



# **Determination: Dominance in Retail Domestic Fixed Telephony Markets**

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## **PREFACE**

This document is divided into four main parts.

Part 1 sets out the Authority's Determination of dominance in respect of the relevant markets for domestic fixed voice telecommunications services; Part 2 offers a background statement and a description of the process the Authority has followed to reach its Determination; and Part 3 highlights the Authority's approach to reaching this Determination. Finally Part 4 presents the Authority's dominance assessment.

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## 1 Determination

Having previously defined relevant economic markets for retail fixed domestic telephony services;

Having consulted with the relevant concessionaires and after considering their representations;

Having considered the likely future trends in the relevant markets;

After careful economic analysis and the application of sector specific rules; and

After due deliberation

**The Authority has determined that the following concessionaires are dominant in the economic markets for retail domestic fixed telephony, as defined in Determination TATT 2/10/2/1**

- ▶ **Market 1:** The market for retail fixed narrowband (voice) access – Telecommunications Services of Trinidad and Tobago (TSTT)
- ▶ **Market 2:** Fixed domestic retail voice services – Telecommunications Services of Trinidad and Tobago (TSTT).

The Authority will conduct regular reviews of the relevant markets in order to ensure that the determinations of dominance remain appropriate as competitive conditions change.



## 2 Background to the Authority's Determination

As a first step in assessing dominance the Authority initiated a process to define the relevant markets. This concluded in April 2009 with the publication of the Determination of Market Definitions in the Retail Domestic Fixed Voice Sector of T&T<sup>1</sup>. The Authority identified the following two relevant markets:

➤ **Market 1: A market for fixed narrowband (voice) access**

Narrowband access to a public telephone network at a fixed location (regardless of the technology used to provide access) by an individual for the purpose of accessing voice telephony services, including the following services:

- ✓ Residential narrowband (voice) access: narrowband fixed dedicated connection to a public fixed telecommunications network to residential customers; and
- ✓ Business narrowband (voice) access: narrowband fixed dedicated connection to a public fixed telecommunications network to business customers.

➤ **Market 2: Fixed domestic retail voice services**

Publicly available local and / or national retail telephone services provided at a fixed location (regardless of the technology used to provide the service), including the following services:

- ✓ Fixed to fixed calls: voice calls originating from a fixed access connection and terminating on another fixed access connection in Trinidad and Tobago and including both on-net calls (i.e., those terminating on the same fixed access network) and off-net calls (i.e., those terminating on another fixed access network in Trinidad and Tobago);

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<sup>1</sup>

[http://www.tatt.org.tt/ddocs/Determination\\_of\\_Market\\_Definitions\\_in\\_the\\_Retail\\_Domestic\\_Fixed\\_Voice\\_Sector.pdf](http://www.tatt.org.tt/ddocs/Determination_of_Market_Definitions_in_the_Retail_Domestic_Fixed_Voice_Sector.pdf)



- ✓ Public payphone: voice calls originating from a public payphone and terminating on any fixed access network or mobile network in Trinidad and Tobago; and
- ✓ Fixed to mobile calls: voice calls originating from a fixed access connection and terminating on any mobile network in Trinidad and Tobago.

In this determination the Authority sets out its views on the extent of competition in these markets. For this purpose, on 11<sup>th</sup> May 2009 the Authority sent an information request to all concessionaires. The concessionaires were asked to provide quantitative and qualitative information relevant for the analysis of market power in the above mentioned markets, including, but not limited to information on subscribers, traffic, revenues, prices and coverage. The Authority also asked operators to provide their views on a number of issues to get a better understanding of the extent of competition in the markets. The deadline to submit a reply to the information request was set to 9<sup>th</sup> of June 2009.

The Authority received quantitative information from TSTT, CCTL and Open Telecom.<sup>2</sup> CCTL also provided a qualitative response, raising two points. In particular, CCTL describes some TSTT behaviour it considers to be anti-competitive and concludes that TSTT is dominant, based on its high market share. It also considers that its business customers do exert a sufficient level of countervailing buyer power, given the significant fraction of traffic and revenues generated by these customers and their ability to switch provider.

TSTT did not respond to the qualitative part of the information request and was duly granted a number of extensions for responding to the Authority. In a letter from the Authority to TSTT dated August 17<sup>th</sup> 2009, (Reference TATT 4/8/4) the Authority stated that if information was not received by August 21<sup>st</sup> 2009, it would conduct its determination without further information from

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<sup>2</sup> Lisa Communications Limited also responded to the information request, confirming that it does not provide services in the relevant markets.

TSTT. Although TSTT did then respond to the qualitative information request, its response was not received by the Authority until after August 21<sup>st</sup>. In its draft determination, published on November 24<sup>th</sup> of 2009, the Authority therefore did not take this submission into account.

The consultation period on the draft decision closed on January 15<sup>th</sup> 2010. By this date, TATT had received one submission, from TSTT. At the same time, TSTT also requested an extension in order to provide the Authority with further analysis to support its submission. An extension was granted to January 29<sup>th</sup> 2010 and TSTT provided its additional submission on January 29<sup>th</sup> 2010.

In reaching this determination, the Authority has therefore had regard to the responses it received to the draft determination (including, for the avoidance of doubt, both TSTT's submissions), together with the initial evidence it gathered and analysis it undertook when it prepared the draft determination. This also includes the submissions made by TSTT for the purposes of the draft determination, but which (as explained above) were not taken into account in that document.

### 3 Approach to determining Dominance in the Relevant Markets

Section 29 (d) of the Telecommunications Act (“the Act”) establishes that:

*“The Authority may determine that an operator or provider is dominant where, individually or jointly with others, it enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers”*

More specifically, in economics market power can be defined as the ability to profitably raise prices above competitive levels. An operator would only be able to do this if it could act without significant competitive restraint from its competitors and customers.

Section 29 of the Act further establishes that for determining dominance:

*“The Authority shall take into account the following factors:*

*(a) the relevant market;*

*(b) technology and market trends;*

*(c) the market share of the provider;*

*(d) the power of the provider to set prices;*

*(e) the degree of differentiation among services in the market;*

*any other matters that the Authority deems relevant.”<sup>3</sup>*

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<sup>3</sup> The definition of dominance set out in the Act is similar to that provided in other jurisdictions and, in particular, under the European Regulatory Framework. It is also aligned with that observed in competition law practice. However, the analysis to determine whether an undertaking holds a dominant position for regulatory purposes is carried out from an ex-ante point of view (i.e., without observing any anti-competitive behaviour) whereas in competition law cases the analysis takes place ex-post (once there has been an alleged abuse). As a consequence, the indicators used for the assessment of dominance in a regulatory context may not necessarily coincide with those employed in competition law cases. For regulatory purposes it is not necessary to demonstrate that an abuse has taken place, but rather only that a provider is in such a position that it could abuse a dominant position.

Building on the Act, Condition A23 of the Concession Agreement provides, in the absence of the relevant regulations, a more detailed methodology for assessing dominance:

*“Without prejudice to any price or competition regulations to be developed by the Authority, and until such regulations are promulgated:*

*a. Any concessionaire which:*

- (i) serves over one hundred and fifty per cent (150%) of its Average Market Share in any market set out in this condition or defined by the Authority from time to time; or,*
- (ii) enjoys a position of economic strength affording it the power to behave an appreciable extent independently of competitors, customers and ultimately consumers;*

*shall be considered to have significant market power and may be declared a dominant provider subject to price regulation in accordance with section 29 of the Act. Notwithstanding the foregoing, a concessionaire with an actual market share of less than 15% of any defined market shall not be considered a dominant provider in that market.*

*b. the Authority may also determine, in accordance with section 29 of the Act, that a concessionaire is dominant where individually or jointly with others it operates in a market in such a way that more than one of the following conditions are satisfied:*

- (i) mature market;*
- (ii) homogenous product;*
- (iii) similar cost structures;*
- (iv) similar market shares;*
- (v) lack of technical innovation and mature technology;*
- (vi) absence of excess capacity;*
- (vii) lack of potential competition;*
- (viii) reduced scope for price competition; or*
- (ix) high barriers to entry.”*

According to condition A23(a) of the Concession, an operator with a market share above 150% of the average share in the market shall be declared dominant. For example, in a market with two players average market share would be 50% (i.e., 100%/2). A player with a share greater than 75% would

therefore, under this condition, be considered to be dominant in the market. On the other hand, any concessionaire with a market share below 15% shall not be considered dominant. Therefore, any dominance assessment must start with an analysis of market shares.

Notwithstanding this, the Authority recognises that market shares are an imperfect indicator of market power. Therefore, when assessing dominance, an initial analysis of market shares should be combined with an examination of those other factors listed in Section 29(d) of the Act and Condition A23 of the concession agreement.<sup>4</sup> These provide further information on the competitive restrictions faced by the undertakings in the relevant markets. For practical purposes, the Authority has categorised these factors as follows:

- **Actual market structure, pricing and offers:** the analysis of recent market trends in terms of existing market players, pricing policies and product offerings may provide useful information to understand the competitive environment.
  - ✓ It is important to **identify** the **main undertakings** in a market. Competition is likely to be stronger if alternative operators are financially robust and have a strong reputation in telecommunications or related markets (e.g. because they are incumbent operators in other countries or they are present in a variety of jurisdictions).
  - ✓ The aim of this step is to characterise the relevant market in terms of its main players: who they are, the degree of vertical integration and prevalent technologies in the market. This, in combination with the analysis of market shares, covers factors a) to c) from Section 29 (d) of the Act.

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<sup>4</sup> The Authority considers those factors listed in Condition A23(b) of the concession agreement are more relevant to the assessment of joint dominance, rather than single firm dominance. Given the prevailing structure of the markets under consideration in this draft determination, the Authority therefore concentrates on assessing those factors listed in Section 29(d) of the Act and others which it considers may influence the ability of concessionaires to act to an appreciable extent independently of competitors, customers and ultimately, consumers.

- ✓ The **evolution of prices** of the relevant services may also provide a good signal of the state of competition in the market. An increase in the market share of the incumbent operator may not necessarily imply the existence of a dominant position when this is accompanied by price reductions. However, one has to be careful when interpreting the evolution of prices of fixed telephony services as these are likely to be affected by regulation.
- ✓ This step is necessary to analyse the power of the concessionaires operating in the market to set prices, as established in condition d) of Section 29 (d) of the Act. It will also enable the Authority to assess other relevant factors such as the analysis of excess pricing and profitability, and the extent of competition on non-price factors.
- ✓ It is also important to analyse the diversity of **available offers** in the market. This may help to interpret price differences and assess whether the competitor's offers are substitutable with the incumbent's products. That is, even though two products are not considered to be sufficiently substitutable to form part of the same market, the pricing of one service may still create some competitive constraint on the second service.

This covers the analysis of factor e) of Section 29(d) of the Act.

- **Potential competition:** this is a key factor restricting the behaviour of active players in the market. Potential competition may come either from existing players with enough capacity to expand their production,<sup>5</sup> from potential entrants<sup>6</sup> or the evolution of alternative technologies.

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<sup>5</sup> For example, a cable operator with enough coverage may restrict the capacity of the incumbent operator to raise prices, as it will have the ability to respond to the price increase.

The analysis of technologies and market trends is a factor included in Section 29(d) of the Act.

- **Consumers' ability to discipline operators:** in addition to the above, the Authority considers that consumers play an important role in assessing dominance. Effective competition will be possible only if consumers are able to switch provider without incurring significant monetary or other costs. If consumers are to switch it is important they have easy access to relevant information. In the case of telecommunication markets, this is not always the case, as offers usually contain a variety of dimensions (e.g. bundled minutes, peak and off peak rates, on-net and off-net prices, etc.) which increases the difficulty of comparing different plans.

In some cases consumers may restrict the behaviour of undertakings if they are sufficiently large or represent an important fraction of the undertaking's revenues. This is what is known as countervailing buyer power.

The analysis of the above indicators will be particularly important in the cases where the evolution of market shares does not allow the Authority to make a presumption of dominance or lack of it. In the cases where the market share is sufficiently high (or low) in which case a presumption of dominance can be made, the analysis of those factors will serve either to provide further support or to refute the conclusion reached through the analysis of market shares.

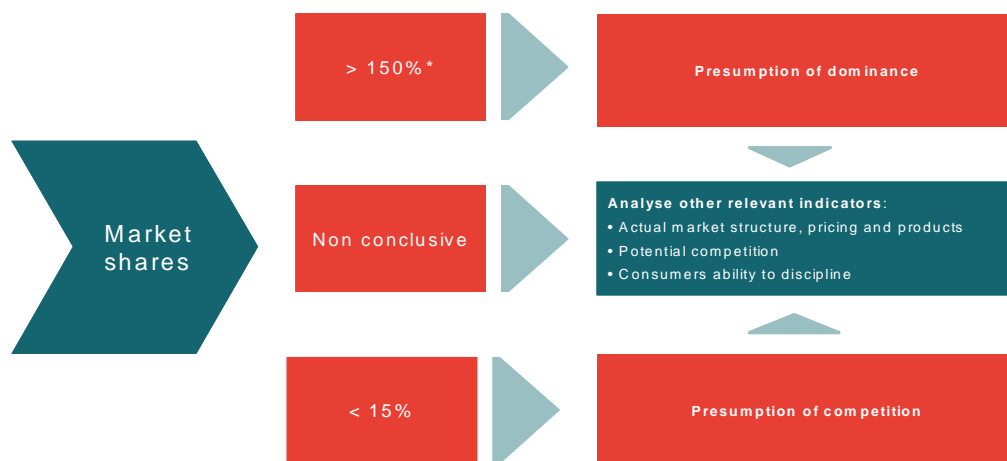
**Figure 1** below summarises the methodology that the Authority has adopted to assess dominance in the retail markets for fixed access and voice telephony services in Trinidad and Tobago. In this analysis, and based on regulatory best practice elsewhere, the Authority will apply what is known as the Greenfield approach. This means the assessment should take into account the potential

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<sup>6</sup> If entry barriers are low, then a price increase by an active undertaking in the market is likely to induce entry as the market may become more attractive. The possibility of entry, therefore, restricts the capacity of existing undertakings to impose excessive prices.

impact on retail markets of any regulations or obligations (for example, licence obligations) imposed on operators at the wholesale level.<sup>7</sup>

**Figure 1.** Methodology for the assessment of dominance



Source: : Frontier Economics

\* A market share of more than 150% of the average share in the relevant market.

The above methodology is also consistent with the approach presented in the “Price Regulation Framework for Telecommunications services in Trinidad and Tobago” (“the PRF”) published by the Authority in March 2009. This provides a simplified methodology for the assessment of dominance, which when it is promulgated will supersede the assessment of dominance set out in Condition A23 of the concession agreement. The Authority therefore considers that any findings of dominance made under A23 of the concession agreement will be consistent also with the PRF. The text box below describes the approach proposed by the PRF for the analysis of dominance.

<sup>7</sup> For a further description of this issue, see for example, the Commission Staff Working Document, Explanatory Note. Accompanying document to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (Second edition.), (C(2007) 5406). To date the Authority has not imposed ex ante regulatory obligations on operators in wholesale markets,



### **Dominance under the PRF<sup>8</sup>**

*The Authority will assess dominance in a market by considering the extent to which any concessionaire in that market is, based on any or all of the factors listed below, in a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers. The factors for consideration of dominance shall include.*

- ✓ *Market share measured in terms of subscriber numbers, traffic volume and or capacity;*
- ✓ *The extent to which the market is concentrated;*
- ✓ *The trends in market share in the relevant market;*
- ✓ *The overall size of the concessionaire's undertaking;*
- ✓ *Access to financial resources;*
- ✓ *Vertical integration;*
- ✓ *Diversification of products or services;*
- ✓ *Absence of, or low, countervailing buying power;*
- ✓ *There exist high barriers to entry;*
- ✓ *The power of the concessionaires operating in the market to set prices;*
- ✓ *Excess pricing and profitability;*
- ✓ *Lack of active competition on non-price factors;*
- ✓ *Barriers to switching;*
- ✓ *Customers ability to access and use information;*
- ✓ *Technology trends relevant to the market;*
- ✓ *The degree of differentiation among services in the market.*

*Where a concessionaire has 40% or more of total revenues in the relevant market, for a continuous period of six (6) months or more, the concessionaire may be subject to a rebuttable presumption of dominance. The six (6) month period may be measured retrospectively. The concessionaire may rebut the presumption by demonstrating, to the satisfaction of the Authority, that it is not in a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers. The presumption may be rebutted by reference to any or all of the factors set out above for assessment of dominance.*

*The Authority will ensure that it takes into account any presence of multi-sidedness in any market when it considers dominance in that market. The Authority will also ensure that its procedures for assessing dominance will afford affected concessionaires an opportunity to make representations to the Authority on the determination.*

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<sup>8</sup> PRF, text box in pages 17-18.

## 4 Dominance Assessment and Conclusion

TSTT was a monopoly provider of domestic telephony services until 2008, when CCTL started to provide voice and access telephony services through its cable network. As of April 2009 there were 6 operators authorised to provide domestic voice services under service-neutral domestic fixed network based concessions. However, TSTT and CCTL are the only two operators authorised to provide services to the whole of Trinidad and Tobago.<sup>9</sup>

The markets for retail fixed telephony services in Trinidad and Tobago were defined by the Authority in the Determination of Market Definitions in the Retail Domestic Fixed Voice Sector of Trinidad and Tobago, published on 14<sup>th</sup> April 2009. This distinguished between the following two markets:

- ✓ **Market 1:** A market for fixed narrowband (voice) access. This market includes residential and business customers and excludes broadband access.
- ✓ **Market 2:** Fixed domestic retail voice service. This market includes fixed to fixed calls, public payphones and fixed to mobile calls.

In the following sections the Authority assesses whether any concessionaire holds a position of dominance in these two relevant markets, focusing on the position of TSTT. Despite including business and residential customers in the same market, the Authority will, wherever data allow, also consider whether there are significant differences in the level of competition between these two segments. This will, if necessary, allow the Authority to design ex ante remedies appropriate to each segment.

### 4.1 Market for fixed telephony access services (market 1)

Customers can directly or indirectly access a telephony network, depending on whether the provider directly connects the customer to its network (direct

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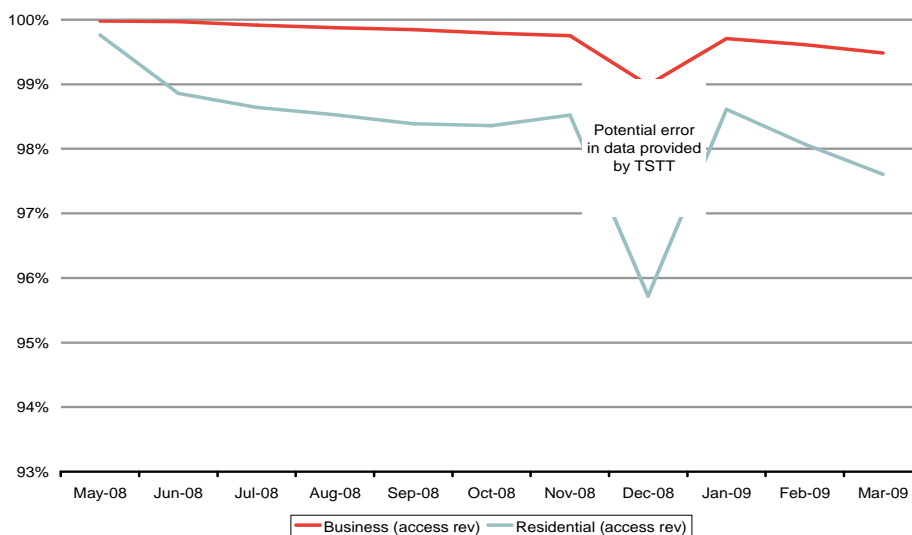
<sup>9</sup> It should be noted that Green dot also has a national concession. However, this operator is not active in the relevant markets.

access or DA) or if it relies on a wholesale product to offer access services (indirect access or IA). At the time of this review DA is the only option available in Trinidad & Tobago to provide fixed telephony access services. TSTT is the incumbent operator, providing access through its copper network. CCTL, on the other hand, offers access services through its cable network.

**Analysis of market shares**

TSTT, as monopoly provider of access services, held a market share of 100% before the entry of CCTL to the market in March 2008. The Graph below shows the evolution of TSTT market share of revenues since the entry of CCTL<sup>10</sup> until March 2009, distinguishing between residential and business customers. Given the duopoly status of the market, any provider with a market share above 75% would, under condition A23 of the Concession Agreement, be considered to be dominant.

**Figure 2.** TSTT share in the market for fixed telephony access (revenues)



Source: Data provided by TSTT and CCTL in reply to the information request

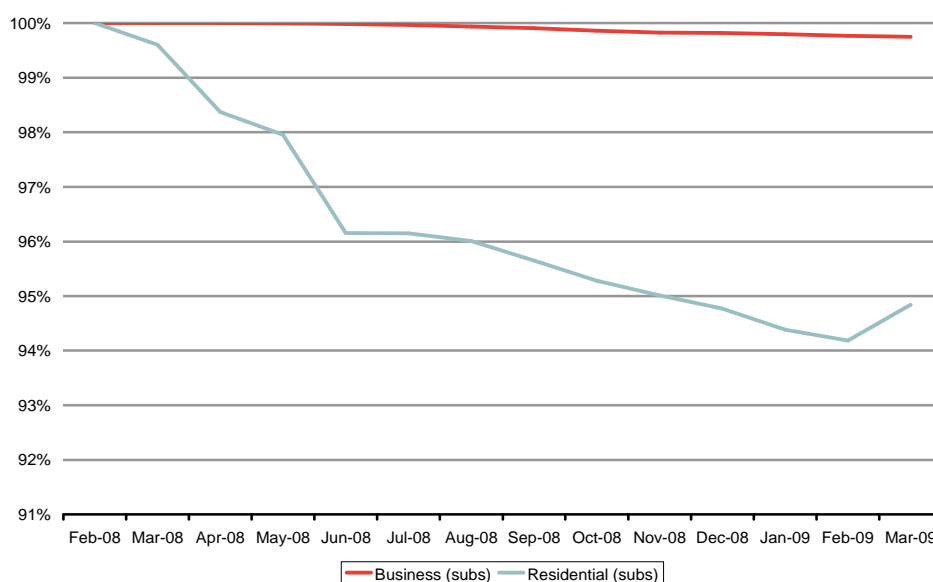
The entry of CCTL has caused TSTT’s market share of revenues to fall. However, the reduction has been modest, in particular, for business services

<sup>10</sup> Since CCTL provided data on access revenues only from May 2008, the Graph considers the period May 2008 – March 2009.

where TSTT still held a market share of 99.5% as of March 2009. This is above the dominance threshold established in condition A23 of the Concession.

**Figure 3** plots TSTT's market share for access services in terms of users for residential and business segments. As in the case of revenues, TSTT has lost less than 1% of business customers. In contrast to this, in the residential segment TSTT has lost almost 6% of customers since the entry of CCTL. Notwithstanding this, TSTT's market share is still high (above 90% as of March 2009) and significantly above the dominance threshold in the Concession Agreement.

**Figure 3.** TSTT share in the market for fixed telephony access (subscribers)



Source: Data provided by TSTT and CCTL in reply to the information request

### *Other relevant indications*

The Authority believes that the evidence presented above demonstrates that TSTT has a dominant position in the retail fixed access narrowband market, in line with Condition A23(a) of the concession agreement. However, in line with best practice and the definition set out in the Act (and the forthcoming PRF), the Authority believes it is also important to assess other relevant indicators for the analysis of market power, as described above.

### Actual market structure, prices and offers

At the time of this review, the market for fixed telephony access services is a duopoly composed of TSTT and the cable operator CCTL. Both operators are vertically integrated, owning the necessary infrastructure to provide retail access services, with a high level of coverage in terms of households passed. CCTL network passes 77% of households in Trinidad and Tobago,<sup>11</sup> with 125,060 active lines as of March 2009, of which 61,752 were digital. In this regard, it should be noted that only customers on the digital network have access to CCTL's voice service. On the other hand, TSTT was serving 66.4% of households as of March 2009.

The analysis of market shares shows that the market structure is currently asymmetric. TSTT holds more than a 90% share of customers and revenues. This is reflected in the Herschman-Herfindahl Index (HHI), which measures market concentration. As shown in **Table 1**, the HHI for both business and residential segments of the market is close to its maximum level of 10,000, which signifies that there is a monopoly supplier in a market.<sup>12</sup>

**Table 1.** HHI in the market for fixed telephony access

Subscribers	Mar 08	Jun 08	Sept 08	Dec 08	Mar 09
<b>Business</b>	10,000	9,996	9,982	9,964	9,950
<b>Residential</b>	9,921	9,261	9,168	9,009	9,022
Revenues					
<b>Business</b>	10,000	9,994	9,970	9,800	9,897
<b>Residential</b>	10,000	9,775	9,683	9,181	9,533

<sup>11</sup> As of 30 June 2009, the number of households passed (HHP) by CCTL was 264,442 and the total number of households in Trinidad and Tobago was 343,180.

<sup>12</sup> The HHI measures market concentration by summing the square of each market share. A market characterised by monopoly would have a HHI of 10,000. Although there is no pre-determined level for a HHI score which indicates dominance, the HHI for the fixed line access market in Trinidad is noticeably higher than for some telecommunications markets in other jurisdictions where operators have been found to have dominance.

Source: Frontier Economics' calculations based on data provided by TSTT in reply to the information request

The evolution of prices for access services does not provide evidence that the market is competitive. The access price charged by TSTT has not changed during the period 2005-2009. This is despite the entry of CCTL in March 2008.

**Table 2.** Price of access telephony services (TT\$) as of March 2009

	TSTT	CCTL
<b>Business</b>	177	130
<b>Residential</b>	31	30

Source: Data provided by TSTT and CCTL in reply to the information request

The access price charged for residential customers is very similar for both operators, CCTL being slightly cheaper than TSTT. In contrast, the price difference is rather large for business customers where TSTT has lost very little market share. Despite CCTL being significantly cheaper than TSTT a very small fraction of business customers have switched to the cable operator.

### **Potential competition**

A high level of concentration does not necessarily imply a lack of effective competition. This is because the behaviour of existing operators could be restricted by potential competition. The Authority, however, considers that this is unlikely in the retail fixed access narrowband market. This is because of:

- ✓ the existence of high sunk costs required to deploy an access network to provide direct access;
- ✓ the lack of wholesale products (such as local loop unbundling or wholesale line rental) that allow the provision of access services by alternative operators; and

- ✓ the presence of economies of scale, scope and density, which may be exacerbated by the vertical integration of existing market players.

The main competitive constraint for TSTT seems to come from CCTL which is in a position to provide access services through its TV cable network, currently serving 125,000 customers, with a level of coverage of 77%.<sup>13</sup> However, at the time of this review, existing evidence shows only a limited impact associated with the entry of CCTL. It is also possible, however, that other technologies, most notably mobile telephony services, could exert competitive pressure on fixed telephony access services. As set out in Annex 1, this is an area TSTT considered in detail in its response to the draft determination. The Authority's views on this issue are presented below.

#### Competition from mobile services

It is possible that mobile access services exert a competitive constraint over TSTT's fixed access services. In assessing this, the Authority has referred back to its previous determination defining the relevant markets for domestic retail fixed telephony services. This considered whether the substitution between fixed and mobile services is sufficiently strong so as to include them in the same relevant market. The Authority summarises its findings below.<sup>14</sup>

- The analysis of fixed and mobile subscriptions revealed that the pattern of fixed subscribers<sup>15</sup> was likely to be a consequence of the mature nature of the fixed access market rather than a result of substitution from mobile access services.
- Further, the Authority noted that the majority of fixed subscribers also hold a mobile subscription, which indicates that fixed and mobile access services behave more like complements than like substitutes.

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<sup>13</sup> As of 30 June 2009, the number of households passed (HHP) by CCTL was 264,442 and the total number of households in Trinidad and Tobago was 343,180.

<sup>14</sup> This was a necessary step to define the relevant markets in TATT's Decision of Market Definitions in the Retail Domestic Fixed Voice Sector of T&T of April 14<sup>th</sup> 2009.

<sup>15</sup> Experiencing a 1% reduction in the period 2003-2007.

Hence, substitution from mobile access services does not seem to be sufficiently strong so as to restrict the behaviour of a dominant operator in the market for fixed access services.

For the reasons presented above, the Authority considers it is unlikely that in the timeframe of this review, alternative technologies will exert competitive pressure over the price of TSTT telephony access services. In a longer timeframe, however, it is possible that alternative technologies may exert competitive pressure over traditional fixed telephony services. The Authority therefore proposes to keep this under review.

### **Consumers' ability to discipline operators**

The entry of CCTL in the market for fixed telephony access services, offering lower prices than TSTT, has not to date resulted in a significant reduction of TSTT's market share. This is particularly the case in the business segment. This contrasts with the views of CCTL and TSTT that business customers exert countervailing buyer power. Despite generating a significant fraction of revenues<sup>16</sup> there lacks evidence showing the ability of business customers to switch operator. This suggests there may be barriers to consumers switching between providers (for example due to the presence of long term contracts, or a lack of number portability); a lack of information about CCTL's products; or a preference amongst consumers for TSTT. Whatever the reasons, however, it seems that consumers do not exert significant pressure over TSTT's pricing behaviour.

Notwithstanding this and in view of the potential constraint that business customers may exert in the future, the Authority will monitor the evolution of the contracts offered to business customers as well as the dynamics of this segment in terms of switching behaviour.

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<sup>16</sup> In its response to the Draft Decision of 15<sup>th</sup> January 2010, TSTT showed that business customers, representing 21 percent of subscribers, generated 51 percent of revenues in 2008.



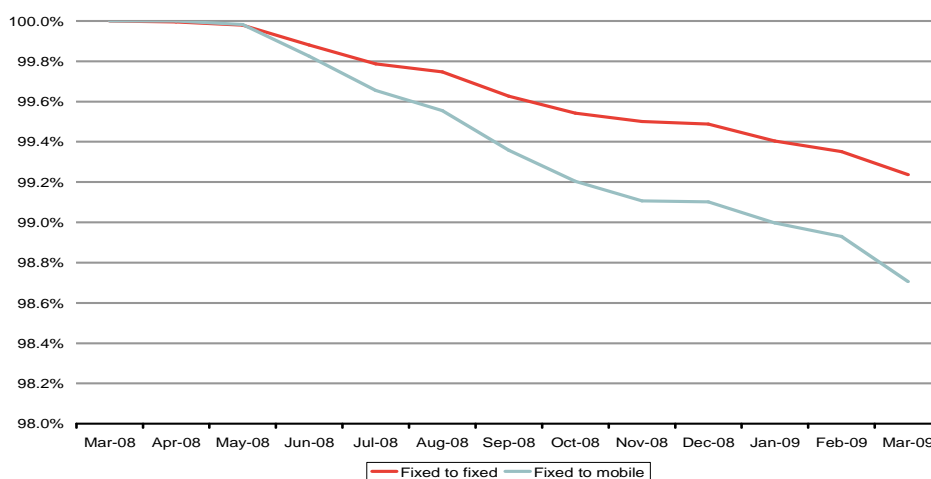
## 4.2 Market for fixed domestic calls (market 2)

As in the case of access, domestic call services can be provided either directly, or indirectly using a wholesale service provided by a network operator (for example, Carrier Selection or Pre-selection, CS/CPS). At the time of this review, there are no wholesale product alternatives available to enable Indirect Access operators to offer domestic calls services in Trinidad and Tobago.<sup>17</sup>

### *Analysis of market shares*

**Figure 4** shows the evolution of TSTT's market share in this market, distinguishing between fixed-to-fixed and fixed-to-mobile calls.<sup>18</sup> The impact of CCTL's entry on TSTT's market share has been greater in the case of fixed-to-mobile calls. However, even in this case TSTT has lost less than 2% of the market, it having a share of 98.7% as of March 2009. This exceeds the upper threshold for dominance included in condition A23 of the Concession. Given the duopoly structure of the market, TSTT's market share at March 2009 represented 197% of the average market share.

**Figure 4.** TSTT market share: fixed-to-fixed and fixed-to-mobile(mins)\*



<sup>17</sup> The data presented in this section excludes calls from public payphones.

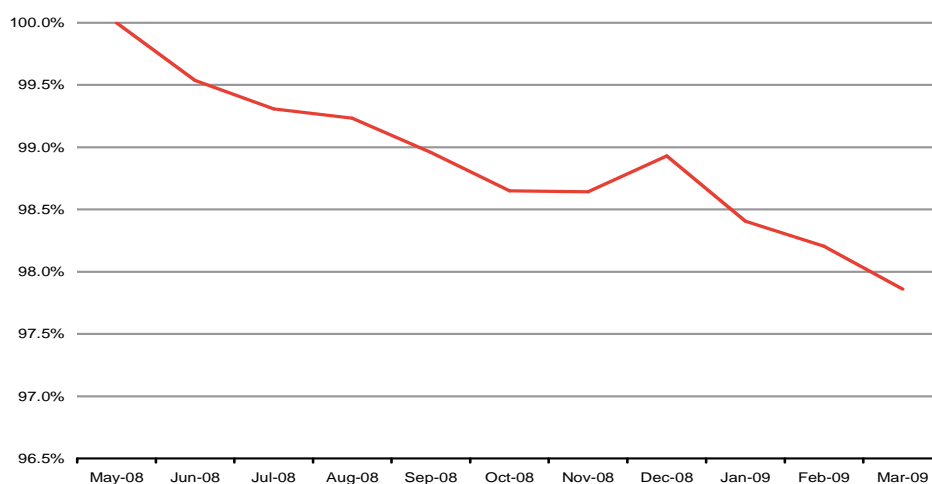
<sup>18</sup> Measured as market share of traffic minutes

Source: Data provided by TSTT and CCTL in reply to the information request.

\* Excluding traffic of public payphones. Note the data provided by concessionaires do not enable the Authority to separately analyse market share in business and residential segments.

TSTT's market share loss is slightly larger when measured in terms of revenues, as shown in **Figure 5**. Nonetheless, the market share of TSTT is still very high, above 97% in March 2009.

**Figure 5.** TSTT market share (domestic calls' revenues)\*



Source: Data provided by TSTT and CCTL in reply to the information request.

\* Note the data provided by the concessionaires do not allow the Authority to separately analyse revenue market shares by call type or customer segment.

From the analysis of market shares and based on condition A23(a) of the concession agreement, the Authority concludes that TSTT is a dominant operator in the market for domestic call services. Again, however, in line with best practice and the definition set out in the Act (and the forthcoming PRF), the Authority believes it is also important to assess other relevant indicators for the analysis of market power, as described above.

### *Other relevant indications*

Following section 29 (d) of the Act the Authority considers below other relevant factors that may affect the market power of TSTT.

### Actual market structure, prices and offers

As for access services, the market for domestic call services has a duopolistic structure, where the main players are TSTT and CCTL. Both are vertically integrated operators with their own network infrastructure. As shown by the HHI in **Table 3**, the market is highly concentrated.

**Table 3.** HHI Index in the market for domestic calls

Minutes	Mar 08	Jun 08	Sept 08	Dec 08	Mar 09
<b>Fixed-to-fixed</b>	10,000	9,976	9,925	9,898	9,849
<b>Fixed-to-mobile</b>	10,000	9,965	9,872	9,822	9,745
<b>Revenues</b>					
<b>Domestic calls</b>	10,000	9,908	9,794	9,789	9,581

Source: Frontier Economics calculations based on data provided by TSTT in reply to the information request.

**Table 4** below shows the prices for fixed-to-fixed (on/off-net) and fixed-to-mobile calls for TSTT and CCTL. The price of TSTT's on-net fixed-to-fixed calls depends on whether the call is intra or inter-exchange. The cost per minute of intra-exchange calls is 0, as the consumer pays 23 cents for the whole call, whereas the cost per minute of inter-exchange calls varies in the range 8 cents to, 69 cents, depending on whether the call is peak/off-peak and the origin and destination of the call. According to the data available to the Authority, around half of domestic fixed-to-fixed traffic is intra-exchange.

Note that, as in the case of access services, CCTL offers lower prices for traffic services. However, TSTT's on-net calls are, in general,<sup>19</sup> cheaper than off-net calls using CCTL. Given the higher market share of TSTT, customers

<sup>19</sup> In particular, intra-exchange calls and off-peak inter-exchange calls. Some inter-exchange peak calls are also cheaper than CCTL off-net calls.

may therefore find its offers more attractive. This is because most calls for TSTT customers are likely to be on-net, whereas for CCTL customers many calls may be off-net.

**Table 4.** CCTL<sup>1</sup> and TSTT<sup>2</sup> local call prices per minute –VAT exclusive (TT\$)

	Fixed-to-Fixed (on-net)	Fixed-to-Fixed (off-net)	Fixed-to-Mobile
<b>CCTL</b>	0	0.18	0.69
<b>TSTT</b>	0.23*** [Intra- exchange]  0.08 – 0.69 [Intra- exchange]	0.40	0.80 <sup>2</sup>

Source: Data provided by CCTL in reply to the information request and TSTT web site as of August 2009

\*\*\* This is the price charged for a local call (intra-exchange) with an unlimited no. of minutes. All other call charges are per minute.

<sup>1</sup> Call rates for residential customers as of June 2009.

<sup>2</sup> Standard rates published in TSTT web site as of August 2009.

Some offers from CCTL and TSTT include lower call prices alongside a monthly fee for a bundle of fixed to fixed and fixed to mobile call minutes. Examples of these are shown in Table 5. However, as set out above, bundles which include free – or heavily discounted - on-net calls are likely to be more attractive to customers of TSTT than customers of CCTL.

**Table 5.** CCTL’s and TSTT’s retail offers for residential customers with bundled minutes VAT exclusive (TT\$)

Plan	Monthly fee	Bundled minutes	F2F on-net (price per minute)	F2F off- net (price per minute)	F2M
<b>CCTL</b>					
<b>U-talk As You Go (Anywhere)</b>	86.95	150	0	0.18	0.69
<b>U-talk As you Go (Anywhere)</b>	173.90	500	0	0.18	0.69
<b>TSTT</b>					

<b>Golden</b>	250	Unlimited Free TSTT Fixed to TSTT Fixed Minutes, 50 Free Bmobile Minutes, 50 Free Digicel Minutes, 100 Free International Minutes	0	0	0.80
<b>Silver</b>	180	900 Free TSTT Fixed to TSTT Fixed Minutes , 38 Free Bmobile Minutes, 38 Free Digicel Minutes, 75 Free International Minutes	0.25	0.25	0.80
<b>Bronze</b>	100	500 Free TSTT Fixed to TSTT Fixed Minutes, 13 Free Bmobile Minutes, 13 Free Digicel Minutes, 25 Free International Minutes	0.25	0.25	0.80

Source: Frontier Economics based on data provided by TSTT and CCTL in reply to the information request and information provided in the respective web sites as of August 2009.

It appears that the launch of fixed telephony services by CCTL has not had a significant impact on TSTT's retail policy. The Smart Choice residential packages Gold, Silver and Bronze introduced in June 2008<sup>20</sup> are very similar to the ones existing before CCTL was active in the market. TSTT did, however, introduce two promotions, one in March 2008 and another in November 2008. The first doubled the number of minutes associated with the Smart Choice Silver and Bronze residential packages and the second included free calls on weekend nights into the same residential packages. The Authority also observes that in May 2008 (when CCTL started to launch fixed-line telephony services for business customers) TSTT introduced a number of business packages including discounts to a maximum of \$1,000 out of bundled minutes and rentals.

These offers may be a reaction of TSTT to the entry into the fixed-line telephony market of CCTL. However, this evidence alone is not sufficient to conclude that the market is tending towards competition.

### Potential competition

<sup>20</sup> As provided by TSTT in reply to the information request.

In the absence of wholesale products that allow the provision of domestic call services by alternative non-network providers, barriers to entry are likely to be high in this market. The sunk costs associated with the deployment of a telecommunications network for the provision of domestic calls are significant for a potential entrant interested in the provision of domestic call services. Further, a new entrant would not benefit from the scale economies enjoyed by TSTT, given its market share is close to 100%.

As in the case of access services, and until wholesale products are available, the main potential competitor to TSTT is CCTL. Despite its low market share, its cable network passes a high proportion of households in Trinidad and Tobago (77%), although not all its network is digital. Therefore, we expect that in the future CCTL may place a competitive restriction on TSTT. As the market develops, the Authority also expects new players like Open Telecom, which now is focused on wireless broadband services and the provision of international call services, to have a more important role in the domestic fixed-line telephony markets.

However, in the timeframe of this review and given the recent entry of CCTL into the fixed-line telephony services markets, the Authority considers that it would be premature to conclude that potential competition from CCTL (or other providers) is strong enough to restrict TSTT from acting independently of competitors, customers and ultimately consumers.

#### Competition from mobile services

As with the access market (described above) it is possible that mobile call services could exert a sufficient competitive constraint on fixed call services to limit any provider's market power in the fixed services market. Indeed, this point has been raised by TSTT in response to the draft determination.

Competition from mobile call services can be recognised by defining fixed and mobile services to be part of the same market. However, it may also be the

case that some competitive pressure between fixed and mobile services exists, even if they are not sufficiently close substitutes to be part of the same market.

The Authority already analysed this issue when defining the relevant markets in its Decision of April 2009.<sup>21</sup> The evidence on call volumes during the period 2004-2007 and the comparison of fixed and mobile call prices led the Authority to consider that mobile call services do not exert sufficient competitive pressure over fixed call services so as to include them in the same relevant market.

Notwithstanding the above, the Authority is aware of the further decreases in fixed call volumes, as presented by TSTT in its recent submission.<sup>22</sup> However, the evolution of traffic patterns is not sufficient evidence to conclude that mobile services do exert competitive pressure over fixed ones. It would be necessary to complement this information with an analysis of price trends for both services. Only when the price of both services is sufficiently close, will mobile telephony become a real constraint for the price of fixed telephony services. The existence of a significant price differential was one of the main reasons considered by the Authority to exclude mobile calls from the relevant market. In view of this, the Authority believes that its conclusions in its determination of the relevant market definitions remain reasonable. It will, however, closely monitor the evolution of fixed and mobile call services, paying particular attention to price developments and consumers' attitudes towards both services

### **Consumers' ability to discipline providers**

The evolution of market shares and the limited number of options available for domestic call services suggest that countervailing buyer power is likely to be limited.

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<sup>21</sup> TATT's Decision of Market Definitions in the Retail Domestic Fixed Voice Sector of T&T of April 14<sup>th</sup> 2009.

<sup>22</sup> TSTT's letter from January 29, 2010.

### 4.3 Conclusions

Having considered the submissions to the information request sent by the Authority on May 11<sup>th</sup> 2009 to the relevant parties, together with the responses to the draft determination, the Authority concludes that TSTT is a dominant operator in the retail fixed narrowband markets for access and domestic calls. This conclusion has been reached in view of:

- The high market share held by TSTT in the relevant markets. In both markets, TSTT's market share is close to 100%, despite the launch of fixed-line telephony services by CCTL in 2008. In both cases, TSTT's share exceeds the threshold market share required under Condition A23(a) of the concession agreement for an operator to be dominant. TSTT's market share in both markets also exceeds the 40% threshold included in the PRF and above which (under the framework) an operator may be presumed to be dominant.
- The presence of a number of other factors in the markets which are consistent with TSTT having a dominant position, such as those listed in Section 29(d) of the Act and also including:
  - ✓ the lack of significant price reductions in the market following the launch of services by CCTL; and
  - ✓ the existence of barriers to entry in the relevant markets for fixed-line access and domestic call services.

Despite CCTL and TSTT's comments on the presence of countervailing buyer power by business customers, existing evidence does not provide support to conclude that TSTT's business customers exert buyer power. For example, as shown in **Figure 2** and **Figure 3** above, TSTT's market share in this segment has not changed significantly, suggesting that business customers are not actively switching between operators.



The Authority therefore concludes that its finding of dominance is robust and consistent with, in turn, condition A23 of the Concession, Section 29 (d) of the Act and the proposed methodology set out in the PRF.

However, notwithstanding the above, the Authority considers that given the wide coverage of CCTL's cable TV network, it may provide important competitive pressure for TSTT in the future. Further, as the market develops, operators active in other communications markets (e.g., those currently focused on wireless broadband services) may decide to enter the narrowband telephony markets. In this regard, the Authority notices the intention of Digicel to launch a homephone fixed service. Additionally, as technology and consumer preferences evolve, alternative voice services, such as VoIP, may become a real constraint for traditional fixed-line telephony services. Hence, the Authority will closely monitor the evolution of fixed telephony markets for access and domestic calls, taking account of changes in the competitive conditions.

Given the comments and information received from TSTT, the Authority will pay particular attention to the evolution of fixed and mobile services (traffic/price trends and customers' attitudes) in view of the possibility that mobile telephony becomes a real restriction for the price of fixed telephony services.

The Authority will therefore monitor closely market developments so to ensure its determination of dominance continues to reflect market conditions.

