
Data request to Macedonian operators offering fixed or mobile broadband services

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1 Introduction and objective

The Agency for Electronic Communications of the Republic of Macedonia ('AEC') has commissioned Analysys Mason Limited ('Analysys Mason') and Grant Thornton LLP ('Grant Thornton') to "*define measures for encouraging the competition development in the electronic communication services markets in Republic of Macedonia and encouraging investments in next generation networks, such as FTTH (fibre to the home), 4G mobile networks, DOCSIS 3.0 networks*".

The main objective of this project is to define measures to encourage the development of competition in the electronic communication services markets in the Republic of Macedonia ('Macedonia'), with a special focus on next-generation networks (such as fibre-to-the-home (FTTH), fourth-generation (4G) and data-over-cable-services-interface-specification (DOCSIS 3.0) networks). The AEC also wishes to be provided with recommendations supported by a tool that will enable it to understand market trends and to test the potential impact of proposed regulatory measures.

In this context, we need to collect information from the Macedonian operators offering fixed and mobile broadband services, to capture and analyse in details the:

- evolution of the broadband market
- existing infrastructure and expected deployment of existing and new technologies
- views about the current market situation and potential issues
- objectives and opinions as regards the development of next generation broadband and appropriate measures that could be taken to improve broadband development in Macedonia.

2 Data collection and interaction with operators

The contribution of the main operators in Macedonia is very important to the success of this project. A close collaboration with the operators will allow to:

- take into account the specificities of the Macedonian broadband market
- adapt, and refine if needed, our analyses to the existing situation of the broadband market

Operators will have to:

- answer to the questionnaires submitted by the AEC

- assist to the meetings organised by the AEC to discuss with the AEC and Analysys Mason and provide comments
- provide comments on the consultation document at a later stage

The data request is intended to provide the necessary and sufficient data to conduct a satisfactory analysis of the situation and to allow the AEC to fulfil its objectives.

For the sake of consistency and efficiency, the AEC request operators who complete questionnaires to feed them exhaustively (i.e. answer all the questions that concern them). This will enable the AEC and Analysys Mason to make significant progress upon receipt of the questionnaires, and undertake the analyses as soon as possible.

The operators' answers to these questionnaires are the main source of information to undertake the analysis. The active participation of operators will allow undertaking analyses that reflect best the current situation in Macedonia and its likely evolution.

The data requests will be made up of the following two documents that address different aspects:

- A Word document (this actual document) to gather *qualitative* information, including: strategy positioning, main offers and network description.
- An Excel workbook to gather *quantitative* information, including: revenue, volume of sales (number of clients, minutes) by main service for each relevant period, main client and suppliers and price evolution.

Regarding the quantitative questionnaire in Excel, operators are requested not to change the format of the cells in the spreadsheet (and in particular to avoid merging cells and adding columns or rows within the existing columns and rows). However, operators can add some comments at the end right of the columns or at the bottom of the rows.

The information and data that will be provided within this project will be treated as confidential. Confidential data provided by operators will not be published in any report.

The questionnaire will be sent by the AEC in email to operators on the 10th of November 2014. It is requested that operators to provide their written answers to the AEC by email by the 8th of December 2014.

In addition to the reply to the questionnaires, operators will have the opportunity to raise questions; provide additional feedback; and potentially comment on their responses during a bilateral two-hours meeting with the AEC and Analysys Mason.

The AEC will provide the dates for the meetings which are expected to happen during the week starting on the 17th of November.

3 Qualitative questionnaire

3.1 Fixed and mobile broadband market

Question 1: How would you describe the current state of development of the broadband market (i.e. nascent, fast growing, mature or declining)?

Answer 1:

Question 2: How would you describe the regulatory environment for broadband services?

Answer 2:

Question 3: How would you describe the competitiveness of the broadband market?

Answer 3:

Question 4: What key factors (if any) could be preventing the development of effective competition in the broadband market?

Answer 4:

Question 5: What regulatory decisions have positively or negatively affected the development of competition in the broadband market in the past?

Answer 5:

Question 6: What are the measures (demand and supply side, political and regulatory) that have been taken to date to promote the development of the broadband market and what are, according to you, the results perceived from these measures?

Answer 6:

Question 7: What are the potential issues or bottlenecks (demand and supply side, political and regulatory) in the broadband market?

Answer 7:

Question 8: Do you think there is geographical variation in the degree of broadband competition across the country (i.e. which areas would have more and less competition)? What would be the main reasons for this and the main actions that could be taken to remedy this issue?

Answer 8:

Question 9: According to you, at what level of the network (backbone, backhaul, access network) would there be the more obstacles (in terms of cost or operational) to the development of broadband in the country?

Answer 9:

Question 10: What potential measures could be taken to boost the development of the broadband market?

Answer 10:

Question 11: How would you expect the market to grow in the short term (2 to 3 years) and in the midterm (3 to 5 years)?

Answer 11:

Question 12: What do you think are the main obstacles to next-generation broadband deployment in the country?

Answer 12:

Question 13: What measures could be taken to stimulate faster rollouts of next-generation networks?

Answer 13:

Question 14: Do you consider legal and financial conditions in the country to be favourable to investment in next-generation infrastructure? What measures could be taken to improve them?

Answer 14:

3.2 Broadband services offered

Question 1: What are the main electronic communications services that you provide in Macedonia? Based on which technologies?

Answer 1:

Question 2: How would you define your general strategic positioning (target clients, network strategy, commercial strategy, etc.)?

Answer 2:

Question 3: Do you have the intention to start supplying additional services in the coming years? Which type of services?

Answer 3:

Question 4: How the prices for broadband products have evolved over the last 3 to 5 years? How do you see the prices to evolve in the next 2 to 3 years for the different products (mobile and fixed; basic broadband and next generation broadband)?

Answer 4:

Question 5: How do you perceive the level of substitutability between fixed broadband and mobile broadband services and basic broadband and next generation broadband services?

Answer 5:

Question 6: What are the patterns in usage of data by your clients currently observed? How has usage evolved in the past years, and do you think it will evolve in the coming years?

Answer 6:

Question 7: What is the impact of subscribers moving from basic broadband (e.g. DSL) to next generation broadband (e.g. fibre) in terms of usage? Do you have any data that show the evolution of usage versus speed?

Answer 7:

Question 8: What is your view on the take up of multiple play bundles by subscribers? Is this a growing trend?

Answer 8:

3.3 Broadband network information

Question 1: Please provide a description (and maps if possible) of your network's nature and footprint, including:

- core network (e.g. assets, main cities passed by the transmission network)
- backhaul network (e.g. technologies used, coverage)
- end users reached by the local network (e.g. geographic location, types of end-users)

Please provide the architecture of your existing network including the main network elements. For fixed networks, this includes DSL, cable (analogue, digital), FTTC/VDSL, FTTH/FTTP¹, wireless fixed broadband or any other technology used. For mobile networks, this includes 2G, 3G and 4G.

Please provide also the architecture, including the main network elements, of future high speed broadband network you intend to rollout such as FTTC/VDSL, FTTH/FTTP¹, cable DOCSIS 3.0 and LTE.

Answer 1:

¹ For FTTH/FTTP technology please do mention if the architecture is centralised or distributed and if you use one or two level of splitters in your diagrams and explanations

Question 2: Is your network partly based on infrastructure provided by other operators or providers? If yes please indicate the operators involved and the nature and price of the wholesale service provided.

Answer 2:

Question 3: What is the current coverage that you provide using basic broadband and next generation broadband technologies? What are your coverage objectives for basic broadband and next generation broadband by 2020?

Answer 3:

Question 4: Can you provide us the level of investment you have incurred during the last 5 years related to broadband as well as the expected future investments?

Answer 4:

3.4 Broadband consumer behaviour

Question 1: Have you undertaken any consumer survey related to broadband services which you can share with us and which include information on subscriber behaviour including the points mentioned below? If not, can you provide us your view on these points?

- usage patterns
- price awareness and sensitivity, in particular willingness to pay for additional/enhanced service features
- awareness of existence of operators providing similar services
- level of information (on price and non-price issues) on alternative offers
- level of satisfaction, for price and non-price issues
- loyalty to existing suppliers, also including
 - intention to change existing supplier
 - key reasons to remain loyal to the existing supplier
 - key reasons for changing supplier
- main difficulties, barriers or constraints (if any) in changing supplier
- level of substitutability among services

Answer 1: