هيئة الاتصالات وتقنية المعلومات
Communications and Information Technology Commission

Draft Market Analysis Report

Attachment A to the Second Public Consultation Document

18/12/1429H (16th December 2008)

Table of contents

1 Introduction

This revised draft Market Analysis Report (“Report”) has been prepared in accordance with the Regulatory Framework for Designation of Telecom Markets for Dominance (“Revised Regulatory Framework”).

The market analysis takes into consideration the very useful comments that were offered in response to the Public Consultation on Telecommunications Market Definition and Dominance of 31 May 2008 on this matter (the “First Public Consultation”), and, where relevant, information offered in those comments.

2 Approach to Market Analysis

2.1 Sequence of activities

The sequence of activities in this Report follows the sequence set out in the Revised Regulatory Framework, as follows:

1. Designate the relevant telecommunications service markets for the purpose of *ex-ante* regulation of dominance pursuant to a consideration of the provisions of Section 4.2 of the Revised Regulatory Framework;

2. Determine whether there are one or more dominant service providers in each defined relevant market, and, if so, designate the relevant service provider(s) as dominant, having regard to Section 4.3 of the Revised Regulatory Framework; and

3. Stipulate the appropriate remedies applicable to all dominant service providers for each relevant market pursuant to a consideration of the provisions of Section 4.4 of the Revised Regulatory Framework.

2.2 Time horizon for market analysis

Changes in the competitive landscape of the telecommunications sector in KSA are occurring at a rapid rate, reflecting changes in the technologies, demand patterns and market conditions globally and CITC's implementation of the Government's sector liberalization strategy. Change is not uniform in all service markets.

It is important to state the time horizon used in a market analysis so that some context can be provided in reviewing and commenting on the analysis. Paragraph 4.1.2 of the Revised Regulatory Framework, requires the preparation, amendment or review of a market analysis report at least once every five years on its own motion or on the application of any interested person. However, there may be considerations that suggest a shorter interval between market analysis reports and a shorter time horizon for a market analysis report.

CITC has taken into account the following factors in considering an appropriate time horizon for the current market analysis report:

- Anticipating technological change is difficult at any time, and is particularly difficult beyond two years at the current time;

- Network technologies are in the process of moving from circuit-switched platforms to systems that are based on Internet Protocols capable of processing a convergent range of services with much higher capacity;

- Broadband infrastructure is being deployed and broadband services are being taken up at an increasing rate, and broadband demand and usage is changing very rapidly;

- The cost structures and service profiles for data services are undergoing change with the adoption of new technologies, such as WiMAX, HSDPA and LTE, and the increased demand for mobile data services; and
- New entrants have recently deployed, or will shortly commence the commercial operation of, their mobile and fixed services, with likely immediate consequences for competition in many services markets.

In the light of these factors, CITC has adopted a two year time horizon in preparing this market analysis report. This does not mean that a review of the market analysis report in respect of all or any of the designated markets will automatically be appropriate in two years' time. The timing of the next review of each market will depend on a number of considerations including the changes that have actually occurred since the last market analysis review.

3 Definition and Designation of Relevant Markets under Consideration

In the context of the First Public Consultation, CITC identified and examined fourteen potential relevant markets for the purpose of its analysis of market dominance. Below, CITC reconsiders all fourteen markets (as well as a fifteenth market, wholesale fixed voice call origination service), in light of the provisions of section 4.2 of the Revised Regulatory Framework.

3.1 Market 1 - Retail fixed access services

(a) Market definition

This is the market for access to public telephone service at a fixed location in both residential and non-residential (including business and government) premises. The market also includes the provision of dial-up internet access.

(b) Demand-side substitutability

Users seeking an alternative means of accessing the pubic telephone service at a fixed location do not have the choice of a similar service in terms of price and overall characteristics. However, a customer wishing to adopt a broadly similar service may consider that a mobile service is an adequate substitute. CITC does not have information on the number of former fixed service subscribers in KSA who have specifically discontinued their subscription in favour of using mobile service instead. This process is well documented globally and is generally referred to as *fixed-mobile line substitution* – in contrast to *fixed-mobile call substitution.* However, this substitution involves a decision that the requirement for a fixed service can be subsumed in the use of a mobile service for such users. The substitution effect operates in one direction – with mobile substituting for fixed, but not the other way.

Mobile services have characteristics that are quite different from fixed services. They are a means of personal communication, and the service is generally used by a single subscriber. This aspect is enhanced by the mobility that the service offers as its defining characteristic. In contrast, fixed services are location-specific and found in family residential or office settings. The costs of service are also different, together with the price plan options, price levels and structures. Note that in the case of most of the mobile services in KSA, which are "pre-paid", there is no separate access charge, but call charging reflects the access element of the service.

Where customers have chosen to reduce the services they use, the choice is typically made in favour of the mobile service. The higher priced mobile service is able to provide all of the access that the customer requires, and the access service at a fixed location may be dispensed with. Most customers have not made this decision. For them the requirement for a location-based service to support family calling or business operations at a specific location is still relevant.

CITC has considered the phenomenon of fixed-mobile line substitution and, in particular, whether it is at a stage in KSA to warrant the extension of the definition of the market to mobile services. The issue is examined by the application of a hypothetical monopolist test. This test is set out in Paragraph 4.2.6 of the Revised Regulatory Framework. If a small but significant non-transitory increase in price (SSNIP) (say 5%) were made to the access service in a fixed location, would this be profitable to the service provider? The answer is 'yes'. It is possible that some customers may discontinue service but the majority would continue. Demand for fixed services is relatively price inelastic. This means that there is no practical and broadly acceptable substitute for retail fixed access services.

This confirms that the definition of the market is appropriate at this time.

(c) Supply-side substitutability

The issue here is whether, if a fixed service provider applied a SSNIP (say 5%), would this be sufficient to attract other providers to provide a service in the specific market? CITC considers that there is no supplier that would be attracted to the market in response to a SSNIP.

(d) Geographic scope of market

If a customer is seeking the provision of a fixed access service at a specific location, it is inappropriate and no substitute to provide a service at another location. The circumstances that influence the availability and choice of services in some locations (for example in metropolitan areas in which infrastructure has been established and where the aggregation of demand has attracted one or more suppliers) may be absent or different from the circumstances in other areas (for example in rural areas that are not within the coverage area of the transmission systems serving larger populations or connecting other population centres).

It is therefore quite possible that as technology and choices develop the characteristics of markets may change at different rates and in different ways on a geographic basis. However, KSA is at a very early stage of development in competition for retail fixed access services, with prospective new fixed service licensees yet to commence commercial operations. Under such conditions, CITC has concluded that for the present and for the time horizon of this analysis, such geographic dissection of the market would be inappropriate in KSA and serve no regulatory purpose.

(e) Threshold matters

Having defined the market it is appropriate to consider the three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework.

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers.*

Fixed access service provision is subject to regulatory barriers, in that entry is subject to an individual licence. Such licences are only available at times and subject to conditions established by CITC.

The natural monopoly characteristics of fixed access service markets also operate as a high entry barrier. Certain infrastructure supporting the network that connects premises to the network is not generally economically replicable, so there is a significant first-in advantage in favour of the incumbent. In particular, it is not generally economic to replicate easements, ducting systems and conduit.

Where there is an aggregation of demand in a concentrated location the circumstances are more likely to exist for new entrants to replicate fixed network infrastructure and provide fixed access on a competitive basis. For example, in central districts of large cities, the aggregation of demand from business and residential users may be sufficient to justify investment in duplicated (cable or fibre) or alternative (wireless) access systems.

These barriers to entry are non-transitory.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers.*

The access component of the local network has bottleneck characteristics that are unlikely to change over time. In fact, as this service is displaced by broadband services, which support a much larger range of service types, the ‘bottleneck’ characteristics may become more pronounced over time. New wireless and broadband technologies are enabling alternative service providers to address demand for fixed access service on a commercially sustainable basis. However the process of providing a range of competitive alternatives will take a considerable time. It would therefore be premature to conclude at this time that the nascent competitive forces are sufficient to protect the interests of customers.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration.*

Ex-post competition controls are unlikely to address concerns related to dominance in this market. This has been the approach in all other countries reviewed. Other service providers relying on fixed access to the connected subscribers must accept such access via the incumbent service provider’s network. They need advance certainty in relation to access, as a matter upon which to base their own business plans and operating strategies. In this case it is important that any exercise of dominant market power be eliminated at source rather than addressed after the event and after potentially substantial damage is done to other service providers and to both the industry and the economy at large.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests that the market has high entry barriers, is not now nor will it tend over time to be subject to competitive market forces sufficient to protect the interests of customers, and is one where *ex-post* controls and *ex-ante* regulation in other markets are unlikely to address the potential harm from dominance in this market. Under those circumstances the market under consideration should be designated as a relevant market for the purposes of *ex-ante* regulation for dominance.

3.2 Market 2 - Retail local and national fixed voice call services

(a) Market definition

This market covers local and national calls originating on the fixed access public network.

(b) Demand-side substitutability

Some respondents to the First Public Consultation raised the issue of whether fixed mobile call substitution had developed in KSA to the stage where the definition might be broadened to include mobile call services. Most who raised this matter tended to answer that substitution had not developed yet to that level.

This view is supported by the mobile premium that currently operates in KSA. The average price of a national mobile call is around 50 - 55 halalas per minute, and the average price of a national (local and long distance) call is around 10 halalas per minute, resulting in a mobile premium of over 400%. If we apply the SSNIP test, it is clear that a small increase in price (say 5%) by the fixed operator would be profitable and would not encourage significant substitution by mobile calls.

(c) Supply-side substitutability

The question is whether, if a fixed service provider applied a SSNIP (say 5%), this would be sufficient to attract other providers to provide a service in the specific market. We have already discussed the provision of services by mobile service providers. The increase would in itself not be attractive to them, because the cost differential, as reflected in the retail price premium of mobile calls, is considerable in KSA.

(d) Geographic scope of market

These services are provided on a national basis. The same supply conditions, including price, apply nationally. This is the result of many factors including regulation, the coverage of the fixed network, and the expectations about service on a national basis that have built up in consequence. Any individual call is between specific locations on the network. However with network meshing and diversity there are many routes that are available to effect the connection of a call within the overall network. This characteristic will be further enhanced as the core network is upgraded to NGN (or IP-based) operation. This demonstrates that it is not useful, in current circumstances, to define the market in geographic terms below the national level.

(e) Threshold matters

Having defined the market it is appropriate to consider the three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework.

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers*

Fixed call service provision is subject to regulatory barriers, in that entry is subject to an individual licence. Such licences are only available at times and subject to conditions established by the regulator. There is no entry at will. It needs to be recognised, however, that alternative means of call service are or may become available, such as via mobile services (as already discussed) and VoIP.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers*

There are no characteristics of this market as currently defined that would lead to this conclusion. The development of broadband services, with convergent applications including voice-mode services, will inevitably impact on the way in which customers use and manage voice calls. However, CITC does not expect those developments to be significant within the time horizon of this market analysis.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration*

Ex-post competition controls are unlikely to address concerns related to dominance in this market. Concerns are associated with new entrants' ability to achieve some early traction in the market. The fragility of competition is a key reason why controls over and above *ex-post* measures need to be operational in this market. The experience in the European Union suggests that *ex-ante* remedies may be appropriate for a number of years after the introduction of network services competition in this market.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests that the market has high entry barriers, is not now nor is it likely to tend over the time horizon of this market analysis to be subject to competitive market forces sufficient to protect the interests of customers, and is one where *ex-post* controls and *ex-ante* regulation in other markets are unlikely to address the potential harm from dominance in this market. Under those circumstances CITC intends to designate the market under consideration as a relevant market for the purposes of *ex-ante* regulation of dominance.

3.3 Market 3 - Retail international voice call services

(a) Market definition

This market covers international call services for all customers of both fixed and mobile access networks.

(b) Demand-side substitutability

International calling is impacted by a range of possibilities – including VoIP, messaging through email, and text messaging through SMS, etc. Many of these modes of communications are used instead of, or as supplements to, voice calling internationally. However, voice calling is a distinct mode of international communication with characteristics that in aggregate result in a different experience to the other modes. The immediate responsiveness, and nuanced and highly interactive nature of the experience, differentiates it from other modes. There are no substitutes that ought to be included in the definition of the services in this market.

This view is supported by the application of SSNIP test. It is clear that a small increase in price (say 5%) by the fixed or mobile service provider would be profitable and would not encourage an offsetting substitution by other services.

(c) Supply-side substitutability

The question is whether, if a service provider in the market for international voice calls applied a SSNIP (say 5%), this would be sufficient to attract other providers to provide a service in the specific market. On balance, CITC is inclined to answer that it would not, notwithstanding that it is the case that the higher the price of services in this market the more willing customers will be to explore alternative options such as VoIP.

(d) Route-by-route scope of market

CITC has considered comments received from respondents to the First Public Consultation. Some considered that competition varied by route and that consequently market conditions themselves must vary route-by-route. Certainly the published data makes it clear that demand levels vary significantly by route as shown in Figure 1. However, this is to be expected. Competition is attracted to the larger markets and may therefore also vary by route as a result.

Clearly if a customer wants to call Jordan from Riyadh no other termination point is a substitute for that call. But this is not the appropriate level of analysis for determining whether the market should be analysed in terms of sub-markets defined by route. The basic service is connection of a call to a foreign address determined by the calling customer. It is of no concern to the customer how the call gets there, so long as it does so, and so long as the service quality and overall experience quality meets expectations. The call can take any route, and the precise route will depend on the underlying technologies employed and the arrangements that the KSA service provider has with overseas correspondents. These are matters that are sorted out at the wholesale level – by service providers and between service providers. They do not suggest that a route analysis of the retail KSA market would be useful for present purposes. Therefore CITC intends to consider this market in aggregate for the present.

Figure 1: Largest international voice markets

Saudi Arabia

LARGEST TDM ROUTES, 2006

	Destination	Minutes (Millions)	Percent of outgoing traffic
1.	Egypt	505.0	14.4%
2.	India	500.0	14.2%
3.	Pakistan	415.0	11.8%
4.	Sudan	220.0	6.3%
5.	Bangladesh	215.0	6.1%
6.	Yemen	190.0	5.4%
7.	Syria	175.0	5.0%
8.	United Arab Emirates	159.0	4.5%
9.	Philippines	151.0	4.3%
10.	Kuwait	97.0	2.8%
11.	Bahrain	87.0	2.5%
12.	Jordan	87.0	2.5%
13.	Morocco	71.0	2.0%
14.	Lebanon	68.0	1.9%
15.	Indonesia	67.0	1.9%
16.	United Kingdom	63.0	1.8%
17.	Turkey	60.0	1.7%
18.	Qatar	56.0	1.6%
19.	United States	50.0	1.4%
20.	Sri Lanka	33.0	0.9%
	Others	250.0	7.1%
	TOTAL	**3,519.0**	**100.0%**

TOTAL TRAFFIC

	2004	2005	2006
TDM Outgoing	2,550.0	3,060.0	3,519.0
TDM Incoming	1,429.7	1,518.7	1,612.9
VoIP Incoming	123.0	146.0	162.0

Data are in millions of minutes of public switched telecommunications traffic.

Source: Telegeography, 2008

(e) Threshold matters

Having defined the market it is appropriate to consider the three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework.

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers*

International call service provision is subject to regulatory barriers, in that entry is subject to an individual licence. Such licences are only available at times and subject to conditions established by the regulator. There is no legal entry at will. However, there are three licensed operators in the market at present, and they are about to be joined by three more. Although entry barriers exist, there are enough service providers that have passed through the barrier to sustain effective competition.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers*

This market is a retail market. There is a corresponding wholesale market, the dynamics of which largely determine the way in which the retail market develops in terms of structure and service providers. Whether the retail market will tend over time towards one that is subject to competitive market forces sufficient to protect the interests of customers will depend on the wholesale market and the way in which KSA service providers in that wholesale market establish competitive and effective correspondent arrangements with overseas operators. All service providers currently providing retail international call services have affiliates and/or associates in major overseas markets. Arrangements with those affiliates determine the terms and conditions they can provide in the KSA retail market. In general the market has the capacity to tend over time towards more and more competition and to one without dominant service providers.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration*

CITC considers that the retail international call market has developed to a stage where *ex-ante* regulatory intervention has a significant likelihood of hindering or distorting the further development of competition in the market and the delivery of the benefits of competition to customers in KSA. Clearly there is the possibility of anti-competitive behaviour in the form of price predation or exclusive dealing both within KSA and abroad. The first is best assessed and dealt with through *ex-post* controls, once the nature of the behaviour, and its extent and impact, are better understood. For example, CITC has used its authority under Article 47 of the Bylaw to require all service providers to notify price changes, and to suspend implementation pending review and analysis of any issues that are involved. Exclusive dealing issues are matters better addressed at the level of the wholesale market. In raising these possibilities (of anti-competitive behaviour in the form of price predation or exclusive dealing), CITC is not making any comment about their actual or likely occurrence.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests:

- Even though the operation of network facilities for the provision of international voice call services has high entry barriers, there are already three service providers who are now inside the barriers and who compete in this market. Three more service providers will have the ability to provide services after licensing is completed and within the time horizon of this analysis.

- The market does not have competitors who are behaving or are able to behave like dominant service providers at present and this is likely to become even more pronounced as the third mobile service provider gains traction in the market. There is no price leader in this market and all service providers find that they must respond to each others' pricing initiatives.
- *Ex-post* competition controls appear to be adequate for the regulation of behaviour that constitutes a potential threat from dominance.

Consequently CITC does not intend to designate the market under consideration as relevant for ex *ante* regulation of dominance.

3.4 Market 4 - Retail national mobile services

(a) Market definition

This market covers all national retail services for mobile customers, including voice, video and data/text services deployed on 2G and 3G platforms.

(b) Mobile voice and data

Some respondents to the First Public Consultation raised the issue of whether retail national mobile services should be considered in two separate markets – one for mobile voice and one for mobile data. The market for mobile data service, separated from and not as part of a voice or integrated offering, is emerging. The characteristics of that market in terms of service requirements, customer profiles and segments, and overall dynamics are also emerging.

It is a matter of judgment whether the emergence of a separate mobile data market is sufficiently pronounced as to require CITC to consider the markets as separate.

CITC considers that there is little evidence that quite distinct data mobile and voice mobile markets are developing in the KSA at this stage, and no evidence was offered by respondents in their comments that would change significantly in the time horizon of this analysis. CITC also suggests that a separate mobile data market, with distinct characteristics compared to other mobile service markets, may emerge in future, as is occurring in some overseas countries.

CITC intends to continue to use the definition above for this market for the present, but will monitor the way in which the market develops in future to determine whether, at a future time, a different approach is required.

(c) Demand-side substitutability

The specific services within the market definition have existing and potential substitutes, such as:

- Fixed voice in the case of mobile voice services (although the overall pattern of substitution in aggregate is mobile displacing fixed calls)

- "Nomadic" data based on WiFi, WiMAX and other wireless technologies that permit service delivery at different locations.

In terms of service functions and characteristics, substitution is occurring. However CITC considers that the cost of service and consequent price differentials would result in profitability for a hypothetical monopolist applying a SSNIP (say, of 5%). That level of price change would not cause sufficient demand substitution in current markets to make the price increase unprofitable. CITC will therefore retain the current definition for now, but, as already noted, will need to monitor developments in this market.

(d) Supply-side substitutability

The question is whether, if a mobile service provider applied a SSNIP (say 5%), this would be sufficient to attract other providers to provide a service in the specific market. There are providers of other products and services who would be capable of entering this market (subject to entry regulation) but CITC considers that a SSNIP would not have that outcome given the high cost of building a mobile network.

(e) Threshold matters

Having defined the market it is appropriate to consider the three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework.

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers*

Mobile service provision is subject to regulatory barriers, in that entry is subject to an individual licence. Such licences are only available at times and subject to conditions established by the regulator. In addition the costs of entry in terms of licensing costs, infrastructure and network deployment are high. A decision to enter this market requires a substantial and continuing financial commitment in the case of facilities-based service providers.

There are two important considerations however:

(1) That despite the high entry barriers that apply for facilities-based service providers who operate their own networks, the entry barriers are much smaller for MVNOs (Mobile Virtual Network Operators) who are able to negotiate commercial terms for using the facilities of service providers who own networks; and

(2) That despite the high entry barriers three operators have already been licensed and, based on international experience, that number is usually regarded as sufficient to ensure sustainable competition in mobile services markets.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers*

Retail mobile service markets in other countries typically involve three or more network-based service providers, and sometimes also MVNOs, and are typically competitive in an effective and sustainable manner on the basis of that structure. The KSA market has three licensed service providers, and therefore has enough competitors to ensure that competitive market forces exist and are likely to develop. There is substantial evidence that the entry of the third service provider and its launch of commercial services in July 2008 have ignited new levels of price and service competition, encouraging responses from incumbent service providers. This market is behaving in a manner that would be expected of a robustly competitive market.

Importantly, there is no price leader in this market. Pricing initiatives are coming from a number of the service providers and all have found it necessary to respond in order to seek to maintain or improve their position in the market.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration*

It is important to consider whether anti-competitive behaviour, if any, ought to be assumed and therefore addressed through preventive *ex-ante* measures, with all the risks associated with unintended consequences of regulatory intervention, or whether the market has reached a level of competitive development that permits action to be taken *ex-post* in these cases, once the nature and extent of the alleged anti-competitive behaviour is known.

CITC considers that, if anti-competitive behaviour is alleged in this market, then *ex-post* competition controls, *ex-ante* remedies in other related relevant markets, and/or *ex-ante* remedies not related to dominance will be adequate to address the harm that might result from an attempted exercise of dominance.

The best way to consider the matter is to examine the issues that could arise in this market. They include:

- Predatory pricing: CITC has powers under Article 47 of the Bylaw that may be used to require service providers to notify and obtain approval for price changes. These powers may be used by CITC to require service providers to suspend implementation of proposed price changes pending CITC examination of the competition issues involved. Exercise of these powers is not conditional on the service provider in question being dominant.
- Access to wholesale services: One concern that arises for mobile service providers when they extend their networks into areas with little or no fixed telecommunications infrastructure, is the availability of transmission services to enable base stations to be connected to base station controllers and to mobile switching centres. Later in this Report the wholesale leased line market is examined. It is the *ex-ante* regulation of that market, rather than of the retail mobile market, that would address the concern associated with dominance in this case.

In addition, *ex-ante* controls are likely to interfere in the further development in the competitive dynamics that are now evident in the KSA retail mobile service market.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests:

- Even though the operation of network facilities for the provision of mobile services has high entry barriers, the barriers for MVNO entrants are considerably lower. In addition, there are already three facilities based service providers who are now inside the barriers and who compete in this market.
- The market does not have competitors who are behaving or are able to behave like dominant service providers at present and this is likely to become even more pronounced as the third service provider gains traction in the market. There is no price leader in this market and all service providers find that they must respond to each others' pricing initiatives.
- *Ex-post* competition and *ex-ante* wholesale controls appear to be adequate for the regulation of behaviour that constitutes a potential threat from dominance.

Consequently the CITC does not intend to designate the market under consideration as a relevant market for the purposes of *ex-ante* regulation of dominance.

3.5 Market 5 - Retail business data services at fixed locations

(a) Market definition

This is the retail market for business data services, such as IP services (e.g. IP VPN), packet service, digital data services, ATM, Frame Relay and leased lines.

(b) Market coverage of services

This market is intended to cover both national and international data services provided to business customers at fixed locations. Mobile services to business customers, including both voice and data, are included in Market 4, above.

Retail business data services markets are in a state of turmoil and change. There are some services, such as leased lines that service specific needs and which have been the subject of *ex-ante* regulation overseas. Leased line capacity is about dedicated transmission service between specific locations. The demand for that is continuing, but is affected by alternative offerings such as managed services.

The challenge for CITC is how to make sense of this collection of services and to determine whether *ex-ante* intervention may risk skewing and distorting the development of new and competitive services in this part of the market to an unacceptable extent. The first part of that involves the question whether business data services are best considered as a single market or as many. The second part is the essential regulatory context and what hangs on the result of deciding on a single or many markets in this case.

There are two important considerations in answering this question:

- whether the potential *ex-ante* remedies that might be useful in containing the exercise of market power, if any, are better applied to other related markets and, in particular, upstream markets; and / or
- whether *ex-post* action in response to anti-competitive behaviour, if any, is likely to be an adequate means of responding.

Both questions are considered later in this Market Analysis.

(c) Demand-side substitutability

As noted above, the patterns and extent of substitutability between the services within the market as defined, and with services in related markets such as retail broadband services, are dynamic, with changing relationships. Under these circumstances the standard array of tests are not particularly useful. Nor is it useful to separate out this market into a large number of single product markets, since the patterns of substitution and the likely future levels of change in business demand mean that a technological or service-by-service approach is most likely to be inappropriate.

CITC does not have information about consumer preferences sufficient to apply the SSNIP test in this area. In any case, the results would be highly uncertain since business data services are in a state of development and flux.

(d) Supply-side substitutability

Assessment of supply-side substitutability does not assist in defining the service boundaries of this market. The potential service set that can be brought to bear to solve business data service needs is substantial and is deliverable by a number of technologies deployed by many different types of service provider, including fixed service providers, mobile service providers, ISPs deploying dial-up and broadband solutions, and providers of managed network and related solutions.

(e) Threshold matters

Using the broad definition of the market in paragraph (a) it is appropriate to consider the three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework.

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers*

Infrastructure-based service providers are subject to licensing. The provision of connectivity and access services to support specific services in the market requires substantial investment in fixed network infrastructure in situations where the first entrant advantage is significant. This is because replication of infrastructure is often not economic. STC has close to 100% market share, with VSAT providers and the other data service providers (“DSPs”) ITC and Bayanat having small market shares.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers*

Three additional fixed facilities-based service providers are about to be licensed. Although this will change the potential for competition in the market this is unlikely to have a major impact on overall levels of competitiveness in the time horizon of this analysis. CITC would expect that competition will be fragile for some time. For all practical purposes, therefore, the market as presently considered does not yet have characteristics that allow CITC to conclude that it will develop of its own accord to a level of competitiveness sufficient to protect the interest of customers.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration*

There are some upstream wholesale markets – such as the market for wholesale leased lines (Market 11) – the *ex-ante* regulation of which will assist in ensuring that the risk of potential harm from dominance in the market under consideration will be reduced. However, in balance, CITC is not convinced that *ex-post* controls and *ex-ante* remedies applied in other markets will be sufficient to address concerns related to market dominance at this stage. The ability of customers to respond by migrating from one business data service to another is not a sufficient manner of addressing the concerns because such moves are still within the same overall market in which two key services, leased lines and IP-VPN services, remain as effective monopolies.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests that the market has high entry barriers, is not likely to develop over time into a competitive market if left to its own forces, and is one where *ex-post* controls and *ex-ante* regulation in other markets are unlikely to address the potential harm from dominance in this market. Under those circumstances, the CITC intends to designate the market under consideration as a relevant market for the purposes of *ex-ante* regulation for dominance.

3.6 Market 6 - Retail internet access services

(a) Market definition

This is the retail market for fixed internet access and covers broadband access services. Dial-up internet access services are included in Market 1.

(b) Demand-side substitutability

Dial-up and broadband internet access are technically substitutable, notwithstanding that the characteristics of each service differ. In practice, for on-going customer usage purposes, the substitution is one way only. Customers will move from reliance on dial-up access to broadband access when the latter is available and when they have determined that the convenience of always-on access and higher download speeds are worth the (possibly) greater price. The substitution effect does not work the other way. Customers do not migrate back to dial-up access, and would certainly not do so in response to a SSNIP. There are no other potential substitutes for broadband internet access under these circumstances.

(c) Supply-side substitutability

The application of a SSNIP test to assess supply-side substitutability adds little to the analysis. A price increase of 5% would be unlikely to encourage broadband service providers into markets that they were not addressing. Far more important factors would weigh with them, such as the overall cost of broadband provision and the solidity of the expected demand in the area that might be served.

(d) Threshold matters

The three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework are considered in relation to Market 6 below:

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers*

The retail market is not subject to high entry barriers for service-based entrants. However to compete as a vertically integrated service provider and use own-infrastructure to provide network services requires an individual licence. There are three licensed facilities-based service providers at present and three additional facilities-based service providers will be licensed and operational in the near future. The resources needed to establish an infrastructure-based service are substantial.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers*

The market under consideration has a long way to go before the competitive entrants gain traction. At this stage it cannot be said that the market will tend over time, left to its own competitive forces, to develop sufficiently to protect the interests of customers in any time frame relevant to this market analysis.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration*

CITC examines the appropriateness of designating the wholesale broadband access market (Market 10) later in this report. The question is whether *ex-ante* regulation of that relevant upstream market, together with *ex-post* competition controls, would likely be sufficient to address dominance concerns in this retail market. On balance CITC thinks not. The three additional facilities-based service providers to be licensed and operational in the near future have yet to deploy services, and may take some time to have significant impact. Competition will remain fragile for some time, and *ex-post* controls may not be adequate or timely to safeguard competition.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests that the market is not likely to develop into a competitive market in the time horizon of this market analysis if left to its own forces, and is one where *ex-post* controls and *ex-ante* regulation in other markets are unlikely to address the potential harm from dominance in this market. Under those circumstances the CITC intends to designate the market under consideration as a relevant market for the purposes of *ex-ante* regulation for dominance.

3.7 Market 7 - Wholesale fixed voice call termination services

(a) Market definition

This wholesale market exists in relation to the termination of calls addressed to end-users connected to each fixed network, so that each fixed network defines a separate market.

(b) Demand-side substitutability

There are no substitute services. All service providers have monopolies in relation to call termination on their own networks. If a caller wishes to access a particular fixed service there is only one way of doing so – and that is via the network to which the fixed service is connected.

(c) Supply-side substitutability

Alternative supply does not arise for this service. The only supplier able to provide termination of a call on a particular fixed service is the supplier to whose network that service is connected.

(d) Threshold matters

Having defined the market it is appropriate to consider the three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework.

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers*

Yes, entry barriers are high and non-transitory. No service providers other than the network operator are possible.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers*

No, the market will always have a single service provider.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration*

In these markets the issues that arise relate to the charge for access and other access terms and conditions. These issues can be readily anticipated and are amenable to *ex-ante* remedies. *Ex-post* controls alone are insufficient to address concerns or to prevent the issues from recurring on a continuous basis.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests that the market has high entry barriers (no other entry is possible), will not develop into a competitive market over time, and is one where *ex-post* controls and *ex-ante* regulation in other markets are unlikely to address the potential harm from dominance in this market. Under those circumstances the CITC intends to designate the market under consideration as a relevant market for the purposes of *ex-ante* regulation of dominance.

3.8 Market 8 - Wholesale transit interconnection service

(a) Market definition

This is a wholesale service for the conveyance of traffic between points of interconnection for other service providers.

(b) Service non-operational

Wholesale transit interconnection services are not currently being provided and there is no current demand. However CITC expects that situation may well change when three additional facilities-based service providers to be licensed become operational. If that situation leads to demand for transit interconnection services, CITC may initiate a review of the market, consistent with the procedures in the Revised Regulatory Framework, to determine whether *ex-ante* remedies are required to address the potential risk of harm from dominance.

Conclusion:

This market is appropriately defined. However, it is non-operational and therefore consideration of the threshold criteria is not appropriate, since they have nothing to which they can apply.

If and when the market becomes operational the situation might be revisited. If there appears to be, at that time, an apprehension of risk of harm from dominance, the procedures under the Revised Regulatory Framework provide for the matter to be reviewed either by CITC on its own motion or on the application of an interested person.

Consequently CITC does not intend to take further action in relation to the market under consideration at this time.

3.9 Market 9 - Wholesale line sharing service

(a) Market definition

This is the wholesale market for provision to other service providers of access to the non-voice spectrum of copper loops from the local exchange to the customer premises.

(b) Relationship with Market 10

Respondents to the First Public Consultation commented that the service that constitutes this market should be considered together with Bitstream access service (Market 10) because of their interdependence in the provision of a total wholesale broadband access offering. On this view the two services should be considered together, whether as a single market or not, for the purposes of considering the application of *ex-ante* remedies to address the potential harm from dominance. Such an approach might enable CITC to adopt a more appropriate and less intrusive approach, in areas where both services are available.

CITC has reviewed the matter and agrees with the view that both line sharing and bitstream access are ways in which wholesale customers may obtain the basic subscriber access on which to develop their own retail broadband services.

The extent to which an individual wholesale customer may require one or both of these wholesale services will depend on many factors including:

- Availability;
- Price;
- The customer's own preferred business model for service provision;
- Regulatory certainty; and
- The extent of retail service differentiation from competitor offerings that is required

Conclusion:

CITC therefore intends to proceed on the basis of considering Market 10 as a combined market, incorporating the services covered by this market. Consequently CITC does not intend to take further action in relation to the market under consideration.

3.10 Market 10 - Wholesale broadband access services

(a) Market definition

This is the wholesale market for the provision of broadband access services and covers two services: Bitstream and wholesale line sharing.[1]

(b) Demand-side substitutability

The common characteristic of both services that comprise this market is that they provide access to non-replicable network elements one or both of which may be necessary as an input into developing a retail broadband access operation. Matters affecting availability, price and preferred business model will determine whether a particular wholesale customer chooses one or other of the services, or a mix of the services overall.

The issue for an assessment of demand-side substitutability is whether a wholesale customer would be able to access a different service that still meets its needs if the relevant price were to be increased by a hypothetical monopolist. A SSNIP of 5% would be profitable for such a hypothetical monopolist. There is no other service that would be an acceptable substitute and which the customer would be encouraged to consider at that level of price change. The market definition in paragraph (a) is therefore appropriate.

(c) Supply-side substitutability

The question is whether, if a ULL or Bitstream service provider applied a SSNIP (say 5%), this would be sufficient to attract other providers to provide a service in the specific market. Wholesale service providers with other technologies such as wireless-based systems would not be encouraged to enter the market in response to this price signal. The scale and type of operation involved, and the resources required to enter a market based on non-replicable infrastructure investments would necessarily have this result.

(d) Geographic scope of market

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[1] The definition has been widened to incorporate Market 9, as discussed earlier.

This market needs to be considered in the same way as Market 1. The availability of services will vary from place to place depending on the network platforms deployed at any given time.

(e) Threshold matters

Having defined the market it is appropriate to consider the three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework.

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers*

Yes, these barriers take the form of regulatory constraints as well as the capital and other resource requirements that are required to operate in this market. The barriers are non-transitory.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers*

The infrastructure that is required to support the services in this market is of a bottleneck nature. That infrastructure cannot be economically replicated in most locations, and this places a substantial value on incumbency. In the timescales that are being considered in this report the market will not tend to be subject to competitive forces that are sufficient to protect the interests of customers.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration*

Ex-post competition controls are unlikely to address concerns related to dominance in this market. The issues that may reasonably be anticipated to arise from a dominant market position in this market need resolution in advance. The issues are systemic and relate very much to the potentially advantaged position of the retail business of an integrated service provider that also supplies services in this market to competitors. If they are not addressed, there is a substantial risk that the downstream retail market for broadband will not develop competitively. Consequently *ex-post* measures will be inadequate and, if relied upon alone, will likely be too late to protect competition.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests that the market has high entry barriers, is not likely to develop over time into a competitive market if left to its own forces, and is one where *ex-post* controls and *ex-ante* regulation in other markets are unlikely to address the potential harm from dominance in this market. Under those circumstances the CITC intends to designate the market under consideration as a relevant market for the purposes of *ex-ante* regulation of dominance.

3.11 Market 11 - Wholesale leased line services

(a) Market definition

This is a wholesale market for the provision of leased lines between separate locations of another service provider.

(b) Demand-side substitutability

There are no effective substitutes for leased lines at the wholesale level – which provide dedicated transmission capacity between two locations. It is possible that leased lines may be used as a substitute for managed network services under particular circumstances, and vice versa. However, this form of substitution may be more appropriate to the retail than the wholesale market.

Comments from some respondents to the Public Consultation suggested that self-provision of transmission services would be a substitute. In this market CITC is inclined to agree that self-supply is a substitute for those service providers who are licensed to build such facilities. Even in those cases, however, the leasing option arises where self-provision is uneconomic – that is, when the cost of leasing is well below the cost of building. This occurs because the minimum level of facilities to be built may have capacity well in excess of the current and immediate future needs of the wholesale customer.

Under these conditions the application of a SSNIP by a hypothetical monopolist would be profitable. A 5% price increase is unlikely to cause sufficient diversion of demand into self-supply to make it unprofitable. The price increase will not be likely to reduce the capacity required. This tends to be inelastic.

(c) Supply-side substitutability

As noted above, self-supply is the most likely substitute in terms of new suppliers encouraged into the market by price increases. Wholesale customers lease because they have limited capacity needs on specific routes and the cost of leasing is below the cost of building a system which may have a minimum capacity well in excess of the demand. Under these circumstances a SSNIP of 5% is unlikely to trigger a move to self-supply to a level that would make the SSNIP unprofitable.

(d) Geographic scope of market

Competition in the provision of leased line services is likely to develop in future on a route by route or similar geographic basis. Therefore CITC is disposed to keep the market under observation to discern if the patterns of demand and supply vary significantly by location so that a geographic or route-based approach to defining sub-markets might become appropriate. At this stage however CITC has concluded that, for the time horizon for this analysis, such geographic dissection of the market would be inappropriate and serve no regulatory purpose.

(e) Threshold matters

Having defined the market it is appropriate to consider the three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework.

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers*

The regulatory (licensing) barriers are substantial. However the cost of provision of alternative network infrastructure to support leased line services is not necessarily high, particularly for short-distance lines that might be delivered using microwave systems, for example. The height of entry barriers will depend on whether the need is for short-distance or longer distance leased lines.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers*

With the exception of leased line services that might be addressed through self-provision, the market has characteristics, in terms of extensive transmission infrastructure that reflects scale economies, that suggest the existence of dominant service providers will be a feature for some time in most situations where leased lines are sought.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration*

Given the potential difficulty of introducing competition, particularly on long distance routes, it is unlikely that *ex-post* controls will adequately address concerns associated with market dominance. Regulators in many countries have found it far more effective to apply *ex-ante* measures in these situations even though competition in their markets has developed further than in KSA.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests that the market has generally high entry barriers (save for some self-supply opportunities), is not likely to develop into a competitive market if left to its own forces, and is one where *ex-post* controls and *ex-ante* regulation in other markets are unlikely to address the potential harm from dominance in this market. Under those circumstances the CITC intends to designate the market under consideration as a relevant market for the purposes of *ex-ante* regulation of dominance.

3.12 Market 12 – Wholesale mobile call termination services

(a) Market definition

This wholesale market exists in relation to the termination of calls addressed to end-users connected to each mobile network, so that each mobile network defines a separate market.

(b) Demand-side substitutability

There are no substitute services. All service providers have monopolies in relation to call termination on their networks. If a caller wishes to access a subscriber to a particular mobile service there is only way of doing so – and that is via the network to which the mobile subscriber is connected.

(c) Supply-side substitutability

Alternative supply does not arise for this service. The only supplier able to provide termination of a call to a particular mobile subscriber is the service provider to whose mobile network that subscriber is connected.

(d) Threshold matters

Having defined the market it is appropriate to consider the three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework.

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers*

Yes, entry barriers are high and non-transitory. No service providers other than the network operator are possible.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers*

No, the market will always have a single service provider.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration*

In these markets the issues that arise relate to the charge for access and other access terms and conditions. These issues can be readily anticipated and are amenable to *ex-ante* remedies. *Ex-post* controls alone are insufficient to address concerns or to prevent the issues from recurring on a continuous basis.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests that the market has high entry barriers (no other entry is possible), will not develop into a competitive market over time, and is one where *ex-post* controls and *ex-ante* regulation in other markets are unlikely to address the potential harm from dominance in this market. Under those circumstances the CITC intends to designate the market under consideration as a relevant market for the purposes of *ex-ante* regulation for dominance.

3.13 Market 13 - Wholesale national roaming services

(a) Market definition

This is the wholesale market for roaming of customers between national mobile networks.

(b) Transitional market

In KSA there is only one customer, Zain, and potentially two service providers, STC and Mobily. Zain has entered into a commercial agreement for these services with Mobily. It is unlikely that there will be more customers, since all licensed mobile service providers have deployed or are deploying their own networks. Wholesale roaming is therefore a transitional requirement while networks are being built or extended in their coverage.

There is no need for CITC to intervene in any way in this area at present, and possibly not at all. CITC notes that a similar stance has been adopted by EU regulators.

Conclusion:

This market is appropriately defined. However, it is transitional and effectively non-operational, and therefore consideration of the threshold criteria is not appropriate.

If and when the market becomes operational, the CITC may undertake an analysis of the market, either on its own motion or on the application of an interested person, and consistent with the procedures in the Revised Regulatory Framework, to determine whether *ex-ante* remedies are required to address the potential risk of harm from dominance.

Consequently CITC does not intend to take further action in relation to the market under consideration.

3.14 Market 14 - Wholesale international voice call services

(a) Market definition

This is a wholesale market for the provision of international voice connectivity.

(b) Demand-side substitutability

A hypothetical monopolist applying a SSNIP is highly likely to make a profit. The wholesale customer's demand is unlikely to change in a way that would make the SSNIP unprofitable. It is more likely that the wholesale customer would seek to pass on the additional costs of the SSNIP to end-users.

(c) Supply-side substitutability

A SSNIP is unlikely to encourage alternative suppliers to enter the market. Substantial investment is required for market entry by alternative suppliers and a SSNIP of 5% is unlikely to be sufficient to encourage this. Market entry requires international switching and transport capability and the development of a set of correspondent relationships to enable call conveyance and termination in KSA and overseas countries.

(d) Route by route definition of the market

Some respondents to the Public Consultation commented that this market would be best considered on a per route basis rather than as a single "block", reinforced by arrangements with international operators**.**

As noted in Figure 1 in relation to the retail market for international calls, the demand characteristics of different routes vary. However, with international call conveyance at the wholesale level, calls can be managed through intermediaries or processed in many ways. There is invariably more than one route to the destination country and carrier, and not all routes may be direct. Route diversity and total route management arrangements suggest that at this level of the market there is little to be gained in route by route market definition. However CITC understands the concern that arises when a service provider has affiliated companies at both ends of a route and may have the opportunity and the power to reduce prices below cost. Clearly these matters need to be monitored, but CITC considers that in all likelihood *ex-post* responses would be quite adequate in addressing the situation.

(e) Threshold matters

Having defined the market it is appropriate to consider the three threshold matters in Paragraph 4.2.4 of the Revised Regulatory Framework.

- *Whether the relevant market under consideration is subject to high and non-transitory entry barriers*

Regulatory barriers exist in that service providers need to be licensed in order to enter the market. When international call markets in other countries were being liberalised entrants focussed on the provision of international call services at both the wholesale and retail levels. This is because the profit margins and future profit opportunities relative to the investment seemed to be attractive. Although international wholesale voice call prices reduced substantially, including as a result of the introduction of IP-based technologies which offer high capacity and low unit cost, the sector remains attractive relative to the investment required to establish an operation. In resource and investment terms the entry barriers are not high. In any case, three service providers are in the market and have established their own international gateways.

- *Whether the relevant market under consideration is now or will tend over time to be subject to competitive market forces sufficient to protect the interests of customers*

Yes, this market will trend in that way because of the substantial numbers of service providers involved globally. Maintaining any form of power in this market is extremely difficult, and more difficult than in purely national markets.

- *Whether ex-post competition controls alone, in the absence of ex-ante regulation in the same relevant market, would likely be sufficient to address concerns related to market dominance, taking into account the particular characteristics of the relevant market under consideration*

Yes, it is likely that *ex-post* controls would be adequate to address the competition issues likely to arise in this market as a result of dominance. Competition already exists and it is not at a fragile or early stage such that anti-competitive behaviour would threaten it before *ex-post* remedies could be considered and applied. If competition issues occur in this market, they might take the form of exclusive dealing or price predation. In both cases *ex-ante* measures that are not related to dominance should be adequate to address the problem. For example, CITC has used its authority under Article 47 of the Bylaw to require all service providers, whether dominant or not, to notify price changes, and to suspend implementation pending review and analysis of any issues that are involved. This is an adequate approach to price predation. *Ex-post* remedies are available as well. Exclusive dealing, which typically involves refusal to deal and unjustified discrimination, is likely to be difficult in this market, but allegations can be addressed on a complaint basis, without competitors failing in the market in the interim. All of the competitors are substantial operations with significant affiliations in foreign-country markets.

Conclusion:

This market is appropriately defined. Consideration of the threshold criteria suggests:

- Leaving aside regulatory requirements for licensing, the barriers to entry are not particularly high and there are already three service providers who are now inside the barriers and who compete in this market.

- The market does not have competitors who are behaving or are able to behave like dominant service providers at present and this is likely to become even more pronounced as the third service provider gains traction in the market. There is no price leader in this market and all service providers find that they must respond to each others' pricing initiatives.

- *Ex-post* competition controls appear to be adequate for the regulation of behaviour that constitutes a potential threat from dominance.

Consequently CITC does not intend to designate the market under consideration as a relevant market for the purposes of *ex-ante* regulation of dominance.

3.15 Market 15 - Wholesale fixed voice call origination service

(a) Market definition

This wholesale market exists in relation to the origination of voice calls from fixed locations in which the calling customer specifies the network on which the call will be conveyed. The services that constitute this market are carrier selection and carrier pre-selection (CS and CPS).

(b) Service non-operational

This service is not operational at this time, and it cannot become operational until the three additional facilities-based service providers, other than STC, become operational and deploy services so that subscribers will have alternative service providers whom they can select or pre-select.

Conclusion:

This market is appropriately defined. However, the existing Regulatory Framework on Carrier Selection imposes the obligation to provide CS on all fixed facilities-based service providers and not only on dominant service providers. Consequently CITC does not intend to designate the market under consideration as a relevant market for the purposes of *ex-ante* regulation of dominance.

4 Dominance

The considerations to which CITC has regard in assessing whether there are one or more dominant service providers in any market are set out in Bylaw Article 30 of the Bylaw and supplemented by the additional criteria in Clause 4.3 of the Revised Regulatory Framework, as listed, for convenience, below.

The relevant article reads:

"**<u>Article 30 Designation of Dominant Service Providers</u>**

30.1 In accordance with Article One of the Act, every service provider that earns forty per cent (40%) or more of the gross revenues in a specific telecommunications market shall be designated a dominant service provider in that market, until and unless the Commission specifies otherwise in a decision.

30.2 The Commission may designate a service provider with more or less than forty per cent (40%) of the gross revenues in a specific telecommunications market as a dominant service provider if, either individually or acting together with others, it enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of competitors or users, taking into account its market share and the factors set out in paragraphs 30.6(b) to 30.6(f) of this Article.

30.3 The Commission shall post and maintain on its official web site a current list of all dominant service providers, specifying the markets in which they have been designated to be dominant.

30.4 Decisions designating dominant service providers shall specify and define the relevant markets for which a service provider is designated to be dominant.

30.5 Prior to issuing any designation decision the Commission shall consult with the public and with the affected service providers, except in the case of an initial decision to designate the incumbent service provider as dominant. Notice of such consultation shall be made in accordance with the Rules of Procedure.

30.6 In determining whether to designate a service provider as dominant, or to change its designation, with respect to any relevant market, the Commission shall, in respect of the relevant market only, take into account the following factors:

(a) the service provider's market share and whether it gives the service provider a position of economic strength affording it the power to behave to an appreciable extent independently of competitors or users, taking into account the other factors set out below;

(b) the number of other service providers and their market shares;

(c) pricing behaviour and the ability of any service provider to take the lead in setting prices;

(d) whether the service provider has exclusive or dominant control over essential facilities for the provision of services and/or telecommunications facilities that provide access to users;

(e) the availability of reasonably substitutable services; and

(f) the nature and extent of barriers to entry."

The supplementary criteria in Paragraph 4.3.1 of the Revised Regulatory Framework are:

(a) the degree of market concentration as determined by reference to revenues, numbers of subscribers or volumes of sales;

(c) the evolution of telecommunications service providers' market share over time;

(d) the degree to which a telecommunications service provider's prices vary over time;

(e) the ability of the telecommunications service provider to earn supernormal profits;

(f) the telecommunications service provider's financial resources and access to capital;

(g) the telecommunications service provider's vertical integration and the existence of a highly developed distribution network;

(h) whether the telecommunications service provider benefits from preferential or limited access to superior technology; and

(i) whether the telecommunications service provider has preferential, entrenched or long-term contracts for the supply of relevant services to large users.

In this Market Analysis Report the factors for consideration have been numbered and abbreviated for convenience as follows:

1. Market share
2. Power to act independently
3. Market structure
4. Pricing behaviour
5. Control over essential facilities
6. Availability of substitutable services
7. Barriers to entry

8. Market concentration
9. Evolution of market share over time
10. Price variations over time
11. Ability to earn supernormal profits
12. Financial resources and access to capital
13. Vertical integration and distribution networks
14. Preferential access to superior technology
15. Preferential or long-term contracts for supply of relevant services to large users

Not all of those factors are relevant for all markets under consideration.

The numbering scheme for the relevant markets that has been used earlier in this report is continued here for ease of reference.

4.1 Market 1 - Retail fixed access services

4.1.1 Market share

STC has close to 100% share in this market. Mobily/Bayanat and ITC are providing some fixed access for data services. The prospective new entrant fixed service providers (EATC, SITC and OCC) have no share in this market at present.

4.1.2 Power to act independently

Leaving market share considerations aside, STC has the power to act independently of its competitors and customers, taking account of the factors listed below.

4.1.3 Market structure

This market is structured in terms of one large long-term incumbent, two small and relatively new service providers and three prospective new entrants who are about to be licensed and have yet to rollout their networks and to deploy services.

4.1.4 Pricing behaviour

STC's prices in this area have always been regulated. The pricing outcomes that are in place today therefore do not represent the behaviour of STC alone. On any view STC is a price leader in this market.

4.1.5 Control over essential facilities

STC controls a range of essential facilities that are needed for the provision of the services in this market, including:

- Rights of way in the nature of grants

- Ducts and conduits to support the customer access network connecting STC's switching centres and customer premises
- Masts and towers in favourable locations
- Transmission capacity in the customer access network (including copper loops) and in low demand areas served by the core (inter-exchange or backbone) network

These are essential facilities because they cannot be economically replicated in many locations.

4.1.6 Availability of substitutable services

Mobile services are being seen as a substitute by some subscribers, who have preferred to rely entirely on mobile for access. However, fixed and mobile access services have different characteristics and typical uses, and mobile access services are not considered full substitutes for fixed access services.

4.1.7 Barriers to entry

Fixed access service provision is subject to regulatory barriers, in that entry is subject to an individual licence. Such licences are only available at times and subject to conditions established by the regulator. In addition substantial capital and other resources are required to enter this market and to achieve a viable scale of operations.

4.1.8 Market concentration

This is a very concentrated market. STC has close to 100% market share.

4.1.9 Evolution of market share over time

The new entrants will gain market share over time, but they will be forced to do that through the provision of broadband services rather than narrow-band PSTN services that are the prime focus of this market today. STC will be a competitor in the provision of those services as well. Therefore, CITC expects the evolution of market share to be a long term matter, with a low rate of change.

4.1.10 Price variations over time

Price variations have been subject to careful scrutiny and control by CITC. There have been no price variations reflecting STC responding to its customers or competitors in the manner that it might in a competitive market.

4.1.11 Ability to earn supernormal profits

Absent regulation, STC has the ability to earn supernormal profits in this market.

4.1.12 Financial resources and access to capital

STC has substantial financial resources and has had, in the past, the access to capital to support the implementation of its business plans. It should be said that many other potential competitors in the broader market are also likely to be well resourced. This is not therefore a major factor for current consideration.

4.1.13 Vertical integration and distribution networks

STC is a vertically integrated company consisting of infrastructure, wholesale and retail businesses. It is structured in a manner that generates a capacity to take profits, absent regulation, at either wholesale or retail levels in the value chain.

STC has distribution networks in this and other markets, but, in CITC's view this is not a source of substantial advantage, since competitors (including mobile service providers) have been able to set up such networks without being hindered unduly by exclusive arrangements.

4.1.14 Preferential access to superior technology

STC does not have preferential access to superior technology.

4.1.15 Preferential or long-term contracts for supply of relevant services to large users

Given its historical position in this market STC has long-term arrangements with large customers including Government. CITC is not aware that those arrangements are exclusive or preclude the customers from taking part or all of their requirements from other service providers now or in future. In any case, if there are volume discounts or other arrangements that tend to encourage customer 'loyalty' in these situations they are amenable to examination and, if found to be anti-competitive, to remedial action on an *ex-post* basis.

Conclusion:

STC is dominant in this market. No other service provider is dominant in this market.

4.2 Market 2 - Retail local and national fixed voice call services

4.2.1 Market share

STC has 100% share in this market and the prospective new entrant fixed operators (EATC, SITC and OCC) have no share in this market at present.

4.2.2 Power to act independently

Leaving market share considerations aside, STC has the power to act independently of its competitors and customers, taking account of the factors listed below.

4.2.3 Market structure

This market is structured in terms of one large long-term incumbent and three small new entrants who are about to be licensed and have yet to rollout their networks and to deploy services.

4.2.4 Pricing behaviour

STC's prices in this area have always been regulated. The pricing outcomes that are in place today therefore do not represent the behaviour of STC alone.

4.2.5 Control over essential facilities

Local and national call services are supported by circuit-switched network platforms. The switching systems are economic to replicate, but the transmission systems and the infrastructure platforms on which they operate are not, as outlined in paragraph 4.1.5 above.

4.2.6 Availability of substitutable services

There are substitute services for most local and national fixed voice calls, but with different characteristics and with pricing that includes the cost of different means of provision and different amenities (such as mobility). The mobile premium, discussed in paragraph 3.2(b), means that there is no ready, similarly priced substitute.

4.2.7 Barriers to entry

Fixed call service provision is subject to regulatory barriers, in that entry is subject to an individual licence. Such licences are only available at times and subject to conditions established by the regulator. It needs to be recognised, however, that alternative means of call service are available, such as via mobile services (as already discussed) and VoIP (albeit not allowed at present). Although barriers to the fixed national call market are high, they are changing in their character and import.

4.2.8 Market concentration

This is a very concentrated market,.

4.2.9 Evolution of market share over time

CITC expects the new entrants to gain market share over time, but they will be forced to do that through the provision of fixed calls in conjunction with the provision of broadband services rather than using narrow-band PSTN services that are the prime focus of this market today. STC will be a competitor in the provision of those services as well. Therefore, CITC expects the evolution of market share to be a long term matter, with only gradual change.

4.2.10 Price variations over time

Price variations have been subject to careful scrutiny and control by CITC.

4.2.11 Ability to earn supernormal profits

Absent regulation, STC has the ability to earn supernormal profits in this market. This is not affected by current and likely immediate future levels of competition.

4.2.12 Financial resources and access to capital

STC has substantial financial resources and has had, in the past, the access to capital to support the implementation of its business plans. It should be said that many other immediate and potential competitors in the broader market are also likely to be well resourced. This is therefore not considered to be a factor for the determination of dominance in this market.

4.2.13 Vertical integration and distribution networks

STC is a vertically integrated company consisting of infrastructure, wholesale and retail businesses. It is structured in a manner that generates a capacity to take profits, absent regulation, at either wholesale or retail levels in the value chain.

STC has distribution networks in this and other markets, but, in CITC's view this is not a source of substantial advantage in this market, since competitors (including mobile service providers) have been able to set up such networks without being hindered unduly by exclusive arrangements.

4.2.14 Preferential access to superior technology

STC does not have preferential access to superior technology.

4.2.15 Preferential or long-term contracts for supply of relevant services to large users

Given its historical position in this market STC has long-term arrangements with large customers including Government. CITC is not aware that those arrangements are exclusive or preclude the customers from taking part or all of their requirements associated with this market from other service providers now or in future. In any case, if there are volume discounts or other arrangements that tend to encourage customer 'loyalty' in these situations they are amendable to examination and, if found to be anti-competitive, to remedial action on an *ex-post* basis.

Conclusion:

STC is dominant in this market. No other service provider is dominant in this market.

4.3 Market 5 - Retail business data services

4.3.1 Market share

CITC does not have specific information, but it estimates that STC's share would be well over 90% in each of the critical service sub-markets – for leased line services and for IP-VPN services.

4.3.2 Power to act independently

Absent regulation, STC would have the power to act in this market independently of its customers and competitors, having regard to the factors set out below.

4.3.3 Market structure

There is one long-standing incumbent service provider (i.e. STC), Mobily/Bayanat and ITC are also providing data services, and three new entrants are in the process of being licensed in this market.

4.3.4 Pricing behaviour

Prices and price changes are regulated. STC is a price leader in this market.

4.3.5 Control over essential facilities

These services are built on essential facilities of the same kind as listed in paragraph 4.1.5.

4.3.6 Availability of substitutable services

The services in this market are, to some extent, substitutable amongst themselves. It is also the case that some other services are substitutable, but do not have the geographical availability at this stage for them to be practical substitutes. Such services include broadband internet access.

4.3.7 Barriers to entry

Entry is subject to licensing. The platforms on which the services are provided include essential facilities that require substantial resources for construction and operation.

4.3.8 Market concentration

The market is very concentrated. See paragraphs 4.3.1 and 4.3.3.

4.3.9 Evolution of market share over time

CITC expects that market share over time will follow the pattern associated with broadband, since many of the services will evolve into IP-based applications on broadband platforms. That evolution will provide an opportunity for competition to develop and for new entrants to gain share, but CITC expects that the evolution will be gradual.

4.3.10 Price variations over time

Prices are regulated. There is no evidence of prices changing with costs as they would in a competitive market.

4.3.11 Ability to earn supernormal profits

Absent regulation, STC has the ability to earn supernormal profits in this market.

4.3.12 Financial resources and access to capital

All service providers have appropriate financial resources and access to capital. This factor is not seen as a source of market dominance in this market.

4.3.13 Vertical integration and distribution networks

STC is vertically integrated and that is a source of market power in this market. STC has distribution networks, but CITC is not aware that these are exclusive in any sense or will not be capable of being matched by other service providers as they increase their presence in the market. In practice IT vendors, maintainers and systems integrators to whom end business customers turn to for advice on their data management and processing needs are the ones that have a substantial say in recommending communications solutions to match the IT issues. These are effective distribution networks that have some considerable influence on demand and market behaviour. They are not typical passive or ‘owned’ sales channels.

4.3.14 Preferential access to superior technology

STC has no such preferential access.

4.3.15 Preferential or long-term contracts for supply of relevant services to large users

Given its historical position in this market STC has long-term arrangements with large customers including Government. CITC is not aware that those arrangements are exclusive or preclude the customers from taking part or all of their requirements associated with this market from other service providers now or in future. In any case, if there are volume discounts or other arrangements that tend to encourage customer ‘loyalty’ in these situations they are amendable to examination and, if found to be anti-competitive, remedial action on an *ex-post* basis. In addition, the important role of IT vendors, maintainers, system integrators and other intermediaries militates against strong preferences by the end-customer in this market.

Conclusion:

STC is dominant in this market. No other service provider is dominant in this market.

4.4 Market 6 - Retail broadband internet access services

4.4.1 Market share

STC has effectively 100% share in this market. The two licensed data service providers and the prospective entrant fixed operators (EATC, SITC and OCC) have no significant share in this market at present.

4.4.2 Power to act independently

Although three additional licensees will enter the market in the near future, STC is effectively the only service provider at present. It has the power to act independently of its customers and competitors having regard to the factors below.

4.4.3 Market structure

STC is the long-standing incumbent service provider. Mobily/Bayanat and ITC provide some broadband internet access services. EATC, SITC and OCC have yet to be licensed and to establish commercial operations.

4.4.4 Pricing behaviour

Prices and price changes are regulated. STC is a price leader in this market.

4.4.5 Control over essential facilities

STC has control over the two main underlying facilities on which this service is based – unbundled local loops (ULL) and where established, fibre. Access to the customer is not economically replicable in many locations and therefore control of both kinds of facility (copper loops and fibre) constitutes control of essential facilities.

4.4.6 Availability of substitutable services

There is the possibility of substitute service in the form of mobile data with internet access. However the customer experience is substantially different and mobile handsets may be unsuited for many business applications. For practical purposes therefore there is no direct substitute service.

4.4.7 Barriers to entry

There are regulatory licensing barriers to entry. The resources and investment required to enter this market at the retail level are substantial.

4.4.8 Market concentration

The market is very concentrated. See paragraphs 4.4.1 and 4.4.3.

4.4.9 Evolution of market share over time

The market shares will evolve over time as the new entrants deploy their services and roll out their networks.

4.4.10 Price variations over time

CITC expects price variations to be made in future in anticipation of competition from new entrants. That has not been the situation to date.

4.4.11 Ability to earn supernormal profits

Absent regulation, STC has the ability to earn supernormal profits in this market at this time.

4.4.12 Financial resources and access to capital

This is not a particularly relevant consideration in these markets given the level of resources required to establish and conduct a business.

4.4.13 Vertical integration and distribution networks

STC is a vertically integrated service provider in this market. It controls the upstream wholesale markets relating to wholesale broadband access and therefore has the capacity to influence the position of its competitors in the market under consideration, unless and until its competitors are in a position to establish their own access networks. However, in many locations the establishment of alternative access networks will not be economic, and so CITC would expect longer term reliance on wholesale services from STC.

CITC does not anticipate that STC has a substantial advantage through access to established and exclusive distribution arrangements. This has not been the case in other important markets, such as the market for retail mobile services, and is no more likely to occur in the market under consideration.

4.4.14 Preferential access to superior technology

No service provider has preferential access to superior technology relevant to this market.

4.4.15 Preferential or long-term contracts for supply of relevant services to large users

Given its historical position in this market STC has long-term arrangements with large customers including Government. CITC is not aware that those arrangements are exclusive or preclude the customers from taking part or all of their requirements associated with this market from other service providers now or in future. In any case, if there are volume discounts or other arrangements that tend to encourage customer 'loyalty' in these situations they are amendable to examination and, if found to be anti-competitive, remedial action on an ex-post basis. In addition, the important role of IT vendors, maintainers, system integrators and other intermediaries militates against strong preferences by the end-customer in this market.

Conclusion:

STC is dominant in this market. No other service provider is dominant in this market.

4.5 Market 7 - Wholesale fixed voice call termination services

This is really a collection of markets – with each fixed network constituting a separate network.

4.5.1 Market share

Each service provider that operates a network has 100% share of this market, irrespective of shares in other markets.

4.5.2 Power to act independently

Absent regulation, each service provider has the power to act independently having regard to the factors below.

4.5.3 Market structure

There are one current and 3 prospective service providers (separate markets) in this field – STC, EATC, SITC and OCC. However only one is in each market, since each network defines a separate market.

4.5.4 Pricing behaviour

Prices in this market are regulated.

4.5.5 Control over essential facilities

Not relevant.

4.5.6 Availability of substitutable services

No substitute is available.

4.5.7 Barriers to entry

No entry is possible apart from the network owner.

4.5.8 Market concentration

There is only ever one service provider in each termination market so by definition the market is concentrated.

4.5.9 Evolution of market share over time

This will not change at all.

4.5.10 Price variations over time

Prices are regulated. Changes reflect initiatives by the regulator, not the service provider.

4.5.11 Ability to earn supernormal profits

There is a very clear ability to earn supernormal profits in this market.

4.5.12 Financial resources and access to capital

Not relevant.

4.5.13 Vertical integration and distribution networks

This market only exists at the wholesale level. There is no corresponding retail service. Distribution networks are not relevant to this market.

4.5.14 Preferential access to superior technology

Not relevant.

4.5.15 Preferential or long-term contracts for supply of relevant services to large users

Not relevant.

Conclusion:

STC is dominant in this market. EATC, SITC and OCC will be dominant in this market when they are licensed and their networks are operational and capable of terminating voice calls.

4.6 Market 10 - Wholesale broadband access services

4.6.1 Market share

STC has close to 100% market share.

4.6.2 Power to act independently

STC has the power to act independently, having regard to the factors below.

4.6.3 Market structure

STC is the long-standing incumbent service provider. Mobily/Bayanat and ITC have the capacity to provide service through their fibre ring infrastructure. EATC, SITC and OCC have yet to be licensed and to establish commercial operations.

4.6.4 Pricing behaviour

Prices in this market are regulated. STC is the price leader.

4.6.5 Control over essential facilities

Both services are provided by network platforms established on essential facilities of the kinds listed in paragraph 4.1.5 of this report.

4.6.6 Availability of substitutable services

There are no direct substitutes for the services that constitute this market.

4.6.7 Barriers to entry

There are high barriers to entry. They take the form of regulatory constraints as well as the capital and other resource requirements that are required to operate in this market. The barriers are non-transitory.

4.6.8 Market concentration

There are four service providers, one of which has effectively complete share at present. The market is very concentrated.

4.6.9 Evolution of market share over time

Market share is expected to change over time. However the new entrants will not be providing ULL for broadband access. The rate of evolution will therefore be dependent on the rate at which bitstream services are deployed and become the norm as wholesale inputs to retail broadband access services. This is a longer term transition and will not occur within the time horizon of this market analysis.

4.6.10 Price variations over time

Prices are regulated and to date have not responded to competitors or to customers as one would expect in a competitive market.

4.6.11 Ability to earn supernormal profits

Absent regulation, STC has the ability to earn supernormal profits in this market, and this is expected to apply for some considerable time.

4.6.12 Financial resources and access to capital

All service providers require and have financial resources and, to the best of CITC's understanding, the access to capital needed to implement their business plans and to deploy services. This then is not a factor affecting the assessment of dominance in the market under consideration.

4.6.13 Vertical integration and distribution networks

STC is vertically integrated, and competes in the retail internet access market. Distribution networks are not relevant to wholesale markets where the service provider may be reluctant to provide the services involved and the buyers are competitors.

4.6.14 Preferential access to superior technology

No service provider has preferential access to superior technology.

4.6.15 Preferential or long-term contracts for supply of relevant services to large users

This is not a relevant consideration for this market.

Conclusion:

STC is dominant in this market. No other service provider is dominant in this market.

4.7 Market 11 - Wholesale leased line service

4.7.1 Market share

STC has close to 100% market share.

4.7.2 Power to act independently

STC has the power to act independently, having regard to the factors below.

4.7.3 Market structure

Soon there will be eight licensed service providers; STC, Mobily, Zain, Bayanat, ITC, EATC, SITC and OTC. Of these, only STC, Mobily/Bayanat and ITC are providing services at this time, with the bulk of services from STC. The others have the capacity and technological capability to enter this market.

4.7.4 Pricing behaviour

Prices in this market are regulated.

4.7.5 Control over essential facilities

Transmission systems over “thin” (low demand) and long distance routes are essential facilities because they are not economically replicable. The network platforms on which leased line services are based include essential facilities of the kind set out in paragraph 4.1.5.

4.7.6 Availability of substitutable services

There are no substitute services, leaving aside self-supply which, as noted above, may be uneconomic in many situations.

4.7.7 Barriers to entry

Wireless technologies are relatively inexpensive and therefore the barriers to entry for short distance leased lines may be low. In general however such solutions may not deliver the required capacity or address the distance or terrain constraints at locations between which dedicated capacity is required. For most of the market CITC considers the barriers to entry as high.

4.7.8 Market concentration

The market is concentrated.

4.7.9 Evolution of market share over time

Given the barriers to entry and the current levels of concentration in the market CITC considers that the evolution of market share will be slow.

4.7.10 Price variations over time

To date prices in this market have been regulated.

4.7.11 Ability to earn supernormal profits

Absent regulation STC has the ability to earn supernormal profits. That ability is only constrained when the threshold of the buy-build decision is reached.

4.7.12 Financial resources and access to capital

This is not a particularly important factor in this market. All potential service providers have access to financial resources and capital.

4.7.13 Vertical integration and distribution networks

STC is vertically integrated and competes in the related downstream retail market for leased lines. That market is Market 5 in this analysis.

Distribution networks are not relevant to this wholesale market.

4.7.14 Preferential access to superior technology

No service provider has preferential access to superior technology.

4.7.15 Preferential or long-term contracts for supply of relevant services to large users

Not relevant.

Conclusion:

STC is dominant in this market. No other service provider is dominant in this market.

4.8 Market 12 - Wholesale mobile call termination services

This is really a collection of markets – with each mobile network constituting a separate network.

4.8.1 Market share

Each network operator has 100% share of this market constituted by its own mobile network, irrespective of shares in other markets.

4.8.2 Power to act independently

Absent regulation, each service provider has the power to act independently having regard to the factors below.

4.8.3 Market structure

There are three service providers with networks (separate markets) in this field – STC, Mobily and Zain.

4.8.4 Pricing behaviour

Prices in this market are regulated.

4.8.5 Control over essential facilities

Not relevant.

4.8.6 Availability of substitutable services

No substitute is available.

4.8.7 Article 30.6(f): Barriers to entry

No entry is possible apart from the network owner.

4.8.8 Market concentration

There is only ever one service provider in each termination market, being the service provider that owns the network that constitutes the market.

4.8.9 Evolution of market share over time

This will not change at all.

4.8.10 Price variations over time

Prices are regulated. Changes reflect initiatives by the regulator, not the service provider.

4.8.11 Ability to earn supernormal profits

There is a very clear ability to earn supernormal profits in this market.

4.8.12 Financial resources and access to capital

Not relevant.

4.8.13 Vertical integration and distribution networks

This market only exists at the wholesale level. There is no corresponding retail service. Distribution networks are not relevant to this market.

4.8.14 Preferential access to superior technology

Not relevant.

4.8.15 Preferential or long-term contracts for supply of relevant services to large users

Not relevant.

Conclusion:

STC, Mobily and Zain are dominant in this market. There are no other service providers in this market.

5 Remedies

This chapter sets out the potential harm that the dominance of each dominant service provider in each relevant market may cause and the *ex-ante* remedies for dominance that CITC is disposed to apply having regard to the procedures and principles set forth in Section 4.4 of the Revised Regulatory Framework. This Chapter does not address the *ex-post* regulation of dominant service providers, nor does it address *ex-ante* regulation that is of general application to all service providers, regardless of whether or not they are dominant. In effect, as set out in the Figure 4.2 of the First Public Consultation Document, CITC has applied a number of *ex-ante* remedies to some or all service providers irrespective of dominance, including in relation to Quality of Service, Terms of Service, etc.

5.1 Market 1: Retail fixed access services

Only STC is dominant in this market. The extent of STC's dominance is substantial, and it is unlikely to be tempered to any extent by developments in the market in the near term.

There are a number of areas that offer potential for harm from market dominance, both to customers and to competitive entrants now in the course of being licensed:

- Over-charging
- Anti-competitive pricing
- Unfair terms and conditions

The remedies that are most appropriate in these circumstances, given the risk and the potential for substantial harm to customers and competitors are:

(a) **Article 47 of Bylaw - Tariff filing and approval**: STC shall be required to notify CITC of all tariffs that apply to services in this market in accordance with the Tariff Procedures, and shall not implement changes to such tariffs until they have been approved by CITC.

(b) **Article 52 of Bylaw - Cost studies**: STC shall undertake cost studies as required by CITC to support proposed tariff changes, and CITC shall provide directions for specific cost studies as the circumstances of the proposed changes requires. On the basis of such cost studies CITC may also direct STC to file tariff changes to ensure that tariffs better reflect costs.

(c) **Article 53 of Bylaw – Price cap regulation.** The CITC may require STC to propose a method for implementing price cap regulation.

(d) **Article 62 of Bylaw – User information requirements.** The dominant service provider is required to provide to users information related to tariffs, and other matters as set out in the Bylaw.

(e) **Accounting separation**: STC shall submit to CITC periodic accounting separation reports on a frequency specified by CITC and in a form specified by CITC for the purpose of determining the full costs and profitability of services in this market.

5.2 Market 2: Retail and local and national fixed voice call services

Only STC is dominant in this market. The extent of STC's dominance is significant, and it may be tempered in practice by the phenomenon called Call Fixed Mobile Substitution (call FMC).

There are a number of areas that offer potential for harm from market dominance, both to customers and to competitive entrants now in the course of being licensed:

- Over-charging
- Anti-competitive pricing
- Unfair terms and conditions

The remedies that are most appropriate in these circumstances, given the risk and the potential for substantial harm to customers and competitors are:

(a) **Article 47 of Bylaw - Tariff filing and approval**: STC shall be required to notify CITC of all tariffs that apply to services in this market in accordance with the Tariff Procedures, and shall not implement changes to such tariffs until they have been approved by CITC.

(b) **Article 52 of Bylaw - Cost studies**: STC shall undertake cost studies as required by CITC to support proposed tariff changes, and CITC shall provide directions for specific cost studies as the circumstances of the proposed changes requires. On the basis of such cost studies CITC may also direct STC to file tariff changes to ensure that tariffs better reflect costs.

(c) **Article 53 of Bylaw – Price cap regulation.** CITC may require STC to propose a method for implementing price cap regulation.

(d) **Article 62 of Bylaw – User information requirements.** STC shall be required to provide to users information related to tariffs, and other matters as set out in the Bylaw.

(e) **Accounting separation**: STC shall submit to CITC periodic accounting separation reports on a frequency specified by CITC and in a form specified by CITC for the purpose of determining the full costs and profitability of services in this market.

5.3 Market 5: Retail business data services

Only STC is dominant in this market. The extent of STC's dominance is significant, and it may be tempered in practice by the potential competition from new entrants when they deploy services in this market and, increasingly, from mobile data services. This market is in flux and this suggests an additional reason for CITC to be careful to avoid being unduly intrusive in the market in terms of *ex-ante* remedies. The market development may be distorted as a result. The list of appropriate remedies below are the same as for other markets that are more established and do not have the level of flux as this market, but, given the need to avoid distortion, the intensity of the application of any remedy will need care.

There are a number of areas that offer potential for harm from market dominance, both to customers and to competitive entrants now in the course of being licensed:

- Over-charging
- Anti-competitive pricing
- Unfair terms and conditions

The remedies that are most appropriate in these circumstances, given the risk and the potential for substantial harm to customers and competitors are:

(a) **Article 47 of Bylaw - Tariff filing and approval**: STC shall be required to notify CITC of all tariffs that apply to services in this market in accordance with the Tariff Procedures, and shall not implement changes to such tariffs until they have been approved by CITC.

(b) **Article 47 of Bylaw - Cost studies**: STC shall undertake cost studies as required by CITC to support proposed tariff changes, and CITC shall provide directions for specific cost studies as the circumstances of the proposed changes requires. On the basis of such cost studies CITC may also direct STC to file tariff changes to ensure that tariffs better reflect costs.

(c) **Article 53 of Bylaw – Price cap regulation.** CITC shall require STC to propose a method of price cap regulation.

(d) **Article 62 of Bylaw – User information requirements.** STC shall be required to provide to users information related to tariffs, and other matters as set out in the Bylaw.

(e) **Accounting separation**: STC shall submit to CITC periodic accounting separation reports on a frequency specified by CITC and in a form specified by CITC for the purpose of determining the full costs and profitability of services in this market.

5.4 Market 6: Retail broadband internet access services

Only STC is dominant in this market. The extent of STC's dominance is significant, and it may be tempered by the knowledge that three additional entrants are in the process of being licensed to enter this market in the near future. However, imminent entry by competitors may equally be the spur for action that is an abuse of dominance.

There are a number of areas that offer potential for harm from market dominance, both to customers and to competitive entrants now in the course of being licensed:

- Over-charging: The risk is that STC may seek to over-charge for services that are not part of the initial service menu of the new entrants.
- Anti-competitive pricing: The risk here is that STC may seek to reduce its tariffs to below cost in locations or for services that will be initial targets by new entrants.
- Unfair terms and conditions
- Customer lock-in: The risk here is that STC might seek to lock customers into longer term contracts, by inducements that are not cost-based in advance of market entry by the new licensees.

The remedies that are most appropriate in these circumstances, given the risk and the potential for substantial harm to customers and competitors are:

(a) **Article 47 of Bylaw - Tariff filing and approval**: STC shall be required to notify CITC of all tariffs that apply to services in this market in accordance with the Tariff Procedures, and shall not implement changes to such tariffs until they have been approved by CITC.

(b) **Article 52 of Bylaw - Cost studies**: STC shall undertake cost studies as required by CITC to support proposed tariff changes, and CITC shall provide directions for specific cost studies as the circumstances of the proposed changes requires. On the basis of such cost studies CITC may also direct STC to file tariff changes to ensure that tariffs better reflect costs.

(c) **Article 53 of Bylaw – Price cap regulation.** CITC shall require STC to propose a method of price cap regulation.

(d) **Article 62 of Bylaw – User information requirements.** STC shall be required to provide to users information related to tariffs, and other matters as set out in the Bylaw.

(e) **Accounting separation**: STC shall submit to CITC periodic accounting separation reports on a frequency specified by CITC and in a form specified by CITC for the purpose of determining the full costs and profitability of services in this market.

5.5 Market 7: Wholesale fixed voice call termination services

Only STC is currently dominant in this market. The three additional facilities-based service providers to be licensed, i.e. EATC, SITC and OCC, will be dominant in respect of the markets defined by their own networks when they become operational.

The extent of STC's dominance, and of the potential dominance of EATC, SITC and OCC, is substantial.

There are a number of areas that offer potential for harm from market dominance, both to competitors, and, through them, to end users:

- Over-charging: The risk is that STC now, and the other service operators when operational, may seek to over-charge for call termination services relative to the cost of service provision. This will increase the costs of competitors and reduce their competitiveness in downstream retail markets.
- Unfair terms and conditions
- Denial or delay in providing services
- Reduction in quality

The remedies that are most appropriate to be applied to STC in these circumstances, given the risk and the potential for substantial harm to customers and competitors are:

(a) **Article 39 of Bylaw - Offer interconnection services**: CITC shall require STC to continue to offer interconnection services of the kind that are within this market to all licensed service providers.

(b) **Article 41 of Bylaw - Reference Interconnection Offer (RIO)**: CITC shall require STC to periodically update and submit for approval a RIO which conforms to the requirements of the Interconnection Guidelines and which sets out the terms and conditions that shall apply to the interconnection services in this market to all licensed service providers who require such services.

(c) **Article 40 of Bylaw - Interconnection charges**: STC shall be required to submit for CITC approval all interconnection charges that apply to services in this market in accordance with the Interconnection Guidelines, and having regard to the costing standards determined by CITC.

(d) **Article 42 of Bylaw - Interconnection agreements.** STC shall be required to submit its interconnection agreements to the CITC pursuant to the Bylaw and shall comply with all other provisions contained therein.

(e) **Article 52 of Bylaw - Cost studies**: STC shall undertake cost studies as required by CITC to support proposed tariff changes. CITC may provide directions for specific cost studies as the circumstances of the proposed changes require. On the basis of such cost studies, CITC may also direct

STC to file relevant call termination tariff changes to ensure that tariffs better reflect costs.

(f) **Accounting separation**: STC shall submit to CITC periodic accounting separation reports on a frequency specified by CITC and in a form specified by CITC for the purpose of determining the full costs and profitability of services in this market.

In the case of EATC, SITC and OCC, when each is licensed and operational, CITC is disposed to impose the following remedies:

(a) **Article 39 of Bylaw - Offer interconnection services**: CITC shall direct EATC, SITC and OCC to continue to offer interconnection services of the kind that are within this market to all licensed service providers.

(b) **Article 41 of Bylaw - Reference Interconnection Offer (RIO)**: CITC shall require EATC, SITC and OCC to submit for approval a RIO which is in conformance to Interconnection Guidelines and which sets out the terms and conditions that shall apply to the interconnection services in this market to all licensed service providers who require such services. In each case the service provider may submit a RIO that has reciprocal provisions to the approved STC RIO.

(c) **Article 40 of Bylaw - Interconnection charges**: EATC, SITC and OCC shall be required to shall be required to submit for CITC approval all interconnection charges that apply to services in this market in accordance with the Interconnection Guidelines, and having regard to the costing standards and to the policies relating to symmetric interconnection charges determined by CITC.

(d) **Article 42 of Bylaw - Interconnection agreements.** EATC, SITC and OCC shall be required to submit their interconnection agreements to the CITC pursuant to the Bylaw and shall comply with all other provisions contained therein.

5.6 Market 10: Wholesale broadband access services

Only STC is dominant in this market. The extent of STC's dominance is significant, although there are two licensed data service providers and three additional entrants are in the process of being licensed and may decide to enter this market in the near future. However, imminent entry by competitors may equally be the spur for action that is an abuse of dominance.

There are a number of areas that offer potential for harm from market dominance, both to customers and to competitive entrants now in the course of being licensed:

- Over-charging: The risk is that STC may seek to over-charge for services that are not part of the initial service menu of the new entrants.

- Anti-competitive pricing: The risk here is that STC may seek to reduce its tariffs to below cost in locations or for services that will be initial targets by new entrants.
- Unfair terms and conditions
- Denial or delay in providing services
- General discrimination in favour of the service provider's own retail operations

The remedies that are most appropriate in these circumstances, given the risk and the potential for substantial harm to customers and competitors are:

(a) **Reference Offer for Data Access (RODA)**: CITC shall require STC to periodically update and submit for approval the RODA which sets out the terms and conditions that apply to the access services in this market to all licensed service providers who require such services.

(b) **Article 52 of Bylaw - Cost studies**: STC shall undertake cost studies as required by CITC to support proposed tariff changes, and CITC shall provide directions for specific cost studies as the circumstances of the proposed changes requires. On the basis of such cost studies CITC may also direct STC to file tariff changes to ensure that tariffs better reflect costs.

(c) **Accounting separation**: STC shall submit to CITC periodic accounting separation reports on a frequency specified by CITC and in a form specified by CITC for the purpose of determining the full costs and profitability of services in this market.

5.7 Market 11: Wholesale leased line services

Only STC is dominant in this market. The extent of STC's dominance is significant, although there are two licensed data service providers in the market, and three additional entrants are in the process of being licensed and may also decide to enter this market . However, imminent entry by additional competitors may equally be the spur for action that is an abuse of dominance.

There are a number of areas that offer potential for harm from market dominance, both to customers and to competitive entrants now in the course of being licensed:

- Over-charging: The risk is that STC may seek to over-charge for services that are not part of the initial service menu of the new entrants.
- Anti-competitive pricing: The risk here is that STC may seek to reduce its tariffs to below cost in locations or for services that will be initial targets by new entrants.
- Unfair terms and conditions
- Denial or delay in providing services
- General discrimination in favour of the service provider's own retail operations

The remedies that are most appropriate in these circumstances, given the risk and the potential for substantial harm to customers and competitors are:

(a) **Offer wholesale leased lines**: CITC shall require STC to continue to offer wholesale leased lines that licensed competitors may require, subject to the locations between which the leased lines are required being places capable of being served by STC's current network.

(b) **Article 47 of Bylaw - Tariff filing and approval**: STC shall be required to file for approval with CITC all proposed tariff changes that apply to services in this market, and shall not implement changes to such tariffs until they have been approved by CITC.

(c) **Article 52 of Bylaw - Cost studies**: STC shall undertake cost studies as required by CITC to support proposed tariff changes, and CITC shall provide directions for specific cost studies as the circumstances of the proposed changes requires. On the basis of such cost studies CITC may also direct STC to file tariff changes to ensure that tariffs better reflect costs.

(d) **Accounting separation**: STC shall submit to CITC periodic accounting separation reports on a frequency specified by CITC and in a form specified by CITC for the purpose of determining the full costs and profitability of services in this market.

5.8 Market 12: Wholesale mobile call termination services

STC, Mobily and Zain are currently dominant in this market. The mobile network of each service provider constitutes a separate market.

There are a number of areas that offer potential for harm from market dominance, both to competitors, and, through them, to end users:

- Over-charging: The risk is that STC, Mobily and Zain may seek to over-charge for call termination services relative to the cost of service provision. This will increase the costs of competitors and reduce their competitiveness in downstream retail markets.
- Unfair terms and conditions
- Denial or delay in providing services
- Reduction in quality

The remedies that are most appropriate to be applied to STC, Mobily and Zain in these circumstances, given the risk and the potential for substantial harm to competitors and, through them, to customers, are:

(a) **Article 39 of the Bylaw - Offer interconnection services**: CITC shall require STC, Mobily and Zain to continue to offer interconnection services of the kind that are within this market to all licensed service providers.

(b) **Article 41 of the Bylaw - Reference Interconnection Offer (RIO)**: CITC shall require STC to periodically update its RIO, and Mobily and Zain to prepare a RIO. Each RIO shall set out the terms and conditions that shall apply to the interconnection services in this market to all licensed service providers who require such service, and shall conform to the requirements of the Interconnection Guidelines and shall be submitted to CITC for approval.

(c) **Article 40 of the Bylaw - Interconnection charges**: STC, Mobily and Zain shall be required to submit for CITC approval all interconnection charges that apply to services in this market in accordance with the Interconnection Guidelines, having regard to the costing standards advised by CITC from time to time.

(d) **Article 42 of Bylaw - Interconnection agreements.** STC, Mobily and Zain shall be required to submit their interconnection agreements to the CITC pursuant to the Bylaw and shall comply with all other provisions contained therein.

(e) **Article 52 of the Bylaw - Cost studies**: STC, Mobily and Zain, or any one of them, shall undertake cost studies as required by CITC to support proposed tariff changes. CITC may provide directions for specific cost studies as the circumstances of the proposed changes require. On the basis of such cost studies CITC may also direct STC, Mobily and Zain or any one of them to file relevant call termination tariff changes to ensure that tariffs better reflect costs.

(f) **Accounting separation**: STC shall submit to CITC periodic accounting separation reports on a frequency specified by CITC and in a form specified by CITC for the purpose of determining the full costs and profitability of services in this market. CITC does not intend to require Mobily and Zain to submit periodic accounting separation reports at this time.

6 Summary

Figure 6.1 below summarizes the candidate markets that have been examined in this market analysis report and the conclusions that CITC has reached in each case.

Figure 6.1: Summary of market analysis

Candidate Market	***Designated Relevant Market***	***Dominant Service Provider***	***Remedies***
1. Retail fixed access services	Yes, designated	STC	Tariff filing and approval, cost studies, price caps, user information requirements, and accounting separation
2. Retail local and national fixed voice call services	Yes, designated	STC	
3. Retail international voice call services	No		
4. Retail national mobile services	No		
5. Retail business data services at fixed locations	Yes, designated	STC	Tariff filing and approval, cost studies, price caps, user information requirements, and accounting separation
6. Retail internet access services	Yes, designated	STC	
7. Wholesale fixed voice call termination services	Yes, designated	STC, and EATC, SITC and OCC when they are licensed and their networks are operational	Offer interconnection services, interconnection charge regulation, and RIO, cost studies and accounting separation
8. Wholesale transit interconnection service	No, combined with 10, below		
9. Wholesale line sharing service	No, combined with 10, below		
10. Wholesale broadband access services	Yes, designated	STC	RODA, cost studies and accounting separation
11. Wholesale leased line services	Yes, designated	STC	Offer wholesale leased line services, tariff filing and approval, cost studies and accounting separation
12. Wholesale mobile call termination services	Yes, designated	STC, Mobily and Zain	Offer interconnection services, interconnection charge regulation, and RIO, cost studies and accounting separation
13. Wholesale national roaming services	No		
14. Wholesale international voice call services	No		
15. Wholesale fixed voice call origination service	No		