Assessment of the Fixed Broadband Service Market Review, the Procedures for Determining Significant Market Power, and the Regulatory Recommendations for Georgia

April 23, 2024

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INTRODUCTION AND EXECUTIVE SUMMARY

In this report we assess a study released in November 2023 under the EU-Georgia Association Agreement, titles *Market review of the Fixed broadband market*.

The study addresses the fixed services markets in Georgia with a focus on determining whether Significant Market Power (SMP) exists and, if so, the remedies that should be applied. In doing so, the study:

- Examines different parameters of the Georgian market and its principal operators,
- Defines what it considers to be the relevant market for SMP purposes,
- Provides conclusions about the operator considered to be exhibiting SMP,
- Explains the basis on which it arrives at such conclusions, and
- Indicates the remedies and other conditions that should be imposed on the operator.

In the process, it considers both the retail and wholesale levels of the market but focuses on the wholesale level in terms of their SMP determinations and related recommendations.

The report that follows represents an assessment of the study report in terms of its treatment of the respective markets, its conclusions concerning SMP and related remedies, and the underlying approaches reflected in the study as well as the degree to which its approach is appropriate in examining Georgia's development in the fixed services market.

Assessment Approach

In completing the report, we have drawn on several perspectives in forming our assessment of the Study. These include:

- 1. Alternative ways of examining and defining the market in question,
- 2. The differences in how different parts of Georgia are covered by the respective operator networks,
- 3. The mix of technologies involved and the overlapping provision of similar services,
- 4. The degree to which Georgia resembles or differs from EU countries in its underlying economic development, population size, and topography, and
- 5. The differences between Georgia's fixed services market (and predominant technologies) and those of most EU countries.

In addition, we have suggested how differences in the evolution of the markets—Georgia's and those of most EU countries—need to be considered in determinations of Significant Market Power. Correspondingly, we note the importance of examining the communications policy objectives that have been achieved in Georgia notwithstanding its economic level, small population, and unusually mountainous terrain as well as the need to consider whether these objectives might be jeopardized by imposing the SMP conditions and restrictions recommended in the Study.

Conclusions of Our Report

We turn now to our conclusions with respect to the Fixed broadband market, noting in the process how some are based on the EU's own approach to determining the existence of SMP.



Market Definitions and SMP

Given our detailed review of the Study's market depictions (retail and wholesale levels), market definition of SMP purposes, SMP determinations and related justifications, and remedy proposals, the full report provides many conclusions and implications as well as raises a wide range of questions about the Study's findings. Here we present some of our main conclusions.

These conclusions include our assessment that the Study's treatment of the market as a single national market is deficient given the different operating conditions and levels of competition that exist. For example, separate consideration could be given to these three segments: (1) those where three or more operators co-exist and compete, (2) those with two competitors, and (3) those with only one. We also believe that for SMP purposes the focus on FTTx technology is artificial, given the wide variety of ways in which broadband access is provided in Georgia (including FWA, xDSL, and mobile broadband).

Instead, the Study imposes a top-down view of the market as a single national one. Yet, as indicated in an assessment of the EU's SMP guidelines, "Geographic analysis should be designed as bottom-up, with the market delineation arising from local conditions of competition, avoiding top-down starting points such as a single national market by default or a national-minus market." This bottom-up approach is based on the European Commission's Competition Code. Moreover, such an approach would lead to a markedly different definition of the applicable market(s) in Georgia.

We note, furthermore, that the focus on FTTx technology is not very price sensitive, as FWA, xDSL and mobile broadband options are generally less costly to implement. This in turn suggests a pre-determined targeting of the main FTTx provider rather than a balanced evaluation of excessive market power in the delivery of fixed broadband services across Georgia's challenging geographic and topographic terrain.

At the same time, the extensive availability of FTTx (at higher levels than in EU countries), including its presence in many rural areas, is not recognized by the Study as contributing to the fulfillment of important policy objectives, including broad service coverage and the use of innovative technologies.³ Overall, The penetration rate and technical speed of fiber optic fixed Internet in Georgia stand out as highly advanced compared to European countries and suggests that the associated service packages are reasonably priced.

Fixed and Mobile Integration

A key aspect of the Study's market definition is its contention that the fixed and mobile broadband markets are entirely separate, especially if the minimum speed basis is set at 10 Mbps. First, as we note in the report, 4G mobile regularly offers much higher speeds and in terms of user choices the two are increasingly substitutable, with the mobile option being increasingly chosen. Overall, this indicates

³ The European Commission has itself indicated that in determining SMP "the analysis should take into account the effects of other types of (sector-specific) regulation, decisions or legislation applicable to the relevant retail and related wholesale market(s) during the relevant period." See European Commission, Guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services, 2018/C159/01, Section 1.3.17.



¹ Copenhagen Economics, Review of SMP Guidelines, prepared for ETNO—European Telecommunications Network Operators' Association, September 25, 2017.

² In 2020, for example, the Commission noted that "geographic areas...which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different...face appreciably different conditions of competition..." In so doing, it referred to Article 64(3) of the Competition Code.

competition between these two "segments" and suggests that mobile's exclusion from the market definition has been motivated as much by SMP targeting as SMP determination on an objective basis.

The decision to focus on FTTx-delivered fixed broadband access versus all fixed broadband is similarly not appropriate in or view. The effect is to diminish the size of the market being reviewed and to highlight the role of a particular operator. A more balanced approach, examining the broadband market overall, which is growing in several respects, including market size, number of providers, and user options would provide a more balanced and valid approach in determining both market dynamics and the degree to which policy objectives—whether increased coverage and access, introduction and availability of diverse and innovative technology, or growth in internet use and traffic—are being met.

Key Differences with EU

In arriving at our conclusions, we also highlight how the Georgian market is inconsistent with most EU markets. In fact, the differences involved are important in determining appropriate regulations and in making SMP determinations. The most fundamental difference is the absence of a highly dominant legacy operator and the associated legacy means of delivering broadband services, notably xDSL. In Georgia the proportion of households with access to only xDSL-based broadband is very small by comparison.

Accordingly, EU regulators have designated many of their legacy fixed telephone service providers as exhibiting SMP related to broadband services. Also, determinations of SMP in the fixed service sector by national EU regulators, as then reviewed by the EU, are usually based on all fixed line connections and not solely FTTx ones. By comparison, the suggested approach for Georgia—namely, the focus solely on FTTx service connections—is selective and overlooks the competitive roles of Silknet and Cellfie as well as Global Erty, iLink and some 80 others FWA providers.

We also note that the Study acknowledges that differences between Georgia's market and those of the EU should be considered. That stated, it does not consider fully the implications of the highly different economic levels involved. We did not find any benchmarking of Georgia with Bulgaria, for example, rather than an average of all EU countries. (We note that even Bulgaria's economic level is 1.7 times higher than Georgia's when measured on a GDP per capita, PPP-adjusted basis.⁴) Nor does the Study highlight additional factors such as Georgia's small population or its mountainous terrain, which is more extensive than in any EU country.

A Multi-Operator Presumption

One final observation concerns the underlying assumption of the Study that it is normal for multiple operators to compete aggressively in the provision of FFTX-based broadband services. In fact, given the substantial investment risks involved, the markets that have produced the highest levels of fiber broadband access and use are generally served by one or two main operators—for example, in Korea (Korea Telecom and LG Plus), Japan (NTT and KDDI), Spain (Telefonica and Vodafone), Sweden (Telenor), Lithuania (Telia Lietuva) and Romania (Orange).

In the last case, there were two principal fiber broadband providers (Orange and Telekom Romania), with the number decreasing to one when Orange acquired major shares of Telekom Romania in 2021. Moreover, the merger was approved by the EU's Competition Authority. Similarly, we note that other SMP determinations in EU countries have been determined as not valid by the courts, even where the main operators hold considerable market shares (e.g. Finland, Sweden). And in almost all the cases where a single operator has been designated as having SMP, the operators involved have been the

⁴ World Bank data, 2022.





original legacy operators of their respective countries, which is quite different from what the Study is concluding with respect to Georgia.

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23 April 2024

FIXED SERVICES

In this part of the report, we review the recent fixed services study prepared under the EU-Georgia Association Agreement.⁵ The Study indicates two dates on its cover, which we assume represent when it was initially completed and when it was formally released.

1. Definition of the Fixed Broadband Service Market

In addressing how to define the fixed services market the Association Study makes several market distinctions that determine SMP behavior and justify *a priori* remedies. The approach, we contend, is set in a manner to maximize the potential for an SMP determination, as we will explain below.

1.1 Market Overview

In its Section 3.1, the EU-Georgia Association Study provides an overview of the coverage of fixed broadband technologies across Georgia. This overview is based on data provided by the network operators and service providers in response to a ComCom questionnaire in 2022 and uses "settlements' as the reference unit. As the study notes, there are 3,605 settlements in Georgia.

The Study goes on to group the settlements into four categories based on the number of operators present. The table below indicates the results, including the number of households associated with each category.⁶

Table 1: Categories of Fixed Broadband Markets by Settlements

No. of Operators	No. of Settlements	No. of Households (thousand)	% of Households	Subscriptions (thousand)
3 or more	474	957.1	76.4	866.3
2	607	119.5	9.5	56.7
1	1,104	114.6	9.2	33.9
0	1,420	60.8	4.9	0
Total	3,605	1,252.0	100.0	956.9

Source: Association Study, based on responses to ComCom questionnaire, 2023

We note that in population terms, the respective shares are 54% for settlements with three or more operators (with 55.8% of these in Tbilisi) compared to 17.3% with no operators, indicating that on average larger-size households prevail in rural areas and relatively smaller households in urban ones.

1.2 FTTx Networks

FTTx Presence

The Study also indicates the degree to which fiber-based networks are present in Georgia, namely, that fiber network-based access is offered in settlements with 84.7% of the country's households. At the



⁵ Market review of the Fixed broadband market - 08.12.2023, Facility for the Implementation of the EU - Georgia Association Agreement - II, November 2023. This will be referred to as the Association Study or the Study in Part A. Otherwise, it will be cited as the Fixed Services Study.

⁶ Ibid., p. 38.

same time, 64.2% of all households are in settlements with fiber networks as well as DSL and fixed wireless (FWA) networks. And 15.3% of Georgian households are in settlements where fiber networks are not present. Correspondingly, the Study notes that the areas without fiber are disproportionately large in terms of territory.

(What needs to be kept in mind is that the presence in a settlement of FTTx or other broadband networks does not mean that all the households in the settlement have direct access to such networks. The Study's definition of network presence includes settlements where only one household may be directly connected to the network.)

Urban vs. Rural

The Study goes on to emphasize differences between urban and rural areas, with Tbilisi at one end of the spectrum and settlements of 1,000 or fewer inhabitants at the other. Tbilisi, the authors indicate, "has the most coverage of telecommunications networks, including four providers of FTTx networks, two providers of xDSL networks, two small providers of FWA networks (one of the FWA networks is based on LTE technology)." In contrast, "The significant majority of settlements of less than 1,000 inhabitants are not covered by FTTx networks (2,247 settlements out of 2,835). In addition, 1,190 other settlements do not have any fixed broadband network of any technology. Only 17% of households are subscribers to FTTx."

The difference is great in other words. And on this basis, the Study arrives at one of its key conclusions, namely, "The real challenge that remains for Georgia is how to be provided broadband connectivity in small, rural settlements for which there remains no economic incentive to build fixed broadband access networks." In pointing this out, however, the Study does not equally emphasize that 17% of households in even the smallest settlements subscribe to FTTx. And, if there is no economic incentive, why is this happening? And which operators are involved?

Moreover, the 17% level rises to 40% in the next category (settlements of 1,000 to 2,000 households), and 50% in the following one (2,000 to 5,000). In other words, operators are investing to reach and serve households in Georgia in areas that the Study considers *uneconomic*. In fact, they are investing in fiber-based extensions of their networks in such areas even as it remains significantly more expensive to do so than to provide coverage via FWA (Moreover, such investment is being largely made by Magticom, as will be explained below.)

The Study also acknowledges that "In Georgia the majority of fixed broadband subscribers are connected to an FTTx network (91%)."

1.3 Bundling of Services

One of the reasons operators are willing to invest in fiber networks in Georgia, even in low population areas is that this accommodates the provision of bundled services in a more secure fashion compared to FWA and other technologies. The resulting mix of services, as the Study notes, consists predominantly of providing both broadband (for internet use) and TV channels. This represents the largest segment of households (49%), followed by those that receive broadband only (39%), with the so-called Triple Play subscribers (combining broadband, TV and either mobile or telephony) adding another 9.4%.8



⁷ lbid., p. 44.

⁸ Ibid., p. 47.

In this context, the Study also raises the key question of "whether a separate market exists for bundles, as distinct from the same services purchased separately." Yet, subsequently, in defining the appropriate market(s) for SMP determination, this point is set aside, as the focus shifts to a single national market.

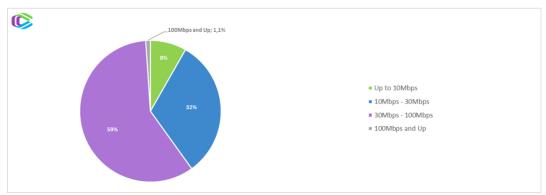
1.4 Service Prices and Speeds

The Study also covers the key aspect of service pricing as well as related speed distinctions. We begin with this latter aspect.

Service Speeds

In addressing the data speeds that various broadband technologies and services provide, the Study differentiates across four levels: (1) up to 10 Mbps, (2) 10-30 Mbps, (3) 30-100 Mbps, and (4) above 100 Mbps.

Graphic: Share of Fixed Broadband Access by Speed Levels (2022)



Source: ComCom, 2023.

As the graphic above indicates, the most prevalent segment in Georgia, in terms of its availability to households is the 30-100 Mbps one (59%) followed by 10-30 Mbps (32%). An accompanying figure in the Study shows how dramatically, the 30-100 Mbps speed category has grown, rising from 12% at the end of 2021 to 59% a year later, suggesting a dynamic market and not a static one dominated by a legacy telephone company, as was the case in several EU countries.

The evidence of significant investment activity (and accompanying risk) is further underscored in the Study's recognition of the predominant role of FTTx technology. This is not a frequent occurrence in countries at Georgia's economic level, yet the Study implies this is a market deficit rather than an outstanding asset.

Service Prices

In terms of service prices for fixed broadband service, the Study provides data that distinguishes across technologies and speeds (download ones, we assume) as well as indicates the difference between the prices offered in Tbilisi and those offered in the regions outside Tbilisi. Notable differences include the following:



⁹ Ibid., p. 48.

- FTTH services, besides involving higher speeds, are generally priced lower than DSL ones and lower than the FWA-WiFi ones, if speed differences are taken into consideration.
- Prices of higher speed services are greater than lower speed ones, ranging between 100 GEL and 10 GEL.
- The prices of FTTH as well as DSL services in Tbilisi are mostly the same as in outside regions except that they are lower in the outside regions in some cases (usually involving the relatively slower speed levels).
- The prices of FWA-WiFi services are generally the same in both areas.
- In addition, there are differences across operators.
- Depending on the speed, Skytel offers up to 20% lower prices for FTTH than do the other operators in both Tbilisi and the regions as does NewNet in one speed category (Tbilisi only).
- In Tbilisi Global Erty offers lower prices as well as higher speed options for DSL service compared to the other DSL operators, with Silknet's prices though substantially higher than Global Erty's in Tbilisi also being lower than NewNet's in two lower-speed categories (also in the regions).
- As for FWA-WiFi there is only one speed level (4 mbps, outside Tbilisi) where two operators are reflected, with Skytel offer service at 20% less than iLink.¹⁰

Overall, however, cases of price competition are limited, as even where two operators have different prices, they may not be serving the same areas. And the Study designates some of the lower price offerings as promotional (i.e. temporary and presumably involving new entrants seeking to establish themselves).

A question the price data raises is whether the lower prices for FTTH outside Tbilisi (at relatively lower speed levels) is due to cost factors, as laying fiber in central Tbilisi may well be more expensive on a per kilometer basis compared to outlying areas. Or, alternatively, is it due to some outlying markets having lower-income households on average, with prices being set in part on this basis? (The only two such cases that are reflected outside Tbilisi in the data presented are Magticom at the 30 mbps level and Silknet at the 25 Mbps level.)

In general, the most significant fact is that FTTH prices are lower than those for non-FTTH counterparts. This suggests that at least in this largest technology- and speed-related segment the market is competitive, as FTTH is likely in general to be a more expensive technology to deploy compared to FWA or DSL. Yet, it is being priced competitively.

1.5 Market Segmentation

There is no single official segmentation of the market presented in the Association Study. However, implicitly, two possible segmentations can be readily deduced. Both are settlement based.

The first of these is the one apparent in Table 1 above. The households served with access to fixed broadband services can be categorized by whether they have zero, one, two, or three or more operators active within their settlements. Or, possibly, the one and two operator categories could be combined, resulting in three segments of 4.9%, 18.7% and 76.4%, respectively.

A limitation here is that "active operators does not indicate as all households having access to that many. In fact, no households may, if, for example, the two operators are each serving different parts of the

¹⁰ Ibid., pp. 58-59.





settlement. Even the possibility that some households may not have ready access to any operators cannot be discounted.

The other potential segmentation, given the ultimate focus of the Study—namely, on the FTTx market, is to look at the main categories that this involves on the coverage level. Here it makes sense to separate the settlements or population not covered by any FTTx networks (i.e. 15.3%) and then, again, separate the remaining ones into levels of coverage—for example, those with one or two active FTTx network operators and those with three or more.

Overall, in determining market dominance, it would seem to make sense to look at all forms of provision of fixed broadband service (e.g. above a certain minimum speed level). Yet the Study does not do this, choosing to focus on FTTx only, which is generally recognized at the most expensive technology to deploy of the fixed broadband options available in Georgia. These options are FTTx, FWA and xDSL, with both of the latter two involving substantially less deployment costs.

Specifically, DSL is a technology that upgrades the capability of a copper-wire network so that it can provide broadband-level service. It does not involve the deployment of an entirely new network. FWA, on the other hand, does generally involve the rollout of a new network but does not involve stringing cables to all the connecting households, often laying them under ground, an expensive process. Instead, the signal travels over-the-air using spectrum frequencies, which calls for deploying transceivers on new or leased poles and not end to end cables.

1.6 Market Definition

In the end, for its purposes, the Study decides to focus on the "high-speed" fixed broadband market and on the FTTx portion of it only. These are, in our view, arbitrary approaches to the market in actual market terms. They seem to be driven by a pre-determined notion of SMP behavior and pre-determined target for SMP restrictions.

In fact, there is a strong argument to define the fixed broadband market as a single market in both technology and speed terms. This was reflected, for example, in the EU's examination of the Orange Spain/Jazztel merger, with respect to which, "the Commission concluded that fixed Internet access services to residential and small business customers, regardless of whether their speed is less or more than 30 Mbit/s and irrespective of the technology used for the delivery of those services belong to the same relevant retail market." Similarly, the Study's definition of the relevant market as "high-speed" and then defining "high-speed" as above 10 Mbps, which the Study in turn uses to justify not treating fixed and mobile broadband as a single market, can be seen as arbitrary.

Perhaps the 10 Mbps limit was set to suggest that only the availability of 5G service in Georgia would make mobile broadband competitive with higher-speed (above 10 Mbps) fixed broadband. Yet, 4G which exists widely in Georgia, can provide much higher speeds than 10 Mbps. For example, according to one source, speeds of 15 Mbps to 90 Mbps are "typical" for 4G (and much higher ones—up to nearly 1 Gbps—can be achieved). Moreover, 5G rollout has also already been undertaken, even though the Study suggests that it will not emerge during the forward-looking period of SMP determination (i.e. three years).



¹¹ See European Commission, Guidelines on market analysis and the assessment of significant market power under the EU regulatory framework for electronic communications networks and services, Commission Staff Working Document, Brussels, 2018.

¹² See, for example, Ken's Tech Tips, November 23, 2018.

Accordingly, there is a basis for seeing the fixed and broadband market as much more integrated than what the Study proposes. While fixed broadband traffic is declining, mobile internet traffic is growing fast. Overall, this suggest competition between these two "segments" of the broadband market—in fact, quite intense competition, which is not reflected when the two markets are separated, as the Study has done.

The decision to focus on FTTx-delivered fixed broadband access versus all fixed broadband is in this respect arbitrary. The effect is to diminish the size of the market being reviewed. A more balanced approach, in our view, would be to examine the broadband market overall, which is growing in several respects, including market size, number of providers, and user options. This would provide a more balanced and valid approach in determining both market dynamics and the degree to which policy objectives—whether increased coverage and access, introduction and availability of diverse and innovative technology, or growth in internet use and traffic—are being met.

2. SMP Determination and Its Implications

So, how does market definition affect SMP determination. To a large extent, as we indicate below.

2.1 SMP Market Definition

Having noted differences in levels of coverage, service provision (including bundling), service prices and speeds, and degree of competition (as reflected in the number of operators in settlements), the Association Study concludes that for purposes of SMP determination, Georgia should be treated as *a single national market*. This is a stark conclusion as well as one the Study seems to contradict when it examines the wholesale aspects of the market (see the related discussion in Section 2.3 below). Moreover, as we explain below, it does not reflect the different market situations in different parts of Georgia.

At the same time, the Study decides that the relevant market is the FTTx one rather than the wider fixed broadband market or the wider still broadband service market, including mobile broadband access. We suggest this is not the only, nor the most reasonable way of defining the market, as we explain further, here below. Again, this has the makings of a predetermined market definition, one that facilitates operator targeting rather than one based on either end user options for accessing broadband or operator options for delivering such access.

2.2 Bases for Determination

Next, we review and assess the bases put forward for the Study's single-market conclusion. We begin with four of the premises that are presented in justifying the single market determination by the Study. 13

1. There are the same legal and regulatory conditions all over Georgia.

This appears to be a rhetorical premise. If, for example, Georgia's market is determined as consisting of several distinct segments, then different regulations could well be applied to these segments. Therefore, this "conclusion" should be re-stated as *for now Georgia applies the same regulations nationally*.

It might also be noted that in general all markets have single regulatory frameworks until they are determined to vary considerably by segment. At that point, the regulations—or, at least, the conditions



¹³ Ibid., p. 73.

under which regulations are imposed—may also vary. To present the single regulatory framework as a basis for concluding there is a single market suggests predetermination of the conclusions being sought.

2. The prices for the same basic fixed broadband FWA packages of certain operators are the same all over Georgia.

This is presented as a basis for uniform SMP treatment of all of Georgia as if the use of separate prices would automatically indicate that different market segments, calling for different SMP-related treatment, were present. In fact, different prices could be rational as could be a sole price.

One basis for price differentiation is the cost of reaching and serving different households or individuals. Overall, the costs are likely to be greater in terms of reaching rural areas but can also be above average in densely populated urban ones (Specifically, the underground placement of cables can involve higher expenses, including on securing various permits, than do above ground installations across rural terrains, even when the distances are much longer in the latter cases.)

Another basis is the likely demand for the service at different price levels. The more the potential subscribers differ, the more they may be best attracted to the service at different price levels. One index of this variation in demand is the *gini* coefficient which measures income inequality in a population. Georgia's level of 34.2 is in the lower to middle part of the range, which goes from the mid 20s to the mid 60s—in other words, it reflects some inequality but not near as high a level as South Africa's index, for example (gini of 63.0). At the same time, Georgia's level is above the average across EU countries, falling in between Greece and Portugal. This suggests a higher-than-average degree of demand variation across population segments and, most likely, geographical areas as well.

Finally, competition is a factor. Where there is more competition, the incentive may be to lower prices. Prices could be higher, on the other hand, in areas without any competition.

In balance, what explains Georgia's largely single price environment? Is it the presence of a single market with similar conditions across the country? The Study's own data suggest this is far from the case, as summarized in the preceding sub-section. It is more likely to be operators' assumption that the regulatory framework calls for uniform pricing, even if this is not an explicit rule and that having different prices in different areas could result in regulatory intervention, whether or not this would make more economic sense.

3. The prices for the same basic fixed broadband xDSL packages of certain operators differ between Tbilisi and other regions for the basic speeds.

According to Figures 28 and 29 in the Study, these price differences reflect Silknet's and New Net's xDSL service offerings at the 2-5 mbps speed levels. The prices are higher in Tbilisi than in the regions. This could be an indication of the demand differences, as any higher costs of laying the copper-pair cables in Tbilisi may no longer have a cost effect because of the time that has passed since their original laying (other than possibly at an ongoing maintenance level). At the same time, it is unclear how or why this is being used to justify a single national market.

4. Although there is different coverage by different operators, there is at least one provider in the higher-speed broadband access market (Magticom) covering most and



¹⁴ See Gini Index, World Bank (data, worldbank.org), 2024.

there are three providers with national coverage that could serve the basic fixed broadband access market (the 3 mobile network operators).

In this last point, the Study emphasizes that one operator (Magticom) covers most of the market and three (mobile operators, including Magticom) "could serve the basic fixed broadband access market." Again, it is unclear how this pertains to the conclusion that "for both basic and higher-speed fixed retail broadband access, the geographical market definitions are national." Similarly, the conclusion that broadband access is a "national" market is not very convincing.

Is the implication we are to draw that if none of the operators covered most of the market SMP would need to be determined separately for separate segments? And what does the reference to mobile operators signify - Substitutability of mobile broadband access for fixed broadband access? If so, why not treat fixed and mobile SMP in conjunction, instead of the separate Association Studies that have been produced?

Correspondingly, given the above depiction of Georgia's fixed service market, it is questionable whether the Study identifies any significant market failure. Yet, the Commission's SMP Guidelines as well as its Recommendations 2020/2245 are clear in this respect—without "market failures" being identified no exante measures should be applied. 15

2.3 Alternative SMP Conclusions

Overall, the operating dimensions of the fixed broadband market are quite different in different segments of this market, including the levels of competition. Accordingly, at a minimum, the market could be divided into three segments, for instance, (1) those where three or more operators co-exist and compete, (2) those with two competitors, and (3) those with only one.

Within this context, Magticom has a significant presence in all three of these segments. However, the nature and contexts of the presence vary across segments significantly, as we will explain, suggesting again that treating the market as a single totality does not make sense. Instead, the question that should be asked is (1) whether Magticom or any other operator exhibiting market dominance in any of these segments, and (2) are there any other, possibly offsetting, policy considerations involved.

Answering these questions is not a simple matter but neither is it simply obvious that SMP exists in any of these segments. For instance, if SMP does exist, why is its presence not accompanied by obvious differences in pricing or other service aspects (e.g. service quality), as might be expected (such as higher prices in the third segment or lower ones in the first)? As for its market share, Magticom's share is highest by far in the third segment (i.e. well over 90%). Does this indicate where the SMP focus should be, or does it mainly indicate how Magticom is contributing to making fixed broadband available widely in Georgia?

In fact, in terms of dominance, Magticom is not taking advantage of its position in this near-monopoly situation. The fact that it is not increasing its price (even for some if not all subscribers) suggests otherwise. At the same time, higher prices might be justified by the above-average capex per subscriber that is likely to be involved in serving more remote rural settlements. In other words, from a policy

¹⁵ See Recitals 154, 205 of the EECC; Paragraphs 9, 12 and 23 of the SMP Guidelines; and Paragraph 17 of Commission Recommendation (EU) 2020/2245, December 18, 2020, on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive (EU) 2018/1972 of the European Parliament and of the Council establishing the European Electronic Communications Code).



standpoint Magticom is in fact helping the government meet its objective of giving all of Georgia access to advanced communications. ¹⁶

As for the remaining two segments, it is hard to ascribe SMP in the first one to Magticom, for instance, given the state of competition. Magticom is not only competing with Silknet in Tbilisi but also with Akhali Kselebi, Global Erty, NewNet, Skytel, and others. We note also that if Magticom is facing heavy competition in Tbilisi and is not preventing competitors—or even single operators in areas with no operator to date—to enter the market, basing an SMP finding on its 53% share of the national market is irrelevant. At the very least, the more than 10% of the market where it is the sole provider should be deducted from the 53% basis of suggested dominance, as there is no indication in the Study that other entrants have been kept out of this segment by Magticom.

Nor is there recognition of the coverage benefits that Magticom provides by extending its networks to the more remote rural parts of Georgia. Suggesting that this reflects its dominance is far from valid consideration. Why would a dominant operator extend its expensive network to parts of the country where network deployment is likely to be costlier than in higher density areas apart, possibly, from extremely dense parts of the largest cities and where demand is likely to be weaker, given the lower incomes of the rural households. We note that prior to Magticom's entry into the fixed market in 2016, FTTx-based internet access was available in 343 settlements. By 2023, it was had expanded to 880 settlements¹⁷, providing service to 965,911 subscribers (Data sourced from settlements with more than 10 subscribers as per Comcom).

Finally, there is the issue of the middle-tier of the market. Yet, even in this "middle" segment, as the pricing assessment in the Study indicates, there is not simply a Magticom-Silknet duopoly. In parts of this segment, these operators also face Akhali Kselebi, NewNet, and Skytel in the FTTH market as well as other competitors like Global Erty and iLink and some 80 others in the FWA portion of the market. In fact, we suspect that, overall, there are more competitors than in EU markets with lower income levels.

As the Study does suggest from time to time, there is also the substitutability of mobile broadband, with Cellfie offering still another service option in a growing number of areas outside of Tbilisi.

3. Considerations Related to Wholesale Market

The Study transition to the wholesale level of the market is significantly affected by its definition of the underlying market, as we indicate below. In contrast, a wholesale market where fixed wireless competition is included, not to mention mobile wireless, would not only include more competitors but would offer more backbone network options as well.



¹⁶ The first objective of electronic communications policy as stated in Article 4 of Georgia's Law of Electronic Communications (2005) "shall be to satisfy the demands of natural persons and legal entities for electronic communications networks and facilities and promote the development of an information-based society." We assume that "natural persons" refers to all persons in Georgia, as emphasized in Article 2 where it states that in implementing the policy, the aim should be to "Ensure provision of equal rights to natural persons..."

¹⁷ Based on ComCom data for settlements more than ten subscribers.

3.1 Forward-Looking Assessment

In providing a three-year, forward-looking assessment of wholesale access in the fixed services context, the Study makes several points, as follows:

- It notes the progress that has been made with respect to telecommunications ducts. By regulating such access (with respect to telecom providers only to date), this has allowed new entrants to establish their networks and services more readily. On the other hand, access to copper pairs has not been secured by alternate operators, indicating a need for regulation.¹⁸ (Incidentally, Magticom does not provide fixed broadband by means of xDSL and does not operate copper pair facilities, so would presumably not be the target of such regulations).
- Even though no regulations would prevent this, it does not expect "significant new players will enter the retail higher-speed broadband access market by building an FTTx network with significant coverage...[as] Building such networks requires high investments with high sunk costs in order to challenge the established players."
- It also does not expect "any [other] players already operating in Georgia will invest in expanding their [FTTx] coverage such that they could effectively compete with Magticom and Silknet." These players hold small market shares and it is "highly unlikely that they will undertake such high investments in order to challenge the two largest players."
- Similarly, it argues that "due to the high investments and the significant time needed for national network deployment, any players not currently operating FTTx networks in Georgia, but having other networks (for example Cellfie)" [are highly unlikely to] switch to FTTx and exert supply-side pressure in the higher-speed retail fixed broadband access market.
- Even with expected "new legal and regulatory measures that aim to stimulate investments by reducing the costs of the development of broadband networks," it is "unlikely that this potential cost reduction will result in significant increases in new and expanded FTTx networks within the three-year time horizon of this market analysis."

The Study concludes that Magticom will remain dominant in the FTTx market and is unlikely to face significant competition other than possibly from Silknet, together with which it will "deny...wholesale access, if requested, and charg[e] excessive retail prices to the end-users." In the process these two operators will be supported by their "well-developed sales and support organization[s]." ²⁰

3.2 Alternative Assessments

The Study itself specifies that "In some EU cases, NRA (National Regulatory Authorities, such as the Romanian one), do not consider that mass market fixed broadband access services (available to both residential and business end-users) constitute separate markets. Within the mass market, there are sometimes options for better service response (for example, faster delivery times and fault restoration) ..."²¹

Furthermore, in Figure 6, it indicates that the "Overlap of FTTx networks with other technologies" is illustrated in that out of 3,605 settlements in Georgia, 2,611 settlements are not covered by FTTx



¹⁸ Ibid., p. 78.

¹⁹ We assume the reference here is to the Broadband Development Strategy of the Government of Georgia for 2020-2025 to -foster the roll-out of high-speed internet. This strategy includes the adoption of the Law on passive infrastructure sharing as well as financing of the rollout of high-speed internet to rural and disadvantaged regions by Open Net.

²⁰ The citations in the above bullet points and here are all from op.cit., pp. 78 and 79.

²¹ The Study, p. 46.

technology or service.²² This appears to be a substantial number of settlements that would still not be addressed in the scenario of SMP designation. At the same time, out of 3,605 settlements, 639 settlements are covered (serviced) by both FTTx as well as FWA technology.

If FWA is being used at the same time as FTTx technology, this suggests it has some advantages (in cost if not other terms) for some operators and that the market benefits from the parallel investments in both technologies, even in some of the same settlements. Overall, the analysis and interpretation of the data that has been gathered is limited—and the focus on FTTx technology is not sufficiently explained, One of the Studies' own subsection titles, "Overlap of Technologies" (Section 3.1.3.2) suggests that multiple technologies form the basis of the market being examined.

At the very same time, the authors of the Study have not considered the implications for the development and widespread availability of FTTx in Georgia [had] the SMP restrictions been imposed earlier. Would fiber broadband subscriptions have reached their high level, even though this has not happened in any of the more economically advanced EU countries, with their presumed SMP-focused regulatory frameworks? (We note that this level is about three times that of the average FTTx subscription level achieved across EU countries, and higher than the EU's FTTx leaders—notably, Spain, Lithuania, Sweden, and Romania.)

Similarly, the Study does not consider the mix of factors that can help advance broadband access, as reflected in our case study of South Korea, the world's leading example of high fixed broadband access and use (see the table below). As the case summarizes, both demand- and supply-side factors are usually involved. In fact, the demand-side aspects can outweigh the supply-side ones, suggesting that SMP in today's context should involve assessments of operators' access to video programming or social media and other apps (or providers of these, such as Google, Facebook, TikTok and others).

Table 2: Case Study of Korean Broadband Development

South Korea leads the world in fiber broadband connections (88% of households in 2022, according to OECD). This has come about due to a mix of supply-side subsidies and incentives as well as demand-side factors, along with some government steps. In fact, Korea's world leading position in household access arose in the early 2000s, a time when Korea still lagged other advanced economies in GDP per capita.

How then was this leading position, which included a very high associated average transmission speed per connection, achieved. Most analyses concluded the driving factors were supply-side ones like population density and broadband deployment subsidies. Our case study in the early 2000s, on the other hand, concluded that the factors underlying Korea's success were as much demand-driven and macroeconomic as supply-based.

In the process, we examined and analyzed the numerous broadband stimulation programs and subsidies (more than 10) of the Korean government as well as industrial strategy aspects, regulation (fostering inter- and intra-modal competition), population density, and demand factors, including the role of interactive video games and online college test preparation programs as well as the related high education level of the youth-centric Korean population (with more schooling years on average than in Japan, Sweden or the United States).

It was these user-related content factors as much if not more than the government subsidies for connecting apartment buildings and outlying areas that, we concluded, were significantly responsible in South Korea's achievement of its leading position in household broadband connections per capita. The expansion of consumer credit following the Asian Financial Crisis of the late 1990s was another

²² Ibid., p. 39 (Figure 6).





factor. Still another one was the high demand for online college preparation course across Korean households, which the broadband connections satisfied along with the demand for video games.

Source: Kalba International, Inc., 2023

Nor does the Study ask why Georgia's FTTx development level is not more reflective of its economic development level and, therefore, more similar to the degree of FTTx take-up that a country like Bulgaria reflects (c. 58%).²³ Conversely, the question should be asked whether imposing SMP-based regulations or attempting to do so-will result in FTTx subscriber levels growing further and the FTTx networks and their associated capacity, quality and coverage improving during coming years or stagnating.

The most likely scenario, we would suggest, is stagnation, as the issues and procedures of developing, contesting and/or imposing the new regulations increase the uncertainties of Magticom, Silknet and other operators investing further resources in their FTTx networks and associated operations. Nor is a substantial new entrant likely to enter the market given such uncertainties, not to mention the GDP level and limited size of the Georgian market.

3.3 Proposed Steps Related to Wholesale Market

The Study does recognize that "the deployment of competing FTTx networks will require substantial time and will not have an impact within the forward-looking timescale of this market review."24 What it proposes as a result is "existing local 'last mile' access to the premises of the end user." Such access, it explains, "could be achieved by a retail service provider with its own infrastructure or by using one or more wholesale offerings from operators having a physical network in the place where the end-user service is required."

The Study adds that "This type of 'unbundled local access' wholesale facility has been widely used in the EU (for example for fixed broadband access using xDSL)." Yet, xDSL, as the Study itself recognizes is not offered by Magticom. Moreover, together with fixed LTE, "xDSL...hold[s]... only 2% of the total number of fixed broadband access connections."25 Moreover, even in the EU (as reflected in Figure 22 of the Study), the share of the market served by xDSL has been declining rapidly. In short, it appears that the Study is suggesting a solution from the EU past rather than one appropriate to Georgia's future.

This is not to suggest that the Study does not also call for the provision of access to existing fiber broadband networks. It does so largely on the grounds that absent such access it would take a new entrant substantial investment and time to create its own backbone and last-mile networks. Accordingly, the Study calls for the existing fiber network operators to open access to their facilities at several levels from the very local stage to the provision of access to the worldwide internet. The underlying justification for this is the time and investment involved and the economies of scale that existing network operators benefit from, especially if they have networks with national or near-national scope.

The corresponding assumption is that the new entity will be able to provide the operating aspects of delivering alternative FTTx service options to end users. Arguably, this is where the Study reflects a limited view on what underlies a successful broadband or other telecommunications service delivery process. For instance, the requisite operational inputs and skills are also subject to economies of scale as well as the limits of market demand.

²⁵ Ibid., p. 53.





²³ Ibid., see figure on p. 55 for EU country FTTP subscriber levels.

²⁴ Ibid., p. 82; this also pertains to the other quotations on this page, unless otherwise indicated.

As the Study does acknowledge, Magticom and Silknet have "well-developed sales and support organization[s]." This as well as staff for dealing with the regulatory, customer care, financing, securing of TV program access for bundled service provision, and other requirements of running broadband networks and related services. And, while newcomers would be scaling up these functions over time, in fact their unit costs would generally be higher at the lower scales involved, given their limited buying power and scale overall. As would be their financing costs (and associated interest rates) even once they scaled up, as they would not have substantial infrastructure to guarantee their loans. ²⁷

On the demand side, a new operator would also face obstacles, even with short-term promotional costs. Among these would be:

- Lack of marketing presence and recognition,
- A limited market in economic and size of population terms,
- Long-term trend of declining population growth rate (-0.5% in 2022), and
- Decline in internet users since 2020.²⁸

These are not trends that support the prospects of new entrants unless, possibly, they can combine effectively with other entities with relevant resources (e.g. utilities, retail chains).

Nonetheless, the Study assumes that new entrants along with, possibly, MVNOs could achieve competitive positions. Yet as we documented in a prior report, the chances for sustained MVNO viability in economies such as Georgia's are low and the challenges for new entrants seeking to be a third national fixed broadband operator are also very significant.²⁹ Even in higher income-level and higher-growth markets such as Hong Kong and Israel, on which we provided case studies, the lag in establishing MVNO access and seeing multiple MVNOs functioning was on the order of five to ten years. The lag with facilities-based broadband entrants, whose investment and operating costs are higher than those of MVNOs are likely to be considerably greater. Yet, the Study offers no "forward-looking" reality checks of this kind.

3.4 Wholesale Market Definition

As with the retail level, the Study concludes that the wholesale access market is national in scope. It does so even though its own description of the market indicates quite distinct segments, including those where the two main FTTx networks are present, those where only one of these is present, those where other broadband service network also exist, those where only such other broadband networks operate (i.e. without either of the main FTTx networks), and those where no fixed operators provide broadband access. (And, in addition, there are various other permutations if the presence of one or more mobile broadband operators is considered, including the independently owned Cellfie.)

Yet, as we have suggested with the basic fixed access market, there is a strong rationale for dividing the wholesale access market into three or more segments. These segments would include (1) areas where only one broadband operator is present, (2) areas with two such operators, and (3) areas with three or

²⁷ The Study does recognize this loan limitation on new entrants on pp. 96-97 when it states: "The lack of availability of loan financing is particularly evident for smaller firms, with the lack of eligible collateral typically part of a firm's inability to comply with banking sector requirements. Financing through alternative capital markets is not yet developed in Georgia. Any local funding would in any case have typically higher commercial lending rates than in the EU, so it is considered that access to financial resources is a significant entry barrier for new investments in Georgia.

²⁹ See BDO LLC and Kalba International, Inc., Introducing MVNOs in Georgia—A Reality Check, June 2020.



²⁶ Ibid., p. 79.

²⁸ See Dataportal Report on Georgia re population and internet user trends, 2023.

more operators. Presumably, these areas would be based in part, at least, on how many operators are subject to wholesale access provision requirements, assuming such requirements were in force.

Nonetheless, the Study asserts its single-market definition. It does so with limited evidence of there being a single equivalent wholesale market, without any reference to any specific cases of entities wishing to secure such access, and without explicit consideration of any alternatives. It concludes: "The market is therefore characterized [without a sufficient basis for a "therefore"] by high and non-transitory barriers to entry due to the very large size of network and investments required to replicate the existing coverage of settlements and households." ³⁰

4. Wholesale Market SMP Determination

Here we will examine the Study's determination of SMP at the wholesale level. This will include our assessment of the bases for this determination as well as the limitations of the single-national market approach, as reflected in Study's and ComCom's approach to SMP regulation in different subsets of the market.

4.1 Basis of SMP Determination

In applying the three-criteria to wholesale access market (referring to it in general as much as specifically to Georgia), the Study concludes that the first criterion, the presence of impediments to entry, is met on the bases that "the markets for wholesale local and central access are characterized by high and non-transitory structural barriers to entry due to the very large size of the network and the correspondingly large investment that would be required to replicate it. [In sum] the structural barriers to entry are high and non-transitory."³¹

In addressing the second criterion, namely that the market is not tending towards competition, the Study examines Georgia's market structure, market dynamics, and wholesale agreement terms, and concludes that all of these are currently deficient. On the last factor, it notes there are no commercial agreements in place and no related ex ante regulation.

As for market dynamics, the Study does recognize a dynamic transformation of the market when Magticom acquired Delta-Net in 2018. This is when its internet subscriber base rose from less than 3,500 subscribers to more than 180,000 subscribers (though still below Silknet's 250,000 subscribers at the time). What the Study does not recognize, however, is that such an event could occur again, even within the three-year range of its forward-looking assessment. Nor does it explain the dynamics of Magticom's rise during the next two years to a position well ahead of Silknet in subscriber terms.

This did not happen due to new regulatory measures being imposed. It happened because of competitive management and decision-making. In fact, the limited price competition that the Study points to underscores the impact of other business decisions and resources. Yet the Study concludes that "in the absence of wholesale regulation...Magticom will remain the only player with significant coverage in Georgia." On this basis one can only wonder if the Study, had it been prepared ten years earlier, would not have arrived at a similar conclusion regarding Silknet's dominance or, alternatively, the long-term duopoly of Silknet and Caucasus Online.

³¹ Ibid., p. 97.



³⁰ Ibid., p. 96.

³² Ibid., p. 102.

As for market structure, the Study emphasizes that existing FTTx competition is limited to settlements of 40,000, which have three or more operators. Another 15% is limited to one or two operators, and the final 15% has none. Yet, the Study suggests the two main operators will extend their coverage to some of these remaining areas where they are not yet present, implying that smaller operators will focus on the larger settlements, as would, presumably, a new entrant. This is meant to support the Study's conclusion that effective competition (the second criterion) cannot be counted on in the next few years and that the means to achieve effective competition is to add another, most likely, small player and/or to reduce Magticom's share.

At the very same time, the Study argues that it is only with the introduction of wholesale access regulation that other entrants will start to serve the currently unserved or under-served (limited to one or two network operators) settlements of Georgia. It does so after presenting market evidence that the smaller operators are focused on the larger markets, with more of them serving Tbilisi than any other settlement.

4.2 Contradictory Evidence

As we have suggested, there remain a number of bases for challenging the Study's SMP conclusions. To begin, a move to regulate wholesale access could reduce the activity of both the larger operators and the smaller ones in the less populated areas of the country. It could also reduce the likelihood that settlements where no FTTx is currently available, 2,611 out of 3,605 total settlements in Georgia, will receive access to the technology (or any fixed broadband) compared with their current prospects.

This has largely been the case within EU countries, where less access to FTTx networks has been generally achieved than in Georgia. This could well become Georgia's fate with the added regulatory limitations and uncertainties of wholesale access regulation and SMP determination. Again, at a minimum, a multi-year stalemate can be expected as has been the case with the relatively easier introduction of MVNOs.

In arguing that wholesale access regulation is needed, the Study also considers how the various operators have been experiencing growth (or declines) in their high-speed broadband subscriber bases. Overall, it shows that a stronger rate of growth has resumed in 2022 after declining in 2021. In fact, Silknet's growth in net subscribers was larger in 2022 than Magticom's. Nonetheless, the Study projects that Magticom will continue to serve more than 50% of high-speed broadband service subscribers (vs. 54.8% in 2022) for the foreseeable future and therefore should be subjected to SMP restrictions.

At the same time, it is important to note that the Study does not properly assess and identify "market failures" which are usually considered a *precondition* for the imposition of ex-ante SMP obligations. Specifically, the "market analysis procedure" called for should have identified "market failures" as referred to in the EECC and in the SMP Guidelines. In performing the market analysis and definition, regulators are meant to analyze to what extent *alternatives* form part of the market in question. Instead, the Study labels these alternatives, whether fixed or mobile, as parts of entirely separate markets.

In addition, the SMP judgement is rendered without [considering] the negative impact that SMP measures (when initially proposed and when subsequently implemented) could have on Magticom extending broadband access to areas without it (as it has done significantly more than any other operator) nor to any pressures it may create for price increases, lower-quality service, delays in upgrading facilities to provide higher-speed services, or even to the financial viability of the smaller broadband network



³³ Please refer to paragraphs 9, 12, 20 and 75 of EU SMP Guidelines of 2018.

³⁴ See Article 67 (1) of the EECC.

³⁵ ERG public consultation document from 2005, page 7.

operators. It is simply assumed that the market will improve, even as ComCom in its annual report suggests that Georgia's broadband market is very well developed.

Another point about the Study's inability to recognize market success and service performance is its suggestion that Magticom's higher subscriber take-up rate in areas where Magticom provides service reflects its larger size and broader coverage overall. Unfortunately, the authors may not fully grasp that this very same wider coverage and higher take-up rate indicates that Magitcom is likely to be serving lower-income households (i.e. in its peripheral coverage areas) and/or ones with less inherent demand (i.e. the relative latecomers in taking up broadband service that it seems to attract) on average than its competitors are.

By the same token, a new entrant is likely to face the choice of serving relatively marginal subscribers in (1) areas with existing operators or (2) as-yet unserved areas. Also, their prospects will be more limited as they will not have the scale and other offsetting factors that Magticom or Silknet can rely on. The effects of such generic challenges are reflected in the third operator's (i.e. Akhali Kselebi) "decline in its market share over the last 5 years from 9.4% to 6.3%." As the Study notes, "This illustrates that there are real barriers to expansion already in place." Yet, the Study disregards these barriers as affecting a new entrant and disregards the challenges an entrant would face in competing with existing operators in terms of price and service quality, not to mention coverage.

4.3 Targeting Magticom

In its concluding statement on Magticom's SMP, the Study stresses "Magticom's high market shares (using both its corresponding downstream retail market share and its FTTx coverage capacity)." It also adds the following considerations:

- The existing barriers to market entry and expansion evidenced by the lack of significant competition and potential competition within a forward-looking timescale of 3 years,
- Magticom's absolute and relative size compared to its competitors,
- Magticom's control over infrastructure not easily duplicated by its competitors in terms of the required national coverage,
- Absence of countervailing buying power and Magticom's lack of incentive to conclude long-term and sustainable wholesale agreements,
- Magticom's significant economies of scale and scope gained through its national infrastructure for both fixed and mobile services, its national distribution channels, and vertical integration.

The implication is that its size and the management capabilities that produced this are somehow threatening to Georgia—and, presumably, to its citizens. It is as if size itself represents a type of market power that is harmful, which is hard to claim given the benefits in terms of coverage, data speeds, and price that Magticom has brought to the market.

The initial basis for seeing large telephone service entities as inimical to a country's interest was not size per se. It was the high prices they charged, the poor service they provided, their hesitancy in adopting new technology, and/or their refusal to serve some households. As the entities typically held 90% or higher market shares, size was used as a proxy of their negative implications for their societies.

³⁶ Ibid., p. 116.





But it was not size per se that was the factor, as some of the most innovative developments in the electronic communications sphere worldwide attest. ³⁷

Does Magticom generally charge higher prices? Does it provide lower quality service? Does it delay the introduction of innovative technology compared to the other operators? Does it underserve outlying settlements? These are the questions the Study should be addressing yet disregards.

4.4 Competition Across Areas

The Study does itself recognize quite distinct market areas when it considers their relevance to smaller operators after the introduction of wholesale access conditions. It effectively divides them into "contestable" areas where the small operators have reached a certain presence and can then deploy their own networks, the uncontestable ones, and those where no operators are present.³⁸ And it concludes that this may call for different regulatory remedies in these areas.

Moreover, the Study adds that the focus on FTTx calls for a "threshold of 3 or more operators." It justifies this by indicating that Silknet and Akhali Kselebi target "municipality centres or more populated settlements." It does not explain, however, how an additional FTTx operator that served only or primarily municipality centers and more populated settlements would make a structural difference, turning what is in its view an uncompetitive market into a competitive one. Nor, once more, does it recognize the public value of Magticom serving outlying areas and less populated settlements with its fiber network and not as a rule charging more for its service in such areas. Is the purpose of the SMP determination to limit its contributions in this regard?

Nor does the Study recognize that Magticom's market shares have decreased or offer any interpretation or analysis of such developments.³⁹ Instead, it goes on to indicate that meeting the single benchmark of three FTTx operators does not by itself constitute sufficient evidence that effective competition exists. And it adds the following long set of additional criteria:

- Magticom should not have more than 40% of the subscribers.
- The third operator should have at least 10% of the overall subscribers.
- The third operator should have at least 10% of subscribers in all settlements with more than 100,000 inhabitants (i.e. Tbilisi and Georgia's three other largest cities);
- The third operator should have at least 10% of the subscribers in settlements with more than 20,000 inhabitants on the basis of a forward-looking projection (i.e. three years in advance);
- The second operator's network should cover at least 80% of the premises and the third operator at least 20%.

In effect, the Study is acknowledging a multi-segment market rather than a single national market, as premised in its underlying definition. At the same time, the potential submarket options it allows, along with the possibility of subsets changing from one category to another, are virtually infinite.

³⁹ Ibid., see Figure 35 on "Market shares on the retail higher-speed fixed broadband access market - trend."



³⁷ As examples we cite Telcel's initial development of prepaid service in Mexico (before it was available anywhere) in the face of the country's financial crisis in the early 1990s, NTT DoCoMo's establishment of an app ecosystem in Japan circa 2000 (well ahead of Apple's smartphone's smartphone ecosystem), and Safaricom's introduction of mobile money service in Kenya in 2007 are all examples of large operators' positive contributions. These same operators also provided wider service coverage in their respective markets than did their competitors and did not charge higher prices. In other words, it is not size itself that is the danger but how size is exercised.

³⁸ Ibid., pp. 125-126.

4.5 The Study's Conclusions

In the end, after applying the above criteria to Georgia's settlements and considering the number and market shares of the competitors, the Study concludes that the "non-contestable"—and thus subject to wholesale access requirements—portion of the market consists of three segments:

Cluster I: The *not contestable* settlements that should be regulated with *a full set of remedies*. They encompass 2.7 million households or 74.2% of the population, with Magticom present in over 90% of this portion of the market.

Cluster II: The small settlements that "tend towards contestability" with only 0.55% of the population. In these areas "lighter ex ante regulation" should be applied.

Cluster III: Clearly contestable settlements where only the lightest regulation should be applied. The areas involve only 0.68% of the population.

In sum, with small exceptions, the full set of remedies (reviewed below) are to apply to about three quarters of the national market in population terms. Nonetheless, in broad term, the market can be segmented into three parts, those the authors of the Study consider not contestable, those where no FTTx exist, and the small remainder in between.

5. Proposed Regulatory Remedies

The above conclusions and the remedies we review below are based on the *potential* existence of unmet demand for wholesale access. However, we note that the Study does not mention any operator or service provider having indicated its interest in such access to ComCom or to any other authority in Georgia. Yet remedies are to be imposed, presumably even if such demand does not exist and even if they may disrupt a market that otherwise reflects a remarkable level of FTTx deployment and use.

In assessing the proposed remedies below, we note also that there is no real indication of how the effectiveness of the remedies will be measured. The implication is that Magticom's market share will decline. Yet, what if this does not occur (Especially, if it does not occur after the recent decline in its share without the remedies). There is no indication of there being a Plan B. More importantly, this underscores how remedies may simply reflect a need to take an action rather than an understanding of the actual drivers of market growth and market share.

5.1 The Proposed Remedies

Like the clusters that have been demarcated based on "contestability," three corresponding clusters of remedies are presented in the Study, as proposed by ComCom. These are as follows:

Cluster I:

- Access
- Non-discrimination
- Transparency
- Cost accounting and price control
- Accounting separation,

Cluster II

- Access
- Non-discrimination
- Transparency



- Cost accounting and price control
- Accounting separation, and

Cluster III

Access

Cluster 1, the Study explains, only applies to cases where Magticom is present, while the other two clusters are not similarly limited. It goes on to explain each of the remedies in some detail. Meanwhile, other operators providing broadband access in settlements where Magticom is not present, are not being even requested—if not required—to provide wholesale broadband access.

5.2 Access Conditions

In the case of access, the Study calls for this to be provided on a transparent basis and to entail either fiber unbundling or VULA (as explained in the note) as well as wholesale central access (i.e. bitstream access) at a national or regional level along with separate virtual channels for IPTV, VoIP, data traffic and other services.⁴⁰ In the process the FTTx operator should also:

- "Make open access available for technical interfaces, protocols or other key technologies that are necessary for the interoperability of services...";
- Provide third parties the access to the ancillary services (physical infrastructure ducts and poles; optical fiber without transmission equipment (i.e. dark fiber); leased lines service based on xWDM or Ethernet technology);
- Enable usage of the access seeker's own CPE (for example modems) which are technically compliant;
 [and]
- Provide access to operational support systems or similar software systems necessary to ensure fair retail market competition...[for monitoring, fault repair, network coverage and service availability]... in B2B format that is easy to manage, control and update."⁴¹

The above conditions apply in general to both Custer I and II situations. As for Cluster III, the obligations are more limited, namely "To negotiate in good faith with operators seeking central access and...respond to any reasonable request within 6 months, in the case of reasonable demand." The reasonableness of such requests is to be based on Article 36 of the Electronic Communications Law, with any dispute settlement procedure to follow Article 19(1) of the Law, which addresses interconnection and related aspects.

What applying the conditions will mean in practical terms is difficult to address without undertaking an assessment of how the networks involved are constructed, equipped, managed, and overseen in data monitoring terms—both those providing the wholesale access and those requesting it. In general, however, the implication is that considerable effort and costs may be involved in making them readily





⁴⁰ Ibid. "VULA" is defined in Annex 2 (p. 197) as "mean[ing] the provision of an active access line by terminating the subscriber line on the optical line termination (OLT) equipment of the access provider, with the access seeker able to connect directly to this equipment at local exchange level where, similar to LLU, the handover will take place and therefore avoid the access provider's aggregation network. VULA may as well apply on copper lines."

⁴¹ Ibid. pp. 164-165.

compatible with each other, especially if different technologies (or even the same technologies but different suppliers thereof) are involved.

Meanwhile, it raises [the question] whether the Study and ComCom have considered the associated adjustment and implementation costs.

5.3 Non-Discrimination and Transparency

Non-Discrimination

Here, a variety of specific requirements are delineated to ensure equal treatment and conditions for wholesale access users in the context of Clusters I and II, with Cluster III not being subject to these (but simply to commercial negotiations). In addition, key performance indicators are specified, including the number of requests received by transmission speeds, the number of repaired faults within and outside the defined time, and twelve others in all.

There is also reference to a margin squeeze test that is to be published on ComCom's website. The purpose of the test is to assess the presence of price discrimination. More specifically, the test is to determine "that the retail price of the SMP operator for a given service must not be less than the sum of the wholesale cost of the SMP operator for that service plus the own-network cost of the access-seeker for that service plus the retail cost of the access-seeker for that service."⁴²

This so-called non-discrimination test implies that if the access-seeker is inefficient or lacks any economies of scale, the SMP operator may be required to price its services higher than it has in the past. Can this really be the result of a rational policy aimed at providing the largest number of end users access to high-speed broadband service at the most reasonable price? It has the markings of its opposite.

Transparency

Once again, the list of related obligations is long. The requirements underlying the reference offer called for has 17 separate elements, with 19 additional sub-elements. These range from reasonable "lists of available access points" to undefined "specifications of equipment to be used on the network" to more obtuse requests for "cost of creating technical solution" (as there could be a near-infinite number of such solutions).

The 36 separate elements referred to reflect the complexity of the wholesale accessing process that is being outlined. It involves more than any common notion of transparency. This in turn raises the question of the additional costs being imposed and its effects on the prices that end users could face in the future, ultimately reducing the number of [users who can afford] the service. (Alternatively, if prices do not increase, complaints about service quality could do so). Plus, ComCom [may incur higher] costs in monitoring the process and in responding to user complaints within the more complex operating structure that would result from the SMP remedies being imposed.

⁴² Ibid., pp. 166-169.





5.4 Price Control and Cost Accounting

In broaching the subject of cost control, the Study admits there is no easy way to ensure that prices are not set below costs to limit competition. This is why ComCom has imposed the numerous other steps described above—to help assure that such anti-competitive pricing does not occur.

Another condition that is imposed is for local access to be charged at a single price regardless of speed and not including backhaul service. Similarly, Ethernet and IP level access (regional or national) should be charged a single price regardless of speed, with backhaul being separately added. Yet, we assume that backhaul, provided on the basis of "wholesale access," could be charged differently depending on the speed to be provided and the route involved. How would new entrants or existing operators resolve this imbalance?

As for Cluster II situations, "No maximum cost-oriented price for local access...will be defined, but a margin squeeze test could be applied ex-post and the test should be based on the "reasonable efficient operator" model. Here reference is made to the formula from "BEREC Guidance on the regulatory accounting approach to the economic replicability test (i.e. ex-ante/ sector specific margin squeeze tests)...[which] specifies that the SMP operator's retail price cannot be less than the sum of the SMP operator's wholesale service costs plus the access-seeker's own network costs plus the access seeker's retail costs.

In addition, Cluster II calls for "Defin[ing] prices for using wholesale central access (bitstream access) services (for all one-off and recurring fees)...[to] include all central access services in accordance with the access obligation..., special virtual channel services..., [and] ancillary services...⁴³ As for Cluster III, "Regulatory obligation of price control is not imposed which means that there are no ex-ante obligations." In other words, "Wholesale charges are determined by free commercial negotiations."44

Finally, the Study refers to ComCom's proposal that the SMP entity be required "To keep separate accounts for the services of local and central access (including ancillary services) [as] defined in this market analysis."45 This requirement would not apply with respect to Cluster III.

6. EU Market & Policy Comparisons

In this last section of the Fixed Services part of this report, we examine the differences between the market situation in Georgia and the proposed SMP measures, on the one hand, and [the practices that] exist in the EU market and [its] competition polic[ies] (as implemented), on the other. These differences are rarely acknowledged in the Association Study. Yet, their acknowledgement is an important input to assessing the Study's outlook and recommendations.

6.1 Comparisons with EU Markets

We begin by noting some differences between Georgia as a broadband market and as an economy and the EU countries that represent the reference context for the Study.

⁴⁵ Ibid., p. 177.





⁴³ Ibid.; see pp. 174-175 for the citations related to Cluster II.

⁴⁴ Ibid., p. 176.

Market Results

In terms of Georgia's fixed broadband market, it is more advanced, as we have seen, in some respects than that which exists in most EU countries. For example, a similar proportion of households being connected to fiber networks is rare across the EU. Specifically, we note that only Spain and Sweden have more than 80% of their broadband subscribers connected to fiber networks. On the other hand, most EU countries have less than 50% of broadband connections served via fiber networks with the five of these falling below 12%.⁴⁶

This, in turn, raises questions of how the Georgian market should be approached in terms of determining SMP. And, correspondingly, whether EU-based approaches, stemming from markets dominated by classical legacy copper-wire telephone service providers are applicable to Georgia's economic and technological context. These underlying issues and questions have been overlooked in the Association Study.

Presence of DSL

Georgia varies in other respects in comparison to most EU countries, where often extensive areas covered only by DSL exist to this day. In Georgia only-DSL areas represent only 0.1% of all households and even less of the population.⁴⁷ This reflects the generically different structure of the Georgian market, without as strong a legacy presence of a copper-wire based operator as is the case in most EU markets. Yes, Silknet is in some respects the equivalent of the typical EU DSL-using legacy operator, but its share of the market is lower than held in the past or even today by most EU legacy telephone service providers.

The Study does not recognize the implications of this factor, which calls for a different approach to SMP assessment in Georgia compared to the classical EU context.

Bundled Services

Nor is Georgia's relative distinction in providing bundled cable TV services acknowledged. Again, unlike the legacy markets of Europe and North America, where cable TV operators were typically distinct entities (i.e. distinct from the telephone companies), in Georgia they are blended operators.

Such blending has been occurring in recent years within some of the EU markets, with the cross-border expansion of legacy phone companies (e.g. Deutsche Telecom, Orange, Telefonica) and of non-legacy entities providing mobile services (e.g. Vodafone) as well as some mergers with cable TV providers (e.g. Liberty TV). In Georgia, it is relatively more fundamental to the market.

6.2 Inconsistencies with EU Policies

Certainly, EU regulators have designated many of their fixed operators as exhibiting SMP. However, these have usually been the traditional fixed telephone operators that began with 100% (or close to 100%) shares of the fixed market. Also, determinations of SMP in the fixed service sector by national EU regulators, as then reviewed by the EU, are usually based on all fixed line connections. By comparison,





⁴⁶ OECD Broadband service market statistics (http://www.oecd.org/digital/broadband/broadband-statitics/); see percent of fiber connections in total fixed broadband, Dec. 2022.

⁴⁷ Ibid., p. 40.

the suggested approach for Georgia—namely, the focus solely on FTTx service connections—appears selective.

This selectivity is not only based on service speed levels but also on the technology employed. To our knowledge, such technology based SMP assessments are highly unusual in the EU context. Moreover, this approach marginalizes xDSL and FWA alternatives as well as the operators that provide broadband services using these technologies. It also exempts competition that may be provided over mobile wireless connections. Overall, this disregards the competitive roles of Silknet and Cellfie as well as Global Erty, iLink and some 80 others FWA providers, not to mention those offering VoIP services.

At the same time, we note that the SMP determinations in some EU countries, based on wider definitions of the market, have been determined as not valid by the courts, even where the main operators hold considerable market shares (e.g. in Finland and Sweden). In almost all the cases where a single operator has been designated as having SMP, the operators involved have been the original legacy operators of their respective countries.⁴⁸ All of this once again emphasizes the largely unique market and operator conditions that prevail in Georgia.

Nonetheless, the Study imposes a top-down view of the Fixed broadband market as a single national one. In contrast, according to an assessment of the EU's SMP guidelines, "Geographic analysis should be designed as bottom-up, with the market delineation arising from local conditions of competition, avoiding top-down starting points such as a single national market by default or a national-minus market." Such a bottom-up approach is specifically called for by the European Commission, which has stated that "geographic areas...which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different...face appreciably different conditions of competition..." ⁵⁰

Correspondingly, the extensive availability of FTTx in Georgia (at higher levels than in EU countries), including its presence in many rural areas, is not recognized by the Study as calling for a different regulatory response than one of SMP determination. Nor is there recognition that, overall, there has been limited use of SMP determinations with respect to securing wholesale access in EU countries in recent years. In fact, the trend has been in the opposite directions, especially at the EU level. In part, this is due to the other definition of SMP, namely, the EU's "Single Market Programme." Increasingly, the need for larger, multi-country mobile operators has been seen as important for technology innovation and adoption purposes and even for regulatory harmony across the EU's many countries.



⁴⁸ Exceptions include Lithuania and Portugal. There is also one case where two operators were designated as having joint dominance (KPN and Vodafone/Ziggo in the Netherlands), a decision that was revoked by the Dutch Trade and Industry Appeals Tribunal.

⁴⁹ Copenhagen Economics, Review of SMP Guidelines, prepared for ETNO—European Telecommunications Network Operators' Association, September 25, 2017.

⁵⁰ In doing so in 2020, the Commission refers to Article 64(3) of the Competition Code.

ASSUMPTIONS AND LIMITATIONS

The general assumptions and limiting conditions pertaining to assessment stated in this document are summarized below:

- The information presented in the report will be used by the Company for managerial decision-making purposes and the Company also may submit the report to Georgian authorities and to the Commission.
- This report is based on the latest information made available to us before completion of our work (23 April 2024) and we accept no responsibility to update it for events that take place after the date of its issue.
- Our findings should be considered as valid for a certain time interval and may be subject to updates. We are not in position to guarantee the realization of any estimates shown in the report, although they have been prepared with an utmost care and on the basis of the information presented to us by various sources during the research phase.
- To the best of our knowledge, the statements of facts contained in this document, upon which the analysis and conclusions are based, are true and correct. Information, estimates and opinions furnished to us and contained in this document or utilized in the formation of the conclusions were obtained from sources considered reliable and believed to be true and correct.
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