

Report on the activities of the President of the Office of Electronic Communications for 2018

Warsaw, July 2019

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Introduction

The President of the Office of Electronic Communications is the regulator of the telecommunications and postal market in Poland, he manages the frequency resources and monitors the fulfilment of requirements in the area of electromagnetic compatibility. He is also a specialized authority in the field of inspecting products emitting or susceptible to emission of the electromagnetic field, including the telecommunications equipment and devices placed on the market in Poland. The President of UKE is a legally distinct and independent body. The President of UKE is appointed by the Sejm with the consent of the Senate upon the request of the Prime Minister.

According to the "Strategic lines of actions of the President of UKE for 2017-2021" adopted in 2017, the regulator:

- a. prioritises the protection of consumer interests, the development of infrastructure and services as well as effective market regulations,
- b. supports the development of technology and innovation, creates the foundations of 5G and new models of network use together with the market,
- c. seeks telecommunications and postal services to meet social needs, not only in terms of prices, but also the quality and ergonomics of use,
- d. develops his own competencies to better understand and design electronic communication, guided by the values of Honesty, Creativity and Effectiveness.

Mission of the President of UKE

Providing citizens with access to modern telecommunications and postal services in a developing market and dynamic international environment.

Vision of the President of UKE

Impartial, professional and credible moderator of market developments, working with understanding of societal needs and rules of the business sector functioning.

1. Protection of consumer interests

1.1. The availability of universal services on the telecommunications market

The essence of universal service is to provide every user in the country with access to the basic telecommunications services of good quality and at an affordable price, such as:

- a. connection to a network in a fixed location for fixed-line telephony and the Internet,
- b. telephone subscription service,
- c. domestic and international telephone services,
- d. National Numbers Office (OBN),
- e. National Directory of Subscribers (OSA),
- f. public payphones (PAS).

In the period from 8 May 2006 to 8 May 2011, Telekomunikacja Polska S.A., currently Orange Polska S.A. (OPL), was the designated undertaking, obliged to provide the universal service throughout the country in the abovementioned scope. At present, no telecommunications undertaking in Poland is designated to fulfil the obligation to provide the universal service. The services included in this obligation are provided by telecommunications undertakings on a commercial (market) basis.

Only if the market mechanism does not lead to satisfying the needs of users throughout the country or part of the country in the scope of the universal service or individual services included in its scope, an undertaking or undertakings should be obliged to provide the universal service.

In November 2018, UKE conducted an opinion survey on the functioning of the telecommunications services market and consumer preferences, and then prepared a report on the status and assessment of the accessibility, quality and affordability of the services included in the universal service. The report contains an image of the needs of end users and presents the status of ensuring particular services included in the universal service by the market and an assessment of the accessibility, quality and affordability of those services.

According to a consumer survey conducted in 2018, approximately 93% of respondents used a mobile phone during the analysed period. Nearly 73% of respondents had access to the Internet. The least popular was fixed-line telephony, which was used by only 9% of respondents.

The report shows that the level of users' demand for fixed-line telephony services is low, and the supply of the services significantly exceeds the demand, the number of fixed-line telephony subscribers is falling, and both consumers and business customers are less and less interested in using the services. What is more, the service of connecting the network termination at a fixed location, which is part of the universal service, can be provided in any technology, including wireless. Therefore, it is not necessary to establish a connection to a fixed-line network to be able to provide access to telephone services and the Internet.

The respondents themselves mostly assess well both the range of services and the matching of the offer on the market (76.6% of positive indications), the quality of such services (76%), as well as their availability (79%). Services are affordable. In the case of mobile telephony, the respondents paid an average of PLN 49.9 in 2018. The average monthly cost of using fixed-line telephony was lower and amounted to 39.3 PLN. On the other hand, the monthly Internet access bill amounted to PLN 51.5 on average.

Services such as the National Numbers Office, the National Directory of Subscribers and public payphones are not very popular at the moment. The percentage of people declaring that they never used such services was respectively: 70% (OBN), 63% (OSA) and 45% (PAS).

Taking into account the results of the consumer survey and consultations of the Report entitled "Status and assessment of accessibility, quality and affordability of services included in the universal service", UKE confirms that all services included in the universal service on the telecommunications market are currently available in the territory of Poland. The users' demand for services included in the universal service is ensured within the framework of the market mechanism, while maintaining adequate accessibility, affordability and good quality, which proves that there are no grounds to designate an undertaking / undertakings to fulfil the universal service obligation.

1.2. Survey of opinions and preferences of the telecommunications market consumers

In 2018, UKE once again conducted a public opinion survey on the functioning of the telecommunications services market and consumer preferences. It was country-wide and was addressed to several groups of respondents, i.e. individual customers as well as institutional customers. Similarly to the previous year, parents and children aged 7-14 were also surveyed. The selection of the research sample corresponded to the population structure (questions were addressed to 1 600 individual customers, 400 institutional customers and 500 children together with their parents).

The results of the work allowed to gain broad knowledge about the functioning of the telecommunications market from the point of view of its participants. Individual customers and entrepreneurs commented, among others, on the use of telecommunications services, prices and safety in the Internet. Opinions were collected on the new aspects of the telecommunications market, related to OTT services and the development of the 5G network¹, as well as the implementation of the EU Digital Single Market Strategy.

Individual and institutional customers also assessed the functioning of the telecommunications market, while entrepreneurs referred to the use of cloud computing and the processing of large data sets in their operations. Individual customers also commented on bundled services, and parents and children on the Internet of Things / Internet of toys.

¹ Fifth generation mobile technology.

1.3. Role of the Internet - research on individual and institutional users

In 2018, UKE conducted a study on the role of the Internet in our personal and professional life in the context of changing the access medium and subscribed bandwidth, with particular focus on the fibre-optic networks built under the Operational Programme Digital Poland (OPDP). It mainly involved individuals who had fibre-optic access to the Internet at home and the aim was to determine the impact of access to the fibre-optic Internet on behaviours and activities undertaken on the Internet. UKE also analysed the reasons for the change of the telecommunications operator providing the Internet access service and identified the types of distortions accompanying the service provided. The persons participating in the analysis included a specific group of respondents being active, conscious Internet users, profiting from the activities of the network - youtubers, bloggers, players. These respondents were asked about the nature of their activity and the importance of fibre-optic Internet access with respect to making a decision regarding the development of their own business.

1.4. Maps of demand

In 2018, UKE continued to collect reports regarding the demand for the following services:

- a. fixed-line telephone,
- b. broadband Internet,
- c. television,
- d. Internet access for free or for a price lower than the market price provided in public places via wireless networks (hotspots) by local government authorities.

Users of the search engine could report the demand for the above services by filling out a form in the data search engine for telecommunications services and infrastructure². The data submitted to UKE can be displayed directly in the map window of the search engine or downloaded as *.csv or *.xlsx files for 4 levels of the administrative division of the country (the whole country, province, district, commune).

The maintenance of national demand maps by UKE is covered by the Efficient State Strategy 2020. The demand maps are also available as an information resource of CRPI - the Central Repository of Public Information on the DanePubliczne.gov.pl website.

In 2018, the number of requests for specific services on the territory of the country covered by maps was:

- a. for broadband Internet - 1 441 (more than 80% of which were NGA requests),
- b. TV + Internet package - 218,
- c. television - 9.

² More: <https://archiwum.uke.gov.pl/mapa/>.

In 2018, requests regarding fixed-line telephone and hotspots were not received.

The continuous update of the demand maps enables the identification of places where there is a demand for the above-mentioned telecommunications services and, as a consequence, it enables telecommunications undertakings to direct their activities to these areas.

1.5. Access to free Internet in public areas

UKE, in 2018, initiated 4, and conducted a total of 16 administrative proceedings regarding the consent to provide the free Internet access service by local government authorities, as referred to in Article 7 of the Act on supporting the development of telecommunications services and networks, hereinafter referred to as the "Mega-law". In 2018, UKE issued:

- a. 11 decisions approving the provision of free Internet access service by local government authorities and specifying the terms and scope of the service,
- b. 2 decisions changing the previous decisions regarding the consent to provide a free Internet access service by local government authorities,
- c. 3 decisions discontinuing the proceedings due to the entry into force of legal changes.

In total, at the end of 2018, there were nearly 6 000 local government hotspots in operation in Poland, for which an UKE consent or opinion was issued.

Since 12 December 2018, new terms and conditions for the provision of free Internet access by local government authorities have been applicable:

- a. range of hotspots limited only to public places,
- b. minimum bit rate of 30 Mb/s,
- c. no consents issued in the form of a decision - it is only necessary to submit an application in electronic form to UKE,
- d. other conditions specified in the Ordinance of the Minister of Digitization of 18 October 2018 on the minimum bit rate of the connection for the Internet access service provided by local government authorities.

As a result of the works related to the amendment of the Mega-law, which were initiated by UKE, the provisions, inter alia, removing the obligation to issue decisions, removing functional limitations regarding the free access service and increasing the quality parameters of services provided with the use of hotspots, entered into force in 2018.

1.6. Monitoring the quality of services

UKE carried out activities in the area of monitoring the quality of Internet access services in Poland based on the rates of data downloading and uploading speed as well as packet delays. These activities consisted in obtaining and developing measurement data, and their summary was

included in the report on monitoring the implementation of the provisions of the Regulation 2015/2120, published on 25 June 2018. The data dates back to April 2016, April 2017 and April 2018, which allowed to present not only the current situation, but also the changes taking place over two years. The data was collected on the basis of measurements made by Internet users with widely available and popular measurement applications in Poland, i.e.:

- a. an application available from the level of the Internet browser³ - the results concerned all access technologies in fixed and mobile networks (performed: in April 2016 - approx. 1.3 million tests, in April 2017 - approx. 1.7 million tests, and in April 2018 - approx. 1.7 million tests),
- b. Internet Speed Test application available on mobile devices - results related to all access technologies in mobile networks (performed: in April 2016 - approx. 78 thousand tests, in April 2017 - approx. 111 thousand tests, and in April 2018 - approx. 250 thousand tests).

The results of measurements made with the use of a browser application indicated a clear increase in data transmission speed in the download (from 20 to 35 Mb/s) and upload (from 7 to 14 Mb/s) and a minimal increase in packet delay (from 37 to 38 ms) between April 2016 and April 2018. This trend is reflected in the increase in the number of measurements whose data download speed results are in the ranges above 30 Mb/s and above 100 Mb/s. This is a positive signal in the context of the implementation of the Digital Agenda for Europe 2020.

It should be noted that still only 24% of measurements provide results above 30 Mb/s, 6% of measurements provide results above 100 Mb/s, and the average value of results is 34 Mb/s. When using the given measurement method, it should be taken into account that the results were achieved by users on their end devices and include the influence of such factors as the parameters of the terminal device and the way it is connected to the Internet. The impact of both factors means that the measurement results correspond to the users' perception level and are lower than the parameters of services provided by providers at the network termination points. An analysis at the level of individual provinces indicates an even distribution of the quality of services throughout the country.

In 2018, UKE conducted a competition for the selection of an entity that will provide a measurement system for the purposes of a certified mechanism for monitoring Internet access services, referred to in Article 4 (4) of Regulation 2015/2120. On 29 November 2018, UKE granted a certificate for a period of 24 months from 1 December 2018 for a stationary application for computers with the Windows operating system - PRO Speed Test (the application provider is V-Speed sp. z o.o. based in Oborniki Śląskie).

The application can be used to demonstrate permanent or regularly repeated, significant discrepancies between the actual performance of the Internet access service and the values indicated in the contract. The possibility of using a certified monitoring mechanism to demonstrate improper performance of the contract with the evidentiary effects provided for

³ Internet browser available at <http://www.speedtest.pl>.

in the regulations applicable to contracts concluded or extended after 29 November 2015. The application enables conducting certified measurements and generating a report of certified measurements of the quality of Internet access (subscribers will gain access to reliable information on the quality of services provided to them). The report can be used by consumers, among others in complaint proceedings or in the case of using other legal protection measures to seek redress from service providers due to non-compliance with contractual parameters of the speed of downloading and uploading data.

In addition to the desktop application, the PRO Speed Test measuring system consists of:

- a. the pro.speedtest.pl website and a user's panel,
- b. mobile applications with Android and iOS,
- c. internet application (WEB).

1.7. Roaming regulations (RLAH)

UKE continued in 2018 to monitor the implementation of the principle of price alignment in roaming in the European Union introduced in 2017 under Regulation 2015/2120 with prices of services provided in the country (*roam like at home* - RLAH). UKE verified the amounts of additional fees for roaming services charged in accordance with the provisions of the Regulation, specified in model contracts and required the cessation of infringements in the event of irregularities. It also monitored and supervised the fair use policy applied by telecommunications operators and the measures for the sustainability of removing additional charges for retail roaming services.

The use of roaming in the European Economic Area (EEA) at domestic prices is possible for all Polish subscribers as a result of actions taken by UKE.

UKE is entitled to agree to the use of an additional regulated roaming fee in the event when the provider demonstrates that by providing roaming services in the EU and EEA at domestic prices in accordance with the RLAH principle, losses are incurred, i.e. revenues from the services do not cover the costs of their provision. This premise occurs when the provider demonstrates that due to the entry into force of the RLAH principle, there is a risk that the domestic price model would be compromised and there will be a noticeable impact on the increase in domestic prices due to the high level of wholesale roaming charges, as compared to domestic retail prices.

In 2018, UKE issued 13 decisions approving the use by Polish mobile telephony operators of an additional fee for the provision of regulated retail roaming services to the extent necessary to cover the costs of the services and one decision to discontinue proceedings. Approvals of the application of an additional regulated roaming fee were issued for a definite period of 12 months in relation to 12 telecommunications undertakings. The issued decisions allow to minimize the

losses of the operator that are related to the implementation of the RLAH principle and consequently to avoid the increase in the prices of domestic services.

UKE addressed three questionnaires regarding the status of the roaming services market to operators on the Polish mobile services market. The result of the analysis of the cost, revenue and traffic data related to roaming was a report illustrating the situation after the RLAH principle came into force in the period from 15 June 2017 to 14 June 2018.

The analyses carried out by UKE indicated the main elements affecting the level of operator losses: a significant increase in the use of roaming services after the introduction of the RLAH principle (entailing high costs of purchasing wholesale traffic), unfavourable traffic balance (Poles more often use roaming in the EEA than guests from abroad in Poland), and also one of the lowest in the EEA revenues per the retail customer for mobile telephony services.

What is more, in 2018, representatives of UKE participated in the implementation of Regulation 2015/2120 in the field of Internet traffic management, specialist services and transparency of commercial contracts and practices, in the following forms:

- a. development of an approach of UKE to the application of the Regulation 2015/2120 in specific cases,
- b. participation in the work of BEREC in the implementation of the "BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules",
- c. preparation of an UKE Questionnaire related to the monitoring and ensuring compliance of the offered Internet access services with the requirements of Articles 3 and 4 of Regulation 2015/2120 with respect to the applied traffic management practices, the provision of specialist services, contractual provisions and commercial practices, transparency requirements for Internet service providers and procedures for handling complaints,
- d. asking 20 Internet service providers (ISP) to provide answers to questions contained in the UKE Questionnaire,
- e. preparation for publication of a report on monitoring the application and the state of implementation of Regulation 2015/2120 in Poland from 1 January to 30 April 2017,
- f. analysis of the responses to the UKE Questionnaire, taking measures to remove identified irregularities in the area of the applied traffic management practices,
- g. handling complaints from end users about the practices of Internet service providers, preventing them from using the open Internet, through the use of traffic management measures.

The effect of UKE's work was the publication of a report on monitoring the implementation of Regulation 2015/2120 in Poland and submitting it to EC and BEREC.

At the same time, in November 2018 UKE carried out an assessment of the type and scale of possible problems resulting from the non-contractual exit of Great Britain from the European Union. The analysis indicates the possible consequences of the loss of power 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 and Commission Implementing Regulation (EU) 2017/2311 of 13 December 2017 setting the weighted average of maximum mobile termination rates across the Union and repealing Implementing Regulation (EU) 2016/2292 in Great Britain, after Brexit. It was indicated above all that in the case of wholesale services, the rules limiting the maximum amount of fees for these services (resulting in particular from Articles 7, 9 and 12 of the above-mentioned Regulation 531/2012) will not apply, which may involve potential renegotiation of prices on wholesale market and possible increase in prices of services on the retail market. Work to ensure the smallest possible impact of the UK's exit process on the conditions for the provision and use of roaming services in the United Kingdom is continued in 2019.

1.8. Control of price lists and regulations for the provision of telecommunications services

The purpose of UKE's monitoring of price lists and regulations for the provision of telecommunications services (ex-ante) is to supervise compliance with regulatory obligations by an operator with significant market power on regulated retail markets and, as a result, to provide pro-consumer tariff solutions. In 2018, OPL held a significant market position on 2 regulated retail markets:

- a. the domestic market for the provision of connection services to the fixed public telephone network and maintaining readiness to provide telecommunications services to consumers (market 1),
- b. the domestic market for the provision of connection services to the fixed public telephone network and maintaining readiness to provide telecommunications services to end-users, excluding consumers (market 2),

and on these markets it was obliged to comply with:

- a. the obligation not to hinder market entry for other undertakings,
- b. the obligation not to apply unjustified preferences to specific users, with the exceptions provided in the Telecommunications Act,
- c. the obligation not to oblige end-users to use services that are unnecessary for them,
- d. the obligation to submit price lists and regulations for the provision of services to UKE for approval,

and additionally with respect to maintaining readiness to provide telecommunications services:

- e. the obligation not to restrict competition by setting underestimated prices for services.

Under the obligation to submit price lists and regulations for the provision of services for approval, OPL in 2018 submitted an application to UKE to amend the regulations for the provision of connection services to the fixed public telephone network and to maintain readiness to provide

telecommunications services in the fixed public telephone network as a result of introducing an out-of-court settlement procedure of consumer disputes and the liquidation of the amicable Consumer Court at the President of UKE, pursuant to Article 5 of the act amending the Telecommunications Act⁴.

The projects of changing the price lists for the provision of services submitted by OPL (OPL application dated 6 July 2018) were accepted by UKE (they fulfilled the required obligations and resulted directly from the change of the applicable provisions of law).

1.9. Information and education activities

In 2018, UKE ran information and education campaigns for various groups of users of telecommunications services.

Click sensibly

The campaign is targeted at the youngest users of telecommunications services and their parents, teachers and caretakers, with the aim to promote a safe use of the Internet. In 2018, a total of 2 140 lessons for 51 300 children were organized at schools in Poland. Thanks to the campaign, the students learned how to use smartphones, computers, games and applications available on the Internet, how to protect their personal data and defend themselves against cyberbullying.

The President of UKE also became a partner of the "Let's be safe together" campaign initiated by Warsaw Trams.

Coding with UKE

UKE has conducted "Coding with UKE" workshops aimed at developing digital literacy among the children and youth of primary schools. In 2018, 3 063 children learned the basics of programming during 209 workshops.

In October 2018, UKE took part in the CodeWeek (19 workshops for 700 children were organized as part of the event).

In December 2018, the Office and the ArchitectsPL Foundation co-organized the campaign "Code & Share. Technologies of the future". As part of the campaign, UKE and the Foundation established a Guinness record by conducting a lesson on new technologies with a simultaneous participation of 1 793 students from 64 primary schools from Poland and Lithuania. The purpose of the lesson was, among others, to raise children's competences for their future in the digital world and in the information society, making them aware of the importance of acquiring skills that may be necessary to perform professions that are yet to be created.

I know what I'm signing

In 2018 UKE ran the "I know what I'm signing" campaign addressed to consumers concluding contracts, primarily to the elderly. They are the most frequent victims of unfair commercial

⁴ Act of 10 May 2018 amending the Telecommunications Act and certain other acts (Journal of Laws of 2018, item 1118).

practices of representatives of operators. UKE held 135 meetings for over 10 000 consumers in 2018.

Polish Sign Language

UKE conducted workshops for deaf and hard-of-hearing persons. In 2018, 229 people participated in 17 meetings conducted in Polish Sign Language. 29 educational films were also recorded using Polish Sign Language.

Moreover, in 2018, UKE organized 6 meetings with Consumer Ombudsmen in the "Together for the Consumer" cycle. During the meetings, UKE experts presented to the Ombudsmen issues related to consumer protection on the telecommunications market.

UKE published information on the current activities and basic rights and obligations of subscribers to telecommunications services on the UKE website and the subpage of the Consumer Information Centre (CIK)⁵. 7 tutorials and a series of articles on network security we published on the CIK website. There was also a weekend cycle called "UKE recommends", with over 50 pieces of consumer advice published on Facebook.

The campaigns increased the awareness of children and adults of the use of telecommunications services. In addition to workshops, lessons and direct meetings, UKE distributed more than 100 000 leaflets (including via the Consumer Ombudsmen). This has a direct impact on eliminating abuse when entering into contracts and accessing the Internet. The summary of education campaigns conducted by UKE in 2018 with rounded figures is shown in Figure 1.

⁵ More on: <http://www.cik.uke.gov.pl>.

Figure 1
Summary of UKE education activities



Source: Office of Electronic Communications

1.10. Direct actions for the consumers of the telecommunications market

UKE intervened in matters relating to the functioning of the telecommunications services market, conducted out-of-court ADR proceedings and provided advice to consumers.

Table 1
Interventions and out-of-court proceedings conducted at UKE

Year	2014	2015	2016	2017	2018
Interventions	5 743	5 223	5 220	5 194	3 214
ADR	3 074	2 406	2 672	1 559	1 397

Source: Office of Electronic Communications

The most common problems reported by consumers in 2018 include:

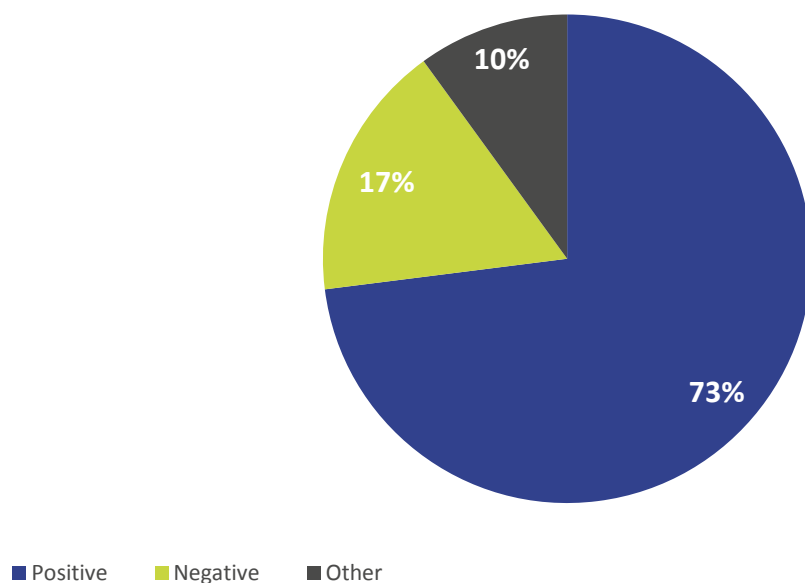
- a. invoices / fees - 21%,
- b. improper performance of services - 12%,
- c. termination of the contract - 10%,
- d. transfer of services (new provider) - 10%,
- e. change of contract terms - 9%.

In 2018, 32 581 people visited the CIK website. The page was displayed 133 206 times.

As part of interventions and the out-of-court procedures, UKE regained PLN 1.1 million for consumers in 2018. It considered 1 397 ADR applications and 3 214 requests for intervention, responded to 2 223 consumer inquiries, provided 240 pieces of advice to subscribers in direct consultations and 24 thousand telephone consultations.

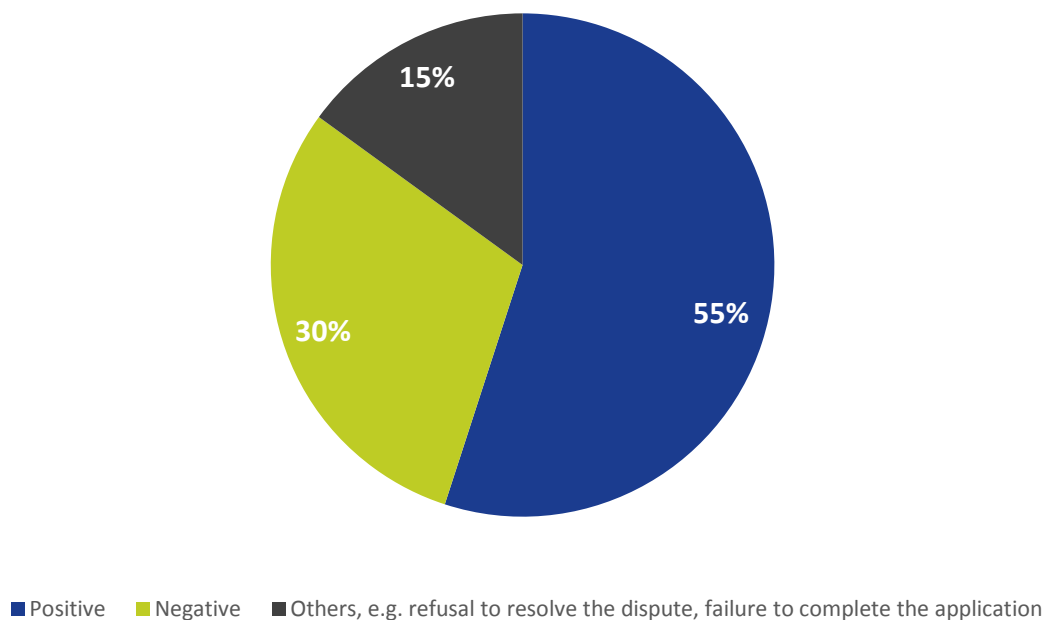
Chart 1

Effectiveness of intervention



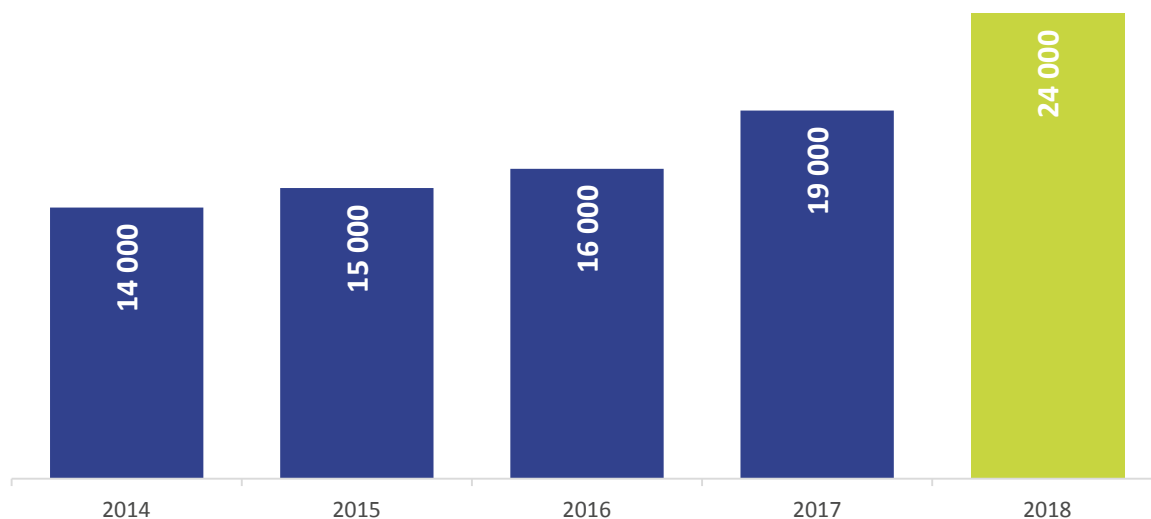
Source: Office of Electronic Communications

Chart 2
Effectiveness of ADR proceedings



Source: Office of Electronic Communications

Chart 3
Advice provided under the CIK UKE



Source: Office of Electronic Communications

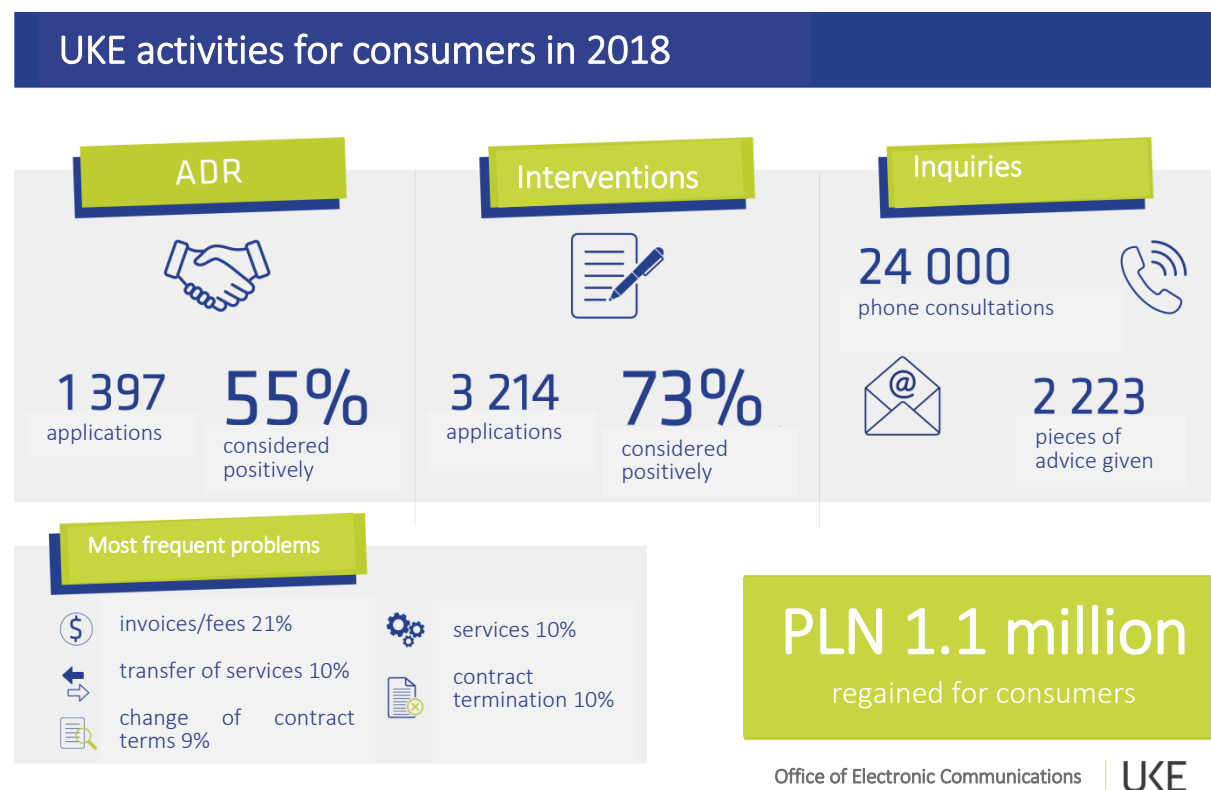
On the Office's website or subpage of the Consumer Information Centre (CIK), UKE published information on: the basic rights and obligations of subscribers to publicly available telecommunications services, principles of providing telecommunications services, methods

of out-of-court resolution of consumer disputes (ADR), and interventions by UKE, as well as advice on how to assert your rights. Along with the information, consumers were provided with educational videos and samples of useful documents. UKE also provided current warnings about threats on the telecommunications market and information important for consumers about: the liquidation of the Amicable Consumer Court at the President of UKE and the amendment of the Telecommunications Act.

UKE cooperated with the authorities and entities protecting consumer interests, including the President of UOKiK and Consumer Ombudsmen. In June 2018, UKE participated in a meeting organized by the European Commission, the ADR Assembly 2018 in Brussels, dedicated to the functioning and development of ADR proceedings. Moreover, as part of its competence, UKE undertook actions aimed at securing and protecting subscribers' interests in connection with the termination of telecommunications activities by Hyperion S.A. and Rebtel Poland sp. z o.o. and initiated actions of telecommunications undertakings and the Polish Bank Association aimed at limiting the frauds on the telecommunications and banking market related to the use of duplicates of SIM cards.

Figure 2

Summary of UKE activities for consumers



Source: Office of Electronic Communications

1.11. Increasing the availability and usability of services

Monitoring the accessibility of entrepreneurs' websites

Since 2016, UKE has been investigating the availability of websites and mobile applications of telecommunications and postal operators. In 2018, UKE extended its analysis to websites of postal operators and mobile applications of telecommunications and postal operators. The research covered 22 websites of telecommunications undertakings, 15 websites of postal operators and 15 applications. As part of the presentation of the report, UKE conducted workshops on creating accessible websites and applications for representatives of both markets.

UKE carried out inspections on the implementation by telecommunications operators of the detailed requirements related to the provision of resources for people with disabilities, which was carried out for the first time with the participation of all regional branches. UKE audited a total of 16 local and 8 countrywide operators. The purpose of the audit was to assess the quality of service for people with disabilities in terms of the architectural adjustment of customer service offices, ensuring proper procedures and instructions as well as appropriate competencies of employees.

Initiating new solutions and resources for employees and customers of UKE with special needs

In 2018 UKE conducted, among others, the following actions:

- a. as regards the audit of UKE's accessibility under the project Central Administration for the Convention on the Rights of Persons with Disabilities - it monitored the implementation and implemented the after-audit recommendations belonging to UKE's responsibility, including:
 - architectural accessibility (e.g. marking edges of stairs),
 - organizational activities (e.g. equipping reception staff with tools to translate Polish Sign Language online),
 - digital accessibility (e.g. translation of the most important employment information into Polish Sign Language, translation into Polish Sign Language of the most important, from the point of view of consumers, articles on UKE websites),
- b. ensured the availability of a certified mechanism to monitor the quality of the Internet (the website without barriers certificate),
- c. as part of information and educational activities, it developed a guide for people with disabilities on the telecommunications services market,
- d. developed rules for creating documents available to people with special needs jointly with the Widzialni Foundation.

Creating a policy related to people with special needs

In 2018, UKE participated in legislative work in the field of:

- a. the Directive on the accessibility of products and services,
- b. the Accessibility Plus Programme,
- c. the Act on the digital accessibility of websites and mobile applications of public entities,

- d. the Accessibility Act.

What is more, as part of consultations and working groups, UKE co-created and had a real impact on the developed draft documents. Thanks to the involvement of UKE employees:

- a. The Accessibility Plus Programme defines the beneficiary more broadly by pointing directly at people with special needs,
- b. there will be uniform standards of service for people with disabilities, and within the public sector the accessibility will be managed by accessibility co-ordinators,
- c. within the framework of the prepared act on accessibility, all provisions concerning the telecommunications and postal market will be subject to evaluation with respect to services for people with special needs provided on both markets,
- d. under the act on the accessibility of websites and applications - upon the initiative of UKE, the accessibility declaration has been extended to include architectural accessibility (equally important is that the obligation of accessibility with respect to school and kindergarten websites was not excluded),
- e. in the draft Directive on the accessibility of products and services, the requirements of the architectural accessibility of the place of service provision are included.

As part of the work of UKE representatives in working groups, the following should be emphasized:

- a. participation and cooperation in developing the topics of the meeting of the Group dealing with the accessibility of online resources,
- b. preparation of opinions for the Ministry of Investment and Economic Development regarding the possibility of developing and using the Polish voice assistant,
- c. determining, within the framework of cooperation with the Ministry of Investment and Economic Development, the scope of changes enabling the creation of more accessible services on the telecommunications and postal market,
- d. cooperation with the Foundation Institute of Regional Development within the project Central Administration for the Convention on the Rights of Persons with Disabilities, and implementation monitoring.

What is more, representatives of UKE participated in the following competitions:

- a. Website Without Barriers - competition of the Widzialni Foundation (1st place),
- b. Accessibility Leader - competition of the Widzialni Foundation (1st place),
- c. Accessibility Report 2018 - very good assessment,
- d. Service without barriers - competition of the Integration Foundation (2nd place),
- e. Digital accessibility for everyone! - description of the project submitted for the ITU WSIS Prizes 2019 competition.

1.12. Improving the quality and security of telecommunications services

In 2018, UKE continued its cooperation with ENISA, based on the provisions of the Polish law transposing the amended Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services.

As part of the cooperation, UKE maintained the ENISA information system on the most serious cases of violations of the security and integrity of electronic communications networks and services. In 2018, there were nearly 200 violations of the security and integrity of networks and services.

Most of the violations were of local nature (small scale and short duration) and did not significantly affect the telecommunications services for customers. Due to the extent and duration, 2 violations were classified as serious and the information was submitted by UKE to ENISA via a formal report.

What is more, UKE participated in:

- a. propagating among the key undertakings, a document prepared by ENISA: "Signalling Security in Telecom SS7/Diameter/5G EU level assessment of the current situation", devoted to the analysis of safety and hazard characteristics in signalling systems of mobile telephony,
- b. recommending the participation of Polish leading undertakings in collecting data using the "ENISA Questionnaire: Security exceptions in the net neutrality", regarding the security measures used to maintain the integrity and security of networks and services (a set of recommendations developed on this basis, entitled "Guideline on net neutrality exception for security reasons", will be made public upon agreement with BEREC),
- c. encouraging Polish leading undertakings to submit data to ENISA under the "Border Gateway Protocol (BGP) Security Assessment" (the information collected will be used by ENISA to issue a set of recommendations for undertakings regarding BGP).

1.13. Direct actions for consumers of the postal market

In 2018, UKE received 787 requests for intervention and inquiries from users of postal services regarding irregularities in the provision of services, interpretation of regulations and rules for conducting postal activities, of which 207 in written form and 580 electronically.

Chart 4

Subjects of cases brought to UKE⁶



Source: Office of Electronic Communications

Out of the 787 interventions and inquiries submitted, 565 concerned Poczta Polska, while 222 other postal operators and issues related to postal activities. 332 interventions and inquiries regarding Poczta Polska related to universal services.

In all matters the Office undertook activities consisting of: contacting postal operators, providing explanations to applicants and conducting other activities for their consideration.

What is more, in 2018 UKE received 263 requests for out-of-court resolutions of consumer disputes (ADR) mostly regarding damages to parcels, non-delivery, processing complaints and irregularities in deliveries of parcels. In 15 cases UKE refused to consider applications, in most situations due to the fact that the subject of the dispute was outside the competence of UKE, while 4 applications were withdrawn by the complainants.

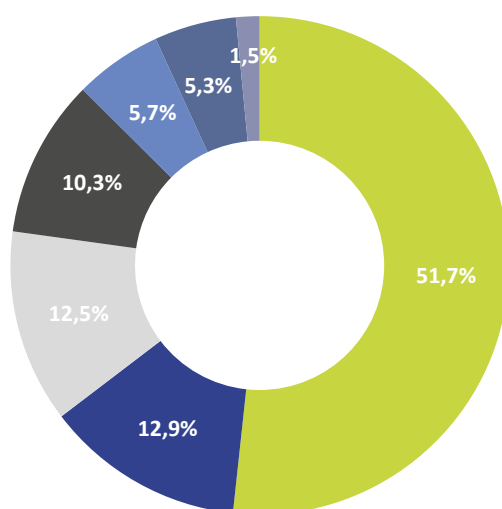
⁶ Some of the cases addressed to UKE concerned more than one subject.

The effect of the activities taken with respect to UKE's intervention and out-of-court resolution of consumer disputes (ADR) was the protection of interests of postal service users, including securing their access to services on an equal and uniform basis and ensuring an appropriate level of service quality.

As a result of the conducted interventions and ADR proceedings in 2018, UKE regained PLN 70 999.26 for users of postal services.

Chart 5

Effectiveness of ADR proceedings



- Operator refused to participate in ADR proceedings
- Parties agreed to the proposed solution of the dispute
- Parties did not agree to the proposed solution of the dispute
- Recognition of the applicant's claim prior to the presentation of proposals for resolving the dispute to the parties
- Refusal to initiate ADR proceedings
- Applications left without recognition
- Applications withdrawn

Source: Office of Electronic Communications

1.14. Subsidy to universal service on the telecommunications market

The designated undertaking is entitled to a subsidy to the costs of services rendered by him in the event of unprofitability. The subsidy to universal service is a multi-faceted process, including:

- a. in the first place - decisions on granting / refusing to grant to OPL a subsidy to particular services included in the universal service,
- b. then - the split of the granted subsidies onto the obligated, in accordance with art. 97 of the Telecommunications Act, telecommunications undertakings⁷ - which includes two stages:
 - establishing a group of undertakings obligated to cover a given subsidy and the percentage rate of their participation,
 - issuing an individual (for each obligated undertaking) decision with the calculated amounts of participation to cover a given subsidy.

The whole process is repeated in the case of additional subsidies granted to services for which a refusal was previously issued, i.e. after valid court judgements repealing the decisions in the said parts refusing to grant the subsidy.

In the years 2007-2012, OPL applied for the subsidy to the costs of all services included within the universal service for the year:

- a. 2006 (8 May - 31 December) - in the amount of PLN 139 933 596.51,
- b. 2007 - in the amount of PLN 219 189 611.75,
- c. 2008 - in the amount of PLN 208 363 479.65,
- d. 2009 - in the amount of PLN 236 166 485.33,
- e. 2010 - in the amount of PLN 269 436 354.80,
- f. 2011 (1 January - 8 May) - in the amount of PLN 33 837 923.28.

After verification of the above-mentioned net costs and assessment of whether they constitute a justified burden, UKE issued decisions to grant:

- a. subsidies to the accessibility services for the disabled, excluding public payphones adapted to the disabled, respectively for the years:
 - 2006 - in the amount of PLN 744 138.18,
 - 2007 - in the amount of PLN 1 269 111,
 - 2008 - in the amount of PLN 1 829 836,
 - 2009 - in the amount of PLN 1 826 517,
 - 2010 - in the amount of PLN 1 044 752.26,
- b. subsidies to the provision of telephone services with public payphones, respectively for the years:
 - 2009 - in the amount of PLN 61 324 043.64,
 - 2010 - in the amount of PLN 54 057 633.12,

⁷ Undertakings whose revenue from telecommunications activity in the year for which the subsidy is due exceeded PLN 4 million.

- c. subsidies to both of the above-mentioned services for 2011 (1 January – 8 May) in one total amount of PLN 14 903 271.64.

With respect to other services, for individual years, UKE refused to grant subsidies. Proceedings were pending against all UKE's decisions to grant / refuse to grant subsidies before the Polish courts. After reconsideration of the case, as a result of the final judgements of the Provincial Administrative Court (WSA) in Warsaw, UKE:

- a. on 11 September 2017, issued decisions determining the level of subsidy to the provision of universal service for 2006 and 2007 with respect to:
 - subsidy to the service of providing information on telephone numbers and the provision of subscribers' lists, for the year 2006 in the amount of PLN 8 129 299.38 and for 2007 in the amount of PLN 11 529 324.00,
 - subsidy to the public payphone service (PAS) for 2006 in the amount of PLN 37 191 694.06 and for 2007 in the amount of PLN 35 736 835.32,
- b. on 7 August 2018, issued decisions determining the level of subsidy to the provision of universal service for 2008 and 2009 with respect to:
 - subsidy to the service of providing information on telephone numbers and the provision of subscribers' lists, for the year 2008 in the amount of PLN 18 147 200.39 and for 2009 in the amount of PLN 18 430 152.00,
 - subsidy to the public payphone service (PAS) for 2008 in the amount of PLN 52 169 302.48, while in relation to the year 2009, the final decision remained the one of 6 September 2011 (no. DHRT-WWM-6060-1/10 (131)).

As of 31 December 2018, the total amount of subsidies granted for OPL by UKE was PLN 318 333 800.47.

In 2018, UKE also conducted proceedings to establish a group of telecommunications undertakings obliged to cover the universal service subsidies for:

- b. 2011 - in the second instance,
- c. 2006 (with respect to the services for which refusal was previously issued, i.e. after the final WSA judgement) - in the first instance,
- d. 2007 (with respect to the services for which refusal was previously issued, i.e. after the final WSA judgement) - in the first instance.

In 2018, proceedings were also conducted to determine the individual amounts for the obligated entities to cover subsidies for the years 2007-2010. In this regard, UKE in 2018 issued:

- a. for 2007 - 2 decisions (in the second instance),
- b. for 2008 - 2 decisions (in the first instance) and 7 decisions (in the second instance),
- c. for 2009 - 76 decisions (in the first instance) and 2 decisions (in the second instance),
- d. for 2010 - 100 decisions (in the first instance) and 2 decisions (in the second instance).

1.15. Universal service on the postal market

Draft amendments to the regulations on the provision of universal services

UKE considered the proposal of three amendments to the regulations on the provision of universal services submitted by Poczta Polska on: 20 February 2018, 11 June 2018 and 18 September 2018.

The changes proposed by Poczta Polska were aimed primarily at adapting the provisions of the regulations to the amended provisions of law in the scope of the information obligation towards consumers⁸, personal data protection (obligations resulting from the GDPR) and the liquidation of arbitration courts⁹.

The changes introduced to the regulations regarding the information obligation towards consumers focused on the introduction of data contained in the National Court Register identifying Poczta Polska. The changes in the scope of personal data protection were aimed at fulfilling the obligations resulting from the GDPR. The change in the scope of amicable court liquidations was of a technical nature and consisted in deleting regulations regarding one of the procedures for pursuing claims for non-performance or improper performance of the postal service.

Moreover, Poczta Polska submitted proposals for amendments to the regulations regarding:

- a. new forms of payment for universal services, including by using the transfer order and enabling payment for universal services with payment cards, also at postal agencies,
- b. liability and deadlines for lodging complaints about non-performance or improper performance of the universal service in domestic and foreign trade,
- c. a new criterion for determining the amount of the discount for the number of registered mail items sent at the same time, including at least 3 registered mail items to one recipient.

The conducted analysis¹⁰ did not give grounds to raise objections to all or part of the draft amendments submitted to the applicable regulations.

Draft amendments to the price list of universal services

In 2018, Poczta Polska submitted three times a draft amendment to the binding price list for universal services to UKE.

The first of the draft amendments was submitted to UKE on 2 February 2018. The proposed changes did not concern postage fees. They were objective in character and resulted only from the changes introduced in January 2018 in the documents of the Universal Postal Union (in Articles VI and VII of the Final Protocol to the Universal Postal Convention - Istanbul 2016 and in Article XVIII paragraph 1 of the Final Protocol to the Convention Regulations). The amendments came into force on 1 April 2018.

⁸ Act of 30 May 2014 on Consumer Rights (unified text Journal of Laws of 2019, item 134).

⁹ Act of 10 May 2018 amending the Telecommunications Act and some other acts (Journal of Laws of 2018, item 1118).

¹⁰ Article 49 par. 4 of the Postal Law.

The second draft was submitted to UKE on 20 August 2018 and concerned remodelling of the price list to reflect the dependence of the fee on a differentiated format and category of the parcel for unregistered letters, registered letters, letters with a declared value, including also poste restante. Having conducted the analysis in terms of compliance of the proposed changes with the provisions of the Postal Law which states that:

- a. universal services must be provided at affordable prices (Article 46 (1) (4)),
- b. fees for universal services should be established in a transparent and non-discriminatory manner (Article 53 (1)),
- c. fees for universal services should be set in a way that reflects the costs of their provision, which is connected with, among others, the possibility of making the level of fees dependent on, in particular, the type, weight or dates of delivery of the parcel (Article 53 (1) and Article 22 (1)),

UKE did not object to all or part of the draft amendments to the current price list.

The changes proposed by the designated operator in the third draft submitted on 27 December 2018 were related to the proposal of changing the price list of universal services in domestic and foreign trade that were submitted on 20 August 2018, to which UKE did not raise objections. The proposal included changes in fees for the return of registered mail and letters with a declared value in foreign trade. It also concerned the technical adaptation to the new nomenclature of mass-size categories of parcels introduced with the previous draft changes to the price list of universal services in domestic and foreign trade.

The above-mentioned amendments to the price list entered into force on 1 April 2019.

Regulatory accounting

Pursuant to Article 101 (4) of the Public Procurement Law in 2017, following a tender procedure, UKE appointed a statutory auditor to audit the annual reports of Poczta Polska on regulatory accounting for 2016, 2017 and 2018 with respect to compliance with legal regulations and regulatory accounting approved by UKE and the description of cost calculation. In 2018, UKE, in accordance with Article 101 (5) of the Postal Law, published the report of Poczta Polska on regulatory accounting for 2017 together with the opinion of a statutory auditor in UKE Public Information Bulletin (BIP).

According to Article 103 of the Postal Law, pursuant to decision of 23 February 2018, UKE imposed on the designated operator an obligation to submit for publication the regulatory accounting instruction for 2018 and a description of the cost calculation for 2018, approved by the decision of 16 November 2017. The documents submitted by Poczta Polska were published on 20 March 2018 in UKE BIP.

In 2018, Poczta Polska developed and submitted a draft regulatory accounting instruction for 2019 and a draft description of cost calculation for 2019 for UKE's approval. After the reconciliation process, administrative proceedings were initiated regarding the approval of the above documents, completed by UKE publishing an approval decision on 23 November 2018.

Net cost of universal service obligation

Following the administrative procedure, pursuant to the application for reconsideration of the case, UKE, pursuant to the decision of 11 January 2018 upheld the decision of 28 April 2017, which determined the amount of the verified net cost for 2013 and the losses on universal services and established the amount of subsidy due for the year 2013.

In March 2018, UKE ex-officio initiated the administrative proceedings against postal operators obligated to participate in the subsidy to the net cost of the universal service obligation by the designated operator.

The aforementioned proceedings are accompanied by evidence-related activities regarding the determination of the shares of the obligated postal operators in the subsidy. The evidence applications submitted by the parties are considered, together with an application to discontinue the proceedings against one of the parties.

The regulatory accounting activities undertaken by the Office of Electronic Communications have made it possible to control the correct allocation of the costs and revenues of the designated operator and the method of calculating the unit costs of universal services, which will also affect the reliability of the calculation of the net cost of universal service obligations and justify the price level for the services.

1.16. Product inspections

Within the framework of the protection of consumer interests in the field of product market surveillance, pursuant to the Act on conformity assessment and market surveillance systems and the Act on conformity assessment, in 2018 UKE inspected 750 products, of which 278 products were found to be non-compliant (about 37% of all products subjected to inspection). The largest number of non-compliant products were among: LED lighting, short-range radio equipment, drones and radio-controlled toys. As part of the inspection, 374 device models were examined, of which 61 did not pass the tests.

Moreover, UKE inspected:

- a. PLC devices (power line communications) - between 1 January and 31 March 2018,
- b. electric vehicles (skateboards, scooters, etc.) - between 1 July and 30 September 2018,
- c. smartwatches - between 1 October and 31 December 2018.

The purpose of the above mentioned campaigns was to verify compliance with formal requirements enabling the consumer to make an informed choice, as well as to verify compliance with the essential requirements by conducting tests at the Central Technical Tests Laboratory of UKE.

Information on the results of product inspections were published on the UKE website. In order to raise awareness and protect consumers, UKE updated its list of non-compliant products every

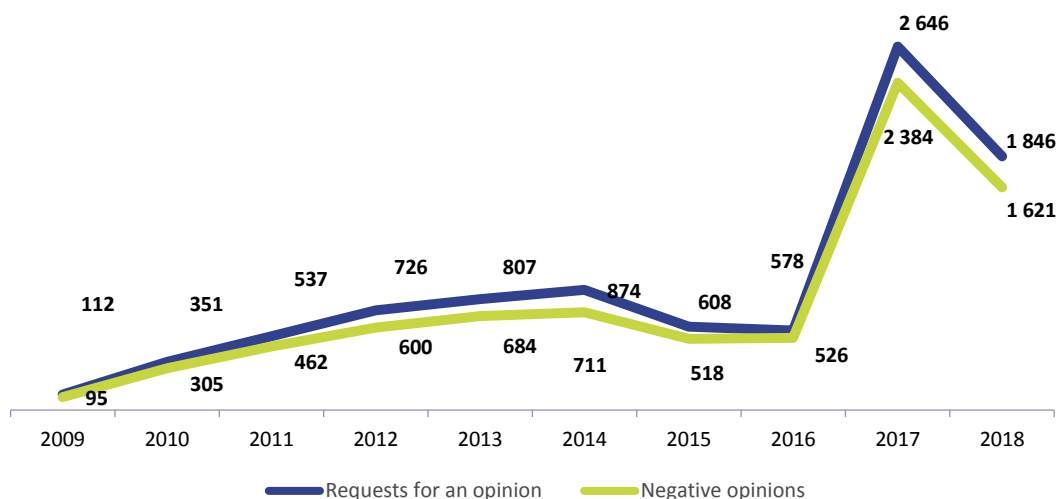
month in 2018. The UKE website with this list is visited monthly by an average of 236 interested persons, which proves its practical usefulness for the buyers of electrical and electronic products.

In 2018, UKE continuously monitored auction portals and conducted inspections to remove products that did not meet the requirements of the Internet offer. UKE focused on illegal radio communication devices - imported from the US and the Far East as well as jammers. Cooperation with the transaction portal, Allegro, involved UKE interventions that ended with the removal of 652 auctions of non-compliant products.

UKE's activities in the product market are not only aimed at efficient and effective elimination of devices from the market that do not meet the essential requirements, but also at preventing the introduction of such products on the market. The customs authorities regularly address UKE with requests for an opinion on the fulfilment of essential, detailed and other requirements by the products. In 2018, UKE issued 1 846 opinions concerning the matter, of which 1 621 opinions were negative (the products did not meet the requirements).

Chart 6

Number of requests from customs authorities and opinions issued by UKE



Source: Office of Electronic Communications

2. Development of infrastructure and services

2.1. Maintaining the registers of RPT and RJST

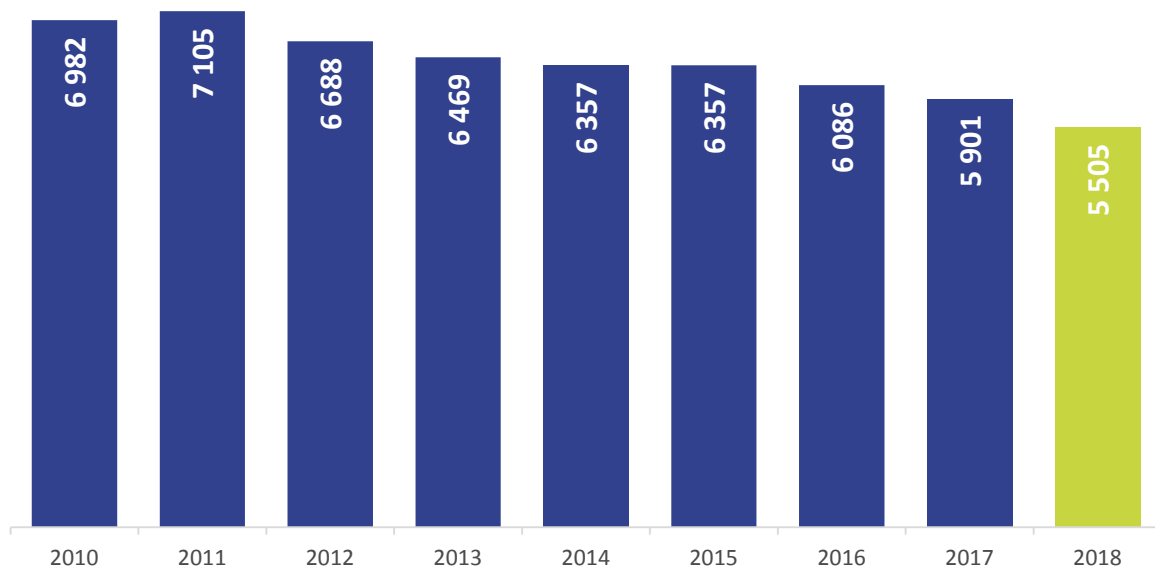
The President of UKE, in accordance with Article 10 (2) of the Telecommunications Act, is the authority maintaining the register of telecommunications undertakings (RPT) and the register of local government authorities performing activities in the field of telecommunications (RJST).

In 2018: 278 entries to the RPT, 674 deletions from the RPT and 2 entries to the RJST were made.

In total, as of 31 December 2018, excluding the deleted entities, the RPT contained 5 505 entities, and the RJST - 406 entities.

Chart 7

Telecommunications undertakings entered into the RPT

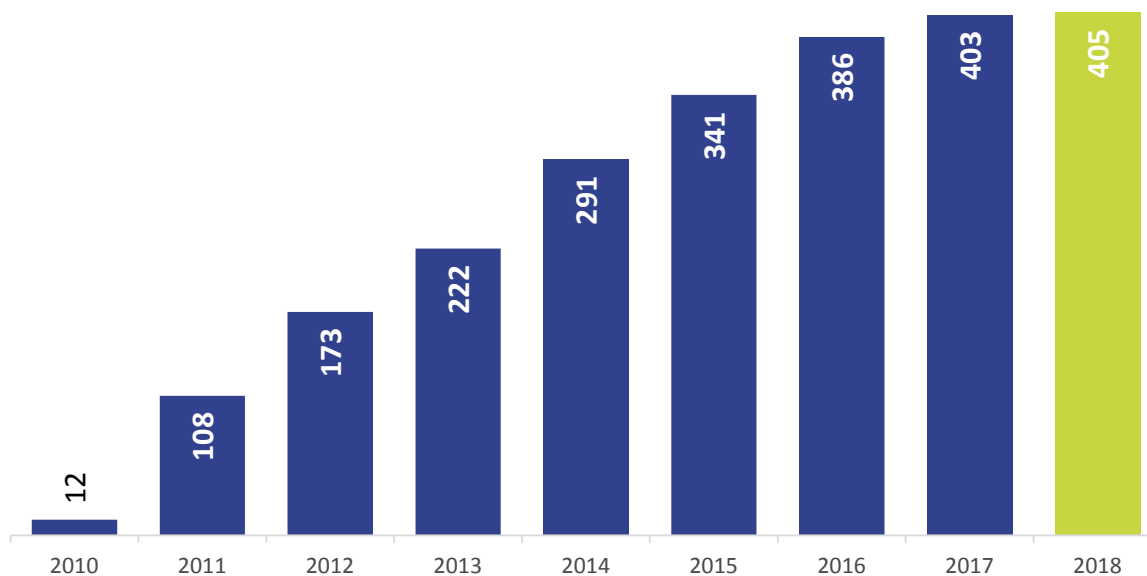


Source: Office of Electronic Communications

Since 19 May 2016, pursuant to the provisions of the Act on the freedom of economic activity, UKE has had the opportunity to delete the entry of an undertaking from the RPT not only at its request, but also after obtaining information about the entrepreneur's death or its deletion from the Central Registration and Information on Business (CEIDG), and since 1 January 2017, also after obtaining information about deleting the undertaking from the National Court Register (KRS). In the current legal status, pursuant to the Telecommunications Act, UKE may delete a telecommunications undertaking from the register at its request and after obtaining information from CEIDG or the KRS about its deletion. These circumstances have reduced the number of entries in the RPT in the last three years.

Chart 8

Local government authorities entered into the RJST



Source: Office of Electronic Communications

2.2. Inventory of telecommunications infrastructure and services

UKE performs tasks specified in the Mega-law by conducting an annual inventory on the territory of the Republic of Poland.

Pursuant to Article 29 (2) of the Mega-law, telecommunications undertakings, state and local government organizational units and entities performing public utility tasks are required to provide up-to-date and complete information on their telecommunications infrastructure, public telecommunications networks and buildings enabling collocation, on the provided telephone services, data transmission services providing broadband Internet access and radio and television broadcasting services by 31 March, to reflect the status as of 31 December of the previous year.

The data is provided in an electronic form by means of the Broadband Infrastructure Information System (SIIS). In 2018, the data on 1.5 million items of telecommunications infrastructure and 46 million network termination points were processed by the SIIS, which was provided by more than 3 thousand from among the obligated entities.

The above-mentioned data enables the analysis and evaluation of the telecommunications services market, the development of a report showing the coverage of the Republic of Poland with the reach of fixed and mobile public telecommunications networks and the presentation of investment forecasts regarding the development of these networks.

A report was developed on the basis of the 2017 inventory, which was published on 28 June 2018. The report shows that the value of the telecommunications market was, similarly to 2016, about PLN 39.5 billion, and about 14.5 million people used the Internet, which gives the saturation with Internet services at the level of 103% per household.

In 2017, the number of buildings within the NGA network increased by 1 percentage point, as compared to the previous year. The range of mobile networks also improved, with the share of the LTE technology increased by 2 percentage points, as compared to 2016, and reached the level of over 84%.

The data collected as part of the 2017 inventory was also used to designate areas for co-financing under the second round of the 3rd OPDP competition.

2.3. Digital Agenda for Europe

In 2018, UKE carried out activities related to monitoring the degree of the implementation of the objectives set out in the Digital Agenda for Europe (EAC) documents. The data used in this area comes from the annual inventory of infrastructure and telecommunications services. In line with the inventory conducted in 2018 and summarized in the Report on the condition of the telecommunications market in Poland in 2017, the average residential penetration with fixed-line Internet coverage with the capacity of at least 30 Mb/s was about 67%. In order to assess the implementation of the provisions of the EAC, a household penetration rate was used, understood as the ratio of the number of residential premises in buildings within the range of a network with the minimum of 30 Mb/s (a building in which operators declare the possibility of providing particular services) to the total number of residential premises in the analysed area.

As regards the implementation of the second EAC objective - in order to achieve the use of access services at speeds of at least 100 Mb/s by 50% of households by the end of 2020 - in 2017, the possibility of using services with a speed of 100 Mb/s was in over 50% of households. On the other hand, the number of users using services with the minimum capacity of 100 Mb/s amounted to 1.8 million households, which means that the rate of residential premises in which high capacity was present, exceeded 10% in 2017 and amounted to 12.8%.

2.4. Development of infrastructure and services - telecommunications analyses

UKE conducted a survey among individual users, and then analysed the issue of the substitutability of fixed Internet and mobile Internet, the impact of fixed Internet and mobile Internet substitutability on price flexibility and the impact of fixed Internet and mobile Internet substitutability on the product range of infrastructural markets (in particular BSA and LLU).

The first stage included interviews during the panels of the focus groups. Their results were used to develop a detailed design of the research conducted in the second stage, performed with the

CAWI method on a group of 5 204 respondents. The results obtained were the main source of data for the conducted analyses. What is more, historical data from 2014 was used, in particular with respect to the trends in consumer behaviour, the available infrastructure used to provide Internet access services, offers of fixed and mobile service providers, and data from the SIIS for 2017.

The research and the analysis have shown that users of fixed Internet access services perceive mobile services as substitutes. However, the level of substitution is so low that there is no basis for extending the product definition for markets 3a (LLU) and 3b (BSA).

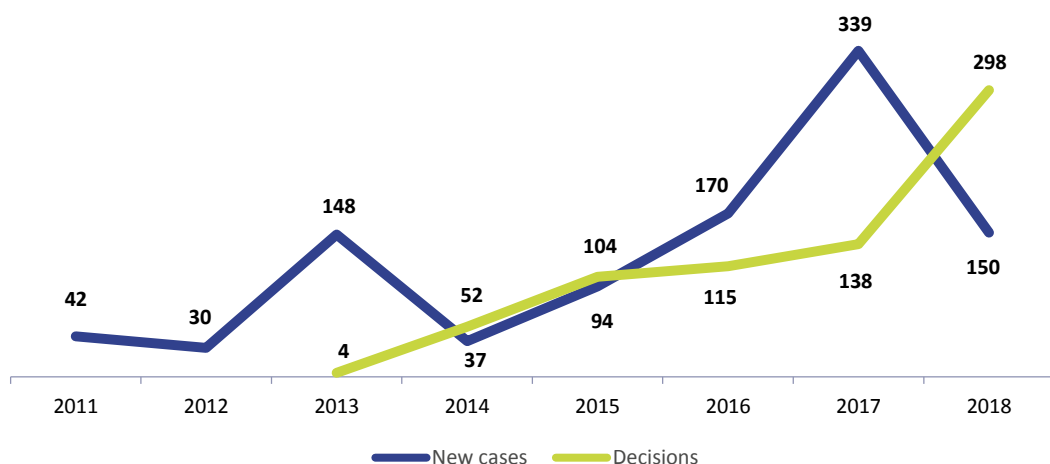
2.5. Supporting construction and infrastructure sharing

Access pursuant to Article 30, Article 17 of the Mega-law and Article 139 (1) of the Telecommunications Act

One of the important tasks of UKE in 2018 was to settle disputes over access to real estates and buildings to provide telecommunications in those buildings. The decisions issued set out the conditions and manner of deploying the telecommunications infrastructure on land estates and buildings located on them. The subject matter of the decision was both to bring telecommunications connections to buildings and to build telecommunications installation of buildings. In 2018, UKE initiated and conducted, at the request of telecommunications undertakings, 150 administrative proceedings regarding access to buildings pursuant to Article 30 of the Mega-law. In 2018, UKE also continued with 380 administrative proceedings initiated before 2018.

Chart 9

Proceedings and decisions on access to real estate



Source: Office of Electronic Communications

In 2018, UKE issued 298 decisions regarding the conditions of access to real estates and buildings (Article 30 of the Mega-law). 247 of the decisions included a positive resolution and defined the terms of cooperation in the field of access to the real estate. In 94 cases, UKE partly refused to

consider the application of the telecommunications undertaking due to the existence of an available telecommunications installation in the building.

In 2018, UKE published on its website a Guide for telecommunications undertakings regarding access to buildings, and in cooperation with the National Chamber of Real Estate Management, conducted a workshop for property managers regarding the same issue¹¹.

What is more, in 2018, in the field of access to passive infrastructure, UKE conducted:

- a. 24 proceedings in the field of access to technical infrastructure (including 7 proceedings opened ex-officio),
- b. 9 proceedings in the field of access to telecommunications infrastructure (including 6 procedures opened ex-officio).

The proceedings initiated ex-officio by UKE concerned:

- a. defining the conditions for providing access to the cable ducts and the telecommunications ducts of the building (7 proceedings ended with the issuance of the decision on 11 September 2018 for: OPL, Netia S.A., UPC Polska sp. z o. o., Multimedia Polska S.A., Vectra Investments sp. z o. o. sp. j., INEA S.A., TOYA sp. z o. o.),
- b. determining the conditions of providing access to telecommunications cables (6 pending proceedings).

In 2018, UKE continued 8 administrative proceedings initiated before 2018 (1 case concerned access to telecommunications cables pursuant to Article 139 of the Telecommunications Act, 7 cases were related to access to technical infrastructure pursuant to Article 18 in connection with Article 22 of the Mega-law).

Moreover, at the end of 2018, 494 488 poles were available according to agreements forwarded to UKE (based on 888 contracts). In contrast, only in 2018, 17 405 poles were made available on the basis of 101 contracts forwarded to UKE.

UKE also continued workshops with representatives of industry chambers associating telecommunications undertakings (Polish IT and Telecommunications Chamber, Polish Chamber of Commerce for Electronics and Telecommunications, National Chamber of Ethernet Communication and Polish Chamber of Electronic Communication), as well as distribution system operators (Polish Society of Transmission and Distribution of Electricity).

Telecommunications access pursuant to Article 28 of the Telecommunications Act

In the area of disputes among operators regarding the telecommunications access, UKE in 2018 initiated, either at the request of telecommunications undertakings or ex-officio, 5 proceedings related to the telecommunications access pursuant to Article 28 of the Telecommunications Act. It also issued 3 decisions stating the expiry of the telecommunications access decision and discontinued 6 proceedings on disputes among operators regarding the telecommunications access.

¹¹ More: <http://uke.gov.pl/akt/poradnik-dla-przedsiębiorców-telekomunikacyjnych,59.html>.

Access to the infrastructure or network constructed, rebuilt, renovated or acquired using public funds (Article 27 of the Mega-law)

In 2018, UKE continued to issue opinions and approve wholesale price lists of Regional Broadband Network operators (RSS) resulting from the provisions of the EC notification decisions, i.e. Mazowiecka Regionalna Sieć Szerokopasmowa - "Internet dla Mazowsza", Łódzka Regionalna Sieć Teleinformatyczna - Stage 1 and 2.

In June 2018, UKE collected and analysed information on market fees from telecommunications undertakings for wholesale services. Then, on 4 July 2018, reference ranges of fees for RSS¹² were published. The analysis of the collected data shows that comparing to the previous update of wholesale fees in 2016, there were slight changes in their amounts (including the reduction of charges for the IP Transit service and a slight increase in fees for passive services and Ethernet data transmission).

In December 2018, UKE summarized the results of the inspection of 11 RSS infrastructure operators. The analysis showed that the operators of the RSS infrastructure covered by the audit operate in the field of wholesale network access in an open, transparent and non-discriminatory manner.

UKE also conducted four administrative proceedings in 2018 related to providing access to services (BSA) provided by the beneficiaries of the first OPDP competition. In these cases, in November and December 2018, draft decisions were published starting the public consultation process.

Approving the price lists by UKE for the RSS infrastructure operators, including settling disputes over access to services of OPDP beneficiaries, guarantees an open access on transparent and non-discriminatory terms to the networks of these operators. It also influences the increase of access to broadband Internet on the areas of white spots.

¹² More: <http://bip.uke.gov.pl/decyzje/oferty-ramowe/aktualizacja-referencyjnych-cen-rynkowych-dla-rss,21.html>.

The settlement of disputes by UKE over access to property, including to buildings, resulted in granting telecommunications undertakings in 2018 access to almost 2 000 land properties and approximately 4 000 buildings. In the majority of cases, access has enabled the construction of telecommunications connections and telecommunications installations of buildings in the FTTH technology. As a result of such actions, competition at the local level increases, investments in modern access networks are supported, and the diversity and attractiveness of retail offers increases. In turn, refusing to build infrastructure where it is possible to use it, and there were many more such cases in 2018 than in previous years, UKE prevents the duplication of the available telecommunications infrastructure, in particular telecommunications installations of buildings.

In the field of access to cable ducts and telecommunications ducts, UKE issued 7 decisions (pursuant to Article 18 (3) of the Mega-law). The conditions specified in the decisions contain a universal and coherent access procedure which should positively affect the investment process, as well as encourage effective use of resources, reducing unnecessary duplication of infrastructure.

2.6. Implementation of OPDP

In 2018, UKE carried out tasks and obligations in the field of supporting the development of telecommunications infrastructure as part of projects co-financed from the EU budget. Pursuant to the Implementation Agreement for the Trilateral Agreement, concluded on 10 May 2016 between the President of UKE and the Digital Poland Project Centre (CPPC), UKE experts pointed to a possible coverage of 847 000 households and 3 800 educational units within the first round of the third competition of axis I of OPDP. As part of the 2nd level substantive evaluation, 87 projects submitted by the applicants were verified. In this regard, UKE experts also carried out analyses of network replication in projects, in accordance with the developed methodology of analyses.

As a result of cooperation with UKE within the first round of the third competition of axis I of OPDP, the CPPC signed contracts for co-financing for a total value of PLN 1 638 911 299.38, which accounts for 84.63% of the available allocation of funds for the competition. These projects foresee the coverage for 659 000 households and almost 4 000 educational units. The beneficiaries of the winning projects declared to connect 142% of the minimum number of households for 33 competition areas.

In 2018, the second round of the third competition of axis I of the OPDP was also announced. The deadline for submitting applications for co-financing was set to be 6 February 2019. For the needs of the second round of the third competition of axis I of the OPDP, UKE experts carried out the following works in 2018:

- a. preparation for the public consultation of the database of areas of white spots - 2.3 million address points,

- b. participation in the study of investment plans / public consultations (verification and monitoring, including the identification of plans that are not implemented in accordance with the entrepreneur's prior notification),
- c. preparation and conducting workshops for OPDP beneficiaries,
- d. identifying and grouping areas of the country requiring public intervention with the participation of EU funds.

UKE also performed an analysis of the current status of educational institutions from the second OPDP competition in 30 projects. The analysis required verification of addresses (after de-communization), verification of the existence of schools after the reform of education and verification of network coverage after another inventory of infrastructure and services.

Within the scope of UKE competence, 81 700 address points were indicated, which, based on the inventory of infrastructure and telecommunications services, constituted the so-called white NGA spots at the stage of defining areas for intervention in the second and third OPDP calls, however, subsequent inventories indicated that NGA coverage would cover some points beyond OPDP.

Having consulted the telecommunications market, on 27 March 2018 UKE developed and published reference conditions of wholesale access to networks built as part of the OPDP to connect households, including a methodology for determining wholesale charges, i.e. "Principles of wholesale access to networks completed under the second competition under measure 1.1 OPDP for households"¹³. It also specified a methodology for determining wholesale access fees to networks built as part of the OPDP to connect educational units, i.e. "Prices of access to networks connecting educational units, deployed under the second competition under measure 1.1 OPDP"¹⁴.

On 30 July 2018, UKE published the reference fee for wholesale data transmission service provided on the networks built within OPDP on the section from PWR to the educational unit¹⁵. The reference was determined as a result of the analysis of contracts, the subject of which was the transmission service corresponding to the transmission service that the beneficiaries of OPDP are obliged to provide to educational units. Determining the reference conditions of wholesale access to the networks built within OPDP, including the preparation of the MS-OPDP test tool and the indication of the recommended fee for the transmission service provided to the educational unit, supports beneficiaries in fulfilling their duties and translates into effective competition in the digitally excluded areas.

On 19 December 2018, UKE published a tool for Margin Squeeze testing¹⁶. The purpose of the tool is to verify compliance with requirements whether the wholesale fees for BSA, LLU and VULA services guarantee that the OPDP beneficiaries maintain their obligations in terms of ensuring an open, effective, wholesale network access on non-discriminatory terms. Moreover, in 2018 UKE carried out an analysis and issued a positive opinion for 2 offers of wholesale household services

¹³ More: http://www.uke.gov.pl/download/gfx/uke/pl/defaultaktualnosci/36/60/1/ceny_dostepu_jo.pdf.

¹⁴ More: http://www.uke.gov.pl/download/gfx/uke/pl/defaultaktualnosci/36/60/1/ceny_dostepu_jo.pdf.

¹⁵ More: <http://www.uke.gov.pl/akt/referencyjna-wysokosc-oplaty-popc,108.html>.

¹⁶ More: <http://www.uke.gov.pl/akt/test-margin-squeeze-dla-sieci-popc,157.html>.

and 4 price lists of services for educational units. Acceptance of offers and price lists allows OPDP beneficiaries to start selling services in the areas covered by investments.

Within the OPDP network inspection, UKE's task is to monitor, supervise and control project implementation, in particular in the field of technical aspects, including participation in the process of project inspection during its implementation and concerning durability in order to determine whether the infrastructure has been constructed in accordance with the contract for co-financing and the documentation provided by the beneficiary.

In order to obtain Technical Assistance from OPDP and to settle it correctly, UKE has completed the following tasks:

- a. the allocation of funds for OPDP Technical Assistance for UKE and the schedule of expenditures for 2018 were prepared,
- b. product indicators for Technical Assistance for 2018 were developed,
- c. Annex no. 2 to the Trilateral Agreement of 3 June 2015 (signed on 5 July 2018) was prepared,
- d. annexes to the Agreement for co-financing of the in-kind project for 2018 were prepared (Annex No. 1 signed on 4 July 2018, Annex No. 2, signed on 11 September 2018, Annex No. 3, signed on 21 December 2018),
- e. annex to the Agreement for co-financing the remuneration project for 2018 was prepared (Annex No. 1, signed on 11 September 2018),
- f. applications for co-financing of projects were prepared and submitted to the Managing Institution,
- g. payment applications to the Managing Institution were prepared and submitted,
- h. participation in the inspection carried out by the Managing Institution, which concerned public procurement for the in-kind project for 2018,
- i. participation in the inspection carried out by the Managing Institution, which concerned applications for payment of the remuneration and in-kind project for 2018.

Effects of the work of UKE experts:

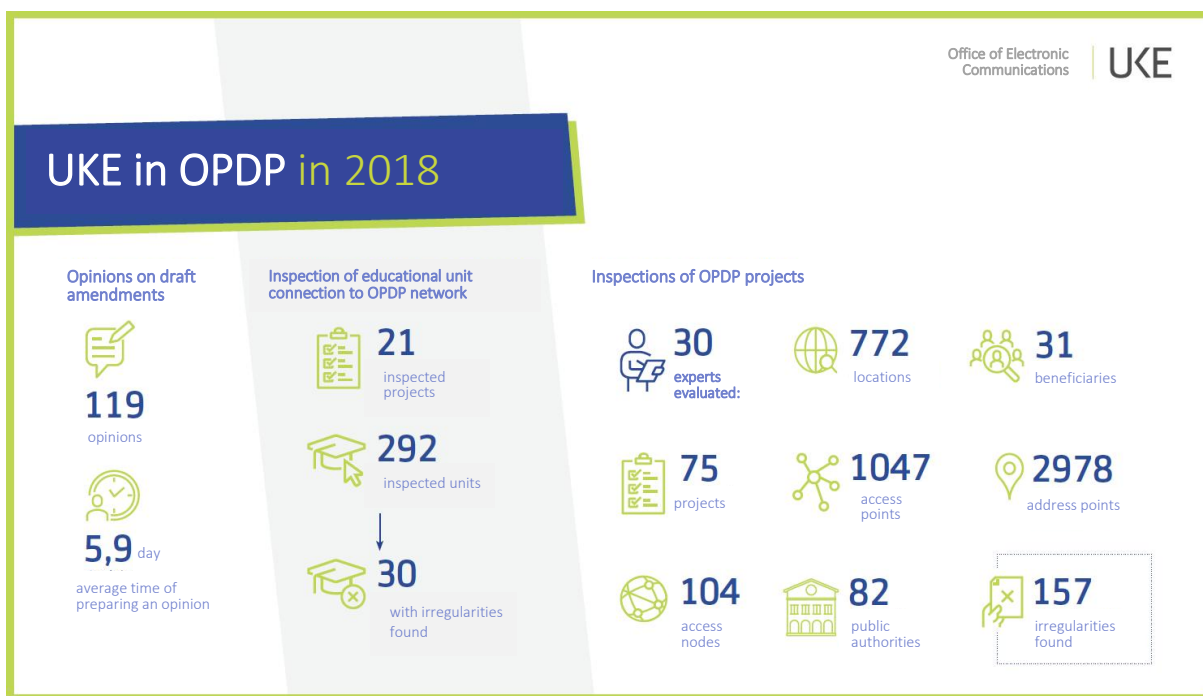
- a. 75 projects audited with respect to technical aspects in order to determine whether the infrastructure was constructed in accordance with the contract for co-financing and the documentation provided by the beneficiary, in particular whether it enables access to the Internet with the required parameters for end users and effective wholesale access for other telecommunications undertakings,
- b. 21 verified projects regarding the connection of educational units to the OPDP network,
- c. 87 evaluations of the applications of telecommunications undertakings for co-financing,
- d. 26 applications of telecommunications undertakings subject to the clarification procedure as part of the 2nd level assessment,
- e. 119 opinions on the assessment of the proposed modifications to project locations and technical and economic aspects of projects under Measure 1.1 POPC (86 opinions in the first competition and 33 opinions in the second competition).

Effects concerning the use of Technical Assistance by UKE:

- a. 2 applications for co-financing submitted to the Managing Institution (for PLN 7 316 192.00 for 2018),
- b. 6 applications for payment submitted to the Managing Institution ,
- c. 6 public procurement orders audited by the Managing Institution ,
- d. no financial corrections,
- e. 5 approved applications for payment (from 2017, 2018), 4 applications from 2018 remaining to be approved,
- f. no irregularities in the audited applications for payment,
- g. 2 workshops prepared for the beneficiaries and potential beneficiaries of measure 1.1 OPDP,
- h. 16 sets of devices for measuring technical parameters of the constructed networks in the field with software for automation of measurement activities,
- i. 6 devices with instrumentation for measuring the length and attenuation of optical fibres in telecommunications networks (OTDR reflectometer),
- j. floating license on ArcGIS specialized software (ArcGIS Pro advanced floating license),
- k. specialized Cellular Expert Professional software (network license 4.4),
- l. expansion of the Netapp FAS 8040 matrix with an additional disk shelf with technical support and manufacturer's warranty service,
- m. MS-OPDP test tool - a form used by beneficiaries and UKE to verify fees for the wholesale LLU, BSA and VULA services provided on networks built within OPDP,
- n. 5 databases, along with reports created on their basis, regarding the Internet of Things, OTT services, mobile Internet and value-added services, pay TV and cloud data processing,
- o. analysis of the principles of cooperation in access to the foundation of poles of energy network operators,
- p. a study on the role of the Internet in our personal and professional life in the context of changing the access medium and subscribed bandwidth, with particular focus on the OPDP fibre-optic networks,
- q. development works on the historicising of address databases and databases from the annual inventory of telecommunications infrastructure and services.

Figure 3

Summary of UKE activities in OPDP - 1



Source: Office of Electronic Communications

Figure 4

Summary of UKE activities in POPC - 2



Source: Office of Electronic Communications

2.7. Works on the implementation of 5G

Consultations - frequencies for 5G

In order to implement 5G in Poland, in 2018 UKE proceeded to develop a concept for the management of radio spectrum resources in Poland. In July 2018, a preliminary concept for the management of radio spectrum resources for 5G was presented for public consultation¹⁷. The concept concerned the allocation of frequencies in the 700 MHz, 3.5 GHz, 3.7 GHz and 26 GHz bands for 5G. Fifteen entities took part in the consultations. The positions presented in the consultations¹⁸ allowed UKE to plan the assumptions of radio spectrum distribution processes for the needs of 5G.

The 700 MHz band

In 2018, UKE continued international arrangements to release the 700 MHz band, as set out in Decision of the European Parliament and of the Council (EU) 2017/899 of 17 May 2017 on the use of the 470-790 MHz frequency band in the Union. As a result, supplements were signed to the agreements regarding the new TV channel arrangement plan in the 470-694 MHz band, previously concluded with the German and Lithuanian Administrations.

UKE also conducted through correspondence the coordination negotiations with the Russian Administration in order to:

- a. agree on new channel plans for NTC after releasing the 700 MHz band,
- b. establish the date of the release of 700 MHz band in the Kaliningrad Region by Russian TV,
- c. establish the date of switching off the analogue television transmitters in the Kaliningrad Region.

Until the end of 2018, Russia did not indicate the date of release of the 700 MHz band by the Russian television in the Kaliningrad Region.

In the letter dated 23 March 2018 addressed to the Ministry of Digitization (MC), UKE described all measures taken by the Office to solve the problems of harmonization of the 700 MHz band. It also asked the MC to inform the Council of Ministers about the situation and to take steps at the level of the Council of Ministers to eliminate the risk of non-compliance with obligations resulting from the Decision of the European Parliament and the Council.

In June 2018, the MC informed UKE about a formal request submitted on 22 April 2018 to the EC to engage in the negotiations with Russia regarding the release of the 700 MHz band.

In 2018, UKE also carried out activities to migrate NTC in Poland to the band below 700 MHz. Representatives of UKE continued their work in the Team for the development of the National Action Plan for the reallocation of the 700 MHz band (KPD).

¹⁷ More: <http://bip.uke.gov.pl/konsultacje-i-wyniki-konsultacji/czestotliwosci-dla-5g-konsultacje-zalozen-zagospodarowania-widma-radiowego,333.html>.

¹⁸ More: <http://bip.uke.gov.pl/konsultacje-i-wyniki-konsultacji/wyniki-konsultacji-zalozen-zagospodarowania-widma-radiowego-czestotliwosci-dla-5g,497.html>.

Based on the internationally agreed plan for NTC below the 700 MHz band, two variants of the 700 MHz band release were developed in Poland:

- a. variant 1 - with a minimum number of changes,
- b. variant 2 - with additional changes between layers, optimizing the use of channels in the layer.

UKE has also developed a preliminary time schedule for channel changes of broadcasting TV stations in specific areas of Poland in the process of releasing the 700 MHz band until the date of frequency availability assumed in KPD.

In the last quarter of 2018 (on: 20 September, 30 October and 18 December) a series of meetings with television broadcasters were organized to discuss and agree upon the process of NTC release of 694-790 MHz range pursuant to the Decision of the European Parliament and Council (EU) 2017/899 and the resulting international agreements on the arrangement of TV channels in the 470-694 MHz range.

What is more, in July 2018 UKE carried out a detailed analysis of potential distortions of broadband systems in Poland, coming from TV stations operating in the 700 MHz band, located in neighbouring countries outside the EU (Ukraine, Belarus, Russia), indicating potentially disrupted communes for each of the system blocks compliant with the IMT standard. The analysis was carried out in relation to frequency blocks with a width of 5 MHz foreseen for broadband systems, including analogue and digital television stations.

UKE's activities for the implementation of the Decision of the European Parliament and of the Council (EU) 2017/899, undertaken by the end of 2018, were aimed at releasing the 700 MHz band in Poland in the basic timeframe foreseen by this decision, i.e. until 30 June 2020. This date of release was also foreseen in the KPD published by the MC on 2 July 2018. At the same time, the amendment of the Telecommunications Act, processed by the MC in 2018, with respect to radio frequency management was to provide the relevant new competences to UKE to change the frequency licenses issued in the 700 MHz band and their migration to a lower range.

A number of recent events, however, signal the risk of failure to meet the 700 MHz band release date, and the final shape of the action plan is not yet known. Thereby:

- a. On 28 December 2018, the MC requested the EC to derogate from the deadline for providing the 700 MHz band in Poland for the needs of broadband systems, as a result of incomplete coordination arrangements with Russia.
- b. On 1 February 2019, the MC announced a one-week consultation of the KPD update draft; according to the draft, the release of the 700 MHz band would be by 30 June 2022; so far, the MC has not published the positions received in the course of consultations or the final version of the KPD, so the final dates of release and the availability of the 700 MHz band, as well as the possible combination of this process with the change of broadcasting standard from DVB-T to DVB-T2 are not known.

- c. At the meeting of the Senate on 26 February 2019 on the draft amendment of the Telecommunications Act, an amendment to the draft (Article 123 (2e)) was adopted, with the approval of the MC representatives, excluding the possibility for UKE to change the frequency licenses in the 700 MHz band ex-officio and thus to migrate the television broadcasters into the 470-694 MHz band.

As a result, due to the lack of legal tools to conduct the NTC migration from the 700 MHz band ex-officio, as well as the Ministry's lack of decision regarding the date of the release of this band and the possible combination of this process with the change of broadcasting standard, UKE is currently unable to take further actions for the implementation of the Decision of the European Parliament and of the Council (EU) 2017/899, and the plan of migration from the 700 MHz band developed by UKE in 2018 has become obsolete.

The migration plan from the 700 MHz band will be updated once the final version of the KPD has been established, and its implementation will depend on the adoption of a separate act by the MC to regulate the issue of changing the allocation of the 700 MHz band. As at the date of this report, the assumptions for the draft of this act and the schedule of works on the preparation are unknown.

A nearly two-year delay in the implementation of the amendments to the Telecommunications Act, which are to come into force in May 2019 and the lack of refarming tools, made it impossible to prepare the 3.5 GHz, 3.7 GHz and 26 GHz bands for earlier distribution.

Bearing in mind the lack of frequency refarming tools, UKE undertook other measures described below to verify the use of frequencies.

The 3.5 GHz band

In the case of the 3.5 GHz band, in 2018 UKE conducted administrative proceedings related to the revocation or expiration of the frequency license. In 2018, 131 proceedings were initiated to revoke the licenses, which:

- a. in 104 cases, ended with the issuance of a decision revoking the reservation,
- b. in 4 cases, ended with the issuance, at the request of the entities, of a decision confirming the expiry of the license,
- c. in 1 case, appeared to be redundant (the license expired during the procedure),
- d. in 22 cases, ended with issuing decisions discontinuing the proceedings,

which means that the number of licenses in the 3.5 GHz band in 2018 decreased by 109 licenses, to 45.

At the same time, in 2018 one license from the 3.5 GHz band was refused.

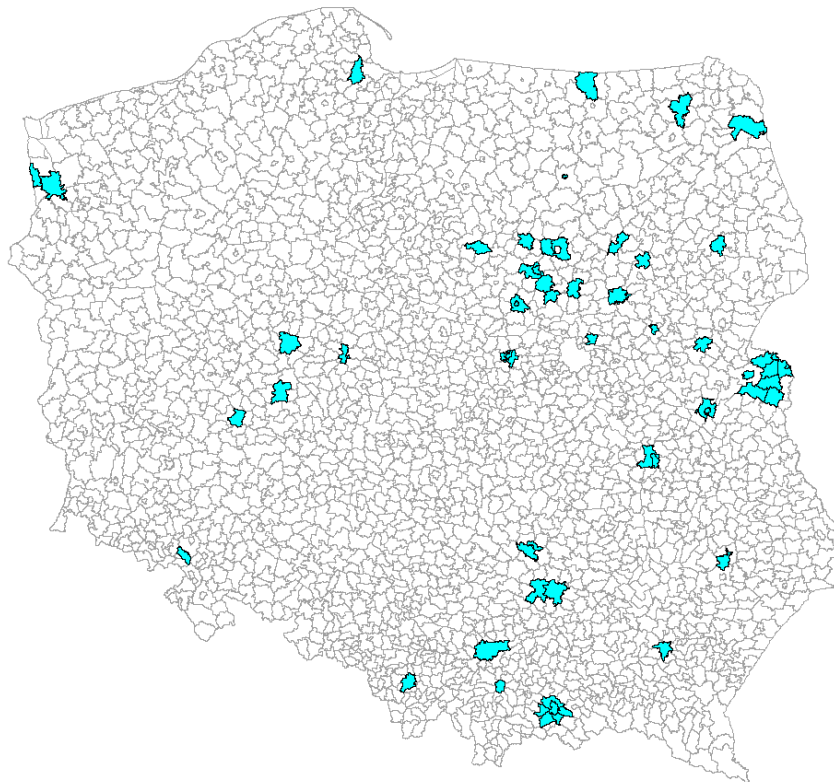
In the case of radio licenses, in 2018 6 decisions revoking radio licenses were issued and 1 permit was refused. As of the date of the preparation of the report, 6 proceedings on the refusal to issue radio licenses are pending.

As of 21 January 2019, in the 3.5 GHz band there were still:

- a. 45 valid decisions on frequency licenses,
- b. 153 valid decisions on radio licenses.

Figure 5

Status of the distribution of 3.5 GHz band licenses as of 21 January 2019.



Source: Office of Electronic Communications

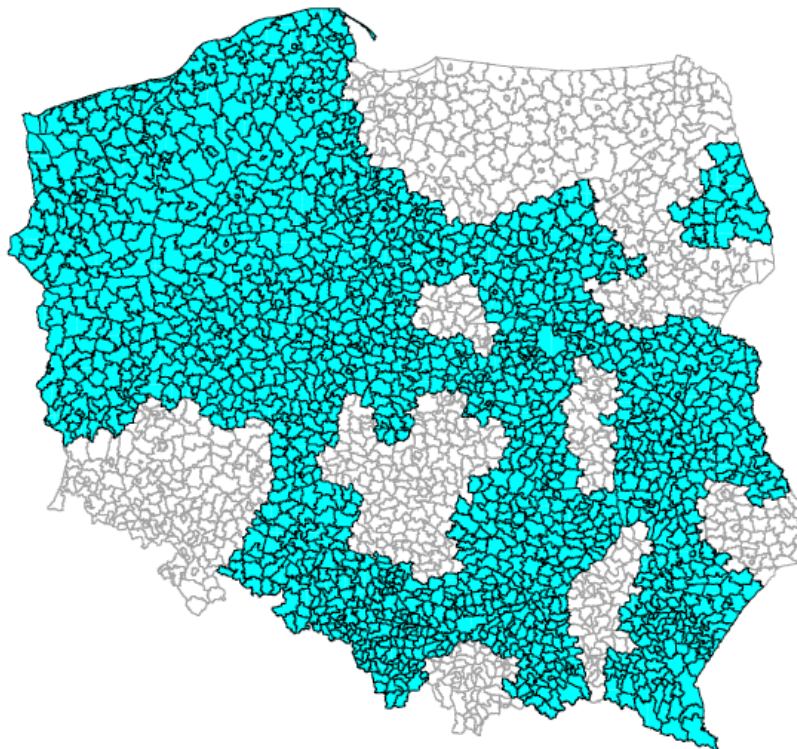
The 3.7 GHz band

In 2018 the activities of UKE regarding the provision of the 3.7 GHz band for 5G were focused on regional licenses in the ranges 3657-3699 MHz and 3775-3799 MHz.

As of 31 December 2017, there were 39 out of 61 regional areas occupied, covering a total of 1 675 communes.

Figure 6

Status of the distribution of regional 3.7 GHz licenses as of 31 December 2017.



Source: Office of Electronic Communications

As part of the activities undertaken in 2018:

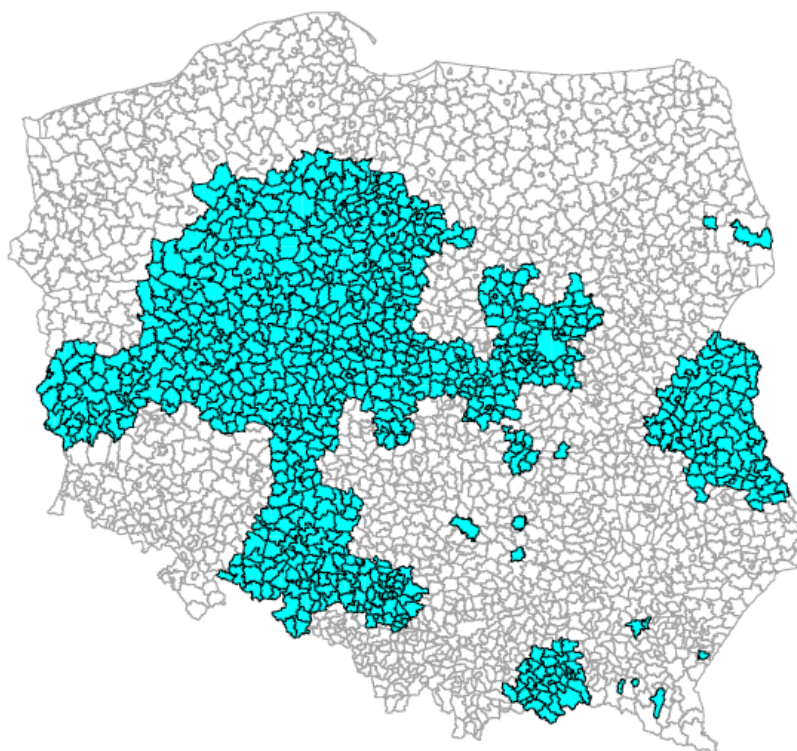
- a. 9 areas had licenses revoked (areas 12.1, 22.1, 22.2, 22.4, 24.3, 32.1, 32.2, 32.3 and 32.4) - altogether 368 communes were released,
- b. 4 areas were found to have licenses expired (areas 06.1, 06.4, 08.1 and 26.1) – the total of 173 communes were released,
- c. 7 areas had the area of license reduced (area 09.2 to 2 communes, area 09.3 to 4 communes, area 14.1 to 1 commune, area 14.2 to 3 communes, area 14.7 to 9 communes, area 20.1 to 2 communes and area 26.2 to 3 communes) - altogether 266 communes were released,
- d. 1 area had the area reduced (to 1 commune) and the license period was shortened (from 31 December 2022 to 31 December 2018) - license in area 14.4 expired at the end of 2018 – the total of 35 communes were released,
- e. 1 area had the license period shortened (area 06.2 from 31 December 2022 to 30 April 2019) - 48 communes will be released at the end of April 2019.

As a result of administrative proceedings initiated in 2018, a total of 842 communes were released.

As of 21 January 2019, regional licences comprised 25 out of 61 regional areas – the total of 833 communes (at the end of April 2019 - 785 communes).

Figure 7

Status of the distribution of regional 3.7 GHz licenses as of 21 January 2019.



Source: Office of Electronic Communications

At the same time, in 2018 UKE refused to issue licenses for frequencies in the 3.7 GHz band in 26 cases.

The 26 GHz band

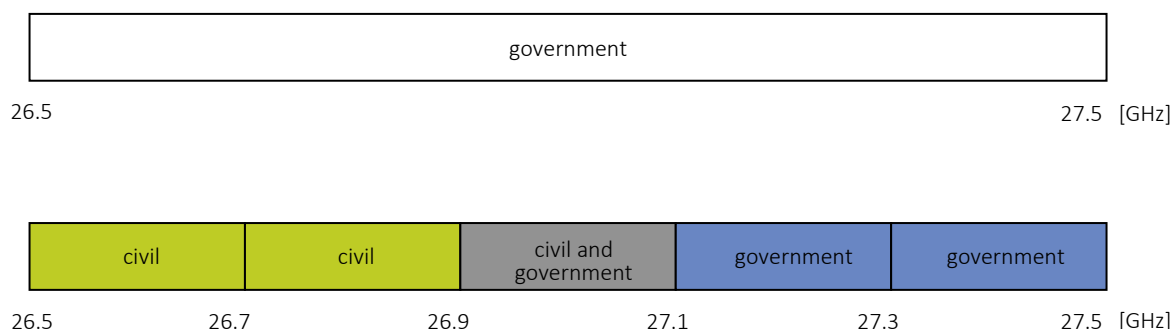
Due to the potential allocation of the 26 GHz band for the needs of the 5G network, in 2018 UKE continued the cooperation started in November 2017 with the Ministry of National Defence (Military Office for Frequency Management – WBZC).

Following a series of meetings as part of the Working Group for the analysis and review of frequencies and frequency ranges used by civil and military users, created under an agreement concluded between the Minister of National Defence and the President of UKE, in November 2018 an agreement was reached to change the National Table of Frequency Allocation (KTPCz), i.e. the allocation of the frequencies in the range of 26.5-27.1 GHz, so that the frequencies in the ranges:

- a. 26.5-26.9 GHz will be allocated for civil use,
- b. 26.9-27.1 GHz will be allocated for civil and government use.

Thanks to these changes, it will be possible to provide two blocks, each with the width of 200 MHz for civil use and one 200 MHz block for civil and government use in the 26 GHz band, without the need of reshuffling.

Figure 8
Distribution of the 26.5-27.5 GHz range



Source: Office of Electronic Communications

In connection with the above arrangements, on 3 December 2018 UKE applied to the Minister of Digitization for undertaking a legislative initiative aimed at introducing changes to the KTPCz and for agreeing further ranges in the 26 GHz band at the government level for the purpose of launching 5G in Poland. Until the date of this report, UKE was not informed about the outcome of the arrangements between the MC and the government users, in particular the Ministry of National Defence, with respect to obtaining further frequencies in the 26 GHz band for civil users.

With the letter dated 3 January 2019, UKE requested the Ministry of Interior and Administration to consider using another frequency range instead of the 26 GHz band.

At the same time, UKE communicated with the current holders of the 26 GHz band. On 20 August 2018, letters were sent to 15 entities using this band with a request to consider changing the decisions in place. UKE received 13 replies in response to these letters. On 12 October 2018 a meeting was held with the operator owning the greatest number of devices in the 26 GHz band. During the meeting, the manner and costs of liquidating the LMDS base stations and the radio links in the Netia Group were discussed.

As of 1 January 2019, in the 26 GHz band there were:

- a. 8 decisions on frequency licenses,
- b. 258 decisions on radio licenses.

2.8. Actions supporting the development of 5G

In 2018, UKE issued 55 permits to conduct 5G technology tests in the 700 MHz and 3.5 GHz bands.

Table 2
Summary of 5G tests

No.	Entity	Test location	Number of base stations	Band	Bandwidth [MHz]	Date of the decision	Date of test completion
1	Orange Polska S.A.	Gliwice	1	3.5 GHz	160	10-08-2018	31-01-2019
2	Orange Polska S.A.	Koszalin	1	3.5 GHz	100	10-08-2018	31-01-2019
3	T-Mobile Polska S.A.	Warsaw	15	3.5 GHz	100	24-09-2018	23-09-2019
4	T-Mobile Polska S.A.	Katowice	5	3.5 GHz	100	05-11-2018	23-09-2019
5	T-Mobile Polska S.A.	Kazimierz Dolny	3	3.5 GHz	95	05-11-2018	23-09-2019
6	Orange Polska S.A.	Bytom	1	3.5 GHz	100	21-11-2018	20-11-2019
7	Orange Polska S.A.	Chorzów	10	3.5 GHz	100	21-11-2018	20-11-2019
8	Orange Polska S.A.	Katowice	6	3.5 GHz	100	21-11-2018	20-11-2019
9	Orange Polska S.A.	Piekary Śląskie	1	3.5 GHz	100	21-11-2018	20-11-2019
10	Orange Polska S.A.	Kołobrzeg	3	3.5 GHz	100	21-11-2018	20-11-2019
11	Lodz University of Technology (jointly with Ericsson sp. z o. o.)	Lodz	5	700 MHz	10	29-11-2018	31-12-2019
12	Lodz University of Technology (jointly with Ericsson sp. z o. o.)	Lodz	4	3.5 GHz	60	29-11-2018	31-12-2019

Source: Office of Electronic Communications

2.9. Management of frequency resources

In 2018 UKE was issuing radio permits and decisions to change them, as well as radio operator certificates.

In 2018 UKE issued a total of 27 519 decisions related to the use of frequencies.

Table 3

Decisions related to the use of frequencies

No.	Type of decision	Amount
1	Decisions in the point-to-point fixed service	12 280
2	Decisions in the point-to-multipoint fixed service	325
3	Decisions in the mobile service for mobile network operators	8 804
4	Decisions in the mobile service for the RRL network	1 237
5	Decisions in aeronautical services	1 335
6	Decisions in maritime services	790
7	Decisions in the broadcasting service for radio	818
8	Decisions in the broadcasting service for television	73
9	Decisions in satellite services	58
10	Decisions in the amateur service	1 692
11	Decisions regarding the use of PLB (personal locator beacon)	107
Total		27 519

Source: Office of Electronic Communications

Additionally, UKE made, pursuant to Article 144c of the Telecommunications Act, 14 021 entries in the register of radio equipment used without permission, operating in base stations of mobile telephony.

In 2018, UKE carried out exams for the radio operator's certificate during 161 examination sessions and issued 5 012 certificates authorizing the use of radio equipment.

Table 4

Certificates for the operation of radio equipment

No.	Type of certificate	Amount
1	Radio operator certificates in the maritime and inland waterway radiocommunication service	3 325
2	Radio operator certificates in the aeronautical radiocommunication service	800
3	Radio operator certificates in the amateur radiocommunication service	887
Total		5 012

Source: Office of Electronic Communications

As part of cooperation with regulatory authorities of other countries, in 2018 the following agreements regarding the use of frequencies in border areas were concluded:

- a. Agreement between the Polish and German administrations regarding the coordination zone in Germany for the VHF III band (170-230 MHz) (Mainz, 23 January 2018),
- b. Technical arrangements between the Office of Electronic Communications of the Republic of Poland and the Office of Communication Regulation of the Republic of Lithuania on the use of the 880-915 MHz and 925-960 MHz frequency ranges by terrestrial systems in border regions (Warsaw, 20 December 2018),
- c. Technical arrangements between the Office of Electronic Communications of the Republic of Poland and the Office of Communication Regulation of the Republic of Lithuania on the use of the 1710-1785 MHz and 1805-1880 MHz frequency ranges by terrestrial systems in border regions (Warsaw, 20 December 2018),
- d. Technical basics and criteria for the use of the 3400-3800 MHz frequency range by terrestrial communication networks in mobile and fixed service in border areas agreed between the Office of Communication Regulation of the Republic of Lithuania and the Office of Electronic Communications of the Republic of Poland (Warsaw, 20 December 2018).

As part of international arrangements for the inclusion of frequency channels for digital terrestrial television after the release of the 700 MHz band, the following agreements were concluded:

- a. Coordination agreement on digital terrestrial television in the 470-694 MHz range between Germany and Poland (Mainz, 23 January 2018),
- b. Supplementing the technical criteria and basics for the digital terrestrial television in the 470-694 MHz range between the Office of Communication Regulation of the Republic of Lithuania and the Office of Electronic Communications of the Republic of Poland (Brussels, 5 June 2018).

Moreover, in 2018 UKE announced a frequency management plan for the 3400-3600 MHz range (Ordinance No. 3 of the President of UKE of 26 January 2018) and started works on the revision of the frequency management plan for the range 174-230 MHz. The Ordinance No. 1 of the

President of UKE regarding the amendment of the frequency management plan for the range 174-230 MHz was published on 14 January 2019.

2.10. Analysis of OTT services

In connection with the intensive development of Over-The-Top (OTT) services, in 2018 UKE ordered a study of their activity. As a result, in December 2018 a report was prepared entitled "The activity of OTT service providers concerning the impact of their services on the telecommunications market in Poland and the economic approach to the issue operator - OTT provider". It contains information on the OTT providers operating on the Polish market along with the range of services they offer.

After the report was completed, UKE carried out its analysis in terms of the comparison of OTT operations in other countries. The analysis showed that the penetration of OTT services in Poland is still at a lower level than in the most developed countries. The most popular text messengers in Poland are available for free, and the service providers earn mainly from ads and user data. In the field of VoIP and video communication, calls made from a given application are also free, and the fee relates to calls made to fixed and mobile telephony and to additional services. The most popular instant messengers in Poland are: Messenger, Skype, GG, Whatsapp and Viber. The report shows that market data and consumer surveys do not clearly prove the existence of a full substitutability of OTT services against the selected telecommunications services. They are rather complementary, although in some areas they compete with them.

The report also contains an analysis of the possibility of UKE to obtain information from entities that are not telecommunications undertakings, as well as the possibility of applying Polish law to those OTT providers whose services are available on the territory of the Republic of Poland, and whose headquarters are located abroad. The provisions of the Polish law do not exclude the possibility of regulating OTT services by UKE. What is more, the national law allows to request information from the OTT providers which are registered in Register of Telecommunications Undertakings (RPT). In the case of other OTTs, this requires the assistance of other state authorities.

2.11. Study of technological start-ups

Due to the fact that one of the areas of UKE's activity is the support of Polish innovative solutions and enterprises, in 2018 a study was conducted on technology start-ups. 52 start-ups participated in the study (20 representatives had extended interviews).

The study covered a wide range of the functioning of the telecommunications market. Opinions were collected on, among others, the use of telecommunications services, including OTT services. The questions also referred to the impact of the development of the 5G network on the activities of start-ups and the safety on the Internet. The start-up representatives assessed the telecommunications market and the changes taking place on it.

An important aspect of the entire undertaking were the explanations given during individual interviews. Entrepreneurs spoke about the sources of ideas for this type of business, or the needs and challenges faced by them. They were asked about the level of innovation and investment plans. It was possible to identify key factors for the development of technology start-ups as well as sales models and channels, including on the international market. An important element of the study was the topic of cooperation of start-ups with other entities, including telecommunications entities.

2.12. Development of the postal market

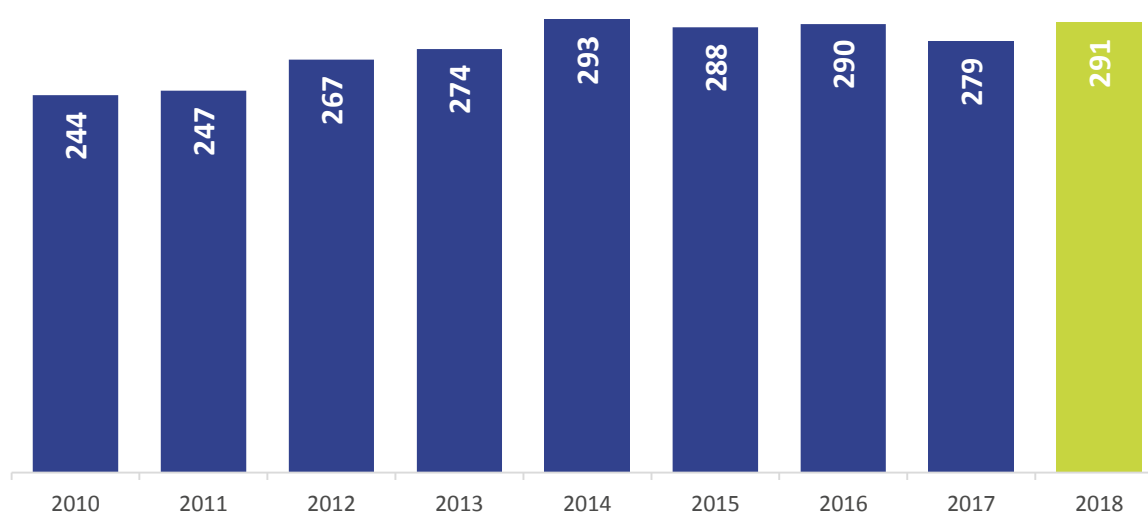
In 2018, the Office of Electronic Communications received:

- a. 37 applications for entry into the register of postal operators (ROP),
- b. 12 applications for the removal from the ROP,
- c. 4 applications for the suspension of postal activities,
- d. 24 applications for data change within the scope of the application for entry to the ROP.

12 entities have been removed from the ROP ex-officio due to a permanent cessation of their postal activities (the entities were previously deleted from CEIDG or KRS). In total, as of 31 December 2018, there were 292 entities in ROP, including Poczta Polska and 291 operators that do not provide universal services.

Chart 10

Alternative postal operators entered into the ROP



Source: Office of Electronic Communications

Workshops for postal operators

In 2018 UKE organized workshops for the representatives of postal operators twice:

- a. Obligation to submit a report on postal activities: the workshops conducted on 21 February 2018 concerned the correct completion of reporting forms and reporting requirements resulting from the Regulation of the European Parliament and of the Council (EU) 2018/644 on cross-border parcel delivery services (Regulation (EU)),
- b. Cross-border parcels - information obligations: the workshop carried out on 13 December 2018 were devoted to information obligations resulting from the Regulation (EU) which aims at fostering competition by providing greater transparency in the price of the deliveries of cross-border parcels and more effective monitoring of the state of the development of the postal market.

Postal market analysis

In 2018, UKE carried out analyses of the functioning of the postal market and prepared:

- **Report on the state of the postal market in 2017** - with information on the functioning of the postal market prepared on the basis of the data provided by postal operators in reports on their activities in 2017. Activities of Poczta Polska as an operator designated to provide universal services and of 142 alternative operators were analysed. An analysis of individual segments of the postal market was also made. Pursuant to the provisions of the Postal Law act, the President of UKE submitted to the Minister of Infrastructure a report on the state of the postal market in 2017, including the results of the inspection of postal activities. The report was also published in UKE BIP.
- **Report of the President of UKE on the study of the delivery time of postal items in the field of the universal service in domestic traffic for 2017** - discusses the research conducted on the time of delivery of unregistered economic and priority letters and economic and priority parcels in 2017 in the field of universal services in domestic traffic by Poczta Polska. The results of the study of the delivery time of postal items were compared with the objectives in terms of timeliness specified by law. Pursuant to the provisions of the Postal Law act, UKE published the report on the delivery time of postal items in the field of universal service in the domestic traffic for 2017 in UKE BIP.
- **Guide for postal operators – cross-border parcels information obligations** - contains the basic, practical information on how to comply with reporting obligations under the Regulation (EU). The guide was published together with the necessary documents and materials on the UKE website for use by postal operators acting on the Polish market as an aid in the implementation of new information requirements.

Developing and publishing the Report on the state of the postal market for 2017 and the Report of the President of UKE on the study of the delivery time of postal parcels in the field of universal services in the domestic traffic for 2017 provided the participants of the postal market with wider and practical information on its functioning.

Developing and providing the Guide for postal operators - Cross-border parcels information obligations, UKE provided postal operators with the necessary information and guidance to facilitate the reporting obligations set out in the Regulation (EU).

3. Competition as a result of optimal regulations

3.1. Regulations of relevant markets

Overview of relevant markets

One of the main tasks of UKE is to review relevant markets, which results in the determination of effective competition or the presence of an undertaking with significant market power (SMP). The starting point for reviews is a proper analysis and definition of markets, and then, if an SMP is found, the imposition of appropriate regulatory obligations.

Taking into account the results of market analyses in 2018 UKE issued deregulation decisions regarding:

- a. the domestic market for the provision of connection services to the fixed public telephone network and maintaining readiness to provide telecommunications services to consumers (market 1/2003),
- b. the domestic market for the provision of connection services to the fixed public telephone network and maintaining readiness to provide telecommunications services to end-users, excluding consumers (market 2/2003),
- c. the domestic market for the provision of a call origination service in fixed public telephone network (telephone network at a fixed location, market 8/2003).

In 2018 UKE also issued regulatory decisions for:

- a. the domestic wholesale market for the broadcasting of radio programs to deliver radio content to end users (market 18/2003),
- b. the domestic wholesale market for the provision of television broadcasting services to provide television content to end-users (market 18/2003).

Wholesale market for the broadcasting of radio or television programmes in order to provide radio or television content to end users (market 18/2003)

The new SMP decisions were issued on 17 January 2018. The regulation of market 18/2003 is aimed at eliminating problems related to the abuse of the significant market power by EmiTel sp. z o. o. (EmiTel), in particular:

- a. enabling the use of EmiTel's infrastructure by alternative operators on transparent terms based on reasonable and justified charges,
- b. limiting the possibility of price differentiation by EmiTel depending on the competitive conditions in a given local area,
- c. limiting the possibility of using negative market practices of the Margin Squeeze type and cross-subsidizing by EmiTel,
- d. creating alternative conditions for alternative operators to provide comprehensive offers for the broadcast of signal covering the entire country, cost-competitive to EmiTel offers

and responding to the needs of broadcasters.

The means to achieve the goals is the fulfilment of regulatory obligations by EmiTel:

- a. providing telecommunications access (including lines and connections, transmission systems and telecommunications devices, including those related to providing the backhaul service),
- b. non-discrimination and transparency,
- c. determining fees based on the costs incurred,
- d. preparation and application of reference offer,
- e. regulatory accounting.

Wholesale market for the provision of call termination services in individual public telephone networks at a fixed location (market 1/2014)

On 21 May 2018, proceedings regarding markets 1/2014 were initiated, and on 30 May – 29 June 2018, consultations on draft decisions for 75 operators were held, during which 93 unrestricted positions were received. However, due to the need to update the data for market analysis and the BU-LRIC model, UKE decided to initiate new regulatory proceedings, which took place on 6 December 2018. On 19 December 2018, consultations on 192 new draft decisions were initiated. The consulted drafts are partial decisions in which regulatory obligations are applied to SMP operators, except for the determination of the termination rate, which will be determined in the next UKE decision.

Wholesale market for local access services at a fixed location (market 3a/2014) and wholesale market for central access services at a fixed location for mass market products (market 3b/2014)

In 2018 UKE continued works related to the final determination of the approach to regulation of markets 3a and 3b/2014, as well as conducted an appropriate market analysis.

On 4 December 2018, a meeting was held with representatives of the EC, during which the assumptions for the regulation of both mentioned relevant markets were presented.

On 2 January 2019, appropriate administrative proceedings were instituted, and on 10 January 2019, consultations on the draft decisions for OPL began.

The delays in reviews of relevant markets

In 2018 UKE intensified the elimination of delays in periodical market reviews, with the 3-year periods formalised by the EC. These activities covered the aforementioned completion of the review and the issuance of decisions for markets 18/2003, 1/2003, 2/2003 and 8/2003 and the launch of the analysis phase of market 1/2014 together with advanced works on draft decisions.

Effects of the regulation of relevant markets:

- deregulation of markets 1, 2 and 8/2003,
- re-appointment of EmiTel as the SMP operator on the market 18/2003,
- initiation of administrative proceedings for market 1/2014,
- analysis and initiation of proceedings for markets 3a and 3b/2014.

3.2. Effective cooperation among operators

Decisions changing or approving reference offers

In 2018 UKE continued the process of adapting the contents of the reference offers to the changing market conditions in accordance with the conditions indicated in Article 43 (1) and (2) of the Telecommunications Act.

On 25 September 2018, UKE issued a decision on the change of the SOR Offer by reducing the subscription fee for the WLR POTS Service. UKE decided that the current fee of PLN 20.05 does not meet the requirement of ensuring competition on the fixed voice services market and lowered it to PLN 18.82.

On 8 October 2018, it issued a decision regarding the change of the SOR Offer by removing the fee for number porting. The previous fee of PLN 25.39, in the opinion of UKE, did not meet the requirement of ensuring competition on the fixed voice services market.

On 20 December 2018, UKE issued a decision refusing the approval of change in the SOR Offer at the request of OPL. OPL requested to delete the synchronization of the IT System Interface with PLI CBD in the process of executing the order for the OPL Regulated Service, related to the number porting service. UKE decided that the OPL proposal did not correspond to the law and market needs, and the current wording of the SOR Offer does not need to be changed.

On 24 April 2018, administrative proceedings were initiated regarding the approval of the draft reference offer for telecommunications access for the purpose of providing radio and television transmission services by EmiTel. On 3 December 2018 - January 2, 2019, consultations on the draft decision were carried out.

Decisions setting the obligation to change the SOR offer

On 25 October 2018, UKE issued a decision refusing the obligation for OPL to change the SOR offer consisting in splitting the "Launching the service in the xPON (FTTH) technology" tariff item into two alternative services: launching the service in the xPON (FTTH) technology on an active link and launching the service in the xPON (FTTH) technology on an inactive link. The proceedings were conducted at the request of Netia S.A. (Netia). In the opinion of UKE, there was no change in market conditions and there were no changes in the demand for services that would justify the issuing of a decision obligating OPL. UKE stated that the penetration of services in the fibre optic technology (both on the retail and wholesale markets) is too low and the separation of fees at this stage of market development would be unfavourable for the further development of the Polish telecommunications market in the area of fibre optic investments. An analysis of retail offers of

the largest operators confirmed that the solution requested by Netia is not used on the Polish market. SMP operators from other EU countries also, as a rule, do not use the division into an active and inactive link on the market of wholesale broadband access services. On 13 November 2018, Netia filed a request for reconsideration of the matter.

Regulatory accounting - Instruction on OPL regulatory accounting for 2017 and Description of cost calculation for 2019, WACC indicator

After conducting market analyses based on Article 21 of the Telecommunications Act, UKE determined a lack of effective competition and designated OPL as an undertaking with significant market power, and also imposed the following obligations on OPL, inter alia:

- a. the obligation to conduct regulatory accounting pursuant to Article 38 (1) of the Telecommunications Act in accordance with the instruction approved by UKE, on the following relevant markets:
 - pursuant to the decision DART-SMP-6040-5/09 (22) of 22 September 2009 on the market for the provision of call termination service in the fixed public telephone network of Telekomunikacja Polska S.A. (market 3/2007),
 - pursuant to the decision DART-SMP-6040-2/10 (52) of 30 December 2010 on the market for the provision of wholesale (physical) access to network infrastructure (including shared or fully released access) at a fixed location (market 4/2007),
 - pursuant to the decision DART-SMP-6040-5/10(42) of 5 August 2011 on the market of call origination in the fixed public telephone network of Telekomunikacja Polska S.A. (market 2/2007),
 - pursuant to the decision DART-SMP-6040-1/14 (121) of 7 October 2014 on the market for the provision of wholesale broadband access services (market 5/2007),
 - pursuant to the decision DART.SMP.6040.1.2015.51 of 16 September 2015 on the market for the provision of high-quality wholesale access services at a fixed location of up to 2 Mbit/s inclusive (market 4/2015),
- b. the obligation to calculate costs on the basis of Article 39 (1) of the Telecommunications Act in accordance with the description of the cost calculation on the market 5/2007 approved by UKE,
- c. the obligation to set fees based on the costs incurred on the basis of Article 40 of the Telecommunications Act on market 2/2007, market 3/2007, market 4/2007, market 4/2015.

On 4 April 2018, UKE issued a decision (Decision I) approving the OPL regulatory accounting instruction for 2017 and a description of the cost calculation of BSA Services for 2019 (Description of calculation 2019). Decision I was upheld by the decision of 4 June 2018 (Decision II).

Description of calculation 2019 relates to the calculation of the current costs of the fibre-optic access network and the copper network according to the LRIC+ method¹⁹. The approved

¹⁹ The method of long-term incremental costs together with the overhead of common costs.

Description of calculation 2019, in accordance with the EC Recommendation²⁰, meets the assumptions concerning in particular: the valuation of the fibre network elements, the period of the economic usefulness of assets and the volume of subscriber connections.

During the arrangements, UKE called OPL to amend the 2017 Instruction and Description of calculation 2019 and to provide clarifications. OPL made changes and modifications to the documents, as a result of which UKE approved the agreed 2017 Instruction and the Description of calculation 2019 without any changes.

On 11 April 2018, UKE issued a decision specifying WACC for OPL for services on market 5/2007. For the BSA Services implemented on the basis of fibre-optic infrastructure, the WACC indicator was determined at the level of 9.37%, for other BSA Services, to the extent that they are implemented on the basis of copper infrastructure - at the level of 8.12%.

These above indicators were applied by OPL in the cost calculation of the BSA Service for 2019.

Fulfilment of obligations pursuant to Article 38 of the Telecommunications Act

On 13 August 2018, an audit of the report on regulatory accounting done by OPL was completed (Article 38 of the Telecommunications Act), regarding the financial year ending on 31 December 2017 and on the results of reasonable costs calculation (Article 39 of the Telecommunications Act) for 2019 (pursuant to Article 53 (5) of the Telecommunications Act) as covered by Decision I and Decision II. The statutory auditor issued a positive opinion, stating the correctness of cost calculation for market 5/2007.

The report on the regulatory accounting performed by OPL regarding the financial year ending on 31 December 2017 on market 2/2007, market 3/2007, market 4/2007, market 4/2015 and market 5/2007, with positive opinion of the statutory auditor, provided UKE with information that in 2017 OPL did not practice price discrimination against alternative operators (OA), there was also no subsidization among the separated OPL activities.

Fulfilment of obligations pursuant to Article 39 of the Telecommunications Act

The statutory auditor issued a positive opinion on the results of the cost calculation on market 5/2007 for 2019 on 13 August 2018. The analysis of the results of the calculations of the costs provided by OPL conducted by UKE showed only minor changes, or no changes in the level of costs, as compared to the costs from the previous year. In view of the above, in the opinion of UKE, there was no need to change the SOR Offer with respect to the fees based on the prerequisites resulting from the Telecommunications Act. What is more, UKE they did not receive requests to change the SOR Offer for market 5/2007 fees.

Due to the indicated circumstances, the fees did not change, and the fees applicable on market 5/2007 are the fees approved with UKE decision of 25 May 2017, partly amending, and partly upholding the decision of UKE of 11 August 2016.

²⁰European Commission Recommendation (Commission Recommendation) of 11 September 2013 on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment.

MS / PS tests carried out in 2018.

In 2018, UKE considered 8 applications for MS Tests for 28 retail promotions, of which 10 retail promotions related to services provided in the xDSL technology, and 18 retail promotions related to services provided in the FTTH technology.

Analysis of market effects of the consolidation of Cyfrowy Polsat and Netia as well as Vectra and Multimedia Polska

The aim of UKE's activities was to support the President of UOKiK in the decision regarding the consolidation on the telecommunications market by conducting a comprehensive analysis of many aspects that may be influenced by the consolidation on the telecommunications market, including the level of prices, the degree of competition and the results for the end customer. The impact of the planned concentration on wholesale markets as well as, for the consolidation of Cyfrowy Polsat and Netia, on the available frequency resources was also examined. Based on the data from the inventory of telecommunications infrastructure and services, the positions of Cyfrowy Polsat and Netia as well as Vectra and Multimedia Polska on the domestic market were analysed, infrastructure availability was tested and the market problems identified. Then an analysis of the price lists of the services offered was carried out. This allowed to characterize the service bundles of operators, both in terms of the price, content and configuration of bundles, as well as in terms of the location of their provision. Thanks to this, it was possible to analyse the locality of the services offered. For the consolidation of Vectra and Multimedia Polska, an analysis of service baskets and an analysis of customer profiles were also carried out. The potential customers of Multimedia, after having completed the profiling, were set against the previously characterized Vectra services. This enabled the assessment of the potential effects of consolidation for end-users and made it possible to take appropriate measures to protect them. As a result, an opinion on consolidation was issued, taking into account the interest of consumers and allowing appropriate measures to be taken for their protection.

3.3. Inspections in the field of telecommunications

In 2018, UKE conducted 91 inspections in the field of telecommunications, mainly in the following areas:

- a. the terms of providing telecommunications services to end-users specified in contract templates and the procedure for complaint handling,
- b. the conditions of access to real estates by telecommunications undertakings as set out in decisions issued by UKE,
- c. use of terminal equipment for direct marketing,
- d. implementation of the ordinance of the Minister of Administration and Digitalization of 26 March 2014 on detailed requirements for the provision of facilities for people with disabilities by providers of publicly available telephone services,
- e. compliance of the activity of undertakings with Articles 10, 12 of the Telecommunications Act,
- f. implementation of the provisions of Mega-law, with the resulting obligations to ensure wholesale access to telecommunications networks deployed in accordance with this Act,
- g. telecommunications malpractice involving the generation of the so-called artificial traffic.

Chart 11

Number of inspections in individual areas

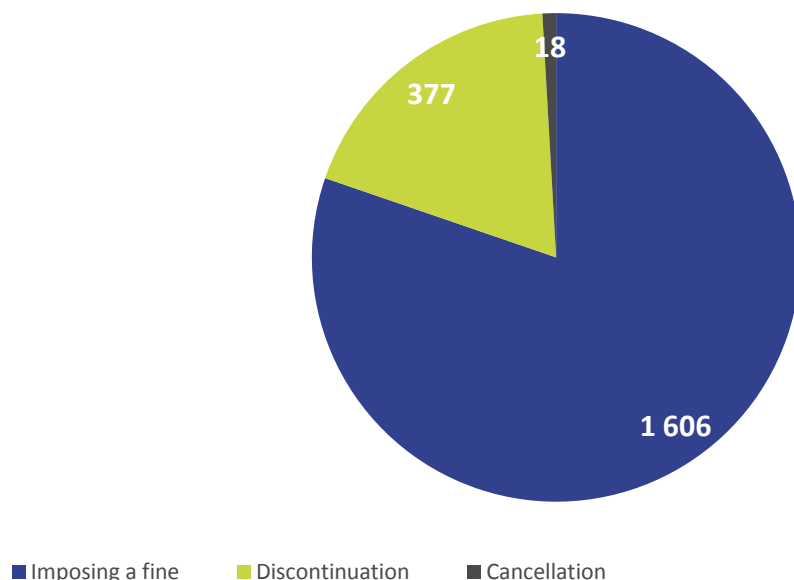


Source: Office of Electronic Communications

In 2018, UKE conducted and completed 2 001 administrative proceedings regarding the imposition of a fine, which served primarily to examine by UKE the compliance with the basic obligations of the Telecommunications Act and Mega-law, in particular, the reporting obligations.

Chart 12

Manner of ending proceedings concerning the imposition of a fine



Source: Office of Electronic Communications

The most important proceedings completed in 2018 include matters relating to the imposition of a fine on:

- a. OPL - PLN 11 million fine for non-compliance with obligations regarding offers defining the reference conditions of access agreements by failing to provide the possibility of sending messages to the PLI CBD system during the process of number porting,
- b. OPL - fines in the total amount of PLN 9.1 million for the use of automated calling systems for direct marketing purposes (sending marketing messages) and a failure to show the consents of subscribers or end users required in such a case,
- c. 4Carriers sp. z o.o. - fines in the total amount of PLN 2.2 million for changing the identification from foreign to domestic of numbers initiating calls and using the national numbering allocated to other telecommunications undertakings for this purpose,
- d. Netcentrica sp. z o. o. - fines in the total amount of PLN 70 000 for non-compliance with the conditions of telecommunications traffic control resulting from the concluded interconnection agreements and for using the number 118913, allocated to OPL to provide the OBN service, without the relevant rights.

3.4. Inspections in the field of frequency management

The Office of Electronic Communications conducted in 2018, through regional branches, a permanent and ad hoc monitoring of the radio spectrum by means of:

- a. Fixed Measuring Stations that are part of the National Automatic Radio Spectrum Monitoring System (KASMON),
- b. Mobile Measuring Stations,
- c. Mobile Monitoring Stations.

Permanent monitoring covered:

- a. 702 radio transmitting and transmitting / receiving devices with 105 300 measurements of emission parameters done during the year,
- b. 128 safety frequency emissions to protect against interference.

Ad hoc monitoring covered:

- a. 1 868 radio transmitting and transmitting / receiving devices,
- b. 2 314 frequency bands for the effective occupation of frequency channels.

In addition, in 2018 UKE, via its regional branches, carried out:

- a. 606 inspection proceedings against users of radio transmitting or transmitting / receiving devices,
- b. 46 post-inspection proceedings resulting from irregularities found during the inspection (including 33 decisions under Article 201 of the Telecommunications Act),
- c. 67 administrative proceedings regarding the use of radio equipment without a license (Article 203 of the Telecommunications Act),
- d. 9 proceedings on the imposition of a fine.

Moreover, UKE conducted in 2018, through its regional branches, two nationwide campaigns for frequency spectrum monitoring:

- a. verification of the fulfilment of license obligations in the LTE 800 band in the area of 448 communes (no LTE 800 signal was found only at 7 test points),
- b. monitoring of 3.4-3.6 GHz and 3.6-3.8 GHz bands dedicated to Wi-Max stations (among the 946 inspected stations: 103 stations operated not in accordance with the radio license, while in 236 stations the frequency was not used).

3.5. Inspections regarding the requirements of electromagnetic compatibility

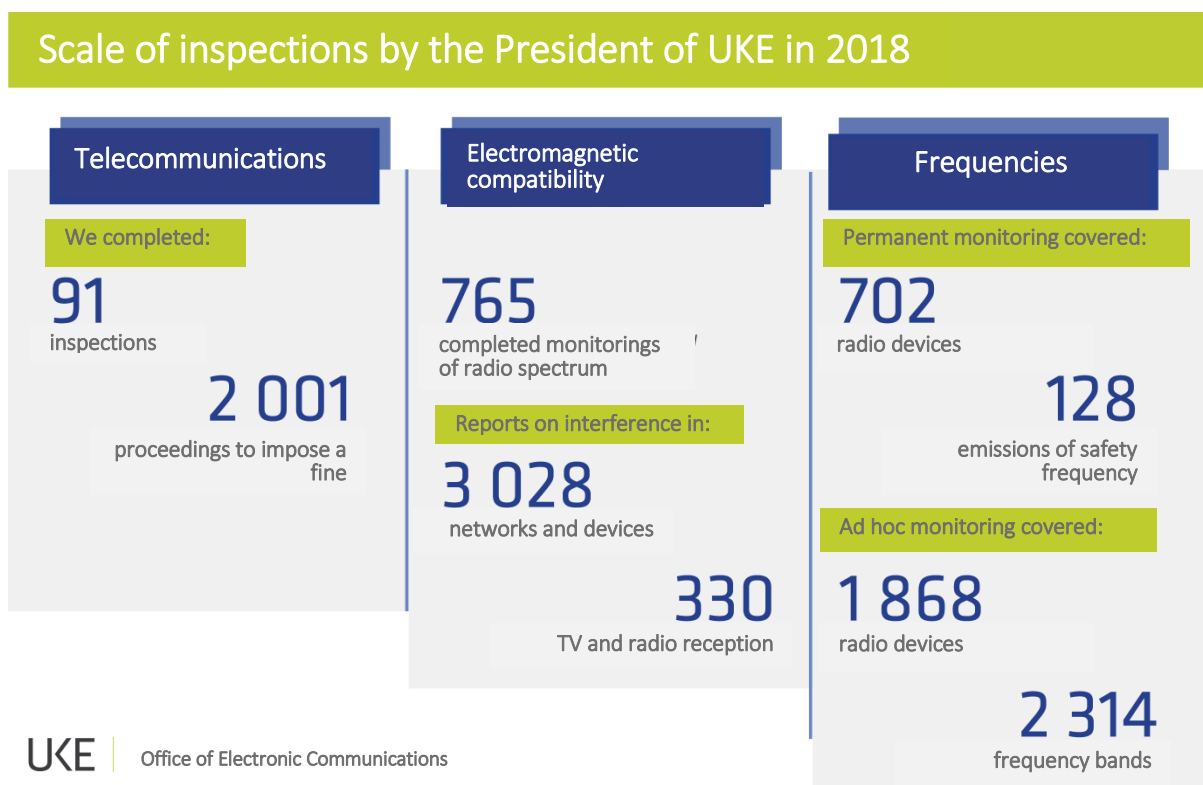
Concerning the fulfilment of requirements regarding electromagnetic compatibility, UKE in 2018:

- received a total of 3 028 reports of interference in radiocommunications networks and devices,
- received a total of 330 reports of interference in radio and television reception,
- performed 765 radio spectrum occupancy surveys to detect and locate the sources of interference.

In 2018, UKE's regional branches reported another increase in the number of interference notifications in radiocommunications networks and devices. In relation to 2017, the increase was 22%. As a result of the actions carried out, it was found again that the main sources of interference were the mobile phone signal amplifiers installed individually by subscribers.

The activities conducted by UKE, both in the field of radio spectrum monitoring and inspection activities, led in 2018 to the initiation of 67 administrative proceedings after determining the use of radio equipment without the permission to do so, 9 administrative proceedings after finding interference, as well as 46 post-inspection and administrative proceedings after identifying irregularities.

Figure 9
Scale of inspections



Source: Office of Electronic Communications

3.6. Inspections on the postal market

Inspections concerning the universal service provider

UKE conducted inspections of Poczta Polska as a designated operator in 2018 in terms of:

- a. examining the time of delivery of postal items in domestic traffic in the field of universal services, including:
 - unregistered letters,
 - postal parcels,
- b. providing disabled people with access to the universal services provided,
- c. handling complaints about universal services.

Checking the timeliness of delivering postal items

Pursuant to the applicable regulations, UKE is obliged to ensure that an inspection of the delivery time of postal items is carried out in a given year in the scope of universal services in domestic traffic and to ensure the verification of correctness of the inspection as well as its results.

The conducted inspections are aimed at a constant monitoring of the quality of universal services and exerting influence on the designated operator for the quality improvement. In this respect, the requirements shall apply on maintaining the rate of delivery time of postal items, as specified in the legal provisions issued pursuant to Article 47 of the Postal Law.

In the event that the designated operator does not follow the indicators for the delivery time of postal items, in each case UKE analysed the premises for waiving fines, including: the economic situation, current financial situation of the designated operator, including the provision of universal services, conditions of the labour market and maintaining the continuity of universal services. UKE also took into account the results of the timeliness inspection from the past two years, the degree of the difference between the required and the achieved indicators and actions taken by the operator to improve the achieved indicators.

The analyses carried out so far with respect to the above mentioned premises did not justify the need to initiate proceedings in order to impose a fine on the designated operator.

In 2018, UKE contacted the designated operator for clarifications regarding measures taken to improve the achieved timeliness indicators in connection with the results of the study of the delivery time of unregistered letter items in 2017. Poczta Polska provided information indicating that the designated operator conducted a detailed analysis of the situation and took many measures to eliminate problems appearing in the most important phases of the parcel delivery process (sending and delivery), including those related to staff shortages, in particular in the delivery service and employee attrition in operational services.

Upon the initiative of UKE, in 2018 meetings were held with representatives of:

- a. the designated operator, aimed at discussing the operator's past and future activities in order to improve the quality of postal services, with particular emphasis on the timeliness of deliveries,

- b. the entity performing the inspection of the handling time of unregistered letters and the unit verifying the performance of the above inspection, in order to discuss the most important issues related to the inspection process.

The inspection of the time of handling unregistered letters in 2018 was carried out in accordance with the new methodology developed in 2017, which to a larger extent was adapted to the postal technology of the designated operator.

Table 5
Nationwide indicators of handling time of letters and parcels in 2018

priority letters			economic letters		
handling time [D + n] ²¹	handling time indicator ²² - quality standard ²³	nationwide handling time indicator [2018]	handling time [D + n]	handling time indicator - quality standard	nationwide handling time indicator [2018]
<i>D+1</i>	82%	57.1%	<i>D+3</i>	85%	74.8%
<i>D+2</i>	90%	84.7%	<i>D+5</i>	97%	94.3%
<i>D+3</i>	94%	93.8%			
priority parcels			economic parcels		
handling time [D + n]	handling time indicator - quality standard	nationwide handling time indicator [2018]	handling time [D + n]	handling time indicator - quality standard	nationwide handling time indicator [2018]
<i>D+1</i>	80%	71.7%	<i>D+3</i>	90%	97.8%

Source: UKE, based on the inspection of delivery time of postal items

Inspection in the field of providing disabled people with access to the universal services

In the period from September to November 2018, UKE carried out an inspection in 470 post offices (285 city office points and 185 rural branches), which constituted 6.2% of all postal office points of Poczta Polska providing postal services in the country²⁴. From among the inspected post office points, the possibility of independent access to the building was provided in 294 of them, while in the case when an independent entry was not possible in 163 post office points, an efficiently functioning bell was installed for calling the staff of the facility. This means that in 457 out of 470 inspected post office points of Poczta Polska (97,2%), the disabled persons were assured the opportunity to independently access the facility or the opportunity to effectively call an employee.

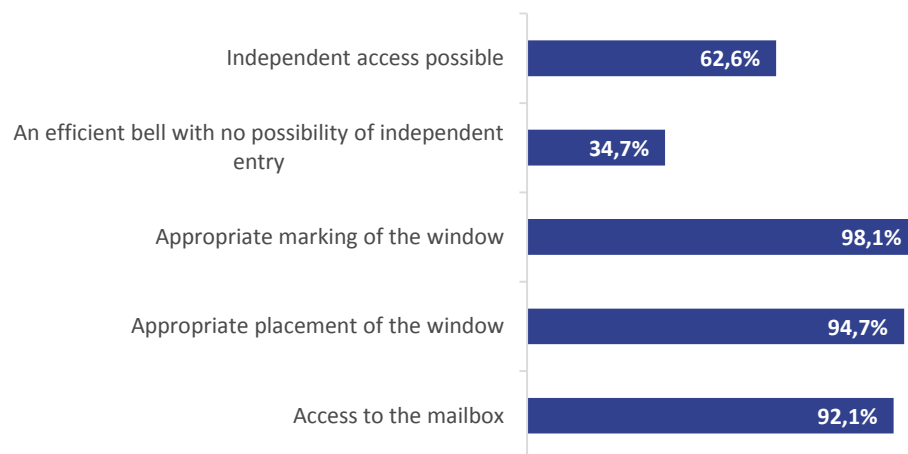
²¹ "D" - the day of conclusion of the contract for the provision of postal services; n - the number of days that have elapsed from the day of sending to the day of delivery of the postal item (statutory holidays and Saturdays are not included in the dates).

²² Share of the number of postal items delivered within a specified period from the date of sending to the day of delivery, to the total number of postal items sent.

²³ Indicator of the handling time of postal items in the domestic traffic specified in Appendix 1 to the Ordinance of the Minister of Administration and Digitization of 29 April 2013 on the conditions for the provision of universal services by the designated operator (Journal of Laws of 2013, item 545).

²⁴ According to the data included in the annual report of the designated operator, at the end of 2017 there were 7 564 post office points operating in Poland, including 4 936 branches located in urban areas and 2 628 in rural areas.

Chart13

Post office points with facilities for the disabled persons

Source: Office of Electronic Communications

Among the 149 post office points inspected that offered the delivery service, the records of disabled persons were kept in 148 of them (99.3%), while the collection of parcels from a disabled person in the place of residence was guaranteed by all post office points with delivery service (100%).

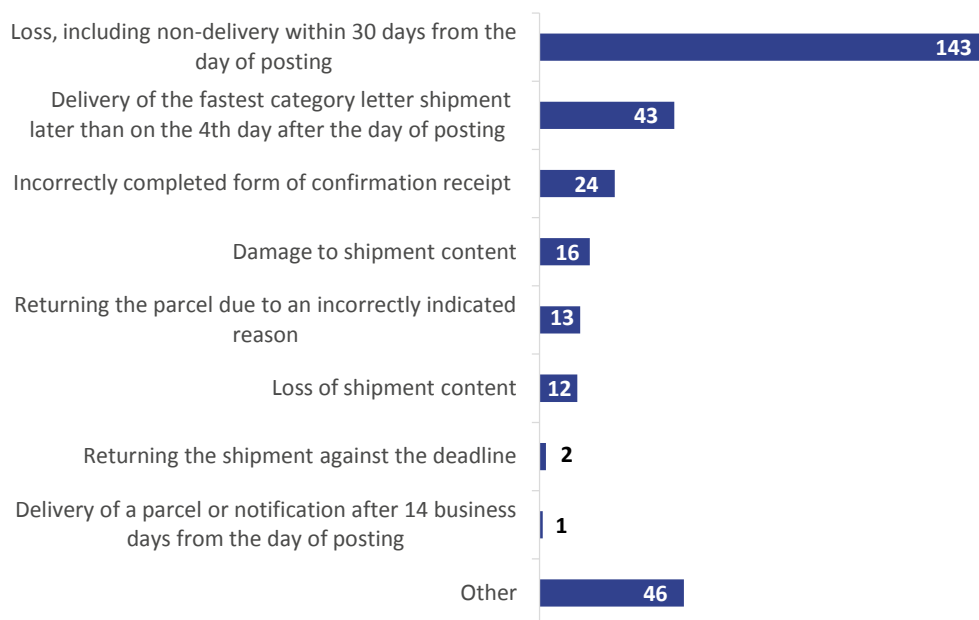
The inspection confirmed that the majority of the inspected post office points met the requirements set out in the Postal Law act. What is more, the information obtained indicates that the designated operator, as part of the ongoing process of introducing a new visual concept of post office points, while renovating or developing the network of post office points, adapts them to the needs of people with disabilities.

Inspection concerning the handling of universal service complaints

From September to November 2018, UKE carried out inspections in the organizational units of Poczta Polska which process complaints. The inspection covered the period from 1 January to 7 November 2018. During the inspection, a total of 300 complaints regarding registered shipments in the domestic traffic were checked, including: 229 complaints about letters, 3 complaints about letters with a declared value, 58 complaints about postal parcels and 10 complaints about postal parcels with a declared value. The inspection was aimed at determining whether Poczta Polska processes complaints about the universal postal service of registered mail, in accordance with the law, as well as obtaining data on the completeness of responses to complaints and their timeliness.

Chart14

Reasons for submitting complaints

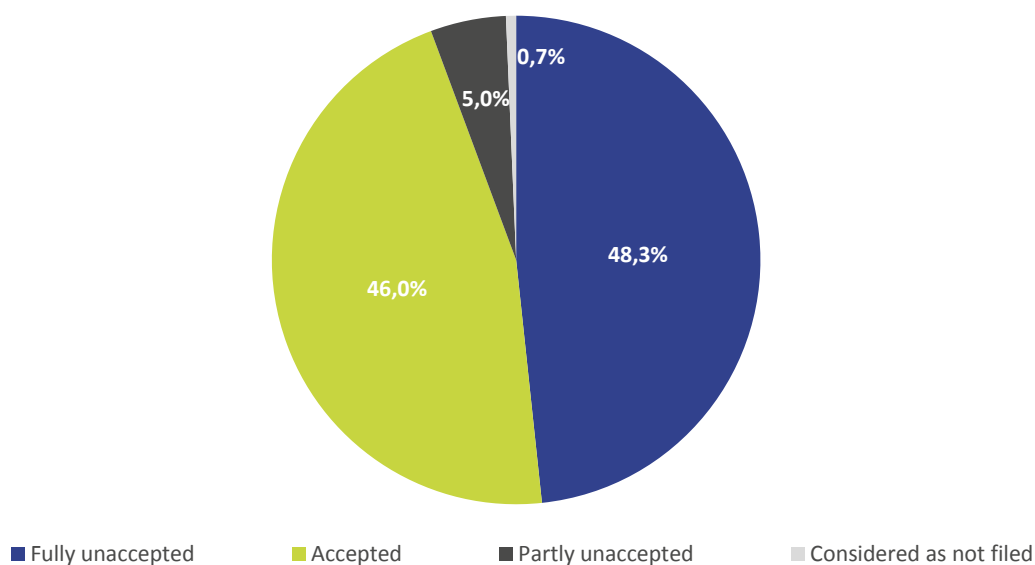


Source: Office of Electronic Communications

Based on the findings made during the inspection, it appears that nearly 50% of the complaints filed during the inspected period were considered justified, while 145 (48.3%) complaints were classified as fully unjustified.

Chart 15

Manner of considering complaints



Source: Office of Electronic Communications

Inspections of entities entitled to perform postal activities on the basis of an entry in the ROP

In 2018, UKE undertook inspections of 15 postal operators. The basis was: not submitting a report on postal activities to UKE, to verify the data contained in the report, obtaining an entry in the ROP and the lack of prior verification, as well as to verify the implementation of UKE's decision. Ten postal operators were effectively inspected. The inspection carried out on the implementation of the final decision showed that the postal operator executed the decision. On the other hand, 1 postal operator made it impossible to carry out an inspection, hence it was notified about the initiation of administrative proceedings to impose a fine for preventing UKE from carrying out the inspection.

Inspections aimed at detecting postal activities performed without the required authorization

UKE carried out an inspection of 4 entrepreneurs where there were premises of them conducting postal activities without a required entry into the ROP.

Among the inspected entities, 2 entities were found to perform postal activities on behalf of and for the benefit of or via postal operators. During the inspections 1 entity was found not to perform postal activities. As a result of the undertaken inspection activities, 3 of the inspected entrepreneurs applied to UKE with an application for entry into the ROP and were entered into the above-mentioned registry.

The effect of the inspection activities was to secure the interests of postal service users, including securing their access to services on an equal and uniform basis, ensuring proper quality of services and ensuring compliance of the conducted postal activity with the applicable regulations.

Administrative proceedings and penalties imposed

In 2018, UKE conducted administrative proceedings regarding matters related to the postal market:

- a. violations of regulations regarding postal activities - UKE issued a decision²⁵ on the application for the reconsideration of case, which was upheld by the judgement of the Provincial Administrative Court in Warsaw (the judgement is not final),
- b. conducting postal activities without a required entry to ROP - UKE issued a decision²⁶ which determined the performance of postal activities without authorizations; the party appealed against the decision to the WSA in Warsaw,
- c. imposing fines on postal operators who did not submit reports on postal activities or submitted the report thus violating the deadline (3 decisions),
- d. verification of the calculation of the net cost and losses on universal services and the determination of the amount of the surcharge for the provision of universal services for 2013,
- e. determining the amount of share in the subsidy for the obligated postal operator and

²⁵ The decision upheld the decision stating the infringement which was appealed against by the party.

²⁶ The decision was then upheld by a decision on the application for reconsideration.

- determining the 30-day deadline for payment,
- f. approving the regulatory accounting instruction for 2019 and the description of the cost calculation for 2019,
 - g. imposing on the designated operator the obligation to submit for publication in UKE BIP the following approved documents: regulatory accounting instructions for 2018 and a description of cost calculations for 2018.

3.7. Management of numbering resources

In 2018 UKE issued nearly 400 decisions concerning the management of numbering resources, and the average time of issuing a decision was 8 days.

In cooperation with the OPL and the services established by law to provide assistance, UKE allocated emergency call numbers for new locations of services handling emergency calls and emergency call centres. It also participated in the processes of migrating the 997 emergency call handling to emergency call centres. Emergency routing numbers (NKA) were published on an ongoing basis on the UKE website in the form of NKA Tables, containing current locations of services handling emergency calls in a given area and emergency call centres. Currently, up-to-date NKA tables are available for all emergency numbers, i.e. 112, 99X and 98X numbers, being the only reliable source of information on emergency call routing areas.

In 2018, UKE ensured the current updating of Numbering Management Tables in the PLI CBD system module, which were also presented on the UKE website, as used in the process of number porting.

What is more, UKE has implemented new provisions on the register of numbers used to provide the premium rate service by developing and implementing modifications to the existing register, aimed at increasing transparency of the provided data. The new register published on UKE websites provides users and consumers with full substantive information along with the necessary contact details of entities providing additional services.

Effects of UKE numbering management:

- efficient issuing of decisions (average time of issuing a decision - 8 working days),
- revenues for the state budget at the level of PLN 85 million per year,
- ensuring the up-to-date status of the publicly available numbering tables and the search engine of service providers of telephone numbers,
- providing full and up-to-date information on the numbers used to provide the premium rate service.

3.8. Legislation and court proceedings

The tasks of the regulator include analysing changes in EU regulations and international organizations in the field of telecommunications, radiocommunications, post, the conformity assessment system and other matters within the competence of UKE from the point of view of their impact on Polish law.

UKE participated in legislative works in 2018 (preparing and agreeing of draft legal acts) concerning not only the telecommunications and postal markets, but also other sectors of the economy, often being the originator and co-drafter of the projects.

UKE also participated in the work on the draft amending the Telecommunications Act and some other acts in 2018. It should be noted that the draft was ready already in April 2017, however, it was submitted by MC for inter-ministerial consultations only a year later, i.e. on 21 March 2018. As a consequence of this and due to further delays in the legislative process, the draft was submitted to the Sejm only in January 2019.

The draft act was to provide the legal basis for the implementation of 5G technology in Poland. Among the changes that actually serve this purpose one should mention:

- a. providing UKE with the authority to issue ex-officio the decision refusing to grant a frequency license for a new period of four years before the expiry of the current licence,
- b. granting UKE the authority to change the allocated frequencies to ensure order in the frequencies management and increase the efficiency of the used frequencies,
- c. introducing an additional premise to change or revoke the frequency license, i.e. in the event of the necessity to fulfil obligations resulting from international agreements binding the Republic of Poland or EU legal acts regarding frequency management,
- d. introducing a number of regulations aimed at ensuring an efficient course of the selection process preceding the issuing of frequency licenses.

However, at the final stage of government work on the amendment, the originator introduced changes that negatively affected the originally set goals. They include, first of all, granting the minister competent in informatisation with the optional authority to set a schedule for the distribution of specific frequency resources, which will prevent UKE from establishing and implementing a long-term frequency management policy. In addition, it should be noted that following the change introducing the schedule, no changes to other material provisions related to radio spectrum management were proposed. Thus, no tools for UKE to implement the schedule will result in the destabilization of the frequency management and will negatively affect the functioning of the telecommunications market, as well as the assessment by industry investors of the credibility of actions taken by public administration in the distribution of radio spectrum, which in turn may negatively affect the willingness to invest in Poland.

Changes have been also made at the stage of parliamentary work on the act that negated the objectives of the amendment. Pursuant to the Senate amendment, the exclusion of the possibility to apply some of the newly granted competences of UKE in the 700 MHz range, will prevent the timely performance of obligations imposed by the Decision of the European Parliament and of the

Council (EU) 2017/899 of 17 May 2017 on the use of the 470-790 MHz frequency band in the Union. The fact that this band will not be released by broadcasters will not be subject and the resulting inability to use it for broadband systems will negatively affect the implementation of 5G technology.

Another important legislative project aimed at enabling the implementation of 5G technology in Poland is the draft amending the act on supporting the development of telecommunications services and networks and some other acts, for which UKE prepared many proposals with respect to amending the legal provisions. On 30 November 2018, the draft was sent out to inter-ministerial consultations, public consultations and opinions. UKE submitted comments to the project, among others pointing to the need to create a compensation fund related to the planned refarming of frequencies.

The draft act introduces a number of facilitations for operators, in particular by reducing the costs of the investment process in telecommunications, its acceleration and simplification as well as extension of access to technical infrastructure.

Moreover, UKE co-created implementing acts prepared in connection with the changes introduced to the Telecommunications Act and to the Mega-law, i.e.:

- a. draft ordinance on the transfer of data on telecommunications activities (signed by the Minister of Digitization on 7 December 2018),
- b. draft ordinance on the minimum connection speed for the Internet access service provided by local government authorities (signed by the Minister of Digitization on 18 October 2018),
- c. draft ordinance on the notification template and template for the update notification to the register of numbers used to provide the premium rate service (signed by the Minister of Digitization on 21 November 2018),
- d. draft regulation on the conditions for the exercise of rights in public telecommunications networks (signed by the Minister of Digitalization on 11 December 2018).

Court proceedings involving UKE concern appeals and complaints against UKE's decisions. In 2018, a total of 392 court cases were received by UKE, including:

- a. appeals lodged to SOKiK - 270,
- b. complaints lodged to WSA - 88,
- c. matters relating to the call for amicable settlement, reporting receivables, applications for the declaration of bankruptcy, an action pursuant to Article 299 of the Code of Commercial Companies, appointment of a probation officer - 34.

Out of 392 new lawsuits, 5 were related to the postal market.

Among 101 final cases resolved in 2018 based on appeals and complaints against decisions and orders of UKE, 88 were concluded with a successful outcome for UKE, which means more than 87% of won cases. In 5 cases, the courts changed the decisions of UKE, while in 8 cases they repealed it.

Table 6
Final court judgements in 2018

Category of the decisions of the President of UKE	Repealing the decision / order	Changing the decision / order	Decision upheld in force
Determining significant market power, imposing regulatory obligations	1		2
Imposing a fine	1	4	30
Subsidy to universal service	1		
Frequency license, radio licenses			2
Access to real estate	2		7
Disputes among operators	2		9
Regulatory accounting		1	
Telecommunications fees	1		6
Other - in the competence of UKE ²⁷			32

Source: Office of Electronic Communications

Among the court proceedings conducted by UKE in 2018, the following cases should be noted:

- a. The case brought pursuant to the complaints of the French Chamber of Industry and Commerce, P4 sp. z o.o. and OPL about the UKE's decision of 26 September 2014 (No. DZC-WAP-5174-16/13 (137)) regarding the change of frequency licenses granted to Sferia S.A. based in Warsaw in such a way that instead of the frequencies in the 824-830 MHz and 869- 875 MHz ranges previously allocated to Sferia S.A., UKE allocated the frequencies in the ranges 816 - 821 MHz and 857 - 862 MHz. Pursuant to the judgement of 2 February 2018, file reference number VI SA/Wa 4095/14, the Provincial Administrative Court rejected the complaint of the French Chamber of Industry and Commerce and, by an order, rejected the complaints filed by P4 sp. z o.o. and OPL. A cassation appeal against the verdict brought by the French Chamber of Industry and Commerce is awaiting examination, while the orders on the rejection of the complaints filed by P4 sp. z o.o. and OPL are valid.
- b. The case brought pursuant to the complaints of the Polish Chamber of Commerce for

²⁷ Among others - limiting the right of access to administrative files, clarification of the content of the decision, refusal to grant access to files, public information, lengthiness and inactivity of the authority.

Electronics and Telecommunications (KIGEiT), the Polish Chamber of Electronic Communication (PIKE) and Netia S.A. about UKE's order of 7 October 2014, no. DART-SMP-6040-2/14 (123) ("Order for market 5"), determining the relevant market as the market for the provision of wholesale broadband access services in commune areas, specified in point 1 of Appendix 1 to the order, establishing that in 76 areas of market 5 there is no telecommunications undertaking with significant market power or telecommunications undertakings occupying a collective significant position and statements that there is effective competition in the above-mentioned areas. Recognizing each complaint separately, the District Court for Competition and Consumer Protection (SOKiK):

- By virtue of the order of 15 January 2018, file reference number XVII Amz 6/15, dismissed the appeal of KIGEiT in its entirety; the resolution is final.
- By virtue of the order of 21 June 2017, reference number XVII AmZ 46/15, dismissed PIKE's complaint in its entirety. PIKE appealed against the above order of SOKiK to the Court of Appeals (SA), as a result of which SA in a closed session on 8 February 2018, by the order no. Act VII AGz 219/18 repealed the Order for market 5 indicating that in this case UKE should issue a decision pursuant to Article 23 (1) point 2 of the Telecommunications Act, instead of the order pursuant to Article 23 (1) point 1 of the Telecommunications Act, which cannot be remedied in a court proceedings.

In SA's opinion, it would be wrong to assume that the relevant market does not exist before it is defined. It should also be recognized that the division of the relevant market does not lead to the automatic repeal of regulatory obligations by law, but to the fact that their scope covers all markets resulting from the division. Accepting that in such a state of affairs it is appropriate to issue a decision referred to in Article 23 (1) point 1 of the Telecommunications Act, would lead to a situation where UKE would not have grounds for repealing the imposed regulatory obligations. SA concluded that in this case there was a telecommunications operator with significant market power on the relevant market, and UKE should issue a decision, because the authority's duty to define the relevant market should be understood as the creation by the authority of a certain hypothetical dependency model based on the criteria set out in Article 22 (1) point 1 of the Telecommunications Act, covering a specific geographical area. As a consequence, the definition of the market by UKE defines an abstract market model in a given geographical area that actually exists.

UKE filed a cassation complaint about the above judgement to the Supreme Court. The complaint is awaiting recognition.

- By virtue of the order of 11 May 2018, file reference number XVII Amz 6/18, suspended the proceedings against the complaint of Netia S.A. until the cassation complaint lodged by UKE in the case VII Agz 219/18 has been examined.
- c. The case brought pursuant to the complaints of KIGEiT and PIKE against UKE's decision of 7 October 2014 (no. DART-SMP-6040-1/14 (121)) regarding the designation of OPL as a telecommunications undertaking with significant market power on the domestic wholesale broadband access market ("Market 5") throughout the country, excluding the

area indicated in the annex to the decision and imposing regulatory obligations on OPL. The judgement of 26 November 2018, file reference number XVII Amt 12/15, SOKiK dismissed both appeals, the judgement is not final.

3.9. Actions for defence, state security and public order

Construction and deployment of the cybersecurity system

In connection with the entry into force on 28 August 2018 of the Act on the national cybersecurity system, UKE started - as part of the construction and deployment of the country's ICT security system - activities aimed at including the telecommunications industry in the information flow within the national cybersecurity system.

As part of the tasks resulting from the National Framework of Cybersecurity Policy of the Republic of Poland for 2017-2022 and competences enshrined in the Telecommunications Act, as amended by the Act on the national cybersecurity system, UKE performed the following activities:

- a. it participated in the preparation of the ordinances of the Minister of Digitization regarding the criteria for recognizing the violation of security or integrity of telecommunications networks or services as a violation of a significant impact on the operation of networks or services and on the template form for providing information on security or integrity breaches of telecommunications networks or services that had a significant impact on the functioning of networks or services,
- b. it took steps to establish cooperation procedures in the field of exchanging information among CSIRT MON, CSIRT NASK and CSIRT GOV on incidents in the telecommunications sector,
- c. it prepared and forwarded to the MC the assumptions for the amendment of the ordinance issued on the basis of the authorization pursuant to Article 176a (5) of the Telecommunications Act related to the action plan for the telecommunications undertaking in the event of special threats. They specify the areas of the required changes in the scope of types and contents of the plan, the manner of its agreeing and updating, and correlation with other plans (e.g. protection of the critical infrastructure).

Support for international projects implemented in the country

The regulator's competences in the field of safety in telecommunications were realised by the Contact Point of the President of UKE at the Department of Security. As part of the security activities of the meeting of the NATO Military Committee in Warsaw and the UN climate summit in Katowice (COP24), UKE carried out the following tasks:

- a. it was responsible for the preparation, reconciliation, distribution and implementation by telecommunications undertakings of administrative decisions on the introduction of restrictions on the operation of telecommunications networks and devices in mobile networks,
- b. it monitored the violations of the security and integrity of networks and services and was

ready to provide information to the entities performing tasks in the field of security and maintaining public order,

- c. it conducted an audit of radio spectrum security and of readiness to detect sources of radio interference.

Support for the activities of authorized state entities in the field of maintaining public order and combating crime

UKE cooperated in 2018 with entities responsible for maintaining safety and public order and prosecuting crimes.

As part of the audit, actions were taken in 2018 to ensure that telecommunications undertakings and postal operators fulfil their obligations with respect to defence, state security, safety and public order. In the case of complaints and requests of authorized entities, prosecutors and courts, UKE conducted explanatory proceedings and administrative proceedings in the matter of imposing fines on undertakings infringing statutory obligations.

In 2018, UKE conducted the above-mentioned actions against 113 business entities, including 37 inspections, initiated 20 interventions and explanatory investigations at the request of authorized entities and 56 ex-officio. Eight audits confirmed full and proper implementation of statutory duties. In other cases, post-audit recommendations or decisions on determining the scope of infringements of law were issued.

As a result of deficiencies found in the performance of obligations by telecommunications undertakings with respect to defence, state security, safety and public order, UKE carried out one administrative proceeding regarding the imposition of a fine. As a result, an administrative decision was issued imposing a fine of PLN 35 000.

Introduction of restrictions on the operation of public mobile telecommunications network and telecommunications equipment

At the request of authorized entities, UKE issued decisions on restrictions on the operation of a public mobile telecommunications network and telecommunications equipment on a given area, guided by the size of the threat indicated by the authorized entity and the principle of minimizing the negative effects of the imposed obligations on the continuity of the service provision and undertaking's business operations.

Improving the procedures for cooperation with state authorities responsible for maintaining safety and public order

As part of the Office's cooperation with key telecommunications undertakings and authorized entities carrying out statutory tasks in the area of maintaining the security of the state, UKE organized meetings aimed at improving the procedures for cooperation in the field of mutual communication and agreeing on the technical and formal requirements of the process.

Preparation of activities and procedures of telecommunications undertakings and postal operators in situations of particular threats

UKE continued the process of agreeing on the plans of telecommunications undertakings and postal operators that include procedures to be followed in situations of particular threats. These plans are intended to ensure the continuity of telecommunications and postal services to all authorities coordinating rescue operations and to services established by law to provide assistance and other entities performing tasks in the field of defence, State security, safety and public order.

In 2018, UKE agreed upon 262 action plans in situations of specific threats prepared by 64 telecommunications undertakings and 48 plans prepared by 10 postal operators.

Upon the initiative of UKE, the Ministry of Entrepreneurship and Technology carried out legislative work aimed at introducing facilitations or limitations of regulatory requirements for citizens and companies under the Telecommunications Act. The proposed changes aim at creating a legal framework for limiting the public law obligation, which is the obligation to draw up an action plan in situations of particular threats by the smallest postal operators.

3.10. UKE's activity on the international stage - telecommunications

Cooperation with EU institutions and regulatory authorities of other countries

Cooperation with the Council of the European Union (RUE)

In 2018, negotiations among institutions on the draft directive establishing the European Electronic Communications Code and the draft regulation establishing the Body of European Regulators for Electronic Communications continued. The Office of Electronic Communications provided opinions on individual proposals of changes prepared as part of the work on these legislative drafts, presenting the optimal wording of the regulations from the point of view of the regulator. A political agreement on the new legislation was reached in June 2018, both legal acts were formally adopted and published in December 2018.²⁸

Representatives of the Office of Electronic Communications in 2018 were involved in the works on the draft regulation on privacy and electronic communications²⁹, providing opinions on the proposed changes discussed at the meetings of the RUE working groups.

Cooperation within the Communications Committee

In 2018, two meetings of the Communications Committee took place. During the meetings, the employees of UKE participated in the discussion of the work of the MSS and 5G groups, including

²⁸Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (hereinafter: directive, Code) and Regulation (EU) 2018/1971 of the European Parliament and of the Council of 11 December 2018 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Agency for Support for BEREC (BEREC Office), amending Regulation (EU) 2015/2120 and repealing Regulation (EC) No 1211/2009 (hereinafter: BEREC Regulation), EU L 321 of 17/12/2018

²⁹Draft regulation concerning the respect for private life and the protection of personal data in electronic communications and repealing Directive 2002/58/EC.

the report on best practices regarding national broadband plans and 5G development, the status of implementing 116 numbers, sanctions reports on violations of Regulation 2015/2120. In addition, during the meeting, the scope and results of the questionnaires regarding the 112 number, the neutrality of services and technologies as well as the application of the European electronic communications law by the national justice systems were discussed.

Cooperation with Radio Spectrum Committee

In 2018, the representative of UKE took part in two meetings of the Radio Spectrum Committee (RSC) regarding:

- a. modification of Decision 2015/750/EU to ensure flexibility in the use of the extended "L" band to ensure coexistence of newly introduced mobile broadband systems with other existing civil and military systems,
- b. discussion on the draft harmonization decision for the 874-876 MHz and 915-921 MHz ranges,
- c. the use of 900 and 1800 MHz bands for IoT,
- d. identification and harmonization of appropriate spectral resources for future mobile systems used by railways,
- e. draft implementation decisions regarding technical parameters for use by fixed and mobile 5G networks - in the frequency range of 3.4-3.8 GHz and in the 26 GHz band,
- f. draft EC decision amending Decision 2007/131/EC on Ultra Wide Band (UWB) technology in the EU,
- g. issues related to spectrum needs for unmanned air systems (UAS) in the EU, harmonization of radio spectrum for use by short-range devices and safe placement of Intelligent Transport Systems (ITS) in the 5.9 GHz frequency band.

Cooperation with Radio Spectrum Policy Group

In 2018, UKE employees participated in 3 meetings of the Radio Spectrum Policy Group (RSPG) regarding:

- a. the second and third opinion of the RSPG on the 5G network as a follow-up to the roadmap to facilitate the implementation of 5G in Europe and a proposal to monitor the progress in the implementation of 5G technology, i.e. the European 5G Observatory,
- b. the discussion on the difficulties associated with the release of the 700 MHz band by Russia and obtaining EC assurance on support and cooperation in this area,
- c. the decision on the need to set the minimum and preferred width of the frequency block for 5G in the 3.4-3.8 MHz range,
- d. the reports on the work progress of the good governance group and the results of the fourth and fifth RSPG questionnaire on the 700 MHz band,
- e. the progress of the working group coordinating the organization of workshops regarding, among others, the auctions for the 700 MHz and 3.6 GHz bands, including the evaluation of the report on public consultations of the joint RSPG / BEREC report regarding coverage requirements in difficult areas, e.g. rural areas with dispersed buildings,

- f. the work of the working group on preparation for the WRC-19,
- g. the summary of the group's work in the scope of reviewing the Code in terms of impact on the activities of the RSPG, e.g. new obligations (one of them being the assessments preceding the allocation of frequencies instead of the current ex-post analyses).

Cooperation with the Body of European Regulators for Electronic Communications (BEREC) and the Independent Regulators Group (IRG)

In 2018, UKE participated in the works of BEREC at all organizational levels, ranging from the Board of Regulators and the Contact Network, to work in specific working groups.

Two analyses were developed regarding intra-EU communications services, including data from the Polish market, over twenty reports on various aspects of telecommunications market regulation and two joint positions. In total, work was carried out on approximately 30 projects within 9 expert working groups. UKE appointed 10 experts for drafting documents, in particular in the group for market and economic analysis, NGN, roaming and mobile networks, remedies, benchmarking and end users.

UKE was involved in the works of BEREC at all levels and in most of the thematic areas. The representatives of the top management of UKE participated in the work of BEREC at the level of heads of regulatory bodies whereas UKE employees participated in the contact network and working groups. UKE experts provided data, co-drafted projects of adopted documents, and thanks to the work in drafting teams, they had a direct impact on their content, especially in the case of a report on a data-based economy, a report on access prices to infrastructure and engineering works, infrastructure sharing report, a report on measures to ensure technical and economic replicability in the context of symmetric access and the report on contract simplification.

At the last BEREC plenary session in December 2018, the President of UKE Marcin Cichy was elected to the position of Vice-Chair of BEREC for 2019. The President of UKE was entrusted with the supervision of working groups on: roaming, regulatory framework and wireless network evolution. In addition, Sławomir Olszewski, consultant in the Department of Regulation at UKE, was elected as the co-chair of the BEREC working group on remedies for a period of two years. This fits in with the implementation of one of the strategic lines of actions of the President of UKE in the scope of strengthening the substantive activity of UKE on the international stage.

UKE participated in the IRG information exchange by providing answers to inquiries and questionnaires distributed by other regulatory authorities, as well as by seeking information from its counterparts. In total, UKE responded to 58 questionnaires in 2018 and requested information to 8 inquires.

Regional cooperation

UKE continued its cooperation under the Memorandum on the quality of services and spectrum management. UKE representative took part in a meeting of National Regulatory Authorities from Poland, the Czech Republic, Slovakia, Slovenia, Croatia, Serbia and Romania, who signed the Memorandum and presented the status of work on the measurement system for the certified

mechanism for monitoring the Internet access service. The representative also learned the experience of other signatories of the Memorandum regarding the implementation of QoS monitoring tools.

In addition, UKE cooperated with the Eastern Partnership countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine) as part of the EaPeReg regulatory platform for electronic communications. UKE representatives participated in two plenary meetings of the platform and in the works of the working group on international roaming. According to the agreed schedule, the Eastern Partnership countries are to seek to reduce roaming rates and make an appropriate agreement in this matter.

Bilateral cooperation

UKE strengthened bilateral contacts with selected regulatory authorities. These were mainly meetings with European regulators and were related to the new obligations that BEREC will receive under the Directive establishing the European Electronic Communications Code and the new BEREC Regulation. Experience in various areas of telecommunications market regulation was also shared, such as: the regulation of markets 3a / 3b / 4, 5G, measurement of the quality of Internet access service, net neutrality, regulator's initiatives concerning end users / information society aimed at increasing digital skills, policy and strategy in the era of bundled services and convergence, and support for innovation and cooperation with start-ups.

Attempts to reach an agreement with Russia on the use of the 700 MHz band were also continued. The President of UKE met with the deputy minister of Telecommunications and Mass Communications of the Russian Federation, during which he urged the Russian communications administration to take actions aimed at changing the allocation of this band³⁰.

UKE also held ad hoc meetings at the request of institutions from other countries (meeting with representatives of the Ministry of Commerce, Tourism and Telecommunications of Serbia dedicated to consumer protection and the Ministry of Finance of China regarding the universal service).

Cooperation in the implementation of projects financed from the EU

A whole year lasted the implementation of the twinning project for the Georgian National Communications Commission (GNCC), in which the President of UKE acts as a Junior Partner and is responsible for the implementation of two out of six components. In total, 9 missions took place with the participation of UKE experts (3 missions in the infrastructure component dedicated to mapping, 4 missions in the component devoted to market analysis and determination of significant market power, 2 missions in the component on mechanisms for the allocation of spectrum). There were also two study visits for representatives of GNCC at UKE. One was devoted to the mapping of infrastructure, and the other one was dedicated to the electronic auction of frequency. Supervision over the implementation of the project was performed by the Junior Project Manager appointed by the President of UKE, who participated in the meetings of the

³⁰ More on this subject in section 2.7 of the Report on the activities of the President of UKE for 2018.

Steering Committee on a quarterly basis, during which he reported on the progress of the project on the part of UKE.

Cooperation with international organizations

Cooperation within the UN Broadband Commission

In September 2018, the President of UKE, Marcin Cichy, became the member of the Broadband Commission for Sustainable Development, operating within the framework of the UN. He was invited to work in the Commission in connection with activities conducted in Poland for the development of electronic communication, including activities in the area of infrastructure investments and development of digital competences of the Polish society.

Cooperation within the International Telecommunications Union (ITU)

Representatives of UKE participated in the most important events resulting from the works of this organization and its individual bodies. In 2018, the key events related to Poland's membership in the ITU were: Plenipotentiary Conference (PP-18), World Summit on the Information Society Forum (WSIS Forum 2018), Global Symposium for Regulators (GSR-18), and ITU Council Meeting.

During the meeting of the ITU Council, the most important discussions from the Polish perspective concerned the preparations for the PP-18 Plenipotentiary Conference. The ITU Council adopted a number of reports (including on the ITU's activities in the area of implementation of the Sustainable Development Goals adopted by the United Nations, supporting the development of broadband infrastructure, the Internet, modern technologies and building digital skills), which were submitted for PP-18.

The President of UKE took part in the WSIS Forum 2018, during which UKE presented innovative projects implemented by scientists and students of the Wrocław University of Science and Technology. UKE organized, in cooperation with ITU, a workshop on good practices to accelerate digital transformation.

The President of UKE and the employees of the Office also participated in the ITU PP-18 Plenipotentiary Conference, which took place on 29 October – 16 November 2018. Thanks to the cooperation of UKE with the Ministry of Foreign Affairs and the MC, and thanks to many years of UKE representatives' activity in the ITU, Poland was elected for the next term to the ITU Council. Among the topics discussed during the Conference were, among others: support for the development of broadband networks, cybersecurity, artificial intelligence, Internet of Things, OTT, building digital skills of children and youth. During the conference, the UKE representatives held dozens of bilateral meetings with the representatives of governments, regulators, science and the telecommunications sector, whose aim was to conduct a campaign on the re-election of Poland to the ITU Council for the next term as well as to present UKE's current lines of actions and acquire knowledge about innovative regulations introduced in other countries. Wojciech Berezowski, head of the International Organizations Unit in the Department of Foreign Affairs of UKE, was the vice-chairman of the Committee 5 on Legal and Political Affairs, also chairing the work of the working group. This fits in with the realisation of one of the strategic lines of actions of the

President of UKE in the scope of strengthening substantive activity of UKE on the international stage.

In addition, the President of UKE participated in the GSR-18 Global Symposium for Regulators participating in the panel on the Internet of Things (IoT), artificial intelligence (AI) and 5G and moderating the panel on privacy in the context of AI and IoT. The UKE representatives held numerous bilateral meetings, during which regulatory experience was exchanged and work directions and priorities of UKE activities were presented.

The work of study groups in the ITU standardization sector (ITU-T) was also important, devoted to regulation of the telecommunications market and new NGN generation telecommunications networks as well as the quality of services and ITU radiocommunications sector (ITU-R). UKE also participated in the work by analysing administrative documents and significant initiatives discussed in study groups.

Moreover, as part of the cooperation with ITU, Lidia Stępińska - Ustasiak, advisor to the President of UKE, was elected a member of the Group on Capacity Building Initiatives (GCBI), advising the Director of the ITU Telecommunication Development Bureau.

Cooperation within the European Conference of Postal and Telecommunications Administrations (CEPT)

As part of the CEPT Com-ITU working group, UKE participated in the development of a common position of the European region for the next meetings of the ITU working groups, the ITU Council and the PP-18 conference. In addition, UKE participated in the work of the ECC and CPG groups, analysing the documents developed by these groups and taking into account the conclusions in the work on national regulations. UKE also participated in consultations on draft ECC reports and decisions.

Cooperation within the United Nations Commission on Science and Technology for Development

The President of UKE represented Poland in the forum of the United Nations Commission on Science and Technology for Development (CSTD) and took part in the 21st plenary session of the CSTD Commission, where the progress of implementing the conclusions of the World Summit on Information Society and Digital Development was presented. The President of UKE shared the Polish experience in building digital skills among children and youth, including as part of educational campaigns organized by UKE. Information on campaigns run by UKE was included in the CSTD materials.

Cooperation within MOŁK Intersputnik

UKE representatives participated in the meeting of the Council and the Operating Committee of the Intersputnik International Organization of Space Communications. During the meeting, the activities were reviewed and the documents regulating the work procedure of the bodies of this organization were approved. In addition, the representatives of UKE took part in a seminar on national systems and satellite networks of new technologies and devices for satellite communication and the exchange of experience and knowledge among member states in the field of national satellite communication systems.

The effects of UKE activities on the international stage:

- influence on the content of EU provisions of the Code and the BEREC regulation,
- obtaining the assurance from the European Commission of support and cooperation in terms of arrangements with the Russian Federation regarding the refarming of the 700 MHz band,
- securing Polish interests regarding the allocation of frequencies in the 3.7 GHz band,
- election of the President of UKE Marcin Cichy as the vice-chair of BEREC for 2019,
- election of UKE representative Sławomir Olszewski as co-chair of the BEREC working group on remedies,
- Poland's election for the next term to the ITU Council,
- election of the President of UKE Marcin Cichy as a member of the Broadband Commission for Sustainable Development operating in the UN system,
- presentation by UKE of innovative academic projects during the WSIS Forum,
- presenting UKE experience related to educational campaigns in the area of communication and information technologies,
- election of the representative of the Office of Electronic Communications - Wojciech Berezowski as vice-chairman of the 5th Committee on Legal and Political Affairs operating within the ITU PP-18 Plenipotentiary Conference,
- nomination of UKE representative - Lidia Stępińska - Ustasiak as a member of the group for digital competence building initiatives, advising the Director of the ITU Telecommunication Development Bureau.

3.11. UKE activity on the international stage - post

The international activity of UKE on the postal services market focused on close cooperation with the most important organizations for this sector - the European Commission (EC), ERGP, UPU and CERP.

European Regulators Group for Postal Services (ERGP)

Tasks implemented in 2018 fit in with the medium-term ERGP regulatory strategy based on three pillars:

- a. promoting the sustainable provision of universal postal services,
- b. promoting a competitive single postal market in the EU,
- c. strengthening the position and protection of end users.

UKE representatives participated in the preparation of reports and other expert documents concerning:

- a. evolution of universal service obligations,
- b. implementation of the regulation on cross-border parcel delivery,
- c. allocation of costs of delivery in the universal postal service network,

- d. applying the principles of transparency, non-discrimination and proportionality in the regulation of access,
- e. analysis of trends in the quality of service, complaint procedure and consumer protection,
- f. development of the European postal market.

ERGP provided the European Commission with technical support in the field of preparing reporting forms for the parcel regulation and the pre-filtering mechanism for the identification of cross-border tariffs subject to affordability analysis.

Postal Directive Committee

The main purpose of the meetings of the Postal Directive Committee is the EC's support of EU Member States in the process of implementing the Postal Directive through the exchange of experience and opinions and the ability to consult, on a regular basis, the most important issues.

During the meeting of the Postal Directive Committee, UKE employees took part in the work on:

- a. changes in VAT regulations in e-commerce,
- b. implementing acts to the regulation on the cross-border parcel market,
- c. research of the postal sector,
- d. postal statistics and cooperation with the UPU.

The new EC proposals are aimed at simplifying the rules of VAT settlement for cross-border e-commerce shipments and at the same time creating the principles of secure trade and trust in the EU single market.

In cooperation with the Member States, the EC adopted an implementing act to the regulation on cross-border parcel delivery specifying the form for reporting purposes. This will allow uniform application of the regulation and gather comparable data on the e-commerce parcel market.

The Commission supported the regulatory authorities of the Member States, including UKE, in the proper application of the Postal Directive by organizing workshop training and consultations in the field of postal statistics. Close co-operation of regulatory authorities with the EC will enable the improvement of the functionality of new IT applications in the field of postal statistics.

Universal Postal Union (UPU)

During the sessions of the Extraordinary UPU Congress and of the UPU Council of Administration - one of the main statutory bodies of the Union, UKE employees participated in making decisions regarding:

- a. UPU reforms - to simplify and streamline the Union's decision-making process in order to better use the existing resources,
- b. implementation of the Integrated Product Plan (IPP) - a new classification of postal items based on content,
- c. implementation of the Integrated Remuneration Plan (IRP) - a comprehensive system of settlements between postal operators,
- d. UPU financing system - introduction of a new model of contribution payment by member

- states to ensure financial stability of the Union,
- e. adoption of the UPU pension scheme (Union's Provident Scheme) - pension security scheme for the employees of the Union.

Actions taken by UPU aim to improve the exchange of international mail and adapt the existing regulations to the rapidly changing market environment on a global scale. The integrated product plan is linked to the integrated plan of remuneration (settlement), which will be implemented in three phases, adapted to the stages of IPP implementation.

IRP aims to modernize, rationalize and integrate settlement systems in the postal traffic between member states. The IRP project will be used as a road map for a modified billing system (end payments), which will be presented at the Congress in 2020. The final shape of IPP and IRP will affect the revenues of designated operators and the level of their competitiveness on the e-commerce market.

European Committee on Postal Regulation (CERP)

Cooperation with the European Committee on Postal Regulation was implemented on several levels and consisted of participation in the Committee's plenary session, work in its specialized working groups, as well as working contacts with CERP member states.

The activities of the group, in which representatives of UKE participated, were subordinated to the current events and challenges faced by the postal sector and the Universal Postal Union:

- a. plenary sessions and meetings of executive committees of the UPU Council of Administration,
- b. Extraordinary UPU Congress,
- c. the Union's reform and the state of implementation of its strategy,
- d. final payment system,
- e. restoring the financial stability of the Union,
- f. increasing the access of entities operating on the postal market to products and services offered by UPU,
- g. providing high quality postal services.

At the Congress, CERP presented a draft resolution, in which the member states of the Committee urged the Council of Administration to prepare a new financing model for the Union, to be adopted at the UPU Congress in 2020.

In addition to the final payment system reflecting the actual costs of providing postal services, the Union's financing system based on payment of contributions by Member States is one of the most pressing problems to be solved.

The exchange of information and opinions of competent ministries and regulators of CERP member states allowed to identify the most important issues of regulatory nature from a European point of view, as well as to prepare and present Poland's position on the international forum, in cooperation with MI.

Cooperation with the most important international organizations of the postal sector allowed for the extension of specialist knowledge and its use in current activities and building regulatory strategies on the international and national scale, in particular in the areas of:

- improving the efficiency of the cross-border parcel delivery services market - one of the elements of the DSM (Digital Single Market) strategy by strengthening regulatory oversight,
- increasing the transparency of prices for cross-border parcel delivery in order to reduce unjustified price differences,
- regulatory framework for the postal services market in terms of assessing possible changes to the scope of the USO and their impact on the provision of a sustainable universal service,
- recommendation of best practices regulating access to the postal network of the operator designated in terms of equal conditions of competition,
- the use of indicators to monitor the European postal market,
- improve the functioning of the global postal network and improve the quality of postal services in international traffic.

4. UKE 3.0 = Honesty, Creativity, Effectiveness

4.1. Experts at the service for citizens and undertakings

In 2018, while building a friendly and available Office, the activities focused on:

- a. multifaceted information on activities carried out by UKE:
 - publication of over 200 articles on uke.gov.pl,
 - publication of over 900 articles on the website bip.uke.gov.pl,
 - publication of 435 posts and gaining 340 new followers on Twitter,
 - publication of about 400 posts and the gaining 600 new followers on Facebook,
 - recording and publishing about 60 films on UKE Regulator channel on YouTube,
 - media service (photos, preparation of materials, films, posts in social media) from over 40 events / conferences with the participation of the President of UKE,
- b. making work organization more flexible and raising operational standards (including flexible working time, paperless model, maximum use of videoconferencing, Intranet, electronic document flow system and electronic signatures for internal communication needs),
- c. continuous improvement of the processes taking place in the secretarial team, taking into account all necessary changes (using an altering model for secretariats, taking care of professionalism through a network of topical trainings, various support for departments and bureaus, among others: registration and preliminary verification of reporting forms, support of HR processes and educational campaigns, servicing meetings with external

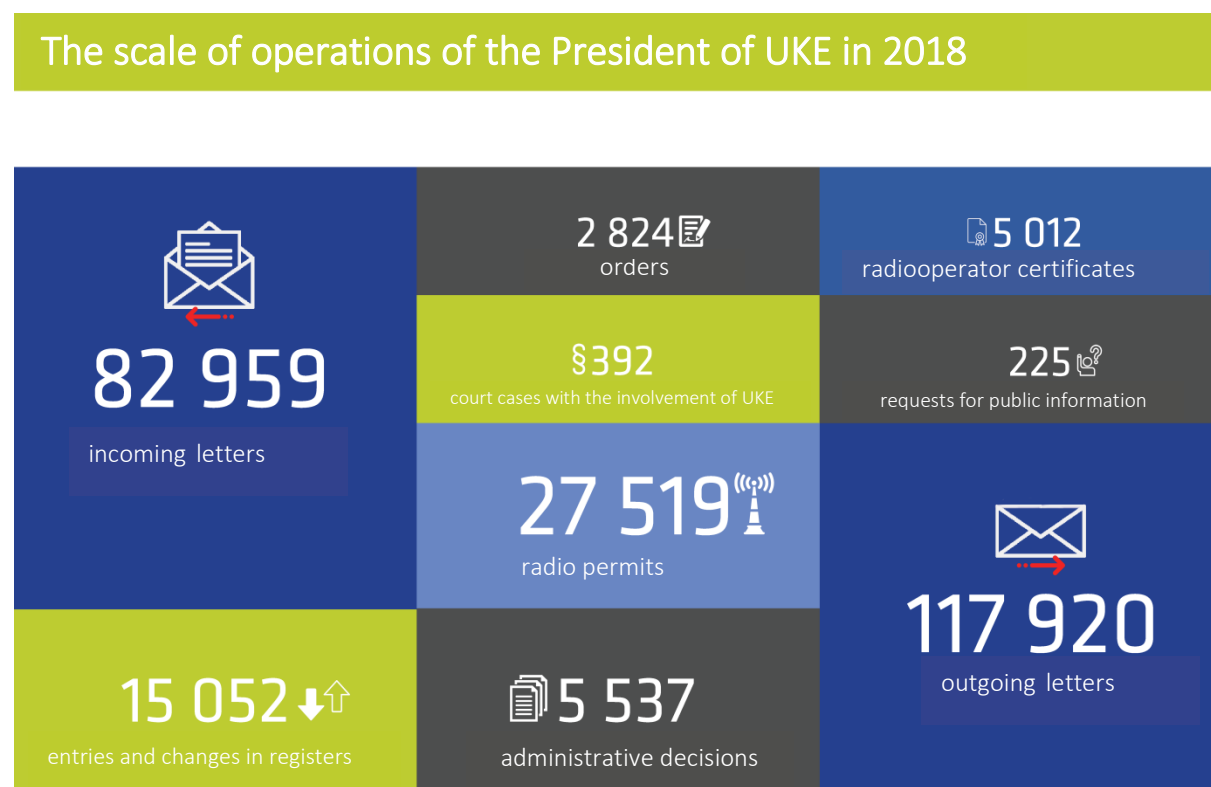
guests, support for 5G and OPDP projects),

- d. effective recruitment and promotion of employment in UKE in the face of increasing staff attrition (recruitment focused on candidates, entering into agreements with universities in the field of student practice and internship, a series of lectures and meetings with students at universities, searching for employees on social networks).

The constant challenge is to maintain at UKE a qualified team of specialists with experience and, above all, having unique knowledge combining engineering (technical), economic, administrative and legal issues. This results from the wide range of competences of the President of UKE, which is confirmed by the scale of operations performed for citizens and undertakings and the growing level of their complexity.

Figure 10

The scale of UKE's operations



UKE | Office of Electronic Communications

Source: Office of Electronic Communications

In addition, under the adopted model of the Office as a market development moderator (UKE - professional hub)³¹ in 2018 UKE continued the implementation of tasks including, inter alia:

- a. undertaking initiatives reported by consumers and undertakings,
- b. participation in social, governmental and local government projects,

³¹ "Strategic lines of actions of the President of UKE for 2017-2021"

- c. conducting educational activity, oriented at propagating knowledge about telecommunications and digitisation,
- d. promoting Polish projects in the field of telecommunications and ICT created by SME and universities on the international stage,
- e. supporting foreign investments relevant for the development of the telecommunications market,
- f. cooperation with suppliers of devices and solutions for the telecommunications market in the exchange of knowledge about new technologies,
- g. institutional cooperation with Ministry of Entrepreneurship and Technology, Ministry of Foreign Affairs and Polish Agency for Enterprise Development to promote the participation of Polish companies from the ICT sector in international procurement,
- h. promoting Polish SMEs during international events (BEREC, ITU),
- i. workshops for participants of the Polish telecommunications and ICT market with representatives of international organizations (ITU, GSMA),
- j. information and educational activities on the development of broadband infrastructure,
- k. presentations of UKE management and employees at Polish and international industry events, presenting issues relevant to ICT development,
- l. supporting domestic events through the patronage of the President of UKE.

4.2. UKE on-line

UKE conducted in 2018 activities aimed at developing electronic services for customers and ensuring the availability and usefulness of information, including people with special needs.

PIT project

On 1 January 2017, the Information Point on Telecommunications (PIT) was launched, functioning as an IT system, enabling UKE to fulfil its obligations under the Mega-law, being an implementation of the provisions of Articles 4, 6, 7 and 10 of Directive No. 2014/61 / EU³².

PIT is to provide every telecommunications undertaking, unless it endangers the security of the state, access to information held by UKE:

- a. in the scope of procedures and formalities required before commencement of construction works related to telecommunications infrastructure, during their performance and until their completion and use of this infrastructure, including information on required decisions, notifications and notifications to competent authorities, as well as exemptions from the obligation to obtain them,
- b. on telephone services, data transmission services and radio and television broadcasting services provided on the basis of telecommunications infrastructure and public telecommunications networks providing broadband Internet access,

³²Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks (EU L 155 of 23.05.2014).

- c. on coverage by the existing telecommunications infrastructure and public telecommunications networks that provide or enable broadband access to the Internet, with a distinction of fibre-optic connections and wireless networks and collocation facilities,
- d. on existing technical infrastructure, as well as on service ducts along with their arrangement and location, type, condition and method of use as well as contact details on access issues,
- e. about investment plans in the scope of performed or planned construction works, financed in whole or in part from public funds, concerning technical infrastructure or service ducts,
- f. about websites on which access conditions have been placed,
- g. on fees for the right of way occupation.

On 15 March 2018, as a result of the settlement of the proceedings under an open tender, UKE signed a contract for the "Design, development, delivery and implementation of the IT system named Information Point on Telecommunications, and provision of warranty, support and development services." The implemented version of the system, so-called PIT 2 is to facilitate data entry by interested or obligated entities, their more convenient search, support for GIS formats and improvement of interface ergonomics. In 2018, the works were carried out in accordance with the schedule adopted in the contract. In November 2018, acceptance tests of the new version of the system took place. Subsequently, UKE carried out a monthly trial operation of the PIT system, which ended on 9 January 2019. The final acceptance took place on 14 February 2019.

The aim of the PIT project is to create one information window on the terms and conditions of investment as well as on existing and planned resources, and to reduce investment costs. Ultimately, through PIT, information necessary to jointly conduct investments by entities from one or a variety of industries, including information about procedures and formalities in the investment process, or data from the national database of geodetic records of the utility network (KGESUT) will be made available.

Development of the Electronic Services Platform (PUE)

In 2018, the UKE Electronic Services Platform (PUE) underwent several significant changes reaching the status of a mature system.

On the basis of the UX audit carried out in 2017, a new graphic layout was designed with a view to adapting it in particular to the requirements defined as user experience (UX) as well as meeting the recommendations contained in the WCAG 2.0 standard. The changes have been implemented also for mobile devices, the site is fully responsive in accordance with the requirements of RWA (Responsive Web Design).

In 2018, a significant change was implemented in the process of creating organization accounts, it was 100% automated. Due to the expected increase in the number of incoming applications for the creation of an organization account, a mechanism for automatic creation of organization

accounts by logged in users was designed and implemented. This change significantly simplified the account creation process, reduced to zero the number of requests to create an account sent to UKE.

E-reporting service for undertakings

From 12 December 2018, new regulations regarding the annual reporting of telecommunications undertakings under Article 7 of the Telecommunications Act are in place. The new regulations introduced the obligation to submit reports on the telecommunications activity of the undertaking only in electronic form via a dedicated Electronic Services Platform (PUE). This is the only possibility to effectively submit the report on telecommunications activity.

In addition, from 2019, the obligation to submit business reports by means of the reporting forms is obligatory for all telecommunications undertakings, regardless of the amount of revenue obtained from the provision of telecommunications services in the reporting year. Until now, the obligation to complete the forms concerned only undertakings whose revenue from telecommunications activities exceeded PLN 4 million in the reporting year, whereas smaller entities only submitted statements.

At the same time, the obligation to provide telecommunications undertakings with financial statements has been removed, which in the previous legal framework concerned undertakings with revenues from telecommunications operations of more than PLN 4 million.

In connection with the amendments to the Telecommunications Act and the ordinance on the provision of data on telecommunications activity, all telecommunications undertakings, irrespective of the amount of revenue received, were required to submit reporting forms. UKE designed and developed the functionality to fulfil this obligation – the undertaking using the Trusted Profile creates an account at PUE, completes the reporting form, signs it with a Trusted Profile and sends it to UKE. The process is fully automated.

The changes covered about 5.5 thousand telecommunications undertakings. The e-service for the reporting forms allowed to achieve:

- a. universal availability, 24h / 7,
- b. sending forms only by electronic means (100%),
- c. significant reduction in the time of filling in the reporting forms,
- d. automatic verification of the correctness of fields in the form.

Development of PLI CBD for the needs of the state and telecommunications undertakings

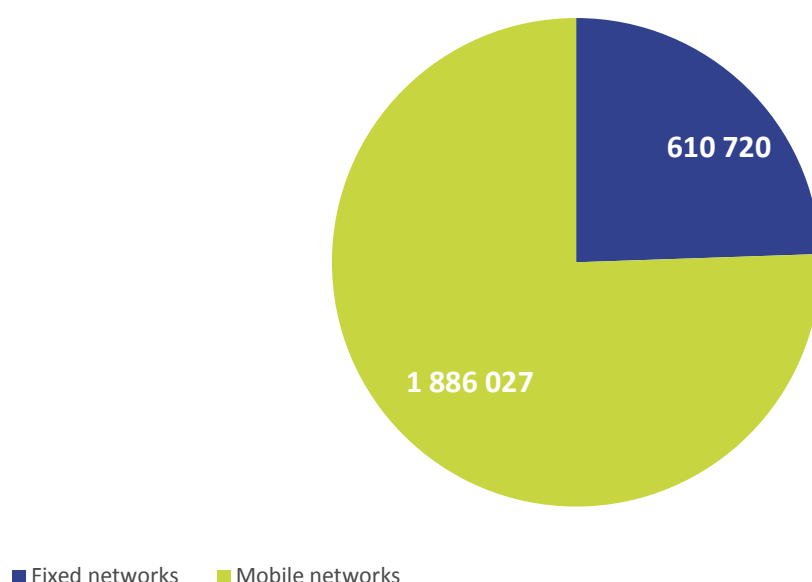
In 2018, UKE continued activities related to the maintenance and development of the Localization and Information Platform with the Central Database (PLI CBD) in order to ensure the availability of the services offered (within specified efficiencies) at the level of 99.5%.

The above goal has been achieved, as shown in the following statistics:

- a. for the functionality to obtain the data and location information of persons requiring assistance, from telecommunications undertakings and share them at the request of the services appointed to provide assistance:
 - number of location information received by PLI CBD indicating the location of the subscriber calling for assistance using a mobile phone: 49 739 193,
 - number of requests for the location of the calling subscriber by the services: 26 012 522,
- b. for the functionality to exchange information between service providers for number porting:
 - number of numbers ported in fixed networks (FNP): 610 720,
 - number of numbers ported in mobile networks (MNP): 1 886 027.

Chart 16

Number of numbers ported via PLI CBD



Source: Office of Electronic Communications

4.3. Preparing UKE for the application of GDPR

In connection with the start of applying the GDPR regulation at UKE from 25 May 2018, the necessary preparatory work on introducing new tasks and procedures was carried out.

The activities were coordinated by the Administrator of Information Security and the Team for the preparation of UKE for the application of the GDPR regulations, established pursuant to regulation no. 6 of the President of UKE of 6 March 2018. The scope of the work included mainly:

- a. the analysis of all data processing operations at UKE (scope of the processed data, source and legal basis, protection methods) - as a comprehensive inventory of personal data processing,

- b. performing risk analyses related to the processing of personal data for all tasks or groups of tasks at UKE,
- c. analysis of sharing personal data (review of contracts concluded and planned to be concluded by UKE, related to entrusting the processing of personal data),
- d. analysis of the implementation of UKE's information obligations towards persons whose data is processed,
- e. analysis of the applied clauses and mechanisms for obtaining consent for the processing of personal data,
- f. analysis of internal normative acts in force at UKE and preparation of proposals for necessary changes in this regard, taking into account the provisions of the GDPR,
- g. preparation and performance of training sessions in the field of changes introduced in the area of personal data protection in connection with the GDPR for all UKE employees,
- h. review and modification of form templates for UKE customers and UKE employees, taking into account the requirements of the GDPR,
- i. preparation of information clauses for UKE clients, compliant with the GDPR,
- j. analysis of changes in the law in relation to ensuring the application of the GDPR.

Pursuant to regulation no. 19 of the President of UKE of 10 August 2018, a Data Protection Supervisor (IOD) was appointed at UKE to perform the tasks specified in Article 39 of GDPR. According to Article 10 (1) of the Act of 10 May 2018 on the protection of personal data, the notification on the appointment of the IOD was submitted to the President of the Office for Personal Data Protection on 21 August 2018, and the information on the IOD, pursuant to Article 11 of the above-mentioned act, was placed on the UKE website. In addition, a permanent Team for the analysis of the factual and legal status in connection with the processing of personal data at UKE was established.

4.4. Structure and employment

In order to optimize the organizational structure of UKE and ensure the adequacy of organizational unit names for the tasks being performed, in 2018 the names of seven organizational units in the Head Office were transformed. Organizational and structural changes affected the Administration and Personnel Office, the Finance and Budget Office, the Telecommunications Market Strategy and Analysis Department, the Wholesale Telecommunications Market Department, the Frequency Resource Management Department, the Telecommunications Safety Department and the International Cooperation Department.

In accordance with the provisions of the statute of the Office of Electronic Communications, constituting an attachment to regulation no. 7 of the Minister of Transport of 11 May 2007 on granting the statute to the Office of Electronic Communications (Journal of Law of the Minister of Transport No. 5, item 14 as amended), as of 31 December 2018, UKE consisted of the following organizational units:

- a. Director's General Bureau,

- b. Department of Consumer Policy,
- c. Department of Regulation,
- d. Department of Strategy and Analysis,
- e. Department of Postal Market,
- f. Department of Radio Spectrum
- g. Department of Technology,
- h. Department of Monitoring,
- i. Department of Security,
- j. Law Department,
- k. Department of Foreign Affairs,
- l. Finance Bureau,
- m. Administration Bureau,
- n. IT Bureau,
- o. regional branches established under the UKE Organizational Regulations:
 - Regional Branch in Wrocław - for Lower Silesia province,
 - Regional Branch in Bydgoszcz - for Kuyavia-Pomerania province,
 - Regional Branch in Lublin - for Lublin province,
 - Regional Branch in Zielona Góra - for Lubusz province,
 - Regional Branch in Łódź - for Lodzkie province,
 - Regional Branch in Krakow - for Lesser Poland province,
 - Regional Branch in Warsaw - for Masovia province,
 - Regional Branch in Opole - for Opole province,
 - Regional Branch in Rzeszów - for Subcarpathia province,
 - Regional Branch in Białystok - for Podlaskie province,
 - Regional Branch in Gdynia - for Pomerania province,
 - Regional Branch in Siemianowice Śląskie - for Silesia province,
 - Regional Branch in Kielce - for Świętokrzyskie province,
 - Regional Branch in Olsztyn - for Warmia-Masuria province,
 - Regional Branch in Poznań - for Greater Poland province,
 - Regional Branch in Szczecin - for West Pomerania province.

Employment at UKE:

- a. as of 30 June 2018: 615 persons / 611.91 positions, including 37 persons / 32 positions from OPDP,
- b. as of 31 December 2018: 660 persons / 656.14 positions, including 46 persons / 44 positions from OPDP.

Status of UKE employees:

- a. civil servants: 60 people / 60 positions,

- b. higher positions in the civil service: 19 people / 19 positions,
- c. employees of the civil service: 517 people / 515.74 positions,
- d. employees outside the civil service corps: 64 people / 61.40 positions.

UKE personnel attrition in 2018:

- a. number of recruitments:³³: 177 of which 79 recruitments ended with filling the position, including 21 recruitments for positions in the OPDP, of which 7 ended with filling the position,
- b. number of offers:³⁴: 873, including 54 offers for positions in the OPDP,
- c. number of employed persons:³⁵: 110 people, including 13 people financed from OPDP,
- d. number of persons with terminated employment³⁶: 69, including 4 people financed from OPDP.

4.5. Expenses and income

The financial plan of part 76 - Office of Electronic Communications for 2018 was prepared on the basis of the Budget Act for 2018. UKE's income and expenses have been set at the following level:

- a. budget income: PLN 741 860 thousand,
- b. budget expenditure: PLN 114 921 thousand.

The income and expenses of UKE in 2018 were realized in the following amounts:

- a. budget income: PLN 762 363 thousand, i.e. 102.8% of the plan,
- b. budget expenditure: PLN 109 964 thousand, i.e. 94.1% of the plan after changes,

including expenses for:

- | | |
|-----------------------------------|---------------------|
| a. current activity: | PLN 94 759 thousand |
| ▪ section 600, chapter 60047: | PLN 89 688 thousand |
| ▪ section 752 chapter 75212: | PLN 41 thousand |
| b. investment (property) activity | |
| ▪ section 600 chapter 60047: | PLN 15 098 thousand |
| ▪ section 752 chapter 75212: | PLN 66 thousand |

³³ Data refer to members of the civil service corps.

³⁴ Data refer to members of the civil service corps.

³⁵ Data refer to members of the civil service corps and employees from outside the civil service corps.

³⁶ Data refer to members of the civil service corps and employees from outside the civil service corps.

Table 7
Execution of revenues planned in the budget for 2018.

Paragraph of budget classification	Plan [thousand PLN]	Execution [thousand PLN]	Execution [%]
0580 - revenues from penalties and fines		2 543	
0590 - revenues from license fees	357 210	358 798	100.4
0610 - revenues from examination fees and fees for issuing certificates, diplomas and duplicates	360	367	101.9
0620 - fees for the right to use frequencies	279 868	296 016	105.8
0690 - revenues from various fees	104 422	104 209	99.8
Other revenues		430	
Total revenues	741 860	762 363	102.8

Source: Office of Electronic Communications

Table 8
Execution of expenses planned in the budget for 2018.

Specification per needs	Plan by budget act [thousand PLN]	Plan after changes [thousand PLN]	Execution [thousand PLN]	Execution [%]
Salaries with derivatives	56 369	55 456	55 411	99.9
Current expenses	30 806	34 441	32 865	95.4
Property expenses	16 150	16 205 ³⁷	13 786	85.4

³⁷ Blocked planned expenditures PLN 2 300 thousand.

Co-financing projects with EU funds	11 596	11 596 ³⁸	7 902	68.1
Total expenses	114 921	116 900	109 964	94.1

Source: Office of Electronic Communications

³⁸Blocked planned expenditures PLN 2 738 thousand.

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Dictionary of abbreviations used

A

Act on conformity assessment and market surveillance systems - Act of 13 April 2016 on conformity assessment and market surveillance systems (consolidated text Journal of Laws of 2019 item 544)

Act on conformity assessment system - Act of 30 August 2002 on the conformity assessment system (consolidated text Journal of Laws of 2019 item 155)

Act on supporting the development of telecommunications services and networks - Act of 7 May 2010 on supporting the development of telecommunications services and networks (Journal of Laws of 2017 item 2062)

ADR (Alternative Dispute Resolution) - Alternative Dispute Resolution System (out-of-court resolution of consumer disputes)

B

BEREC (Body of European Regulators in Electronic Communications) - the Body of European Regulators for Electronic Communications

BSA (Bitstream Access) - access service to broadband access devices and access to telecommunications network nodes

C

CEIDG - Central Register and Information on Business

CEPT - European Conference of Postal and Telecommunications Administrations

CPPC - Project Centre Digital Poland

CSIRT - Computer Security Incident Response Team

E

EAC – Digital Agenda for Europe

EC - European Commission

ENISA – European Network and Information Security Agency

EEA - European Economic Area

ERGP - The European Regulators Group for Postal Services

EU - European Union

F

FTTH - Fiber to the Home

I

ICT (Information and Communication Technologies) - a department of telecommunications and information technology, dealing with information transfer technology and logical tools for flow control and data transmission

IoT - Internet of Things

IRG - Independent Regulators Group

ITU - International Telecommunications Union

J

JST - local government authority

K

KASMON - National Automatic Radio Spectrum Monitoring System

KRS - National Court Register

KTPCz - National Table of Frequency Allocation

L

LLU (Local Loop Unbundling) - service for access to the local subscriber loop (unbundling subscriber loop)

LRIC (Long-Run Average Incremental Cost) – long-term incremental costs

LTE (Long Term Evolution) - the fourth generation standard of mobile telephony

M

Margin Squeeze - narrowing the margin

MC - Ministry of Digitization

Megaustawa – Mega-law - act on supporting the development of telecommunications services and networks

MI - Ministry of Infrastructure

MliR - Ministry of Investment and Development

MON - Ministry of National Defence

MPiT - Ministry of Entrepreneurship and Technology

MSWiA - Ministry of the Interior and Administration

MSZ - Ministry of Foreign Affairs

N

NASK - Scientific and Academic Computer Network National Research Institute

NGA (Next Generation Access) - next-generation access networks

NGN (Next Generation Network) - new generation telecommunications networks

NKA - numbers of emergency routing

NTC - terrestrial digital television

O

OBN - National Numbers Office

OPL - Orange Polska S.A.

OSA - National Directory of Subscribers

OTT (Over-The-Top) - delivering content, services or applications over the Internet without the direct involvement of the network operator or ISP

P

PARP - Polish Agency for Enterprise Development

PAS - public payphones

PJM – Polish sign language

PLI CBD - Localization and Information Platform with Central Database

POTS (Plain Old Telephone Service) - an analogue telephone service

POPC - Operational Program Digital Poland (OPDP)

Postal Law - the Act of 23 November 2012 Postal Law (consolidated text Journal of Laws of 2018 item 2188)

PWR - Traffic Exchange Point

Q

QoS - quality of service

R

Refarming - changing the allocation of a given frequency range (bandwidth) associated with frequency change and granting new licenses

Reshuffling - changing the arrangement of the use of a given frequency band, but without changing its allocation

RJST - register of local government authorities performing telecommunications activities

RLAH (Roam Like at Home) - providing roaming services at prices at the level of charges in the domestic network (without roaming charges)

RODO - Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (EU L 119 of 24.12.2013, p. 1)

Regulation 2015/2120 - 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 (EU L No. 310, p. 1)

ROP - register of postal operators

RPT - register of telecommunications undertakings

RSS - Regional Broadband Networks

RUE - Council of the European Union

S

SIIS - Information System on Broadband Infrastructure

SME - Small and Medium-sized Enterprises

SMP - significant market power

SOKiK - Court of Competition and Consumer Protection

SOR - a fixed network reference offer defining the reference conditions for telecommunications access in the area of call origination and termination, wholesale access to the network, access to subscriber lines in a manner ensuring full or shared

access, and access to subscriber lines through telecommunications network nodes for the needs of broadband services data transmission

SS7 (Signaling System 7) - a set of protocols used in telecommunications networks

Start-up - a newly created enterprise or temporary organization looking for a business model that would ensure its profitable development

T

Telecommunications Act - the Act of 16 July 2004 Telecommunications Act (consolidated text Journal of Laws of 2018 item 1954)

U

UKE BIP - Bulletin of Public Information on the website of the President of UKE

UPU - Universal Postal Union

UN - United Nations

UOKiK - Office of Competition and Consumer Protection

V

VoIP (Voice over Internet Protocol) - technology that enables voice calls over the Internet

Vula (Virtual Unbundling Local Loop) - wholesale virtual subscriber loop services

W

WACC (Weighted Average Cost of Capital) – rate of return on the cost of involved capital

WCAG 2.0 (Web Content Accessibility Guidelines) - guidelines for facilitating access to content published on the Internet

WLR (Wholesale Line Rental) - wholesale subscription service

WRC - World Radiocommunication Conference

WSA - Provincial Administrative Court

WSIS - The World Summit of the Information Society

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