

Georgia

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Georgia
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1 OVERVIEW

The current independent state of Georgia was established in 1991. It has a population of 4.5 million people and a land mass of 69,700 square kilometres. The GNI per capita was 1,115 Euro (1,350 US\$) in 2005, based on World Bank figures. Georgia is a republic and is divided for administrative purposes into 9 regions, 2 autonomous republics and one city, Tbilisi.

1.1 Regulation of Electronic Communications

Georgian interconnection agreements are based on commercial negotiation, with the National Regulatory Authority (Georgian National Communications Commission - GNCC) intervening when decisions cannot be reached in this way. The NRA is governed by very strict rules with regard to transparency, independence, consultation and conflict of interest avoidance. No significant concerns have been identified with regard to its effectiveness.

The GNCC has responsibility for numbering, but has inherited a very complex system which leads to significant competition concerns and does not correspond in several ways to international conventions on numbering management. Policy development from the government side comes from the Telecommunication and Information Technology Department of the Ministry of Economic Development. While there is little to criticise regarding national regulation in the communications sector, the Ministry does not have a published forward-looking strategy for development across industry, resulting in major gaps, particularly in fields, such as e-commerce, where it does not share responsibilities with the GNCC.

There are comprehensive rules with regard to facilities sharing, collocation and unbundling. The implementation of these is overseen by the GNCC and, thus far, few significant concerns have been raised. Unbundling, in particular, is very successful in Georgia.

A considerable degree of rebalancing has been undertaken, although there is still some work to be done. Cost accounting measures have been implemented through legislation, with an intermediary solution currently in place and LRAIC being planned in the medium term.

There are currently no universal service obligations placed on the incumbents, although this may change in the near future. As in Ukraine and Moldova, pilot projects are being launched in order to create a basic level of shared access to communications services for rural communities.

There are neither sector specific regulations nor general obligations with regard to leased lines in Georgia. General competition rules are used to regulate this sector.

Work has begun on data protection legislation, although little progress has been made recently.

1.2 Regulation of Electronic Services

In contrast to the very well developed and implemented telecommunications regulatory framework in Georgia, the e-commerce regulatory framework has been somewhat neglected. The now defunct State Department for Informatisation produced several comprehensive drafts of an e-commerce law from 2000 to 2003. However, this document was shelved for two years and work has only recently been restarted. Progress is extremely slow as a result of overlapping ministerial responsibilities and the absence of any overarching strategy or political will to move forward to definitively adopt comprehensive e-commerce legislation.

Georgia has comprehensive laws with regard to intellectual property protection. On the other hand, the legal framework for online child abuse images is unclear, particularly with regard to the position of Internet access and hosting providers. The legal position of Internet access and hosting providers with regard to illegal content more generally has never been directly clarified, although the 2005 Law of Georgia on the Freedom of Speech and Expression adopts an approach very similar to that of the EU – although it only covers liability for defamation, rather than the horizontal approach taken in the EU.

In the absence of a clear regulatory framework for commercial online services, the potential for development of the market has been limited. Banks have been at the forefront of the development of online commercial services, such as online payments for utilities and basic banking facilities.

1.3 Use of Information and Communications Technologies

Georgia suffers from both a low teledensity and a severe urban-rural divide. Despite high levels of competition and effective and well-implemented legislation in Georgia, both fixed (14.7 percent¹) and mobile (28 percent²) penetration are in line with the other countries in this study, indicating the level of infrastructure problems in Georgia and the difficulties of rolling out services in a country with a very low average income.

With an average household income of 247 GEL (133.77Euro³) per month in 2006, a 420 Euro computer equates to approximately three month's net income for a family. Despite low Internet access prices, the most recent available figures suggest that Internet penetration is only 3.9 percent.⁴

There has been very little progress in Georgia regarding the provision of e-government services.

¹ JSC United Telecom of Georgia Presentation - http://www.privatization.ge/spp/spp_files/entity_pdfs/ent_16_en.pdf

² Data from TeliaSonera. Q2 2005 Report

³ Data from the National Statistics Agency - <http://www.statistics.ge/files/georgian/Quarterly%20Bulletin%2011%202006.pdf>

⁴ ITU statistics quoted in Internetworldstats.com

2 GENERAL ENVIRONMENT

2.1 Influence of Stakeholders on Regulation and Policy

The telecommunications sector in Georgia is well organised in terms of trade associations, with the Telecommunication League, Broadcasters Association⁵, Cable TV Association⁶ and Internet Association all defending the interests of their respective sectors. These associations are involved in the consultation processes of the National Regulatory Authority (GNCC) and believe that they are effective interlocutors on behalf of their particular part of the industry.

However, the GNCC itself is relatively new, as are the associations that have been established in response to it. Therefore, they have yet to develop beyond the basic function of communicating with the regulator. That said, they should act as a useful counterbalance should either GNCC or relevant ministries adopt policies perceived not to be in the best interests of the industry.

2.2 National Development Plan

No national development plan for the ICT sector has been implemented in Georgia. However, the Ministry for Economic Development has been working on a plan for the past two years, covering issues such as electronic governance for society in general as well as in the specific areas of education, culture and health. Work on the plan is ongoing and dates for publication and implementation have yet to be set.

2.3 Data Protection

Georgia signed the Council of Europe Convention on the Protection of Individuals with regard to Automatic Processing of Personal Data in 2001, but has not yet ratified it. To prepare for the future ratification of the Council of Europe Convention, the Georgian civil service has commenced work on the development of draft legislation, which will encompass many of the key elements of EU data protection principles. However, not much progress is being made in developing the draft and passing it into law, and there is little indication that this situation will change in the near future. Data protection does not yet appear to be a priority for the Georgian authorities.

⁵ <http://www.gnab.ge/>

⁶ http://www.itic.org.ge/cabletv/about_us.htm

2.4 Cybercrime and Spam

Georgia has not signed, acceded to or ratified either the Council of Europe Cybercrime Convention or the Optional Protocol of the Convention on the Rights of the Child on the on the Sale of Children, Child Prostitution and Child Pornography.

According to Interpol, in addition to the age of consent being considerably lower than most countries (14 years) there are no laws specific to child pornography.⁷

However, the Constitution prohibits the “*propagation*” of “*pornography and immorality*”. That said, both terms are difficult to define precisely and therefore a considerable amount of case law will be needed before the legal situation becomes clear in Georgia (for example, does providing access to foreign websites constitute “propagation”? Does providing access to specific websites that an ISP has been informed may host illegal material constitute “propagation”?).

Georgia is a member of the World Intellectual Property Organisation (WIPO) and has undertaken a considerable effort in aligning its legal system with regard to IPR international norms. Georgia has extensive intellectual property laws covering databases and rules concerning the decompilation of software.

There is no legislation regarding the sending of unsolicited electronic communications in Georgia.

⁷ Information from “Legislation of Interpol Member States on Sexual Offences against Children,” found on the Interpol Website <http://www.interpol.int/Public/Children/SexualAbuse/NationalLaws/csaGeorgia.asp>, (last accessed 13 August 2005.)

3 REGULATORY ENVIRONMENT FOR ELECTRONIC COMMUNICATIONS

UTG⁸ (United Telecom Georgia, the Georgian incumbent local fixed line operator) was designated by the GNCC as having SMP in fixed termination, local loop, underground infrastructure, local calls and call origination.

3.1 Interconnection

There is a vibrant fixed market with an incumbent (now privatised) long-distance carrier (Sakartvelos Telekom/Telecom Georgia⁹), and an incumbent local lines (sold in May to Route d'Esch Property BV, formerly Black Sea Telecom Holding BV, a Kazakh company) operator (Sakartvelos Elektrokavshiri/UTG).¹⁰

Retail prices are not regulated in Georgia. Interconnection pricing is subject to commercial negotiation and the National Regulatory Authority (GNCC) only intervenes when decisions cannot be reached in this way. Fixed-to-fixed and mobile-to-fixed termination costs 0.027GEL (0.012 Euro), while fixed-to-mobile and mobile-to-mobile termination costs 0.155GEL¹¹ (0.071 Euro). The fixed-to-mobile rate was reduced by 14.5 percent in July 2005 and again in 2006, as a result of lobbying by the fixed telephony industry. Telecom Georgia (local lines incumbent) has indicated that it thinks the wholesale call origination market is fully competitive and does not need regulation.

The Georgian Law on Electronic Communications 2005¹² (articles 41 and 42) establishes the procedures for dealing with interconnection disputes. This is given more precise procedures by GNCC Decree 6 on the Approval of the Charter on Interconnection. The dispute resolution process has strict time limits to minimise the disruption caused.

The GNCC also has a monitoring department, which requires operators to provide details of incoming and outgoing traffic, both domestic and international, to ensure that it has all the necessary data to regulate the sector effectively.

Each operator is required to publish standard conditions and tariffs for interconnection and to provide interconnection to other operators, directly or indirectly, at any technically feasible point. Further key obligations include:

- Reasonable tariffs for interconnection;
- Publication of the minimum terms and conditions for interconnection agreements;
- Implementation of interconnection within 3 months from the date of submission of an application to the interconnection provider;

⁸ <http://www.utg.ge/>

⁹ <http://www.telecom.ge/>

¹⁰ <http://www.utg.ge/>

¹¹ All data from industry sources

¹² An English translation of the law can be found here: http://www.gncc.ge/files/7050_3555_376651_eleqtr.eng.pdf

- Requirement for collocation and facilities sharing.¹³

Rather than requiring the publication of a Reference Interconnect Offer (RIO), the GNCC regulates key aspects of interconnection pricing for the whole market, such as line rental for unbundled lines (2.5GEL or 1.15 Euro) and for ducts. Duct prices have increased significantly, with a new pricing structure based on different thicknesses of cable. One kilometre now costs 55.66 Euro per month for cables of 15mm or smaller, 120 Euro for cables of 15mm to 25mm, and 180 Euro for larger cables.

Details of pricing, including at least two weeks advance notice of retail price changes, must be communicated by operators to the GNCC.

Carrier selection is available (see the section on Numbering, below), although there are concerns regarding the management of numbering for this purpose. Carrier preselection is not available. In addition, a limited form of carrier selection is available in the mobile sector, whereby users can opt to have their calls carried by a provider other than their mobile provider – although choice is restricted to the operator(s) that are in partnership with the mobile provider in question. Some corporate networks run by competitive operators do not support selection codes.

Fixed telephony and dial-up Internet can be paid for via prepaid cards, post-paid billing or revenue sharing.

The concerns of incumbent operators in other countries in this study regarding the illegal termination of VoIP calls do not exist in Georgia, as there is no difference in termination charges for local and international calls and therefore no profit to be made. However, there are problems with severely outdated equipment making traffic management very difficult and some traffic being terminated illegally (without the requisite payment) by some operators. Testing in Tbilisi and Kutaisi, carried out with the assistance of the Ukrainian incumbent, Ukrtelecom, led to a variety of anomalies being identified. Initial estimates by UTG are that this results in a 10-15 percent loss of interconnection revenues.

There are currently two GSM operators, Geocell¹⁴ and Magticom,¹⁵ and one CDMA operator, Telenet¹⁶, active in the market.

3.2 Numbering

Numbering in Georgia has developed into a particularly complex issue for a variety of reasons. Firstly, the 1999 Law on Post and Telecommunications (LPT), which established the GNCC, divides responsibility for this policy area between the Ministry of Transport and Communications (the “MTP”) and the GNCC. Article 8 of the LPT gives the MTP responsibility for defining and approving policy for a unified numbering system

¹³ "Georgia: Structural Reforms Support Project Regulatory Development" GNCC, DETECON-WB-GNCC August 2003

¹⁴ <http://www.geocell.ge/>

¹⁵ <http://www.magtigsm.com/>

¹⁶ <http://www.telenet.ge/>

with the participation of the GNCC and other interested parties; while article 20.5.I of the same law gives the GNCC responsibility for the “*conditions and rules of assignment of numbering resources and [allocating] numbering resources.*” Within that framework, the GNCC implements the rules laid down in the 2005 Law on Electronic Communications¹⁷ (Article 48).

The situation is equally complex with regard to the availability of non-geographic numbers, such as those which could be used for VoIP services or carrier selection. Currently, the digits used in the numbering plan neither identify the type of service nor the tariff that is applicable for calls to the number. In addition, very few numbers have been allocated in the current numbering plan to non-geographic services, and the numbering plan used for such services is not capable of providing additional numbers without being fundamentally reformed.

Similarly, there is a limited number of short codes available in Georgia and these are not equally available to all providers, including providers of carrier selection services. Major issues regarding the sustainability and impact on competition of the way in which short codes (which are also used for fixed services in Georgia, unlike most other countries) are organised need to be addressed.

Fixed numbers can be ported in areas with digital networks and within tariff boundaries. There is no regulation covering costs for portability and, due to low usage, this policy area has not attracted the attention of the GNCC. Mobile portability is planned but not yet in operation.

There is neither sufficient numbering space available for commonly recognised national services nor is the principle of non-discriminatory access to non-geographic service numbers met by the current numbering plan. Furthermore, the Georgian numbering plan does not correspond on a number of points to ITU recommendations.

3.3 Rights of Way and Facilities Sharing/Collocation

Georgian legislation contains advanced collocation and facilities sharing obligations. All communications service providers are required to provide collocation terms that are fair, reasonable and non-discriminatory. Rights of access to infrastructure such as ducts, and network elements, as well as unbundled lines, are ensured by the GNCC.

With regard to collocation in telephone exchange buildings, there are no requirements for the building of separate rooms for new entrant equipment, structural surveys, or negotiations on participation in costs for air conditioning, electricity and security.

The GNCC is responsible for overseeing complaints. The regulator has indicated that problems concerning refusal of collocation are rare, possibly due to the fact that there is a commercial benefit for the local lines incumbent to facilitate collocation as part of its business.

¹⁷ http://www.gncc.ge/index.php?lang_id=ENG&sec_id=7050&info_id=3555

3.4 Tariff Policy

The rebalancing of tariffs in Georgia has mostly been accomplished, although some issues remain outstanding. In particular, the roll-out of billing for local calls needs to be completed and needs to be balanced by measures to improve universal service.

A price ceiling and floor was applied to international tariffs in order to bring them more into line with costs in 2001. This was repealed in 2005, as the GNCC considered that the market had become sufficiently competitive.¹⁸ Similarly, price caps were placed on network interconnection in 2005¹⁹. This resolution also established rules for establishing the prices for a call termination on mobile to fixed and fixed to mobile calls. The regulator has informed the study team that the aim for 2006 was to move closer to the EU approach to cost accounting in order to ensure more cost orientation of tariffs and to improve the competitive environment.

3.5 Cost Accounting

The GNCC has produced a cost model that has been ratified through legislation. It has only been verified internally and is not yet in line with EU cost models. The “full allocated cost” model is an interim step on the way to a Total Service Long Run Average Incremental Cost model (LRAIC). Full details regarding the accounting system have been published by the GNCC.

However, the concept of “significant market power” was introduced into Georgian communications legislation by the 2005 Law on Communications. The GNCC designates companies as having SMP if *“the authorised undertaking has no competitors, is protected from significant competition or that the authorised undertaking's competitive market position enables it to unilaterally make a significant influence restricting competition in this segment of the market.”* (Article 2.ddd).

3.6 Universal Service

Despite having a very comprehensive communications regulatory framework, the country has the similar legacy problems as the other countries in this study with regard to outdated infrastructure, low fixed telephony penetration and so on.

In September 2005, the GNCC established rules regarding the provision of universal service in Georgia, taking into account the EU Universal Service Directive (2002/22/EC). The GNCC aims to propose more detailed plans regarding practical implementation of the rules on universal service in due course, but is first dealing with the issue through

¹⁸ GNCC Resolution 2005/03/11

¹⁹ GNCC Resolution 2005/06/06

rolling out pilot projects. The company that will provide the services will be selected through a competitive bidding process, which will be undertaken on a national level.

The GNCC is also considering imposing a universal service obligation on the former incumbent local lines operator (UTG) and it will be up to that operator, at the end of the financial year, to demonstrate the financial burden that this has created for it. On this basis, the GNCC will pay the operator an amount equal to the net cost from the universal service fund. Although a universal service fund has already been created, some work still needs to be done in order to finalise the methodology for calculating the net costs of service provision. 80% of licence fees from communications providers goes towards financing the universal service fund.

3.7 Local Loop Unbundling

The Georgian Law on Electronic Communications (2005) establishes the legal basis for LLU, covering shared access both at the loop and sub-loop levels. A significant portion of the data regarding the layout and quality of the network is available through the GNCC, which has effectively eliminated the problem of having to rely on the incumbent to provide the data.

There is a significant difference between the wholesale (2.3GL) and retail (4GL) cost of the lines, thereby avoiding the price squeeze experienced or alleged in some EU countries.

Problems reported by competitive operators focus on the availability of ducts. Collocation arrangements in Georgia are very favourable for new entrants as there are no requirements for the building of separate rooms for new entrant equipment, structural surveys, nor negotiations on participation in costs for air conditioning, electricity and security.

The regulator reports that there is no need for verification of claims regarding lack of space in exchanges because the local incumbent (state telecoms provision has traditionally been divided between a local lines provider and a long-distance service provider) is treating unbundled access as a commercial activity in its own right and consequently is facilitating it in an open and transparent way. As a result, there are neither reports of nor evidence that unfounded claims regarding lack of space are being made.

Access is available at ATM, POP and DSLAM levels and, in some places, alternative backhaul providers can be used by competitive providers.

The unbundling rate is 17 percent, with competitive operators accounting for 30 percent of lines currently in operation. While this rate for local loop unbundling is exceptionally high, it does have very shaky foundations, as there are no specific rules regarding LLU in Georgia. This means that the local incumbent has considerable potential, should it ever wish to do so, to disrupt the provisioning of unbundled lines.

3.8 Leased Lines

There is no sector-specific regulation in Georgia with regard to the provision of leased lines. There is no obligation to have at least one operator providing leased line services at every point in the country. Where there is no capacity available but ducts are in place, competitive operators can use the existing ducts to lay their lines.

However, generally speaking, leased lines are dealt with in the same competitive framework as other network elements, so it would be incorrect to say that the sector is not regulated at all. The Law on Electronic Communications creates obligations with regard to transparency and to the cost accounting mechanism used. Similarly, regulatory obligations are in place to cover non-discrimination and cost orientation for the SMP operator. There is also an obligation to have a maximum five-day period for provisioning and repair.

Prices are charged at a flat rate and do not take distance into account. Examples of prices in Georgia are 64k for 50 GEL/month (23 Euro), 2mbps for 620 GEL/month (285 Euro), 34mbps for 9,300 GEL/month (4,279 Euro).

Statistics are collected by GNCC with regard to service availability (although these are considered commercially sensitive and therefore not released to the public) in order to monitor the market. No technical limitations are allowed on the interconnection of leased lines and public telecommunications networks. However, limitations can be imposed due to lack of facilities.

The market is currently satisfied with the available offerings at the slower end of the leased line market (64kbps and 2mbps), meaning that there is not yet any impetus for regulatory action to improve either availability or price for faster lines. However, the NRA does believe that the cost of leased lines is too high and measures are therefore planned within the next year to bring them down.

3.9 Mobile Services

The Georgian mobile market consists of three GSM (two active) and CDMA operator and accounts for 60 percent of income in the telecommunications market according to GNCC estimates. The three players currently on the mobile market are GSM operators Magticom²⁰ and Geocell,²¹ and Iberiatel (CDMA).²² Virgin Islands-based company Bloomfin won an auction for a GSM licence in February 2006, paying 71.9 million GEL (33.12 million Euro). Telenet is also planning a CDMA-450 network covering the whole territory of Georgia in order to provide broadband and voice services.

With regard to 3G licences, one 800Mhz (3x) band was auctioned in June 2005. The auction attracted three bidders and was won by Magticom. During the course of the

²⁰ <http://www.magtigsm.com/>

²¹ <http://www.geocell.ge/v2/eng/index.php>

²² <http://www.iberiatel.ge/>

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auction, the bid went up from an initial 5 million GEL (2,305,426 Euro) to a final price of 26 million GEL (11,992,366 Euro).

A second 3G licence was auctioned in February, 2006. The initial price was set at 8,491,392 GEL (3,911,371 Euro) and was won by new entrant Argotex Ltd for 19,954,782 GEL (9,191,728 Euro). Argotex subsequently sold the licence to Magticom, having never launched services and having paid one third of the licence fee. A third licence was auctioned in May, 2006. With an initial starting price of 8.5 million GEL (3.9 million Euro), the auction was eventually won by Telecom Invest Georgia with a bid of 18.68 million GEL (8.6 million Euro).

According to figures from the 2005 GNCC Annual Report and Statistics Georgia, the mobile penetration rate is 27%. Income increased between 2004 and 2005 by 70 million GEL or 32.24 million Euro.

There are no statistics available regarding the number of SMS messages sent in the Georgian market. There are also no statistics available regarding the use of GPRS services.

As an example of prices in Georgia, Magticom's prepaid Mono service has no activation fee (although the SIM card must be purchased for 5 GEL (2.31 Euro)) and no monthly subscription is charged. An SMS costs 0.06 GEL (0.027 Euro) compared with a peak call charge of 0.864 GEL/minute (0.398 Euro).²³ GPRS activation costs 5 GEL (2.31 Euro), with each megabyte of downloaded data costing 1 GEL (0.462 Euro).

Monthly fixed line rental is 4 GEL (1.84 Euro) for private customers and 6 GEL (2.76 Euro) for businesses.

3.10 Satellite Services

Satellite services (offering IP uplink and downlink, telephony and television services) are available both to consumers and businesses in Georgia, although the costs of such services are generally too high for private consumers.

Satellite services are also made available on a wholesale basis for ISPs to resell. The GNCC reports that it is standard practice for large communications operators to have a spare satellite channel. ISPs use satellite DVB technology to receive IP connectivity.

On an international level, Georgia is a member of both UTELSAT and EUTELSAT.

Direcway offers a 500kbps download speed for a connection fee of 600 US\$ (500 Euro) and a monthly fee of 60 US\$ (50 Euro).

In some rural areas, satellite is the only option for receiving TV signals.

²³ For calls within the same network – no figures are quoted on the Magticom website for fees for calling other networks.

3.11 Status of the National Regulatory Authority (NRA)

The Law on Post and Telecommunications, which was passed in 1999, established the country's national regulatory authority, the Georgian National Communications Commission (GNCC). It is fully independent from the relevant ministries of Government. The Commission consists of three Commissioners, who are nominated by the President. Only the Commissioners can select, appoint or dismiss staff of the organisation.

The GNCC's funding comes directly from industry (up to 2004, the GNCC received 20% of licence fees, which was its primary source of income, which serves to ensure that it both has the necessary resources to fully carry out the tasks apportioned to it and also to increase its independence from the Government. Its income has increased strongly since its creation, rising from 2.2 million GEL (1.01 million Euro) in 2001 to 5.5 million (2.5 million Euro) in 2004. Starting from the third quarter of 2005, its main source of financing is a 1% fee on total income excluding VAT of all communications companies and broadcasters. This resulted in a net income of 54% more than budgeted for in 2005 - 9.9 million GEL instead of 6.4 million GEL.²⁴

The key functions of the GNCC are as follows:

- To determine the licensing conditions in the telecommunications and postal sphere and grant, modify, renew, suspend and revoke licences according to the rules determined by the law;
- To determine tariffs and their regulation for the services provided by Georgian telecommunications and postal networks;
- To certify (type-approve), standardise and provide metrological services for telecommunications and post facilities;
- To regulate the technical and economic conditions of telecommunications network interconnection;
- To define radio frequency spectrum and allocate spectrum in cooperation with the Ministry and other interested authorities;
- To promote a competitive environment;
- To settle disagreements between licence holders and between licence holders and consumers within the scope of the Commission's competence;
- To supervise the implementation of licensing conditions and, in the case of violation, take measures envisaged by the law;
- To provide open and transparent public relations;
- To ensure the development of a competitive environment by determining rules regulating the incumbents' activities;
- To supervise and control the implementation of these rules and the rules specified by the Georgian Law on the Protection of Consumer's Rights; and
- To define conditions and rules for the assignment of numbering resources and to allocate numbering resources.

The GNCC is authorised to obtain any information that it deems necessary in order to carry out its tasks.

²⁴ This is explained in detail in the 2005 Annual Report of the GNCC.

The GNCC has two options when dealing with infringements – fines and the revocation of licences. The GNCC can impose fines up to a maximum of 1,000 Lari (448 Euro) for natural persons or 5,000 Lari (2,244 Euro) for businesses. Licences can be revoked if the licence holder:

- Makes technological and construction changes in its technical facilities without the agreement of the Commission;
- Violates regulations, established by existing (effective) legislation in the sphere of telecommunications and post;
- Contravenes the rules determined by international agreements or breaches the rules laid out in the following Georgian laws: the Georgian Organic Law, the Georgian Electoral Code, existing Georgian laws on Copyright and Related Rights, Protection of Minors, Advertising and State Secrets, or if the licence holder violates in any other way the rights and freedom of the people, lawful interests and endangers the life and health of the people; or,
- Does not maintain a service quality that corresponds to its licence obligations.

There is a very comprehensive set of rules in place to avoid conflicts of interest. For example, no employee of the GNCC, nor any close relatives of employees of the GNCC, can directly or indirectly have any economic interest in licence holders, nor receive any income or other benefits from licence holders or hold any position in the business of a licence holder.

The consultative structure of the GNCC has brought about the need for the various parts of the communications industry to create structures to be able to give a voice to their sector. Indeed, it is interesting to note that Article 28 of the Law on Communications and Post even places an obligation on the GNCC to ensure that “*all interested parties*” are made aware of its meetings and to attend if they so wish. Even where practical considerations require the meetings to take place in secret, the law requires decisions taken to be made public.

The consultation function of the GNCC is supported by the Advisory Council of the Commission which adds an extra layer of independent expertise to the workings of the GNCC. The Council consists of well-known telecommunications and post specialists, representatives of civil society, and experts of different spheres, including various international organisations

The Commission has a deadline of between 5 and 45 (depending on the issue in question) working days to deal with disputes.

3.12 Licensing and Authorisation

In Georgia, licences are required for fixed and mobile telecoms operators, cable operators and Internet service providers. There are no restrictions on the establishment of foreign providers in the Georgian market. Licence holders are obliged to provide the GNCC with details of tariffs for their various services and of any price changes at least 14 days before they come into effect.

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Licensing obligations are based on the Law on Communication and Post (1999) and the Law of Georgia on Principles for Issuing Entrepreneurial Licences and Permits (2002). The licensing regime is generally considered to be cumbersome.

There are also some fundamental problems, such as the technology specificity of the licensing requirements in the Law on Communications and Post. In particular, all the technologies requiring licensing are specifically enumerated, meaning that any new technology would not automatically be covered. General authorisations are provided for in the Law on Communications and Post, but the requirements are generally considered by industry as being too narrow to be of practical value. A wide range of documentation is required for an authorisation.

Licence fees are paid via an up-front payment as well as an annual fee. This money is then used to cover the costs of licence provision and provide funds for the NRA (20 percent) and for the provision of universal service (the remaining 80 percent). The licence fee is calculated as 1 percent of the company's gross income (cash and other income) during the preceding calendar year.

Conformity assessments for mobile phones also cause particular problems in Georgia, as the rules are considered too burdensome.

3.13 Spectrum

Article 20 of the Law on Communications and Post (1999) gives the GNCC the right to assess available spectrum and distribute it with the assistance of other "interested" (undefined) agencies, assign radio frequency, supervise compliance with conditions of licences and take action where the law has been violated.

The 2.4GHz and 5GHz bands are not subject to licensing requirements. For non-commercial users, a permit issued by the GNCC is all that is required. ISPs and data transmission companies (who already have a licence) can be given a permit for use of these bands. Auctions for the use of 2.5Ghz-2.7Ghz frequencies were held for the Batumi region.

Twelve-month Wi-Fi permits are available when the system is to be used for non-commercial purposes and for commercial purposes in certain circumstances. There are, in total, six different types of permit related to Wi-Fi use (independent of the licences needed if the entity is a telecommunications provider) and separate from the registration of the equipment itself. A nationwide auction was held for 3.5Ghz frequency for the provision of WiMAX services, which was won by the only bidder, Telenet.

Authorisation of devices using high frequencies is somewhat cumbersome. Registration by the GNCC requires:

- Safety verification by the Ministry of Labour, Health and Social Security;
- Approval by local government; and
- Approval by the Ministry of Transport and Telecommunications.

Georgia

The GNCC is at a comparatively early stage of organising itself in the area of spectrum management and it is still too early for communications providers and users alike to judge the effectiveness of the framework in which it operates.

4 REGULATORY ENVIRONMENT FOR ONLINE SERVICES

4.1 Digital Signatures

From December 2000 onwards, the State Department for Informatisation created five draft laws on e-commerce, one version of which consisted of eight chapters and forty-four articles and covered information provision, e-documents, document copies, electronic signatures, verification, ownership of e-signatures, and various other e-commerce issues. Some of these proposals were technology specific and therefore not in line with international standards. Other significant issues raised by industry were that the draft laws included requirements regarding the government licensing of digital signature providers, the impossibility of anonymous or pseudonymous transactions, and inadequate concern for consumer data privacy.

The ICT department of the Georgian Ministry of Economic Development is responsible for the issue of digital signatures. The draft legislation described above is being used as the basis for work in this policy area. Management of the process to move the dossier forward is the responsibility of the Deputy Head of the Department of Telecommunications and Information Technologies in the Ministry of Economic Development.

The current draft law on e-commerce retains its very broad scope (divided into sections on digital signatures, digital documents and electronic commerce). Progress has been slow partly due to the need to iron out some of the flaws created during the initial drafting process and to focus on harmonising the new Georgian law with the experience and approach of EU e-commerce and e-signature legislation, as well as the United Nation's model e-commerce law. It is also necessary to amend the draft in order to adapt to recent changes in Georgian law. It was expected that the legislation would be published in the first half of 2006, with a bill being presented to Parliament later in the year. However, the time of writing in December 2006, no progress had been made.

4.2 Payment Systems

In the absence of a comprehensive e-commerce regulatory framework, e-payment systems have not been in great demand. However, services are now starting to appear, despite the absence of a detailed legislative package. For instance, the TBC²⁵ bank has been quite active in international e-payment projects. TBC joined SWIFT²⁶ in 1996 and is integrated into the Visa Electron credit card system. It now provides a basic range of online services to customers including the purchase of phone cards, utility bill payments, accessing historical data, and other account status operations.

²⁵ <http://www.tbcbank.ge/eng/>

²⁶ http://www.swift.com/index.cfm?item_id=1008

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TBC has also teamed up with Intellectbank and UFC International²⁷ to provide innovative e-services for their payment card customers. The services include SMS-based services which enable users to avail of their cards to pay for phone services, and to block and unblock their cards in case of theft or loss.

²⁷ <https://secure.ufc.ge/index.php>

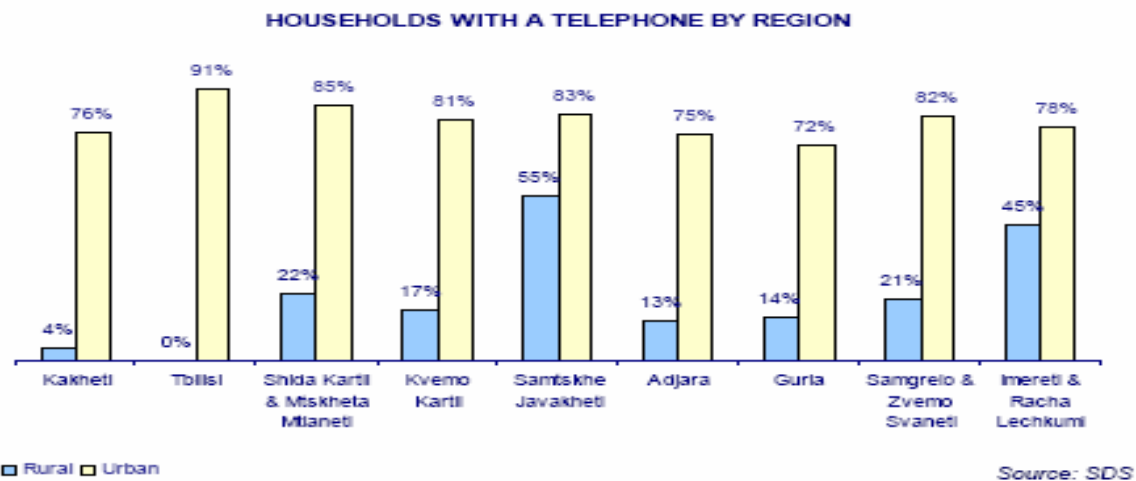
5 USE OF ELECTRONIC COMMUNICATIONS SERVICES

5.1 Fixed Telephony

Georgia's infrastructure is a major obstacle to the development of the Information Society in the country. Teledensity is very low and the network is severely outdated and unreliable. Furthermore, there is a significant discrepancy between the urban and rural areas and this urban-rural digital divide appears to show little or no signs of decreasing. Operators are investing in more modern and sophisticated services to address the markets in the major cities, but there appear to be few signs of similar initiatives being undertaken in rural areas.

Furthermore, current infrastructure is not sufficient to satisfy demand for services. According to UTG,²⁸ there is a waiting list, which is equivalent to 38 percent of the existing fixed line market.²⁹ The GNCC 2005 Report indicated that there were 550,000 fixed telephony subscribers in that year, representing a penetration rate of 12.72%, using 2005 population figures from the Statistics Georgia.

Urban-rural Divide in Fixed Telephony



5.2 Mobile Usage

Possibly due to the high level of competition in the fixed market and the resultant low prices (a one minute fixed line call costs over ten times less than a one minute mobile call), the take-up of mobile services is low when compared with other NIS. Currently, only one sixth of the population uses a mobile phone.³⁰ Over 94 percent of mobile phone

²⁸ Data from UTG, February 2006

²⁹ Ibid

³⁰ All statistics in the mobile services section come from the GNCC

users avail of prepaid tariffs. High levels of prepaid users are common in less affluent societies as they allow consumers to have more control over their expenditure. The 2005 GNCC Annual Report indicates that there were 1,175,000 active SIM cards in Georgia, representing a penetration rate of 27.2%.

5.3 Cable Services

There are approximately 40,000 households connected to cable networks, with the overall proportion of households covered by cable networks standing at approximately 11 percent. A high proportion of large businesses use cable internet, while smaller businesses tend not to use this technology. The overall business penetration rate for cable is estimated by the industry to be approximately 5 percent.

Voice telephony is also offered by cable providers and no regulatory concerns regarding interconnection were raised during the research for this study.

5.4 Computer Availability

According to the State Department for Statistics (SDS), in 2003 there were approximately two computers per one hundred households in urban areas and less than one per hundred in rural areas.³¹ According to the World Bank,³² GNI in Georgia in 2005 was 1,350 US\$ (1,115 Euro), meaning that purchasing even a basic computer (estimated for the purposes of this study at 420 Euro) was beyond the reach of most consumers.

5.5 Internet Access

The Internet access market is very dynamic in Georgia, at least in urban areas. There are cable, satellite, dial-up Internet, Wi-Fi, WiMAX and ADSL service providers, which provides for a very competitive environment in what is, as yet, an extremely limited marketplace. The market breakdown for Internet access providers in Georgia is currently as follows:

Internet Access Providers in Georgia³³

Rank	Company	%	Technology
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³¹ See <http://www.statistics.ge>

³² See <http://siteresources.worldbank.org/DATASTATISTICS/Resources/GNIPC.pdf>

³³ This information is from the marketing department of UTG.

Georgia

1	Telenet	30	First provider of Broadband GPON ³⁴ access. Leased lines, dial-up, VoIP, Wi-Fi Triple play is planned at 2007
1	Sanet and Georgia on Line (GOL) were merged to create the Caucasus Network (ICN) in 2006	30	Leader in ADSL access Broadband, leased lines, Dial-up, VoIP, Wi-Fi
3	Global-1	10	Broadband, leased lines, dial-up, VoIP, Wi-Fi
4	GeoNet	5	Broadband, leased lines, Dial-up, VoIP, Wi-Fi
4	WaneX	5	Leased lines, point to point connections for VPNs, dial-up VoIP
4	Egrisi	5	Satellite DVB and leased lines
4	Railway Telecom of Georgia	5	Carrier provider, dial/up, VoIP
4	Deltacom	5	Trunk connections, leased lines
9	Grena	3	Broadband, leased lines, Wi-Fi
10	DCN	1	Broadband, dial-up VoIP
10	Makrocom	1	Cable, VoIP

Internet access services are available though both dial-up (56kbps) and ADSL at a range of speeds, from the equivalent of European ADSL “light” services to 8Mbps. There is extensive competition in the dial-up market, with prices starting from 0.45 Lari per hour (0.20 Euro). As an example of ADSL prices, Sanet’s service (65k/256k) costs 39 US\$ (32.23 Euro) per month.

It was estimated that there were around 175,600 Internet users in Georgia in 2003. ITU statistics indicate that this figure increased to 200,000 (4 percent penetration) by September 2005.³⁵ Revenue from Internet access services in Georgia was 19.8 million GEL (9.1 million Euro), which is an increase of 22.4% over 2004.³⁶ There were 15,300 ADSL lines in Georgia at the end of 2005.

UTG has been investing heavily in Tbilisi, rolling out a gigabit Ethernet network and 17 DSLAMs, offering the possibility for providing triple play services across the capital in the near future.

5.6 Public Internet Access Points (PIAP)

Some work has been undertaken by international organisations, such as the Internet Access and Training Program of the International Research and Exchanges Board,³⁷ in

³⁴ Gigabit Passive Optical Network

³⁵ Quoted in Internetworldstats.com - <http://www.internetworldstats.com/asia.htm>

³⁶ GNCC Annual Report, 2005

³⁷ <http://www.irex.org/programs/iatp/index.asp>

order to provide PIAPs and training both in Tbilisi and in regional centres. This has led to three PIAPs in libraries and universities in Tbilisi, two in Kutaisi and one each in Batumi, Gori, Khashuri, Poti, Rustavi, Telavi and Zugdidi.

According to Telenet, the regional authorities in Batumi intend to launch a free Wi-Fi hotspot in Ajara as a free municipal service, using the Telenet network.

5.7 Wireless Access Services

The ISP Iberiatel,³⁸ which has recently merged with Telenet,³⁹ provides wireless competition to fixed networks in some areas, such as Telavi. Telenet provides wireless local loop services, Internet access services and holds licences for CDMA 800 and CDMA 450. In addition, in February 2006, Telenet received a licence for the 5.2GHz frequency, to add to its existing 5.7GHz licence. It now provides services in both frequencies.

Telenet provides wireless local loop services, Internet access services and hold licences for CDMA 800 and CDMA 450. Telenet received a licence for the 5.2GHz frequency for Tbilisi. It now provides services in 2.4, 5.2, 5.7 GHz countrywide.

Telenet uses Motorola “Canopy” technology both to provide wireless competition for fixed line services and also to provide advanced communications services to areas which previously had no opportunity to connect to the national telecommunications network. Telenet has also started deploying a national wideband transport network covering the entire territory, using wireless, fibre optic and powerline communications.

³⁸ <http://www.iberiatel.ge/>

³⁹ <http://www.telenet.ge/en/about.html>

6 AVAILABILITY OF ONLINE SERVICES

6.1 E-Commerce

According to interviews carried out for this study with ICT organisations in Georgia, only about one third of businesses have websites, although no clear statistics are available regarding either how these can be divided between SMEs and large organisations or between sites that target B2C and B2B.

Unsurprisingly, bearing in mind the lack of key pieces of legislation regarding e-commerce, e-banking has taken some time to take off. However, possibly in the anticipation of this problem being resolved in the near future, services are now starting to appear. For example, the TBC⁴⁰ bank has been quite active in international projects, having joined SWIFT in 1996 and integrating into the Visa Electron credit card system. It now provides a basic range of online services to customers including phone card purchase, utility bill payments, account history and various account status operations.

A second problem, which is keeping innovative e-services offline, is the lack of Internet penetration in the country. TBC bank uses the Russian Spylog⁴¹ web-counter system. The public logs of the TBC bank indicate that the website as a whole (not the e-banking section) receives only about four hundred hits per day. However, once the legal framework is in place and services like this become more commonplace and trusted, the framework will be in place to allow this market to develop.

Finally, it is interesting to note that TBC, perhaps addressing consumer fears regarding security in the online world, does not hold customers personally liable for any unauthorised transactions via their online account as long as the consumer abided by the terms of the service agreement, which places minimal requirements on consumers, such as using an up-to-date browser and basic password precautions.

TBC bank has also teamed up with Intellectbank and UFC International to provide innovative e-services for their card payment customers. The services include SMS-based services, which enable users to avail of their cards to pay for utilities and phone services via their mobile phones, and to block their cards in case of theft or loss.

6.2 E-Government

E-Government has not yet taken off in Georgia, which is understandable when the rather low level of Internet penetration in the country is considered. It is the Georgian Government's intention to start launching their first e-Government services in the short to medium term.

⁴⁰ <http://www.tbcbank.com.ge/en/private/>

⁴¹ <http://www.spylog.ru/>

The majority of ministries still do not have websites, and those that do only include very limited information. However, the number of ministries with websites has grown significantly in the course of the past four years. In 2001, there were nine Government Ministry and Department websites (at that time, several Departments did not even have Internet access). The availability of websites and computerisation within the government has now improved significantly. New websites that have been created include those of the Ministry of Justice⁴² and the National Library.⁴³

A further e-government project is a joint effort of the World Bank and the ITU. In 2003, the World Bank undertook a project to digitise all documentation in the Ministry of Telecommunications in Georgia. In the course of this project, the World Bank asked the ITU to set up a document transmission, retrieval and security system. The ITU took this opportunity to provide solutions to enhance work flow automation, by enabling officials to digitally sign and disseminate official documents, thereby replacing the slow and rather expensive paper-based methods. There was a two-fold logic in this approach: on the one hand, it was a step towards creating an efficient system in the Ministry and, on the other, it was designed to give officials in the Ministry the opportunity to get accustomed to working with digital signatures, thereby improving their ability to legislate on this important e-commerce issue. However, there are as of yet few visible results from this project.

Work is now underway in a major push for comprehensive e-government programme called the Georgian Government Network, using Cisco networks (under a one million US\$ / 826,000 Euro) contract and with the expert advice of the national REN, GRENA, which has already worked extensively with Cisco. The project will build a network between government offices in Tbilisi and between the capital and regional centres. This, it is planned, will form the basis on which to build future e-government projects.

The network itself will be entirely virtual, relying on existing infrastructure for its capacity.

6.3 E-Health

E-health is being actively promoted by the Georgian Telemedicine Union,⁴⁴ whose activities include telepathology, education, organisation of conferences and the development of policy for particular scenarios, such as e-consultations for conflict regions. It also developed a proposal for the creation of an e-health national network in Georgia. However, this has not yet been implemented.

The National Information Learning Centre⁴⁵ provides online and offline medical information for medical professionals and students, an FTP server, training and Internet access.

⁴² <http://www.justice.gov.ge>

⁴³ <http://www.nplg.gov.ge>

⁴⁴ <http://georgia.telepathology.org/>

⁴⁵ <http://www.nilc.org.ge/>

6.4 E-Learning

As part of the cooperation between Estonia and Georgia in the Information Society sector, Georgia is trying to emulate the successful Estonian Tiger Leap Programme.⁴⁶ The Tiger Leap Programme was established in Estonia to develop ICT use for education and is generally considered to have been very successful.

The Georgian Deer Leap Project⁴⁷ has four distinct phases (of which the first two have been completed):

- (1) Analysis of the current e-education system in Georgia by liaison between Estonian and Georgian officials.
- (2) Detailed research in order to understand the framework in Georgia including meetings and visits with key Georgian institutions.
- (3) Development of the overall plan for Deer Leap.
- (4) Implementation of the project.

It is worth noting, both in this context and as a sign of the wider problems with Internet and ICT use in Georgia, that the project's coordinators complained from an early stage about the "marginal" approach to technology in Georgia's education system. There was difficulty caused by the fact that the infrastructure was so poor within the schools participating in the project and also because ICT was considered as a subject in its own right and not as a general tool for education. A key aspect of Stage 4 of the process was described by the Estonian e-governance academy website as follows: *"In order to change the attitudes of Georgian teachers and school principals and to demonstrate the educational value of ICT in all subjects and grade levels, the best practice cases from Estonian schools should be demonstrated by the authors and coordinators of the successful Internet-projects to Georgian colleagues."*⁴⁸

A full overview of the project, including budgets, overall strategy, documents relating to meetings that took place during the planning of the project and other useful information can be obtained from <http://www.htk.tpu.ee/TLG>. The first draft of the next stage of the project was published on the website in November 2005.

According to the research carried out for the Deer Leap Project in Georgia, more than three-quarters of schools have more than ten computers. However, these tend to be quite out of date and generally not equipped with Internet access. According to the United Nations Country Assessment Report of 2002, there was one computer per 707 pupils in Georgian schools, with an average of 0.3 computers per institution. As a result of the project, 800 schools have now been connected, with 7,000 computers installed. By 2008, it is planned that 2,300 schools will be connected and the ratio of computers to pupils will drop from its current level of 1:35 to 1:20, with a total of 30,000 computers being supplied. 70% of teachers will receive training to support the practical rollout network and hardware rollout. A two-phase tender has been launched for the hardware and expertise necessary to ensure successful completion of the project.

⁴⁶ <http://www.tiigrhype.ee/eng/index.php>

⁴⁷ <http://www.htk.tlu.ee/TLG>

⁴⁸ This information comes from the article "Tiger Leap in Georgia" which can be accessed on the Estonian e-governance website <http://www.ega.ee/?id=26339>.

Georgia

Plans are also underway to increase use of the national research and education network (GRENA).⁴⁹

The Internet Access and Training Programme and International Research and Exchange Board⁵⁰ also organises courses and services to boost e-skills in Georgia.

The “Creating e-Societies in the Southern Caucasus” project, funded by the European Commission, started in September 2005 and is due to last for two years. This includes a significant e-learning component.

A Wi-Fi network has been established in Tbilisi for academic purposes.

The number of schools with a computer has risen significantly in the last three years, from 9.8% in 2004 to 10.1% in 2005 and to 24.8% in 2006.⁵¹

⁴⁹ <http://www.grena.ge/>

⁵⁰ <http://www.irex.org/programs/iatp/>

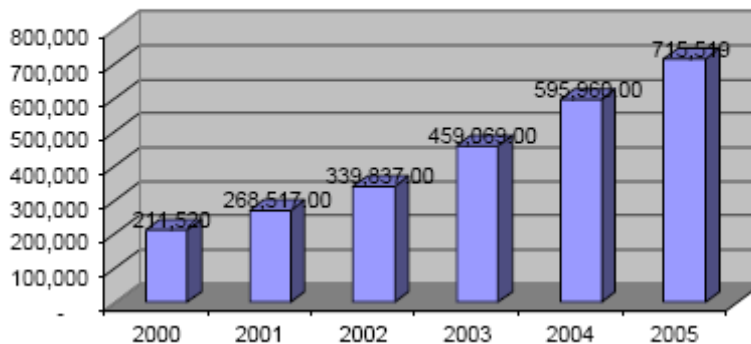
⁵¹ Statistics Georgia - <http://www.statistics.ge/files/english/education/8e.doc>

7 STRUCTURE OF THE COMMUNICATIONS INDUSTRY

The communications market is extremely vibrant, with 18 Internet and data networks, 4 mobile operators, 34 international telephony providers and 30 local telephony providers. The growth rate of the sector has been very high in recent years, 28 percent in 2002, 30 percent in 2003 and 34 percent in 2004. The fixed line market still has enormous potential, with a waiting list, which is equivalent to 38 percent of the existing fixed line market.⁵²

The table below, from the 2005 GNCC annual report shows the strong growth in revenue experienced by the Georgian electronic communications market in the period 2000-2005.

Total Revenues of electronic communications market 2000-2005
(million GEL, VAT included)



7.1 Fixed Networks

There is a considerable degree of state ownership in the communications market. However, this was reduced significantly in January 2005, when the Government's full 51 percent share of Georgia Telecom⁵³ was transferred to Telcell, a wholly-owned subsidiary of Metromedia,⁵⁴ a US company which also owns a significant share of the mobile operator Magticom. Nonetheless, state enterprises had a 15.1 percent share in the output of the communications market in the first quarter of 2005. The two former state-owned fixed telephony service providers are listed below.

Company	Services	Owners
Georgia Telecom (Sakartvelos Telekom) ⁵⁵	International fixed line and long distance	Metromedia (US) 81% Bulcom (Cyprus) 19%
Georgian Local Lines Company (Sakartvelos Elektrokavshiri/UTG) ⁵⁶	Local services and infrastructure	90.3% owned by Turan Alem Bank (KZ), the remainder owned by employees.

⁵² Data from UTG, February 2006

⁵³ <http://www.telecom.ge/>

⁵⁴ <http://www.metromedia-group.com/>

⁵⁵ <http://www.telecom.ge/index.php?class=1&lang=eng>

7.2 Mobile Networks

The Georgian mobile market has to compete with the very vigorous fixed market. There are two main GSM operators, with additional competition planned in the near future from Magticom and Telecom Invest Georgia, both of which have been awarded 3G licences. A further licence is to be auctioned in September 2006.

Company	Services	Owners
Geocell ⁵⁷	Mobile operator	Georgia Telecom (2%), United Telecom of Georgia (12%), Turkcell (Turkey) (40%), Celcom (46%)
Magticom ⁵⁸	Mobile operator including GPRS	Magti Group (Georgia) (49%), Telcell Wireless (51%)(USA)
Iberiatel ⁵⁹	Local telephone, NMT, CDMA	Private ownership 100%

According to the 2005 GNCC annual report, revenues of mobile operators increased by 30.4% in 2001, 34.8% in 2002, 40.4% in 2003, 33.9% in 2004 and 19.7% in 2005.

7.3 Cable Networks

Cable services represent approximately 2% of revenue for communications in Georgia.

7.4 Internet Access Networks

There are approximately fifty Internet access providers in Georgia, providing dial-up, satellite, Wi-Fi and Cable services.

The principal ISPs are:

- **Telenet (including Iberiapac)**, which provides advanced data services to businesses and information exchange to Georgian banks, advanced, high speed wireless solutions using Motorola Canopy (5.7GHz) technology and Internet access and web hosting services. Telenet's acquisition of Iberiatel was undertaken partly in order to roll out a CDMA-450 IP-based data and voice service covering the full territory of Georgia.

⁵⁶ <http://www.gec.ge/>

⁵⁷ <http://www.geocell.ge/v2/eng/index.php>

⁵⁸ <http://www.magtigsm.com/>

⁵⁹ <http://www.iberiatel.ge/>

- **Georgia Online**, which has grown substantially, allegedly benefiting from a huge degree of advertising donated by its parent company, the television company Rustavi 2. It provides dial-up access (including prepaid), hosting and leased lines.
- **Sanet** is present in three large cities (Tbilisi, Kutaisi and Poti) offering leased lines and dial-up (including prepaid)

7.5 Production of IT Services

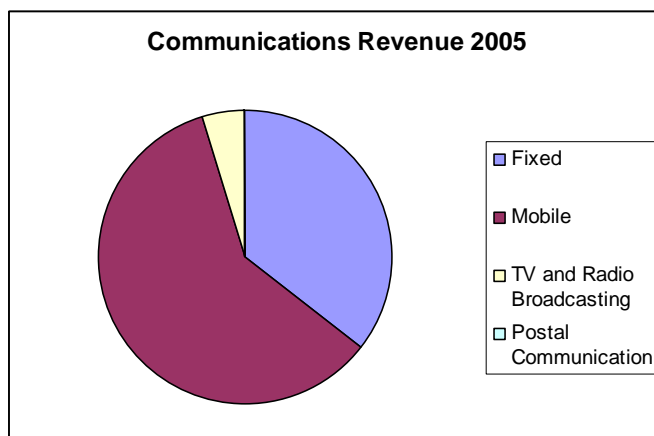
IT services are an insignificant part of the Georgian economy and are not the subject of specific research by the state statistics agency – Statistics Georgia.

7.6 Financial Development of the ICT Sector

The extensive level of telecommunications liberalisation in Georgia means that there has been significant private investment in the sector. Operators reported an almost 100% increase in revenue between 2000 (at the early stages of liberalisation) and 2003. Year-on-year growth was in excess of 25% every year from 2000 to 2005, reaching 6.21% of GDP in 2005.

In 2005, mobile providers accounted for 54.95% of telephony revenue in 2005, with fixed operators accounting for 35.2%. The rapid growth of the sector has not shown any slow-down, with UTG (see above) reporting a huge demand for fixed lines while, in 2005, the mobile sector reporting a growth rate of 40.3% and ISPs reported a 71% growth.

In the course of 2005, there was an increase of 20% in the number of companies operating in the electronic communications market, with 230 companies in operation. In the period 2000-2005, there was a 240% increase in revenue for the communications sector, reaching 715.5 million GEL (329.58 million Euro). This income breaks down as follows:



Georgia

Communications revenue from 2005 breaks down as follows:

Fixed Communications – 35.2% (252 million GEL)

Mobile Communications – 59.45% (425 million GEL)

TV and radio broadcasting – 4.4% (32 million GEL)

Postal service – 0.9% (6.5 million GEL)

Revenue in the ISP market was 19.8 million GEL (9.12 million Euro) according to the 2005 GNCC annual report, representing a 22.4% increase over 2004.