NGA Guidelines – final presentation

EBRD / GNCC: ICT Sector Development:
Harmonisation of laws, regulation of next generation access and regulatory development

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Agenda

Introduction

NGA is one component within the EBRD-GNCC project scope

Three components:

Component I: Legislation covers harmonisation of Georgian ICT and audio-visual media legislative framework with that of the European Union;

Component II: Next Generation Access covers proposal and adoption of a framework for regulation of Next Generation Access and

Component III: Regulatory development covers universal service and measures to reduce the cost of deploying high-speed electronic communications networks, radio spectrum, market analysis and mergers and acquisitions regulation.

Fulfilment of Component II of the project is related to **the acceleration of high-speed broadband roll-out across Georgia, which is supported by the NGA Guidelines**

NGA Guidelines scope and objectives

- **Analyse the current market situation** and trends in broadband/Next Generation Access (hereinafter “NGA”) in relation to future and existing regulation
- **Help to develop GNCC’s regulatory strategy** related to the broadband/NGA markets by defining a set of recommendations and steps for a regulatory approach
- Foster positive trends and improve broadband/NGA coverage of Georgia by **encouraging investment into modern broadband infrastructure**
- **Establish a sustainable competitive environment** in the field of the provision of broadband/NGA connection

Basis of the analysis

- Desktop research, including data from the GNCC analytical portal and GeoStat
- Interviews with representatives of GNCC
- Interviews with representatives of the Ministry for Economy and Sustainable Development
    - Also Georgia Innovation and Technology Agency (GITA) – Broadband for Development project
- Interviews with representatives of telecom operators involved in broadband/NGA network roll out and development in Georgia

Questionnaires and consultation interviews with telecom operators:

- Association of ISPs
- Geocell
- MagtiCom
- Mobitel
- New Net
- Silknet

A questionnaire/consultation was also conducted with OpenNet

We keep track of developments in the market

Although some parts of the analysis were completed in late 2016, we are aware of recent developments in the market

Silknet acquired Geocell

- In January 2018, Silknet acquired mobile operator Geocell
- The combined company offers broadband, pay TV, fixed telephony and mobile services
- Between Silknet/Geocell and Magticom, the two companies occupy:
  - c.90% of the fixed broadband market; and
  - c.75% of the mobile market

Further network rollout is planned or in progress

- Silknet announced USD100m of investment
- Magticom has stated this it is continuing to construct/extend its fibre network

OpenNet has issued a tender document

- Design and construction of passive optical fibre infrastructure is planned in Zugdidi-Jvari-Mestia, Kutaisi-Tkibuli-Ambrolauri, Samtredia-Chokhatauri-Ozurgeti and Kutaisi-Tsageri-Lentekhi

Source: GNCC analytics portal, March 2018

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Summary of recommendations

Four themes emerged from the NGA work-stream that need attention

Recommendations to the GNCC have been made in each of the themes:

- Improving the effectiveness of retail competition
- Improving access to wholesale connectivity
- Tackling the urban/rural divide
- The need for further demand (stimulation)

We frame the themes using a common structure:

- Market context
- Market challenges
- Recommendations to address challenges
- Expected outcomes

We recommend GNCC performs market analysis to confirm our initial hypotheses before introducing regulation. The market analysis methodology and market analysis of NGA related markets (EU markets 3a and 3b) will be issued after the adoption of the new Electronic Communications Act legislation.

Improving the effectiveness of retail competition:

Improving the outcomes for consumers in *existing* coverage areas [1 of 2]

Market context	Market challenges
• Retail broadband prices for **high speed services (100Mbps) appear to be high compared to benchmarks** • Operators appear to **provide partial coverage of major towns and cities**	• Although the market features significant levels of competition, information on whether there are local monopolies is not available • **Stakeholders generally accepted that local monopolies were likely** • Operators indicated **existing remedies (e.g. duct access) are still not widely used** • Multiple duct networks is unusual; providing access between operators could be complex; “Exclusive” use of some utility infrastructure could be a concern • **Conclusion** [Hypothesis]: **Citizens do not have a choice** due to widespread instances of local monopolies

Improving the effectiveness of retail competition:

Improving the outcomes for consumers in *existing* coverage areas [2 of 2]

Recommendations to address challenges	Possible outcomes

• **Confirmation of the role of GNCC as competent NRA**, including maintenance of its independence and having all the necessary resources to set the right regulation
• **Adoption of the EU framework**, and in particular two elements which are most useful for NGA competition:
    • The **market definition and analysis procedure**
    • The **cost reduction directive**, including the establishment of a comprehensive electronic database of existing infrastructure
• **Gather network coverage and service availability from operators at a granular level**; also take-up of existing remedies such as duct access
• Implement regulation to encourage effective competition:
    • **Analyse the effectiveness of current remedies**
    • **Complete a market review** of the broadband/NGA markets, considering the possibility of joint SMP and/or geographically defined sub-markets
	Major operators competing directly for individual households, leading to reduced prices and improved services

Improving access to wholesale connectivity:

Operators which do not own infrastructure pay high prices [1 of 2]

Market context	Market challenges
• **Georgia is well connected**, both nationally and internationally • Some national and international connectivity (and the provision of wholesale access to this connectivity) is **controlled by large players**	• **Smaller operators have raised concerns about the cost of connectivity**, e.g. trunk leased lines: a large proportion of retail prices have to be paid for national and international connectivity by those operators that do not own national and international infrastructure • **Conclusion: competition for national and international connectivity needs to be assessed**: smaller operators that do not own national and international infrastructure cannot compete effectively (on speed and/or price) with larger operators

Improving access to wholesale connectivity:

Operators which do not own infrastructure pay high prices [2 of 2]

Recommendations to address challenges	Possible outcomes

• **Investigate whether requirements for non-discrimination are being met**, and if not, consider penalties
• **Consider going further: price controls to stop margin squeeze** and/or improve accounting transparency
• Consider **re-assessment of market for access to backbone services** in two sub-markets:
  ◦ Access to **passive lines**
  ◦ Access to **active equipment**
• Review approach of large players of providing access to content (local content and caches of international content) – concern here is about routing own traffic to the caches, while wholesale customers have to use international link
  ◦ Consider imposing interconnection obligations on large players which would allow smaller players to access local and international content on a non-discriminatory basis
	• **Smaller operators pay a lower price for wholesale connectivity**, and can launch a sustainable competitive challenge to the NGA retail offerings from larger operators
	• **Georgia's retail market becomes more effective and dynamic**, with resulting improvements in price, choice and service

Tackling the urban/rural divide:

Driving the coverage of NGA networks further out beyond Tbilisi and the main cities [1 of 2]

Market context	Market challenges

• **Georgia has reasonable broadband coverage** with a range of broadband technologies: fibre, ADSL and LTE
• **Fibre coverage compares well with international benchmarks**
    • Operators have announced continued or planned investment, though the extent of deployment is not known
	• Overall coverage of fixed broadband is low compared to benchmarks
	    • **a strong urban/rural divide**
	• The OpenNet project should support the extension of NGA coverage in rural areas, but the extent of coverage is uncertain
	• **Conclusion: Georgia has a challenging urban/rural divide, which will be only partly tackled via the OpenNet project**. Action is needed to take full advantage of the OpenNet investment, and drive out NGA coverage into areas beyond Tbilisi and the major cities

Tackling the urban/rural divide:

Driving the coverage of NGA networks further out beyond Tbilisi and the main cities [2 of 2]

Recommendations to address challenges*	Possible outcomes
• **Define national objectives:** the Government can use EC's 2020 and 2025 targets as reference points, as well as USO targets being considered in other countries • **Form a rural task force:** to engage with stakeholders and understand in detail the impact of various issues such as lack of addresses, lack of electricity, mountainous terrain, local government objections, difficulty in obtaining permits • **Promote alternative financing solutions**: e.g. co-financing options with combined government and private sector funding • **Data gathering of rollout plans:** request operators' expansion plans (e.g. targeting settlements with over 500 homes) • **Viability modelling:** model the commercially viable limit of different technologies, accounting for the specific characteristics of rural areas (e.g. availability of poles and ducts, availability of copper, deployment costs, ARPUs) to forecast an achievable infrastructure approach for rural areas, e.g. fibre, fibre plus wireless, wireless only	A **targeted and substantiated case for requesting funds** to support investment in rural areas, where operators cannot create a commercially viable business case

* Some of these recommendations will need to be addressed by other stakeholders, not GNCC

We made a number of recommendations related to rural development projects

Assess appropriate rural broadband models for Georgia

- Annex 1 includes **examples for Australia, Bulgaria, Czech Republic, Lithuania, Slovakia and the UK,** from which it may be able to take a number of lessons learnt

Recommendations for OpenNet:

- **Infrastructure access provided under transparent, non-discriminatory conditions** and agreed wholesale tariffs
- **Define access conditions in cooperation with GNCC** and also publish a reference offer
- **The entity offering the network access should be an authorised person**, so would be included in any GNCC market analysis
- **A cost model would be useful in defining the price** of access to infrastructure

The need for further demand (stimulation):

Monitor competition measures and existing initiatives [1 of 2]

Market context	Market challenges
• Despite initial high take-up of NGA services in covered areas of Georgia, **fixed NGA take-up is now in the middle of the benchmark range** • Despite having a fibre connection, the proportion of **fixed users taking speeds of 30Mbit/s (or more) is low compared to benchmarks** • when considered against the extent of network coverage and time since launch • **Broadband for Development (BfD) project**, overseen by GITA, plans to deliver a number of demand stimulation initiatives, e.g. vouchers, training	• **Many potential barriers to taking high speed services**, e.g. alternative cheaper low-speed services; high prices(services and equipment) compared to disposable income; lack of skills, awareness and interest • **Scope of the BfD project is limited**, so will not have a major impact on overall take-up of NGA services in Georgia • **Operators are not engaged** in initiatives to boost demand; operators are ideally placed to support such initiatives • **Conclusion:** Georgia is showing reasonable levels of NGA demand in covered areas, though **additional demand stimulation would be useful to increase take-up**

The need for further demand (stimulation):

Monitor competition measures and existing initiatives [2 of 2]

Recommendations to address challenges*	Possible outcomes
• **Monitor the development of demand in covered areas** to assess whether further demand initiatives are required (especially in rural areas) • **Benchmark the scale of each BfD initiative** against similar initiatives from other countries. By looking at the scale and outcome of other initiatives, it should be possible to assess how additional demand stimulation initiatives could benefit Georgia • **Encourage operators to engage** in demand stimulation programmes by highlighting the benefits of higher take-up, which will be generated for the operators themselves, including decreased investment risk, and increased returns • Further initiatives should be considered in the context of a defined national strategy, to ensure that competitive dynamics are not affected • Implementation of initiatives targeting end-user skills or deploying e-government services	• **Greater demand for broadband services in Georgia**, adding value to the economy, and improving the business case for both private and public investments

* Some of these recommendations will need to be addressed by other stakeholders, not GNCC

We have identified the responsibilities for the development of NGA connectivity

Responsible/Competent Entity	Responsibility/Competence
Ministry of Economy and Sustainable Development of Georgia	• Approval of the amended Law and its submission for government approval • Proposal of national broadband strategy • Introduction of demand stimulating tools • Introduction of investment stimulating measures
Government (Parliament) of Georgia	• Approval of amended Law • Approval of demand stimulating tools • Approval of national broadband strategy • Approval of investment stimulating measures
OpenNet	• Implementation of the State program on broadband infrastructure development in Georgia
GNCC	• Execution of regulatory competencies and obligations stipulated by the Law

Agenda

Next steps

We have recommended a timetable for implementing regulation, and KPIs to monitor progress

Activity / milestone	Suggested target date
Adoption of ECA harmonisation package by Parliament	Q4 2018
Harmonised ECA in force	January 2019
Publication of new market analysis methodology for public consultation	Q4 2018
Adoption of new market analysis methodology by Commissioners	February 2019
Publication and adoption of new list of relevant markets	February 2019
Market analysis of NGA related markets (markets 3a and 3b)	January – February 2019
Public consultation of market analysis of 3a and 3b markets	March 2019
Designation of SMP and imposing obligations	May 2019

Potential KPIs to assess the success of broadband development

- NGA coverage
- NGA subscriber penetration
- % of households in the coverage of two or more broadband providers
- Proportion of high speed connections (30 Mbit/s and faster)
- Minimum download and upload speeds

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