UCC Market Definition and Market Power Assessment

Final Project Report

By Cartesian
12 March 2015

Prepared for:

UGANDA COMMUNICATIONS COMMISSION
Version History

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<td>Cartesian</td>
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<td>13/1/2015</td>
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</table>
1. **Introduction**

1.1 This document summarises Cartesian’s activities in the definition and assessment of markets in the Uganda communications sector, conducted in 2014 for the Uganda Communications Commission.

1.2 The UCC’s overarching objective of the exercise was to identify relevant markets in the broadcast and telecommunications sectors and to then assess a subset of those markets to determine whether significant market power exists.

1.3 In addition, the UCC sought guidance on the regulatory safeguards and remedies that could be applied against identified and potential market failures. Finally, a framework for the review of mergers and acquisitions was required.

2. **Project Scope and Objectives**

2.1 The UCC engaged Cartesian to provide support in a review of markets in the Ugandan communications sector. The scope of the project covered three major activities:

- Definition of markets within the Ugandan communications sector;
- Assessment of relevant markets for significant market power; and,
- Identification of regulatory remedies and safeguards.

2.2 The primary focus of the project was the telecommunications sector in which Cartesian assessed seven markets for significant market power (SMP). In addition, Cartesian completed a high-level review of the broadcast sector.

2.3 The key objectives of the project were as follows:

- To establish a framework for market definition in the communications sector;
- To apply the framework to define broadcast and telecommunications markets;
- To identify which of the markets were relevant for ex-ante regulation;
- To establish a framework to assess markets for SMP;
- To apply the SMP assessment framework to evaluate selected, high-priority markets;
- To identify potential ex-ante remedies to address observed competition issues;
- To develop a framework for assessing mergers and license transfers; and,
- To transfer knowledge to the UCC team through a series of workshops.

2.4 Cartesian collaborated closely with the UCC team throughout the process to facilitate knowledge transfer and handover. Cartesian also engaged with industry stakeholders at critical points throughout the course of the engagement.
3. **Project Approach and Deliverables**

3.1 The project was divided into three modules as follows:

1. Market Definition
2. Competitive Assessment
3. Regulatory Implications

3.2 The activities and deliverables of each of these modules are summarised below. Key findings and conclusions for each of the core deliverables are documented in the following sections of this report.

**Module 1: Market Definition**

3.3 Cartesian conducted the following activities in the Market Definition module:

- Kick off and planning;
- Research and data collection;  
- Development of market definition framework; and,  
- Definition of markets.

3.4 The deliverables from this module were as follows:

- Inception report;  
- Stakeholder questionnaire and data gathering forms;  
- Market definition report; and,  
- List of relevant markets.

**Module 2: Competitive Assessment**

3.5 Cartesian conducted the following activities in the Competitive Assessment module:

- Development of market assessment framework;  
- Stakeholder discussions;  
- Assessment of selected markets; and,  
- Development of conclusions regarding SMP.

3.6 The deliverables from this module were as follows:

- Market power assessment framework; and,  
- Market power assessments for each of the selected markets.

**Module 3: Regulatory Implications**

3.7 Cartesian conducted the following activities in the Regulatory Implications module:

- Identification of remedies and safeguards;  
- Development of merger and licence transfer framework; and,  
- Finalisation and handover.
3.8 The deliverables from this module were as follows:

- Regulatory remedies and safeguards report;
- Merger and licence transfer framework; and,
- Final project report.
4. Market Definition Framework

Overview

4.1 The purpose of the Market Definition Framework is to provide the UCC with a structured approach to identifying and defining relevant markets in the Uganda electronic communications sector.

4.2 The approach to defining relevant markets starts with a larger number of candidate markets. These candidate markets are reduced down to the relevant markets based on:

- An initial, high-level assessment of the effectiveness of competition in the candidate markets;
- Relationships and dependencies between downstream retail markets and key inputs from upstream wholesale markets, which may suggest that any issues with the performance in a downstream market is caused an issue with an upstream input;
- Relative value and size of the market; and
- Strategic relevance of the market to the development of the electronic communications sector in Uganda.

4.3 It is important to note that the market, as defined in a market review, must be disambiguated from what licensees may refer to as their ‘market’: the area in which they sell their products or, in a larger sense, the industry or sector in which they operate.

Market Definition Process

4.4 The Market Definition process follows four main steps, as follows:

1. Data Gathering and Research
2. Defining Candidate Markets
3. Identifying Relevant Markets
4. Updating Market Definitions

4.5 The activities in each of these steps is outlined below.

Data Gathering and Research

4.6 The first step in the market definition process is the gathering of data and insight from internal and external sources. Typical sources of data include:

- Market data (e.g. quarterly reporting from licensees);
- Stakeholder interviews;
- Formal information requests;
- Consumer research;
- Financial reports.
Defining Candidate Markets

4.7 The process of defining candidate markets follows from the data gathering and research step. The market definition process identifies all those products and services that are found to be effective substitutes for the products and services that are the focus of an analysis.

4.8 Market definition is not a mechanical or abstract process but requires an analysis of a wide range of evidence to identify whether or not consumers treat goods or services as substitutes, and whether firms have the potential to enter a market and compete.

4.9 The Market Definition Framework recommends that the Hypothetical Monopolist Test (HMT) be used to analyze substitutability. The Hypothetical Monopolist Test (HMT) is a conceptual test used to identify those products that are substitutes, if any, and therefore define the size of the market. It involves identifying a product or group of products and a geographic area in which these products are sold such that a hypothetical profit-maximising firm, not subject to price regulation, would impose a 'small but significant and non-transitory increase in price' (SSNIP), assuming the terms of sale of all other products are held constant and prices are currently at the competitive level.

4.10 The Framework recommends that market definitions consider the following dimensions:

- Product dimension: the products supplied and purchased
- Geographic dimension: the geographic area from which the products are purchased or supplied
- Supply chain: the level in the supply chain at which the product is supplied
- Customer dimension: the different customer types within the market

Identifying Relevant Markets

4.11 Following the definition of candidate markets, each market must be assessed to determine their relevance to the market assessment phase.

4.12 The assessment of each market is essentially a consideration of the susceptibility of each to competition issues that are best addressed with ex-ante regulation (i.e. regulation designed to prevent the occurrence of competition issues or to reduce the impact of any anti-competitive behaviour in that market).

4.13 To assess whether or not a market is susceptible to ex-ante regulation to address market failures, a three criteria test is recommended. These three criteria are:

- High and non-transitory barriers to market entry;
- No tendency toward competition in the candidate market in the relevant time horizon; and
- Insufficiency of ex-post competition law to address failures in that market.

Updating Market Definitions

4.14 Given the speed of change of technology and business practices in a number of markets, definitions may require updating in subsequent market reviews. The Framework recommends that market definitions are revisited in subsequent market reviews, typically conducted after 2 to 3 years.

4.15 This process will start with the first step of the market definition process, data gathering and research, to understand how new technologies, practices, and other changes have altered market and competitive dynamics since the last review.
5. Relevant Market Report

Overview

5.1 The Relevant Market Report describes the defined markets and sets out the supporting evidence for the market definitions.

5.2 The markets defined in the report were presented to external stakeholders and comments on the definition were collected as a part of the engagement. This provided external stakeholders the opportunity to comment on the proposed definitions.

Market Definition

5.3 The scope of the market definition exercise in the telecommunications sector included fixed and mobile retail services as well as upstream wholesale services and infrastructure. In total, 23 candidate markets were defined.

5.4 The candidate markets were then analysed to determine which ones were relevant for SMP assessment. The analysis determined that there are 13 relevant markets.

5.5 The table below summarises the 23 markets and identifies the 13 that were determined to be relevant.

<table>
<thead>
<tr>
<th>#</th>
<th>Product</th>
<th>Type</th>
<th>Geography</th>
<th>Customers</th>
<th>Relevant Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mobile Access, National Voice Calls and SMS</td>
<td>Retail</td>
<td>National</td>
<td>Consumer and business customers</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Broadband Internet Access from a Mobile Terminal</td>
<td>Retail</td>
<td>National</td>
<td>Consumer and business customers</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>PSTN Access and National Voice Calls from a Fixed Location</td>
<td>Retail</td>
<td>National</td>
<td>Consumer and business customers</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>Outbound International voice calls</td>
<td>Retail</td>
<td>National</td>
<td>Consumer and business customers</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>Broadband Internet Access from a Fixed Location</td>
<td>Retail</td>
<td>National (Potentially multiple sub-national)</td>
<td>Consumer and business customers</td>
<td>Yes</td>
</tr>
<tr>
<td>6</td>
<td>Business Dedicated Internet Access</td>
<td>Retail</td>
<td>National</td>
<td>Business customers</td>
<td>No</td>
</tr>
<tr>
<td>7</td>
<td>National Leased Lines</td>
<td>Retail</td>
<td>National</td>
<td>Business customers</td>
<td>Yes</td>
</tr>
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Figure 1: List of Candidate Markets and Indication of Relevance
<table>
<thead>
<tr>
<th></th>
<th>Service Description</th>
<th>Type</th>
<th>Scope</th>
<th>Required Access</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>International Leased Lines</td>
<td>Retail</td>
<td>National</td>
<td>Business customers</td>
<td>No</td>
</tr>
<tr>
<td>9</td>
<td>Call Termination on Mobile Networks</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed mobile and fixed CSPs</td>
<td>Yes</td>
</tr>
<tr>
<td>10</td>
<td>Call Termination on Fixed Networks</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed mobile and fixed CSPs</td>
<td>Yes</td>
</tr>
<tr>
<td>11</td>
<td>SMS Termination</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed mobile CSPs</td>
<td>Yes</td>
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<tr>
<td>12</td>
<td>International Voice Transit and Termination</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed mobile and fixed CSPs</td>
<td>No</td>
</tr>
<tr>
<td>13</td>
<td>Internet Transit</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed fixed, Internet and mobile CSPs</td>
<td>No</td>
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<td>14</td>
<td>International Transmission</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed fixed and mobile CSPs</td>
<td>No</td>
</tr>
<tr>
<td>15</td>
<td>Leased Line Trunk Segment</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed mobile and fixed CSPs</td>
<td>Yes</td>
</tr>
<tr>
<td>16</td>
<td>Leased Line Terminating Segment</td>
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<td>National</td>
<td>Licensed fixed and mobile CSPs</td>
<td>Yes</td>
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<td>17</td>
<td>Dark Fibre Trunk</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed fixed, Internet and mobile CSPs</td>
<td>No</td>
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<td>18</td>
<td>Dark Fibre Access</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed fixed, Internet and mobile CSPs</td>
<td>No</td>
</tr>
<tr>
<td>19</td>
<td>Cell Site Passive Infrastructure</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed wireless CSPs</td>
<td>Yes</td>
</tr>
<tr>
<td>20</td>
<td>National Roaming</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed mobile CSPs</td>
<td>No</td>
</tr>
<tr>
<td>21</td>
<td>Mobile Network Access for MVNO</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed CSPs (MVNOs)</td>
<td>Yes</td>
</tr>
<tr>
<td>22</td>
<td>Mobile Platform Access for SMS-Based Applications</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed mobile CSPs, SMS Aggregators, Application Service Providers</td>
<td>Yes</td>
</tr>
<tr>
<td>23</td>
<td>Mobile Platform Access for USSD-Based Applications</td>
<td>Wholesale</td>
<td>National</td>
<td>Licensed mobile CSPs, USSD Aggregators, Application Service Providers</td>
<td>Yes</td>
</tr>
</tbody>
</table>

6.1 Cartesian also reviewed the broadcast subsector in the market definition phase and produced a high-level report capturing proposed market definitions for the subsector and a broad summary of the key issues observed.

6.2 The markets were delineated and defined by applying the Market Definition Framework. The broadcast markets were not assessed for relevancy or SMP within Cartesian’s agreed scope of work.

Broadcast Candidate Markets

6.3 Through the market definition process, a total of 10 separate broadcast markets were identified. The markets are listed in the table below.

<table>
<thead>
<tr>
<th>#</th>
<th>Market Name</th>
<th>#</th>
<th>Market Name</th>
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<td>Digital Terrestrial TV Transmission</td>
<td>6</td>
<td>Local TV Content Production</td>
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<tr>
<td>2</td>
<td>Satellite TV Transmission</td>
<td>7</td>
<td>Radio Broadcast and Transmission</td>
</tr>
<tr>
<td>3</td>
<td>Free-to-Air (FTA) TV Broadcast</td>
<td>8</td>
<td>Radio Content Rights</td>
</tr>
<tr>
<td>4</td>
<td>Pay TV Broadcast</td>
<td>9</td>
<td>TV Broadcast Advertising Airtime</td>
</tr>
<tr>
<td>5</td>
<td>TV Content Rights</td>
<td>10</td>
<td>Radio Broadcast Advertising Airtime</td>
</tr>
</tbody>
</table>

6.4 Analogue terrestrial TV transmission was excluded because of the forward-looking nature of the review. There is an active digital switchover (DSO) programme in Uganda and analogue TV transmission is expected to end in 2015.

6.5 Digital terrestrial radio transmission, on the other hand, is not expected to be rolled out in Uganda for the foreseeable future. This is primarily due to cost: digital radio receivers are expensive relative to analogue receivers. Because of this, many other countries have so far held off digital radio deployment.

Issues Identified

6.6 A number of investigation were identified in the broadcast sector in Uganda. These relate to the formation of a single digital signal distributor, access to content and the local content quotas. The issues are summarised below.
6.7 Uganda’s digital switchover plans include the creation of a sole digital signal distributor in the form of SigNet. While it is unclear what is to happen with Pay TV broadcasters’ existing digital transmission infrastructure, the monopoly signal distributor will need to be monitored carefully.

6.8 In the absence of competition, SigNet will have no commercial incentives to maintain/improve service quality or constrain its prices. It is important that these aspects be addressed through regulation and governance.

6.9 This will help ensure that the TV broadcast sector does not suffer from a lack of transparency, poor service quality or excessive pricing by the signal distributor, or from non-compliance by other market stakeholders.

6.10 Access to FTA content is a significant issue in Uganda, where there appear to be some issues with regard to observance of content rights, particularly around rebroadcast and exclusivity.

6.11 Additionally, access to premium content such as sports, news and movies is a significant differentiator in Uganda, and there appear to be some issues with regard to access and exclusivity.

6.12 Recently introduced local content quotas have created a significant market for local content production. With a limited supply of high quality local content available according to industry stakeholders, access to local content will increasingly become an issue amongst content aggregators and broadcasters.

6.13 The above issues require further investigation and analysis to identify any anti-competitive practices or abuse of SMP.
7. **Market Assessment Framework**

**Overview**

7.1 The Market Assessment Framework sets out an approach to assess whether there is effective competition in a defined market or whether one or more firms in the market hold significant market power (SMP).

7.2 Firms with SMP have the potential to increase price or reduce output below the competitive level. Therefore, it is important to identify whether or not firms have SMP.

7.3 If a firm with SMP used this power to support anti-competitive behaviour, this would be detrimental to consumers and economic efficiency in total. The presence of SMP is therefore a key factor in assessing whether to impose regulatory measures. Properly designed and implemented, regulatory measures can ameliorate the potential of a firm to abuse a position SMP and thus enhance market performance and economic efficiency in the relevant market.

7.4 The assessment of whether firms have SMP requires the consideration of a wide range of indicators of market power. The reason for this complexity is that there is no single definition of effective competition in an industry, such the telecommunications industry, where there are generally a small number of rival operators competing against each other.

7.5 The fact there are a small number of competing operators is suggestive of an oligopoly market structure, which in turn implies that each operator has some degree of market power. However, the crucial question that needs to be addressed is whether an operator or group of operators' degree of market power is such that they have the SMP to raise price above and/or lower output below the competitive level, or whether their market power is not significant and they are constrained by their competitors. Therefore, an assessment of the wide range of indicators of market power is needed to determine whether an operator or group of operators' market power is significant or not.

**Approach to Assessing SMP**

7.6 The indicators of market power can be grouped within the structure-conduct-performance (SCP) framework. This framework is useful to illustrate how the indicators relate to each other and the overall assessment of market power.
The Structure-Conduct-Performance Framework

As can be seen in the diagram, there are feed-forward from basic conditions and market structure through to conduct and performance and then feed-back loop from conduct and performance to basic conditions and market structure.

For each element of the SCP framework there are a related set of criteria that form an assessment of SMP. In practice, a selection of criteria will be used which will depend on the markets being addressed and the availability and quality of data.

This framework enables issues to be identified, detailed and substantiated using available data and evidence.
8. Significant Market Power Assessments

Overview

8.1 Seven telecommunications markets were prioritised for assessment by the UCC. The selected markets are listed in the table below.

---

Figure 4:  *List of Assessed Telecommunications Markets*

<table>
<thead>
<tr>
<th>#</th>
<th>Market Name</th>
<th>#</th>
<th>Market Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Retail Mobile Access, Voice and SMS</td>
<td>5</td>
<td>Wholesale Mobile Platform Access for SMS-based Applications</td>
</tr>
<tr>
<td>2</td>
<td>Retail Broadband Internet Access from a Mobile Terminal</td>
<td>6</td>
<td>Wholesale Mobile Platform Access for USSD-based Applications</td>
</tr>
<tr>
<td>3</td>
<td>Wholesale Voice Call Termination on Mobile Networks</td>
<td>7</td>
<td>Wholesale Cell Site Passive Infrastructure</td>
</tr>
<tr>
<td>4</td>
<td>Wholesale Mobile Network Access for MVNO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2 The assessments determined that suppliers individually held SMP in four of the seven assessed markets, namely: Wholesale Voice Call Termination on Mobile Networks; Wholesale Mobile Platform Access for SMS-based Applications; Wholesale Mobile Platform Access for USSD-based Applications were each found to have SMP.

8.3 For Wholesale Voice Call Termination on Mobile Networks, MTN, Airtel, Orange, Uganda Telecom and Smart were determined to have SMP in their respective markets for voice call termination on their own networks.

8.4 For Wholesale Mobile Platform Access for SMS-based Applications, MTN, Airtel, Orange, Uganda Telecom, K2 Telecom and Smart were determined to have SMP in their respective markets for access to their SMS platforms.

8.5 For Wholesale Mobile Platform Access for USSD-based Applications, MTN, Airtel, Orange, Uganda Telecom, K2 Telecom and Smart were determined to have SMP in their respective markets for access to their USSD platforms.

8.6 In the Retail Mobile Access, Voice and SMS market, there is evidence of possible joint dominance between MTN Uganda and Airtel Uganda.

8.7 In the remaining three markets – Retail Broadband Internet Access from a Mobile Terminal; Wholesale Mobile Network Access for MVNO; and, Wholesale Cell Site Passive Infrastructure – there was no finding of SMP.

8.8 As summary of the key findings from each of the seven market assessments follows.
Retail Mobile Access, Voice and SMS

8.9 Mobile Access, Voice and SMS services are supplied in Uganda by Airtel, MTN, Orange, Sure Telecom, Uganda Telecom and K2. Of these firms: Airtel, MTN, Orange, Uganda Telecom and Sure Telecom are mobile network operators (MNOs); and, K2 is a mobile virtual network operator (MVNO) with a wholesale supply agreement with Orange.

8.10 Cartesian identified a number of issues in this market. These are listed below and are described in full in the SMP Assessment Report:

- High Market Concentration
- Lack of True Growth
- Significant Network Effects
- Control of Sales and Distribution Channels
- Mobile Money Network Effects

8.11 Our initial finding is that there is evidence to suggest that MTN and Airtel may be jointly dominant in this market. The fact that Airtel and MTN have a joint market share of 92%, which is approximately equally distributed between each operator, is consistent with a market where joint dominance exists between operators.

Retail Broadband Internet Access from a Mobile Terminal

8.12 Mobile broadband services are supplied in Uganda by the communications service providers (CSPs): Airtel, MTN, Orange, Sure Telecom, Afrimax and K2. Of these firms: Airtel, MTN, Orange, Sure Telecom and Afrimax are mobile network operators (MNOs); and K2 is a mobile virtual network operator (MVNO) with a wholesale supply agreement with Orange.

8.13 The mobile broadband market includes Internet access from smartphones, tablets and USB modems. For the avoidance of doubt, the market excludes fixed-wireless networks and connections of less than 256kbps.

8.14 Demand for the mobile broadband services have grown rapidly; there appears to be downward pressure on handset prices; and, usage prices are consistent with international comparators.

8.15 Cartesian identified a number of issues in this market. These are listed below and are described in full in the SMP Assessment Report:

- High Market Concentration
- Control of Sales and Distribution Channels
- Spectrum Availability

8.16 Our initial finding is that CSPs in the mobile broadband market were neither individually nor collectively/jointly dominant at the time of assessment.
Wholesale Voice Call Termination on Mobile Networks

8.17 Mobile call termination services are supplied in Uganda by Airtel, MTN, Orange, Smart Telecom and Uganda Telecom.

8.18 Cartesian identified a number of issues in this market. These are listed below and are described in full in the SMP Assessment Report:

- Natural Monopolies
- Network Access Discrimination
- MTR Implementation
- Lack of Transparency

8.19 We determined that all five MNOs have SMP in the market of mobile termination on their own networks. This follows from the simple technical fact that a mobile use that subscribes to one network, that calls a person that subscribes to another network, does not have the choice to call that person via a third network.

Wholesale Mobile Network Access for MVNO

8.20 Mobile Network Access refers to the provision of access to a mobile operator’s network and systems for the purpose of hosting an MVNO. The services in this market are supplied on a national basis to licensed mobile CSPs without mobile network and systems infrastructure (i.e. MVNOs).

8.21 Currently there is only one MVNO in Uganda, which is K2 Telecom, and it has an MNA agreement with the Orange. In addition to Orange, other MNOs operating in Uganda include MTN, Airtel, Uganda Telecom, and Smart Telecom.

8.22 Cartesian identified a number of issues in this market. These are listed below and are described in full in the SMP Assessment Report:

- Network Access Discrimination
- Vertical Integration
- Lack of Transparency

8.23 Our initial finding is that Orange does not have significant market power in this market, and neither do any of the other CSPs.

8.24 This assessment was based on the observation that Orange and K2 both freely entered into an MVNO agreement. In other words, both K2 and Orange were able to negotiate contract terms that were sufficiently economically beneficial to them so that they could reach an agreement.

Wholesale Mobile Platform Access for SMS-based Applications

8.25 Mobile Platform Access for SMS-based Applications (MPA-SMS) refers to the provision of access to a mobile CSP’s SMS platform for the purpose of offering SMS-based applications to the mobile CSP’s subscribers. The market includes provision of access to SMS aggregators such that they can offer SMS services to application and content providers.
MPA-SMS services are supplied in Uganda by Airtel, MTN, Orange, Smart Telecom, Uganda Telecom and K2.

Cartesian identified a number of issues in this market. These are listed below and are described in full in the SMP Assessment Report.

- Natural Monopolies
- Vertical Integration
- Network Effects
- Limited Access to Sales & Distribution Channels
- Limited Countervailing Buyer Power
- Excessive Pricing
- Poor Service Quality

We determined that all six of these CSPs have SMP in the market of MPA-SMS on their own networks. This is because an SMS SP that wants to offer services to mobile users on a particular CSP's network must acquire access to that CSP's MPA-SMS.

Wholesale Mobile Platform Access for USSD-based Applications

Mobile Platform Access for USSD-based Applications (MPA-USSD) refers to the provision of access to a mobile CSP’s SMS platform for the purpose of offering USSD-based applications to the mobile CSP’s subscribers. The market includes provision of access to USSD aggregators such that they can offer SMS services to application and content providers.

MPA-USSD services are supplied in Uganda by Airtel, MTN, Orange, Smart Telecom, Uganda Telecom and K2.

Cartesian identified a number of issues in this market. These are listed below and are described in full in the SMP Assessment Report.

- Natural Monopolies
- Vertical Integration
- Network Effects
- Limited Access to Sales & Distribution Channels
- Limited Countervailing Buyer Power
- Excessive Pricing
- Poor Service Quality

We determined that all six of these CSPs have SMP in the market of MPA-USSD on their own networks. This is because an SMS SP that wants to offer services to mobile users on a particular CSP’s network must acquire access to that CSP’s MPA-USSD.
Wholesale Cell Site Passive Infrastructure

8.33 CSPI is a relatively new market in Uganda. Until fairly recently, all MNOs in the Ugandan market accessed CSPI (almost exclusively) through self-supply. This changed in 2012 with the entry of two tower companies: ATC Uganda and Eaton Towers.

8.34 The tower companies purchased cell site infrastructure from a number of MNOs such as MTN and Orange Uganda in sale-and-leaseback transactions. Under the terms of the deals, CSPI assets were transferred to the tower companies with the MNOs becoming tenants on the infrastructure which they used to own.

8.35 Cartesian identified a number of issues in this market. These are listed below and are described in full in the SMP Assessment Report.

- High Market Concentration
- Barriers to Entry
- Limited Transparency

8.36 Our initial view is that the tower companies in the CSPI market currently do not have SMP.

8.37 This conclusion is based on the observed recent growth in the number of CSPI sites; the improving quality of service offered by CSPI operators; and, even though there are only two tower companies, there is little incentive or opportunity to coordinate their actions, particularly given the MNOs ability to build their own CSPI.
9. Regulatory Remedies and Safeguards Report

Overview

9.1 The purpose of the Regulatory Remedies and Safeguards report is to identify a range of regulatory remedies which could be used to address the observed competition issues in the communications sector.

9.2 The report first discusses regulatory policy objectives, anti-competitive practices and regulatory instruments at high-level before focussing in on ex-ante remedies.

9.3 The remedies section considers remedies that are applicable to different types of competition issue and provides international examples of where these have been applied. The report considers a wide range of remedies, comprising:

- Transparency;
- Non-discrimination;
- Access to network facilities;
- Price control and cost accounting obligations;
- Accounting separation; and,
- Functional and structural separation.

9.4 Finally, the report summarises the findings of the seven SMP Assessments and identifies remedies that the UCC should consider to address the observed competition issues.

9.5 The framework does not assess the potential impact of specific regulatory remedies. Cartesian recommends that an impact assessment of the costs and benefits arising from regulatory remedies be conducted prior to a decision on which remedies (if any) to implement.
10. Merger and Licence Transfer Framework

Overview

10.1 The Merger and Licence Transfer Framework was developed to support the UCC’s intention to develop a clear merger control and licence transfers framework for the Ugandan communications sector.

10.2 The foundations of the Framework are the Uganda Communications Act 2013 and the draft Competition Bill of 2004. Although the Competition Bill has not been enacted, it provides a useful strawman process for investigating proposed mergers.

10.3 The Framework illustrates how the frameworks for market definition and market assessment may be applied in the context of merger control. Recommended actions that the UCC could undertake to establish a merger control framework in lieu of a competition legislation are also set out.

10.4 In addition to the proposed framework for Uganda, the report includes summaries of the merger control frameworks of Australia, the European Union and the USA. These summaries capture the key points of each of the frameworks as a reference for comparison with the proposed framework for Uganda.

Proposed Merger Control Procedure for UCC

10.5 In situations where licence transfers within the communications sector are also combinations (i.e. mergers), these are to be assessed by the UCC according to the proposed procedure and timescales within the draft Competition Bill of 2004.

10.6 In the report, we recommend that the UCC notify existing licensees of the procedure to be followed and the criteria to be applied, based upon the draft Bill. The procedure should be published on the UCC’s website so that prospective licensees are aware of the merger control framework that is in place.

10.7 Secondly, we recommend that the UCC clarify and communicate the notification requirements for combinations. Specifically, the criteria which triggers a notification and the information that parties to a combination must submit in their notification are to be clarified and communicated.

10.8 Under the procedure outlined in the Competition Bill, the parties to the combination shall be directed to publish details of the combination for bringing it to the attention of the public and persons that would be affected by it. We recommended that guidance be given as to the minimum information acceptable for the published version of the notification. We also recommended that the UCC consider publishing such information on its website in addition to any other communication channels.

10.9 Additionally, the UCC may wish to publish a timeline for activities in the review of this merger and keep this updated as the investigation proceeds.

10.10 The draft Bill refers to “relevant markets” for the purpose of assessing the effect of the combination on competition. Where appropriate, we recommend use of the market definitions in the Relevant Markets Report prepared by Cartesian for the UCC.
10.11 In order to assess whether a merger or licence transfer will impact the competitive levels in the market, we recommended using the approach set out in the SMP Assessment Framework prepared by Cartesian for the UCC.

10.12 The SMP Assessment Framework can be used to assess the current competitive situation and the competitive situation that could be expected should the combination proceed. The Framework provides a structured approach to consider the competitive dynamics present in the market.

10.13 Where competitive concerns are identified, as per the procedure in the draft Competition Bill, two options are open to the UCC: approval with conditions or outright rejection.

10.14 Approval with conditions will seek to modify the combination such that it will not detrimentally affect competition in the relevant market(s). This may require divisions of the combined firm, divestitures of customers, divestitures of spectrum, access obligations or other measures.

10.15 Should the parties to a combination disagree with the final decision they may choose to appeal. Clarity is required as to whether the appeal should be made to the High Court (as proposed in the Competition Bill) or to a tribunal and subsequently the Court of Appeal (as per the Communications Act).
Cartesian is a specialist consulting firm of industry experts, focused exclusively on the communications, technology and digital media sector. For over 20 years, Cartesian has advised clients in strategy development and assisted them in execution against their goals. Our unique portfolio of professional services and managed solutions are tailored to the specific challenges faced by executives in these fast-moving industries. Combining strategic thinking and practical experience, we deliver superior results.

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