# **ANNUAL REPORT**

2017



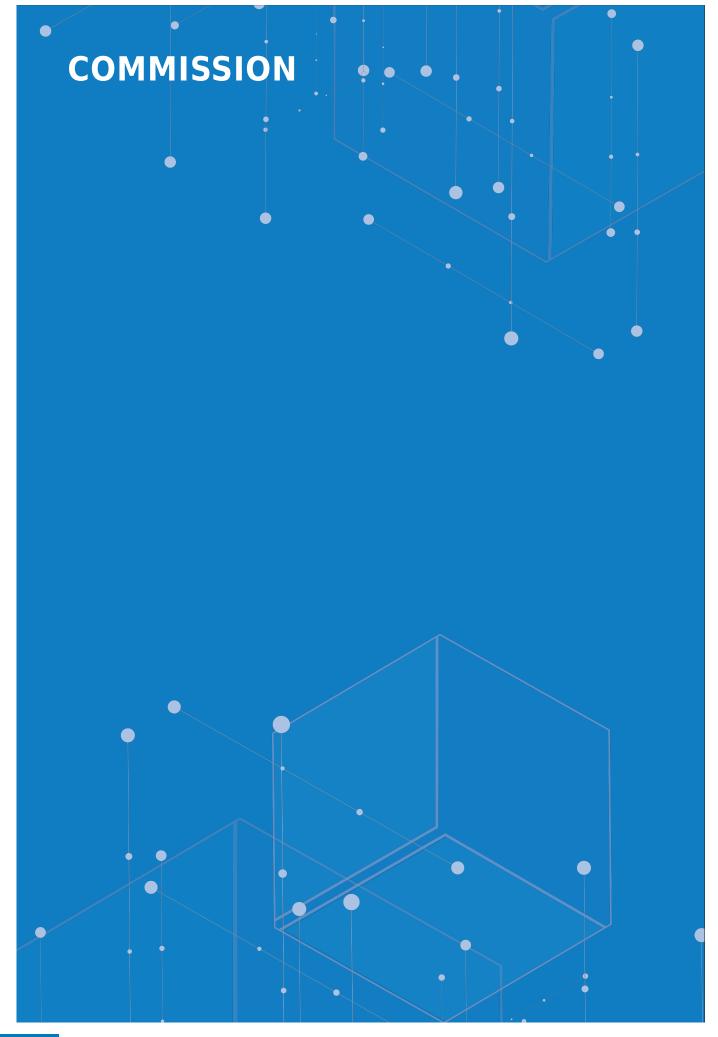
## ANNUAL REPORT OF THE GEORGIAN NATIONAL COMMUNICATIONS COMMISSION



### **CONTENT**

COMMISSION	6
About Commission	7
Amendments to the Constitution of Georgia	8
Election of the Chairperson of the Commission	8
Process of the Commission Staff Reorganization	9
Structure of the Commission	10
Statistics Reflecting Activities of the Commission	11
ELECTRONIC COMMUNICATIONS	13
Calculation of Interconnection Tariffs for Mobile and Fixed Networks based on LRIC Model	14
Cost and Revenue Accounting Separation and Tariff Calculation Methodology for Authorised Entities	15
Coefficient of Return on Contributed Capital for Mobile and Fixed Networks	15
"Regulations On the Rules of Provision of Services and Protection of Consumer Rights in the Sphere of Electronic Communications"	15
Internet Service Quality Control	15
Georgian Electronic Communications Sector Development Project	16
Twinning Project "Support to Georgian National Communications Commission in Refining Electronic Communications Regulatory Framework and Increasing Institutional Capacity"	16
Wholesale Tariffs on Access to Global Internet Resources	17
Portability	18
Statistics	19
SPECTRUM	20
National Plan for Spectrum Allocation	21
Free FM Frequencies	21
Spectrum Monitoring	21
Cellular Communication Networks Analysis Portal	22
REGULATION OF AUDIO-VISUAL MEDIA SERVICES	23
Media Literacy	24
Media Monitoring of Elections	25
Guidelines – Placement of Social Advertisements	26
Priorities of Radio Broadcasting	26
Statistics	27

INTERNATIONAL RELATIONS	29
GeolGF-Tbilisi	30
Memorandum of Understanding between Georgia and Latvia on Reduction of Roaming Tariffs	30
Memorandum of Understanding with the Croatian Regulator of Electronic Communication and Post Services	30
Memorandum of Understanding with Macedonian (former Republic of Yugoslavia) Electronic Communications Office	30
Meeting of Polish Electronic Communication Office and the Commission	31
Network of Electronic Communications Regulators of the Eastern Partnership – EU4Digital – EaPeReg	31
Meeting/Summit of 4 Platforms of Electronic Communications Regulators	32
Other International Activities	32
PROTECTION OF CONSUMER RIGHTS	34
Statistics Of 2017 Complaints by Topics and Response Status	35
Complaints statistics by Providers	36
Results of Public Defender's Actions	36
OVERVIEW OF TRENDS IN THE AREA OF DEVELOPMENT OF ELECTRONIC COMMUNICATIONS AND BROADCASTING	37
General Overview	38
Contributions to the State Budget	38
Acting Entities Subject to Regulation	39
Mobile Communications	40
Mobile Internet	43
Overview of Mobile Data Prices/Benchmarking	45
Portability	47
Fixed Telephony Services	49
Fixed Broadband	52
Overview/benchmarking of Fixed Internet Prices	57
Broadcasting Transit	60
Broadcasting	64



#### **ABOUT COMMISSION**

Georgian National Communications Commission is a Legal Entity of Public Law, which regulates broadcasting and electronic communications sectors. The Commission is an independent regulatory body, which does not report to any public authority. The Commission regulates Television and Radio broadcasting, broadcasting transit, fixed and mobile telephone, as well as Internet services.

#### **KEY GOALS OF COMMISSION ACTIVITIES:**

- · Creation of competitive environment;
- Support to introduction of newest technologies via active cooperation with international organizations;
- Consumer protection;
- Provision of wide choice and availability for consumers;
- Establishment of transparent regulatory environment;
- Inadmissibility of monopolies in areas of electronic communication and broadcasting;
- Effective allocation of spectrum.

#### **KEY FUNCTIONS OF THE COMMISSION:**

- Issuance/modification/extension/transference/consent issuance/suspension/renewal/termination of licences/authorizations on use of exhaustive resources;
- Issuance/modification/suspension/renewal/termination of broadcasting authorization;
- Issuance/suspension/renewal/termination of authorisations in the area of electronic communications;
- Spectrum management;
- Issuance of rights of use of numbering and radio frequency resources;
- Drafting main directions of the state policy proposals in the broadcasting area as well as control and supervision over implementation of such;
- Oversight and control over execution of legislation concerning advertisement, copyright and neighbouring rights, protection of juveniles from harmful influences;
- Resolution of disputes between Commission regulated entities or between regulated entities and customers;
- Research and analysis of various segments of the telecommunications market, determination of SMPs (significant market power) and imposition of specific obligations of those;
- Regulation of access to telecommunications networks and infrastructure;
- Support to introduction of standardization, certification and metrology services systems in the area of electronic communication;
- Implementation of other authorities as prescribed by laws in the area of communications as well as control over execution of such laws and provision of relevant response;
- Promote development of Media Literacy in the society; Action Plan;
- Evaluation of the media literacy levels and identification of challenges;
- Cooperation with public institutions, broadcasting and electronic communication market players, educational institutions, civil society organizations and foreign partners for the purpose of implementation of the Media Literacy Action Plan;
- For purposes of fulfilling media literacy tasks and objectives, the Commission is authorized to allocate relevant amounts from the budget of the Commission, obtain grants and raise other funds, use Commission budget funds for implementation of programmes and projects in support of media literacy;
- The Commission is authorized to establish Educational and Research Centre, a non-entrepreneurial (non-commercial) legal entity, for the promotion of Media Literacy.

Georgian National Communications Commission is a Collegial Administrative Body comprising five members. Following agreement and countersigning on nominees between the President of Georgia and

Georgian Government and submission of nominees by the President of Georgia, Commissioners are elected by the Parliament of Georgia for a term of 6 years. Chairperson of the Commission, who manages the Commission and Staff and carries out a representation function, shall be elected by the majority of Commission members for a term of three years. Public Defender for Customers' Rights functions under the Commission.

Georgian National Communications Commission is not funded from the State Budget. The source of income of the Commission is the regulation fee paid by authorized and licensed entities in the area of broadcasting and electronic communications. Regulation fee is an amount equal to 0,5% of entities' income (without VAT) of broadcasters and 0.75% of income (without VAT) in case of authorized electronic communications entities.

#### AMENDMENTS TO THE CONSTITUTION OF GEORGIA

In 2017, the Constitution of Georgia was complemented by a provision aimed at increasing guarantees of institutional and financial independence of the Commission. According to the new provision, access to Internet and the right to freely use Internet is considered as a fundamental human right.

Article 17 of the Constitution now reads: Article 17. Rights to freedom of thoughts, information, mass media and Internet

- 1. The freedom of thought and its expression is protected. No persecution of people for their thoughts or their expression shall be permitted.
- 2. Every individual has a right to freely receive and disseminate information.
- 3. Mass Media shall be free. Censoring shall not be permitted. The State or separate individuals shall not be permitted to monopolise mass media outlets or means of information dissemination.
- 4. Everybody has a right to access Internet and to freely use Internet.
- 5. Restriction of above mentioned rights shall be allowed only in cases prescribed by law, to ensure state/public security or territorial integrity of the country, to protect rights of others, to avoid disclosure of confidential information or to ensure independence and impartiality of Courts.
- 6. The law provides for independence of the Public Broadcaster from State institutions as well as freedom from political or other significant influences.
- 7. In order to protect media pluralism, to ensure free expression of thought in media, to avoid monopolization of mass media or its dissemination means, as well as to protect customers of broadcasters and electronic communication entities, the National Regulator's institutional and financial independence is guaranteed by the Law.

#### **ELECTION OF THE CHAIRPERSON OF THE COMMISSION**

On May 2 2017, Georgian National Communications Commission has elected Mr. Kakhi Bekauri as a Chair of the GNCC, who will lead the Commission until January 24 2020. Pursuant to the law of Georgia on Broadcasting, Chair of the Georgian National Communications Commission is elected for a term of three years by the Commission itself out of its members by majority of votes. The Commissioner may be elected a Chair-person only for one term. Kakhi Bekauri's candidature was submitted by all members of the Commission in accordance with article 3.5 of the Statute of the Commission.

Kakhi Bekauri replaced in this position Vakhtang Abashidze, who led the Commission from May 19 2014. Vakhtang Abashidze continues his work as a Commissioner until expiration of his term on April 16 2020.

#### PROCESS OF THE COMMISSION STAFF REORGANIZATION

Intensive work continues as of 2015 for purposes of increasing organizational efficiency of the Commission. In 2015-2016 organizational changes diagnostics, planning and implementation stages were planned and implemented; based on that, problems and challenges of the Commission were thoroughly reviewed; relevant activities were implemented as prescribed by the Plan (see Reorganization Report for 2016). During 2017, special attention was paid to work processes and introduction of human resources management principles; that as well, served the purpose of increasing effectiveness and efficiency of the Commission.



As of February 2017, within the limits of work process identification and optimization, the Commission started cooperation with the USAID partner organizations. In the limits of the Human and Institutional Capacity Building Project (HICD), USAID funded description of 70 work processes. With participation of heads of structural units of the Commission and Policy Management Consulting Group consultants, 73 work processes were designed. This year a map of each process shall be presented, as well as description of standard work procedures and recommendations for optimization of 20 work processes.



Decision #653/22 approved Rules for conducting Commission Staff Attestation; pursuant to the newly enacted Law, the Rules contain provisions for conducting public and simplified public competition for selection of staff as well as work rules of Competition and Complaints Commissions.



Decision #754/22 approves Internal Regulations of the Staff of the Georgian National Communications Commission; it regulates issues pertinent to internal management and human resources of the Commission; it also defines internal operations procedures and Code of Ethics.



Decision #816/22 approved "List of Positions of the Georgian National Communications Commission, its primary staff and other permanent (temporary) support staff positions and the new organizational structure of the Commission". In the limits of positions with support functions, permanent and short-term functions were defined with the purpose of performing specific long-term objective.



As of July 1 2017, legislative amendments were initiated due to enactment of the Law of Georgia "on Public Service,. In June 2017, based on proposal of the Commission, the Parliament of Georgia heard and approved amendments to the Law on National Regulatory Bodies the aim of which was to apply provisions of the Law on Public Service to the staff of Regulatory Bodies in consideration of specifics pertinent to National Regulatory Bodies and which ensures independence of mentioned institutions, including the part on human resource authorities.

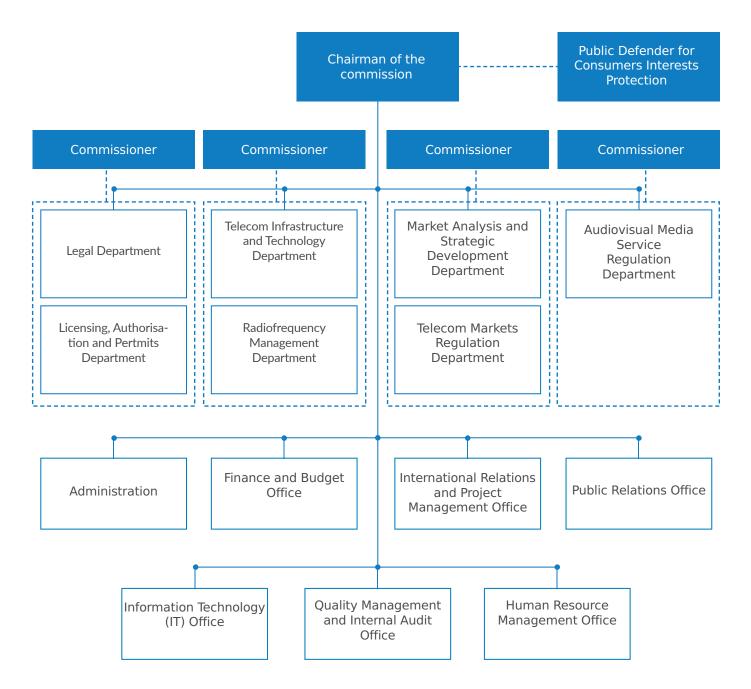
Based on the aforementioned law, in 2017 the Commission announced 11 public and 3 simplified competitions, of which 4 public competitions were declared as invalid. In 2017 the Commission has appointed 10 persons to different positions.



For purposes of increasing organizational effectiveness, the Commission deems necessary to strengthen human resources and work processes audit management areas. For this purpose, it is planned to optimize human resources management strategy, performance evaluation system, motivational policy, as well as the system of positions ranking and processes.

#### STRUCTURE OF THE COMMISSION

According to data for December 31 of 2016, the Georgian National Communications Commission and the Consumer Interests Protection Service under the GNCC employed 107 persons, and by data for December 31 2017 the total number of employees was 108; among them: 5 Commission members, public defender of consumer rights and its 4 assistants and 8 persons were hired as temporary and part-time staff to perform termed functions/objectives.



#### STATISTICS REFLECTING ACTIVITIES OF THE COMMISSION

Hearings held	143
Decisions adopted	842
Resolutions adopted	8
Correspondence received	9705
Public information requested	118
Unanswered letters	116
Pending letters	2
Authorization	
Authorizations in broadcasting	12 persons
Modification in broadcasting authorizations	10 persons
Renewal of broadcasting authorizations	1 person – Informational Centre "Kolkheti 89" Ltd
Suspension of broadcasting authorization	10 persons
Termination of broadcasting authorization	6 persons
Authorization in the area of electronic communications	54 persons
Renewal of authorization in the area of electronic communications	1 - Cominet AVD Ltd
Suspension of authorization in the area of electronic communications	63
Termination of authorizations in the area of electronic communications	44
	44
Licensing	10 licenses/10 competitions
Issuance/competition (for) of radio broadcasting license     Medification of the radio broadcasting license	10 licenses/10 competitions 6 licenses
Modification of the radio broadcasting license     Extension of radio broadcasting license	
Extension of radio broadcasting license     Consent on transfer of the radio broadcasting license	6 licenses
Consent on transfer of the radio broadcasting license     Torreign tion of the gradia broadcasting license	O Townshop in full O licenses
Termination of the radio broadcasting license	Termination in full - 8 licenses; termination in part - 1 license
Issuance of license to use radio frequencies	4 licenses
<ul> <li>Modification of license to use radio frequencies</li> </ul>	4 licenses
Extension of license to use radio frequencies	2 licenses
<ul> <li>Transfer of rights and obligations under the license to use radio frequencies</li> </ul>	3 licenses
Termination of license to use radio frequencies	5 licenses
Failed tender for obtaining private radio broadcasting license	4 tenders
Permits related activities	
Issuance of the permit to use numbering resource	79 permits
<ul> <li>Issuance of permits to use radio frequencies for activities not requiring authorization</li> </ul>	243 permits
Allocations/Assignment	
Allocation of radio frequencies	2 allocations
<ul> <li>Numbering resource – allocation/assignment of addressing prefixes</li> </ul>	5 assignments
<ul> <li>Assignment of the national signalling points codes</li> </ul>	3 assignments
Issuance of consent to purchase share/operational asset, mergers	
Consent to purchase share	12 consents
Consent to purchase operational assets	4 consents
Consent to purchase share and merger	8 consents
Recognition of commercial secrets	
Requests met	13 requests
Requests partially met	4 requests
Disputes reviewed	23 disputes
Imposition of administrative responsibility	84 sanctions
On broadcaster	33 sanctions
• warning	31
financial penalty	2
On authorized persons in the area of electronic communications	51 sanctions
• warning	41
financial penalty	10

Termination of commenced administrative proceedings	22
Commencing administrative proceedings (for public proceedings for reviewing disputes/	8
adopting resolutions)	
Court hearings	65 disputes
With broadcasters	9 disputes
Completed in favour of the Commission	5 disputes
Pending	4 disputes
With authorized persons in the area of electronic communications	54 disputes
Completed in favour of the Commission	16 disputes
pending	38 disputes
With other persons	2 disputes





### CALCULATION OF INTERCONNECTION TARIFFS BETWEEN MOBILE AND FIXED NETWORKS BASED ON LRIC MODEL

By Decision of the Commission interconnection tariffs for mobile and fixed networks reduced four times. Call termination tariffs were calculated based on the EU Recommendation # 2009/396/EC from March 7 2009. LRIC -based estimated interconnection tariffs are linked to current value of assets; it contains only interconnection services related costs and does not include costs of operators due to ineffective exploitation of network infrastructure.

Based on applied technologies and network topology in Georgia, the Commission announced a tender for purposes of estimating interconnection costs for mobile and fixed network operators in accordance with LRIC methodology (call origination/termination). "Ernst & Young" had been declared as a winner of the abovementioned tender; a relevant contract was signed with the Company based on which "Ernst & Young" submitted LRIC-based call origination and termination tariffs in the mobile and fixed networks.

### CURRENT INTERCONNECTION TARIFF IN MOBILE NETWORKS 3.5 TETRI (INCLUDING TAXES) SHALL REDUCE IN ACCORDANCE WITH THE SCHEDULE, AS SHOWN IN THE TABLE BELOW.

Interconnection services	As of July1 2018	As of January1 2019
Call origination, Tetris, (taxes excluded)	2.16	1.44
Call termination (taxes excluded)	1.81	0.75

## CURRENT INTERCONNECTION TARIFF IN FIXED NETWORKS 2 TETRIS (INCLUDING TAXES) SHALL BE REDUCED IN ACCORDANCE WITH THE SCHEDULE, AS SHOWN IN THE TABLE BELOW.

Interconnection services	As of July1 2018	As of January1 2019
Call origination at the local level, Tetris (taxes excluded)	1.04	0.38
Call origination at transit level, Tetris (taxes excluded)	1.05	0.41
Call termination at the local level, Tetris, (taxes excluded)	0.99	0.28
Call termination at transit level, Tetri (taxes excluded)	1.01	0.32

#### COST AND REVENUE ACCOUNTING SEPARATION AND TARIFF CALCULA-TION METHODOLOGY FOR AUTHORISED ENTITIES

In 2017 the Commission approved "Rules for cost accounting and cost allocation separation methodology of authorized entities" (hereinafter "Resolution"). The new Resolution refined, clarified and brought specific regulating principles for accounting separation in compliance with international standards; it also defined the rules for accounts preparation. New methodological rules envisage formulation of more detailed criteria and rules for tariff regulation, costs and revenues separated accounting, prepared services cost calculation for authorized entities with Significant Market Power (SMP) and provision of explanations of processes and procedures thereto. Consulting Company "Ernst & Young" participated in the process of drafting the Resolution.

### COEFFICIENT OF RETURN ON CONTRIBUTED CAPITAL FOR MOBILE AND FIXED NETWORKS

In 2017 the Commission established WACC rate – Weighted Average Cost of Capital – for mobile and fixed networks. Weighted Average Cost of Capital (WACC) before taxation for mobile networks is defined at 13.7 per cent, and for fixed networks it is 13.69 per cent.

WACC is calculated based on equity capital and borrowed capital (liabilities).

Tender winning company "Ernst & Young" presented the Commission with calculations methodology and the calculation itself of Weighted Average Cost of Capital rate for mobile and fixed networks. WACC calculation principles are in full compliance with best practices of European regulatory bodies in the area of Telecommunications

# REGULATIONS ON THE RULES OF PROVISION OF SERVICES AND PROTECTION OF CONSUMER RIGHTS IN THE SPHERE OF ELECTRONIC COMMUNICATIONS

or with the other sectors of economy, raises an issue of necessity of e-business development. However, technological development can carry certain risks related to consumers' rights protection and some of the fears in public interests. having regard to the above-mentioned tendencies and risks, the Commission has introduced the regulatory provisions on provide distance contract between the service provider and a customer; the goal of such provisions, on the one hand is to provide services to the Identified Customer and on the other hand, it is aimed to simplify consumption of electronic communications services by the customer.

#### **INTERNET SERVICE QUALITY CONTROL**

Pursuant to the Law of Georgia "On Electronic Communications"<sup>1</sup>, one of key tasks of the Commission is to ensure provision of quality electronic communication services by authorized entities to the end user. In addition, in accordance with the Article 62 of the same Law, the Commission establishes service provision quality and oversees observance of quality standards by the electronic communications services provider.

During 2017 the Commission has studied practice and regulations of EU countries for internet service quality monitoring and evaluation of observance by the provider of subscriber agreement terms and conditions regarding provision of services.

1 Article 11.2.b

In November 2017, for consulting purposes, the Commission published an initial draft of the Resolution on Internet Service Provision Quality and Monitoring. Before commencing public administrative procedures, all stakeholders were given an opportunity to get acquainted with the document and submit their opinions comments on the Draft. The Draft presented by the Commission, is based on Regulations of the European Parliament and Council of Europe from 2015 (EU 2015/2120) and recommendations designed by the Body of European Regulators for Electronic Communications – BEREC.

### GEORGIAN ELECTRONIC COMMUNICATIONS SECTOR DEVELOPMENT PROJECT

In 2016 started the joint project of the European Bank for Reconstruction and Development (EBRD) and the Commission "Development of the Georgian Electronic Communications Sector. Total cost of the Project amounted to EURO 630 000, out of which 90% was funded by the government of Slovakia, and 10% by the GNCC.

The above-mentioned Project is being implemented by "Grant Thornton Advisory", "Analysis Mason" and "Pierstone" consortia and covers three directions, namely:

- Harmonization of the Georgian Legislation with that of the European Union;
- Regulation of Next Generation Network Access NGA;
- Development of various priority directions;
- · Market Analysis;
- Development of the framework for measures to be taken in case of occurrence of monopolies;
- Studying, providing recommendations and drafting procedures for radio spectrum management and allocation.

In the limits of the mentioned project, the main part of works was implemented in 2017; namely: a package of legislative amendments to bring Georgian legislation in accordance with the EU Directives, as prescribed by the Association Agreement, is prepared and completed; in addition, methodology for market analysis and consolidation/merger regulation, as well as is prepared a package of draft legislative amendments due to new approaches to radio spectrum management and allocation.

It shall be noted that in 2017 foreign experts of the project held a meeting with telecommunication market operators, where they discussed existing environment in the area of telecommunications infrastructure and Next Generation Networks development perspectives. As a result, Consultants prepared recommendations for Next Generation Network Access.

TWINNING PROJECT "SUPPORT TO GEORGIAN NATIONAL COMMUNICATIONS COM-MISSION IN REFINING ELECTRONIC COMMUNICATIONS REGULATORY FRAMEWORK AND INCREASING INSTITUTIONAL CAPACITY"

On December 12 2017 the EU-funded a project "Support to Georgian National Communications Commission in Refining Electronic Communications Regulatory Framework and Increasing Institutional Capacity" has officially launched; duration of the project is 18 months. Key partner of the Project is the Communications Regulatory Body of Lithuania, and Ministry of Economy and Energy of Germany as well as Electronic Communications Office of Poland are co-partners.

The Project consists of six components; experts of all three countries, as well as Commission staff participate in each of those components. Project directions are:

• In-depth examination of the Georgian Electronic Communications Regulatory Framework and bringing it in compliance with that of the EU;

16 WWW.GNCC.GE

- Support to development of fixed and wireless broadband services and designing relevant regulations:
- Definition of electronic communications markets subject to ex-ante regulation;
- · Development of the methodology for radio spectrum allocation;
- Increasing role of the Commission in areas on Internet Governance and Network security;
- Regulation of international roaming.

The project envisages expert missions, as well as workshops and meetings with the Commission staff and other stakeholders. In order to introduce new, European Regulations, the fixed and mobile broadband services shall be analysed and the Action Plan shall be designed to ensure implementation of regulatory measures for their development.

Pursuant to European recommendations, markets, subject to ex-ante regulation, will be redefined. In addition, an Action Plan for Internet governance and Network security regulations shall be designed, and in consideration of Regulator's competences and jurisdiction, unilateral and multilateral roaming regulation methodology shall be drafted. Stakeholders involved in the project, shall get acquainted with contemporary models of running frequencies auctions; thus, training simulations will be held for them.

#### WHOLESALE TARIFFS ON ACCESS TO GLOBAL INTERNET RESOURCES

In 2017, as a result of work performed by the Commission with authorized wholesale service providers of access to global internet resources, Internet wholesale service tariffs² halved indeed. The Table below shows offers of two largest providers "Caucasus Online" Ltd and JSC "Silknet".

Capacity in mb/sec	Before June 1 2017 (GEL)	After June 1 2017 (GEL)	As of 2018 (Caucasus Online, GEL)	As of 2018 (Silknet, GEL)
1-50	32	28	19	18
51-100	32	27	18	17
101-200	31	26	17	16
201-500	30	25	16	15
501-2000	29	23	15	14
2001-10 000	29	22	14.5	14

<sup>2</sup> Decision of the Commission # 57/9 from January 29 2015 established a ceiling rate on wholesale service for access to global internet resources at GEL 32, without taxes.



Commission, with assistance of international experts, continues working in the direction of complex research and analysis of relevant market segments of service market Internet network service market; it envisages regulation of the relevant segment of the wholesale market, which is closely related to the retail internet services

#### It includes:

- Access to backbone and transit transmission networks;
- · Access to DWDM, Ethernet data transmission technologies;
- · Access to fibre-optic pairs.

In December 2017 the Commission announced a tender for procurement of advisory services to calculate tariffs of NGA and NGN technologies-based whole services based on LRIC model (including lease of fibre-optic cables, data transmission by Ethernet and DWDM technologies. With assistance of the tender-winning company PWC's Slovakian Office and in accordance with relevant consultations with stakeholders, Long Run Incremental Costs – LRIC – model has been designed; it will help calculate wholesale services tariffs based on incurred effective costs of an Operator.

#### **PORTABILITY**

Resolution N3 of Commission from 2010 on "Approving the Portability Statute of Subscribers' Numbers" has been amended; the amendment changed the period of subscriber number portability process, and instead of three days, the process takes maximum 24 hours.

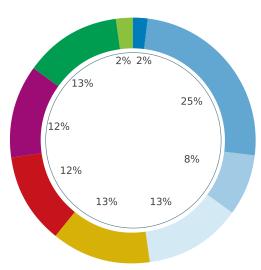
The Table below presents amounts paid annually, by authorized entity, for portability services during 2011-2017 (VAT excluded).

2011	2012	2013	2014	2015	2016	2017
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6,336,877 GEL 6,689,811 GEL 5,908,434 GEL 4,516,576 GEL 1,277,753 GEL 1,317,923 GEL 659,947 GEL

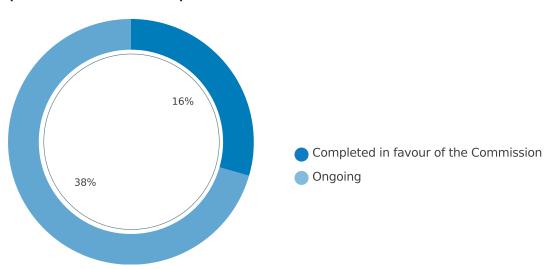
#### **STATISTICS**

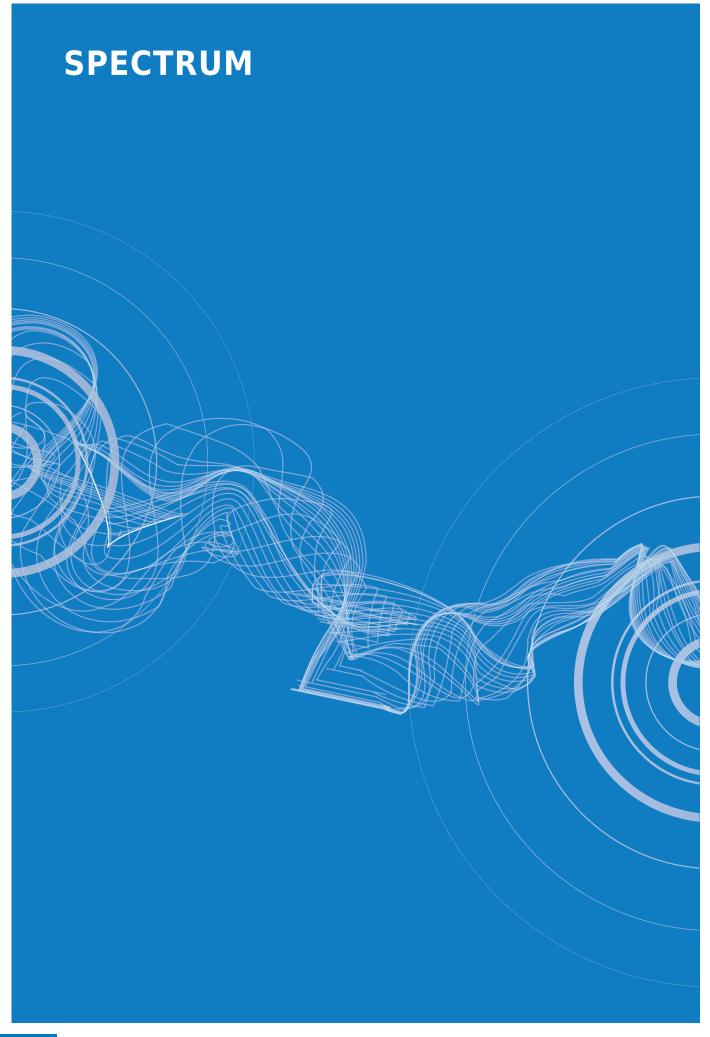
### LEGAL VIOLATION TYPES IN THE AREA OF ELECTRONIC COMMUNICATIONS (TOTAL OF 60 VIOLATIONS)



- Activities in the area of electronic communication without relevant authorization
- Illegal transmission of broadcasting channels
- Failure to provide information via the electronic Report to the Commission
- Failure to pay the regulation fee
- Failure to submit to the Commission the calculation of the regulation fee
- Transfer of the shares without prior consent of the Commission
- Provision of mobile telephone services to customers without written contracts
- Failure to publish an Offer
- Violation of the electronic communication safety as well as transparent transfer of an international number of a calling subscriber during establishment of the international connection

### COURT DISPUTE WITH AUTHORISED ENTITIES IN THE AREA OF ELECTRONIC COMMUNICATIONS (TOTAL OF 54 DISPUTES)





#### NATIONAL PLAN FOR SPECTRUM ALLOCATION

The Commission designed "New form of the National Plan for Spectrum Allocation"; its draft has been published on the website of the Commission in September 2016. National Plan for Spectrum Allocation was first published in 2006. The Plan has been modified (amendments and additions) due to and in accordance with international agreements on radio systems or spectrum usage, as well as based on national decisions due to specific requirements of the country. The new version of the Plan, reflecting results of WRC-15 – the World Radio Communication Conference - underwent multiple examinations and reviews; no critical comments were made and it has been endorsed by international experts. Therefore, Resolution of the Georgian National Communications Commission "On Introduction of Amendments to Resolution of The GNCC from June 30 2006 on Approval of the National Plan for Spectrum Allocation" was published on February 9 2017 in "Sakanonmdeblo Matsne".

#### FREE FM FREQUENCIES

Every 2 years, the Commission publishes free (not assigned) frequencies in the 87.5-108 MHz band. After the completion of digital switchover, frequency range previously occupied by analogue TV broadcasting 4th and 5th channels has been released for VHF FM broadcasting. With consideration of the above, by Decision N614/19 from September 8 2016 the Commission has approved and published the free frequencies in the 87.5-108 MHz band for VHF FM broadcasting. The Commission has already begun the process of international frequency coordination (including bilateral agreements with neighbouring countries) and after its successful completion the Commission will publish the updated free frequencies for VHF FM broadcasting.

#### SPECTRUM MONITORING

In 2017 the following was developed and introduced:

- Methodology for evaluation of qualitative aspects of cellular communication networks with wireless access, as well as monitoring principles of networks (GSM, UMTS, LTE);
- Methodology for examination of compliance of technical parameters of digital terrestrial TV broadcasting and radio broadcasting FM stations with license conditions;
- Form 10.4 to be submitted by entities authorized to provide Internet services, with the purpose of delivery and renewal of information concerning location of Wi-Fi access points;
- Form on technical data of the terrestrial station for Satellite communications Form N10.6



Radio monitoring tower was built in Tsavkisi. At the same time, with assistance of American Company TCI International, Inc., the Shavnabada fixed station was equipped and put to exploitation. The Urta Mountain radio monitoring station was equipped with the new software and relevant employees were trained. As a result, it is possible to reflect results of radio monitoring on Urta Mountain station by means of installed Rohde & Schwarz receivers in the Scorpio (licensed software) unified database. Fully functioning Tbilisi fixed radio monitoring stations (Lotkin, Shavnabada, Tsavkisi) allowed for recording locations of Tbilisi and its suburbs radio-electronic devices, operating in the 20 MHz – 3 GHz band; it has also allowed for definition of emitted signal parameters for the purpose of relevant analysis.

#### **CELLULAR COMMUNICATION NETWORKS ANALYSIS PORTAL**

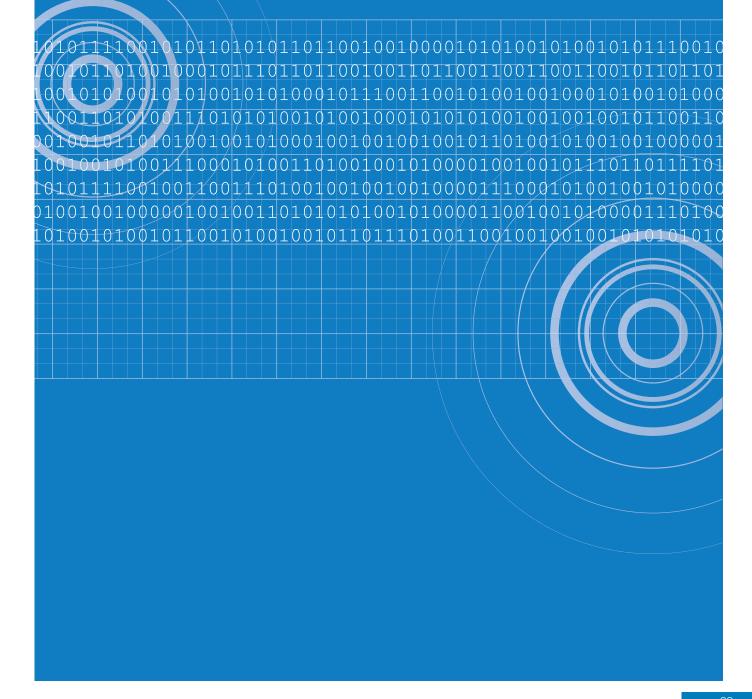
In 2017 the Commission developed a cellular communication networks analysis portal MCA.gncc.ge, which shows minimum, average and maximum speed values and signal levels as per technology. Portal allows for estimation of data transmission speeds by FTP and HTTP protocols.

On May 31 2017, in the Portuguese city of Cascais, at the EU -organized Summit, the Georgian delegation presented, for the first time, the MCA software to the representatives of EU regulatory authorities.

During the MCA software demonstration, experts acknowledged the need of MCA introduction; it became part of the 3-year Work Plan (to be presented to the Plenary Session of EaPeReg). Representative of the Georgian National Communications Commission remains a Co-Chair of the SEWG.

Possibility of MCA portal introduction – based on example of GNCC – was also offered by the Academy of International Telecommunications Union (ITU-A) at its training course, where they discussed an issue of "wireless access technologies in Internet networks: regulatory instruments"

# REGULATION OF AUDIO-VISUAL MEDIA SERVICES



#### **MEDIA LITERACY**

In 2017 the Commission presented the Parliament with a proposal for legislative amendments concerning media literacy; this issue is reflected in the Directive (2010/13/EC) on Audio-Visual Media Services of the European Parliament and Council of Europe.

Deriving from the fact that support to media literacy development is a statutory obligation for large part of European Regulators, the Commission thoroughly studied these obligations, as well as implemented activities and multilateral cooperation practices and, as a result, legislative initiative was drafted.

Main purpose of the Law is to equip public with the "knowledge tools", which, in conditions of modern technologies and excess information, will help the society in processing messages they receive via various media channels, performing critical analysis and making informed decisions. In addition, it will help in developing resilience against propaganda and harmful influences or other threats.

For the purpose of overcoming challenges and achieving goals, presented legislative amendments envisage assignment of additional functions and obligations to the Commission for it to effectively support development of medial literacy; within of its remit the Commission shall perform a role of a facilitator and implement activities prescribed by the Directive on Audio-Visual Media Services (2010/13/EC) and EC 2009 Recommendations on Media Literacy in the Digital Environment for more Specific Audio-visual and Content Industry and the Society with Inclusive Knowledge"; namely:

- · Systematic study of media literacy and its progress;
- Developing and implementing regulatory initiatives in support of development and refinement of self-regulation mechanisms;
- Implementing awareness raising campaigns and trainings to increase awareness of customers, especially, adolescents and youth, parents and teachers.

Parliament of Georgia shared European practice and approved proposed amendments in December of 2017. Accordingly, pursuant to Georgian legislation, following functions were added to the Georgian National Communications Commission from 2018:

- Promotion of media literacy development in the society;
- Approval and implementation of the Action Plan to support media literacy development;
- Evaluation of the media literacy development, and identification of challenges;
- Mutual cooperation with public institutions, industry players, educational institutions, civil society organizations and foreign partners for purposes of implementing the media literacy Action Plan;
- To accomplish media literacy goals, the Commission shall be authorized to allocate relevant amounts from the budget, obtain grants and raise other funds; it is also authorized to use its own budget to fund media literacy programmes and projects;
- Commission is authorized to establish the Media Literacy Education and Research Centre as a non-commercial legal entity.

ANNUAL REPORT 2017

25

#### **MEDIA MONITORING OF ELECTIONS**

Pursuant to Resolution of the Georgian National Communications Commission from August 15 2012 "About Media Participation in the Election Processes and Rules of Use" the Commission is authorized to procure services necessary for implementation of media monitoring or implement such itself and/ or use relevant and publicly available media monitoring results provided by civil sector subjects during the elections process.

In the limits of supporting the election campaign media monitoring, on July 3 and 4 of 2017, a EU and EC implemented a project "Strengthening Media Freedom, Professionalism and Pluralism". Election campaign media monitoring guidelines and recommendations were drafted. With participation of foreign experts, training was conducted for media monitoring performers, as well as for broadcasting company representatives involved in coverage of election campaign.

Together with the Commission staff, 2017 local elections media monitoring was performed by university students and graduates.

Monitoring of broadcasting channels started on August 23 2017 and ended on November 12 (including 2nd round of elections). All general broadcasters, Public Broadcaster and Adjara TV of the Public Broadcaster were subject to monitoring. Monitoring of 41 broadcasting channels, general license holder radio companies and 34 central or local budget-funded newspapers<sup>3</sup> was performed.

#### **DURING MONITORING THE COMMISSION OBSERVED:**

- Elections advertisement;
- Elections debates:
- News and social-political shows;
- Pre-election canvassing;
- Public opinion polls/surveys;

In cases of violations during the media monitoring process, the Commission applied legal measures after thorough examination of the matter. Due to failure to fulfil obligations and due to violations, the Commission drafted 13 administrative violations reports, including: 4 – on broadcasters, 7 news agencies and 1 – newspaper funded from the local budget. Administrative sanctions were used to broadcasters for violation of advertisement placement rules and lack of public and political shows. The Commission has published three reports regarding 2017 local elections media monitoring. (http://gncc.ge/ge/regulation/broadcasting/elections/adgilobrivi-tvitmartvelobis-archevnebi-2017).



During media monitoring of 2016 parliamentary elections, the Commission has identified certain short-comings, addressing of which – in opinion of the Commission – requires legislative amendments. Identified shortcomings and gaps were related to elections (political) free/paid advertisement content, public opinion polls and obligations of disclosure, social advertisements, information of public significance and programme restrictions.

Commission prepared and presented to the Parliament draft amendments to the Law on Broadcasting and Elections Code of Georgia to clarify and make media responsibilities more distinct during elections, including second rounds of elections. The current law does not contain certain regulating provisions; namely:

The law in force does not have any clear indication of political/elections advertisement to not contain war and violence propaganda; or advertisements calling upon forceful change of state/public order or coup of government, or violation of territorial integrity of Georgia, national hatred and hostility, religious

<sup>3</sup> General regulations for participation of media in elections and rules of its use apply to central and local budget-funded newspapers; therefore, in the elections period, the Commission performs monitoring of those entities, too

and ethnic conflict; it was not clear which agency to address in case of a dispute between the advertiser of the political/elections advertisement and a broadcaster; such vagueness confused broadcastersand led to double reading of provisions and failure to abide by legal requirements.

The draft envisages amending legislative regulations, according to which, public opinion polls and publication requirements shall be observed by the broadcaster ordering such a poll/survey; and the broadcaster, which publishes results of the public opinion poll/survey commissioned by other entity, shall be obliged to observe an obligation of publishing poll/survey results only.

In addition, during 2016 parliamentary elections it has been identified that placement by an administrative entity of a social advertisement (PSA) or a video clip with the purpose of dissemination of publicly important information does not exclude the possibility of perceiving it or its elements as elections/political advertisement; that is why it becomes necessary to limit administrative bodies in an abovementioned right in the pre-election period. According to the draft-law, the broadcaster shall be prohibited from placing a paid social advertisement of any administrative body in the period from scheduling elections until the actual day of such. As to dissemination of important information, the draft-law provides that the broadcaster shall address the Georgian National Communications Commission for the approval of compliance of information presented by the administrative body (except Elections Administration with the law and place it only in case of the positive opinion.

#### **GUIDELINES - PLACEMENT OF SOCIAL ADVERTISEMENTS**

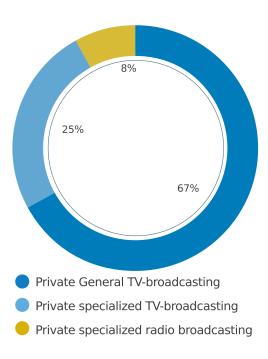
Commission has developed guiding recommendation for placement of social advertisements in the broad-casting network. The goal of adopting guidelines on placement of social advertisement for cases of failure to observe provisions of the law in force, is to inform broadcasters and other administrative bodies of authorities and approaches of the GNCC. Recommendations are published on the official web-site of the Commission: (http://gncc.ge/ge/news/socialuri-reklamis-samauwyeblo-badeshi-gantavsebastan-dakavshirebuli-saxelmdzgvanelo-rekomendaciebi.page).

#### PRIORITIES OF RADIO BROADCASTING

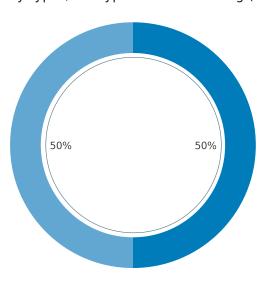
According to the Law of Georgia on Broadcasting, the Commission defines radio broadcasting priorities biannually. Tenders, winners of such and licensing is performed based on those priorities. According to established priorities, in 2017 the Commission issued 10 radio broadcasting licenses, and 4 tenders for obtaining the radio broadcasting license failed.

#### **STATISTICS**

Broadcasting authorization According to types/sub-types of broadcasting (12 entities received authorizations)

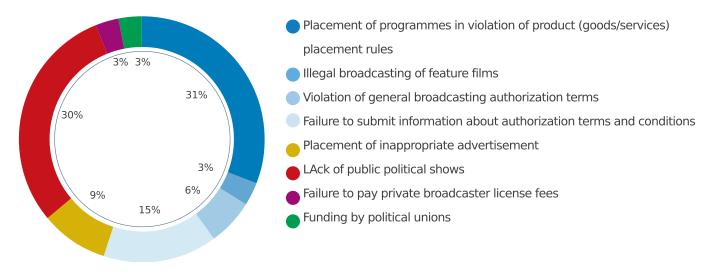


Issuance of radio broadcasting licenses by types/sub-types of broadcasting (10 licenses)

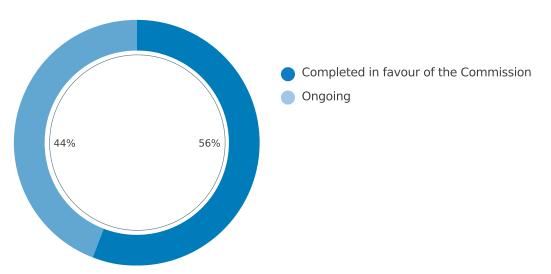


- Private general radio broadcasting
- Private specialized radio broadcasting

### Types of legal violations in the area of radio broadcasting (total of 33 violations)



#### Lawsuits with broadcasters (9 disputes)





#### **GEOIGF-TBILISI**

On September 12 2017 the 3rd Internet Governance Forum was held in Tbilisi. Internet Society (ISOC), Europe's Internet Governance Forum (EuroDIG) and Europe's IP Networks Coordination Centre (RIPE NCC) management participated in the Forum. Issues discussed were: propaganda on Internet; domain names market opportunities; new regulations with regard to personal data protection; issues of Internet access in Georgia and Tusheti internetization project.

In the limits of GeoIGF-Tbilisi Forum, Memorandum of Cooperation was signed between the GNCC and the RIPE NCC. Parties developed the plan for mutual cooperation, which envisages RIPE NCC training on IPv6 development for stakeholders and academic sector. Parties will cooperate on Internet statistical-analytical, local and global data exchange as well.

### MEMORANDUM OF UNDERSTANDING BETWEEN GEORGIA AND LATVIA ON REDUCTION OF ROAMING TARIFFS

Georgia made its first steps towards the EU countries single roaming space by signing the Memorandum of Understanding between Latvia and Georgia in 2016 on international roaming services. This Memorandum envisages gradual reduction of international roaming tariffs (voice, SMS, Internet) between Latvia and Georgia.

In June 2017, in Riga, the Memorandum of Understanding on reduction of roaming tariffs was signed between Latvia and Georgia. Representatives of the Georgian Commission and mobile operators signed on behalf of Georgia, and representatives of the Latvian regulator and mobile operators signed the Memorandum on behalf of Latvia.

Delegation of Georgia familiarized themselves with the Latvian experience and software of quality control methodology in the area of electronic communication. As agreed by the parties, cooperation between two regulatory authorities will continue in these directions.

### MEMORANDUM OF UNDERSTANDING WITH THE CROATIAN REGULATOR OF ELECTRONIC COMMUNICATION AND POST SERVICES

In September 2017, in Tbilisi, Georgian National Communications Commission and Croatian Electronic Communications and Post Regulatory authority (HAKOM) signed the Memorandum of Understanding, which will facilitate cooperation between regulators of two countries, implementation of various events, information and experience sharing, organization of joint seminars, conferences and forums.

### MEMORANDUM OF UNDERSTANDING WITH MACEDONIAN (FORMER REPUBLIC OF YUGOSLAVIA) ELECTRONIC COMMUNICATIONS OFFICE

In November 2017, in Skopje, the Georgian National Communications Commission and Macedonian (former Republic of Yugoslavia) Electronic Communications Office (AEK) signed a Memorandum of Cooperation in the area of electronic communications.

Work meeting was held, where Macedonian experience in the area of neutral Internet exchange point (IXP) initiation and formation, mobile networks and multiplex platform services quality monitoring was discussed and it was decided to continue cooperation at the level of experts in order to share experience on listed issues.

Besides, possibility of Georgia joining 4 Balkan countries (Macedonia, Serbia, Montenegro, Bosnia-Herzegovina) on international roaming agreement was discussed as well.

### MEETING OF POLISH ELECTRONIC COMMUNICATION OFFICE AND THE COMMISSION

Georgian National Communications Commission hosted a delegation of the Electronic Communications Office of Poland (UKE). In the framework of the visit, Polish delegation shared with the Georgian counterpart experience in the area of broadband, telecommunications infrastructure regulations, including active and passive infrastructure access and Internet quality monitoring.

At the Commission Chairperson's initiative, regulatory authorities of two countries will cooperate on reducing international roaming tariffs. Polish and Georgian mobile operators will participate in the process. In addition, Polish counterparts will share experience in the area of access to active and passive infrastructure in the process of providing electronic communications service and introduction of regulations in force in the European countries.

### NETWORK OF ELECTRONIC COMMUNICATIONS REGULATORS OF THE EASTERN PARTNERSHIP - EU4DIGITAL - EAPEREG

In 2017, Georgian National Communications Commission hosted a meeting of spectrum expert working group (SEWG) and Comparative Analysis working group (BEWG) within remit of the Network of Electronic Communications Regulators of Eastern Partnership – EU4Digital – EaPeReg.

Expert work groups uniting representatives of electronic communications regulators of Eastern Partnership, EU and Balkan countries, were created in 2015 upon initiative of the Commission.

Goal of expert groups is to approximate electronic communications markets of Eastern Partnership to those of the European Union, and it serves the purpose of European integration.

In addition, experts of the Commission participated in the meetings of the roaming experts work group (REWG), the main goal of which was to create a single roaming space of Eastern Partnership and EU countries.

In order to assist the roaming experts' work group, the EU-funded project HiQSTEP "Short-term High-Quality Studies to Support Activities of the Eastern Partnership" has commenced in the framework of which EU-hired consultants who presented the draft-report to the experts work group.

At the plenary session of 2017 EU4Digital-EaPeReg 2018-2020 an Action Plan was approved to be presented to the Summit of the Eastern Partnership. The Action Plan contains 5 key components: legal approximation; increasing regulators' independence; radiofrequencies spectrum coordination; roaming tariffs harmonization; comparative analysis of telecommunications markets and development of broadband services.

### MEETING/SUMMIT OF 4 PLATFORMS OF ELECTRONIC COMMUNICATIONS REGULATORS

In 2017 representative of the Commission participated in the united Summit of 4 platforms of Electronic Communications Regulators in Cascais, Portugal (BEREC - Body of European Regulators for Electronic Communications, EMERG - Europe and Mediterranean Regulators' Group, REGULATEL - Latin America Regulators Body and EU4Digitl - EaPeReg Eastern Partnership Regulators). Representatives of the Commission presented the Summit with following topics: EU4Digital-EaPeReg Action Plan and the Role of the Commission in development of EU4Digital-EaPeReg; introduction of DVB-T2 in Georgia and mobile technologies. At the end of the Summit Chairs of all four platforms signed the Mutual Cooperation Declaration.

#### **OTHER INTERNATIONAL ACTIVITIES**

In 2017, in the limits of international cooperation, the Commission participated in various meetings and events, including:

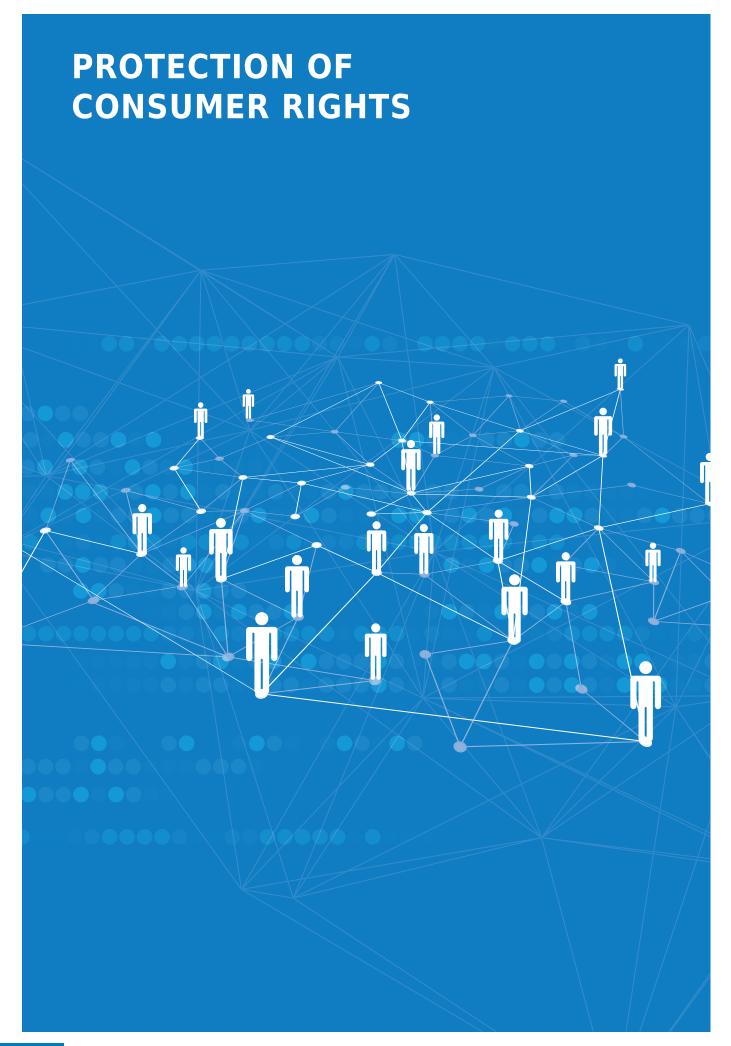
- The Commission actively participated in Geneva-06 Plan modification-related procedures. Coordination procedures were performed with all affected administrations.
- On January 24-26 2017, Ankara, third bilateral meeting of representatives of Information and Communication Technologies Administration of Turkey and GNCC was held, where the parties reviewed issues of using mobile technologies (GSM, UMTS, LTE) in relevant frequencies bands in border regions; also, issues related to allocation/assignment of frequencies in 174-320 MHz and 470-694 MHz bands for digital terrestrial TV stations and in 87.5-108 MHz band for VHF/FM radio broadcasting stations. A relevant protocol were signed at the end of the meeting.
- On January 2017 in Zakatala, Azerbaijan and September 29 in Tbilisi, Georgia, at meetings of Azerbaijani Communications and Hi-Tech Ministry's representatives discussed issues of coordinating spectrum for GSM, UMTS and LTE mobile technologies in border regions. Prior to the meetings joint radio-monitoring was conducted involving mobile operators of both parties. After the meeting the parties have signed the protocol.
- On October 25-26 2017, in Tbilisi, a meeting with representatives of Armenian Transport, Communications and IT Ministry concerned coordination of the band used for GSM, UMTS and LTE mobile technologies. The meeting was proceeded by joint radio monitoring involving mobile operators of both countries. The protocol was signed upon completion of the meeting.
- In May 2017, the Protocol signed between GNCC and the Russian Federation Communication Administration's technical experts on allocation of spectrum for terrestrial broadcasting stations came into force. As a result, Russian Federation dismissed its initial obstacles to 29 TV channels of Georgia, 21 of which are included in the Geneva-06 Plan (at the end of 2017 ITU spectrum international information circular BR IFIC was published). As to remaining 8 TV channels already coordinated with the Russian Federation, negotiations are ongoing with other affected neighbouring countries.
- Based on Agreement with TCI International, Inc., for purpose of attending inspection of devices at the manufacturer's site, on June 11-18 2017 representatives of the Commission visited Freemont of California.
- Head of the Spectrum Management Department of the GNCC, Mr. Sergo Shavgulidze, as the Deputy Chair of the Radio Communications 5th Sector of the International Telecommunications

Union (ITU-R SG5), on May 22-28 2017 and November 14-21 2017 in Geneva, attended meetings of ITU-R SG5 and related sub-groups 5A (WP 5A), 5B (WP 5B), 5C (WP 5C)

- On November 2-3 2017, in Rome, in the limits of the ITU broadband networks development European Regional Initiative "ITU Regional Initiative for Europe on Development of Broadband Access and Adoption of Broadband" organized by the European Coordination Office and Ministry of Economic Development of Italy, a meeting of experts was held on levels of electromagnetic fields and 5G development issues; Head of the Spectrum Management Department of GNCC Mr. Sergo Shavgulidze made a presentation on Future Development of IMT (the presentation is published on the ITU website: https://www.itu.int/en/ITU-D/Regional-Presence/Europe/Documents/Events/2017/EMF/Sergo%20Shavgulidze\_Georgia.pdf)
- In May 2017, in Dublin, the Commission participated in the CEPT WG FM examination group meeting in the limits of which the work continued throughout the year with the purpose of bringing frequencies allocation plan (published on the CEPT website) in compliance with single European harmonized frequencies ECA- table and preparation of answers to any CEPT questionnaires.
- In 2017, in the limits of the Memorandum signed with the European Telecommunications Standards Institute (ETSI) the Commission participated in review of the EN 77 European standards project, of 56 standards were selected for registration in Georgia as European standards.
- Representatives of the Georgian National Communication Commission attended the 8th meeting of the International Telecommunications Union's Telecommunications Indicators Expert Group (EGTI); it has been organized by the Bureau for Development of Telecommunications on the following topic: revision of ICT price baskets, speed levels of fixed broadband services, OTT (Overthe-Top) services and IP convergence, cyber-security indicators. In addition, ITU project Big-Data to Measure Information (Knowledge) Society was presented where six countries (selected by ITU) participated: Georgia, Sweden, Columbia, United Arab Emirates, Kenia and Philippines
- Ivane Makharadze, Head of the Audio-Visual Media Services Regulation Department, participated
  in the EC-organized Regional Conference held in 2017, in Budapest. Discussions at the Conference were around media transparency, legal standards, media independence mechanisms, public broadcaster functioning and financing, as well as editorial and institutional independence.
- Georgian National Communications Commission and Ukrainian National Television and Radio Commission held two meetings. Ukrainian party learnt Georgian legislation and enforcement mechanisms;
- In March 2017, in Kakheti, in the limits of EU and EC joint projects seminars were held on audio-visual media services regulations, where experts of the Council of Europe spoke about EU approaches and best practices for protecting juveniles and minors from harmful effect; they have also reviewed matters of TV regulations in accordance with EU standards.
- EU expert, Jean Francois Furnemont studied Georgian legislation for compliance with the 2010 EU Directive 2010/13/EU au Audio-Visual Services; based on the study the expert prepared recommendations for legislative amendments. On May 30-31 2017 at the GNCC premises a meeting was held with NGOs working on media issues, and broadcasters, where the expert made a presentation on Video-on-demand (VOD), video sharing platform regulation, development of effective mechanisms to protect minors from harmful influence, regulation of hate language and protection of individuals with disabilities



Former Head of the Market Research and Strategic Development Department of the GNCC Mr. Rati Skhirtladze is appointed a Head of the ICT Data Processing and Statistics Department at ITU. It shall be noted that Rati Skhirtladze is a first citizen of Georgia, who started working at the International Telecommunications Union – ITU.



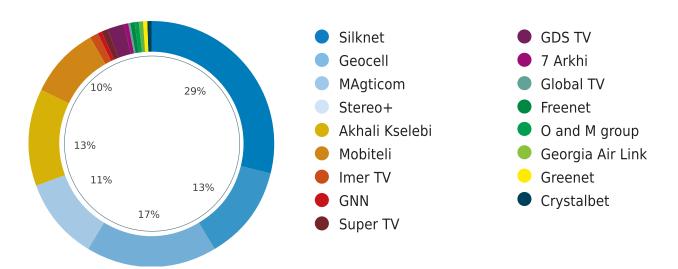
In 2017, Consumer Rights Defender's Office under the GNCC received 283 complaints<sup>4</sup>, out of which 114 were in writing, and 169 – were filed by phone. 3 complaints concerned broadcasting, 284 – electronic communications, and 16 – other matters.

#### STATISTICS OF 2017 COMPLAINTS BY TOPICS AND RESPONSE STATUS

TOPIC	COMPLAINT SUSTAINED	PARTIALLY SUSTAINED/ EXPLANATION PROVIDED	NO VIOLATION FOUND	TOTAL
Low quality telecommunication services	72	1	2	75
Inadequate informing of consumers/ subscribers	26			26
Correctness of assessed telecommunications service fee	18	3	3	24
Delay/rejection of telecommunications services	15	4	1	20
Sale of subscriber numbers	10	1		11
Change of telecommunication service packages	10			10
Termination of telecommunication services	9			9
Radiation caused by telecommunication masts	6	2		8
SPAM	6	1		7
Harmful effect of media on minors	3	2	1	6
Portability	3	2		5
Digital broadcasting				4
Internet service price increase	4			4
Other	85	5	5	94
Total				303

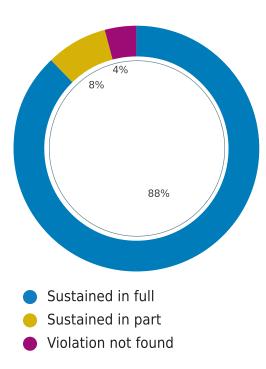
<sup>4</sup> Total number of complaints and complaints divided by topics do not match since some complaints concern several issues

#### **COMPLAINTS STATISTICS BY PROVIDERS**



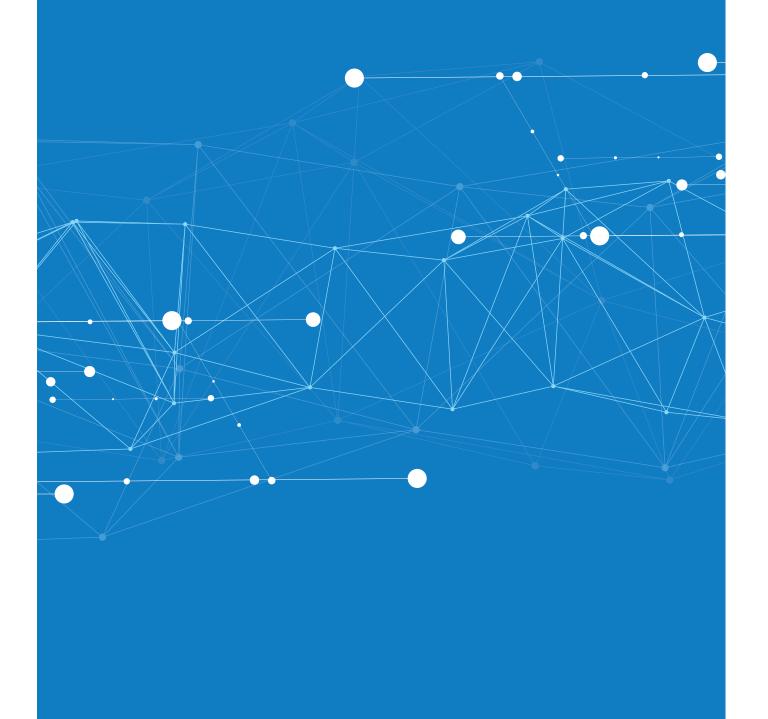
#### **RESULTS OF PUBLIC DEFENDER'S ACTIONS**

Out of 283 complaints received by the Consumer Interests Public Defender under the GNCC, 268 were sustained; 249 – sustained in full, 22 – in part. Violation not found in 12 cases.



Pursuant to Article 15<sup>4</sup> of the Law of Georgia on National Regulatory Authorities, the Public Defender shall submit the financial report for the previous year as well as a report on performed activities not later than March of each year; the report is also communicated to the general public by means of mass media. Full report of the Consumer Rights Public Defender under the GNCC can be viewed here: http://momkhmarebeli.gncc.ge/.

# OVERVIEW OF TRENDS IN THE AREA OF DEVELOPMENT OF ELECTRONIC COMMUNICATIONS AND BROADCASTING

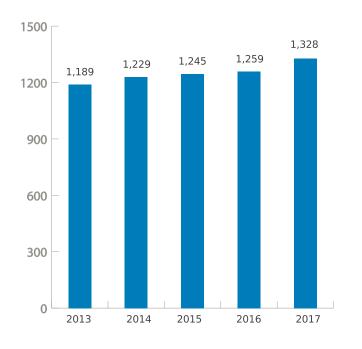


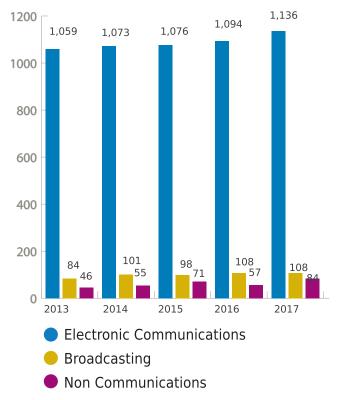
#### **GENERAL OVERVIEW**

In 2017, revenues of actors in the communications sector (without VAT and Excise<sup>5</sup>) amounted to GEL 1 328 mln, which exceeds the same indicator for 2016 by 5.5%. Revenues from electronic communications in 2017 amounted to GEL 1 136 mln, revenues from broadcasting – GEL 107,5 mln<sup>6</sup>. Amount of revenues from non-communication related activities of regulated entities was GEL 84 mln (lease of telecommunications equipment, sale, etc.)

Communications Sector Revenue (mln GEL)







#### CONTRIBUTIONS TO THE STATE BUDGET

In 2017 broadcasters paid GEL 14,492,995.27 to the state budget in taxes<sup>7</sup>, and the amounts paid by authorized and/or licensed persons under the law of Georgia on Electronic Communications – GEL 250,296,698.66. As to revenues from licensing, sums paid to budget in 2017 amounted to GEL 33,223,821.06; revenues from numbering resource and other permits amounted to GEL 966,665.80.

Penalties assessed and paid to the budget for administrative offences amounted to GEL 10 500.

In 2017 the communications sector contributed total of GEL 298,990,680.79.

<sup>5</sup> Revenues are shown in the report without VAT and Excise tax

<sup>6</sup> Detailed information TV advertisement revenues can be viewed here: http://gncc.ge/ge/news/press-releases/komisia-mauwyeblebis-deklarirebul-she-mosavlebtan-ertad-2012-2017-wlebis-satelevizio-sareklamo-shemosavlebis-analizs-aqveynebs.page

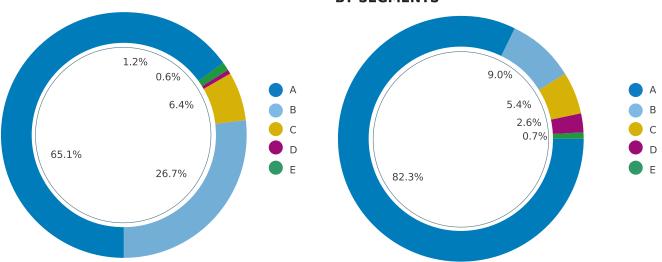
<sup>7</sup> Income tax, corporate tax, VATm excise, import twaxm property tax, land tax (agricultural and non-agricultural)

#### **ACTING ENTITIES SUBJECT TO REGULATION**

In 2017, some 329 acting companies<sup>8</sup> were recorded in the electronic communications sector. It shall be noted that in 2017 only four companies (companies of A category<sup>9</sup>) received revenues of more than GEL 100 mln in the electronic communications sector, and total revenues of those companies amount to 82.3% of total revenues; the total sum revenues of entities, which in 2017 earned less than GEL 100000 (E category – 214 entities) amounted to 0.7% of total revenues.

# ELECTRONIC COMMUNICATIONS SECTOR PLAYERS MARKET SHARES BY SEGMENTS

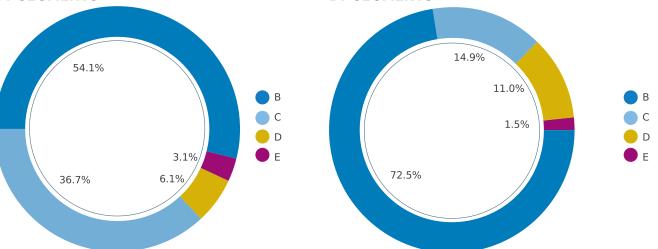
# ELECTRONIC COMMUNICATIONS SECTOR PLAYERS REVENUE DISTRIBUTION BY SEGMENTS



In 2017 only 2 broadcasting companies had revenues exceeding GEL 10 mln (B category companies) and share of those companies in the total revenues of broadcasting companies amounted to 65%; revenue of companies whose revenues were less than GEL 100 000 (E category companies) amounted to 1.5% of total revenues in the sector.

# NUMBER OF ACTIVE BROADCASTERS BY SEGMENTS

# BROADCASTING REVENUE DISTRIBUTION BY SEGMENTS



8 Acting is an entity which received some sort of income from electronic communications/broadcasting during a year

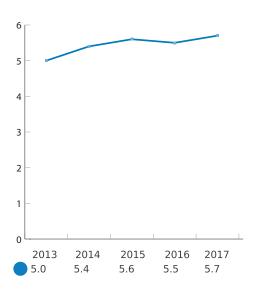
9 Traditionally we know following categories:

category	Annual revenues
А	≥ GEL100 mln
В	GEL 10 mln - GEL 100 mln
C	GEL 1 mln - GEL 10 mln
D	GEL 100,000 - GEL 1 mln
E	< GEL 100,000

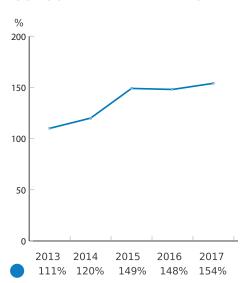
#### **MOBILE COMMUNICATIONS**

Number of mobile subscribers<sup>10</sup> at the end of 2017 (4th quarter) amounted to 5.7 million. Number of subscribers increased by 178.7 thousand versus data for 2016; penetration<sup>11</sup> of mobile subscribers is 154%

#### **NUMBER OF SUBSCRIBERS (MLN)**

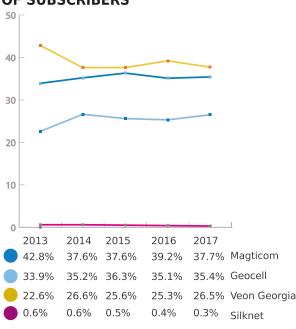


#### SUBSCRIBER PENETRATION

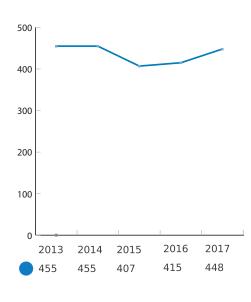


In 2017, market share of mobile operators by number of subscribers was as follows: In the end of 2017 Magticom market share by number of subscribers is 37.7%, Geocell – 35.4%, Veon Georgia – 26.65%, Silknet – 0.3%

# MARKET SHARES ACCORDING TO NUMBER OF SUBSCRIBERS



#### **RETAIL REVENUE (MLN GEL)**



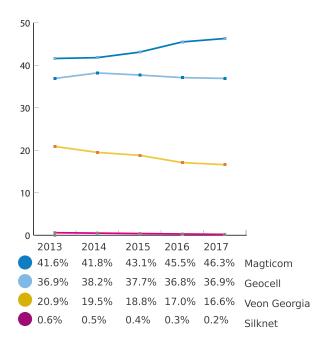
10 A SIM card which made or received voice call, SMS, MMS or had Internet or other services, or topped up balance (including company staff and without test cards) at least once in a given period (quarter)

11 Number of subscribers divided by population of the country. In 2015 subscriber penetration increased due to 2014 census, showing 3.7 million as total population of Georgia. Previously, population was considered to be 4.4 – 4.5 million

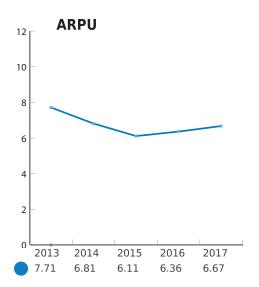
Retail income of mobile operators in 2017 amounted to GEL 448 mln, which exceeds the same figure for 2016 by 7.8% (GEL 32.7 mln).

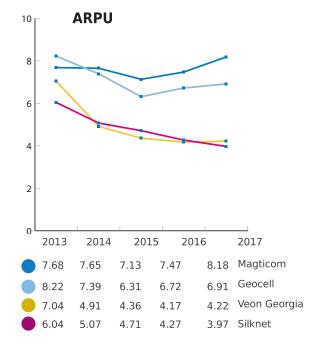
As to market share by retail revenues, Magticom's share is 46.3%, Geocell – 36.9%, Veon Georgia – 16.6%, Silknet – 0.2%

#### MARKET SHARES ACCORDING TO RETAIL REVENUE



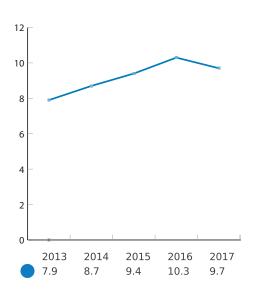
Average (monthly) revenue per user (ARPU – Average Revenue per User) at the end of 2017 (4th quarter) amounted to GEL 6.67. As compared to 4th quarter of 2016, it increased by 30 Tetri (4.48%). It shall be noted that in 2016 ARPU of Magticom, Geocell and Veon Georgia increased, and ARPU of Silknet reduced.

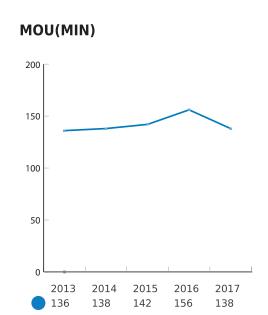




In 2017 total outgoing voice calls traffic amounted to 9.7 billion minutes. Traffic decreased by 5.9% as compared to 2016. Minutes of Use (MOU)<sup>12</sup> reduced accordingly – if in the 4th quarter of 2016 it amounted to 156 minutes, in 4th quarter of 2017 it constituted 138 minutes only.

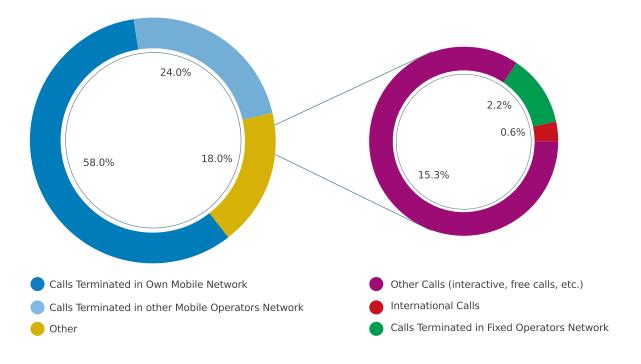
#### **OUTBOUND TRAFFIC (BILLION MIN)**





Largest share of mobile operators' outgoing traffic – 58% - comes on completed calls in own network. It is followed by completed calls on another mobile operator's network – 24%. Share of completed calls on fixed networks is 2.2%, international calls – 0.6%.

#### **DISTRIBUTION OF OUTBOUND TRAFFIC BY DIRECTIONS**

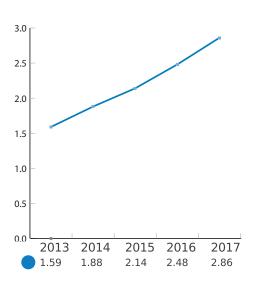


<sup>12</sup> MOU - Minutes of Use - averaged minutes talked by a user (only outgoing calls count). Calculated as follows: sum of talked minutes in one quarter divided by number of subscribers and divided by 3.

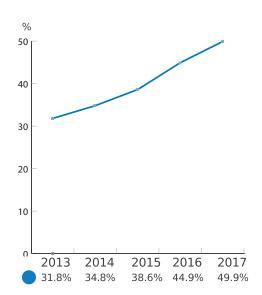
#### **MOBILE INTERNET**

According to data of 4th quarter of 2017, 49.9% of subscribers used mobile internet (2.86 mln. Subscribers). Internet traffic tends to significantly increase. Average Internet traffic per user increased as well. If in the end of 2016 it constituted 1,362 MB per month, in the end of 2017 the figure increased to 1,851 MB (>34%)

#### **NUMBER OF MOBILE DATA USERS (MIN)**

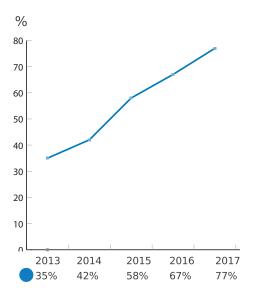


# MOBILE DATA USERS SHARE IN TOTAL NUMBER OF SUBSCRIBER



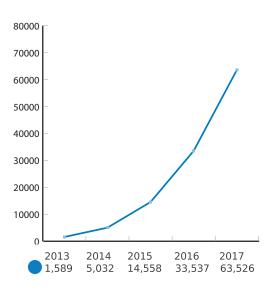
#### **PENETRATION**

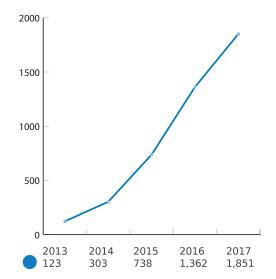
(The Ratio of Mobile Data Subscribers to the Population)



# MOBILE DATA TRAFFIC (Terabytes)

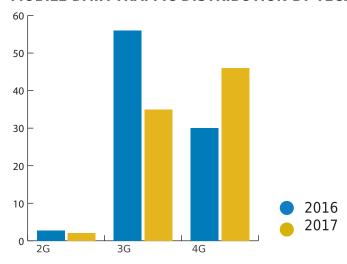
#### **AVERAGE MONTHLY TRAFFIC PER USER (MB)**



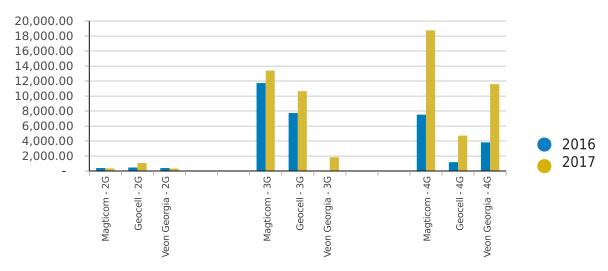


In 2017, 2G mobile Internet traffic constituted only 2.78% of total mobile internet traffic; 3G traffic was 41.3% and 4G – 56%. Distribution of traffic in 2017 by technologies and operators is given in the exhibit below.

#### MOBILE DATA TRAFFIC DISTRIBUTION BY TECHNOLOGIES



#### DATA TRAFFIC DISTRIBUTION BY MARKET PLAYERS (TERABYTES)



It shall be noted that in 2017 mobile Internet traffic mainly increased on account of 4G, and even surpassed 3G, traffic.

### **OVERVIEW OF MOBILE DATA PRICES/BENCHMARKING**

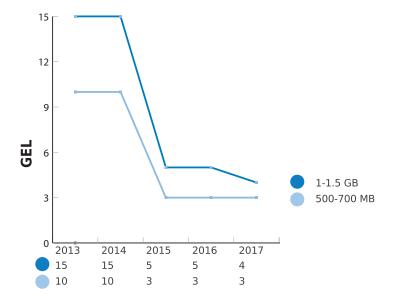
In 2013-2017 mobile internet package prices in Georgia reduced by approximately 59%.

#### Georgia

#### 500-700 MB

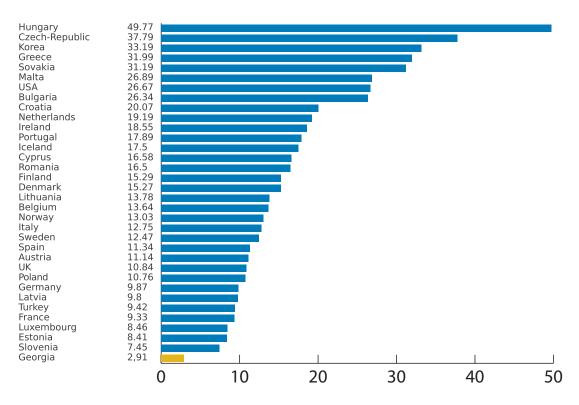
300-700 MB						
GEL	2013	2014	2015	2016	2017	Price reduction %
Magticom	10	10	3	3	3	70%
Geocell	10	10	3	3	3	70%
Veon Georgia	3		3	3		
Average						70%
1- 1.5 GB						
GEL	2013	2014	2015	2016	2017	Price reduction %
Magticom	15	15	5	5	5	67%
Geocell	15	15	5	5	5	67%
Veon Georgia	7	4	4	4	4	43%
Average						59%

#### **MOBILE DATA PRICES IN GEORGIA**

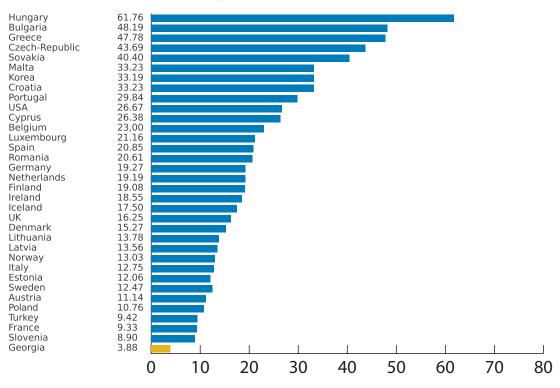


In 2017, for the purpose of comparing mobile broadband internet prices to those of European countries, the Commission used a report prepared by "Van DIJK Consultant commissioned by the European Commission; its methodology gives preference to pre-paid tariff plans; tariff plans from 31 European countries, as well as tariff plans of America and Korea, are processed and reviewed in this report. Reviewed tariffs include taxes and exclude activation fees, promotions and other additional fees (like device charge). It reviews 1-month 5—MB and 1000 MB internet packages. The report reviews standard packages (standalone)<sup>13</sup> and the prices are indicated in EURO in consideration of purchase power parity of national currency (EURO PPP).

#### **500 MB PACKAGE PRICES - EURO PPP**



#### **MOBILE DATA BASKET - 1GB / EURO PPP**

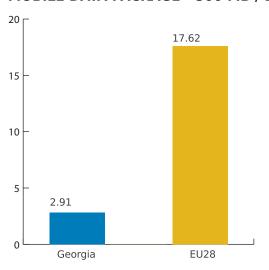


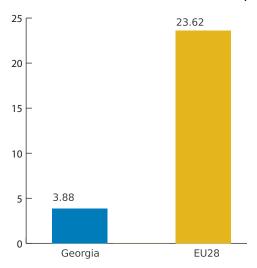
13 In case of lack of standard package, the report uses prices for combined packages

Comparison of 31 European countries' mobile internet packages (500 MB and 1000 MB) average prices to average mobile internet package prices of Georgia

#### **MOBILE DATA PACKAGE - 500 MB / EURO PPP**

#### **MOBILE DATA PACKAGE - 1GB / EURO PPP**



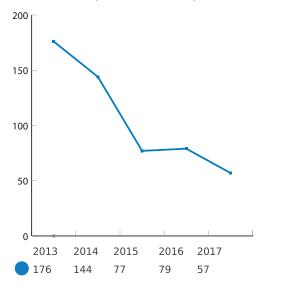


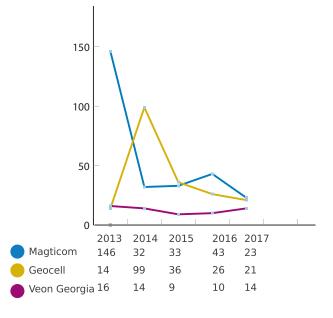
#### **PORTABILITY**

In 2017, some 57 355 numbers were ported between mobile operators. Most numbers were ported in the Magticom network – 23 000, followed by Geocell with 21 000 and then followed by Veon Georgia – 14 000 numbers.

# TOTAL NUMBER OF PORTED MOBILE NUMBERS (THOUSANDS)

# NUMBER OF PORTED NUMBERS TO OPERATOR'S NETWORK (THOUSANDS)



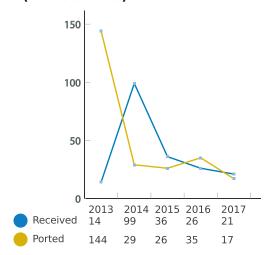


In 2017, 284 more subscribers ported to Magticom than from Magticom. In case of Geocell 4146 more subscribers ported to it than from it. In case of Veon Georgia – 4 387 more subscribers ported to other mobile networks than ported to it.

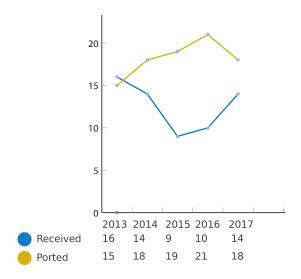
# NUMBER OF PORTED AND RECEIVED NUMBERS TO MAGTICOM NETWORK (THOUSANDS)



# NUMBER OF PORTED AND RECEIVED NUMBERS TO GEOCELL NETWORK (THOUSANDS)



#### NUMBER OF PORTED AND RECEIVED NUMBERS TO VEON GEORGIA NETWORK (THOUSANDS)



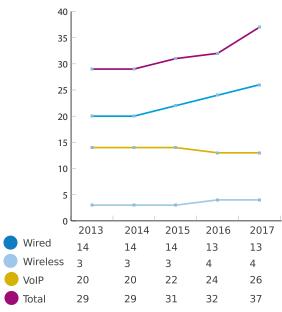
#### **DISTRIBUTION OF MOBILE DEVICES ACCORDING TO MANUFACTURERS:**

MANUFACTURER	COUNT	%
Samsung	1,594,795	30.88%
Microsoft/Nokia	976,250	18.90%
other	973,098	18.84%
Apple	580,149	11.23%
HUAWEI	452,377	8.76%
Lenovo	232,939	4.51%
TCT	94,694	1.83%
Sony/Ericsson	94,038	1.82%
LG	78,533	1.52%
HTC	62,341	1.21%
ZTE	25,643	0.50%
TOTAL	5,164,857	

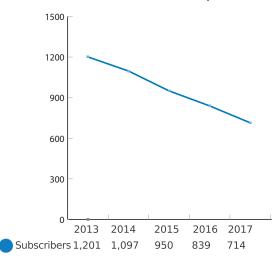
#### **FIXED TELEPHONY SERVICES**

Georgian fixed telephony service market used wired, as well as wireless (CDMA) and VoIP (voice communications via Internet Protocol) technologies. In 2017 fixed telephone service market comprised 37 market players. Fixed wired technology was provided by 13 authorized persons, 4 persons used wireless, and 26 - VoIP<sup>14</sup>.

#### **NUMBER OF OPERATORS**



#### **NUMBER OF SUBSCRIBERS (THOUSANDS)**



At the end of 2017 (4th quarter), number of fixed telephony service subscribers amounted to 714 000. As compared to 4th quarter of 2016, the number of subscribers reduced by 13.1% (124 000). Reduction of fixed telephony subscribers (and, therefore, reduction of revenues and traffic) is a general trend in the world, which mainly is related to increase of use of mobile communication replacing fixed telephony.

Penetration of fixed telephony service subscribers is 19% per population<sup>15</sup> and 63% per household<sup>16</sup>.

Total retail revenues of fixed telephony services tend to decrease all the time. In 2017, retail revenues mounted to GEL 46.5 mln only, and this figure is less than 2016 figure by 7% (GEL 3.7 mln).

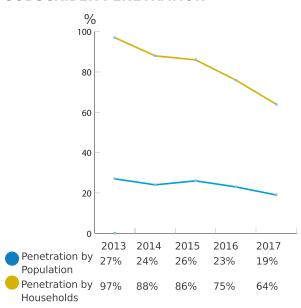
<sup>14</sup> Some companies use several technologies simultaneously; number of operators by technologies does not match the total number of operators

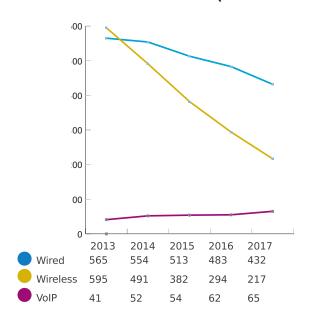
<sup>15</sup> Number of fixed telephony service subscribers is divided by number of population

<sup>16</sup> Number of fixed telephony services is divided by number of households in the country

#### **SUBSCRIBER PENETRATION**

#### **NUMBER OF SUBSCRIBERS (THOUSANDS)**





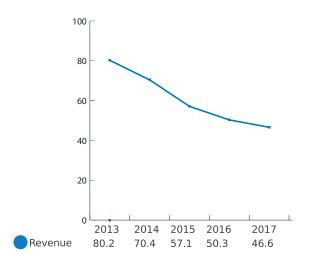
Number of **fixed wired telephony** subscribers at the end of 2017 amounted to 432 thousand; it is 10% less than the number for 2016. In 2010-2017 revenues of fixed wired telephone services kept reducing. In 2017 retail revenues amounted to total of GEL 30.4 mln, which is less than the figure for the previous year by 10.8% (GEL 4.2 mln).

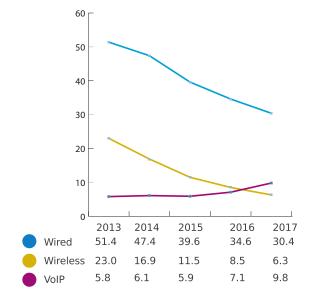
Number of **CDMA** subscribers significantly reduced since 2012. If by the end of 2011 some 734 thousand subscribers were recorded, at the end of 2017 the figure reduced to 217 thousand. Correspondingly, retail revenues reduced in 2017, too. If in 2016 retail revenues from CDMA amounted to GEL 8.5 mln, then in 2017 the revenue constituted GEL 6.3 mln only (20% less).

Number of **VoIP** subscribers in 2017 slightly increased and now it is some 65 thousand VoIP subscribers; it is more than the number for the previous year by 5.1%. In 2017 retail VoIP revenues increased and amounted to GEL 9.8 mln, which is more than the figure for 2016 by 38%, GEL 2.7 mln that is.

#### **RETAIL REVENUE (MLN GEL)**

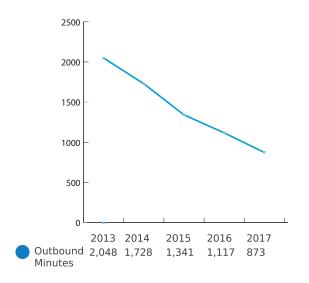
## RETAIL REVENUE (MLN GEL)



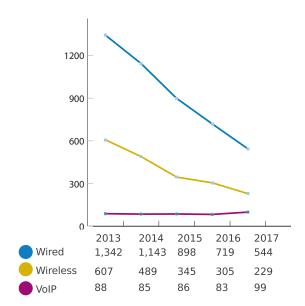


Outgoing traffic of fixed wired telephony reduced in 2017. In 2016 it was 1.12 billion minutes, but in 2017 it was only 0.873 billion minutes (21% less).

#### **OUTBOUND MINUTES (MLN)**



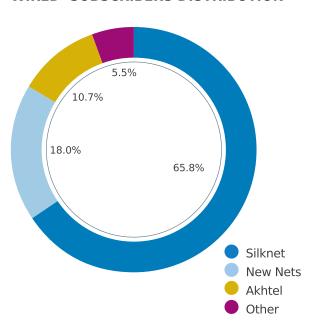
#### **OUTBOUND MINUTES (MLN)**



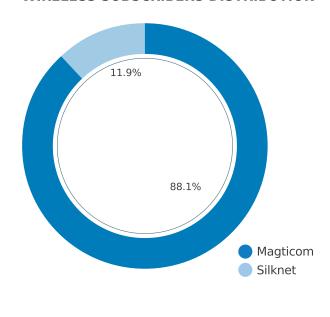
Outgoing traffic in fixed wired telephone services in 2017 amounted to 544 mln. Minutes, which is less than the indicator for the previous year by 24.3% (174 mln minutes). CDMA outgoing telephone traffic decreased, too: in 2016 it was 305 mln minutes, and in 2017 itwas 229 mln minutes only (21% less). It shall also be noted that VoIP outgoing traffic increased: in 2017 it was 99 mln minutes (versus 2016 with 82.7 mln minutes).

**Fixed wired telephony** market key players are still: Silknet, New Nets and Akhtel (New Net and Akhtel are interdependent affiliated entities). In all of Georgia, Silknet customer share is 65.8%, New Net – 18%, Akhtel – 10.7%. Other operators jointly amount to 5.5.%. Customer base, and, therefore, market share of operators is stable.

#### WIRED SUBSCRIBERS DISTRIBUTION



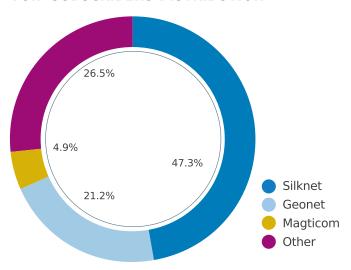
#### WIRELESS SUBSCRIBERS DISTRIBUTION



**Wireless fixed telephony** (CDMA) is mainly represented in the market by two operators: Magticom and Silknet. Magticom's share in terms of subscribers is 88.1%, and Silknet's – 11.9%.

There are total of 26 companies in the **VoIP** telephony market. Silknet is the largest in terms of subscribers. Its share is 47.3%. It is followed by Geonet - 21.2%, and Magticom - 4.9%.

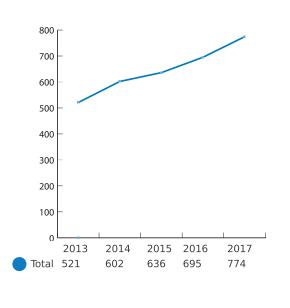
#### **VOIP SUBSCRIBERS DISTRIBUTION**



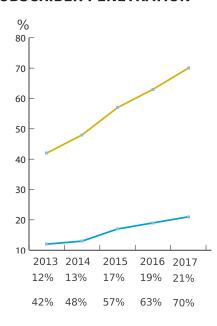
#### FIXED BROADBAND<sup>17</sup>

Number of fixed broadband services subscribers - as of 4th quarter of 2017 - was 774 thousand. compared to the end of 2016, the number of subscribers increased by 11.6% (73 thousand subscribers). Penetration of fixed broadband subscribers per population $^{18}$  is 21%, and 70% per household $^{19}$ 

#### **NUMBER OF SUBSCRIBERS (THOUSANDS)**



#### SUBSCRIBER PENETRATION



52 ANNUAL REPORT 2017 WWW.GNCC.GE

Penetration by

Population Penetration by

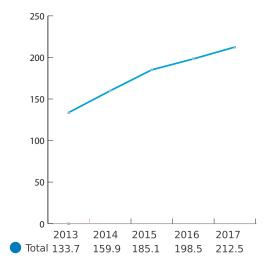
Households

<sup>17</sup> ratio of fixed broadband subscribers to population

<sup>18</sup> ratio of fixed broadband subscribers and population of the country

<sup>19</sup> ratio of fixed broadband subscribers and households of the country

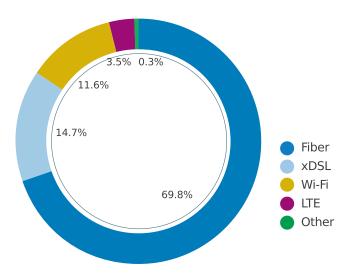
#### **RETAIL REVENUE (MLN GEL)**



Retail revenues from fixed broadband services are being increased. In 2017 revenues from retail activities amounted to GEL 212.5 mln, which is 7,7% more (GEL 14 mln) than in 2016.

Majority of fixed broadband services subscribers use fibre-optic technology, (69.8%). Wi-Fi – 11.6%, xDSL services – 14.7%, fixed LTE – 3.5%. All other technologies (WiMAX, Canopy, satellite) are used by 0.3% of broadband subscribers.

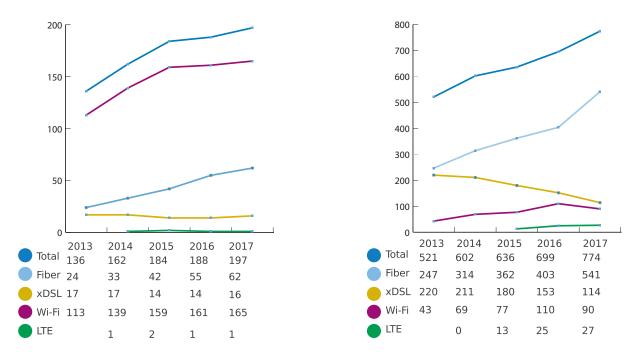
#### SUBSCRIBERS NUMBER DISTRIBUTION BY TECHNOLOGIES



In 2017, 197 entities were engaged in the provision of broadband services, of which 62 – were offering services via Fiber Optic tehcnology, xDSL – 16, Wi-Fi – 165, fixed LTE – by 1 authorized person.

#### **NUMBER OF OPERATORS**

#### **NUMBER OF SUBSCRIBERS (THOUSANDS)**



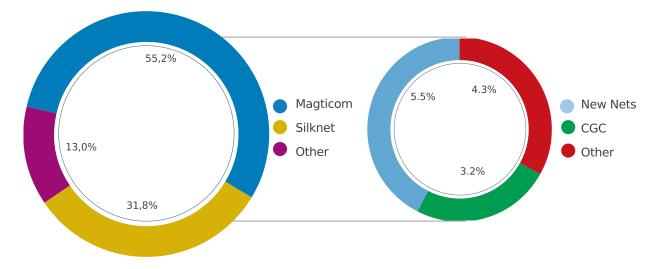
**fibre-optic network** subscribers' growth rate compared to other technologies, is rather high. By the end of 2017 there were540 000 subscribers using fibre-optic services; it exceeds the figure of 2016 by 37.8% (136 000 subscribers).

By the end of 2017, the number of **xDSL** subscibers amounted to 114 000. The number of subscribers reduced by 21% (38 thousand subscribers) compared to the end of 2016.

By the end of 2017, the number of **WiFi** subscribers amounted to 90 thousand, and the number of **fixed LTE** subscribers was 27 000 subscribers, which is slightly more than the data for 2016.

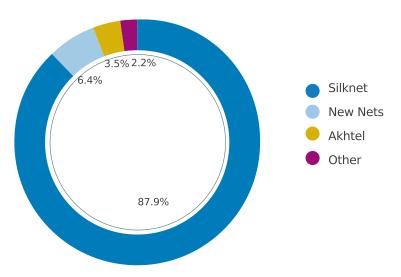
As of 4th quarter of 2017, Magticom served 55.3% of **fibre-optic** subscribers, Silknet – 31.9%, New Net – 5.5%, Caucasian Central Communications Corporation (CGC) – 3.2%, all other operators' served in total 4.1% of total subscribers.

#### FIBER-OPTIC SUBSCRIBERS DISTRIBUTION



As for xDSL technology, Silknet served 87.9% of subscribers, New Net – 6.4%, Akhtel – 3.5%, all other operators' - 2.2% (New Net and Akhtel are affiliated entities)

#### XDSL TECHNOLOGY SUBSCRIBERS DISTRIBUTION



Unlike other technologies, there are no companies with Significant Market Power offeringWiFi Internet service. There are 165 companies in the market, of which the share of the largest operator "SkyTel" is 7%.

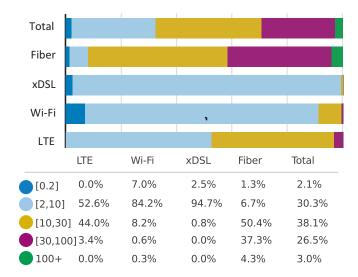


By the end of 2017, majority of Georgian subscribers used packages, declared speed of which was between 10 -30 Mb/sec. Share of such subscribers was 34%. It was followed by 2-10 Mb/sec packages with 28% of share.

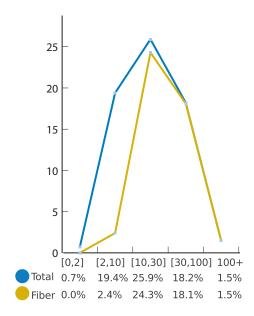
It shall be noted that speed of most commonly used packages differs by technologies, which is quite natural. For instance, in case of fibre-optic and fixed LTE technologies, speed in majority of packages is in the range of 10-30 Mb/sec (fibre – 50.4%, LTE – 44%), in case of xDSL and WiFi technologies declared speed is mainly in the range of 2-10 Mb/sec (xDSL – 96.7%, WiFi – 84.2%).

Majority of of households (21.7%) uses 2-10 Mb/sec packages, and 25.9% - 10-30 Mb/sec packages. Use of packages with the speed exceeding 30 Mb/sec constantly increases and amounted to 19.4%; the figure for 2016 was 9.3%.

#### SUBSCRIBERS DISTRIBUTION BY TECHNOLOGIES AND SPEEDS



#### SUBSCRIBER PENETRATION BY HOUSEHOLD ACCORDING TO THE CONNECTION SPEEDS



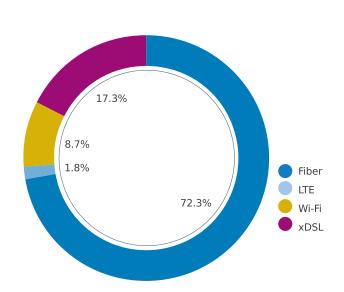
Share of corporate subscribers on the fixed internet market is 4.7%, although, the share of revenues from those subscribers amounts to 27%.

Majority of corporate subscribers (72.3%) uses fibre-optic technologies. Share of corporate fibre-optic subscribers is 4.9%; share of revenues from them in fibre-optic technologies area is 31.6%.

#### **CORPORATE SUBSCRIBERS SHARE**

#### 27.0% Total 4.8% 31.5% Fiber 4.9% 15.0% xDSL 5.6% 14 6% Wi-Fi 3.7% 2.3% LTE 2.4% 10 15 25 Revenue Subscribers

# CORPORATE SUBSCRIBERS DISTRIBUTION BY TECHNOLOGIES

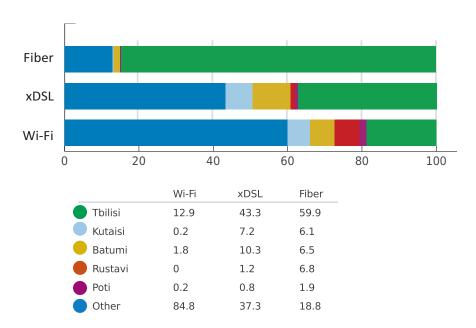


Large part of fibre-optic technology users are located in Tbilisi – 59.9%. 81 % of users of this technology is accumulated in 5 cities of Georgia – Tbilisi, Kutaisi, Batumi, Rustavi and Poti; 19% of users are located in other places of the country. Main reason for such a distribution is the lack of rural infrastructure.

The largest part of xDSL technology users is also located in Tbilisi with 43.3%. Their amount is high in Kutaisi and Batumi as well, with 7.2% and 10.3% accordingly.

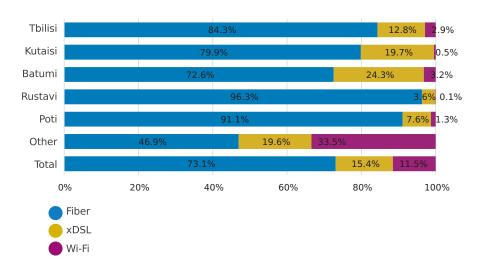
As for Wi-Fi technology, 84.8% of users are mainly located outside abovementioned 5 towns.

#### SUBSCRIBERS DISTRIBUTION BY TECHNOLOGIES AND GEOGRAPHY



By the end of 2017, in Tbilisi, Kutaisi, Batumi, Rustavi and Poti, users of fibre-optic technologies prevailed over users of all other technologies. It shall be noted that share of such subscribers in Rustavi was 96.3%, and in Poti – 91.1%.

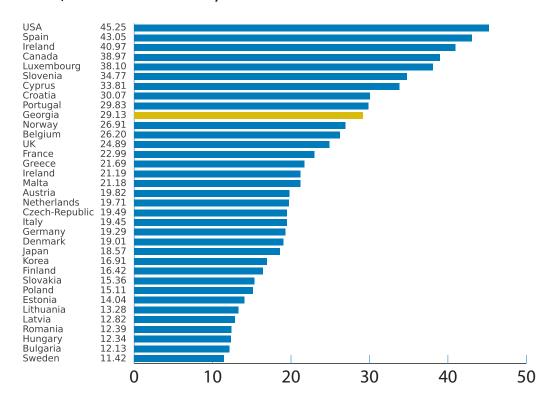
#### SUBSCRIBERS DISTRIBUTION BY TECHNOLOGIES AND GEOGRAPHY



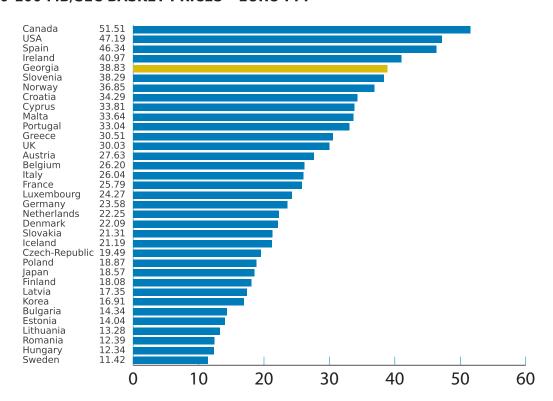
#### **OVERVIEW/BENCHMARKING OF FIXED INTERNET PRICES**

In 2017, the Report of Advisory Group "Van Dijk Consultant" – prepared and published at the order of EU Commission – was used for reasons of comparing broadband Internet prices in other countries to those in Georgia; the Report covers most commonly used package tariffs of 30 countries, including America, Canada, Japan and Korea. The Report reviews offers of largest operators nationally, total market share of which in the broadband retail market exceeds 40%. Upon identification of operators, the cheapest package is selected based on the specific basket in entire country. It reviews 1-month or close to 1-month standard packages. Methodology does not include the installation price, promotions and other additional fees (like, line rental fee). The Report uses prices in EUROs, taking in account the purchase power of national currency (indicated as EURO PPP).

#### 12-30 MB/SEC BASKET PRICES, EURO PPP

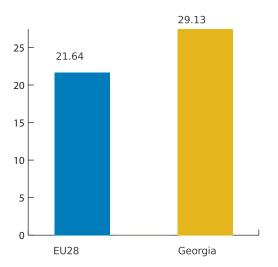


#### 30-100 MB/SEC BASKET PRICES - EURO PPP

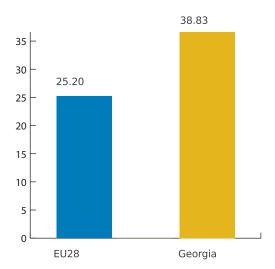


30 EU Countries Internet baskets (12-30 Mb/sec and 30-100 Mb/sec) average prices vs. prices of similar fixed Internet baskets in Georgia

# FIXED BROADBAND BASKET - 12-30 MBPS / EURO PPP



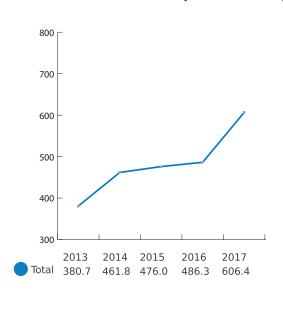
# FIXED BROADBAND BASKET - 30-100 MBPS/ EURO PPP



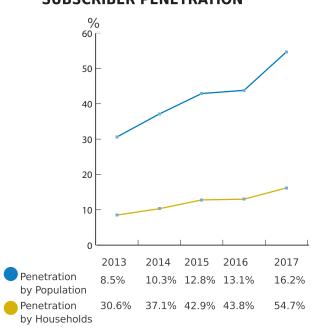
#### **BROADCASTING TRANSIT**

In the 4th quarter of 2017 some 605.6 thousand subscribers were using broadcasting transit service; this exceeds the same data for 2016 by 24.5% (119 thousand subscribers). Penetration of broadcast transit subscribers by population<sup>20</sup> amounted to 16.2%, and 54.6% by household<sup>21</sup>. It shall be noted that in 2011-2014 the number of broadcast transit subscribers was growing much faster than in 2015-2016, and in 2017 we have again witnessed drastic increase in numbers

#### SUBSCRIBER NUMBER (THOUSANDS)

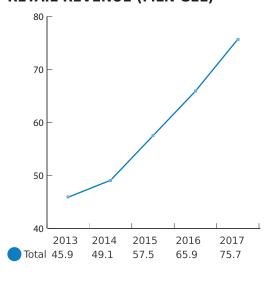


#### SUBSCRIBER PENETRATION

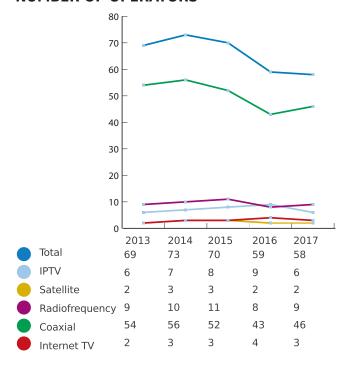


Retail revenues from broadcast transit have also increased – in 2017 revenues amounted to GEL 75.7 mln, which exceeds the same figure for the previous year by 14.9% (GEL 9.6 mln).

#### **RETAIL REVENUE (MLN GEL)**



#### **NUMBER OF OPERATORS**



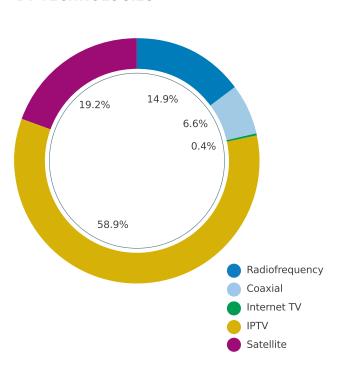
<sup>20</sup> Ratio of broadcast transit subscribers and population of the country

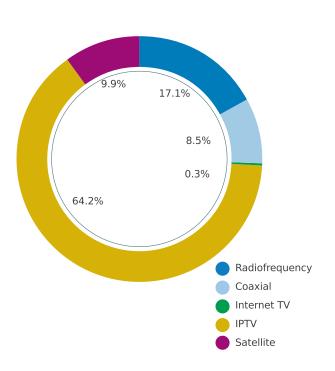
<sup>21</sup> Ratio of broadcast transit subscribers and households of the country

IPTV technology is most commonly used in Georgia for broadcast transit delivery. Share of users of this technology amounted to 58.9% in the 4th quarter of 2017. It was followed by satellite technology – 19.2%, radio frequencies – 14.9%, coaxial cable – 6.6%, and the number of Internet TV users constitutes only 0.4%.

# SUBSCRIBERS NUMBER DISTRIBUTION BY TECHNOLOGIES

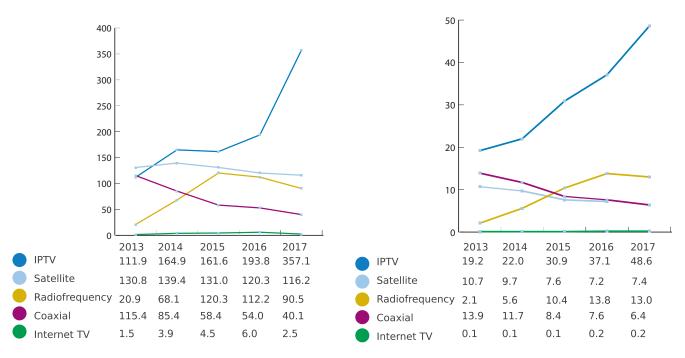
# RETAIL REVENUE DISTRIBUTION BY TECHNOLOGIES



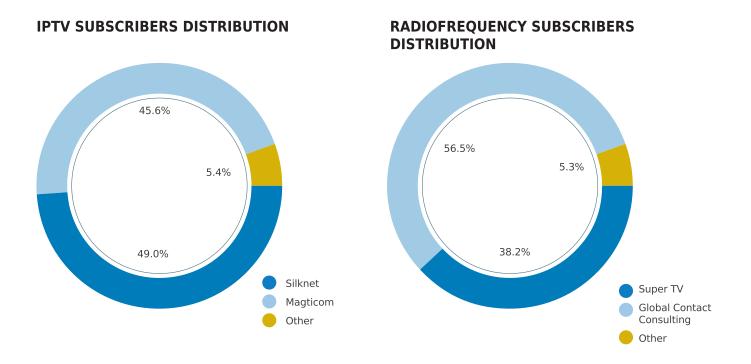


# NUMBER OF SUBSCRIBERS BY TECHNOLOGIES (THOUSANDS)

#### **RETAIL REVENUE (MLN GEL)**

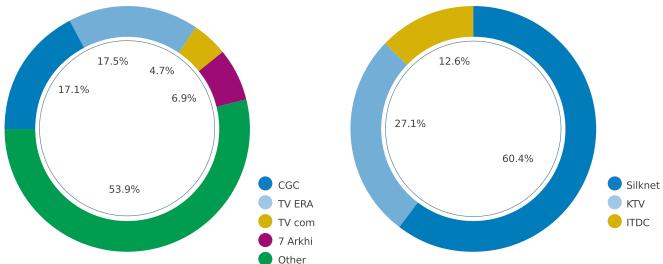


In 2017 the number of IPTV service users increased by 163 thousand (84%), and the revenues thereto – by GEL 11 mln (30%). In the last quarter of 2017 Silknet (49%) and Magticom (45.6%) were key providers of IPTV services. In 2017 the number of broadcast transit users via radio frequencies technology has reduced and amounted to 90.3 thousand.



In 2017, similarly to 2016, the number of broadcast transit users via coaxial cable technology has reduced. In 4th quarter of 2017 total of 40 thousand subscribers used this technology, which is less than the same data for the previous year by 13 thousand (25%). Key players in the market were the Central Communications Corporation (CGC), TV Era, and TV Com.



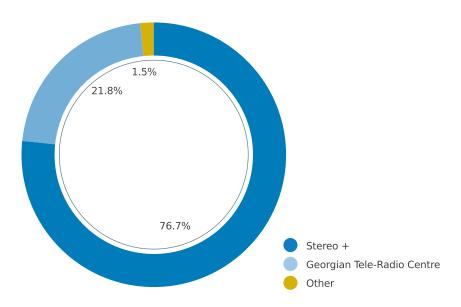


**Broadcast transit via Internet.** The number of this particular service subscribers is rather low – total of 2.4 thousand. Broadcast transit via Internet means a possibility of watching TV on Internet following registration and payment of the relevant fee. Such services are provided only by three Georgian companies: JSC Silknet (silktv.ge), ITDC Ltd., (myvideo.ge) and KTV 1 (shoni-tv.ge)



In December 2017, there were 28 multiplex operators in Georgia; however, only 8 of them received revenues (Stereo+, Georgian Tele-Radio Centre, Kvemo Kartli Tele-Radio Company, Media Centre for Open Abkhazia, TV company Egrisi, TC25, Tele-Radio Company Rioni, Tele-Radio Company Tvali (eye)); other operators transmitted their own channel(s) and did not engage in multiplex related commercial activities. In 2017 operators received a revenue of GEL 5.8 mln, with the principal share attributed to Stereo+ and Georgian Tele-Radio Centre:

#### **DISTRIBUTION OF REVENUE GENERATED BY MULTIPLEXES IN 2017**



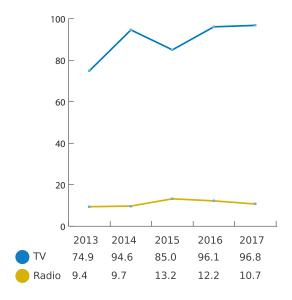
According to Commission's information, approximately 30-35% of households use the Free to Air digital broadcasting delivered via multiplex. Number of this technology users is higher in regions (in %), than in Tbilisi or other big cities.

#### **BROADCASTING<sup>22</sup>**

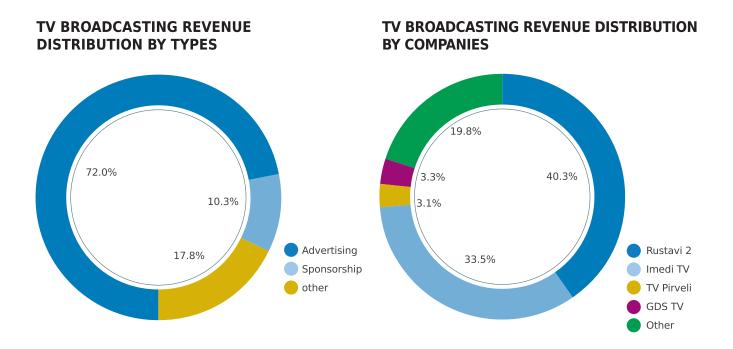
According to latest data of 2017, total of 98 broadcasters operate in Georgia, of which 21 are nation-wide general TV broadcasters.

It shall be noted that according to statistical reports submitted to the Georgian National Communications Commission in 2017, revenues were generated by 65 private TV broadcasting and 44 radio broadcasting companies.

#### **BROADCASTING REVENUE (MLN GEL)**



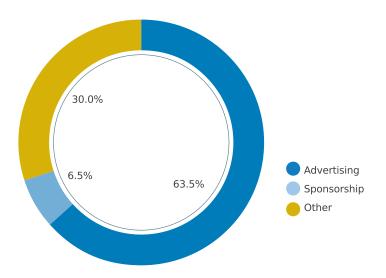
It shall be mentioned that main source of revenues of TV broadcasters is advertisement and sponsorship (82% of total revenues). According to revenues from TV broadcasting, in 2017, the company Rustavi2's share was 40.3%; it was followed by TV Imedi with 33.5%, GDS TV with 3.3%, TV Pirveli – 3.1%. All other broadcasting revenues amounted to 19.8%.



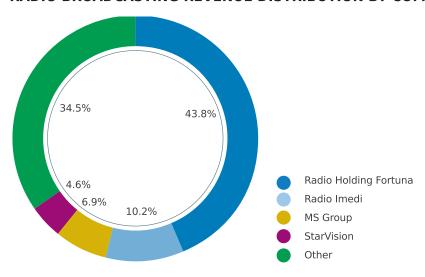
<sup>22</sup> http://gncc.ge/ge/news/press-releases/komisia-mauwyeblebis-deklarirebul-shemosavlebtan-ertad-2012-2017-wlebis-satelevizio-sareklamo-shemosavlebis-analizs-aqveynebs.page

Similar to TV broadcasters, radio broadcasters' main source of income was advertisement and sponsorship. Their share in total revenues of 2017 amounted to 82%. As for revenues, the largest share belongs to Radio Holding Fortuna with 43.8%, Radio Imedi with 10.2%, MS Group with 6.9%, StarVision with 4.6%. All other radios received 34.5% of the market revenues.

#### RADIO BROADCASTING REVENUE DISTRIBUTION BY TYPES



#### RADIO BROADCASTING REVENUE DISTRIBUTION BY COMPANIES



According to Research published by the Audio-Visual Observatory in the end of 2017, in 2011-2016, common advertisement market in 20 countries of Europe grew by 14%, which happened on account of increased advertisement in online media. Revenues received from online advertisement increased by 93% and revenues from TV and external/outside advertisement increased only by 9-9% accordingly, and radio advertisement — by 8% only. Printed media suffered the biggest loss as advertisement in magazines and newspapers dropped by 29%, whereas film advertisement increased by 20%. Online advertisement market became a leader in EU countries in 2015, when revenues from online commercials exceeded the TV advertisement revenues. Authors of the Research related the complete transformation of the advertisement industry to new advertisement technologies and domination of online advertisements on Google and Facebook.