STANDARD TWINNING PROJECT FICHE

1. Basic Information

1.1 Programme: Technical Cooperation Facility, AAP 2015, ENI/2015/037-862

1.2 Twinning Number: GE/15/ENI/TE/01/16 (GE/27)

1.3 Title: Supporting the Georgian National Communication Commission (GNCC)

in developing of its electronic communications regulatory framework

and operational capacities in line with EU regulatory framework

1.4 Sector: Telecommunications

1.5 Beneficiary country: Georgia

2. Objectives

2.1 Overall Objective(s):

To support Georgia in development of telecom regulatory framework in line with EU regulatory framework and to ensure the provision of competitive environment for all market players, in the Georgian electronic communications sector;

2.2 Project purpose:

The purpose of this project is to:

Conduct in-depth review of Georgian Telecommunication Regulatory frameworks redefine relevant markets in the electronic communications sector that are susceptible to *ex ante* regulation define broadband regulatory approach, conduct a feasibility study to assess the necessity of Universal Service provision, according to the EU Regulatory Framework and Europe 2020 Initiative "The Digital Agenda for Europe".

2.3 Contribution to the National Development Plan / Cooperation Agreement / Association Agreement / Action Plan

In the last few years the Government of Georgia (GoG) has introduced several reforms with the aim of supporting the overall macro-economic stability, fiscal consolidation and continuous growth. The reform efforts, particularly those related to institutional reforming of the telecommunication sector have received international recognition.

Present Twinning project is in line with the EU-Georgia cooperation priorities and objectives as well as provisions of the Socio-Economic Development Strategy of Georgia - "Georgia 2020" under which facilitating the broad use of information and communication technologies is important both for the population and for raising private sector competitiveness. In order to achieve this goal, the GoG intends to support measures to improve the country's telecommunications infrastructure. Besides, access to internet and information and communication technologies (ICT) will be ensured all over the country.

In the framework of the EU-Georgia Association Agreement (AA), in the field of electronic communications, the Georgian National Communication Commission (GNCC) is in charge to approximate Georgian standards with the EU defined under, Title IV, Section 5, Sub-Section 5, Articles 105 through 113, ANNEX XV-B of the Association Agreement (see below section 3.1.5 Strategic Framework).

3. Description

3.1 Background and justification:

3.1.1 Background

Georgian National Communications Commission (GNCC) was established in 2000 as an independent regulatory body to license and oversee the telecommunications and broadcasting sector operations within the Georgian territory. Core mandate and functions of GNCC include:

- Ensuring fair competition in the electronic communications and broadcasting sector;
- Issuing and revoking authorizations for companies seeking to operate in the field of electronic communications and broadcasting, on Georgian market;
- Issuing licenses for companies seeking to operate in the field of electronic communications and broadcasting, on Georgian market;
- Managing the scarce resource (Radio Frequency) of Georgia and conducting relevant award activities (auctions, beauty contests) of RF licenses;
- Mediating disputes between the authorized, license holder companies operating in electronic communications and broadcasting sector, as well as between operators and consumers;

Since the establishment, GNCC thrives to fulfil its mandate in strengthening the competition on Georgian electronic communications and broadcasting markets. Its aim has always been and will be the protection of consumer interests and the provision of fair, equitable and predictable regulatory environment for all market players. The latter (predictable regulatory environment) is an essential precondition for the telecom market development and investment attraction, however it will be hard to achieve without proper legal framework and experience sharing. The activities of this project are designed in a way to support effective and sustainable implementation of the regulations in line with EU legislation, and better regulation approach. Regulations and guidelines, as well as relevant implementation action plan will be developed within this project and communicated to all relevant stakeholders. Accountability and information accessibility to all relevant stakeholders will be on the top priority list of the project, as the stakeholder involvement and timely cooperation is vital to the successful completion. All activities are defined with the vision to form uniform (united) approach for the further development of Georgian telecom sector and to ensure transparency and inclusion of all interested parties. All activities and results of the project shall be approached in an inclusive and evidence-based manner. This Twinning project will not only support GNCC in its activities and implementation of its priorities, but will contribute massively to the promotion and awareness raising on EU regulations and approaches amongst other stakeholders and interested parties. The project will be implemented according to the national framework on policy development and particular attention will be made on ensuring that the policy development process is based on the better regulation approach, supported also at the EU level¹.

¹ http://ec.europa.eu/info/strategy/better-regulation-why-and-how

3.1.2 Country Background

General Data:

Total population for the beginning of the year 2016: 37 million GDP in current price USD: 3018.8 million (2016 estimate)

The Telecommunications Market in Georgia 2015: (Please update this data, including exchange rates_

Revenue from Major sectors:

Mobile telephony (retail): 156 million EUR
Fixed telephony (retail): 22 million EUR
Internet Access (retail): 71.6 million EUR

(Official Exchange Rates for 28.07.2016 - 1 USD = 2.3453 GEL 1 EUR = 2.5794 GEL)

Subscribers:

Mobile telephony: 5.6 million
Fixed (wired & wireless) telephony: 0.95 million
Fixed (wired & wireless) Internet: 0.63 million
The major players:

- Fixed telephony and infrastructure provider: JSC Silknet, Ltd Akhali Kselebi, Ltd MagtiCom, Ltd Caucasus Online, Ltd CGC.
 - Mobile Telephony: Ltd MagtiCom, Ltd Geocell, Ltd Mobitel, JSC Silknet.
 - Internet Service Providers:

JSC Silknet, Ltd Akhali Kselebi, Ltd CGC, Ltd Caucasus Online

3.1.3 Telecommunications sector background

Georgia fully liberalized its market for telecommunications in 2004. The national incumbent operator "Elektrokavshiri", now owned by JSC Silknet offers: fixed, fixed wireless and mobile telephony services, internet service and IPTV services. The development history and current trend of Georgian telecom market is following:

Revenue received from retail segment of the telecommunication services (mobile telephony, fixed telephony, internet access) in 2014 amounted to 740 million GEL.

3.1.4 Justification

The priorities of the GNCC are defined in accordance with the government policies and action plan and are fully in line with the EU-Georgia Association Agreement agenda.

All obligations defined under respective sections of the Association Agreement for electronic communications (Title IV, Section 5, Sub-Section 5-ANNEX XV-B) fall under GNCC remit and shall be implemented by the GNCC. Thus, GNCC faces a number of challenges and requires support from the experienced peer institutions from the EU Member States. GNCC priorities are as follows:

- Strengthen the independence and administrative capacity of the national regulator in the field of electronic communications in order to fully comply with the responsibilities undertaken by the Government of Georgia in regard to the EU Association Agreement and other international agreements;
- Adopt policy and regulation ensuring the harmonization with EU regulatory framework

In response to these challenges, GNCC seeks to acquire the EU knowledge and expertise on regulatory and legislative issues in the field of electronic communications; modern approaches, implementation plans and best practices related to the abovementioned priorities.

In order to achieve above mentioned objectives GNCC outlined six directions to be tackled by the Twinning project:

- 1. To proceed with the fulfilment of the responsibilities defined under Association Agreement GNCC has to have a thorough knowledge of the gaps in the regulatory framework of Georgia and only after this process of inspection can GNCC start working on the harmonisation of its primary and secondary legislation with the EU regulatory framework;
- 2. GoG commenced working on national development plan where GNCC is a stakeholder of the project on the regulatory issues, therefore knowing the EU regulations and experiences on the issue is very significant for the success of the project.
- 3. Redefining the relevant markets is vital for the adequate and fair regulation of the market(s).
- 4. GNCC has more spectrum to be awarded in Frequency bands of 800 MHz; 1800 MHz; 2100 MHz, therefore it is of utmost importance to have the most relevant award methodology in place.
- 5. Internet governance has become one of the most important issues in Telecom world. Unfortunately Georgia and GNCC lack relevant knowledge and expertise on IG (Internet Governance) issues, amongst them on such significant issues as network security.
- 6. GNCC has no current regulation on national and international roaming, though the issue has become very current in the light of Georgian telecom market developments.

3.1.5 Strategic Framework

Under the Association Agreement Georgia undertakes responsibility to gradually approximate its legislation to the relevant *EU acquis*. Obligations defined under respective sections of the Association Agreement for electronic communications (Title IV, Section 5, Sub-Section 5-ANNEX XV-B) fall under GNCC remit and shall be implemented by GNCC within the stipulated timeframes:

 Directive No 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) as amended by Directive No 2009/140/EC of the European Parliament and of the Council of 25 November 2009

The following provisions of this Directive shall apply:

- strengthen the independence and administrative capacity of the national regulator in the field of electronic communications
- establish public consultation procedures for new regulatory measures;
- establish effective mechanisms for appeal against the decisions of the national regulator in the field of electronic communications
- define the relevant product and service markets in the electronic communications sector that are susceptible to ex ante regulation and analyse those markets with a view to determining whether significant market power (SMP) exists on them.
- Directive No 2002/20/EC of the European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications networks and services (Authorisation Directive) as amended by Directive No 2009/140/EC of the European Parliament and of the Council of 25 November 2009 The following provisions of this Directive shall apply:
- implement a regulation providing for general authorisations and restricting the need for individual licences to specific, duly justified cases
- Directive No 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive) as amended by Directive No 2009/140/EC of the European Parliament and of the Council of 25 November 2009
- Based on the market analysis carried out in accordance with the Framework Directive the National regulator in the field of electronic communications shall impose on operators found to have significant market power (SMP) on the relevant markets, appropriate regulatory obligations with regard to:
- access to, and use of, specific network facilities
- price controls on access and interconnection charges, including obligations for cost-orientation
- transparency, non-discrimination and accounting separation
- Directive No 2002/58/EC of the European Parliament and of the Council of 12 July 2002 concerning the
 processing of personal data and the protection of privacy in the electronic communications sector
 (Directive on privacy and electronic communications) as amended by Directive No 2009/136/EC of the
 European Parliament and of the Council of 25 November 2009
 - The following provisions of this Directive shall apply:
- Implement regulation to ensure protection of fundamental rights and freedoms, and in particular the right to privacy, with respect to the processing of personal data in the electronic communication sector and ensure the free movement of such data and of electronic communication equipment and services
- Decision No 676/2002/EC of the European Parliament and of the Council of March 7, 2002 on a regulatory framework for radio spectrum policy in the European Community
- adopt policy and regulation ensuring the harmonised availability and efficient use of spectrum
 - Timetable: these provisions of this Directive shall be implemented within 3 years of the entry into force of this Agreement.
- Directive No 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service

Directive) as amended by Directive No 2009/136/EC of the European Parliament and of the Council of 25 November 2009

The following provisions of this Directive shall apply:

- implement regulation on Universal Service obligations (USO), including the establishment of mechanisms for costing and financing

Timetable: provision of this Directive shall be implemented within 5 years of the entry into force of the Association Agreement.

Though the recommendations and directive(s) listed below are not defined obligatory under the Association Agreement, GNCC understands that these directives and recommendations are indispensable for the proper and successful implementation of regulatory framework; therefore we consider them as part of the priority area 2 and priority area 3 and their relevant expected results. Namely:

- ✓ Recommendation (2014/710/EU; OJ 2014 L295/79) on relevant product and service markets (currently applicable Recommendation was adopted on 9 October 2014, previous versions of the Recommendation should be taken into account (Recommendation 2007/879/EC of 17 December 2007, and Recommendation 2003/311/EC of 11 February 2003);
- ✓ Recommendation (2010/572/EU) on regulated access to Next Generation Access Networks;
- ✓ Recommendation (2013/466/EU) on non-discrimination and costing methodologies;
- ✓ Recommendation (2009/396/EC) on termination rates;
- ✓ DIRECTIVE 2014/61/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks.

3.1.6 Institutional framework in the field of Telecommunication

According to the Georgian law on "Electronic communications" the main directions of the state policy in the field of electronic communications are developed by the GoG, taking into account proposals of the Ministry of Economy and Sustainable Development of Georgia (MESD) and afterwards submitted to Parliament of Georgia for approval.

The strategy and main directions of the State policy in the field of electronic communications are led by the Prime Minister of Georgia. The main trends of the State policy in the field of electronic communications, approved by the rule defined in Georgian legislation, shall be implemented by the GoG within the competence determined by the Constitution, the present law and the law of Georgia.

GNCC has always been open to innovation on telecommunication market, and consistently bases decisions on sector advancements and the EU best practice. During past years, GNCC took some important steps towards EU approximation: (a) introduced number portability, (b) obliged mobile operators to inform roaming subscribers about the consular and emergency services in the country of roaming, (c) in 2012 within its competence, closely cooperated with the Ministry of Economy and Sustainable Development of Georgia and EBRD in development of Digital Broadcasting Switchover (DSO) coordination and Action Plan; announced beauty contest for obtaining a license for the use of radio frequency spectrum for Digital Terrestrial Television (DTTV) network provisioning, d) announced auction for obtaining radio spectrum license for terrestrial systems capable of providing electronic communications services (4G broadband services), e) announced multiband (sequential) auction for obtaining radio spectrum license for terrestrial systems capable of providing electronic communications services (4G broadband services).

GNCC has developed close cooperation with international organizations: European Bank for Reconstruction and Development (EBRD), Council of Europe (CE), United States Agency for International Development (USAID), European Telecommunications Standards Institute (ETSI-member since 2001). In 2005 GNCC joined (International Corporation for Assigned Names and Numbers) ICANN/GAC (Government Advisory Committee) and represents the interests of Georgia on the committee. Since 2007, GNCC is the full member of European Conference of Postal and Telecommunications Administrations (CEPT). GNCC is actively involved in EaP (Eastern Partnership) activities and programmes.

3.1.7 Legal framework in the field of Telecommunication

The main legal act for the regulation in the field of electronic communications is the Georgia Law on "Electronic Communications" which was adopted in 2005 by the Parliament of Georgia. The law is establishing legal and economic grounds for the pursuit of activities by means of electronic communications networks and facilities on the territory of Georgia as well as principles for the development and regulation of competitive environment in this sector, it defines the functions of the Ministry of Economy and Sustainable Development of Georgia as well as of the national regulatory authority (i.e. the GNCC), specifies the rights and obligations of natural persons and legal entities owning, using or providing services by means of electronic communications networks and facilities

One of the important normative acts, namely: the Georgia law on licensing and permits, which applies to other sectors as well besides telecommunications, provides additional licensing procedures, principles and aims to be followed in licensing, general terms for licenses, types of activities subject to licensing.

As for the secondary legislation, there are sub normative acts adopted by GNCC, which together with the Georgian law on "Electronic Communications" sets regulatory rules in the field of electronic communications.

- 1. Resolution N 2 of the Georgian National Communications Commission of February 21, 2012 on Approval of Regulations on Issue, Use and Payment of Numbering Resource;
- 2. Resolution N 3 of the Georgian National Communications Commission of July 6, 2010 on Approval of Subscriber Number Portability Charter;
- 3. Resolution N 6 of the Georgian National Communications Commission of June 30, 2006 on Approval of National Frequency Allocation Plan;
- 4. Resolution N 5 of the Georgian National Communications Commission of April 20, 2006 on Approval of Rules of Separate Accounting and Cost Accounting Methodology by Authorized Entities;
- 5. Resolution N3 of the Georgian National Communications Commission of March 17, 2006 concerning the Approval of the Regulations in Respect to the Provision of Services and Consumers Rights Protection in the Sphere of Electronic Communications;
- 6. Resolution N5 of the Georgian National Communications Commission of 2007 on the methodology of relevant market definition and competition assessment;
- 7. Resolution N 13 of the Georgian National Communications Commission of December 12, 2005 on Approval of Charter on Carrying Out Auction for Obtaining the Right to Use Radio Frequency and/or Numbering Resource.

Furthermore, building on the lessons learnt and the Better Regulation agenda promoted at the EU level, this Twinning project will contribute to the overall public administration reform in Georgia by ensuring the introduction of an inclusive and evidence-based approach to policy-making and legal drafting in electronic communications sector. It will also pay specific attention to accountability and reporting lines between concerned institutions.

3.2 Linked activities:

EaPeReg Technical Assistance Project – funded by the European Union; implemented in 2013 -2016. The overall objective is to contribute to the social and economic development of partner countries by supporting the development of their electronic communications markets through a strengthened long-term cooperation between the European Union and the EaP countries in this area. The technical assistance project includes: 1) thematic and technical workshops on: market analysis; costing methodologies and approaches; mobile and fixed termination rates; universal services obligation; quality of service and customer protection; international and national roaming; broadband NGA (Next Generation Access, NGN – Next Generation Network); accounting separation and regulatory audit; frequency assignment, digital dividend; challenges of digital switchover process; 2) Benchmarking studies; 3) Information exchange – bilateral cooperation;

Georgia – Communications Policy and Regulatory Development - EBRD funded project - technical assistance project to the Ministry of Economic and Sustainable Development and the Georgian National Communications Commission; implemented in 2011-2013. The programme had a two-fold set of objectives - firstly, to assist the Ministry of Economy and Sustainable Development (MESD) to develop the electronic communications sector policy that will support the Government's e-Society objectives (Component I) and, secondly, to assist the GNCC to develop and implement regulatory actions aimed at improving market competitiveness and promoting investment in more universally available modern services, especially broadband (Component II). Component II covered the following topics: 1. Spectrum

Re-farming / Reallocation; 2. Analogue to digital Broadcasting Switchover; 3. Access and Interconnection Regulations; 4. Certification and EMC testing laboratories. The relevant recommendations for each topic were prepared by the EBRD according to the RFP. Provided two workshops: Spectrum auction design workshop and conference/workshop on Sector Policy Investment and Legislation Draft.

Georgia – Communications Policy and Regulatory Development - EBRD funded project – extension – implemented in 2013-2014. Component I – Preparing the technical specifications defining the main design parameters for national digital broadcasting network in Georgia - done; Component II – Assisting in the design of a competitive contest process for the selection of suitable digital multiplex platform provider(s) – done; Component III – Assisting in the running of the contest to select the operator(s)/ providers who will provide the initial multiplex platforms for digital broadcasting switchover, including assistance in the promotion of the contest to a national and international audience of potential bidders; Component IV – Assistance in the monitoring of the network planning stages of the winning operator(s) to ensure compliance with the implementation requirements of their networks.

Project between Electronic Communications Office of the Republic of Poland (UKE) and the Georgian National Communications Commission (GNCC), within the framework of Polish Aid Program, was implemented in 2011-2012. Project title - "Using the experience of UKE in the field of telecommunications market regulation according to the EU directives requirements"; The Project was financed by UKE and co-financed by the Polish development cooperation programme 2011 of the Ministry of Foreign Affairs of the Republic of Poland. The project was an introductory type of project with main aim of presenting the development path of UKE.1. EMC testing laboratory; 2. Market research and analysis, definition of SMPs (Significant Market Power), setting up the specific obligations for SMPs and monitoring of these obligations; 3. Tariff regulation; 4. Regulatory accounting and accounting separation; 5. Division of competencies between the antimonopoly office and the regulatory body and cooperation between them; 6. Universal Service and Universal Service Obligation; 7. Analogue to digital broadcasting switchover Frequency spectrum optimization; 8. Monitoring of quality of service; Radio monitoring system;

It's worth mentioning that the cooperation between GNCC and UKE was based on MoU and covered only information sharing practices. The topics of cooperation and relevant activities were planned around on-going specific necessities of the commission and its departments, however the relationship did not include any legal assistance or gap-analysis for any given topic, and no reports were produced. Nowadays, when Georgia has entered into Association Agreement and has specific obligations and time line to implement relevant legislative changes there is a need to implement full scale projects in order to have more systemic approach and to comply with entrusted responsibilities. Therefore, approximation of regulatory framework and its practical implementation is targeted by this Twinning Project.

Support to the Public Administration Reform in Georgia, EU funded project, planned for 2016 -2019.

The objective of the programme is to improve the efficiency, accountability and transparency of the public administration of Georgia, in line with the European Principles of Public Administration. It will have a particular focus on the improvement of the policy planning and coordination capacities and processes in the central public administration. The professionalization of the civil service (including the reform of the civil service training system) will also be supported through the programme.

Facility for the implementation of the Association Agreement in Georgia, EU funded project, 2015-2018. The project provides policy advice and capacity building support to the Georgian Government in coordinating the implementation of the Association Agreement, strengthening the institutional capacities of the line ministries and other public institutions to carry out the required reforms, including on policy development and legal approximation processes.

Legislative impact Assessment, Drafting and Representation, EU funded project, 2015-2017. The project aims to improve the legal drafting process at the central level of government (through promoting better coordination among relevant entities, and introduction of the regulatory impact assessment of draft legislation) as well as the Government's international representation and reporting functions with special emphasis on the Ministry of Justice.

The last two TA projects: support the elaboration of a unified methodology and provide capacity building to key institutions in the legal approximation processes.

3.3 Results

The mandatory results are the following:

Component 1: Enhancing regulatory framework of the GNCC in order to come in line with the EU regulatory framework and make it compatible with the EU telecom industry developments;

Result 1.1: In-depth review of Georgian Telecommunication Regulatory Framework with the view of bringing it in line with the EU Regulatory Framework conducted;

Indicators of achievement:

- Gap analysis of current Georgian legislative regulatory framework, including remaining obstacles to effective implementation of the requirements defined under AA performed
- Relevant report with proposals for possible improvements/amendments and recommendations elaborated

Result 1.2 Georgian regulatory framework upgraded <u>a</u>ccording to an inclusive and evidence-based approach and in line with the EU principles;

Indicators of achievement:

- Amendments to the regulatory framework prepared in an inclusive process and approved by the BA
- Consultation document for direct and indirect stakeholders prepared and communicated
- At least 2 workshops (1 informative, 1 consultative) for the stakeholders on proposed changes conducted and report on stakeholder consultation prepared
- Training programme on modified function together with the implementation plan developed
- Training/seminar for the GNCC relevant staff on introduced changes conducted

Result 1.3 Roadmap for the implementation of the new regulatory framework developed and capacity of GNCC on application of the roadmap enhanced;

Indicators of achievement:

- Roadmap to provide guidance for the successful implementation of the relevant regulations developed and approved by the BA
- Training materials to train GNCC staff and other relevant stakeholders on new regulatory framework and roadmap elaborated, printed and disseminated
- Training course organised and conducted (at least 50 participants)

Result 1.4 Necessity of Universal Service provision assessed and regulatory framework, including mechanisms for costing and financing developed according to an inclusive and evidence-based approach;

Indicators of achievement:

- The need of the Universal Service provision in Georgia assessed and relevant recommendations for the regulatory framework prepared and presented
- Relevant regulatory framework drafted and approved by all stakeholders

• At least 4 workshops (amongst them 2 consultative), round tables to discuss proposed initiatives organized and conducted with the involvement of all stakeholders, reports on stakeholder consultations prepared Study visit of the GNCC staff (10 BC experts for 5 working days) to the EU MS preferably which have already developed and carried out the net cost calculation methodology, study visit report drafted

Component 2: GNCC contribution to encourage fixed and wireless broadband development enhanced by defining guidelines for: infrastructure barrier removal, infrastructure sharing, net neutrality and access regulation in regards to DAE (Digital Agenda for Europe); taking into account the need of Universal Service Provision

Results 2.1 Analysis of the broadband service development framework conducted in an inclusive process and capacities of the GNCC to implement new approaches upgraded;

Indicators of achievement:

- Needs assessment of the GNCC regarding the infrastructural development for the broadband services carried out and report with recommendations, including EU MS approaches and models, drafted
- Study visit² of the GNCC relevant staff (10 BC experts for 5 working days), in MS, to gain first-hand knowledge and experience related to broadband infrastructure and its sharing in line with the EU best practice and to study and evaluate different MS approaches implemented for broadband development, especially in the rural areas performed and study visit report prepared

Result 2.2 Comprehensive regulatory guidelines to encourage fixed and wireless broadband development elaborated;

Indicators of achievement:

- At least 3 workshops (informative and consultative) on encouraging broadband development in Georgia for the GNCC staff and other relevant stakeholders (50 persons) conducted and reports on the results of consultations prepared. The workshops should cover the issues covered by the prepared guidelines and related to: IP-based interconnection, access to and sharing of infrastructure, network security, Net-neutrality, effective spectrum management for mobile broadband, etc.
- Comprehensive regulatory guidelines on fixed broadband infrastructure issues and network resilience drafted in line with the better regulatory approach and approved by the BA
- Comprehensive regulatory guidelines on effective spectrum management (for mobile broadband)drafted in line with the better regulatory approach and approved by the BA
- Public presentation of the regulatory guidelines organized and conducted

Component 3: Relevant markets are redefined and methodology for SMP (Significant Market Power) determination developed

Results 3.1 Assessment of the Relevant Markets in the electronic communications sector susceptible to *ex ante* regulation conducted;

Indicators of achievement:

Study visits are envisaged for GNCC employees from different departments. As the topics are cross-functional, in general study visit participants will be staffed with employees from the following departments: Strategy development, Frequency management, Competition support, Information and analysis, Legal, Consumer protection,

- Report on Relevant Market definition as well as redefined relevant markets in telecommunications in Georgia prepared and approved by the BA/working group
- Assessment of the SMPs for each relevant market conducted
- Report/white paper on SMP assessment methodology drafted and approved by the BA/ working group
- Training conducted for GNCC staff and report on training delivered
- Training materials and guidelines on SMP assessment methodology developed
- At least 1 workshop on SMP assessment methodology for the GNCC staff and other relevant stakeholders (40 persons) conducted.

Component 4: Strengthening the mechanisms for future spectrum awards for GNCC and relevant stakeholders

Result 4.1 Methodology for future spectrum awards to be followed and implemented by the GNCC defined and elaborated;

Indicators of achievement:

- Analysis of the existing system for the spectrum award methodologies such as: various auction types, beauty contests and etc. conducted and report prepared
- Spectrum award methodologies for various frequencies defined, drafted and approved by the BA
- Study visit of the GNCC staff (10BC experts for 5 working days) to the MS to study and explore various award methodologies practiced in EU and available software for conducting relevant auction procedures

Result 4.2 Training programs on application of the new spectrum methodologies elaborated and conducted for GNCC and relevant stakeholders;

Indicators of achievement:

- Training materials on spectrum award methodologies elaborated, printed and disseminated
- Training conducted for GNCC staff and report on training delivered
- Training materials and guidelines on spectrum award methodologies for telecom operators developed At least 2 trainings (including several types of the auction simulations) for telecom operators (around 50 participants) conducted and report on training delivered

Component 5: Enhancing GNCC capacities in Internet Governance (IG) and network security issues

Results 5.1 Three year action plan for approaching Internet Governance and network security issues elaborated;

Indicators of achievement:

- Current state of Georgia in the area of internet governance and network security analysed, issues identified and recommendations for better operation for GNCC provided
- Study visit of the GNCC staff (10 BA experts for working days) to get acquainted with hands-on management and inter agency cooperation on the Internet Governance carried out in Member States, study visit report drafted Action plan for approaching Internet Governance and network security issues drafted and approved by the BA
- Training materials for GNCC staff on the EU best practices of IG and network security issues and application of the new action plan developed
- At least 2 trainings for GNCC staff and other stakeholders on IG and Network Security, including e-privacy issues, conducted and training report drafted

Result 5.2 Guidelines based on the EU good practices for approaching Internet Governance and network security drafted;

Indicators of achievement:

- Analyses of important issues in IG and network security (such as: integrity and smooth functioning) performed and recommendations delivered
- Guidelines based on EU good practice drafted and approved by the BA
- At least 2 workshops (consultative) presenting guidelines on IG and network security to GNCC staff members and other stakeholders conducted, consultation report drafted

Result 5.3 Awareness on the implementation of the Europe 2020 initiative "the Digital Agenda for Europe" of the GNCC staff and other stakeholders raised;

Indicators of achievement:

- At least 2 seminars regarding the information and experience on the implementation of the Europe 2020 initiative, including funding mechanisms, organized for the GNCC staff and other stakeholders
- Trainings on design of the respective regulatory approaches related to IG, cyber space and network security and its application conducted to the GNCC staff and other stakeholders
- Training materials and information resources developed and presented

Component 6: Outlining the role of the GNCC in national/international roaming regulations according to the EU roaming regulations

Result 6.1 Role of the GNCC in regards to roaming regulation defined.

Indicators of achievement:

- Gap analysis of the GNCC in regards to the roaming regulation conducted and recommendations presented
- Needs assessment for the roaming regulation with regard to the EU regulations performed and report delivered
- Roaming regulation framework drafted together with its enforcement procedures and approved by the BA
- Study Visit of the GNCC staff (5BA experts for 5 working days) to the EU MS to get acquainted with roaming regulations, monitoring and administration issues
- Workshop presenting national and international roaming regulation guidelines and EU best practices organised
- Changes presented and agreed with all relevant stakeholders

The inclusiveness and evidence-based approach should be applied to all activities related to legislation alignment with *EU acquis* and policy development / adjustment: drafting/amendment of the legal and policy proposals should be based on evidence, the cost of their implementation should be calculated and budgeted and they should be consulted at the right time of the process with relevant internal and external stakeholders.

3.4 Activities:

Member State(s) is (are) kindly requested to develop activities in the submitted proposal which are needed in order to achieve the results stipulated in the fiche.

Minimum two visibility events will be organized in the course of the implementation of the project; Kick-off meeting at the start of the implementation and the Final meeting at the end of the implementation of the project activities.

3.5 Means/ Input from the MS Partner Administration:

MS Project Leader may participate in the project also as a short-term expert (STE). In this case the MS Project Leader should satisfy requirements stipulated in the fiche for both the Project Leader and the relevant STE profile.

3.5.1 Profile and tasks of the Project Leader

Requirements:

Qualification and skills:

- Good Command of the English language, both spoken and written;
- Good inter-personal skills;

General professional experience:

- Minimum 10 years of professional experience
- Experienced project manager, demonstrating good record in organisational leadership, staff motivation, and communication.
- Experience in transposing EU regulations into national practice

Specific professional experience:

- University level education or equivalent professional experience of 10 years in the field of telecommunication
- 7 years of experience working in Telecommunication Authority; or top level manager of one of the major telecom operators in MS;
- Proven contractual relation to public administration or mandated body, as defined under Twinning manual 5.4.5.
- High ranking official
- Currently belonging to a Member State telecommunication administration.

Tasks of the Project Leader:

- Overall coordination and managing of the implementation of the project in cooperation with the BC Project Leader;
- Ensuring sound implementation of the envisaged activities;
- Monitoring and evaluating the needs and priorities in the respective sector, project risks, progress against the project budget, benchmarks, and outputs, and taking any necessary remedial actions if needed;
- Coordination of MS STEs' work and availability;
- Providing efficient leadership of the project;
- Ensuring backstopping and financial management of the project in the MS;
- Participation in Steering Committee (SC) meetings;
- Project reporting.

3.5.2 Profile and tasks of the RTA

One RTA will be appointed and he/she will be located in the premises of the GNCC in the beneficiary country.

The secondment of the Resident Twinning Advisor (RTA) will last for 18 months, during which he/she will be responsible for the direct implementation of the project under the overall supervision of the MS Project Leader.

He/she will come from an EU Member State to work on a full time and day-to-day basis with the beneficiary administration. The Resident Twinning Adviser will have a key role in the coordination of the inputs required for the successful implementation of all the project activities. He/she shall be supported by the STEs.

Profile

Qualification and skills:

- University level education, or professional qualification, preferably in telecommunication, business administration or related discipline;
- Excellent Command of the English language, both spoken and written;
- PC Computer literacy;
- Good inter-personal skills.
- Knowledge of the Georgian and/or Russian language would be an asset;

General professional experience:

- Civil Servant from an EU MS Administration;
- Minimum 7 years of professional experience;
- Work experience that coincides with at least one of the results presented in the twinning fiche. Experience of two or more is considered as an asset.
- Experienced project manager, demonstrating good record in organisational leadership, staff motivation and communication;
- Excellent team-working skills;
- Strong analytical skills;

Specific professional experience:

- Experience in the field of telecommunication policy formulation and regulations
- Experience in transposing international telecommunication regulations into national practice
- Knowledge of EU laws and best practices in the area of telecommunications regulation.
- Active participation in international network of telecommunications regulation Bodies (such as BEREC - Body of European Regulators for Electronic Communications or similar) considered as an asset.

Tasks:

As to the general responsibility of the day-to-day implementation of the Twinning project in the Beneficiary Country, the Resident Twinning Adviser (RTA) tasks will include:

Coordination of all project activities and STEs' inputs;

- To provide technical advice, support and assist the beneficiary institution in the context of a predetermined work plan;
- Ensuring day-to-day implementation of the Twinning project in the BC;
- Ensuring smooth correlation between the activities, deadlines and the envisaged results in the Work Plan;
- Ensuring smooth implementation of the different activities delivered;
- To coordinate and organise training activities;
- To organise the visibility events (kick-off and final event);
- To organise the Steering Committee meetings;
- To participate in Steering Committee meetings;
- Executing administrative issues (e.g. assisting in reporting);
- To provide technical advice on EU policies and best practices, and assisting the Georgian administration in the context of the project work plan;
- Networking with institutions relevant to this project in Georgia and in MS;
- To provide advice and assistance in drafting legal, application acts, instructions, manuals etc. for implementation of the new legislation and supporting documents;
- To assess continuously the Twinning Project in all stages and provide link to compare it with the specified benchmarks/results and time-frame;
- To prepare the material for regular monitoring and reporting;
- To prepare operative side letters;
- To take corrective actions, if necessary, inside the terms of the signed contract.

3.5.3 Profile and tasks of the short-term experts

Profile of short term expertise

Specialist staff will be made available by the Twinning Partner (MS) to support the implementation of the activities. Specific and technical matters relevant to this Twinning project will be taken over by a pool of STEs. The detailed expert input shall be established when drawing up the Twinning work plan.

The short term experts will work in close co-operation with the Project Leader/ RTA and the Beneficiary in order to meet the specific objectives as set out above.

In order to cover the activities to be performed in the project the short term experts are expected to have qualifications and skills as detailed here-after respectively covering the following areas of telecommunication:

- Expert in competition and ancillary issues
- Expert in Consumer Protection in telecommunication
- Expert in Regulatory Framework
- Expert in the development of Institutional Framework in the field of telecommunications
- Expert in Market Analysis
- Expert in Enforcement Methods
- Expert in Regulatory Accounting
- Expert in Pricing Methodologies
- Expert in Infrastructure Access and infrastructure sharing
- Expert in Radio Spectrum Management Spectrum award methodologies
- Expert in Broadband
- Expert in Internet Governance issues

General qualifications and skills:

- University degree or relevant professional background in telecommunication of minimum 7 years
- Sound knowledge of relevant EU legislative, institutional and regulatory requirements related to the various components of this project
- Very good command of English (oral and written)
- Very good communication skills
- Good writing and presentation skills
- Good training and facilitation skills
- Excellent computer skills (Word, Excel, Power Point)

Specific qualifications and skills:

- at least 5 years working experience in their respective field of expertise among one of the abovelisted areas
- Sound knowledge / experience of relevant EU legislative, institutional and regulatory requirements applicable to their respective field of expertise
- Have experience with organising stakeholder consultations
- Experience in approximation of the EU regulations into national practice according to an inclusive and evidence-based approach

4. Institutional Framework

The main Beneficiary Institution (BI) of the project is the Georgian National Communication Commission. Georgian National Communications Commission (GNCC) was established in year 2000 as an independent regulatory body to license and oversee the telecommunications and broadcasting sector operations within the Georgian territory. Georgian National Communications commission is a legal entity of public law and a constant independent state authority. The Commission is obliged to submit its annual activity report to the President, The Prime minister and the Parliament of Georgia. The Commission is not subordinated to any of the state authorities. GNCC has five Commissioners including the Chairman. Members are appointed by the Parliament of Georgia. As mentioned above the Commission is an independent body, fully financed by the regulation fees paid by the regulated entities in the field of electronic communications and broadcasting.

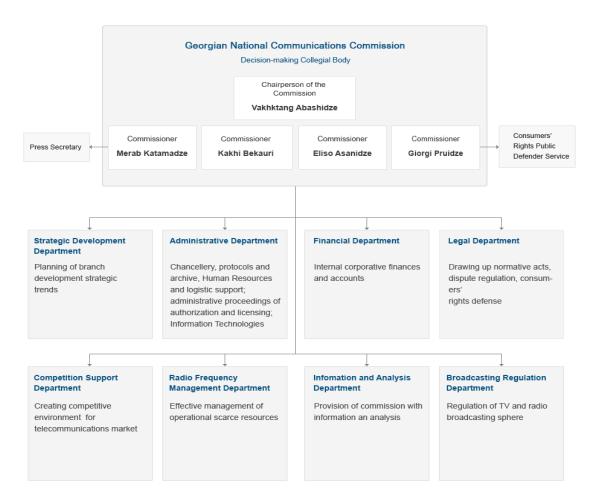
According to the Georgian Law on "Electronic communications", The Commission shall independently regulate activities pursued by authorized undertakings in the field of electronic communications, as well as the use of radio frequency spectrum and/or numbering resources by permission and/or license holders inter alia, adopting normative and specific legal acts, monitoring and controlling their implementation and, within the competence provided for in the law, impose sanctions for violations pursuant to the same law and the Georgian Code of Administrative Offenses

Core mandate and functions of GNCC are:

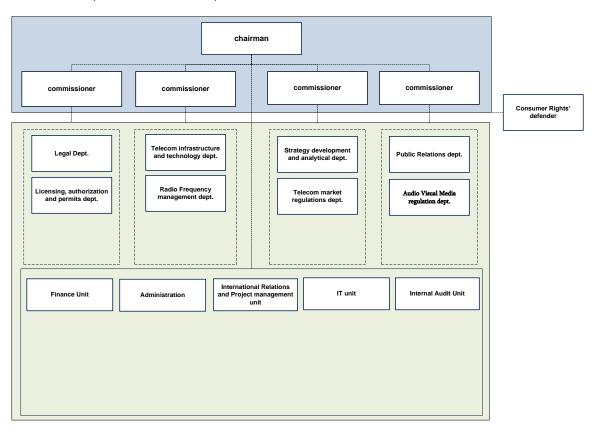
- Ensuring (establishing, maintaining and development) fair competition in the electronic communications and broadcasting sector;
- Issuing and revoking authorizations for companies seeking to operate in the field of electronic communications and broadcasting, on Georgian market;
- Issuing licenses for companies seeking to operate in the field of electronic communications and broadcasting, on Georgian market;
- Managing the scarce resource (Radio Frequency) of Georgia and conducting relevant award activities (auctions, beauty contests) of RF licenses in an transparent and non-discriminatory way;

- Mediating disputes between the authorized, license holder companies operating in electronic communications and broadcasting sector;
- Ensuring quality of service provided to the customers by the service providers (including disabled users) also, ensuring availability and accessibility to the wide range of electronic communication services at affordable tariffs:
- Encouraging investments in the electronic communications networks and facilities and innovative technologies;
- Carrying out analysis of the relevant markets; defining authorized undertakings with significant market power; imposing specific obligations pursuant to the present law;
- Ensuring provision of certification of electronic communications facilities, standardization and metrology services, pursuant to the statute on certifying radio facilities and telecommunications terminal equipment;
- Supervising the compliance with the conditions of licenses and/or permission and authorization of activities in the electronic communications sector as well as the execution of measures against their breach pursuant to the law;
- coordinating electromagnetic compatibility of radio-electronic facilities as well as measures for their protection pursuant to international legislation;
- Presenting Georgia in international organizations engaged in the electronic communications sector and protecting Georgia's interests within its competence and within the competence delegated by the Government of Georgia to the Commission;
- Execution of other functions defined in the present law and consistent with the objectives of the Commission.

As seen on the chart below, GNCC consists of 8 Departments:



Though the Commission is in the process of reorganization and according to the commission decision the new structure (see the chart below) shall come into force on 31 December 2016.



Organizational unit directly involved and leading the project is Strategy Development department, which is responsible for strategic project development and implementation. Other departments will be participating in relevant components and implementation.

The beneficiary institution will dedicate all necessary human and financial resources in order to guarantee an effective implementation of the respective project.

Where necessary, other stakeholders at all levels will be involved in project activities and special attention shall be paid to accountability lines between relevant stakeholders.

Direct Stakeholders involved in the project are:

- GNCC and relevant departments
- Ministry of Economy and Sustainable Development of Georgia
- Entities authorised on the provisioning of electronic communications networks and/or services under the Law of Georgia on Electronic Communications

Indirect Stakeholders involved in the project are:

- Ministry of Infrastructure and Regional Development of Georgia
- Ministry of Energy of Georgia
- Ministry of Internal Affairs of Georgia
- Data Exchange Agency of Ministry of Justice of Georgia
- Non-Governmental organizations

4.2. Coordination mechanisms

A Project Steering Committee (PSC) will be established for the coordinate and supervision of the project activities and the mandatory results. The Project Leaders, the RTA, the RTA counterpart, the EU Delegation and Programme Administration Office representatives will meet regularly at quarterly intervals and will submit by the end of the meeting (as recorded in the minutes of meeting) an 'approval/not approval' of the quarter project reports as described in the Common Twinning Manual. It will be co-chaired by the Project Leaders (EU Member State and Beneficiary Country). Official minutes of the PSC meetings will be kept in English.

The PSC will monitor, supervise and co-ordinate the overall progress and implementation of the project. Furthermore the SC will enhance the involvement of the relevant BC institutions in the project, provide guidance for the different components of the project and define priorities.

In addition to PSC, monthly progress monitoring meetings can be held if necessary. As a gathering of RTA, RTA counterpart, PAO and EU Delegation representative, the meetings are to solve any emerging operational problems on a monthly basis.

Beneficiary Country Project Leader (BC PL)

The BC Project Leader will act as the counterpart of the MS PL and will ensure close cooperation in the overall steering, co-ordination and management of the project from the beneficiary side. He/she will support the Twinning project team in organisational and technical matters and will also coordinate the Project Steering Committee (PSC) on behalf of the BC. The role of the BC PL and the MS PL are complementary.

5. Budget

Supporting the GNCC in developing of	ENI	National	TOTAL
its electronic communications	Community	Co-financing	
regulatory framework and operational	Contribution		
capacities in line with EU Regulatory	(100 %)		
framework			
Twinning Contract	1,300,000.00 €	-	1,300,000.00 €

6. Implementation Arrangements

6.1. Implementing Agency responsible for tendering, contracting and accounting

The Delegation of the European Union to Georgia will be responsible for the tendering, contracting, payments and financial reporting and will work in close co-operation with the Beneficiary. The person in charge of this project within the EU Delegation to Georgia is:

Ms. Nino Samvelidze Programme Manager Delegation of the European Union to Georgia 38 Nino Chkheidze St, 0102 Tbilisi, Georgia Tel: +995 32 294 37 63

E-mail: Nino.SAMVELIDZE@eeas.europa.eu

6.2 Main counterpart in the BC

The Programme Administration Office (PAO)/EU Assistance Coordination Department of the Office of the State Minister of Georgia on European and Euro-Atlantic Integration will support the Twinning Project implementation process together with the EU Delegation. The person in charge of this project is:

Mr. Roman Kakulia

Head of EU Assistance Coordination Department / Programme Administration Office (PAO) in Georgia Office of the State Minister of Georgia for European and Euro-Atlantic Integration

7 Ingorokva Street, Tbilisi 0134

Georgia

Tel: 995 32 228 24 60

E-mail: pao@eu-nato-gov.ge

Beneficiary administration

BC Project Leader:

Mr. Vakhtang Abashidze Chairman Georgian National Communications Commission 50/18 ketevan tsamebuli ave/bochorma str. Tbilisi 0144 Georgia Tel: +995 32 2921667

E-mail: <u>vabashidze@gncc.ge</u>

RTA counterpart:

Ms. Irine Verdzeuli

Head of Strategy Development Department

Georgian National Communications Commission

50/18 ketevan tsamebuli ave/bochorma str. Tbilisi 0144

Georgia

Tel:+ 995 32 2311699

E-mail: <u>iverdzeuli@gncc.ge</u>

Apart to the Project Leader and RTA Counterpart BA will assign two additional staff members to effectively coordinate the project.

Project Coordinator(s)/component leaders:

Ms. Katy Rekhviashvili

Chief Specialist of Strategy Development Department

Georgian National Communications Commission

50/18 ketevan tsamebuli ave/bochorma str. Tbilisi 0144

GeorgiaTel: +995 32 2311699 E-mail: <u>krekhviashvili@gncc.ge</u>

Ms. Mariam Sulaberidze

Chief Specialist of Strategy Development Department

Georgian National Communications Commission

50/18 ketevan tsamebuli ave/bochorma str. Tbilisi 0144

Georgia

Tel: +995322311699

E-mail: msulaberidze@gncc.ge

6.3 Contracts

It is envisaged that the Project will be implemented through one Twining contract with the maximum amount of 1,300,000 EURO.

7. Implementation Schedule (indicative)

7.1	Launching of the call for proposals (Date)	3Q 2016
a.	Start of project activities (Date)	2Q 2017
b.	Project completion (Date)	1Q 2019

c. Duration of the execution period (number of months)

21 months: The execution period will end 3 months after the implementation period of the Action (work plan) which will take 18 months.

8. Sustainability

The achievements of a Twinning project (mandatory results) should be maintained as a permanent asset to the Beneficiary administration even after the end of the Twinning project implementation. This presupposes inter alia that effective mechanisms are put in place by the Beneficiary administration to disseminate and consolidate the results of the project.

The Beneficiary Institution is fully committed to ensure the long term impact of the Twinning project. During the project implementation, the Twinning partners should develop draft regulations, documents / hand-outs, guidelines, in line with the better regulation approach, that will be easily accessible for later use by the beneficiary administration and other relevant stakeholders. The focus on an inclusive and evidence-based legislative process will also ensure that the law can be properly implemented and enforced.

Staff benefiting from trainings/study visits shall transfer knowledge through subsequent training to their colleagues at all levels. The BA participants in project activities should be asked to provide feedback, in the form of short evaluation sheets (or questionnaires), to establish how they consider the value of the activity.

The project will have a significant impact on integration of Georgian telecommunication system in the EU system.

9. Crosscutting issues (equal opportunity, environment, etc...)

Equal Opportunities and non-discrimination

The principles and practice of equal opportunity will be guaranteed so as to ensure equitable gender participation in the project. The principle of equal opportunity shall apply both to the GNCC staff involved in the project and project members participating from contracting authority/ies. Every effort will be made to ensure broad gender representation among all participants.

Environment and climate change

Not applicable

Minorities and vulnerable groups

Minority and vulnerable groups' concerns will be reflected in all activities of the project. Participation in the project activities will be guaranteed on the basis of equal access regardless of racial or ethnic origin, religion or belief, disability, sex or sexual orientation.

10. Conditionality and sequencing

This Twinning Project Fiche has been drafted in close cooperation with the Georgian counterpart, which commits itself to provide the contributions stated in the Fiche. They include the following:

- Strong commitment and support of the GNCC management to the Project implementation
- Strong involvement and commitment of the GNCC staff at all levels
- Assigning dedicated staff to activities connected with the Project
- Ensuring coordination between departments and institutions connected with the Project
- Ensuring access to indispensable information and documents
- Supply of office room for the RTA for the entire duration of the Project, including access to computer, telephone, internet, printer, photocopier
- Adequate conditions for the STEs to perform their work while on mission to the BI

- Providing suitable venues and equipment for the training sessions and meetings that will be held under the Project
- Designating a GNCC counterpart for each MS expert

The list of Acronyms:

Abbreviation Meaning
EU-Georgia Association Agreement
Beneficiary Administration
Beneficiary Country
Beneficiary Institution
Council of Europe
The European Conference of Postal and Telecommunications
Administrations
Digital Terrestrial Television
Eastern Partnership
European Bank for Reconstruction and Development
European Commission
European Economic Community
European Neighbourhood Plan (Action Plan)
European Neighbourhood Plan Instrument
European Telecommunications Standards Institute
European Union
The European Union Currency 'Euro'
Governments Advisory Committee
Currency of Georgia 'Lari'
Georgian National Communication Commission
Government of Georgia
Internet Corporation for Assigned Names and Numbers
Internet Protocol
Internet Governance
Member State
Member State Administration
Ministry of Economy and Sustainable Development
Next Generation Access
Next Generation Network
National Regulatory Authorities
National Indicative Programme
Operations (EU standard)
Programme Administration Office
Partnership and Cooperation Agreement
Project Leader
Project Steering Committee
Regulatory Framework
Resident Twinning Adviser
Significant Market Power
Short Term Expert
Technical Assistance
Training of Trainers
Technical Assistance Information Exchange
United States Agency for International Development
Value Added Tax

ANNEXES TO PROJECT FICHE

- 1. Logical framework matrix
- 2. Detailed implementation chart
- 3. Benchmarking EU Acquis on telecommunications with Georgia Telecom Law
- 4. Telecom market overview

ANNEX 1: Logical Framework

Supporting the GNCC in developing of its electronic communications regulatory framework and operational capacities in line with EU Regulatory framework	Program name and number: Technical Cooperation Facility, ENI/2015/037-862		
Georgian National communications Commission	Contracting period expires: 3 years following the date of conclusion of the Financing Agreement	Disbursement period expires: 3 years following the end date for contracting	
	Total budget: 1,300,000	ENI financing (100% 1,300,000)
Overall objective	Objectively verifiable indicators	Sources of Verification	
The overall objective of the Twinning is to support Georgia in development of telecom regulatory framework in line with EU regulatory framework and to ensure the provision of competitive environment for all market players, in the Georgian electronic communications sector	Baseline report on the Georgian Telecom Market; Rank of Georgia in: - ICT development index (ITU) - Information Society Report (ITU) - Information Society Index (IDC)	- Report of M Developmer	al report and strategy
Project purposes	Objectively verifiable indicators	Sources of Verification	Assumptions
Conduct in-depth review of Georgian Telecommunication Regulatory frameworks, redefine relevant markets in the electronic communications sector that are susceptible to <i>ex ante</i> regulation, define broadband regulatory	Number of legal acts identified for further major/minor amendments;	GNCC official website;	Government commitment on adoption of EU acquis continues;

approach, conduct a feasibility study to assess the	Number of legal and regulatory drafted	GNCC annual report	GNCC commitment on further
necessity of Universal Service provision, according to the EU Regulatory Framework and Europe 2020 Initiative "The Digital Agenda for Europe";	amendments to the law ;	Project reports and WG reports;	implementation of regulations/policies and recommendations provided within
питоре ,	Trainings provided within the framework of priorities identified by GNCC;	Amendments to the law(s) initiated;	the framework of Twinning and in line with relevant EC regulations;
		External feedback/review of GNCC performance;	Availability of local staff and their commitment;

Results	Objectively verifiable indicators	Sources of	Assumptions
		Verification	
Component 1: Enhancing regulatory framework of the GNCC in order to come in line with the EU regulatory framework and make it compatible with the EU telecom industry developments;	 Gap analysis of current Georgian legislative regulatory framework, including remaining obstacles to effective implementation of the requirements defined under AA, performed; Relevant report with proposals for 	GNCC website; GNCC official press release; Project reports;	GNCC commitment to harmonise Georgian telecom legal and regulatory frameworks with EU framework;
Result 1.1: In-depth review of Georgian Telecommunication Regulatory Framework with the view of bringing it in line with the EU Regulatory Framework conducted Result 1.2 Georgian regulatory framework upgraded according to an inclusive and evidence-based approach and in line with the EU principles	possible improvements/amendments and recommendations elaborated; • Amendments to the regulatory framework prepared in an inclusive process and approved by the BA; • Consultation document for direct and indirect stakeholders prepared and communicated; • At least 2 workshops (1 informative,	Ministry reports; Ministry official website; NGO reports and official websites; Minutes and	Availability of relevant staff and other resources and their commitment to the project; Timely feedback from the commissioners;
Result 1.3 Roadmap for the implementation of the	1 consultative) for the stakeholders	feedback from public	

new regulatory framework developed and capacity of GNCC on application of the roadmap enhanced

Result 1.4 Necessity of Universal Service provision assessed and regulatory framework, including mechanisms for costing and financing developed according to an inclusive and evidence-based approach;

on proposed changes conducted and report on stakeholder consultation prepared;

- Training programme on modified function together with the implementation plan developed;
- Training/seminar for the GNCC relevant staff on introduced changes conducted;
- Roadmap to provide guidance for the successful implementation of the relevant regulations developed and approved by the BA;
- Training materials to train GNCC staff and other relevant stakeholders on new regulatory framework and roadmap elaborated, printed and disseminated;
- Training course organised and conducted (at least 50 participants);
- The need of the Universal Service provision in Georgia assessed and relevant recommendations for the regulatory framework prepared and presented
- Relevant regulatory framework drafted and approved by all stakeholders
- At least 4 workshops (amongst them 2 consultative), round tables to discuss proposed initiatives organized and conducted with the involvement of all stakeholders, reports on stakeholder consultations prepared
- Study visit of the GNCC staff (10 BC experts for 5 working days) to the EU MS preferably which have already developed and carried out the

consultations;

Operator reports/feedback;

Partner NRA feedback;

Project documentation (list of participants, training materials, recommendations etc.) Assistance in cooperation with government authorities and telecom operators as well as other external stakeholders of the project;

Availability of all the necessary legislation and other documents; some of them in English;

Working Days 150 (estimated)

	net cost calculation methodology, study visit report drafted		
Component 2: GNCC contribution to encourage fixed and wireless broadband development enhanced by defining guidelines for: infrastructure barrier removal, infrastructure sharing, net neutrality and access regulation in regards to DAE (Digital Agenda for Europe), taking into account the need of Universal Service Provision; Results 2.1 Analysis of the broadband service development framework conducted in an inclusive process and capacities of the GNCC to implement new approaches upgraded Result 2.2 Comprehensive regulatory guidelines to encourage fixed and wireless broadband development elaborated	 Needs assessment of the GNCC regarding the infrastructural development for the broadband services carried out and report with recommendations, including EU MS approaches and models, drafted; Study visit of the GNCC relevant staff (10 BC experts for 5 working days), in MS, to gain first-hand knowledge and experience related to broadband infrastructure and its sharing in line with the EU best practice and to study and evaluate different MS approaches implemented for broadband development, especially in the rural areas performed and study visit report prepared; At least 3 workshops (informative and consultative) on encouraging broadband development in Georgia for the GNCC staff and other relevant stakeholders (50 persons) conducted and reports on the results of consultations prepared. The workshops should cover the issues covered by the prepared guidelines and related to: IP-based interconnection, access to and sharing of infrastructure, network security, Net-neutrality, effective 	GNCC website; GNCC official press release; Project reports; Ministry reports; Ministry official website; Minutes and feedback from public consultations; Operator reports/feedback; Partner NRA feedback; Project documentation (list of participants, training materials, recommendations, guidelines etc.)	GNCC commitment to harmonise Georgian telecom legal and regulatory frameworks with EU framework; Availability of relevant staff and other resources and their commitment to the project; Timely feedback from the commissioners; Assistance in cooperation with government authorities and telecom operators as well as other external stakeholders of the project; Availability of all the necessary legislation and other documents; some of them in English;
	spectrum management for mobile broadband, etc. • Comprehensive regulatory guidelines on fixed broadband infrastructure		Working Days 200(estimated)

Component 3: Relevant markets are redefined and methodology for SMP (Significant Market Power) determination developed Results 3.1 Assessment of the Relevant Markets in the electronic communications sector susceptible to ex ante regulation conducted	issues and network resilience drafted in line with the better regulatory approach and approved by the BA; Comprehensive regulatory guidelines on effective spectrum management (for mobile broadband)drafted in line with the better regulatory approach and approved by the BA; Public presentation of the regulatory guidelines organized and conducted; Report on Relevant Market definition as well as redefined relevant markets in telecommunications in Georgia prepared and approved by the BA/working group; Assessment of the SMPs for each relevant market conducted; Report/white paper on SMP assessment methodology drafted and approved by the BA/ working group; Training conducted for GNCC staff and report on training delivered; Training materials and guidelines on SMP assessment methodology developed; At least 1 workshop on SMP assessment methodology for the GNCC staff and other relevant stakeholders (40 persons) conducted.	GNCC official press release; Project reports; Ministry reports; Ministry official website; NGO reports and official websites; Minutes and feedback from public consultations; Operator reports/feedback; Project documentation (list of participants, training materials, recommendations etc.)	GNCC commitment to harmonise Georgian telecom legal and regulatory frameworks with EU framework; Availability of relevant staff and other resources and their commitment to the project; Timely feedback from the commissioners; Assistance in cooperation with government authorities and telecom operators as well as other external stakeholders of the project; Availability of all the necessary
--	--	---	---

			legislation and other documents; some of them in English; Working Days 55 (estimated)
Component 4: Strengthening the mechanisms for future spectrum awards for GNCC and relevant stakeholders Result 4.1 Methodology for future spectrum awards to be followed and implemented by the GNCC defined and elaborated Result 4.2 Training programmes on application of the new spectrum methodologies elaborated and conducted for GNCC and relevant stakeholders	 Analysis of the existing system for the spectrum award methodologies such as: various auction types, beauty contests and etc. conducted and report prepared; Spectrum award methodologies for various frequencies defined, drafted and approved by the BA; Study visit of the GNCC staff (10BC experts for 5 working days) to the MS to study and explore various award methodologies practiced in EU and available software for conducting relevant auction procedures; Training materials on spectrum award methodologies elaborated, printed and disseminated; Training conducted for GNCC staff and report on training delivered; Training materials and guidelines on spectrum award methodologies for telecom operators developed At least 2 trainings (including several types of the auction simulations) for telecom operators (around 50 participants) conducted and report on training delivered; 	GNCC official press release; Project reports; Ministry reports; Ministry official website; NGO reports and official websites; Minutes and feedback from public consultations; Operator reports/feedback; Partner NRA feedback; Project documentation (list of participants, training materials, recommendations, guidelines etc.)	GNCC commitment to harmonise Georgian telecom legal and regulatory frameworks with EU framework; Availability of relevant staff and other resources and their commitment to the project; Timely feedback from the commissioners; Assistance in cooperation with government authorities and telecom operators as well as other external stakeholders of the project; Availability of all the necessary legislation and other documents; some of them in English;

Component 5: Enhancing GNCC capacities in Current state of Georgia in the area of	GNCC official press	
Internet Governance IG, and network security issues Results 5.1 Three year action plan for approaching Internet Governance and network security issues elaborated Result 5.2 Guidelines based on the EU good practices for approaching Internet Governance and network security drafted Result 5.3 Awareness on the implementation of the Europe 2020 initiative "the Digital Agenda for Europe" of the GNCC staff and other stakeholders raised Result 5.3 Three year action plan for approaching Internet Governance and network security wish hands-on management and inter agency acquainted with hands-on management and internet Governance carried out in Member States, study visit report drafted Action plan for approaching Internet Governance and network security issues drafted and approved by the BA Training materials for GNCC staff and network security issues and network security issues and network security including e-privacy issues, conducted and training report drafted Analyses of important issues in IG and network security (such as: integrity and smooth functioning); performed and recommendations delivered Guidelines based on EU good practice drafted and approved by the BA At least 2 workshops (consultative) presenting guidelines on IG and	release; Project reports; Ministry reports; Ministry official website; Minutes and feedback from public consultations; Operator reports/feedback; Partner NRA feedback; Project documentation (list of participants, training materials, recommendations, guidelines etc.)	GNCC commitment to harmonise Georgian telecom legal and regulatory frameworks with EU framework; Availability of relevant staff and other resources and their commitment to the project; Timely feedback from the commissioners; Assistance in cooperation with government authorities and telecom operators as well as other external stakeholders of the project; Availability of all the necessary legislation and other documents; some of them in English; Working Days 120 (estimated)

Component 6: Outlining the role of the GNCC in national/international roaming regulations according to the EU roaming regulations Result 6.1 Role of the GNCC in regards to roaming regulation defined	members and other stakeholders conducted, consultation report drafted • At least 2 seminars regarding the information and experience on the implementation of the Europe 2020 initiative, including funding mechanisms, organized for the GNCC staff and other stakeholders • Trainings on design of the respective regulatory approaches related to IG, cyber space and network security and its application conducted to the GNCC staff and other stakeholders • Training materials and information resources developed and presented • Gap analysis of the GNCC in regards to the roaming regulation conducted and recommendations presented; • Needs assessment for the roaming regulation with regard to the EU regulations performed and report delivered; • Roaming regulation framework drafted together with its enforcement procedures and approved by the BA; • Study Visit of the GNCC staff (5BA experts for 5 working days) to the EU MS to get acquainted with roaming regulations, monitoring and administration issues; • Workshop presenting national and international roaming regulation guidelines and EU best practices orginised; • Changes presented and agreed with all relevant stakeholders Workshop conducted; report and feedback documentation (list	GNCC commitment to harmonise Georgian telecom legal and regulatory frameworks with EU framework; Availability of relevant staff and other resources and their commitment to the project; Timely feedback from the commissioners; Assistance in cooperation with government authorities and telecom operators as well as other
---	---	--

	provided;	of participants, training materials, recommendations etc.)	external stakeholders of the project; Availability of all the necessary legislation and other documents; some of them in English;
Activities	Means	Specification of Costs	Working Days 60 (estimated) Assumptions
Member State(s) is kindly requested to develop activities in the submitted proposal which are needed in order to achieve the results stipulated in the fiche	Consultations, analyses, preparation of documentation, trainings, workshops, study visits, internships.	Twinning project: 1.300.000,00 EUR	In line with the assumptions specified for results

ANNEX 2: Detailed implementation chart

Supporting the			1	2016	5			2017												2018												2019			
GNCC in																																			
developing of																																			
its electronic																																			
communicatio																																			
ns regulatory																																			
framework and																																			
operational																																			
capacities in																																			
line with EU																																			
Regulatory																																			
framework																																			
Month	J	Α	S	0	N	D	J	F	M	Α	M	J	J	Α	S	0	N	D	J	F	M	Α	M	J	J	Α	S	0	N	D	J	F	M		
Twinning				T	T	T	C	C	C	C	C	A /	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	R	R	R		
												Ι																							

T – Call for proposals and evaluation; C – Contracting; A/I – Arrival of the RTA/ Start of the implementation of activities;

I – Implementation of activities; R – Report

Annex 3. Benchmarking EU Acquis on Telecommunications with Georgia Telecom Law

Legal framework outlined in the Annex 3, represents liabilities defined under Association Agreement. However, GNCC is aware and closely monitors the changes in the EU Acquis. Therefore during project implementation GNCC shall consider and base its regulatory framework on the current EU legislation³

Directive 20	02/21/EC, on a common regulatory framework for electronic communications networks and services	Yes/Not covered by	
(Framework	Directive)	Telecommunications Legislation	
Chapter I: So	Chapter I: Scope, aim and definitions		
Art. 1	Objective, scope	Yes	
Art . 2	Definitions	Yes	
Chapter II: N	Vational Regulatory Authorities		
Art. 3	National Regulatory Authorities	Yes	
Art. 4	Right of Appeal	Yes	
Art. 5	Provision of information	Yes	
Art. 6	Consultation and transparency mechanism	Has to be developed	
Art. 7	Consolidating the internal market for electronic communication	N/A	
Chapter III:	Tasks of National Regulatory Authorities	I	
Art. 8	Policy objectives and regulatory principles	Yes	
Art. 8a	Strategic planning and coordination of radio spectrum policy	Yes	

³ https://ec.europa.eu/digital-single-market/en/news/proposed-directive-establishing-european-electronic-communications-code

Art. 9	Management of radio frequencies for electronic communication services	Yes
Art. 9a	Review of restrictions on existing rights	Yes
Art. 9b	Transfer or lease of individual rights to use radio frequencies	Yes
Art. 10	Numbering, naming and addressing	Yes
Art.11	Rights of way	No
Art. 12	Co-location and facility sharing	Yes
Art. 13	Accounting separation and financial reports	Yes/to be implemented
Art. 13a	Security and integrity	No
Art. 13b	Implementation and enforcement	No
Chapter IV: C	eneral Provisions	
Art.14	Undertakings with significant market power	Yes
Art. 15	Market definition procedure	Yes, but weak and has to be improved
Art. 16	Market analysis procedure	Yes, but weak and has to be improved
Art. 17	Standardisation	Yes
Art. 18	Interoperability of digital interactive television services	Not
Art. 19	Harmonisation procedures	N/A
Art. 20	Dispute resolution between undertakings	Yes
Art. 21	Resolution of cross-border disputes	N/A

Art. 21a	Penalties	Yes
Art. 22	Committee	N/A
Art 23	Exchange of information	N/A
Art. 24	Publication of information	Yes
Art. 25	Review procedures	N/A
Chapter V: Fi	nal Provisions	
Art. 26	Repeal	N/A
Art. 27	Transitional measures	N/A
Art. 28	Transposition	N/A
Art. 29	Entry into force	N/A
Art. 30	Addressees	N/A
Annexes		
Annex I:	List of markets to be included in the initial Commission recommendation on relevant product and service markets referred to in Article 15	No
Annex II:	Criteria to be used by national regulatory authorities in making an assessment of joint dominance in accordance with Article 14 (2), second subparagraph	No

	D2/20/EC, "The Authorisation Directive" facilitates market entry by requiring a general authorisation regime, that everybody can provide electronic communications services without the need for a licence or the need to	Yes/Not covered by Telecommunications Legislation
pay inapprop	, , ,	refeedimenteations negislation
Art. 1	Objective, scope	Yes
Art. 2	Definitions	Yes
Art. 3	General authorisation of electronic communications networks and services	Yes
Art. 4	Minimum list of rights derived from the general authorisation	Yes
Art. 5	Rights of use for radio frequencies and numbers	Yes
Art. 6	Conditions attached to the general authorisation and to the rights of use for radio frequencies and for numbers, and specific obligations	Yes
Art. 7	Procedure for limiting the number of rights of use to be granted for radio frequencies	Yes
Art. 8	Harmonised assignment of radio frequencies	Yes/partially
Art. 9	Declarations to facilitate the exercise of rights to install facilities and rights of interconnection	Yes
Art. 10	Compliance with the conditions of the general authorisation or of rights of use with specific obligations	Yes
Art.11	Information required under the general authorisation, for rights of use and for specific obligations	Yes
Art. 12	Administrative charges	Yes
Art. 13	Fees for rights of use and rights to install facilities	Yes
Art.14	Amendment of rights and obligations	Yes
Art. 15	Publication of information	Yes
Art. 16	Review procedures	N/A
Art. 17	Existing authorisations	N/A

Art. 18	Transposition	N/A
Art. 19	Entry into Force	N/A
Art. 20	Addresses	N/A
Annexes		
Annex A:	Conditions which may be attached to a general authorisation	No/partially
Annex B:	Conditions which may be attached to rights of use for radio frequencies	Yes
Annex C:	Conditions which may be attached to rights of use for numbers	Yes

authority car	/2002/19/EC, "The Access Directive" – deals especially with the access obligation that the national regulatory impose on the SMP operators, which means the SMP operators can be obliged to provide access to their discrimination, transparency and cost-orientation	Yes/Not covered by Telecommunications Legislation
Chapter I: So	cope, aim and definitions	
Art. 1	Scope, aim	Yes
Art 2.	Definitions	Yes
Chapter II: C	General provisions	
Art. 3	General framework for access and interconnection	Yes
Art. 4	Rights and obligations for undertakings	Yes
Art. 5	Powers and responsibilities of the national regulatory authorities with regards to access and interconnection	Yes
Art. 6	Conditional access systems and other facilities	Yes
Chapter III:	Obligations on operators and market review procedures	
Art. 7	Review of former obligations for access and interconnection	[deleted by Directive 2009/140/EC]
Art. 8	Imposition, amendment or withdrawal of obligations	Yes
Art. 9	Obligation of transparency	Yes
Art. 10	Obligation of non-discrimination	Yes
Art.11	Obligation of accounting separation	Yes
Art. 12	Obligations of access to, and use of, specific network facilities	Yes
Art. 13	Price control and cost accounting obligations	Yes
Art. 13a	Functional separation	No

Art. 13b	Voluntary separation by a vertically integrated	No
	undertaking	
Chapter IV: Pro	ocedural Provisions	
Art.14	Committee	N/A
Art. 15	Publication of, and access to, information	Yes
Art. 16	Notification	N/A
Art. 17	Review Procedures	N/A
Art. 18	Transposition	N/A
Art. 19	Entry into Force	N/A
Art. 20	Addresses	N/A
Annexes		
Annex A:	CONDITIONS FOR ACCESS TO DIGITAL TELEVISION AND RADIO SERVICES BROADCAST TO VIEWERS AND LISTENERS IN THE COMMUNITY	Yes /not for radio
Annex B:	MINIMUM LIST OF ITEMS TO BE INCLUDED IN A REFERENCE OFFER FOR UNBUNDLED ACCESS TO THE TWISTED METALLIC PAIR LOCAL LOOP TO BE PUBLISHED BY NOTIFIED OPERATORS	No

especially the territory of t	02/22/EC, "The Universal Service Directive" – contains several provisions to ensure consumer protection, e requirement to ensure that a basic level of electronic communications service is available on the whole he country and for every end-user, even in cases when it would not be provided under normal market	Yes/Not covered by Telecommunications Legislation
conditions		
Chapter I: So	cope, aim and definitions	
Art. 1	Scope, aim	No
Art 2.	Definitions	No
Chapter II :	Universal Service Obligations	
Art. 3	Availability of universal service	No
Art. 4	Provision of access at a fixed location	No
Art. 5	Directory enquiry services and directories	Yes/ but chaotic, not wholistic
Art. 6	Public pay telephones	No
Art. 7	Special measures for disabled users	No
Art. 8	Designation of undertakings	No
Art. 9	Affordability of tariffs	Yes
Art. 10	Control of expenditure	No
Art.11	Quality of service of designated undertakings	No
Art. 12	Costing of universal service obligations	No
Art. 13	Financing of universal service obligations	No
Art.14	Transparency	No
Art. 15	Review of the scope of universal service	No

Art. 16	Review of obligations	No
Art. 17	Regulatory controls on retail services	No
Art. 18	Regulatory controls on the minimum set of leased lines	No
Art. 19	Carrier selection and carrier pre-selection	Yes
Chapter IV:	End-user Interests and Rights	l
Art. 20	Contracts	Yes
Art. 21	Transparency and publication of information	Yes
Art. 22	Quality of service	Yes/amendment needed
Art. 23	Integrity of the network	Partially
Art. 24	Interoperability of consumer digital television equipment	Partially
Art. 25	Telephone directory enquiry services	Yes
Art. 26	Single emergency call number	Yes
Art. 27	European telephone access codes	N/A
Art. 28	Non-geographic numbers	Yes
Art. 29	Provision of additional facilities	Yes in practice/Not in legislation
Art. 30	Number portability	Yes
Art. 31	'Must carry' obligations	Yes

Art. 32	Additional mandatory services	No
Art. 33	Consultation with interested parties	No
Art. 34	Out-of-court dispute resolution	Yes
Art. 35	Technical adjustment	No
Art. 36	Notification, monitoring and review procedures	No
Art. 37	Committee	N/A
Art. 38	Transposition	N/A
Art. 39	Entry into force	N/A
Art. 40	Addressees	N/A
Annexes		
Annex 1:	DESCRIPTION OF FACILITIES AND SERVICES REFERRED TO IN ARTICLE 10 (CONTROL OF EXPENDITURE) AND ARTICLE 29 (ADDITIONAL FACILITIES)	No
Annex 2:	INFORMATION TO BE PUBLISHED IN ACCORDANCE WITH ARTICLE 21 (TRANSPARENCY AND PUBLICATION OF INFORMATION)	No
Annex 3:	QUALITY OF SERVICE PARAMETERS	No
Annex 4:	CALCULATING THE NET COST, IF ANY, OF UNIVERSAL SERVICE OBLIGATIONS AND ESTABLISHING ANY RECOVERY OR SHARING MECHANISM IN ACCORDANCE WITH ARTICLES 12 AND 13	No
Annex 5:	PROCESS FOR REVIEWING THE SCOPE OF UNIVERSAL SERVICE IN ACCORDANCE WITH ARTICLE 15	No
Annex 6:	INTEROPERABILITY OF DIGITAL CONSUMER EQUIPMENT REFERRED TO IN ARTICLE 24	No
Annex 7:	CONDITIONS FOR THE MINIMUM SET OF LEASED LINES REFERRED TO IN ARTICLE 18	No

Decision 2002/676/EC, "The Radio Spectrum Decision" – which deals with the regulatory framework for radio spectrum		Yes/Not covered by
policy in the	EU	Telecommunications Legislation
Art. 1	Scope, aim	Yes
Art 2.	Definitions	Yes/partially
Art. 3	Committee Procedure	N/A
Art. 4	Function of the Radio Spectrum Committee	N/A
Art. 5	Availability of information	No
Art. 6	Relations with third countries and international organisations	Yes
Art. 7	Notification	N/A
Art. 8	Confidentiality	Yes
Art. 9	Report	N/A
Art. 10	Implementation	N/A
Art.11	Entry into Force	N/A
Art. 12	Addresses	N/A

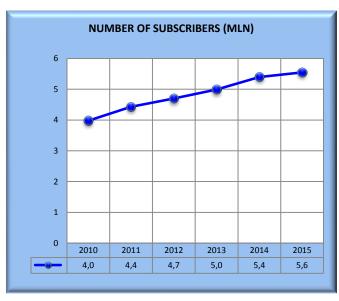
	2/58/EC, "The Privacy Directive" – deals with the protection of personal data in electronic communications	Yes/Not covered by Telecommunications Legislation
Amended by	Directive 2006/24/EC (**) and Directive 2009/136/EC (***)	
Art. 1	Scope, aim	Yes
Art 2.	Definitions	No
Art. 3	Services concerned	Yes/partialy
Art. 4	Security of processing	Yes/partialy
Art. 5	Confidentiality of the communications	Yes
Art. 6	Traffic data	No
Art. 7	Itemised billing	Yes/partialy
Art. 8	Presentation and restriction of calling and connected line identification	No
Art. 9	Location data other than traffic data	No
Art. 10	Exceptions	No
Art.11	Automatic call forwarding	No
Art. 12	Directories of subscribers	No
Art. 13	Unsolicited communications	Yes/needs amendments
Art.14	Technical features and standardisation	No
Art14A	Committee procedure	No
Art. 15	Application of certain provisions of Directive 95/46/EC	Yes/partial (law on personal data protection)
Art. 15A	Implementation and enforcement	No

Art. 16	Transitional arrangements	No
Art. 17	Transposition	No
Art. 18	Review	No
Art. 19	Repeal	No
Art. 20	Entry into force	No
Art. 21	Addressees	No

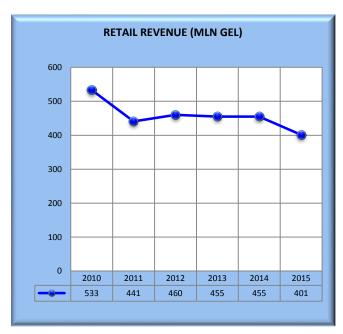
COMMIS	SION RECOMMENDATION	Yes/Not covered by	
of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex		Telecommunications Legislation	
ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common			
regulator	y framework for electronic communications networks and services		
Wholesale level			
1.	Wholesale call termination on individual public telephone networks provided at a fixed location	Yes	
2.	Wholesale voice call termination on individual mobile networks	Yes	
-	() XVI 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	77 1 1 1 1 1 1	
3.	(a) Wholesale local access provided at a fixed location	Yes, but weak and has to be improved	
	(b) Wholesale central access provided at a fixed location for mass-market products		
4.	Wholesale high-quality access provided at a fixed location	No	

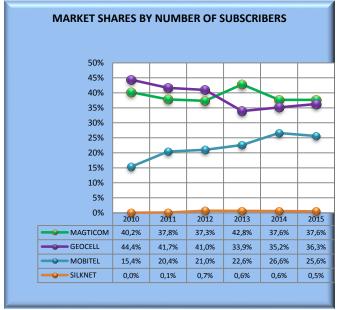
ANNEX 4: Telecom market overview

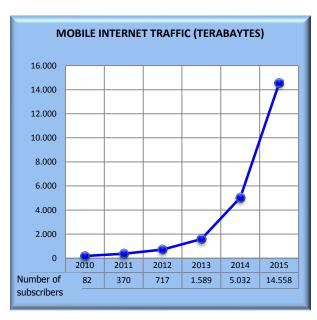
Mobile Communications Services

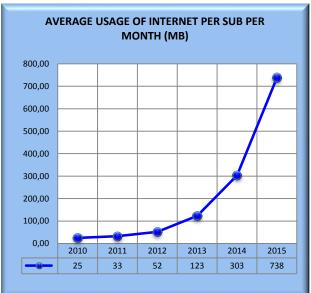










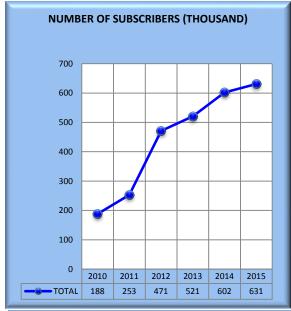


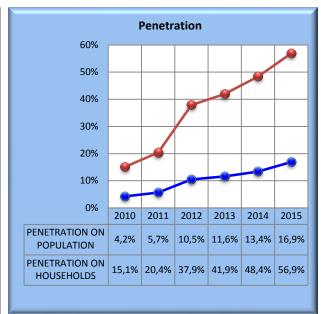
Mobile voice services



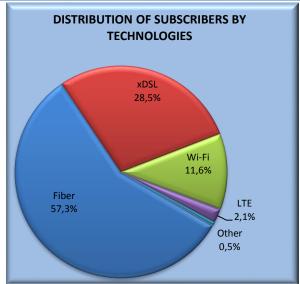


Fixed internet services

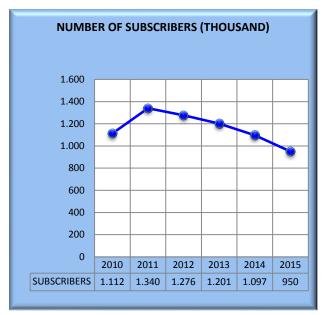


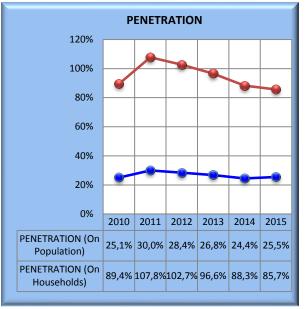






Fixed telephony services

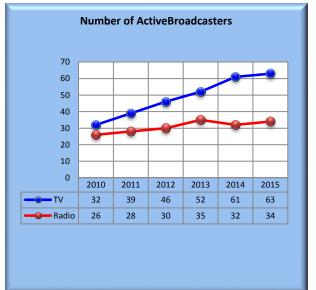








Broadcasting





Pay TV

