 790-862 MHz frequency band on the mobile radiocommunication networks at the border with the Republic of Belarus in 2017, drafted and approved the amendments to the Plan for the Radio Communications Development in the 790-862 MHz Radio Frequency Band on 6 September 2018. The plan establishes the procedure for allocating radio frequencies (channels) from the 790-862 MHz radio frequencies (channels) from the 790-862 MHz radio frequency band used in the terrestrial radio systems for the provision of the electronic communications services and the procedure for the provision of the electronic communications services via the terrestrial Systems, general conditions for the use of such radio frequencies (channels) and minimum requirements for the development of terrestrial systems. The plan for development amends the provisions governing the use of the radio frequencies (channels) at the border with the Republic of Belarus. This ensures the conditions for more effective use of radio frequencies, variety of electronic communications services and business development related to the provisions of such services and electronic communications networks.

It must be noted that the feasibility of the development of all radiocommunication systems are directly related to the compatibility of such systems with the radiocommunication systems operating in the same radio frequency bands in the neighbouring countries, therefore the RRT specialists are continuously cooperating with the representatives of the foreign radiocommunication administrations concerning the coordinated use of the radio frequency bands. In 2018, the arrangements of a technical nature were signed with the electronic communications regulatory authorities of the Republic of Latvia and Republic of Poland with regard to the conditions of use of the 900 MHz and 1800 MHz radio frequency bands as well as sharing of priority GSM channels taking into account the needs of the mobile radio communications operators. The arrangement on the use of the 700 MHz radio frequency band was signed with the electronic communications regulatory authority of the Kingdom of Sweden, and the arrangement on the use of the 3400-3800 MHz radio frequency band was signed with the electronic communications regulatory authority of the Republic of Poland.

7.1 Development of mobile radiocommunications

GSM, UMTS and LTE are the key technologies which are used to provide voice and data transmission services via the

mobile radiocommunication networks to the Lithuanian residents. The number of LTE (4G) network base stations has been growing most rapidly for several years in a row.

In 2018, RRT received 284 requests or inquiries regarding the use of mobile radiocommunication. Having examined the requests, 3,147 new radiocommunication network stations were registered and 178 licences for the use of the mobile service radio frequencies were issued.

In 2018, GSM, UMTS and LTE network operators of public mobile radiocommunication systems were using 16,829 base stations at the end of the year. Compared to 2017, the number of UMTS base stations went up by 17.42%, and the number of LTE base stations increased by 41.26% (Table 9).

	2015	2016	2017	2018
GSM	4219	4394	3812	3916
UMTS	3718	3998	4321	5074
LTE	2300	4026	5549	7839

Table 9. Public mobile radiocommunication network base stations in 2015-2018

In 2018, the steepest growth of LTE technology-based radio stations operating in the 1800 MHz, 800 MHz, 2100 MHz, 2300 MHz and 2600 MHz radio frequency bands was recorded. RRT registered 163 LTE base stations operating in the 2300--2600 MHz radio frequency band (TDD), 964 LTE base radio stations – in the 1800 MHz frequency band, 490 LTE base radio stations – in the 2100 MHz frequency band, and 437 LTE base radio stations – in the 800 MHz frequency band. The distribution of public mobile radio network base stations in 2018 is provided in Figure 29.



Fig. 29. Number of public mobile communications network base stations in 2018.

In 2018, RRT conducted the calculations of probable LTE (4G) coverage zones of UAB Bité Lietuva, Telia Lietuva, AB and UAB Tele2 and updated the probable coverage zone maps published on the website http://epaslaugos.rrt.lt/apreptis. The coverage zones are provided based on different levels of an electromagnetic signal starting with the minimum signal enabling to initialise the communication link in an open location till the level of a signal which ensures communications inside the buildings.

The calculation results showed that the radio networks of all three mobile operators were covering the territory of Lithuania equally well (Table 10).

Table 10. Probable coverage of GSM, UMTS and LTE networks, % of the territory of the Republic of Lithuania

49

	Probable coverage of GSM networks		Probable coverage of UMTS networks			Probable networks	coverage	of LTE	
	–95 dBm	–85 dBm	–75 dBm	–105 dBm	–95 dBm	–85 dBm	–115 dBm	–105 dBm	–95 dBm
UAB Bitė Lietuva	98.9.	89.5.	63.6.	99.2.	95.3.	75.8.	97.3.	75.1.	43.4.
Telia Lietuva, AB	99.7.	96	76	99.5.	96.9.	81.7.	98.3.	76.7.	45.9.
UAB Tele2	99.7.	97.9.	83.2.	99.7.	97.3.	79.3.	98.8.	80.5.	48.9.

7.2 Digital television and radio

In 2018, Lithuania joined a small circle of the EU countries where digital terrestrial television was developed in the VHF range (in the 174-230 MHz frequency band) as well.

On 9 March 2018, RRT issued a licence to the company Bite Lietuva for the use of the radio frequencies (channels) from the 188-216 MHz frequency band which granted the right to establish the digital terrestrial television broadcasting network of national coverage and provide television programme broadcasting and other data transmission services via that network (Fig. 30). The planned network was distinctive because of the advanced DVB-T2 technology used by RRT for digital TV signals transmission for the first time in Lithuania.

The first practical steps towards the establishment of that network were taken in May 2018 when UAB Bite Lietuva, under the licence issued by RRT, installed and operated a temporary digital terrestrial television radio station in Kaunas in order to reveal and assess the practical aspects of the implementation of that network. The use of the VHF range for TV broadcasting is restricted not only in Lithuania, but also in the other countries of the region, as the devices used by the consumers must be specifically adjusted for proper operation within that range. This may be one of the reasons for which the licence holder delayed the establishment of the network and provision of television broadcasting services via that network.



Fig. 30. Digital terrestrial television network of UAB Bite Lietuva

Fig. 31. Digital terrestrial television network of southeastern Lithuanian region When implementing the project of the Polish national TV programme transmission via the digital terrestrial TV network to the residents of the south-eastern Lithuanian region (cities and districts of Vilnius, Šalčininkai, Švenčionys), AB Lietuvos Radijo ir Televizijos Centras (LRTC) was issued the licences for the use of the digital terrestrial TV radiocommunication stations in Vilnius, Šalčininkai and Švenčionys in 2018. The radio frequencies of the third digital terrestrial television network of LRTC were used for that purpose. In May 2018, having carried out the network establishment and other preparatory works, LRTC officially launched transmission of 5 new television programmes via three free stations: "TVP Polonia", "TVP Info", "TVP Historia", "NUTA.TV" and "Power TV". The programmes may be received by more than 95% of all residents of the cities and districts of Vilnius, Šalčininkai and Švenčionys (see Fig. 31).

Nevertheless, the said progress of the digital terrestrial television sector was overshadowed by shut-down of two digital terrestrial television networks of national coverage owned by Telia Lietuva, AB. In August-September 2018, all 20 stations operating on the two digital terrestrial TV networks mainly used for the paid digital terrestrial TV services were shut down. The only free TV programme "TV Polonia", which was transmitted via the second digital terrestrial TV network of Telia Lietuva, AB, remained accessible only to the residents of south-eastern Lithuania after the shut-down.

On balance, at the end of 2018, 87 operating digital terrestrial television stations remained in Lithuania (their number shrank by 17 units over the year (see Fig. 32)), 14 stations were used to transmit TV programmes of local and regional broadcasters, the remaining 73 stations were used to transmit the programmes of two networks of national coverage (the first network of LRTC and the network of Public Enterprise Lithuanian National Radio and Television).



Fig. 32. The change in the number of digital terrestrial TV stations operating in Lithuania

The unfavourable position held by the administration of the Russian Federation regarding replanning of TV programme broadcasting frequencies governed by Geneva Agreement 2006 caused little progress in the replanning process in Lithuania. The international replanning activity started in 2014 to free up the 694-790 MHz frequency band and allow its use for the wireless broadband communications systems. Although a quite constructive dialogue by correspondence took place with the Russian Federation with regard to the coordination of part of the radio frequencies in 2018, the conclusions and counter-proposals over the other frequencies to be coordinated provided by that administration did not allow achieving the desired objectives and the implementation of regional decisions taken during the work of Northern Eastern Digital Dividend Implementation Forum. The issues of cross-border coordination which were unresolved for that reason still prevented final planning of reallocation of frequencies used in on digital terrestrial television networks and in the stations as provided for in the *Description of the Model of Digital Television Deployment and Development in Lithuania*.

At the end of 2018, 12 national coverage terrestrial radio networks consisting of 225 VHF radio stations were operating; local and regional radio programmes were broadcasted via 90 stations.

In 2018, 6 radio broadcasting stations started operating at new radio frequencies in various locations of Lithuania. The terms and conditions of the use of 12 radio broadcasting stations were amended, therefore the capacity of receipt of the programmes broadcast via those radio stations were improved.

7.3 Fixed radiocommunications

2,800 - number of coordinated fixed service radio stations in the neighbouring countries.

168 – the number of foreign fixed service radio stations whose coordination was refused. They would have interfered the performance of our local radio stations.

In the past three years, the number of radio relay link (RRL²⁷) stations has been changing insignificantly. As the need for the data transmitted via mobile radio networks increased, the operators tended to choose highefficiency RRLs of new technologies which might be used to transmit larger amounts of data. With the changing radiocommunication generations, the data flows increased twice and more, therefore Lithuanian operators prefered RRLs whose bandwidths allow transmitting large data flows.

It must be noted that Lithuanian operators, when preparing for the 5G communications deployment, used radio channels of a larger bandwidth as the market saturation with mobile devices with Internet access (i.e. smart phones) caused the growth of the demand for data transmission. Where RRL radio channel bandwidths used to be 7 MHz, 14 MHz or 28 MHz in the past years, in 2018 used channel bandwidths were 28 MHz or 56 MHz, or even 112 MHz whose transmission capacity could go up to 700 Mb/s.

At the request of the Lithuanian operators, 244 new RRLs were registered in 2018 and licences for 488 radio stations were issued. Currently, 8,832 radio-relay links are operating in Lithuania (see Fig. 33).



Fig. 33. Change in the number of radio relay links in 2015-2018

²⁷ Lines designated to establish a radio communication between fixed accurately set stations are called radio relay links.

Electronic registration of RRL stations which may operate in the 64-64.5 and 65-65.5 GHz as well as 74.625-75.875 and 84.625-85.875 GHz frequency bands was created on the RRT website²⁸. Radio frequency users wishing to use said RRLs no longer need to obtain individual licences, they just need to be registered. The number of RRL users is likely to increase due to such an attractive regulatory system and very low operational costs in the future.

In 2018, 2,968 inquiries regarding the coordination of fixed service radio stations were received from the neighbouring countries. The total of 2,800 fixed service radio stations were coordinated in the neighbouring countries (in 2017 – 2,082). To protect the Lithuanian radio frequency users against potential harmful interference, the coordination of 168 foreign fixed service radio stations was refused as they would have probably hindered the smooth performance of the local radio stations in 2018 (in 2017 – 88).

7.4 Satellite radiocommunications



In 2018, the international procedure for coordination of orbital resources of the Lithuanian satellite network M6P was finished.

In 2018, RRT successfully completed the international procedure for coordination of orbital resources of the Lithuanian satellite network M6P with 25 countries and received a consent to use radio frequencies from the 2 GHz band for the satellites which will orbit in a synchronous orbit of the Sun.

The satellite communications operator UAB Nanoavionika was issued a temporary licence for the use of orbital resources solely for communications with the Earth station, which is in the territory of Lithuania, for carrying out the tests of the satellite subsystems at the early stage of the mission. The use of 10 satellites was intended in this network.

The satellite communications operator Inmarsat Ventures Limited, which has been issued a licence to use radio frequencies (channels) from the 2 GHz frequency band when introducing 3G satellite and terrestrial radio communications mixed data transmission technologies, informed, when submitting its annual report for 2018, that the satellite mobile radio system which has additional terrestrial components as well was completely prepared for providing commercial services in all member states of the EU.

In 2018, RRT drafted the terms and conditions for unlicensed use of fixed and mobile Earth stations with geostationary and non-geostationary satellites. When those conditions are approved, the operators will be able to use the Earth stations installed on mobile platforms (cars, trains, ships and planes) in the Ku and Ka frequency bands without licences and provide higher-speed broadband services.

RRT examined 26 international frequency circulars of spaces services and sent its comments regarding newly coordinated satellite networks to the communications administrations of 15 countries in order to protect satellite network frequencies allocated to Lithuania and operating terrestrial radio systems against disturbances.

To ensure smoother deployment of 5G networks in the 3.5 GHz band in Lithuania, a detailed analysis of satellite Earth stations operating in the neighbouring countries was performed and the alternatives of compatibility of those stations with the mobile communications stations were examined on the basis of the ITU Radio Regulations and rules of the procedures.

²⁸ <u>http://rvis.rrt.lt/SitePages/ApieRRT.aspx</u>

7.5 The activities of radio amateurs

In 2018, 756 radio amateurs with valid licences of classes 502 A and 237 B (beginners) were engaged in radio amateur activities in Lithuania (see Fig. 34), and there were 13 radio amateur clubs.

Radio amateurs used 837 radio call signs assigned to them.

In 2018, RRT issued 143 licences for engagement in radio amateur activities, 30 licences for the use of radio call signs, 34 harmonised certificates of radio amateur examinations.





Fig. 34. Number of radio amateurs in 2015-2018

7.6 Radio spectrum monitoring

3,882 – number of radio measurements' performed.

25 – number of cases of unauthorised use of radio frequencies.

In 2018, the total of 3,882 measurements of signal parameters and the strength of the electromagnetic field were carried out.

In 2018, 25 cases of unlawful use of radio frequencies were identified (Fig. 35). In most of cases (20), the non-registered radio relay stations of public mobile communications service providers were operating.

Annual Report 2018 of the Communications Regulatory Authority





In 2018, in Lithuania and foreign countries, i.e. the Russian Federation and the Republic of Belarus, the measurements of the strength of the electromagnetic field created by base mobile communications stations owned by the operators of were carried out. Violations detected:

- 275 cases where Lithuanian service providers violated the terms and conditions for the use of radio frequencies (channels);
- 303 where public mobile communications service providers of the neighbouring countries breached the international agreements on the use of radio frequencies.

Thanks to RRT, all violations were eliminated after the service providers were contacted or the foreign competent authorities were notified of the violations.

In 2018, RRT acquired the last 2 sport utility mobile radio monitoring stations out of 5 planned ones which were installed in "VW Transporter" cars; their basis was the broadband horizontal and vertical polarization radio spectrum monitoring and directional system of the company TCI (USA) operating in the frequency range between 9 kHz and 8.5 GHz.

7.7 Inspection of radiocommunication networks and stations

In 2018, the total of 171 internal radiocommunication network inspections and 59 radio and television programme broadcasting station inspections were carried out. It was found out that 22.2% of internal radiocommunication networks and 10.2% of broadcasting stations were not in line with the conditions for the use of frequencies. Figure 36 shows the number of facilities non-compliant with the conditions for the use of frequencies in comparison with all inspected facilities.



Fig. 36. The results of inspections for compliance with the project and/or conditions specified in the licence in 2018

The most common violations were the following: too high effective radiated power (49%); non-registered stations (22%); prohibited location of installation (8%). (see Fig. 37). There were other violations detected as well: prohibited radio frequencies used, the antenna improperly installed or antenna other than the allowable one used, or the parameters of the transmitter signal were uncompliant with the set standards. All detected violations were eliminated. This enabled to reduce the probability of potential radio interferences, so that the frequency users could use the "clean" radio frequencies (channels).



Fig. 37. The results of inspections for compliance with the project and/or conditions specified in the licence

7.8 Elimination of radio interference

379 – number of requests to eliminate radio interferences.



245 - number of investigations under received requests to eliminate radio interference to television (DVB-T).

In 2018, RRT received 379 requests to eliminate radio interference from natural and legal persons.

The majority of the requests (see Fig. 38) concerned malfunction of reception of television (DVB-T) programmes, other requests related to radio interference to public mobile networks (67), short-range radio equipment (24), radio stations (21), Earth and satellite navigation and location systems (7) and non-radio equipment (2).



Fig. 38. Breakdown of requests regarding radio interference in 2018

The results of the analysis of the complaints regarding radio interference to terrestrial television showed that, actually, reception of programmes malfunctioned due to radio interference in mere one-sixth of all investigated cases. The main cause of radio interference to television were LTE public mobile base stations operating nearby. In all cases, radio interferences were successfully eliminated in all points of television signal reception having installed barrier radio frequency filters. Such activities were carried out by public mobile communications service providers, when instructed by RRT. RRT specialists regularly consulted the entities on further actions to be taken to avoid the malfunctioning of television programme reception and improve the quality of reception.

7.9 Management of other resources

7.9.1 Management of telephone numbers

One of the tasks of RRT is to ensure the effective use of electronic communications resources, so that there would be sufficient resources of national telephone numbers required to provide the public electronic communications services, also to ensure that the numbering plans and procedures would be applied in a way which would assure equal opportunities of all public electronic communications service providers.

In 2018, RRT continued supervising the National Numbering Plan and assigned telephone numbers (see Table 11).

Designation of numbers	Numbers assigned	Right revoked (numbers refused)	Total number of numbers assigned ¹
Short numbers 10XX	0	0	19
Short numbers 18XX	8	3	65
Short numbers 19XXX	16	1	43
Short numbers 116 XXX	0	0	3
Numbers of public fixed telecommunication services	112017	0	1136300

Table 11	. The summary	of the telephone	e numbers issue	d/revoked in 2018
----------	---------------	------------------	-----------------	-------------------

Numbers of public mobile telecommunication services	111973	111973 90489	
Service numbers 7XX XXXXX, 8XXXXXX and 9XXXXXXX	105	5354	232553

¹ The number includes all telephone numbers assigned by RRT, including the ones which were assigned in 2018.

7.9.2 Internet addreses

RRT has been authorised to issue permissions regarding the use of the state name of Lithuania before the top-level domain ".lt".

Authorisations granted by RRT ensure that the name of Lithuania will be used adequately and Lithuania will be properly represented on the Internet.

The name of Lithuania is the official long or short name of the state of Lithuania, i.e. "the Republic of Lithuania" or "Lithuania" in all the official languages of the EU Member States and in all the grammatical forms of the said languages.

In 2018, RRT issued 32 licences (see Fig. 39) granting the persons the right to use the name of Lithuania in the second level domain name before the top-level domain ".It" and revoked 1 license at the applicant's request.

If the application corresponds to all established requirements, RRT issues the licence within no longer than 5 working days.



8 INTEGRATION INTO THE EU AND INTERNATIONAL REGULATORY SPACE AND EFFICIENT ACTIVITIES OF RRT

8.1 International activities of RRT

8.1.1 The International Telecommunications Union (ITU)



In 2018, the representatives of RRT participated in the IT Council activities.

The ITU Plenipotentiary Conference, where also the Lithuanian delegation participated in, took place in Dubai (UAE) from 28 October to 16 November 2018.

In 2014, Lithuania was elected to the International Telecommunication Union (ITU) Council for a term of four years. The ITU Council is the ITU management body which manages the ITU activities between the conferences which are held every 4 years. Two meetings of the ITU Council were held in April and October last year. The financial, administrative issues as well as issues related to regional development and future strategy were discussed during the meetings. During the Council meetings in 2018, the main focus was placed on the preparation for the ITU Plenipotentiary Conference to be held in Dubai (UAE) between 28 October and 16 November in which the Lithuanian delegation led by Vice-Minister of Transport and Communications R. Degutis participated.

The Plenipotentiary Conference (PP) is the most important ITU event during which the most significant decisions in the telecommunication area of the specific agency of the United Nations are made. During PP, the ITU financial statement is approved, 5 highest officials of ITU are elected for a term of 4 years (ITU Secretary-General, Deputy Secretary-General and Heads of three sectors – Radiocommunication (ITU-R), Telecommunication Standardization (ITU-T) and Telecommunication Development (ITU-D)), members of the ITU Council are elected as well as the members to the Radio Regulations Board (RRB), the proposals concerning the amendments to the articles of ITU rules of association and the Convention are considered and adopted, and other issues of the telecommunication area are discussed. During PP-18, 51 resolutions were amended, 10 new important resolutions regarding telecommunication and ICT innovations as well as OTT services, use of ICT in the sector of finances, etc. were adopted.

In 2018, much attention was paid to the election activities. The Republic of Lithuania sought re-election to the ITU Council for a period of 2019-2022 (in region B – Western Europe) and the representative of Lithuania, Deputy Director of RRT dr. Mindaugas Žilinskas was nominated to the position of the Director of ITU-R. There was much activity involved when presenting the Lithuanian candidacies and national accomplishments in the area of telecommunication over the year. Despite the efforts made, the Lithuanian nominations to said positions were not approved, but RRT together with the other Lithuanian institutions will continue to work with the ITU in various formats so as to ensure proper representation of the interests of Lithuania in this global organisation important for the development of the communications sector.

In 2018, the preparation for the most significant ITU Radio Sector international event to be held in 2019 – World Radiocommunications Conference (WRC-19) took place. The decisions adopted during WRC-19 will affect the trends of the further development of terrestrial and satellite radiocommunication systems.

One of the most significant issues dealing with mobile radiocommunication development is Item 1.13 of WRC-19 agenda "To consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution 238 (WRC-15)". RRT took part in the activity of ITU Radiocommunications Sector Working Groups WP5D and TG 5/1 which are responsible for the aspects of the development of all modifications of IMT radiocommunications systems – IMT-2000, IMT-Advanced, IMT-2020, also provided comments and recommendations regarding issues concerned.

The IMT radiocommunications system serves as a basis for a global platform for next generations of mobile communications and future services, therefore WP5D Group deals with the technical, operational and radio range management issues of terrestrial IMT system in order to satisfy the future needs of the IMT systems. Working group TG 5/1 will draft studies oncompatibility and common use of IMT systems in the 24.25-86 GHz radio frequency bands. The documents will be delivered during WRC-19, so the decisions adopted during the conference will have an effect on the global IMT development trends, including Lithuania.

8.1.2 Documents considered in the EU Council working groups



In 2018, the Electronic Communications Code and BEREC Regulation entered into force.

In 2018, two main documents were considered in the EU Council Working Party on Telecommunications and Information Society:

- The proposal concerning the Directive of the European Parliament and of the Council establishing the European Electronic Communications Code (the Electronic Communications Code) and
- The proposal concerning the Regulation of the European Parliament and of the Council establishing the Body of European Regulators for Electronic Communications (the **BEREC Regulation**).

The RRT representatives regularly provided information, expert opinion and proposals to the Telecommunications and Postal Services Attaché representing Lithuania seeking to contribute to the formation of the Lithuanian position when considering those two documents which were adopted at the end of 2018 and entered into force on 20 December 2018.

The **BEREC Regulation** of direct effect expands and newly sets the BEREC objectives, tasks, management and decision-making mechanisms by repealing BEREC Regulation (EC) No 1211/2009.

The new **Electronic Communications Code** will consolidate and replace the EU telecommunication legal acts – four EU directives of 2002 which were last revised in 2009. The document is designed to ensure more effective legal regulation of the European electronic communications market which would correspond to the features of modern technologies and markets with rapidly growing demand for Internet services and high capacity 5G networks. The strategic task of the reform of the EU electronic communications legal acts initiated by the European Commission in 2016 is to help to create a "Gigabit Society" by 2025 and to ensure "gigabit" Internet connection to all EU residents and businesses by focusing on the development of high capacity 5G networks and promotion of investments. The Member States will need to transpose the provisions of the Electronic Communications Code into national law within two years by the end of 2020.

The following significant changes for both businesses and consumers are provided for in the Electronic Communications Code:

Broader definition of the electronic communications service. Taking into account the changes of the services used for communications and technical means for their provision, the still existing definition of an electronic communications service based on the conveyance of signals via electronic communications networks will be replaced by a broader definition based on functional principles rather than on technical parameters only. The new definition of electronic communications services, and services will contain three types of services: internet access services, interpersonal communications services, and services consisting wholly or mainly of the transmission of signals. This is an important change in the electronic communications services which are not linked to the telephone number in the regulatory field (e.g. Viber, Whatsapp, etc.). In other words, the service whose goal is to connect another person, irrespective of whether or not the telephone number is used, becomes regulated within the scope of the electronic communications sector.

Management of radio frequency spectrum. In order to consistently deploy and develop 5G wireless mobile networks in Europe, the coordination of the allocation and use of radio spectrum necessary for that purpose is intended at the level of the EU. This means that the 3.6 GHz and 26 GHz frequency bands, and subsequently the other ones, will need to be allocated for installation of 5G networks by the end of 2020 under the terms and technical conditions coordinated with the EU. The peer-review procedure for the allocation of radio spectrum coordinated at the EU level has been established allowing the EU Member States to provide comments regarding the draft decisions of the other Member States. Moreover, a longer period of validity of the licences granting the right to use the radio spectrum coordinated at the EU level has been established allowing, together with the coordinated management of radio frequencies, promote the investments in the 5G networks and use thereof.

Access to very high capacity networks. The operators will be encouraged to jointly invest in high capacity public communications networks (both fixed and mobile), thus sharing a business risk. The operator having significant market power will be able to propose joint investments in the creation of new networks under express and transparent conditions. If the proposal concerning joint investment is accepted by at least one alternative operator, RRT, taking into account the effect on the competitive environment, will be able to refrain from imposing additional obligations on the operator having significant market power with regard to newly developed high capacity networks. This should improve the competitive environment and promote joint investments in new technologies and advanced networks.

Market analyses and access regulation. The Electronic Communications Code establishes that the national regulatory authorities (RRT in Lithuania) will be able to conduct market analyses and repeat them every five years, which was previously three years. The regulators will be able to apply symmetric regulation of access to wiring and cables and associated facilities for providers of electronic communications networks or the owners of such wiring and cables and associated facilities, where it is justified on the grounds that duplication of such network elements would be economically inefficient or physically impracticable. Also, new fixed and mobile call termination tariffs that will apply in the whole of the EU will be set by 2020.

Universal electronic communications service. The Electronic Communications Code updates the requirements for the universal electronic communications services. The scope of the universal electronic communications services has been revised: it will no longer be mandatory to provide the telephone services by

payphones, but the Code establishes the obligation to ensure the affordability of adequate broadband internet access.

Consumer protection. The Electronic Communications Code will introduce favourable changes ensuring the protection of the EU consumers' interests. The rules on the consumer right protection will be unified, they will allow the consumers using both interpersonal communications and internet access services to change a service provider in a simple and easier way. The conditions for consumers who have ordered the packages of various services will be regulated more clearly. Moreover, the main provisions of the agreements will be unified after the European Commission approves the template of the essential terms and conditions for the provision of electronic communications services.

Reduction of the prices of international calls within the EU. The prices of calls within the EU will be reduced as of 15 May 2019. This is the greatest novelty which was introduced at the end of the reading of the Electronic Communications Code. In other words, the EU legislation will not only govern international roaming services, where a person uses the services while travelling and being in another EU country, but will also set the prices of international calls where a consumer calls from one EU country to another. According to the intended regulation, the cost of a call made from a country of residence to another EU member state for the EU residents will not exceed EUR 0.19 per minute (without VAT), and sending a text message (SMS) will not cost more than EUR 0.6 (without VAT), and this novelty will enter into force as of 15 May 2019. Currently, the Lithuanian residents calling from the fixed network of the major Lithuanian operators to the fixed network of another EU member state pay between EUR 0.43 and 0.47 per minute; calls from fixed to mobile networks cost between EUR 0.58 and 0.63 per minute; calls from mobile to mobile and/or fixed network cost between EUR 0.37 and 0.89 per minute.

The new European Electronic Communications Code is available on the EUR-lex website²⁹.

8.1.3 Issues discussed in the committees and working Groups of the European Commission (EC)

The RRT representatives participate in the activities of the Radio Spectrum Policy Group (RSPG) and Radio Spectrum Committee (RSCOM), where issues relating to harmonisation of radio communications in the EU Member States are discussed, documents are drafted and conclusions on relevant issues in connection with radio frequency management and use thereof are drawn.

In 2018, the RSPG opinion regarding ITU-R World Radiocommunication Conference 2019 and 5G networks (Strategic Spectrum Roadmap towards 5G for Europe) was drafted.

In 2018, RSCOM drew up and approved the EC implementing decisions regarding the coordinated use of the 1427-1517 MHz, 874-876 MHz and 915-921 MHz frequency bands in the EU and amended the EC decisions regarding the harmonisation of the 900 MHz and 1800 MHz and 3400-3800 MHz frequency bands for wireless broadband electronic communications systems. The latter decision is directly related to the deployment of the fifth-generation mobile radiocommunication 5G technologies in the Member States of the EU.

8.1.4 The Body of European Regulators for Electronic Communications (BEREC)

²⁹ https://eur-lex.europa.eu/legal-content/LT/TXT/PDF/?uri=CELEX:32018L1972&from=EN

The goal of BEREC is to develop the cooperation between the national regulatory authorities and cooperation with the EU Commission so that the consistent application of the EU regulatory system of electronic communications networks and services is ensured in all Member States.

Important works or activities of the Body of European Regulators for Electronic Communications (BEREC) in 2018:

BEREC report on pricing for access to infrastructure and civil works. The objective of the Directive of the European Parliament and of the Council on measures to reduce the cost of deploying high-speed electronic communications networks (hereinafter - the Directive) is to facilitate the deployment of high-speed electronic communications networks and to make it less costly. It could be done by ensuring better access to passive infrastructure suitable for the broadband deployment, providing more opportunities of cooperation when carrying out civil works and simplifying the permit granting procedures. In 2017, the BEREC Office drafted a detailed document regarding the implementation of the Directive in the Member States which has examined the functions assigned to the Member States at great length and revealed how they were practically implemented the Directive. When developing said BEREC report, many issues were raised as regards the cost of access to the infrastructure, therefore the setting of the costs of access to the infrastructure was the main topic of the report. The report revealed that the EU Member States have different understanding of access to the existing physical infrastructure as there are differences in the way they transposed the provisions of the Directive into national law. As for the pricing methodologies, 10 Member States treated the pricing set in the Directive as "fair and reasonable", 7 Member States saw it as the "cost-oriented". 5 Member States, when providing information for the report, indicated that they have set the rules on sharing the costs when coordinating civil works, whereas 14 Member States did not have specific provisions or rules regarding the pricing in place. The only decision over the dispute was adopted in Germany where excavation costs are usually estimated. 15 Member States specified that they had established the regulation prior to adopting the Directive, and 7 Member States indicated that the regulation was adopted when transposing the provisions of the Directive.

BEREC Report on Terminating Contracts and Switching Provider. The report provides information on different terms and conditions for contract termination and switching service providers applied in the EU Member States as well as on different terms applied to the fixed and mobile voice services, fixed and mobile broadband and OTT services. The goal of the report is to help NRAs draw the consumers' attention to their options of choice and understand the circumstances and factors which may affect their possibilities of terminating the contract or switch the service provider.

Net Neutrality Measurement Tool. In 2017, it was decided to create a tool for measurement of the quality of internet access services which could be used by NRA. This tool would help NRA recognise and identify unlawful network traffic management tools (blocking, decelerating, etc.). The project is implemented by the company Alladin Zafaco which was awarded the public contract, the project is managed by the BEREC Office, RRT experts take part in the creation of this tool (one of the creators is an RRT colleague). The project should be implemented within one year by September 2019. The BEREC Office, when assessing the interim results of the project, is not fully satisfied with the course of the project as there is a great risk of delay of the project implementation, which means it may not be implemented on time.

BEREC guidelines on calls within the EU The Electronic Communications Code adopted at the initiative of the European Parliament in 2018 additionally regulated calls within the EU and reduction of the prices of international calls within the EU will be implemented as of 15 May 2019. BEREC conducted a detailed analysis of reduction of those prices and drew up the guidelines. Thus, the EU legislation will not only govern roaming services, where a person uses the services while travelling and being in another EU country, but will also set the

prices of international calls, i.e. where a consumer calls from one EU country to another. According to the planned regulation, the cost of a call made from a country of residence to another EU member state for the EU residents will not exceed EUR 0.19 per minute and sending a text message (SMS) will not cost more than EUR 0.6. As there was insufficient time for a public consultation, the workshop for all stakeholders was organised in Brussels on 29 January 2019 during which they could provide their comments. BEREC Roaming EWG working group took into account the comments and proposals provided by the stakeholders during the workshop in their guidelines and presented a final version of the documents to the participants of the BEREC Plenary Meeting.

8.1.5 European Regulators Group for Postal Services (ERGP)



In 2018, RRT chaired the ERPG WG on end-to-end competition and access regulation. The active participation when drafting the report on the application of the principles of transparency, proportionality and non-discrimination established in the Postal Directive by granting access to the postal network³⁰ enabled gaining the knowledge which will be used when regulating the access to postal networks and related services.

In 2018, the RRT representative, together with the representative of the national regulatory authority of the Kingdom of the Netherlands, chaired the ERGP WG on end-to-end competition and access regulation. This working group drafted the report on the application of the principles of transparency, non-discrimination and proportionality established in the Postal Directive to the regulation of access to postal network in the European Union under the ERGP's 2018 work programme. The other ERGP working groups drafted the following important documents and reports analysing the EU postal market, its changes, trends and development opportunities over 2018:

- ERGP Report on the quality of service, consumer protection and complaint handling (an analysis of trends);
- ERGP Report on core indicators for Monitoring the European Postal Market (2018);
- ERPG Report on allocation of delivery costs;
- ERGP input for the Commission's Guidance related to the Article 6 Assessment of cross-border single-piece parcel tariffs;
- ERGP report on the boundaries around postal services in order to ensure NRAs clarity in the performance of their tasks.

The RRT representatives were also active in the activities of ERPG Cross-border parcel delivery WG and Regulatory framework WG, they were providing comments and proposals regarding the ERPG work programme, drafted documents and were actively participating in the international events organised by ERPG (in the ERPG open workshop on the changes in the postal area and future needs, stakeholders' forum on expanding digital market and its impact on the postal regulatory framework (interaction between the digital and postal sectors), open workshop on the issues of the postal regulatory framework during which the results of the analysis of cross-border parcel delivery trends in the context of e-commerce development were presented).

³⁰ Directive 97/67/EC of the European Parliament and of the Council of 15 December 1997 on common rules for the development of the internal market of Community postal services and the improvement of quality of service as amended by Directives 2002/39/EC and 2008/6/EC.

8.1.6 The European Conference of Postal and Telecommunications Administrations (CEPT)



In 2018, the RRT representative was elected as the chair of the CEPT ECC Project Team PT1 responsible for spectrum engineering.

In 2018, CEPT was involved in active work of the preparation for the most important world events in the area of communications. One of the tasks of CEPT is to develop common views of 48 member states on the fundamental issues of communications development and defend those views in the world forums.

During 2018, CEPT Committee for ITU Policy (Com-ITU), whose purpose is to coordinate CEPT actions before and during the most important ITU events, focused mainly on the joint preparation of CEPT members for the ITU Plenipotentiary Conference (PP-18). During the preparatory meetings of Com-ITU members, the proposals regarding the amendments to the existing ITU documents submitted by CEPT and other regional organisations were discussed, draft resolutions concerning OTT, Internet of Things, artificial intelligence, etc. were considered and common views of the countries were coordinated. Com-ITU committee drafted 37 common views of the European countries which became a point of reference in the PP-18 conference. During PP-18, the CEPT countries coordinated their actions and this led to good accomplishments of the region in the conference as basically all common European viewes were defended.

RRT took part in the activity of Conference Preparatory Group (CPG) of the Electronic Communications Committee (ECC) for WRC-19 conference in 2018. This working group is drafting the proposals of the European countries on all issues of WRC-19 agenda: conditions of deployment of next-generation radiocommunication systems, additional radio frequency identification, regulatory conditions for satellite radiocommunication networks, application of new technologies to ensure maritime and aviation safety, etc.

In CPG working groups and project teams, the RRT representatives were applying the documents proposing the guidelines for the coordination of the 1429-1518 MHz frequency band between the mobile service radiocommunication systems and aeronautics telemetry systems as well as the coordination of amateur activities with the broadcasting service in the 50-54 MHz frequency band.

All said issues are urgent for Lithuania in order to promote the development of mobile broadband communications, whilst ensuring that new radio frequency bands provided for radiocommunication systems cause no limitations for radio communication systems operating in Lithuania to ensure more flexible regulation of small satellites, as well as efficient use of radio frequencies for maritime and aviation safety, traffic efficiency and safety.

In 2018, the RRT representative was elected as the chair of the CEPT ECC Project Team PT1 responsible for spectrum engineering. The draft report ECC for public consultations was drafted. In terms of 5G radio development, ECC PT1 also reviews the compliance of ECC Solutions of 900 MHz, 1800 MHz, 2.1 GHz and 2.6 GHz frequency bands with the 5G systems.

The issues related to the management of radio frequencies were discussed in the ECC's Working Group Frequency Management WGFM: trends of development of broadband mobile radiocommunication and other systems, needs of broadband public protection and disaster relief (BB-PPDR) services, use of short-range radiocommunication equipment. For the meeting of this working group in May 2018 Lithuania together with Hungary, Croatia, Czech Republic, Slovenia, Bosnia and Herzegovina and Ireland submitted a document proposing to use part of the 410-430 MHz frequency band for BB-PPDR operating on the basis of LTE. The document was approved and the working group will draw up the draft amendment.

RRT contributed to the study drafted by the ECC Working Group Spectrum Engineering WGSE SE45 which deals with the issue related to the electromagnetic compatibility of wireless access WAS/RLAN facilities with the other systems operating in the 5925-6425 MHz frequency band. This radio frequency band could be used for the WAS/RLAN systems at a national level as there is a great shortage of radio frequencies (channels) in those systems. At the request of RRT, Vilnius University carried out the analyses regarding the effect of WAAS/RLAN systems on fixed satellite service (FSS) and fixed service (FS) systems. The results showed that when assessing the impact of cumulative RLAN disturbance on satellite IS-22, its protection criterion (I/N < -10,5 dB) would be maintained and the compatibility between RLAN and FSS systems is possible. The results of the studies on compatibility of RLAN and FS systems showed that long-term interference did not exceed I/N = -10 dB threshold by more than 20% of time (protection criterion of FS systems under recommendation ITU-R F.758), and compatibility between those systems is also feasible. The employees of RRT presented the results of that research in the working group SE45. The drafted report of ECC is currently submitted for public consultations, and the final decision will be made during WRC-19.

8.1.7 Eastern Partnership Electronic Communications Regulators Network (EaPeReg)

The EaPeReg network unites six countries of the Eastern Partnership (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine) and several EU countries. The objective of the establishment and activity of this network is to bring the electronic communications regulatory system of the Eastern Partnership countries closer to the EU legislation, promote their cooperation and sharing experience and good practice with the EU Member States. RRT has been involved in the activities of the network since the very beginning of its establishment in 2012. The network operations are financed by the funds of the European Commission.

In order to contribute to the implementation of the priorities of foreign policy of Lithuania, RRT continued to actively participate in the activities of the Eastern Partnership Electronic Communications Regulators Network (the "EaPeReg network"). In 2018, this network was chaired by the National Commission for State Regulation of Communications and Informatization of Ukraine, RRT acted as the Vice-Chair.

One of the priority activities of the EaPeReg network is the reduction of international roaming tariffs among six Eastern Partnership countries. This initiative is coordinated by the Roaming Expert Working Group (REWG) chaired by the Ukrainian regulator NCCIR together with RRT.

In 2018, the International Roaming Study was completed and approved; it proposed the tariff reduction models and guidelines for their implementation, the analysis of the economic impact of tariff reduction on Eastern Partnership countries was conducted and the possibilities to sign the Regional Agreement regarding international roaming tariff reduction among Eastern Partnership countries (the "Regional Agreement") were assessed (the study is available on the website)³¹.

In June 2018, the informal ministerial dialogue was held in Minsk during which the Ministers of Digital Economy of Eastern Partnership and EU countries, European Commissioner for Digital Economy and Society Mariya Gabriel and European Commissioner for European Neighbourhood Policy and Enlargement Negotiations Johannes Hahn expressed their political approval for international roaming tariff reduction in Eastern Partnership countries and signing the Regional Agreement. For that purpose, REWG working group drafted the operational plan for 2019-2020 which was approved during the third meeting of the Ministers of Digital Economy of Eastern Partnership Countries held in Bucharest (Romania) on 28 February 2019. During the meeting, the ministerial declaration was adopted; it provided for the reduction of international roaming tariffs not only among the Eastern

³¹https://europa.eu/capacity4dev/hiqstep/documents/harmonising-international-roaming-pricing-and-reducing-roaming-tariffsamong-eastern

Partnership countries, but also to consider a possibility to create a single international roaming area between the Eastern Partnership and European Union countries.

To increase awareness and ensure closer cooperation with regard to the signing of the Regional Agreement, a specific session for meeting the ambassadors of the Eastern Partnership countries in Lithuania and their representatives was organised during the 5th meeting of REWG group which was held in Vilnius in September 2018 at the initiative of the Ministry of Foreign Affairs of the Republic of Lithuania and RRT. Vice-Minister of Foreign Affairs of the Republic of Lithuania Darius Skusevičius as well as other high officials also participated in the sessions, they were presented the activity, goals and future plans of REWG group. In 2019, REWG working group intends to draw up the Draft Regional Agreement to be signed by the end of 2020.

Not only REWG working group, but also the other two EaPeReg working groups were carrying out their intense activity in 2018. The spectrum expert working group continued its activities in the field of coordination of 700 MHz radio frequencies and 5G network development. The members of the broadband and benchmarking expert working groups together with the World Bank experts were carrying out the activities related to the development of broadband strategies in the Eastern Partnership countries, conducted comparative analyses of the markets with regard to legal harmonisation, regulator's independence and infrastructure mapping. The RRT representatives appointed to those working groups shared their expertise, good practice and gave presentations during the meetings. At the end of 2018, RRT, together with the Georgian National Communications Commission (GNCC), was elected to chair the Spectrum Expert Working Group.

The representatives of RRT also took part in the plenary meetings which are held twice a year. One of them was organised in Vilnius in November 2018. During the meeting, the Georgian regulator GNCC was elected the Chair of the EaPeReg network for 2019, and the Latvian Communications Commission was elected the Vice-Chair.

8.1.8 The International Association of Internet Hotlines INHOPE

The International Association of Internet Hotlines (INHOPE) unites 45 Internet hotlines from 40 countries.

In 2018, the representatives of RRT participated in the INHOPE Annual General Meeting and Internet hotline training, in Lyon. During the meetings, the INHPOPE Board election took place, the prospects of the expansion of the INHOPE network, its management, further activities, and funding of the Fund and of the Association of INHOPE, INHOPE financial statement, amendments to the INHOPE Articles of Association and Best Practice Papers were discussed. During the meeting, the closer cooperation with the law enforcement institutions – EUROPOL and INTERPOL – was sought. The EU General Data Protection Regulation which came into force in the whole of the EU in May 2018 was presented. When analysing the EU General Data Protection Regulation, the main focus was placed on the changes in the data area as a lot of internet hotlines are the data controllers, therefore this information was highly relevant.

In 2018, the EGM (Extraordinary General Meeting) was held in Heraklion. The main topic was dark web. The challenges resulting from dealing with the internet threats were discussed, the tool designed to monitor the dark web was presented and it was practically demonstrated how the information collected using that tool might be applied to the activities of the police and hotlines.

8.1.9 Forum of European Supervisory Authorities for Trust Service Providers (FESA) and ENISA working group

The objective of FESA is to promote cooperation between trust service provider supervisory bodies, harmonise their activities and prepare common positions. When carrying out its activity, FESA cooperates with the European Commission (EC), European Network and Information Security Agency (ENISA), standardisation organisations (ETSI and CEN) and provides them with the proposals as to how ensure smooth implementation of Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC (the "eIDAS Regulation").



The RRT representative carried out the functions of a member (secretary) of the Board of FESA.

In 2016, the RRT representative was elected as a member (secretary) of the Board of FESA for a 2-year term and held office in 2018, and during the FESA meeting which was held in Malta in 2018, the decision to extend the RRT representative's authorisations at the FESA Board for one more year was made.

During the FESA meetings held in 2018, the following issues relevant to Lithuania were discussed: implementation of the eIDAS Regulation; security of remote identification of trust service providers (by means of video sessions) and standardization aspects; quality of reports on conformity assessment of trust service providers and potential actions to be taken to ensure the minimum level of quality of such reports in all countries (the position-letter which was officially failed with the EX was coordinated for this purpose as well); drafting of standards related to trust services; aspects of handling trusted lists.

In 2018, there was involvement in the meetings of the ENISA working group regarding Article 19 of the eIDAS Regulation, where incidents related to the Lithuanian trust service providers were presented and the measures to mitigate damage done by the incidents were discussed.

8.1.10 The Universal Postal Union (UPU)

On 3-7 September 2018, the RRT representative, as the Deputy Head of the government delegation, attended the Universal Postal Union's (UPU) Second Extraordinary Congress held in Addis Ababa, Ethiopia. The issues of the UPU management reform, reform of the member state contribution system, amendments to the product integration plan and integrated plan of payments were considered in the congress. The congress approved the decisions related to the reform of the activities of the UPU Postal Operations Council for the purpose of the more effective decision-making. The proposals related to the amendments to the product integration plan and integrated settlement plan were approved.

8.1.11 Participation in the Twinning Project



254 – the number of working days spent on the implementation of the EU Twinning Project by Lithuanian experts over 2018.

4 – the number of the meetings of the EU Twinning Project supervisory committee organised.

2 times the representatives of the Georgian National Communications Commission (GNCC) visited RRT.

In 2018, RRT, as the main partner, was actively involved in the implementation of the EU Twining Project in Sakartvelo.

At the end of 2017, RRT together with the junior partners to the project – the Federal Ministry for Economic Affairs and Energy and the Office of Electronic Communications of the Republic of Poland – started the implementation of Twinning Project No GE/15/ENI/TE/01/16 (GE/27) "Supporting the Georgian National Communications Commission (GNCC) in developing of its electronic communications regulatory framework and operational capacities in line with EU regulatory framework"³². Over 50 experts from 6 EU countries participated in the project. Lithuania was leading two major components out of six based on the scope of the topics – "Legal framework" (Component 1) and "Broadband development" (Component 2). The RRT actively contributed to the implementation of the other activities led by the partners as well. In total, approximately 30 Lithuanian experts participated in the activities of the project.

In 2018, two study visits were organised for the representatives of the Georgian National Communications Commission (GNCC) at the RRT Office in Vilnius. During the first visit, GNCC experts were introduced the Lithuanian experience in developing the broadband infrastructure and services on 4-8 June 2018. The guests heard the presentations prepared by the RRT specialists, visited several communications companies and laboratories in Dovainonys and Kaunas owned by RRT, took part in equipment testing and interference measurements carried out in Kaunas and Trakai. During the discussions, the RRT representatives not only presented good practice of their own country, but they were also introduced the Georgian regulator's experience.

During the second visit of GNCC experts on 8-9 November, the guests were acquainted with the Lithuanian and EU good practice of regulation and implementation of the provision of roaming services. The RRT representatives shared their experience in practical implementation of the changes in the regulation of this field and specified the impact on the use of services, pricing and market made by legal acts adopted by the EU. During the meeting, the wholesale and retail roaming tariff ratios and aspects of cooperation between the operators were discussed. The representatives of Sakartvelo demonstrated their interest in the regulation of alternative tariffs as well as the measures used by RRT to ensure the implementation of the Roaming Regulation. The guests visited telecommunication companies UAB Tele2 and Telia Lietuva, AB, showed their interest in the operators' activities and practical experience as to how to ensure the smooth provision of services to travelling service users, discussed the cooperation between the operators of Lithuania and Sakartvelo.

At the end of 2018, the first workshop for the representatives of the GNCC ministries, institutions of other countries, equipment suppliers, operators and other stakeholders was held in Tbilisi, it focused on the EU legal requirements for radio equipment applied when implementing Directive 2014/53/EU. The RRT representatives presented the Lithuanian experience to the colleagues from Sakartvelo in terms of transposing the requirements of said Directive into national law, they also analysed the practical aspects of the application of those requirements and introduced the good practice of Lithuania and European countries. According to the Association Agreement, Sakartvelo undertook to harmonise the national legislation under Directive 2014/53/EU in 2018, therefore the workshop participants were active in discussions, showed their interest in the issues related to the application of the Directive to the market of Sakartvelo and transposition of legal requirements into the national legal framework. That was the first event out of 20 planned events of the Twinning Project (GE/27) held in Sakartvelo.

³² RRT Director Feliksas Dobrovolskis has been appointed the leader of the project, Giedrius Pūras, the RRT Deputy Director has become the Advisor Resident to the EU Twinning Project in Georgia.

In 2018, Lithuanian (RRT) experts undertook the mission in Sakartvelo – they took part in 52 working missions, where legal acts governing the GNCC activity were analysed, proposals on their improvement were tabled, specific draft documents (guidelines, legal acts) were drawn up, presentations on the Lithuanian and EU practice on specific issues relevant to the colleagues from Sakartvelo were given.

RRT will be implementing the project with the German and Polish partners till September 2019.

8.2 Effective activities of RRT

8.2.1 Management of RRT



RRT is managed by the director. The Director is appointed by the President of the Republic of Lithuania upon the submission of the Prime Minister for a term of 5 years. The Director is in charge of all issues within the competence of RRT, he represents RRT in the Republic of Lithuania and abroad, approves the RRT structure, the Regulations of structural divisions, lists of positions and job descriptions, employs and dismisses RRT civil servants and employees employed under employment agreements, approves the RRT strategic plan, signs resolutions adopted by the RRT Council, issues orders, approves legal acts and monitors adherence to such legal acts (the most relevant orders of 2018 related to the activity of RRT are provided in Annex 6), also ensures that laws and other legal acts are followed by RRT.

In 2018, 9 RRT Council (the "Council") meetings were held during which the following issues were discussed:

- Plans for the radio communications development in certain frequency bands
- Imposition of economic sanctions
- Tariffs of remuneration for services rendered by RRT and works performed
- Amendments to the estimate of the RRT's Communications Management and Control Programme for 2018
- Cost estimate of the RRT's Communications Management and Control Programme for 2018 (funded from the Council's over-performance and unused contributions)
- Estimate of the RRT's Communications Management and Control Programme for 2019
- Amendments to the RRT structure, regulations of RRT structural divisions and internal regulation of RRT
- Approval of the RRT draft strategic operational plan for 2019-2021.
- Presentation of the Annual report of 2017 and Overview of Trust Services of 2017.

8.2.2 In-service training for RRT employees

In order to improve the staff's skills related to the implementation of the strategic goals of the authority and to develop the specific, with RRT regulated sector related knowledge of the employees, inservice training sessions were organised in 2018³³.

146 RRT employees were involved in training:

172 participants were improving general competences;

121 participants fostered their analytical abilities (in the training course "Fostering employees' cognitive and analytical abilities when working in a team", etc.);

118 participants improved their qualification in the field of customer service, abilities and skills in focusing on a client (they were in the training course "Effective professional communication and conflict management when working in a team", etc.);

181 participants improved their communication skills (knowledge of the EU working languages was enhanced, training on team building was attended);

97 participants improved their skills and abilities in the field of electronic information security (cyber security);

14 participants raised their expertise in electronic communications, postal and other sectors (attended the workshops at the European Training Centre for Railways (ETCR), training course of the International Telecommunication Union (ITU) as well as the training "Stress management. Emotional awareness. Impact of social media on our emotional field");

8 participants deepened their knowledge in the field of professional ethics and corruption prevention;

3 participants improved managerial, leadership and change management skills;

1 employee participated in the instructional program for civil servants.

In 2018, under the RRT employee training programme "RRT employees to RRT employees", the overview of the disputes between end service recipients or users and electronic communications service/postal service providers handled by RRT in 2017 was presented. Training courses "Officers' rights and duties, adequate collection and finalisation of investigation material, drawing up reports", "Supervision of the electromagnetic compatibility regulation, harmonised standards, EMC tests" including practical demonstrations of the activities of EMC laboratories in Kaunas and Dovainonys were held.

8.2.3 Consumer information measures

RRT website <u>www.rrt.lt</u> was updated.

³³ In-service trainings were organised by implementing priority objectives of civil servants' training relevant to RRT. The participation of every unique employee was counted (if one employee took part in three different training courses, three participants were counted).


<u>www.nebūkberyšio.lt</u> – access to the information resources administered by RRT on various electronic communications services provided in Lithuania.



The website <u>https://tikrinti.elektroninisparasas.lt</u> introduces a new tool for verifying certificates for electronic signatures, electronic seals, website authentication and verifying electronic time stamps.



The speed measuring tool <u>https://matuok.lt/</u> enables assessing the internet speed by mobile devices as well.

In 2018, RRT website <u>www.rrt.lt</u> was updated as well as the content management system. The website incorporated new areas of RRT's activities: railway infrastructure supervision, trust services and remuneration for the data from registers. Information provided on a new website is optimally structured. The website also contains convenient information for electronic communications and postal service users, for instance, information on how to submit complaints (in an interactive form), on users' rights, tips on various relevant issues, etc.

The website <u>www.nebūkberyšio.lt</u> has been active for the second year in a row. It grants the Lithuanian electronic communications service users the convenient access to the information resources administered by RRT on various electronic communications services provided in Lithuania, quality, development and security thereof.



In 2018, RRT updated the Internet access speed measuring tool <u>http://matuok.lt/.</u> The system has been improved by OOkla HTML5 measurement module whose main advantage, compared to the previous version, is an opportunity to assess the internet speed using mobile devices as well. In order to measure the internet speed by means of those devices, installation of apps is no longer necessary – the measurements are performed through a usual browser. By using this tool the users are able to assess the speed of the Internet access data upload and download, accumulate and analyse the measurement results, compare them with the average results of the measurements performed by the other Lithuanian internet service users.

The new RRT website <u>www.elektroninisparasas.lt</u> helps the Lithuanian residents and trust service providers to find information on the qualification of the trust service providers, and to obtain the news related to the electronic signature and trust services at a single point.

In 2018, the website <u>www.elektroninisparasas.lt</u> was used by 14 thousand users, i.e. 3.2 times more than in 2017 (4,356 users). The number of registered users using the remote training system is increasing (at the end of 2017 – 1,870, at the end of 2018 – 1,896 registered users).

RRT together with the Information Society Development Committee organised the national selection contest <u>"The New Book Carier 2018"</u>. The goal of the contest was to find the best digital content solutions developed in Lithuania – it could be the websites, apps, electronic services, apps designed for various platforms and devices, games – and to nominate them to international contest <u>"World Summit Awards"</u> under the auspices of the United Nations. In 2018, during national selection contest <u>"The New Book Carier 2018"</u> 8 top solutions were selected, two of which – Pulsetip ("Pulsetip") and Computers for Children (Computer Support Fund) – were nominated together with 40 top digital innovations in the global contest "World Summit Awards".

9 PERFORMANCE OF OBLIGATIONS IN THE FIELDS OF NATIONAL DEFENCE, NATIONAL SECURITY AND MAINTENANCE OF PUBLIC ORDER

RRT was obligated to aquire, manage, maintain and upgrade equipment for the purposes stated in Article 77(1) and/or Article 77(4) of the Law on Electronic Communications of the Republic of Lithuania.

The National Investment Programme for 2018-2020 provided for the continuous (launched in 2012) investment project "Installation of special signal processing and decoding software and hardware in operators' switching nodes" of which implementation in total EUR 1,159 thousand was allocated from the state budget. The amount of EUR 1,158.8 thousand from the state budget was used for the investment project (allocated from the state budget).

Under the contracts of agency, in 2018 the State Security Department of the Republic of Lithuania implemented the procedures for the procurement of special signal processing and decoding software and hardware. The acquired signal processing and decoding software and hardware was handed over to the State Security Department for operation in trust in accordance with the procedure laid down in legal acts.

10 PROMOTION OF EFFECTIVE COMPETITION ON THE RAILWAY TRANSPORT MARKET

10.1 Monitoring of competition on the railway transport market

[.	
0	٦
Þ	

In 2018, one undertaking, AB Lietuvos Geležinkeliai, was carrying out the activity on the railway transport market; it was the public railway infrastructure manager, railway undertaking (carrier) and railway service facility operator.

Two railway undertakings (carriers) – UAB Gargždų Geležinkelis and UAB LGC Cargo – submitted applications for the allocation of public railway infrastructure capacity for rail freight transportation to be able to compete with AB Lietuvos Geležinkeliai in 2018.

RRT, as the railway transport market regulator, believes that it is important to enable effective competition on the railway transport market and prevent the abuse of the market power held by the public railway infrastructure manager, railway undertakings (carriers), railway service facility operators on the railway transport market. To achieve it, the involvement of all railway transport market players is needed.

In 2018, a new railway undertaking (carrier) UAB LGC Cargo, besides UAB Gargždų Geležinkelis and AB Lietuvos Geležinkeliai, submitted the applications to the Lithuanian Transport Safety Administration for the allocation of public railway infrastructure capacity to engage in rail freight transportation.

Due to certain congested³⁴ parts of the public railway infrastructure, UAB Gargždų Geležinkelis received none and UAB LGC Cargo and AB Lietuvos Geležinkeliai received only part of requested public railway infrastructure capacity for a period of validity of the working timetable of 2018-2019. It must be concluded that the Lithuanian rail transport market is challenged not by a lack of potential competitors – new railway undertakings (carriers) – but rather by the technical restrictions of the use of public railway infrastructure which prevent the competition on the rail transport market as new railway undertakings (carriers) are not granted access to the public railway infrastructure due to insufficient public railway infrastructure capacities or the granted access is insufficient to carry out their activities.

10.2 Supervision of the compliance with the requirements for the railway transport market players

When carrying out the supervision of the railway transport market, RRT conducted the audit of AB Lietuvos Geležinkeliai to determine whether it properly fulfilled the requirements for the system of separation of accounts and cost distribution. As the accounts of AB Lietuvos Geležinkeliai was not properly separated in 2018 due to the fact that the railway service facility operator was not separated from the public railway infrastructure manager, and information required to verify how the costs were distributed was not provided to RRT, it is expected to have the final results of the inspection of AB Lietuvos Geležinkeliai in 2019 having received all information necessary to assess the report on cost accounting separation system and cost distribution.

In 2018, RRT audited contribution rates of charges to be paid for the services provided by the public infrastructure manager (the charges payable for the minimum access package during the period of the working timetable forf 2018-2019).

³⁴ In the working timetable of 2018-2019, the following parts of public railway infrastructure are specified as congested: side track Viduklė–Tauragė (section Radviliškiis–Pagėgiai); side track Livintai–Gaižiūnai (section Kaišiadorys–Radviliškis); side track Plungė–Šateikiai (Kužiai–Klaipėda section); side track Šeduva–Gustonys (Rokiškis–Radviliškis section).

Result. RRT, having considered the calculation of the charge to be paid by the railway undertaking (carrier) for the minimum access package under the data provided by the public railway infrastructure manager, determined that the approved **contribution rates** of the charge for the minimum access package **were calculated in compliance with all the requirements set**.

Taking into account the request of the Lithuanian Private Railway Companies Association, RRT carried out the **analysis of the documents made publicly available by** AB Lietuvos Geležinkeliai. During the analysis it was determined that the terms of adoption of amendments to or publishing of part of the documents of AB Lietuvos Geležinkeliai, whose requirements have a direct effect on economic activities carried out and/or intended by other economic operators³⁵ are not made publicly available. Therefore, the non-disclosure of such information is considered one of the barriers of entrance into the Lithuanian rail transport services market as the potential market players do not receive all information they find necessary.

Result. RRT obliged AB Lietuvos Geležinkeliai, under the amended plan of publicly available normative documents, approved by AB Lietuvos Geležinkeliai, to publish all available normative documents by 31 March 2019, where the requirements of those documents apply to the economic activity carried out and/or intended by other economic operators in the public railway infrastructure and railway service facilities as well as to the provision of the services in those railway service facilities.

Taking into account the request of the Lithuanian Private Railway Companies Association, **RRT carried out** the analysis of the amendment to the **Description of the References of the Application of Certain Items of the Regulations on the Technical Use of Railways** 292/LG approved by Order No I-541 of the Director General of AB Lietuvos Geležinkeliai of 4 September 2017 "On the Amendment to Annex 24 to the Description of the References of the Application of Certain Items of the Regulations on the Technical Use of Railways 292/LG approved by Order No I-62 of the Director General of AB Lietuvos Geležinkeliai of 20 January 2014" (hereinafter – the Amendment to the Description) which aimed to clarify if the Amendment to the Description was nondiscriminatory and/or if it did not restrict the rights of the railway undertakings (carriers) whose rolling stock would be used in the public railway infrastructure for the first time. To assess the factual circumstances of the Amendment to the Description, RRT carried out correspondence with the Lithuanian Private Railway Companies Association, AB Lietuvos Geležinkeliai, Lithuanian Transport Safety Administration and Ministry of Transport and Communications of the Republic of Lithuania.

Result. RRT, having assessed the factual circumstances, determined that the Amendment to the Description made by AB Lietuvos Geležinkeliai was non-discriminatory and it did not restrict the rights of the railway undertakings (carriers) whose rolling stock would be used in the public railway infrastructure for the first time.

10.3 Examination of the applicants' complaints



1 – decision adopted regarding the complaint

4 – complaints accepted for handling (handling of all complaints deferred to 2019)

³⁵ Activities performed in the public railway infrastructure and railway service facilities as well as when providing services in those railway service facilities.

APPLICANT – a railway undertaking (carrier), international group of railway undertakings (carriers), shipper (consignee), shipping agent which, wishing to provide the public services of transport of passengers by rail or having commercial interests, wishes to acquire public railway infrastructure capacities.

DISPUTES SETTLED BY RRT involve the procedure of examination of act and/or omission of the railway infrastructure manager, operators of railway service facilities, railway undertakings (carriers), institutions, authorities or organisations, including the decisions made by such entities within their competence with regard to the restriction of the conditions of the right to use the public railway infrastructure, railway service facilities and services provided therein to the railway undertakings (carriers), examination of the content of the Public Railway Infrastructure Network Statement, allocation of the public railway infrastructure capacities, charges to be paid by the railway undertaking (carrier) for the minimum access package, as well as charges for the use of railway service facilities and services provided therein, and charges for auxiliary and ancillary services, also the procedure of handling and decision making of the complaints.

In 2017, **UAB Gargždų Geležinkelis** addressed RRT with regard to the allocation of public railway infrastructure capacity for the validity period of the 2017-2018 working timetable for rail transport and related decisions. The applicant requested RRT to change the decision made by the Lithuanian Transport Safety Administration and allocate public railway infrastructure capacity as requested in the applicant's application. Moreover, the applicant requested to revoke the decision made by the Lithuanian Transport Safety Administration with regard to the action brought by UAB Gargždų Geležinkelis which had arisen out of the coordination of applications for allocation of the same public railway infrastructure capacity approved by Resolution No 611 of the Government of the Republic of Lithuania of 19 April 2004 "On the Approval of the Regulations for the Allocation of the Public Railway Infrastructure Capacity".

Result. RRT adopted a decision that the complaint of UAB Gargždų Geležinkelis was partly founded. Taking that into account, RRT obliged the Lithuanian Transport Safety Administration to repeal the decisions made towards UAB Gargždų Geležinkelis and, having assessed the circumstances identified when handling the complaint, adopt a new decision regarding the allocation of public railway infrastructure capacities requested by UAB Gargždų Geležinkelis.

It must be noted that the **decision adopted by RRT is not enforced** as both UAB Gargždų Geležinkelis and Lithuanian Transport Safety Administration was appealed against at the court. Accordingly, the court has, having considered the request of the Lithuanian Transport Safety Administration, suspended the validity of the decision adopted by RRT.

In 2018, **UAB LGC Cargo** addressed RRT with regard to the actions taken by the public railway infrastructure manager regarding the conclusion of the agreement on the use of the public railway infrastructure.

The applicant request RRT to investigate the actions taken by AB Lietuvos Geležinkeliai when signing the agreement on the use of the public railway infrastructure and to oblige AB Lietuvos Geležinkeliai to sign the agreement on the use of the public railway infrastructure with UAB LGC Cargo, and to ensure that all the actors of the Lithuanian rail transport services market are applied the uniform conditions of the use of the public railway infrastructure and 23(3) of the Code are properly adhered to.

Result. RRT accepted the applicant's complaint. Pursuant to the provisions of Article 7¹(2) of the Code, in the absence of the complete material for the examination of the complaint, the examination was not finished in 2018 and it continued in 2019.

UAB LGC Cargo approached RRT in 2018 with regard to the actions of the Lithuanian Transport Safety Administration in allocating railway infrastructure capacity for the period of the working timetable of 2017-2018.

The applicant requested RRT to investigate the actions taken by the Lithuanian Transport Safety Administration when allocating the public railway infrastructure capacity for the period of the working timetable of 2017-2018 and oblige the Lithuanian Transport Safety Administration to allocate the public railway infrastructure capacity to UAB LGC Cargo³⁶.

Result. RRT accepted the applicant's complaint. Pursuant to the provisions of Article 7¹(2) of the Code, in the absence of the complete material for the examination of the complaint, the examination was not finished in 2018 and it continued in 2019.

UAB LGC Cargo approached RRT in 2018 with regard to the actions of the Lithuanian Transport Safety Administration in allocating railway infrastructure capacity for the period of the working timetable of 2018-2019.

The applicant requested that RRT, having investigated the actions taken by the Lithuanian Transport Safety Administration when allocating the public railway infrastructure capacity for the period of the working timetable of 2018-2019, would partly repeal the decision of the Lithuanian Transport Safety Administration regarding the allocation of the public railway infrastructure capacity for the period of the working timetable of 2018-2019 in the section of UAB LGC Cargo subject to the decision on the public railway infrastructure capacity, and would oblige the Lithuanian Transport Safety Administration to allocate all public railway infrastructure capacity requested by UAB LGC Cargo³⁷.

Result. RRT accepted the applicant's complaint. Pursuant to the provisions of Article 7¹(2) of the Code, in the absence of the complete material for the examination of the complaint, the examination was not finished in 2018 and it continued in 2019.

10.4 Independent Regulators' Group – Rail

In 2018, RRT participated in the activity of six working groups of IRG-Rail.

In 2018, the Independent Regulators' Group – Rail (IRG-Rail), at the request of the EC and at its initiative, was developing and providing the opinions on the common template for service facility descriptions drafted by the RailNetEurope (RNE), regarding the amendment to Commission Implementing Regulation (EU) 2015/1100 of 7 July 2015 on the reporting obligations of the Member States in the framework of rail market monitoring (OJ 2015 L181, p. 1) initiated by the European Commission and public consultation draft regarding the implementing regulation related to an economic equilibrium test conducted by the EC.

At its initiative, IRG-Rail has additionally drafted:

 Overview of findings regarding Implementation and interpretation of regulatory bodies' functions and powers of regulatory bodies under article 56.9 of Directive 2012/34/EU of the European

³⁶ Pursuant to paragraph 13.6.3 of Order No 3-574 of the Minister of Transport and Communications of the Republic of Lithuania of 30 November 2017 "On the Approval of the Regulations of the Lithuanian Transport Safety Administration" and Articles 7(3) and 29(1) of the Code.

³⁷ Pursuant to paragraph 13.6.3 of Order No 3-574 of the Minister of Transport and Communications of the Republic of Lithuania of 30 November 2017 "On the Approval of the Regulations of the Lithuanian Transport Safety Administration" and Articles 7(3) and 29(1) of the Railawy Transport Code of the Republic of Lithuania.

Parliament and of the Council of 21 November 2012 establishing a single European railway area (OJ 2012 L 343, p. 32) ("Directive 2012/34/EU");

- Common position regarding common principles on granting exemptions under Article 2 (2) of Commission Implementing Regulation (EU) 2017/2177³⁸;
- Analysis report of national definitions for heritage railways.
- Report on time limits set in the Member States for answering requests by railway undertakings for access to, and supply of services in the service facility pursuant to Article 13(4) of Directive 2012/34/EU.
- An overview of charges for storage sidings in Europe and updated review of charging practices for the minimum access package in Europe.

It must be noted that the opinions, reports, overviews, etc. of *IRG-Rail* are drafted in six expert working groups of *IRG-Rail* which also involve the representatives of RRT who provide statistical information and present the aspects of the regulation of the Lithuanian rail transport services market. The documents drawn up in the *IRG-Rail* expert working groups are approved by the members of *IRG-Rail*, and heads of the national regulatory authorities.

It is important to note that in 2018, RRT signed the updated memorandum of cooperation between *IRG-Rail* members and undertook to cooperate when exchanging information and provide mutual assistance when carrying out the tasks of rail transport services market surveillance, handling complaints or carrying out investigations.

10.5 The European Network of Rail Regulatory Bodies (ENRRB)

In 2018, RRT participated in the ENRRB activities.

In 2018, RRT took part in three meetings of the European Network of Rail Regulatory Bodies (ENRRB). During the meetings, the regulatory aspects of the Lithuanian railway transport market, handled complaints, as well as the specifics of the directly applicable EU legislation and different implementation practice in the Member States were presented, a special focus was placed on the project of the portal of European railway services and restructuring of the process of drafting the international working timetables.

³⁸Commission Implementing Regulation (EU) 2017/2177 of 22 November 2017 on access to service facilities and rail-related services (OJ 2017 L 307, p. 1)

11 Supervision of the calculation of renumeration for document submission and data registration

In 2018, RRT started carrying out a new function – the supervision of the calculation of salary for submission of documents.

The concept "document submission" includes the submission of register data, register information, documents and/or copies thereof submitted to the register, State information system data as well as the submission of documents, including the register data, register information, documents and/or copies thereof submitted to the register, State information system data for repeated use.

In 2018, the legal acts governing the supervision of the calculation of salary for the submission were drawn up: the Description of the Requirements for Cost Attribution to the Activities of the Submission of Documents was approved, Typical Terms of Reference of the Calculation of Salaries for the Submission of Documents and Verification of Compensated Costs were drawn up and approved.

RRT provided methodological assistance to the public authorities and bodies, companies and public enterprises financed from the state or municipal budgets and authorised, under the Law on Public Administration of the Republic of Lithuania, to carry out public administration, or providing the persons with public or administrative services, or carrying out other public functions, including libraries, museums and state archives, processors of registers and state information systems (hereinafter – the institutions).

The institutions were consulted, orally and in writing, regarding the application of the requirements laid down in the Description of the Procedure for the Calculation of Salary for the Submission of Documents and Payment of Salary for the Submission of Register Data, Register Information, Documents and/or Copies Thereof Submitted to the Register, Data of the State Information Systems. The draft of the Description of the Requirements for Cost Attribution to the Activities of the Submission of Documents was submitted for public consultation during which the draft document was presented to the institutions, the comments provided by the institutions were discussed, and the questions of institution representatives' on practical aspects of reimbursement for document submission, calculation of costs, installation of cost accounting systems were answered.

12 RRT activity priorities for 2019

RRT continued activities commenced in 2018 and set the following objectives for 2019:

- Protection of the rights and legitimate interests of users of electronic communications and trust services, postal services, radiocommunication and electric and electronic equipment
- Promotion of investments in next generation wireless broadband communication networks and of harmonised development of advanced technologies and services
- The assurance of effective competition in the rail transport sector and prevention of power abuse on the rail transport services market
- Assurance of salary for the submission of register documents on the basis of cost-orientation

I. Protection of the rights and legitimate interests of users of electronic communications and trust services, postal services, radiocommunication and electric and electronic equipment

RRT, when implementing this priority, will continue monitoring of the wireless Internet access service quality indicators as required by the European Union (the EU) directives and other legal acts, it will also inform the public on the results of performed measurements in 2019. In 2019, RRT plans to upgrade the equipment for measuring the quality indicators of the wireless Internet access and public mobile telephone services in order to perform the control measurements of the quality of the public mobile telephone services and data transmission services by means of the latest technologies (*LTE, LTE Advanced, VoLTE*, etc.) and compare them with the actual services offered by the electronic communications service providers AB Lietuvos Radijo ir Televizijos Centras, UAB Bitė Lietuva, Telia Lietuva, AB and UAB Tele2.

A great focus will be placed on the measurements of data transmission speed On LTE and 3G networks in motion, i.e. where the measurements are carried out when driving down the city streets and main roads covering less populated areas as well. This will enable to reveal the changes in the service quality indicators with respect to communications technologies newly installed by electronic communications service providers, coverage of provided services, location and mobility of electronic communications service users. The measurement results will be used to provide the users with an opportunity to chose the services which correspond to their needs best.

In 2019, RRT plans to conduct the measurements of the quality of wireless Internet access services provided to railway passengers by UAB Bitė Lietuva, Telia Lietuva, AB and UAB Tele2 on railway passenger transportation routes of the Republic of Lithuania.

RRT, taking into account the provisions on network neutrality laid down in Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union (Regulation No 2015/2120), plans to deploy new and improve the existing tools for the monitoring of quality of the services provided by the internet access service providers and flow management designed to assess whether the internet access service providers do not restrict the internet access services provided to the electronic communications service users based on the internet content they are used for in 2019-2021.

RRT, when supervising the implementation of Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union with the latest amendments thereto made by Regulation No 2015/2120, will monitor the situation on the market and will make respective decisions regarding the application of additional fees in order to maintain the stability of the

80

prices of national mobile telephone services to the extent required to compensate the losses incurred by those service providers.

In 2019, RRT will continue the monitoring and supervision of the market with regard to determine if the mobile operators follow the provisions of Regulation No 531/2012 and Regulation No 2015/2120, if the electronic communications service users are not discriminated against, if, when providing the services and making settlements between the operators, the discriminatory provisions are not applied. In 2019, the representatives of the Authority will be actively involved in solving the other practical issues related to the application of Regulation No 531/2012 and Regulation No 2015/2120 and, if necessary, will promptly respond to the actions and/or intentions of the national operators on the market.

In order to ensure the compliance with the requirements set forth in the Technical Regulation for Electromagnetic Compatibility and Technical Regulation of Radio Equipment, RRT will carry out the supervision of the market of radio equipment and electric and electronic devices so that the market of the Republic of Lithuania would be supplied with the radio equipment and devices compliant with the requirements laid down in these Regulations only.

In 2019, RRT will commence the construction of a special purpose building in Želvos St. 12, Kaunas, and will install one more anechoic chamber designed to test electromagnetic radiation. This will enhance the capacity of the Device and Equipment Electromagnetic Compatibility Control Department as both electromagnetic radiation and electromagnetic compatibility tests would be carried out simultaneously, which would shorten the length of testing.

The protection of rights and legitimate interests of postal service users will further remain the main area of the governance of the postal service for the Authority in 2019. This activity will cover the supervision of the provision of the postal service, including the universal postal service: consultation of users and handling of complaints, consultation of postal service providers, supervision of the compliance with the conditions for the provision of the universal postal service, monitoring of the quality indicators of the universal postal service and other related functions.

RRT, when implementing the provisions of Regulation (EU) 2018/644 of the European Parliament and of the Council of 18 April 2018 on cross-border parcel delivery services, will accumulate the statistical information from the parcel delivery service providers of the Republic of Lithuania and assess the prices of cross-border parcel delivery. RRT will submit the said statistical information to the EC which will publish summarised information of all EU Member States on the designated website.

When implementing the provisions of Regulation (EU) No 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC (OJ 2014 L 257, p. 73) (hereinafter – the elDAS Regulation), RRT will carry out the functions of the authority supervising the trust services and the body responsible for establishing, maintaining and publishing national trusted lists, it will improve digital instruments required to carry out this activity and strengthen consumer information system in 2019. RRT, following Article 19(3) of elDAS Regulation and seeking to ensure the reliability of trust services, will provide the European Network and Information Security Agency (ENISA) with the information on the reports received from the trust service providers on the security or integrity breaches, and will maintain the electronic Trusted Services List (TSL).

In 2018, RRT, together with Information Society Development Committee under the Ministry of Economy, Association Langas į Ateitį, Martynas Mažvydas National Library of Lithuania and Ministry of the Interior of the Republic of Lithuania, launched the project "Connected Lithuania: Effective, Safe and Responsible Digital Society in Lithuania" to encourage the Lithuanian residents to acquire necessary skills for effective, full, safe and responsible use of the internet, and involve the local communities in those activities. In 2019, when carrying out this project, RRT will draft the training material on the trust services, electronic signature and safe use of internet, and will supplement the websites for electronic signature and related trust services as well as safe use of internet with that information; it will also provide part of the potential electronic signature users with the technical means necessary to use the electronic signature – chip card readers.

II. Promotion of investments in next generation wireless broadband communication networks and of harmonised development of advanced technologies and services

On 17 May 2017, Decision (EU) 2017/899 of the European Parliament and of the Council on the use of the 470-790 MHz frequency band in the Union (Decision 2017/899) was adopted under which the EU Member States are under obligation to the use of the 694-790 MHz ("700 MHz") frequency band for terrestrial systems capable of providing wireless broadband electronic communications services by 30 June 2020, and ensure that the 470-694 MHz frequency band could be used for broadcasting services, including free television, by 2030. Decision 2017/899 establishes that the time limit for providing the conditions for the use of the 700 MHz frequency band for terrestrial systems capable of postponed for no longer than two years, i.e. by 30 June 2022.

RRT, when implementing the provisions of Decision 2017/899, will carry out the preparatory works of freeing up the 700 MHz frequency band from the television broadcasting services in 2019, it will also seek to agree with the telecommunication administrations of the Russian Federation and Republic of Belarus on the conditions for the use of the 700 MHz frequency band for the development of the broadband mobile networks.

On 28 May 2015, the EC adopted Implementing Decision (EU) 2015/750 on the harmonisation of the 1452-1492 MHz frequency band for terrestrial systems capable of providing electronic communications services in the Union (Decision 2015/750). It must be noted that the radiocommunication development in that frequency band can be hardly implemented or absolutely impossible due to the aeronautics navigation systems operating in the foreign countries. The proposals provided by the Authority to the telecommunication administrations of the Russian Federation and Republic of Belarus regarding the use of the 1452-1492 MHz frequency band in order to use the 1452-1492 MHz frequency band in Lithuania based on the parameters set in Decision 2015/750 or make sure that the deviation from those parameters is as low as possible have not been approved yet, therefore RRT will seek to reach an agreement and find a solution acceptable to all parties in 2019. It is hoped that the next generation broadband networks can be deployed in a part of the 1427-1518 MHz frequency band.

At the end of 2019, the ITU World Radio Conference (WRC-19) will be held, and its purpose is to review and, if necessary, clarify the ITU Radio Regulations and international agreements establishing the radio spectrum and stationary and non-stationary satellite stations. In 2019, RRT will participate in the considerations of the issues of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis.

RRT, by ensuring electromagnetic compatibility of all the radiocommunication systems operating in Lithuania not only inside the country but also with the neighbouring countries, will participate in the international negotiations over the establishment of the mobile radio station coordination terms in the border territories. RRT will make every effort to ensure that the radio frequency bands harmonised at the EU level are used by the operators operating in Lithuania under as favourable conditions as possible and will contribute to the investments in the next generation broadband wireless networks and promotion of advanced technologies and harmonised development of services.

On 6 June 2018, during the trilateral negotiations between the EC, European Parliament and EU, the final political agreement regarding the European Electronic Communications Code (the "Code") was reached; the

purpose of the Code is to ensure a more effective governance of the European electronic communications market with the rapidly growing need for very high capacity 5G networks. The Code focuses on the development of high capacity 5G networks and seeks to enhance the European digital economy and competitiveness, satisfy the rapidly increasing need of the market for the very high capacity (VHC) communications, consider the rapid market and technological changes by implementing more effective legal governance. When implementing the provisions entrenched in the Code, RRT will need to amend the national legislation in 2019.

III. The assurance of effective competition in the rail transport sector and prevention of power abuse on the rail transport services market

On 14 December 2016, Directive (EU) 2016/2370 of the European Parliament and of the Council amending Directive 2012/34/EU as regards the opening of the market for domestic passenger transport services by rail and the governance of the railway infrastructure, constituting the so-called 4th package of the EU railway transport legislation, was approved. The Directive set new requirements binding to the EU Member States in the areas of the independence, non-partiality and financial transparency of the railway infrastructure manager's activities. Taking that into account, the Ministry of Transport and Communications initiated the amendment to the Railway Transport Code. After it is adopted, RRT will need to draw up new legal acts related to the governance of the railway transport market in 2019, and ensure the conditions for non-discriminatory access to the public railway infrastructure and effective competition in the railway transport sector.

RRT, seeking to prevent any possibility for the public railway infrastructure manager and/or railway service facility operators to abuse their power on the rail transport services market, will need to draft new and, if necessary, edit the existing legal acts regulating the surveillance of the rail transport market. When implementing the new system of the governance of the railway transport sector, the competition on the rail transport market will be promoted as well as investments in the development of the public railway infrastructure, and innovations which would result in a specific benefit to the railway transport service users. RRT will also seek to ensure the opportunities and conditions for joining the EU railway transport market, and the ability for the other economic operators to operate under the same regulatory conditions as in the other EU countries.

IV. Assurance of salary for the submission of register documents on the basis of cost-orientation

RRT, when implementing this priority, will need to ensure that the salaries for the submission of registry documents correspond to the actual operating costs, and the costs incurred due to free of charge submission of registry documents are properly calculated in 2019. In 2019, RRT will collect and publish, within the set time limits, the summarised information on the implementation of the provisions of the description of the procedure for the calculation of the salary for submission of documents.

13 IMPLEMENTATION OF IMPACT EVALUATION FACTORS OF STRATEGIC OBJECTIVES IN 2018

Strategic goal I – to enhance the effective competition in the fields of electronic communications and postal activities, ensure efficient use of electronic communications resources and protect the rights of ICT and postal service users, thus accelerating the development of digital society.

RRT shall implement the Strategic Goal I by performing the continuous Communications Management and Control Programme (it was commenced in 2001 and continued till 2018).

	Performance of the impact evaluation factors of Strategic Goal I in 2018				
Code of the evaluation factor	Name and measurement unit of evaluation factor	Planned value for 2018	Actual value for 2018	Factor implementat ion	
E-01-01	Share of households with an opportunity to use 30 Mb/s or higher speed data transmission service provided by means of wireless technology (% of all households)	85	85.2	100	
E-01-02	Share of active mobile communications end service users using the services of data transmission via LTE network (% of all active mobile communications end service users)	40	45.8	115	
E-01-03	Share of households using Internet access of 30 Mb/s or higher provided by means of fixed communications technology (% of all households)	48	44.2	92	
E-01-04	Development of the market of postal services in terms of revenue (compared to the previous year, %)	4.8.	16.3	340	
E-01-05	The decline in the number of the same IP addresses involved in malicious activities or having critical vulnerabilities detected on the networks of Internet access service providers and information systems of electronic information hosting service providers (share of recurring IP addresses, % of the total number of the same IP addresses involved in malicious activities)	50	Having consolidated the state cyber security and electronic security functions, CERT-LT functions were delegated to the National Cyber Security Centre (NCSC) on 1 March 2018, therefore RRT is unable to specify the actual value for 2018.	-	

E-01-06	The growth of the number of qualified electronic signature certificates provided by trust service providers (%, compared to the previous year)	5	-1.9	-138
	to the previous year).			

Impact factor E-01-01 – share of households with an opportunity to use 30 Mb/s or higher speed data transmission service provided by means of wireless technology (% of all households) – allows assessing the development of high-speed data transmission via wireless radio networks in Lithuania and demonstrates the accessibility of those networks to the public. In 2018, the actual value, which is based on the test calculations of LTE high-speed rate using the new (not completely harmonised) propagation model, is preliminary and may differ in the future. The value was obtained assuming that the LTE network load level was 50%. The factor was implemented by **100%** (see Fig. 1).



Fig. 1. Impact factor E-01-01- share of households with an opportunity to use 30 Mb/s or higher speed data transmission service provided by means of wireless technology (% of all households)

Impact factor E-01-02 – share of active mobile communications end service users using the services of data transmission via LTE network (% of all active mobile communications end service users) – shows the effectiveness of RRT's actions by ensuring the affordability of advanced electronic communications services. The factor was implemented by **115%** (see Fig. 2).



Fig. 2. Impact factor E-01-02 – share of active mobile communications end service users using the services of data transmission via LTE network (% of all active mobile communications end service users)

Impact factor E-01-03 – share of households using Internet access of 30 Mb/s speed and higher provided by means of fixed communications technologies (% of all households) – demonstrates the change in the use of advanced electronic communications services. Based on this criterion, RRT's activity is directed to the areas which would increase the accessibility and affordability of the services. The transition of broadband Internet access subscribers that were provided the services by means of wireless communication technology WIMAX to LTE platform led to the lower number of subscribers that were using fixed communications technologies: in 2018,

it dropped by 1.3% and stood at 788.4 thousand on 31 December 2018. The factor was implemented by **92%** (see Fig. 3).



Fig. 3. Impact factor E-01-03 – share of households using Internet access of 30 Mb/s speed and higher provided by means of fixed communications technologies (% of all households)

Impact factor E-01-04 – the growth of the postal service market in terms of revenue (%, compared to the previous year) – shows the change in the postal service market by revenue. This allows to analyse the data, draw up the comparative reports, etc. The growth of the postal service market, in terms of revenue, was enhanced by the advanced electronic communications means which contributed to shopping online becoming part of a daily life of the population. It is assumed that the growth of the postal sector was caused by the increasing volumes of e-commerce, larger flows of parcels due to the scale of emigration and different (higher) tariffs of the services. The factor was implemented by **340%** (see Fig. 4).





Impact factor E-01-05 – the decline in the number of the same IP addresses involved in malicious activities or having critical vulnerabilities detected on the networks of Internet access service providers and information systems of electronic information hosting service providers (share of recurring IP addresses, % of the total number of IP addresses involved in malicious activities) – allows assessing the actions of the internet access service providers and of electronic information hosting service providers by eliminating IP addresses noticed in malicious activities earlier and by stopping their activity. RRT does not have the actual data for 2018 as the functions of CERT-LT, having consolidated the state cyber security and electronic security functions, were delegated to the NCSC on 1 March 2018 (see Fig. 5).



■ faktiniai duomenys ■ planiniai duomenys



Impact factor E-01-06 – the growth of the number of qualified electronic signature certificates generated by trust service providers (%, compared to the previous year) – shows the change in the number of qualified electronic signature certificates generated by the trust service providers during the reporting year. In order to increase the security level of electronic signature and taking into account Regulation No 910/2014 of the European Parliament and of the Council on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC as well as legal acts of the Republic of Lithuania, all mobile electronic signature users had to replace their SIM cards with the new SIM cards compliant with the new security requirements by 1 July 2018. During that change, the most of mobile operators operating in Lithuania refused of the services of mobile electronic signature certificates provided by the Public Enterprise Centre of Registers and started using the identical services provided by the Estonian service provider SK ID Solutions AS. This had an effect on the decrease of the number of qualified electronic signature certificates in Lithuania issued fewer qualified certificates for electronic signature with the identity cards, therefore the total number of qualified certificates generated by the trust service providers and issued by Lithuania decreased by 1.9% in 2018: down to 926,164 (in 2017, there were 944,127 valid certificates). The factor was not implemented by 138% (see Fig. 6).



Fig. 6. Impact factor E-01-06 – the growth of the number of qualified electronic signature certificates provided by trust service providers (%, compared to the previous year).

Strategic goal II – to aim for the conditions of effective competition on the railway transport service market and prevent the abuse of the market power held by the public railway infrastructure manager, railway undertakings (carriers), railway service facility operators on the railway transport service market.

RRT is implementing Strategic Goal II by carrying out the Railway Transport Market Regulation Programme that was commenced in 2017.

	Performance of the impact evaluation factor of Strategic Goal II in 2018.				
Code of the evaluated factor	Name and measurement unit of impact evaluation factor	Planned value for 2018	Actual value for 2018	Factor implementat- ion percentage	
E-02-01	1. Development of the market of the railway transport market by volume of transported freight (%, compared to previous years).	0.3	7.86	2620	

Impact factor E-02-01 – the growth of the railway transport market by volume of transported freight (%, compared to the previous year) – shows the change in the railway transport market by volume of transported freight and allows assessing the condition and trends of the market. Based on the actual data of 2018, the railway transport market by volume of transported freight grew by **7.86**%, compared to 2017, due to increased volumes of freight transportation by rail. The growth was caused by a larger flow of freight transit through the territory of the Republic of Lithuania as well as by a larger flow of freight transport to Klaipėda Seaport due to higher import. It must be noted that the railway transport market statistical data were not collected until 2017 when RRT was appointed the railway transport market regulator, therefore it was difficult to accurately forecast the value of this factor for RRT. The factor was implemented by **2 620%** (see Fig. 7).



Fig. 7. Impact factor E-02-01 – the growth of the railway transport market by volume of transported freight (%, compared to the previous year)

Strategic Goal III – to ensure supervision of the calculation of salary for registration of the registry objects and submission of documents.

RRT is implementing Strategic Goal III by carrying out the Programme of the Supervision of the Calculation of Salaries for the Registration and Submission of Data that was commenced in 2018.

Performance of the impact evaluation factor of Strategic Goal III in 2018.				
Code of the evaluated factor	Name and measurement unit of impact evaluation factor	Planned value for 2018	Actual value for 2018	Factor implementation percentage
E-03-01	Share of conclusions provided with regard to the salaries based on cost- orientation (% of submitted requests)	-	-	-

Impact factor E-03-01 – share of conclusions regarding salaries based on cost-orientation (% of all submitted requests) – allows assessing the share of conclusions provided by RRT with regard to the salaries based on cost-orientation comparing to the total number of requests to provide a conclusion. RRT does not have the actual data for 2018, as in 2018, RRT carried out the preparatory works due to the implementation of the provisions of the *Description of the Procedure for the Calculation of Salary for the Submission of Documents and Payment of Salary for the Submission of Register Data, Register Information, Documents and/or Copies thereof Submitted to the Register, Data of the State Information Systems (the "Description") approved by Resolution No 45 of the Government of the Republic of Lithuania of 10 January 2018. Pursuant to the provisions of paragraph 4.1 of the Description, the documents of the institutions with regard to the calculation of the salary for the submission of the submitted by RRT as of 1 February 2019 (see Fig. 8).*



Fig. 8. Impact factor E-03-01– share of conclusions provided with regard to the salaries based on cost-orientation (% of submitted requests)

14 ANNEX 1. IMPLEMENTATION OF EVALUATION FACTORS OF OBJECTIVES AND TASKS OF THE COMMUNICATIONS MANAGEMENT AND CONTROL PROGRAMME FOR 2018

Code of the evaluated factor	Names and measurement units of objectives, tasks, evaluation factors	Planned value for 2018	Actual value for 2018	Factor implementation
	Objective 1 – ensuring efficient and transparent competition on the electronic communications and postal service markets			
R-01-81-01-01	The share of the market of alternative public fixed communications networks and service providers (%, in terms of the number of end service users)	11.75	17.1	146
R-01-81-01-02	Market share of postal service providers (except for AB Lietuvos Paštas) (%, in terms of revenue)	63	66.5	106
R-01-81-01-03	The share of the market of alternative broadband Internet access provided by means of fixed communications technologies, service providers (%, in terms of the number of end service users)	55	48.0	87
	Task 1 of Objective 1 – to ensure the absence of distortion and restrictions of competition in electronic communications and postal sectors			
P-01-81-01-01-01	The share of inspections performed on how the undertakings having significant market power follow the imposed obligations (% of the imposed obligations)	100	100	100
P-01-81-01-01-02	The number of performed analyses of markets under the EC Recommendation 2014/710/EU and of other markets subject to <i>ex ante</i> regulation (pcs.)	1	0	0
P-01-81-01-01-03	Share of the EU legislation transposed into domestic law and implemented within the deadlines set within the competence of the Authority (% of legal acts to be transposed and implemented)	99	80	81
P-01-81-01-01-04	The share of subscribers who used the right of number portability (% of the total number of active subscribers)	31	34	110
P-01-81-01-01-05	The share of examined reports on violations of electronic communications infrastructure installation and use (% of the total number of received reports on violations)	100	94	94
P-01-81-01-01-06	The number of planned inspections of electronic communications service providers (units)	19	14	74
P-01-81-01-01-07	The number of planned inspections performed on postal service providers, including their divisions (units)	16	13	81
	Objective 2 – ensuring the protection of rights and legitimate interests of ICT and postal service users within the competence of the Authority			

R-01-81-02-01	Share of complaints from electronic communications service users (consumers) and postal service users regarding the quality of services (% of all received complaints)	19	13.7	72
R-01-81-02-02	The share of types of radio equipment complying with the administrative requirements of the Radio Equipment Regulations (% of the total number of types of inspected equipment)	70	61	87
R-01-81-02-03	The share of types of electric and electronic devices complying with the administrative requirements of the EMS Regulation (% of the total number of types of inspected devices)	72	90	125
R-01-81-02-04	The share of Lithuania's critical electronic communications and Internet network infrastructure and Lithuania's cyber space elements that are under regular monitoring (% of the total number of elements)	100	Functions delegated to the NCSC	Functions delegated to the NCSC
R-01-81-02-05	The growth of the number of users of the remote training system for the use of electronic signatures (% compared to the previous year)	5	1.4	28
	Task 1 of Objective 2 – to reinforce security of electronic communications networks and information as well as reliability and resistance of electronic communications networks			
P-01-81-02-01-01	The share of investigated electronic communications networks and information security incidents (% of the total number of received reports on incidents)	100	Functions delegated to the NCSC	Functions delegated to the NCSC
P-01-81-02-01-02	The number of reports on the issues of the security of electronic communications networks and information published on the websites www.esaugumas.lt and www.cert.lt (pcs.)	30	15	50
P-01-81-02-01-03	The share of investigated reports on websites publishing sensitive information or violating the procedure for publication of restricted information (% of the total number of reports received over the Internet hotline)	100	100	100
P-01-81-02-01-04	The number of published reports on violations of the procedure for control of information prohibited in computer networks of public use and dissemination of restricted public information (pcs.)	4	4	100
P-01-81-02-01-05	The share of examined applications for approval of filtering tools (% of the total number of received applications)	100	No requests received	-
	Task 2 of Objective 2 – supervision of the provision of the electronic communications and postal services, including universal services			
P-01-81-02-02-01	The share of the complaints received from of ICT and postal service users, including consumers, examined within the competence of the Authority (% of the total number of received complaints)	100	94	94

P-01-81-02-02-02	The number of planned inspections of cable television networks (CTV) (units)	20	20	100
P-01-81-02-02-03	Number of operators' networks subject to the monitoring of the service quality indicators (units)	5	5	100
	Task 3 of Objective 2 – assurance of the compliance of radio equipment existing on the Lithuanian market with the mandatory requirements of the Radio Equipment Regulation and the compliance of electric and electronic devices with the requirements of the EMC Regulation			
P-01-81-02-03-01	The number of inspected types of radio equipment for compliance with the administrative requirements of the Radio Equipment Regulation (pcs.)	71	71	100
P-01-81-02-03-02	The number of inspected types of electric and electronic devices for compliance with the administrative requirements of the EMC Regulation (pcs.)	32	35	109
P-01-81-02-03-03	The number of types of radio equipment taken from the market for laboratory testing in order to determine if they comply with the fundamental requirements of the Radio Equipment Regulation (pcs.)	22	26	118
P-01-81-02-03-04	The number of types of electric and electronic devices taken from the market for laboratory testing in order to determine if they comply with the fundamental requirements of the EMC Regulation (units)	17	28	165
P-01-81-02-03-05	Share of conducted assessments of the compliance of radio equipment with the fundamental requirements of the Radio Equipment Regulations (effective use of radio spectrum and electromagnetic compatibility) and of issued test reports (units)	50	60	120
P-01-81-02-03-06	Share of conducted assessments of the compliance of electric and electronic equipment with the fundamental requirements of the EMC Regulation and of issued test reports (pcs.)	85	103	121
	Task 4 of Objective 2 – supervision of trust service providers and provision of trust services they provide			
P-01-81-02-04-01	The share of complaints regarding activities of trust service providers handled within the competence of the Authority (% of all received complaints)	100	100	100
P-01-81-02-04-02	Share of provided methodological assistance to trust service providers (% of all received inquiries)	100	100	100
P-01-81-02-04-03	Share of provided consultations over trust services to the users (% of all received inquiries)	100	100	100
	Objective 3 – allowing for long-term investments in the electronic communications infrastructure and			

	advanced development of ICT			
R-01-81-03-01	Share of the territory of the Republic of Lithuania covered by the moderate strength communications of the fourth-generation (4G) mobile radiocommunication networks (% of the whole of the territory of the Republic of Lithuania)	75	87	116
R-01-81-03-02	Assigned radio frequency band width (MHz) harmonised at the EU level	948	911	96
R-01-81-03-03	Number of registered broadband access mobile radiocommunication radio stations (units)	900 0	13 132	146
	Task 1 of Objective 3 – to perform radio frequency (channel) management, supervision of the use thereof, including monitoring and management of other electronic communications resources			
P-01-81-03-01-01	The share of issued permits granting the right to use radio frequencies (channels) on mobile radiocommunication internal networks (% of the total number of received requests)	95	100	105
P-01-81-03-01-02	The share of issued permits granting the right to use radio frequencies (channels) on fixed service radio stations (% of the total number of received requests)	80	100	125
P-01-81-03-01-03	Issued permits for the experimental use of radio frequencies (channels) (% of the total number of received requests)	90	94	104
P-01-81-03-01-04	Inspections and control measurements of newly installed radio and television broadcasting stations (% of the total number of newly installed stations)	100	100	100
P-01-81-03-01-05	The number of inspections of radio and television broadcasting stations (units)	32	58	181
P-01-81-03-01-06	The number of inspections of internal radiocommunication networks (units)	137	161	118
P-01-81-03-01-07	Share of handled complaints from the users regarding radio interference (% of all received complaints)	95.5	98.2	103
	Objective 4 – integration into the EU and international regulatory space and efficient activities of the Authority			
R-01-81-04-01	Compliance of the factor of the Authority's overall performance functions with the target established by the protocol of the Government of the Republic of Lithuania	<0.3	0.24	The factor does not exceed the desired value
R-01-81-04-02	The number of permanent working groups and committees of the EU and international organizations in the activities whereof the participation of RRT representatives is ensured (units)	29	38	131
	Task 1 of Objective 4 – efficient integration in the decision making process of the EU and international organisations			
P-01-81-04-01-01	The number of notifications, draft documents, positions of Lithuania prepared and coordinated for participation in the	38	77	203

	committees and working groups of the EU Council and of the European Commission, in the committees and working groups of the Body of European Regulators for Electronic Communications (BEREC), the European Regulators Group for Postal Services (ERGP), the European Conference of Postal and Telecommunications Administrations (CEPT), the International Telecommunication Union (ITU), and the Universal Postal Union (UPU), the meeting of the Baltic regulators, other international events (units)			
	Task 2 of Objective 4 – efficient organization, publicity and control of activities of the Authority			
P-01-81-04-02-01	The share of civil servants who participated in in-service training events in the accounting year (% of the total number of civil servants)	85	88.5	104
P-01-81-04-02-02	Number of incorporated advance personnel management instruments applied in the Authority (pcs.)	2	2	100
P-01-81-04-02-03	Accessibility of RRT information systems and their subsystems per year (% of all working time)	90	90	100
	Objective 5 – ensuring performance of obligations that may be imposed on operators and providers of electronic communications services in the interests of national defence, national security and maintenance of public order as well as in cases of extraordinary circumstances			
R-01-81-05-01	Ensured fulfilment of obligations relating to surveillance of electronic communications traffic (%)	100	100	100
	Task 1 of Objective 5 – to ensure that operators and providers of electronic communications services perform their obligations that may be imposed on them taking into account the interests of national defence, national security and maintenance of public order as well as in cases of extraordinary circumstances			
P-01-81-05-01-01	The share of the procured equipment used for the purposes stated in Article 77(1) and/or Article 77(4) of the Law on Electronic Communications of the Republic of Lithuania (% of equipment to be purchased)	100	100	100

The reasons for failure to implement the factors:

The factor **R-01-81-01-03** was implemented by **87%**. The transition of broadband Internet access subscribers using the wireless communication technology WIMAX to LTE platform led to the lower number of subscribers that were using fixed communications technologies: in 2018, it dropped by 1.3% and stood at 788.4 thousand on 31 December 2018.

The factor **P-01-81-01-02** was not implemented. On 18 January 2018, RRT commenced the market analysis on call termination on individual public communications networks at a fixed location, but due to the changes in the staff conducting the analysis, the completion of the market analysis was moved to Quarter II of 2019.

The factor **P-01-81-01-03** was implemented by **81%**. The transposition into the national law and/or implementation of **1** EU legal act is delayed – Commission Implementing Regulation (EU) 2017/2177 of 22 November 2017 on access to service facilities and rail-related services (OJ 2017 L 307, p. 1). In order to ensure the compliance of the national governance with the practice applied in the European Union, the draft needed to be drawn up taking into account Common principles on granting exemptions under Art. 2 (2) of Commission Implementing Regulation EU 2017/2177 approved by the Independent Regulators' Group (IRG-RAIL), which was approved only on 16 November 2019 by IRG-RAIL.

The factor **P-01-81-01-05** was implemented by **94%**. The investigation of 2 reports on violations of electronic communications infrastructure installation and use was moved to 2019.

The factor **P-01-81-01-06** was implemented by **74%**. RRT, when planning the value of the factor, took into account the actual value of the last year, but when compiling the annual list of economic operators engaged in the electronic communications activity, RRT followed the Model of the Risk Assessment-Based Supervision of Economic Operators' Activities and, having assessed the actual values of the riskiness of electronic communications service providers, included the most risky electronic communications service providers in the list of economic operators to be inspected in 2018 and inspected them.

The factor **P-01-81-01-07** was implemented by **81%**. RRT, when planning the value of the factor, took into account the actual value of the last year, but when compiling the annual list of postal service providers to be inspected, RRT followed the Model of the Risk Assessment-Based Supervision of Economic Operators' Activities and, having assessed the actual values of the riskiness of postal service providers, included the most risky postal service providers in the list of economic operators to be inspected in 2018 and inspected them.

The factor **R-01-81-02-01** was implemented by **72%**. The share of complaints of the electronic communications service users (consumers) and postal service users regarding the quality of services dropped in 2018, as more relevant issues that the applicants applied for were related to the salaries for services, amendments to the terms of the agreements and consequences of the termination of the agreements.

The factor **R-01-81-02-02** was implemented by **87%**. After the entry into force of the new Radio Equipment Regulations, the focus was placed on the products of third countries producers when carrying out the market surveillance, where a greater part of products failed to meet the requirements of the Radio Equipment Regulations than it was planned.

The factor **P-01-81-02-01-02** was implemented by **50%**. On the website www.esaugumas.lt 14 pieces of news related to the security on the Internet, and 1 article was published. RRT does not have the data on the number of reports published on the website www.cert.lt, as the functions of CERT-LT were delegated to the NCSC on 1 March 2018.

The factors **R-01-81-02-04** and **P-01-81-02-01-01** were not implemented due to the consolidation of the state cyber security and electronic security functions during which the functions of CERT-LT were delegated to the NCSC on 1 March 2018.

The factor **R-01-81-02-05** was implemented by **28%**. The number of consumers increased insignificantly due to the limited publication of the training system which required the technological upgrade and content update. The update of the content of the training system and procurements of its technical modernisation are planned for 2019.

The factor **P-01-81-02-02-01** was implemented by **94%**. The share of complaints received from ICT and postal service users, including the consumers, was moved to Quarter I of 2019 from 2018. The handling is exercised under the terms and conditions set forth in legal acts.

The factor **R-01-81-03-02** was implemented by **96%**. The 3.6 GHz frequency band is being prepared for the auction which will be held in 2019, therefore two permits for the use of radio frequencies (channels) were withdrawn during the replanning activities.

15 ANNEX 2. IMPLEMENTATION OF EVALUATION FACTORS OF OBJECTIVES AND TASKS OF THE RAILWAY TRANSPORT MARKET REGULATION PROGRAMME FOR 2018

Code of the evaluated factor	Names and measurement units of objectives, tasks, evaluation factors	Planned value for 2018	Actual value for 2018	Factor implementati on percentage
	Task 1 – aim for the conditions of effective competition on the railway transport market			
R-02-82-01- 01	1. Share of applicants' complaints regarding an act and/or omission of the public railway infrastructure manager, railway service facility operators, railway undertakings (carriers), institutions, authorities or organisations examined by the Authority, within its competence, within the set time limits (% of all received complaints)	100	100	100
	Task 1 of Objective 1 – carry out monitoring of the competition on the railway transport market			
P-02-82-01- 01-01	1. Number of railway transport market monitoring reports drafted and submitted to the EC within the set time limits (per year)	1	1	100

16 ANNEX 3. IMPLEMENTATION OF EVALUATION FACTORS OF OBJECTIVES AND TASKS OF THE PROGRAMME OF THE SUPERVISION OF THE CALCULATION OF SALARIES FOR THE REGISTRATION AND SUBMISSION OF DATA FOR 2018

Code of the evaluated factor	Names and measurement units of objectives, tasks, evaluation factors	Planned value for 2018	Actual value for 2018	Factor implementati on percentage
	Objective 1 – assured cost-orientation of the salary for the registration of the registry objects and submission of documents			
R-03-83-01- 01	Share of examined requests regarding cost- orientation of the salary for the registration of the registry objects and submission of documents (% of all received requests)	-	-	-
R-03-83-01- 02	Share of examined requests regarding cost- orientation of free of charge registration of the registry objects and submission of documents (% of all received requests)	-	-	-
	Task 1 of Objective 1 – to ensure that the salaries for the registration of registry objects and submission of documents correspond to the actual operating costs, and the costs incurred due to free of charge registration of registry objects and submission of documents are properly calculated			
P-03-83-01- 01-01	The number of reports drafted and published within the set time limits regarding the implementation of the provisions of the description of the procedure for the calculation of salaries for the submission of documents (per year) (units)	1	0	0

The factors **R-03-83-01-01**, **R-03-83-01-02** and **P-03-83-01-01-01** were not implemented, as in 2018, RRT carried out the preparatory works due to the implementation of the provisions of the *Description of the Procedure* for the Calculation of Salary for the Submission of Documents and Payment of Salary for the Submission of Register Data, Register Information, Documents and/or Copies thereof Submitted to the Register, Data of the State Information Systems (the "Description") approved by Resolution No 45 of the Government of the Republic of Lithuania of 10 January 2018. Pursuant to the provisions of paragraph 4.1 of the Description, the documents of the institutions with regard to the calculation of the salary for the submission of documents will be submitted by RRT as of 1 February 2019.

17 ANNEX 4. RRT FINANCIAL STATEMENT OF 2018

In 2018, RRT carried out three programmes:

Communications Management and Control Programme, code 01.81.

Railway Transport Market Regulation Programme, code 02.82.

Programme of the supervision of the calculation of salaries for the registration and submission of data, Code 03.83.

To fund those programmes under the Law on the Approval of Financial Indicators of the State Budget and Municipal Budgets of the Republic of Lithuania in 2018, the amount of EUR 8,430,000 of the general appropriations was allocated, of which EUR 3,311,000 – for salaries, EUR 2,562,000 – for property acquisition (of which: EUR 1,159,000 of the state budget funds were intended for the procurement of equipment as defined in Article 77(1) and/or Article 77(4) of the Law on Electronic Communications of the Republic of Lithuania, and EUR 100,000 from the state budget for the new function – supervision of the calculation of salaries for the registration and submission of data).

In 2018, the plan of RRT revenue contributions was EUR 7,171,000. Information on every programme carried out by RRT is provided below:

the Communications Management and Control Programme					
ltem No.		Revenue in 2018			
	RRT revenue groups	EUR	%		
1.	Supervision of observance of the conditions for engaging in electronic communications activities	22 736.74	0.33		
2.	Supervision of observance of the conditions for engaging in provision of postal services	17 885.27	0.26		
3.	Revenue from tenders and auctions for granting the right to use radio frequencies (channels) and telephone numbers	0	0		
4.	Setting conditions for the use of radio frequencies (channels) and radio stations and the conditions for engaging in radio amateur activities	117 289.95	1.72		
5.	Supervision of the use of radio frequencies (channels), including radio monitoring	5 960 817.81	87.21		
6.	Supervision of the use of telephone numbers	646 232.27	9.46		
7.	Tests of radiocommunication equipment and telecommunications terminal equipment, tests of electromagnetic compatibility of devices and equipment	69 298.67	1.01		
8.	Other	416.29	0.01		
9.	TOTAL (1+2+3+4+5+6+7+8)	6 834 677.00	100		

The revenue received by RRT in 2018 for the services provided and activities completed according to the Communications Management and Control Programme

In 2018, it was planned to fund the **Communications Management and Control Programme** with the amount of EUR 8,200,000, of which EUR 3,200,000 were assigned for salaries, EUR 2,559,000 – for property asset acquisition (of which EUR 1,159,000 of the state budget funds assigned for the procurement of equipment as specified in Article 77(1) and/or Article 77(4) of the Law on Electronic Communications of the Republic of Lithuania).

In 2018, the plan of revenue contributions from the Communications Management and Control Programme was EUR 7,041,000.

According to the Law on the Budget Structure of the Republic of Lithuania, Resolution No 543 of the Government of the Republic of Lithuania of 14 May 2001 "On the Approval of the Procedure for Structuring and Executing the State Budget of the Republic of Lithuania and of Municipal Budgets", the amount of EUR 395,000 of overperformance and unused contributions to the state budget was carried over to 2018 and it was used to finance the Communications Management and Control Programme carried out by RRT by exceeding common appropriations approved by the Parliament of the Republic of Lithuania. Based on the estimate approved on 16 August 2018, the total amount of EUR 9,308,000 (8,200,000 +1,108,000) was allocated to the Communications Management and Control Programme carried out by RRT was planned – in this sum the offsets of overperformance and unused contributions from the previous year were included.

RRT, in accordance with the provisions of the Law on Electronic Communications, is obliged to assess the conformity and validity of the costs and collected fees. RRT, having taken into account the revenue received in 2017 and unused funds and seeking to balance the revenue and expenses of 2018, by Order No 1V-624 of the Director of RRT of 27 June 2018 established the recalculation coefficient 0.75 for the tariffs of supervision of the use of radio frequencies (channels), including radio monitoring, and of telephone numbers which was in effect from 01 July 2018 to 30 November 2018. The application of the tariff recalculation coefficient allows a flexible balance between revenue and expenses, i. e. to repay the market its overpayments through reduced tariffs, where the revenue received in the current year was higher than expected. Thus, the principle that market players do not pay more than it is necessary to regulate and supervise the market is implemented.

In 2018, the total amount of **revenue contributions transferred by RRT** to the state budget under **the Communications Management and Control Programme was EUR 6,732,300.**

2018						
ltem No.	Type of expenditure	Communications Management and Control Programme				
	Type of experiordure	Pay-box expenses 2018 (EUR)				
1.	Total expenses	5 309 937.16				
	of which:					
1.1.	Wages	3 037 727.67				
1.2.	Social insurance contributions	929 008.83				
1.3.	Costs of the use of goods and services	1 319 897.23				
1.4.	Social allowances (benefits)	22 596.38				
1.5.	Other expenses for current purposes	707.05				

Use of the funds for the Communications Management and Control Programme carried out by RRT in

2.	Tangible and intangible asset expenses	2 838 780.7
	of which:	
2.1	Procurement of fixed assets	2 838 780.7
3.	TOTAL (1+2)	8 148 717.86*

Note: *Of which EUR 1,158,823.95 of the state budget funds were used for the procurement of equipment as defined in Article 77(1) and/or Article 77(4) of the Law on Electronic Communications of the Republic of Lithuania.

The amount of EUR 130,000 was planned for the funding of the **Railway Transport Market Regulation Programme in 2018**, of which EUR 63,000 for salaries and the amount of EUR 0 for property acquisition were approved.

In 2018, the plan of revenue contributions of the Railway Transport Market Regulation Programme was EUR 130,000.

According to the Law on the Budget Structure of the Republic of Lithuania, Resolution No 543 of the Government of the Republic of Lithuania of 14 May 2001 "On the Approval of the Procedure for Structuring and Executing the State Budget of the Republic of Lithuania and of Municipal Budgets", the amount of EUR 80 of over-performance and unused contributions to the state budget was carried over to 2018 and it was used to finance the Railway Transport Market Regulation Programme carried out by RRT by exceeding common appropriations approved by the Parliament of the Republic of Lithuania. Based on the estimate approved on 23 March 2018, the total amount of EUR 210,000 (130,000 +80,000) was allocated to the Railway Transport Market Regulation Programme carried out by RRT was planned – this sum included offsets of over-performance and unused contributions from the previous year.

In 2018, the total amount of revenue contributions transferred by RRT to the state budget under the Railway Transport Market Regulation Programme was EUR 143,426.

. .

_ _

- -

..

Use of funds for the Railway Transport Market Regulation Programme carried out by RRT in 2018							
ltem No.	Type of expenditure	For the railway transport market regulation					
		Pay-box expenses 2018 (EUR)					
1.	Total expenses	81 868.12					
	of which:						
1.1.	Wages	37 659.50					
1.2.	Social insurance contributions	11 560.21					
1.3.	Costs of the use of goods and services	32 648.41					
1.4.	Social allowances (benefits)	0.0					
1.5.	Other expenses for current purposes	0.0					

2.	Tangible and intangible asset expenses	5 083.54
	Of which:	
2.1	Procurement of fixed assets	5 083.54
3.	TOTAL (1+2)	86 951.66**

Note: **Due to the functions not carried out in full scope, RRT did not use part of the funds when performing its functions, to the extent practicable, by means of internal resources.

In 2018, it was planned to finance the Programme of the supervision of the calculation of salaries for the registration and submission of data by the amount of EUR 100,000, of which EUR 48,000 were allocated for salaries, and EUR 3,000 – for property acquisition. The programme was funded from the state budget.

Use of the funds for the programme of the supervision of the calculation of salaries for the registration and submission of data carried out by RRT in 2018 For the programme of supervision of the calculation of salaries for the registration and Item submission of data No. Type of expenditure **Pay-box expenses** 2018 (EUR) 1. **Total expenses** 92 582.38 of which: 1.1. Wages 46 199.46 1.2. Social insurance contributions 14 000.0 1.3. Costs of the use of goods and services 31 382.92 1.4. Social allowances (benefits) 1000.0 1.5. Other expenses (for current purposes) 0.0 2. Tangible and intangible asset expenses 3 000.0 Of which: 2.1 Procurement of fixed assets 3 000.0 3. 95 582.38 **TOTAL (1+2)**

18 ANNEX 5. Regulated markets of the electronic communications sector

Market	Description	Undertakings having significant market power	Imposed obligations						
No acc. to Rec. 2003/ Rec. 2007*/ Rec. 2014			Provision of access	Non- discrimination	Transparency	Price control and cost accounting	Accounting separation	Wholesale line assignment (lease)	Selection of a public telecommunicatio n service provider
1; 2 / 1 / n.	The market of access granted to customers and service recipients, except for customers, to public telecommunication networks at a fixed location	Telia Lietuva, AB		X	х	X	X	X	Х
9/3/1	9/3/1 The market of call termination on individual public telecommunication networks at a fixed location	Telia Lietuva, AB	Х	Х	Х	Х			
		AB Lietuvos Geležinkeliai, AB Lietuvos Radijo ir Televizijos Centras, UAB CSC Telecom, UAB Linkotelus, UAB Mediafon ,UAB Nacionalinis Telekomunikacijų Tinklas", UAB Telekomunikacijų grupė, UAB Ecofon	x			Х			
11 / 4 / 3a	The market of wholesale local access at a fixed location	Telia Lietuva, AB	Х	х	Х	Х	Х		
12 / 5 / 3b	The market of wholesale central access at a fixed location for the mass- market products	Telia Lietuva, AB	Х	Х	Х	Х	Х		
13 / 6 / 4	The market of wholesale high- quality access at a fixed location	Telia Lietuva, AB	Х	Х	Х	Х	X		
16/7/2	The market of voice call termination on individual public mobile telephone networks	Telia Lietuva, AB, UAB Bitė Lietuva, UAB Tele2	Х	Х	Х	Х			
		UAB CSC Telecom, UAB Linkotelus, UAB Ecofon, UAB Mediafon	Х			Х			
18 / n. / n.	The market of broadcasting transmission services to deliver broadcast content to end users	Telia Lietuva, AB, AB Lietuvos Radijo ir Televizijos Centras	Х	Х	Х	Х	Х		
n. / n. / n.	The market of services of providing broadcasting transmission means	AB Lietuvos Radijo ir Televizijos Centras	Х	Х	Х	Х	Х		

19 ANNEX 6. The orders of the Director of RRT in 2018

1. Order No 1V-19 of the Director of RRT of 12 January 2018 "On the Amendment of Order No 1V-698 of the Director of RRT of 21 June 2016 "On the Approval of the National Table of Radio Frequency Allocation and Plan of the Use of Radio Frequencies and Repealing Some Orders of the Director of the Communications Regulatory Authority of the Republic of Lithuania";

2. Order No 1V-20 of the Director of RRT of 12 January 2018 "On the Repealing Some Orders of the Director of the Communications Regulatory Authority of the Republic of Lithuania";

3. Order No 1V-40A of the Director of RRT of 19 January 2018 "On the Amendment of Order No 1V-148 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 11 February 2005 "On the Approval of the Internal Regulation of the Communications Regulatory Authority of the Republic of Lithuania";

4. Order No 1V-92 of the Director of RRT of 6 February 2018 "On the Amendment of Order No 1V-1087 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 7 November 2011 "On the Approval of the Specification of the Procedure with a view to Subscribers and/or Users Being Able to Use the Services of Institutions Providing Emergency Call Services";

5. Order No 1V-93 of the Director of RRT of 6 February 2018 "On the Amendment of Order No 1V-261 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 24 February 2006 "On the Approval of the Rules on Connection to the Public Communications Network at a Fixed Location and Determination of Public Telephone Service Quality Indicators and Provision of Data";

6. Order No 1V-94 of the Director of RRT of 6 February 2018 "On the Amendment of Order No 1V-214 of the Director of RRT of 15 February 2006 "On the Approval of the Specification of the Requirements for the Quality of Universal Services and Specification of the Requirements for Universal Service Providers Ensuring Accessibility of Public Telecommunication Services Provided by Public Payphones, Including Accessibility of Payphones to the Disabled Service Users";

7. Order No 1V-95 of the Director of RRT of 6 February 2018 "On the Amendment of Order No 1V-889 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 20 September 2011 "On the Approval of the Rules on the Provision of Universal Electronic Communications Services";

8. Order No 1V-126 of the Director of RRT of 13 February 2018 "On the Amendment of Order No 1V-1188 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 15 December 2010 "On the Approval of the List of Legal Acts Regulating the Activity of the Communications Regulatory Authority of the Republic of Lithuania or Establishing the Requirements for the Areas of Supervision Performed by the Communications Regulatory Authority of the Republic of Lithuania";

9. Order No 1V-309 of the Director of RRT of 30 March 2018 "On the Amendment of Order No 1V-1005 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 26 September 2016 "On the Approval of the Settings of the Electronic Service Information System of the Communications Regulatory Authority of the Republic of Lithuania";

10. Order No 1V-310 of the Director of RRT of 30 March 2018 "On the Amendment of Order No 1V-1006 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 26 September 2016 "On the Approval of the Security Provisions of the Electronic Service Information System of the Communications Regulatory Authority of Lithuania";

11. Order No 1V-311 of the Director of RRT of 30 March 2018 "On the Amendment of Order No 1V-1287 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 14 December 2011 "On the Approval of the Security Provisions of the Information System of the Communications Regulatory Authority of the Republic of Lithuania";

12. Order No 1V-312 of the Director of RRT of 30 March 2018 "On the Amendment of Order No 1V-656 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 29 May 2015 "On the Approval of the Regulations on the Management of Numbers and Codes and the Right to Use Domains with the Name of Lithuania and on the Information System of the Administration of the List of Electronic

Communications Service and Network Providers and of the Regulations on Security of the Management of Numbers and Codes and the Right to Use Domains with the Name of Lithuania and on the Information System of the Administration of the List of Electronic Communications Service and Network Providers";

13. Order No 1V-313 of the Director of RRT of 30 March 2018 "On the Amendment of Order No 1V-507 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 10 April 2006 "On the Approval of the Provisions of the Information System of the Communications Regulatory Authority of the Republic of Lithuania";

14. Order No 1V-394 of the Director of RRT of 25 April 2018 "On the Approval of the Rules on Assurance of Integrity of Public Communications Networks".

15. Order No 1V-436 of the Director of RRT of 07 May 2018 "On the Amendment of Order No 1V-148 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 11 February 2005 "On the Approval of the Internal Regulation of the Communications Regulatory Authority of the Republic of Lithuania";

16. Order No 1V-526 of the Director of RRT of 1 June 2018 "On the Approval of the Description of the Requirements for Cost Attribution to the Activities of the Submission of Documents";

17. Order No 1V-559 of the Director of RRT of 13 June 2018 "On Repealing Order No 1V-408 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 19 April 2011 "On Setting the Minimums Amount of Insurance for Qualified Certification Service Providers Creating Certificates";

18. Order No 1V-588 of the Director of RRT of 21 June 2018 "On the Approval of the Specification of the Procedure for Granting Status of Qualified Trust Service Providers and Qualified Trust Services and Incorporation Thereof in the National Trusted List and Provision of Activity Reports of Qualified Trust Service Providers";

19. Order No 1V-596 of the Director of RRT of 25 June 2018 "On the Amendment of Order No 1V-148 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 11 February 2005 "On the Approval of the Internal Regulation of the Communications Regulatory Authority of the Republic of Lithuania";

20. Order No 1V-624 of the Director of RRT of 27 June 2018 "On Setting the Tariff Coefficients for the Supervision of the Use of Radio Frequencies (Channels), including Radio Monitoring, and of Telephone Numbers";

21. Order No 1V-661 of the Director of RRT of 12 July 2018 "On the Amendment of Order No 1V-1025 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 29 July 2014 "On the Approval of Maximum Tariffs of the Universal Postal Service";

22. Order No 1V-686 of the Director of RRT of 24 July 2018 "On the Amendment of Order No 1V-670 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 14 June 2016 "On the Approval of the Technical Regulation for Radiocommunication Equipment";

23. Order No 1V-731 of the Director of RRT of 10 August 2018 "On the Approval of the Plan for the Radio Communications Development in the 470-790 MHz Radio Frequency Band";

24. Order No 1V-752 of the Director of RRT of 10 August 2018 "On the Amendment of Order No 1V-1005 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 26 September 2016 "On the Approval of the Settings of the Electronic Service Information System of the Communications Regulatory Authority of the Republic of Lithuania";

25. Order No 1V-827 of the Director of RRT of 05 September 2018 "On the Amendment of Order No 1V-367 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 7 April 2011 "On the Approval of the Tariffs of the Fees for the Services Provided and Works Performed by the Communications Regulatory Authority of the Republic of Lithuania and of the Payment Procedure";

26. Order No 1V-836 of the Director of RRT of 6 September 2018 "On the Amendment of Order No 1V-730 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 6 May 2013 "On the

Approval of the Plan for the Radio Communications Development in the 790-862 MHz Radio Frequency Band";

27. Order No 1V-868 of the Director of RRT of 13 September 2018 "On the Amendment of Order No 1V-698 of the Director of RRT of 21 June 2016 "On the Approval of the National Table of Radio Frequency Allocation and Plan of the Use of Radio Frequencies and Repealing Some Orders of the Director of the Communications Regulatory Authority of the Republic of Lithuania";

28. Order No 1V-947 of the Director of RRT of 03 October 2018 "On the Amendment of Order No 1V-297 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 17 September 2004 "On the Approval of the Rules on Market Analyses";

29. Order No 1V-1055 of the Director of RRT of 26 October 2018 "On the Approval of the Description of the Procedure for Verifying the Identity and Additional Specific Attributes when Issuing Qualified Certificates for Electronic Signature, Electronic Seal and Website Authentication";

30. Order No 1V-1112 of the Director of RRT of 12 November 2018 "On the Amendment of Order No 1V-526 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 1 June 2018 "On the Approval of the Description of the Requirements for Cost Attribution to the Activities of the Submission of Documents";

31. Order No 1V-1113 of the Director of RRT of 12 November 2018 "On the Amendment of Order No 1V-889 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 20 September 2011 "On the Approval of the Rules on the Provision of Universal Electronic Communications Services";

32. Order No 1V-1126 of the Director of RRT of 13 November 2018 "On the Amendment of Order No 1V-148 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 11 February 2005 "On the Approval of the Internal Regulation of the Communications Regulatory Authority of the Republic of Lithuania";

33. Order No 1V-1191 of the Director of RRT of 6 December 2018 "On Repealing Order No 1V-334 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 14 April 2008 "On Serving Individuals under One-Stop-Shop Principle at the Communications Regulatory Authority of the Republic of Lithuania and Repealing Order No 1V-975 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 14 November 2005 "On the Approval of the Rules on Serving Citizens and Other Individuals at the Communications Regulatory Authority of the Republic of Lithuania";

34. Order No 1V-1236 of the Director of RRT of 14 December 2018 "On the Amendment of Order No 1V-670 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 14 June 2016 "On the Approval of the Technical Regulation for Radiocommunication Equipment";

35. Order No 1V-1237 of the Director of RRT of 14 December 2018 "On the Amendment of Order No 1V-1328 of the Director of the Communications Regulatory Authority of the Republic of Lithuania of 15 December 2006 "On the Approval of the Technical Regulation for Electromagnetic Compatibility";

36. Order No 1V-1255 of the Director of RRT of 20 December 2018 "On the Approval of the Typical Terms of Reference of the Calculation of Salaries for the Submission of Documents and Verification of Compensated Costs".