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A Consultative Document

Draft Universality Framework for Telecommunications Services in Trinidad and Tobago

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1 Introduction

1.1 The Importance of Universality

In today's world there has been widespread growth in the use of telecommunications and broadcasting services within most societies. The main reason driving this explosive growth is people's need for information. Telecommunications is one mean of accessing information in an efficient and timely manner. Individuals use telecommunications and broadcasting services in their daily routines – keeping in contact with loved ones, keeping up-to-date with the latest developments in the news, calling emergency services etc. These services are usually in the form of fixed line and mobile telephone services or, Internet services.

While some people take the ability to access these services for granted, not everyone has the opportunity to share the experience due to the existing digital divide. This Universality Framework seeks to institute regulatory mechanisms that would facilitate bridging the gap between those who have access to telecommunications services and those who do not in Trinidad and Tobago.

1.2 WSIS Plan

As part of a global initiative, the United Nations General Assembly in September 2000, created the UN Millennium Development Goals with the main objective of upholding the principles of human dignity, equality and equity at a global level. These eight goals are as follows:

- Eradicate extreme poverty and hunger
- Achieve universal primary education
- Promote gender equality and empower women
- Reduce child mortality

- Improve maternal health
- Combat HIV/AIDS, malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development

In order to help achieve these Millennium Development Goals, the World Summit on the Information Society (WSIS), a sub-committee of the UN, is playing its part by seeking to use Information and Communication Technology (ICT) based products, networks, services and applications, as a tool for reducing poverty and in the process, to aid countries in bridging their digital divide. WSIS has developed specific action lines¹, under the purview of the International Telecommunications Union (ITU), that will feed into the overall objectives of:

- Building an inclusive Information Society;
- Putting the potential of knowledge and ICTs at the service of development;
- Promoting the use of information and knowledge for the achievement of internationally agreed development goals; and
- Addressing new challenges of the Information Society, at the national, regional and international levels.

As a member of ITU, the Government of the Republic of Trinidad and Tobago (GoRTT), building on these actions lines, has initiated the National ICT Plan which seeks to transform the country into a knowledge-based society by 2008. The connectivity objectives arising out of the NICT Plan² includes:

- Providing all citizens with affordable Internet access;
- Focusing on the development of children, and adult skills to ensure a sustainable solution and a vibrant future;
- Promoting citizen trust, access, and interaction through good governance; and

¹ From WSIS Plan of Action, www.itu.int/wsis/docs/geneva/official/poa.html

² From “NICT Plan,” by the Ministry of Public Administration, www.fastforward.tt

- Maximising the potential within all citizens, and accelerating innovation, to develop a knowledge-based society.

Some of the projects government has recently launched to achieve these connectivity objectives include:

- *ttconnect* – this is Trinidad and Tobago’s national e-Government portal which seeks to provide access to all appropriate Government information and services online. It represents a new channel of service delivery, consistent with the Government’s overall efforts to become more service-oriented, while at the same time increasing its transparency, accessibility and availability.
- *Community Connection Programme* – this project seeks to establish hundreds of Community Access Centres throughout Trinidad and Tobago so as to provide rural and urban residents with affordable access to computers and high speed Internet services.

1.3 National Universality Policy

As an initiative to facilitate, encourage and incentivise an ICT enabled society, the GoRTT has developed a National Universality Policy which promotes the initiative where all citizens of the country can have access to information and knowledge through ICTs. These ICTs should reach all locations, be affordable and offer a full range of basic services, taking into account the different needs of the user population.

By facilitating easy and affordable access to ICTs, some of the benefits citizens can be exposed to include improvements in their lives through an increase in access to education and health services, and even government services. More importantly the use of ICTs can enhance the overall competitiveness of a country in the global market, which in turn can stimulate economic growth and reduce the level of poverty.

1.4 Role of the Telecommunications Authority of Trinidad and Tobago

Established in 2004 as the agency responsible for managing the telecommunications and broadcasting sectors, the Telecommunications Authority of Trinidad and Tobago (the Authority) has been charged with the mandate of promoting Universality in Trinidad and Tobago to the extent that it is reasonably practicable. This mandate is prescribed in Section 28 of the Telecommunications Act (2001) ('the Act') which states:

28. (1) In accordance with the policy established by the Minister, the Authority shall determine the public telecommunications services in respect of which the requirement of universal service shall apply.

In order to fulfil the objective of the Act and the GoRTT's National Universality Policy, the Authority has established this draft Universality Framework for consultation to inform the regulations, the purpose of which, once finalised and laid in Parliament, would be to:

*'To put in place robust regulatory initiatives to improve the Digital Access Index and Digital Opportunity Index of the country over the period 2008-2010 by facilitating the construct of a knowledge-based economy predicated on widespread access to basic telecommunication services through low-cost, high-quality connections, high computer literacy, comfort in using the Internet, its useful content and innovative Internet applications to create value.'*³

1.5 Modification to Document

As the country's telecommunications industry matures, the framework for achieving Universality will evolve. Subsequent to the consultation process, and after this document has been finalised, the Universality Framework will be reviewed and modified as

³ From "The Draft Framework for Development of a Universality Policy for Trinidad and Tobago", TATT unpublished document

necessary and in consultation with stakeholders (including the public), to ensure that regulatory practices and processes continue to be guided by appropriate policy guidelines and objectives.

1.6 The Consultation Process

On June 27th 2008, the Authority published the first draft of this document and invited comments and recommendations from all interested parties. The first consultation period ended on July 31st, 2008. The Authority received several comments from the following parties:

- Telecommunications Services of Trinidad and Tobago (TSTT)
- Digicel (Trinidad) Limited
- The Ministry of Public Administration
- The Ministry of Social Development
- Columbus Communications (Trinidad) Limited
- Independent Cable Network of Trinidad and Tobago

The Authority has revised this Draft Universality Framework taking into consideration the comments and recommendations received in the first consultation round. A Decisions on Recommendations (DOR) Matrix has been included at Annex B, which provides all the comments and recommendations received and summarises the Authority's decisions in respect of those.

The Authority is now seeking the views and opinions of interested parties regarding the proposals made in this revised consultative document in accordance with the Authority's *Procedures for Consultation in the Telecommunications Sector of Trinidad and Tobago*. The Authority's consultation procedures and comment submission form are available on the Authority's website, <http://www.tatt.org.tt>.

Comments should be submitted on or before **May 22nd 2009** to policy@tatt.org.tt or mailed to:

Telecommunications Authority of Trinidad and Tobago
#5, Eighth Avenue Extension, off Twelfth Street,
Barataria

2 The Concept of Universality

2.1 Universality Policy of Trinidad and Tobago

The GoRTT's National Universality Policy provides general guidelines for the development of a regulatory framework for Universality by the Authority.

The national policy specifies its aim as:

*'to promote universal access to telecommunications services for all persons in Trinidad and Tobago by facilitating the orderly, systematic, dispersed development and provision of telecommunications services at affordable rates in Trinidad and Tobago in a manner that facilitates access by all citizens while encouraging innovation and incentive for investment in the ICT sector.'*⁴

The Universality Policy can be obtained from the National Information and Communication Technology Centre of the Ministry of Public Administration.

2.2 Defining Universality

The term Universality means achieving a combination of both universal access and universal service.

Universal access is achieved when 100% of the country's population can access affordable basic telecommunications services either on an individual or shared (public access) basis. Examples of publicly accessing these basic services can be through community access centres, Internet kiosks and public payphones.

Universal service on the other hand builds on the concept of universal access. This is achieved when basic telecommunications services are both accessible and affordable and are delivered on either a household basis or an individual basis. Therefore universal

⁴ From "Universality Policy of Trinidad and Tobago," by Ministry of Public Administration

service speaks to 100% of the population being able to subscribe and use these basic services on a household or individual basis.

2.3 Definition of Basic Telecommunications Services

The Government's Universality Policy specifically states that:

“The Authority shall determine the public telecommunications services to which Universality shall apply to provide the requisite benefits to society. Such services shall include at a minimum:

- *affordable and easily accessible domestic and international call origination and termination;*
- *affordable public data services of throughput no less than five hundred and twelve kilo bits per second (512 kbps);*
- *directory assistance; and*
- *free 24-hour access to emergency call service*
- *free itemised billing, upon request.”*

Using these parameters as the public services to which universality should apply, the Authority is proposing to specifically define basic telecommunications services as follows:

- affordable fixed and mobile voice services for the purpose of domestic and international call origination and termination;
- affordable broadband Internet services of throughput no less than five hundred and twelve kilo bits per second (512 kbps);
- access to directory assistance from both fixed and mobile phones;
- free 24-hour access to emergency call service from both fixed and mobile phones.
- free itemised billing for all telecommunications services, upon request

In accordance with the definition of telecommunications services outlined in the Act, the Authority is proposing to adopt a technology neutral approach, where no restrictions will be placed on service providers in respect of the technology to be used for the provision of the basic telecommunications services listed above.

Statement on Basic Telecommunications Services:

The Authority proposes to define basic telecommunications services as follows:

- *affordable fixed and mobile voice services for the purpose of domestic and international call origination and termination;*
- *affordable broadband Internet services of throughput no less than five hundred and twelve kilo bits per second (512 kbps);*
- *access to directory assistance from both fixed and mobile phones;*
- *free 24-hour access to emergency call service from both fixed and mobile phones;*
- *free itemised billing for all telecommunications services, upon request.*

The Authority is proposing to adopt a technology neutral approach for facilitating the provision of these basic telecommunications services.

2.4 Broadcasting Services

In accordance with Section 2 (1) of the Telecommunications Act, universal service is limited to:

*‘the provision of **telecommunications services** throughout Trinidad and Tobago, taking into account the needs of the public, affordability of the service and advances in technologies’.*

Notwithstanding the above, the Authority has recognised the contributing role the broadcasting sector has played towards the development of an ICT enabled society.

As such, the Authority has recommended to the GoRTT legislative revisions to the Act that includes broadcasting services as part of the definition of universal service. On approval of the recommendation, the necessary updates will be made to this framework for the inclusion of certain broadcasting services as basic services that may also fall under the ambit of Universality.

2.5 Achieving Universality

In the short term, the focus of most countries is primarily on the universal access aspect of universality since public access should be achieved before emphasis is given to private access. However taking into consideration the population density of Trinidad and Tobago and the current teledensity penetration and coverage resulting from the maturity of the mobile market, the Authority is proposing that the Universality Framework establish mechanisms that would promote universal service for both telephony and data (including Internet) services as far as reasonably practical. The Authority however, recognizes that on a case by case basis, there may be the need to promote ‘universal access’ type initiatives at community access centres, schools, libraries and other public institutions.

Statement on the Promotion of Universality:

The Authority proposes that the Universality Framework and supporting regulations should establish mechanisms that would promote universal service for both telephony and data (including Internet) services as far as reasonably practical. The Authority however, recognizes that on a case by case basis, there may be the need to promote ‘universal access’ type initiatives.

In doing so, the framework should place emphasis on:

- *the expansion of infrastructure for the provision of affordable basic telecommunications services in communities that fall within the access gap⁵ (e.g. remote or high-cost areas);*
- *the implementation of mechanisms that would promote accessibility to affordable basic telecommunications services by population groups that*

⁵ Access gap is defined under Section 3 of the Framework

fall within the access gap;

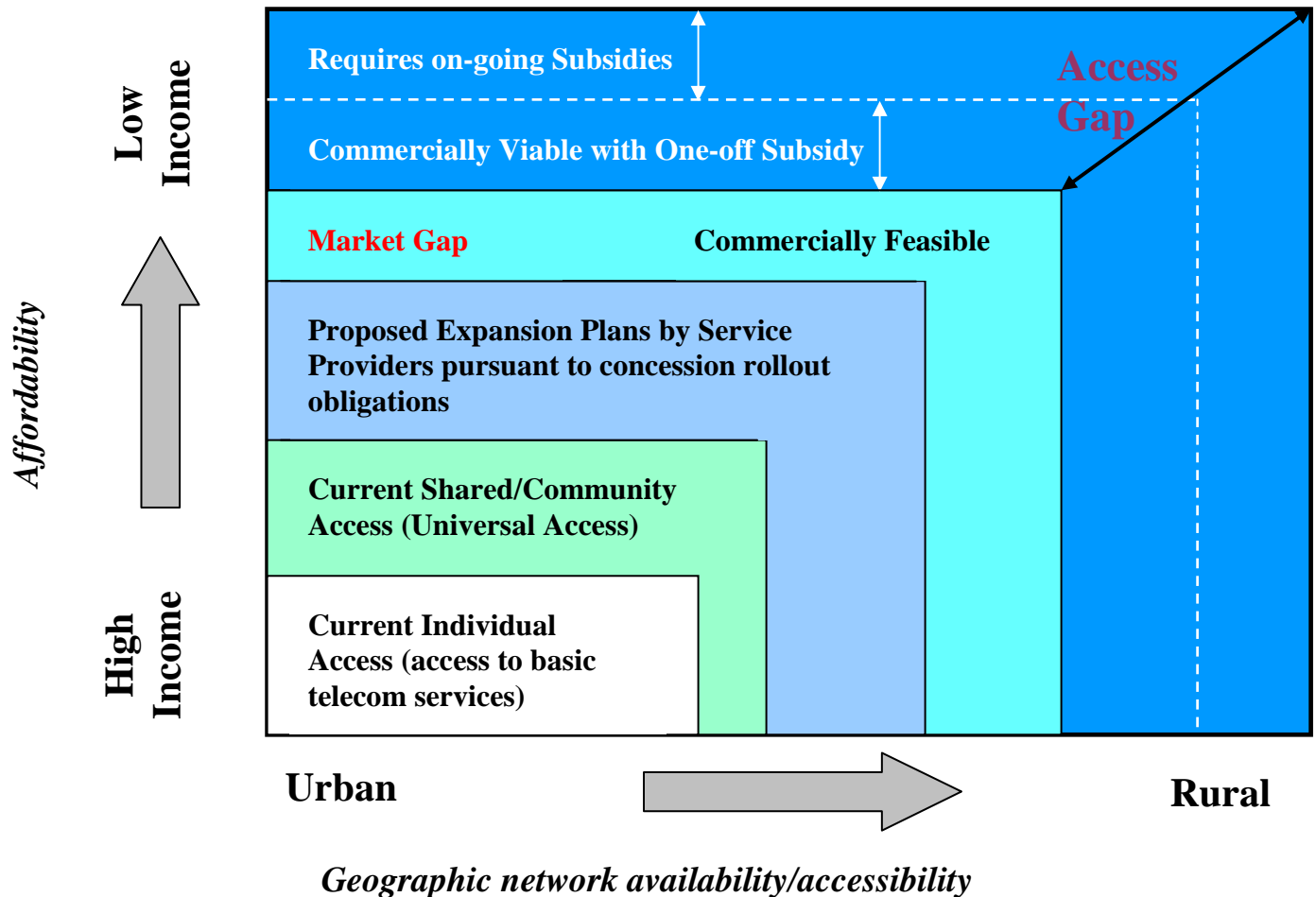
- *public access telephony and Internet services on a case by case basis; and*
- *the implementation of a funding mechanism to provide subsidies and incentives to the consumers and providers of basic telecommunications services where applicable.*

3 The Market Gap and Access Gap

In determining those communities in Trinidad and Tobago for which it may not be economically feasible to provide basic telecommunications services, it is necessary to measure the level of telecommunications development in the market. This can be done using the concept that there exists a market gap and an access gap.

Figure 7 below gives an illustrative description of the difference between the market gap and the access gap.

Figure 1: The Market Gap and the Access Gap



Source: Adapted from "Best Practices and Evolution of Universal Access Programs," by World Bank

Explanation of the categories in Figure 1:

- Current Individual Access – these are the number of individual households/ individuals that currently subscribe to basic telecommunications services.
- Current Shared/Community Access – this represents households/individuals that can access basic telecommunication services on a public or shared basis but are not subscribers of the services.
- Proposed Expansion Plans by Service Providers pursuant to concession rollout obligations – these represent households that will be in a position to acquire access to basic telecommunications pending the rollout of telecommunication services by operators within the timeframes mandated by their concession obligations. It must be noted that as operators put measures in place to facilitate the universal accessibility of these basic telecommunications services, the affordability factor decreases for the consumer in view of increasing economies of scale.
- Market Gap – this represents communities or individuals that still do not have access to basic telecommunication services due to regulatory barriers, insufficient competitive market forces, or other factors not providing sufficient incentives for service providers to provide services to these communities or individuals. This does not necessarily mean that it is not commercially viable for the service provider, however some regulatory intervention may be required.

Within the market gap, service providers may be afforded the opportunity to encourage new customers to subscribe to their services through the use of competitive market forces. For instance, with increased competition, service providers may expand their network coverage or even promote packages to capture low-income users of telecommunication services.

Evidence of the success of such marketing strategies are present in Trinidad and Tobago.

- The Access Gap (commercially viable with one-off subsidy) – the areas/individuals beyond the Market Gap for which it is not economically feasible for operators to rollout services. However service providers may be able to survive on their own if provided with their initial start-up costs as a subsidy.
- The Access Gap (requires on-going subsidy) – the areas/individuals beyond the Market Gap for which it is not economically feasible for operators to rollout services therefore requiring a permanent subsidy for the provision of basic telecommunications services.

With the effective liberalization of the telecommunications market, regulatory agencies can differentiate between the market gap and the access gap. In a more simplified explanation, the market gap is the difference between what markets are actually achieving under current competitive conditions and what they could achieve if regulatory barriers were removed and regulation was used to provide incentives. The access gap, on the other hand, recognises that intervention is still required to reach some areas and population groups that will not be served even within the most optimal, efficient and liberalised market⁶. One reason for this may be that the provision of services to these areas and population groups may not be feasible economically or because of geographical challenges with providing the necessary infrastructure.

3.1 Initiatives to Minimise the Market Gap

On analysing Figure 1 it must be noted that the nature of the market gap makes it possible to be minimised or even eliminated without the use of any subsidy programme. Two such initiatives that can be implemented to close this gap include:

⁶ Referred from “Trends in Telecommunications Reform 2003, ” by International Telecommunications Union, 2003

3.1.1 Market-based Reforms

A first step in moving towards universality, while eliminating the market gap, is possible through the use of market-based reforms. Such reforms, accomplished through the liberalization of the sector, places the responsibility of providing telecommunications services squarely on the service providers.

Types of market-based reform techniques include:

a. Privatization

This occurs where a fully state-run service provider is sold partly or wholly by the government to a private operator with the intention of providing more efficient service to consumers.

Partly-privatised in 1989, the Government of Trinidad and Tobago and Cable and Wireless (C&W) Ltd signed a shareholders agreement which related to the joint ownership of TSTT between Cable and Wireless Limited (49% shareholder) and the Government of the Republic of Trinidad and Tobago (51% shareholder). TSTT was formed by the TEXTEL Vesting Order of 1990 which vested the assets of TEXTEL in TELCO, combining both domestic and international telecommunications into the single monopoly provider.

b. Competition⁷

The most important step of reform is the introduction of competition, which coupled with fair and independent regulation, creates a level-playing field among service providers.

Competition promotes universality in the following ways:

1. Competition drives expansion including coverage and availability
 - o Due to the increased number of operators in the market, competition encourages the expansion of networks and services as a result of a general increase in the available investment capital necessary for providing services.

⁷ Referred from "ICT Regulation Toolkit," by InfoDev, 2009

With the liberalization of the Trinidad and Tobago mobile market in 2006, the population now enjoys almost 100% mobile coverage available nationwide. Remote communities that were without service before the introduction of competition now have access to mobile telecommunications services.

- Another benefit of a competitive environment is that current marginal or uneconomic areas may be offered services based on expectations of demand growth and competitive pressure for operators to position themselves as first in and establish their brand.

In an attempt to further the availability of telecommunications services especially to areas that are classified as underserved, the Authority has auctioned the 700 MHz band and is currently in the process of auctioning the 2.3 and 2.5 MHz bands allowing the provision of Broadband Wireless Access services by interested service providers. Bidders successful in the auction process will be required to roll out services using broadband wireless access technologies in areas that were previously considered not to be economically feasible using wired technologies.

2. Competition provides an incentive for greater efficiency, lower prices, new pricing models and promotes better quality of services
 - An increased level of competition generally has the effect of lowering prices which can expand the market through price elasticity of demand. Competition also lowers the access barrier for new subscribers through new and innovative pricing options, as well as shared or public access. Therefore, the consumer stands to gain from the price effects of competition. Operators are generally driven to increase their efficiency and reduce costs by a need to be more competitive in the market and increase the subscriber base. A lowering of prices, which is operationally feasible for the operator helps to close the market gap.

In December 2007, Trinidad and Tobago's international Internet bandwidth capacity increased due to the launch of an additional off-island fibre facility. Competition in both the broadband Internet market and the voice telephony market was realized with the introduction of broadband Internet and fixed-line voice services by the major cable provider resulting in reduced rates for these services.

- Competition generally improves the quality of services, though periods of rapid growth may temporarily lead to lower quality of service provision. However, similar to the rationale behind a lowering of prices, improvements to service quality is driven by each operator's desire to differentiate itself from competitors, and thus to further its brand.
- 3. Competition encourages market segmentation and stimulates the introduction of innovative new services (i.e. more choices and new services); and promotes service provision to the less affluent.
- Competition causes greater segmentation of a communications market. This results in a stronger differentiation of customer groups and a variety of services that are more tailored for each segment. Since the liberalization of the mobile market in Trinidad and Tobago, service providers now offer customized value-added services (examples include customers' options to download music, wallpapers etc) in an attempt to differentiate their product to particular market segments.
- Competition also strikes at the core of the universality mandate, which is to reach the population that is currently underserved and has limited telecommunications service at their disposal. As operators compete for more business, with the intention of gaining higher revenues, they look to capture the greatest share of subscribers and/or users. While this race to subscribe tends to take place first in urban areas, due to higher income and

easier network roll-out, the trend is to continue seeking new consumers where there is still profit to be made and then, where there is a future potential for profit.

3.1.2 Mandatory Service Obligations

Regulators may also impose mandatory service obligations to licensed operators when making an effort to eliminate the market gap . Such obligations can extend to community service initiatives, network roll-out targets, teledensity targets, the installation of public pay phones, requirements to reduce waiting lists, quality-of-service targets and geographic/population coverage targets.

Advantages	Disadvantages
Funding for universality initiatives is generally provided by the private sector	If the cost of providing the obligations is excessively high, the operator may fail to meet its requirements

Such mandatory service obligations are realised in the Authority’s concessions and licences agreements which specify the requirements to be followed by all authorised service providers.

As an example, Section A15 a.(iii) of the concession agreement states:

“where the concessionaire is authorised to operate public domestic fixed telecommunications networks and provide public domestic fixed telecommunications services, provide at a minimum provide no less than fifty public nodes, for example pay phones or Internet kiosks, per national county and parish.”

Each concessionaire operating a public telecommunications network is also given specific roll-out obligations in terms of geographical or population coverage and customer service standards over the period of the concession.

The Authority is responsible for the implementation of regulatory monitoring and enforcement measures to ensure that all authorised service providers meet their concession and licence obligations as this can significantly affect the extent of the industry's market gap.

Statement on Focus of Universality Initiatives:

The Authority proposes to focus regulatory initiatives for Universality on only those communities and population groups that are found to be within the access gap as opposed to those falling within the market gap.

It must be noted that in order for the Authority to develop further mechanisms to reduce both the market and the access gap, there must be some understanding of the current size of these gaps. As a result the Authority undertook the initiative of conducting a Digital Divide survey.

4 Assessing the Digital Divide in Trinidad and Tobago

4.1 Definition of Digital Divide

The digital divide relates to the gap that exists between those who have access to ICTs and those who do not. When such a gap exists, it creates a division between different sections of the population – the information rich vs. the information poor. When examining the digital divide of a country, there are two issues that arise:

- The instruments to be used to measure the digital divide
- The size/magnitude of the digital divide

4.2 Digital Divide Survey

In order to devise the achievable objectives for a Universality Framework, and to identify the population groups and areas that fall within the access gap, an assessment of Trinidad and Tobago's current situation was conducted. The Authority, with the assistance of the Sir Arthur Lewis Institute of Social and Economic Studies (SALISES), undertook a national survey in July and August of 2007 that measured not only the country's digital access standing at a national level, but also the digital divide that exists among pre-defined communities in Trinidad and Tobago.

The survey encompassed two parts: the service provider survey and the household survey. The service provider survey targeted fixed line, mobile, Internet and cable operators as well as national libraries and community centres. The household survey targeted 6,000 households that spanned over the 3,000+ enumeration districts of the country.

4.2.1 Instruments used to measure the Digital Divide

In the past, the International Telecommunications Union (ITU) has utilized two indices (Table 1) to measure and compare the capacity for individuals to access and use ICT services at a country level:

- The Digital Access Index (DAI). This index is built around eight (8) indicators grouped into four (4) fundamental vectors that reflect a country's ability to access ICTs: infrastructure, affordability, knowledge and quality and actual usage of ICTs.
- The Digital Opportunity Index (DOI). This index is based on eleven (11) ICT indicators, grouped into three (3) vectors: opportunity, infrastructure and utilization.

Table 1: DAI and DOI Indicators

DAI Indicators	DOI Indicators
<i>Infrastructure</i>	<i>Opportunity</i>
Fixed telephone subscribers per 100 inhabitants	Percentage of population covered by mobile cellular telephony
Mobile cellular subscribers per 100 inhabitants	Mobile cellular tariffs as a percentage of per capita income
<i>Affordability</i>	Internet access tariffs as a percentage of per capita income
Internet access price as percentage of Gross National Income per capita	<i>Infrastructure</i>
<i>Knowledge</i>	Proportion of households with a fixed line telephone
Adult Literacy	Mobile cellular subscribers per 100 inhabitants
Combined primary, secondary and tertiary school enrolment level	Proportion of households with Internet access at home
<i>Quality</i>	Mobile Internet subscribers per 100 inhabitants
International Internet bandwidth (bits) per capita	Proportion of households with a computer
Broadband subscribers per 100 inhabitants	<i>Utilization</i>

DAI Indicators	DOI Indicators
<i>Usage</i>	Internet users per 100 inhabitants
Internet users per 100 inhabitants	Ratio of Fixed Broadband Internet subscribers to total Internet subscribers
	Ratio of Mobile Broadband Internet subscribers to mobile Internet subscribers

4.2.2 Size of the Digital Divide: Results of the Survey – National Index Readings

The Digital Divide survey measured Trinidad and Tobago’s digital standing on a national and community level using the above two ITU-recognised indices and a third altered index.

The national results obtained were as follows:

- National Digital Access Index (DAI): **0.6668**
- National Digital Opportunity Index (DOI): **0.6315**
- National Digital Opportunity Index - Alternate (DOI_ALT): **0.5595**

The DOI_ALT is an altered index developed by the Authority to eliminate skewing of the DOI as a result of the high *mobile broadband Internet subscribers: mobile Internet subscribers* ratio in Trinidad and Tobago. The Authority was of the view that the high ratio would not accurately represent the level of mobile broadband Internet penetration since there were a very small number of mobile Internet subscribers, most of whom subscribed to mobile broadband Internet.

It must be noted that the Government of Trinidad and Tobago has prescribed in its Universality Policy a national DAI target of 0.75⁸ to be achieved by 2010.

The achievement of this target will place Trinidad and Tobago among other countries within the High Access range of the ITU index.

⁸ From “Universality Policy of Trinidad and Tobago,” by Ministry of Public Administration

4.2.3 Size of the Digital Divide: Results of the Survey – National Indicator Category Readings

Table 2 shows the results of the Digital Divide survey broken down by indicator category.

Table 2: DOI_ALT and DAI Category Average

DOI_ALT Category	Average	DAI Category	Average
Opportunity	0.87	Infrastructure	0.64
Infrastructure	0.39	Affordability	0.93
Utilization	0.23	Knowledge	0.89
		Quality	0.47

The Opportunity category of the DOI_ALT measures the ability of persons to afford ICT services, which is also measured by the Affordability category of the DAI. The survey results showed an average Opportunity indicator and Affordability indicator of 0.87 and 0.93 respectively. These results imply that most persons can afford telecommunications services in Trinidad and Tobago. The Knowledge indicator of the DAI also implies that on average many persons in Trinidad and Tobago are capable of utilizing ICT services. The Infrastructure indicator of both the DOI_ALT and the DAI measures the availability of the network and user devices to persons. As noted in Table 2 the average country Infrastructure indicators are 0.39 and 0.64 for the DOI_ALT and the DAI respectively.

4.2.4 Size of the Digital Divide: Results of the Survey – National Service Readings

The survey also provided information with respect to the level of access to individual basic telecommunications services in Trinidad and Tobago. Table 3 shows the country’s rating in respect of indicators for each of these services.

Table 3: National Average by Service⁹

Service	National Average
<i>Fixed Line Telephony</i>	
Proportion of households with fixed lines	72.6%
Fixed telephone subscribers per 100 inhabitants	39.17
<i>Mobile Telephony</i>	
Mobile subscribers per 100 inhabitants	92.6
<i>Internet</i>	
Internet users per 100 inhabitants	33.2
Proportion of households with Internet access at home	27.3%
Broadband subscribers per 100 inhabitants	13

4.2.5 Size of the Digital Divide: Results of the Survey – Community Readings

The results of the survey also provided DAI, DOI and DOI_ALT readings for the individual communities within Trinidad and Tobago. In terms of the three main basic telecommunications services, the following outcomes were evident:

- 353 communities scored below the national average of 72.6% for proportion of households with fixed lines
- 235 communities scored below the national average of 92.6 for mobile subscribers per 100 inhabitants
- 335 communities scored below the national average of 33.2 for Internet users per 100 inhabitants
- 325 communities scored below the national average of 27.3% for percentage of households with Internet access at home.

⁹ It must be noted that the results shown in Table 3 represent the national average of the 585 communities surveyed. These figures may vary somewhat with the *actual* national country average as this survey instrument sampled only a portion of the national population.

A complete listing of the underserved communities in Trinidad and Tobago is attached at Annex A. Areas that are below the current country average have been identified as underserved in accessing affordable basic telecommunications services. It must be noted that no community in Trinidad and Tobago has been identified as unserved, that is, does not have access to any basic telecommunication service, since the results of the survey showed that no community obtained a score of zero in relation to any basic telecommunications service.

The complete survey report is available on the Authority's website (<http://www.tatt.org.tt>). However, an idea of the digital access standing for various communities is provided in the following illustrations (Figures 2 to 7):

Figure 2:Trinidad DAI

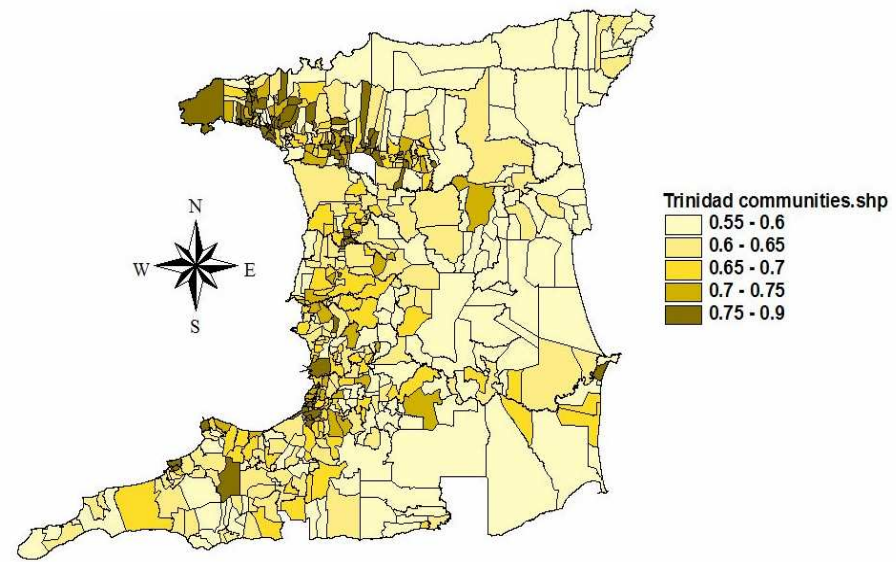


Figure 3: Trinidad DOI

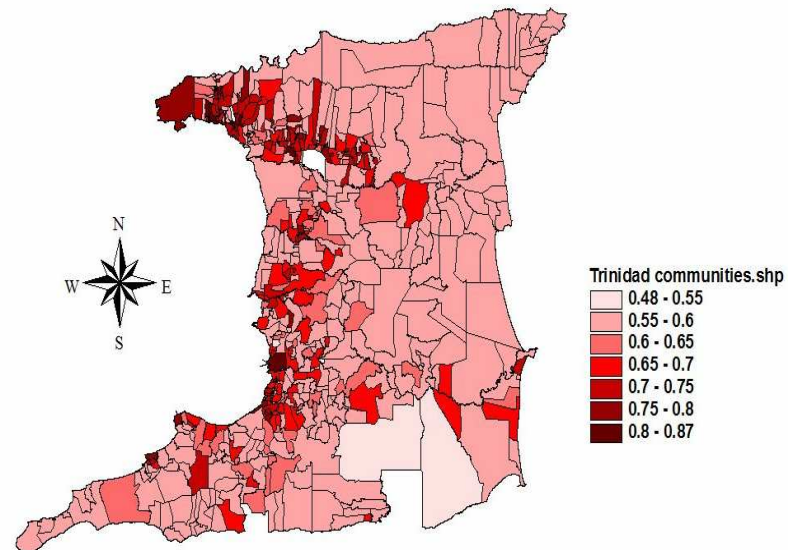


Figure 4 : Trinidad DOI_ALT

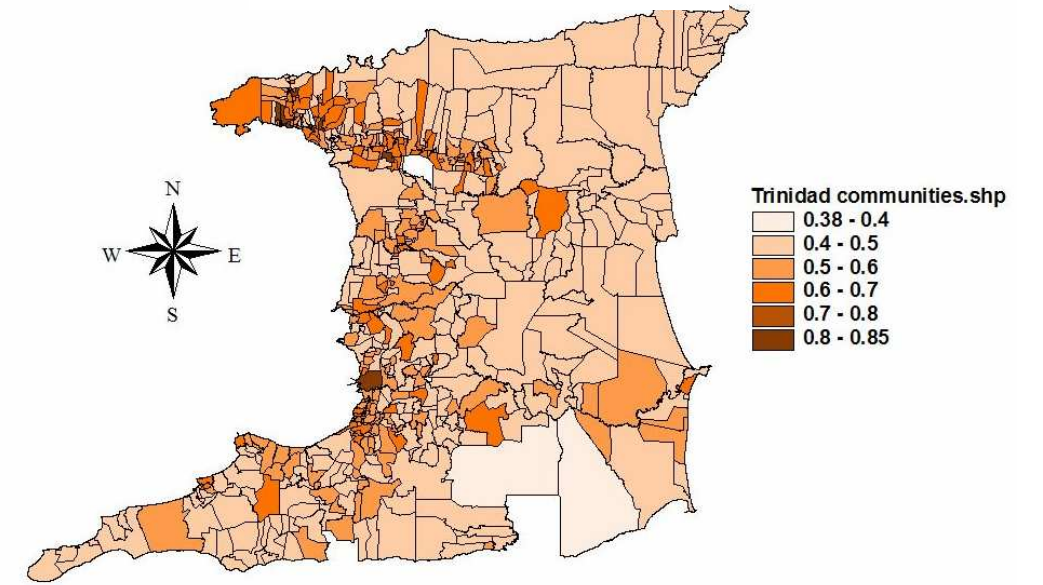


Figure 5 : Tobago DAI

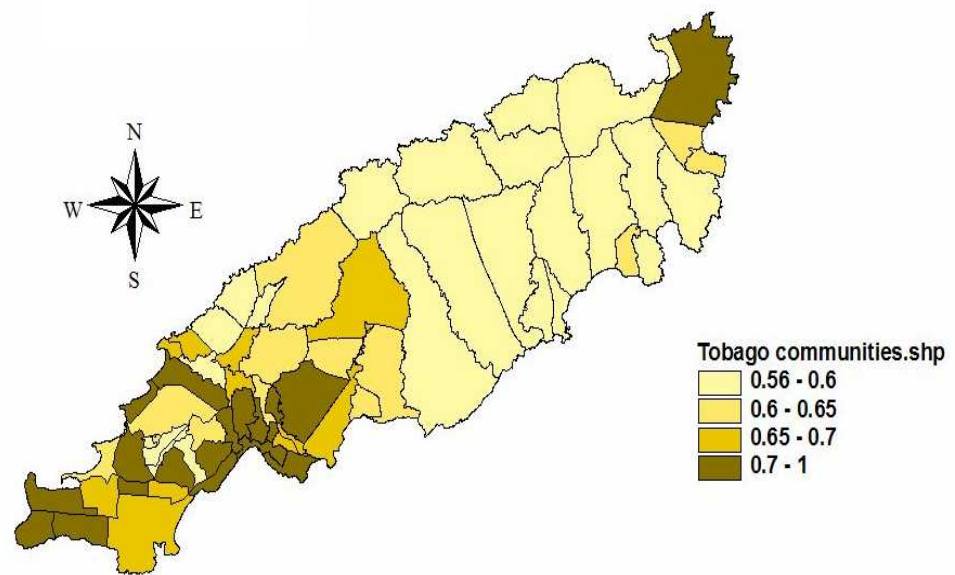


Figure 6 : Tobago DOI

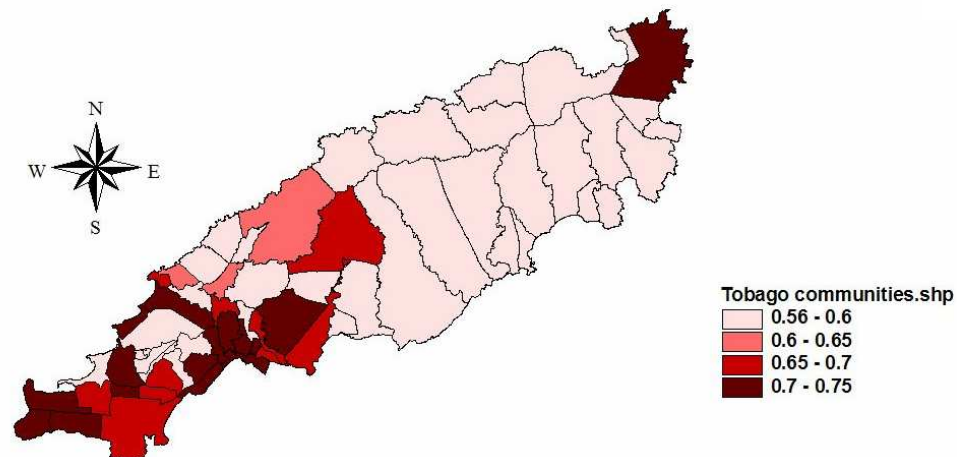
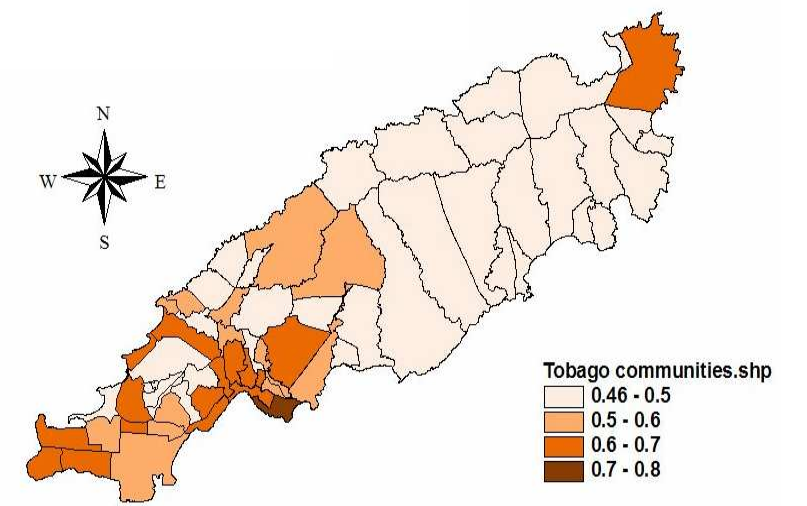


Figure 7 : Tobago DOI_ALT



4.2.6 Setting Community Targets

One of the major aims of the Universality Framework is to propose solutions that can facilitate reducing the size of the digital divide among communities in Trinidad and Tobago. Accordingly, using the results of the Digital Divide survey, the Authority is proposing to set service-level targets on a community basis in an attempt to achieve the GoRTT's national DAI target of 0.75.

By setting uniform community targets throughout Trinidad and Tobago, the Authority can measure the progress of each community towards achieving its DAI goal and its contribution towards reducing the digital divide.

In deriving the service-level community targets, the Authority used the following criteria:

1. Comparison of the fixed, mobile and Internet penetration rates among countries with a DAI of 0.75 (the national DAI target proposed by the GoRTT);
2. The DAI and DOI individual community results from the national Digital Divide survey conducted; and
3. National service-level targets proposed by the GoRTT.

4.2.6.1 Comparison of Service Penetration Rates among Countries with a DAI of 0.75

Table 4 : 2007 Service Penetration for selected countries with a DAI of 0.75

Country	Fixed Line Penetration per 100 inhabitants	Mobile Subscribers per 100 inhabitants	Internet Users per 100 inhabitants	Broadband subscribers per 100 inhabitants
Singapore ¹⁰	41.97	133.54	68.00	20.18
Japan ¹⁰	40.04	83.88	68.85	22.10
Luxembourg ¹⁰	53.20	129.50	78.00	27.54
Austria ¹⁰	40.75	118.55	67.00	19.40
Trinidad and Tobago ¹¹	39.17 (proportion of households with fixed lines = 72.6%)	92.6	33.2	13

Source: <http://www.itu.int/ITU-D/ICTEYE/Indicators/Indicators.aspx#>

Table 4 highlights the penetration rates for three basic telecommunications services measured within various countries when surveyed in 2002 by the last Digital Access Index survey implemented by the ITU. The countries chosen for this comparison included those scoring a DAI of 0.75.

On evaluating the figures, the Trinidad and Tobago national average for fixed and mobile telephony showed an acceptable level of penetration when compared to the other benchmarked countries. However, it must be noted that for the period 2002 – 2007,

¹⁰ The countries listed in Table 4 scored a DAI of 0.75 when measured in 2002 by the ITU

¹¹ Based on the results of the 2007 Digital Divide survey. It must be noted that the results shown represent the national average of the 585 communities surveyed. These figures may vary somewhat with the *actual* national country average as this survey instrument sampled only a portion of the national population.

according to statistics published by ITU, the level of fixed line penetration has been decreasing while mobile penetration has shown an upward trend¹².

Conversely, Trinidad and Tobago has an Internet user average of 33.2, which is below the averages of the countries benchmarked. The Authority believes that this figure is fairly low from a perspective of both a country average and community average to accomplish the GoRTT plans of fulfilling its ICT objective to become a knowledge-based society by 2010.

4.2.6.2 Proposed Minimum Community Service-Level Targets

The national Digital Divide survey, through the household survey, measured the DAI and DOI score for each of the communities in Trinidad and Tobago as categorised by the Central Statistical Office (CSO). Using this as a benchmark together with the figures highlighted in Table 4, the Authority is proposing that the target fixed and mobile penetration readings for each community should, at minimum, be the same as the national average readings of the 2007 Digital Divide survey.

In respect of Internet penetration and usage, as part of its mandate to become a knowledge-based society, the GoRTT has proposed initial targets of 51 Internet users per 100 inhabitants and 13 broadband subscribers per 100 inhabitants for the achievement of the 0.75 DAI objective. Table 5 summarises the minimum service level targets being proposed by the Authority for each community in Trinidad and Tobago:

Table 5 : Community Target by Service

Service	Minimum Community Target
Proportion of households with fixed lines	73%
Mobile subscribers per 100 inhabitants	93%
Internet users per 100 inhabitants ¹³	51

¹² InfoDev “ICT Regulation Toolkit”

¹³ These community targets have been extracted from the GoRTT’s presentation titled ‘ICT Vision Strategy 2008’.

Broadband subscribers per 100 inhabitants ¹³	13
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Statement on Community Targets for achieving Universality:

The Authority proposes to set the following minimum community service targets in an attempt to meet the 0.75 DAI objective outlined in GoRTT's National Universality Policy:

<i>Service</i>	<i>Community Target</i>
<i>Proportion of households with fixed lines</i>	<i>73%</i>
<i>Mobile subscribers per 100 inhabitants</i>	<i>93%</i>
<i>Internet users per 100 inhabitants</i>	<i>51</i>
<i>Broadband subscribers per 100 inhabitants</i>	<i>13</i>

4.3 Identifying Basic Telecommunications Services requiring Regulatory Intervention for Achieving Universality

In determining which basic telecommunications services would likely require regulatory intervention in order that they are available, affordable and accessible universally, the Authority took into consideration two factors:

1. Has the ability to use the service become essential for social inclusion based on Government ICT policy objectives and social, economic and technological developments? , and
2. Are normal commercial and market forces insufficient to make the service available for all to use?

The Authority considers that all of the basic telecommunications services defined at Section 2.3 above satisfy the first test. However, based on the results of the Digital Divide Survey, the Authority considers that public mobile telephony¹⁴ services does not satisfy the second. Therefore while mobile voice remains a basic telecommunications service, the Authority, in its analysis, believes that normal commercial and market forces are already sufficient to make this service available for use by all persons of Trinidad and Tobago.

As a result, the Authority believes that mobile service providers should be excluded from acquiring assistance from any universality funding mechanism in order to rollout and make available affordable mobile telephony services to the public of Trinidad and Tobago. It must be noted however, at this time the Authority does not believe the same inference can be applied to mobile data services in communities or to population groups that fall within the access gap.

Statement on Basic Telecommunications Services requiring regulatory intervention for achieving Universality:

The Authority proposes to exclude mobile telephony services from those basic telecommunications services requiring regulatory intervention to facilitate it being affordable and accessible universally throughout Trinidad and Tobago. As a result, the Authority is not considering the provision of assistance from any universality funding mechanism to providers of public mobile services for the provision of mobile telephony services.

4.4 Identifying Communities that fall within the Access Gap

Tables 2 and 3 show that although there is a high penetration of mobile voice services, Internet penetration, Internet usage and fixed telephony penetration are very

¹⁴ Public telephone service (commonly referred to as telephony) as defined by the Telecommunications Act: 'the commercial provision to the public of interactive voice communication in real time from and to points at which users are connected to a network such that a user can use terminal equipment to communicate with another user'.

low in Trinidad and Tobago. Based on the results of the survey, the Authority concluded that in general, inadequate infrastructure and utilization of fixed telephony and Internet services were the main reasons for communities having low digital divide indicators.

Additionally, the low readings in respect of Internet services could have also been as a result of not many persons on average owning computers to use or to subscribe to Internet services. The low Quality indicator of the DAI index might also explain the low percentage of broadband Internet subscribers in Trinidad and Tobago.

4.4.1 Current Status of Service Provision in the Underserved Areas

The Authority, in accordance with its mandate to liberalise the telecommunications market has thus far granted the following concessions:

Table 6 : Telecommunications and Broadcasting Providers

Network Category	Service Provided	Concessions Granted	Operators providing Service
International¹⁵	Facilities only	2	2
	Facilities and/ or Services	9	9
Domestic Fixed¹⁶ (Wired or Wireless)¹⁷	Telephony	8	2
	Internet	8	13
	Subscription TV	8	6
Domestic Mobile¹⁸	All mobile services	2	2

¹⁵ An international telecommunications network is any network that enables the provision of an international telecommunications service.

¹⁶ In total there are nine authorised fixed telecommunications networks, however some concessionaires provide triple-play options. Additionally, the Authority has not yet completed granting of concessions to ISPs who existed prior to the Act's promulgation, hence the reason for more there being more providers of Internet than concessions granted.

¹⁷ A Domestic Fixed Telecommunications Networks can have either wired or wireless components, or a combination of both. In a fixed wired telecommunications network, there is no use of spectrum for the transmission of information to the end user. By contrast, fixed wireless telecommunications networks transmit information to end users using spectrum.

The Authority has recognised that there may still exist a significant market gap in the provision of particular services including fixed line and Internet as full competition is yet to take effect. Evidence of this is provided in Table 6 which shows, for example, even though 8 concessions have been granted for the provision of telephony services, there are only two operators currently providing the service. It is expected that, as time goes by, operators will launch their services and fulfill their concession obligations.

Furthermore, consideration should be given to the fact that after the Digital Divide survey was completed in 2007 the country's international Internet bandwidth capacity increased due to the launch of two additional off-island fibre facilities. Consequently, competition in both the broadband Internet market and fixed telephony was realized with the introduction of national broadband Internet services and fixed voice services by the major cable provider, and broadband Internet services by wireless providers. The country has therefore seen a significant reduction in broadband Internet rates since 2007.

Since the publication of the Digital Divide Survey results, the Authority has engaged in dialogue with existing concessionaires to evaluate the current status of service provision in the underserved areas. The information gathered may aid the Authority in:

1. Determining the reasons why certain communities are underserved (See Annex A), that is, below the national average results of the Digital Divide survey;
2. Identifying the underserved communities where there are already plans in place to facilitate service provision;
3. Enforcing the roll-out obligations of concessionaires where necessary; and
4. Assessing the access gap – as mentioned above, the telecommunications sector has been further liberalised since the 2007 Digital Divide Survey. Subsequently, communities that were labelled as underserved based on the 2007 survey may now have increased access to basic telecommunication services.

¹⁸ A Domestic Mobile Telecommunications Network is any network in which the physical location of the end user's equipment is not limited to a stationary position at any point of time while using the network.

In addition to dialogue with concessionaires, the Authority has recognised the need to continuously assess the progress of the current market so as to identify those communities and population groups that fall within the access gap, and for which subsidies may be required. As a result, the Authority intends to conduct digital divide surveys every three (3) years and other relevant independent studies to:

1. Continuously measure the status of the underserved communities and population groups so as to develop specific universality implementation plans; and
2. Gauge the effectiveness of its universality plans in reducing the access gap among these communities and population groups.

Statement on Eligibility of Communities requiring Regulatory Intervention for achieving Universality:

The Authority proposes to only provide funding for the provision of affordable basic telecommunications services in underserved areas where it has been proven to be economically challenging to do so. These areas shall be referred to as Universality Areas (UAs). The Authority proposes to assess the extent to which it is not economically feasible to provide basic telecommunications services in consultation with the industry before declaring those communities for which universality funding will be made available.

4.5 Identifying Population Groups that fall within the Access Gap

The Digital Divide Survey provided information that enabled the Authority to assess the extent to which service provision is inadequate in communities within Trinidad and Tobago. It does not provide information to assess the extent to which particular population groups have challenges in accessing basic telecommunications services.

A comprehensive Universality Framework should also ensure that there are subsidies and mechanisms that make basic telecommunications services accessible by, and affordable for, particular groups of the society that may have low incomes or may be

differentially-abled. Some population groups that may require assistance through regulatory intervention include¹⁹:

- Persons who typically experience low incomes *and/or* social obstacles that prevent them from having access to telecommunications, for example, women and elderly persons;
- Unemployed persons, for whom Internet access may provide new skills, networking capabilities, or knowledge leading to employment;
- Young people, who usually have low or no income, who are often early adaptors of new technologies and can easily learn to make the most of them for the wider benefit of their families and eventually society; and
- Persons who are differently-abled (physically or otherwise).

In May 2008, the Authority hosted a public seminar in order to commemorate World Information Society Day under the theme ‘Connecting the Disabled’. The majority of the participants were members of the differently-abled society of Trinidad and Tobago and as a result, the Authority received feedback on specific telecommunications issues adversely affecting them.

Some of the issues raised at the seminar were as follows:

- Affordability and availability of assistive technology devices for accessing basic telecommunications services
- Assistive technology devices for persons with cognitive and mental disabilities
- Special tariffs schemes for differently-abled persons
- Format of Braille directories electronically
- Free directory assistance for the visually-impaired
- Availability of Braille billing for the visually impaired

¹⁹ Adopted from “ICT Regulation Toolkit,” InfoDev

➤ Accessibility to the Internet for the hearing impaired

In consideration of the above, the Authority has been liaising with the relevant social development agencies (Ministries, Non-Governmental Organisations, etc.) to assess the extent to which regulatory intervention is required to enable the differently-abled community and some of the population groups identified above to access basic telecommunications services.

Arising from these discussions, the Authority is proposing to put mechanisms in place to facilitate the access of affordable basic telecommunication services by members of the differently-abled community.

Statement on Eligibility of Population Groups requiring Regulatory Intervention for achieving Universality:

The Authority proposes to only provide subsidies for the provision of basic telecommunications services to population groups, to whom it has been proven to be economically challenging to provide affordable basic telecommunications services. Such population groups may include:

- *Persons who typically experience low incomes and/or social obstacles that prevent them from having access to telecommunications, including women and elderly persons;*
- *Unemployed persons, for whom Internet access may provide new skills, networking capabilities, or knowledge leading to employment;*
- *Young people, who usually have low or no income, who are often early adoptors of new technologies and can easily learn to make the most of them for the wider benefit of their families and eventually society; and*
- *Persons who are differently-abled (physically or otherwise).*

The Authority proposes to assess the extent to which it is not economically feasible to provide basic telecommunications services to particular population groups by conducting independent studies, and by consulting with concessionaires and the relevant agencies before instituting mechanisms and providing universality funding to facilitate affordable service provision to these groups.

In deciding which (if any) population group requires regulatory intervention in order to access

affordable basic telecommunications services, and the extent to which such intervention is required, the Authority proposes to take into consideration the following factors:

- current penetration of the basic telecommunications service within the particular population group;*
- the extent to which the remedy for facilitating access to the population group requires a subsidy, and if so, the level of subsidy required; and*
- the extent to which the subsidy required is financially sustainable.*

4.6 Objectives of the Universality Framework

Based on the guidelines of the GoRTT National Universality Policy and an analysis of the digital divide existing in Trinidad and Tobago, the Authority proposes the following 5-year objectives for the Implementation Plan:

- 1) To achieve an increase in the national DAI from 0.67 to 0.75 and DOI from 0.63 to 0.75 at minimum by facilitating an increase in the DAI and DOI of all communities below the current country average by one standard deviation (8%) per year such that the minimum community DAI and DOI reaches 0.67 and 0.63 respectively. This objective will put Trinidad and Tobago into the high access range, according to ITU standards;
- 2) To facilitate the provision of affordable and accessible basic telecommunications services to everyone especially population groups within the access gap and persons living in underserved areas such that 100% of the population would have access to affordable basic telecommunications services;
- 3) To ensure the deployment of essential ICT infrastructure in key geographic areas such that there is universal geographic coverage of basic telecommunications services throughout Trinidad and Tobago;
- 4) To implement a Universality Funding mechanism that would require that concessionaires, and other entities as may be required, to contribute a percentage of their gross annual revenues to the cost of providing basic telecommunications services (except public mobile telephony services) to communities and population groups that fall within the access gap.

5 Universality Funding Mechanism

5.1 Objectives of A Funding Mechanism

The Authority recognises that in choosing any Universality Funding Mechanism the following objectives should be met. The Universality Funding Mechanism should be able:

- to facilitate the achievement of the policy objectives in both the Authority’s Universality Framework and the GoRTT’s Universality Policy;
- to ensure that unfair financial burden is not placed on any concessionaire; and
- to promote the use of competitive market forces in funding communities and population groups in the market gap

5.2 Examples of Funding Mechanisms

The following methods have been used by various regulators to meet their universality requirements.

5.2.1 Cross Subsidies

One method used by regulators in the past is to allow service providers to fund universality through internal cross-subsidisation. This method involves the use of surplus revenues earned in profitable market segments to cover losses on non-profitable services. This mechanism is intended to subsidize unserved or high cost customers from revenues earned from other subscribers or services.

Advantages	Disadvantages
Assists in financing higher cost services to those who may otherwise be unable to afford it.	It may be impractical and anti-competitive since the introduction of competition in profitable markets has resulted in reduced rates and therefore insufficient revenues in those markets to make cross-subsidisation

	feasible.
	It can promote inefficiency and depress demand for services. For instance, if local rates are subsidized by international rates, the demand for international services may be reduced due to higher prices.

Section 24 (1) (c) of the Telecommunications Act states:

“...a concession for a public telecommunications network or a public telecommunications service shall require the concessionaire to adhere, where applicable, to conditions requiring the concessionaire to—

(c) refrain from using revenues or resources, from a telecommunications network or service, to cross subsidise any other telecommunications network or service, without the prior written approval of the Authority;....”

The Authority does not propose to encourage the use of internal cross subsidisation as a means of funding Universality at this time.

5.2.2 Access Deficit Charges (ADCs)

This scheme has been used in some countries to compensate operators who bear the obligation to provide access services to certain customers at a price below cost. These operators raise the funds to finance the access deficit by imposing a charge on other operators who require access to the access network. They are generally charged similar to interconnection charges i.e. on a per minute basis or on a per trunk basis, or even as a levy on the operator’s revenue.

Advantages ²⁰	Disadvantages
Maintains loss-making basic telecommunications services at a low cost to customers while wholesale services are priced above cost to finance these basic services.	This system gave few incentives to the operator to allocate costs accurately and to price services efficiently.
	Price averaging increases the difficulties associated with distinguishing the costs of intermediate and final services. This in turn complicates the task of setting interconnection fees and distributing the costs of universal service provision fairly.

While the issue of access deficit is being considered outside of this Universality Framework, the Authority does not propose to use ADCs as a means of funding Universality in Trinidad and Tobago.

5.2.3 Universality Funds or Universal Service Funds

Universality Funds (UF) , or Universal Service Funds (USFs), are special funds created to subsidise the delivery of telecommunication services for communities and population groups that fall within the access gap . Universality funds collect revenues from a variety of sources including government and telecommunications service operators. The amounts contributed are determined in a transparent manner and are used to finance specific and targeted high cost areas and/or low income subscribers. It must be noted though that no UF should be used to support investments that would otherwise be made by private operators on a purely commercial basis (market gap), nor should these funds give a competitive advantage or disadvantage to any service provider.

²⁰ From “Chapter 31 Future Directions in Telecom Regulation: The Case of the United Kingdom, ” by Richard Collins and Cristina Murrioni

Advantages	Disadvantages
Most transparent, effective and efficient means of providing targeted subsidies to expand or support the provision of service where it is uneconomically feasible to do so.	There may be some administrative complexity and transaction expenses in establishing the fund. Additionally, there may also be some potential for bad governance.
Works best in expansion of service to uneconomically feasible areas if combined with competitive bids from existing operators	Difficult to forecast costs and revenues associated with the universality projects.

The Act also contains the following provisions in respect of funding for Universality:

- Section 28 (4) “ *The Authority may, with the approval of the Minister, require that closed user group services, private telecommunications services and value added services as well as the users of such services and all telecommunications services generally, contribute to the funding of universal service.*”
- Section 53 (1) (d) “*The funds of the Authority shall consist of sums collected in respect of universal service obligations.*”
- Section 53 (3) “ *Funds arising in respect of paragraph (1) (d) shall only be applied to facilitate the provision of universal service in accordance with the provisions of section 28.*”
- Section 53(6) “*The Authority shall keep and maintain a separate account opened with the approval of the Minister of Finance for the purpose of depositing funds collected in respect of the funding of the services referred to in section 28 and such funds shall not be used for any other purpose.*

In addition Section A15 (b) of the service providers’ concessions states:

“A concessionaire shall where the concessionaire is authorised to operate public domestic mobile, public domestic fixed, and/ or public international telecommunications networks, and/or provide public domestic fixed, public domestic mobile, public international telecommunications, and/or broadcasting services, remit such amount no greater than three per cent (3%) of gross annual revenues from such networks and services as may be specified by the Authority regarding universal service, into an account or fund to be specified by the Authority for the development of a universal service and access programme.”

Guided by the requirements of the Act and the Concession agreement, the Authority considers the establishment of a Universality Fund as the most appropriate mechanism for funding Universality in Trinidad and Tobago.

Policy Statement on funding Universality:

The Authority shall establish and implement a Universality Fund to subsidise the provision of basic telecommunications services (except public mobile telephony services) to communities and population groups where it has been determined that the provision of those services is not economically feasible.

6 Establishment of Universality Fund

The following are the main principles that the Authority proposes to be adopted in the establishment and implementation of a Universality Fund (UF) in Trinidad and Tobago:

- That the UF be administered by the Authority and be separately identified under the Authority's operating budget;
- That the Authority establishes a Fund Administration Committee to recommend the most effective use of the UF;
- That the UF budget be made public and be subject to independent audit in accordance with Section 57 (2) of the Telecommunications Act;
- That the Authority establishes specific criteria, consistent with Section 4.4 and 4.5 of this framework, for:
 - (i.) identifying communities and population groups that would be eligible for UF funding; and
 - (ii.) the selection of service providers to be eligible to access the UF in order to provide services.
- That the administration cost of operating the UF be determined annually and paid from the UF, subject to audit and review in accordance with Section 57 (2) of the Telecommunications Act.

6.1 Administration and Structure of the Fund

6.1.1 Administration of the Fund

Selecting the agency to be responsible for administration and management of any UF is a significant decision. Table 7 provides examples of agencies required to administer Universality Funds around the world.

Table 7: Examples of Fund Administrations

Country	Fund Administrator
Argentina	Administered by a council made up of 10 people selected by various levels of government, operators and consumers
Brazil	Anatel - regulatory agency
Chile	Subtel – regulatory agency
Colombia	Ministry of Communications
Dominican Republic	Indotel - regulatory agency
Ecuador	CONATEL - regulatory agency
Guatemala	Ministry of Communications
India	Department of Telecommunications
Jamaica	The Universal Fund Company
Malaysia	Malaysian Communications and Multimedia Commission (CMC) – regulatory agency
Pakistan	The Universal Service Fund Company Limited
Peru	OSIPTEL – regulatory agency
South Africa	Universal Service and Access Agency of South Africa
Venezuela	A Board consisting of the head of the telecom regulator, representatives from three ministries and a representative from the contributing operators

Based on the information presented in Table 7, it must be noted that the majority of countries have allocated the responsibility of administering and managing the fund to the regulatory agency. Reasons for this include:

- 1) The regulator has a degree of independence from government and the industry; and
- 2) The regulator has technical and regulatory expertise²¹

It is considered best practice that the regulator be responsible for providing the secretarial expertise and day-to-day support, under the guidance of a Management Committee or Advisory Board. This Committee or Board should provide high-level decisions on the projects to be undertaken, approve fund disbursements, monitor for the proper execution of universality projects, and maintain the financial integrity of the UF.

Additionally, Section 28 (3) of the Act states:

“In accordance with the policy established by the Minister, the Authority shall periodically determine the manner in which a public telecommunications service or value added service shall be provided and funded in order to meet the requirements of universal service for that service, including the obligations, if any, of the providers and users of the service.”

Therefore it is clear that the Act mandates the Authority to be responsible for the management and administration of the UF.

Policy Statement on UF Management and Administration:

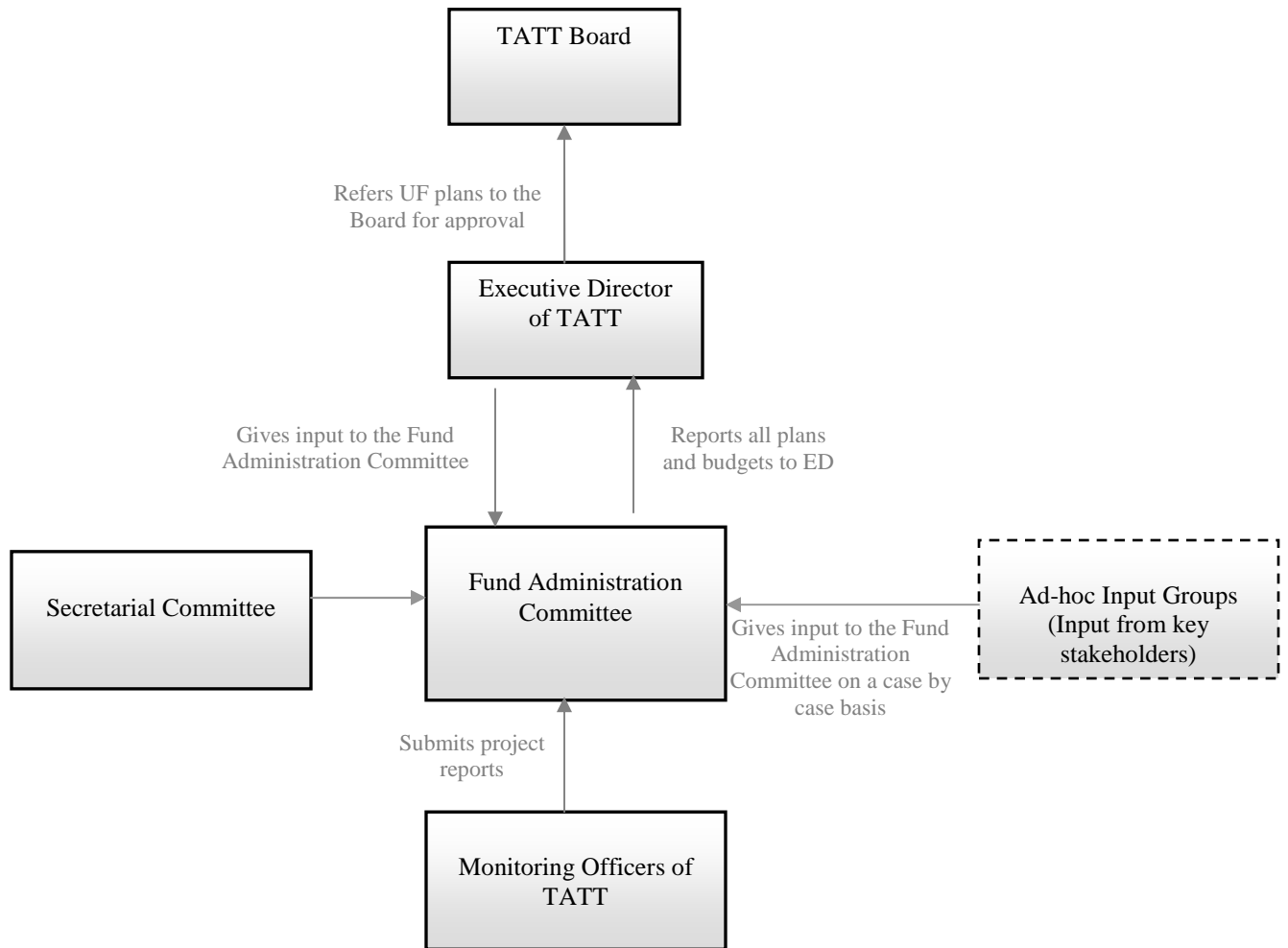
In accordance with Section 28 (3) of the Telecommunications Act, the Authority will be responsible for the management and administration of the UF.

6.1.2 Hierarchical Structure of the Universality Fund

The Authority is proposing to use the hierarchical structure prescribed in Figure 8 to manage and administer the UF:

²¹ Referred from “ICT regulation Toolkit,” by InfoDev, 2009

Figure 8 : Proposed Hierarchical Structure for the Administration of the Universality Fund



The *Board* will be responsible for :

- a) setting the overall policy for the administration of the UF;
- b) approving annual plans and budgets of the UF and any recommendations the Executive Director may make regarding UF matters; and
- c) approving UF annual reports and audits.

The Authority proposes that the *Executive Director* of the Authority have responsibility for the following:

- a) reporting UF matters and making recommendations to the Board based on information provided by the Fund Administration Committee.

The Authority proposes that the *Fund Administration Committee* be a committee comprising the Executive Director and divisional heads of the departments of the Authority which should include at minimum persons with experience and qualifications in the areas of law, accounting, economics and engineering. The Authority is proposing that the Fund Administration Committee have responsibility for:

- a) seeking input from the relevant stakeholder groups when deliberating on universality initiatives to be implemented;
- b) providing recommendations with respect to the priority to be given to Universality initiatives to be undertaken annually;
- c) developing objectives, budgets and operational plans for the management of the UF;
- d) ensuring the authorisation process for the award of concessions/ and or universality obligation contracts to service providers;
- e) reviewing the adequacy of fund contributions received every three (3) years and submitting any recommended changes to the Board for approval;
- f) recommending the amounts that should be disbursed from the fund and to whom the funds should be disbursed in accordance with the Authority's tendering rules; and
- g) monitoring and overseeing the implementation of all universality initiatives to ensure that all obligations are fulfilled within the required timeframes.

The Authority proposes the establishment of a *Secretarial Committee* whose responsibility will include:

- a) organising and coordinating stakeholder or ad-hoc input group meetings when the FAC is deliberating on universality initiatives to be implemented;
- b) providing research and input into the development of the objectives, budgets and operational plans for execution by the UF;
- c) advising the FAC on projects to be undertaken; and
- d) providing overall technical and administrative support to the members of the FAC;

The Authority proposes that it sets up *Ad-hoc Input Groups* from time to time to seek advice from stakeholders in the industry when the need arises. The Ad-hoc input groups may comprise stakeholders relevant to the Universality matter under consideration by the Fund Administration Committee. Such stakeholders may include representatives from various service providers, representatives of the Ministries with responsibilities for telecommunications, community and social development, residents of underserved communities, representatives of the relevant Non-governmental agencies, representatives of population groups that fall within the access gap (e.g. differently-abled persons), or any other group determined by the Fund Administration Committee to have a key interest.

It must be noted that members of the Ad-hoc Group will be selected based on the nature of the proposed project to be implemented.

The Authority proposes that the *Monitoring Officers* shall be employees of the Authority appointed by the Fund Administration Committee. The Authority recommends that the Monitoring Officers have responsibility for:

- a) monitoring universality projects being implemented by the service providers on an on-going basis to ensure compliance with contracts awarded by the Authority; and
- b) preparing reports on the progress and the status of universality projects to the Fund Administration Committee.

6.1.3 Review of Universality Fund Activities

The Authority considers that in order for there to be confidence by concessionaires and key stakeholders in the administration of the UF, the process for the periodic review of UF activities must be a transparent one. In order to facilitate this, the Authority proposes the biennial publication of a Universality Strategic Implementation Report and the annual publication of a Universality Fund Accounting Report.

The Authority proposes that the Universality Strategic Implementation Report be published no later than six (6) months before the end of the Authority's financial year biennially and contain information on:

- the description and details of a two (2) year strategic implementation plan of universality initiatives to be undertaken and the proposed budget for these initiatives;
- A report on the progress of universality initiatives currently being funded by the UF; and
- Any revisions of the UF objectives that may be necessary for the period following the current financial year.

The Fund Accounting report should be published annually three (3) months after the end of the Authority's financial year and should contain:

- A report on the collection and disbursement of funds from the UF for the financial year just ended;

The accounts published in the Fund Accounting Report will be audited by the Auditor General of Trinidad and Tobago pursuant to section 57 of the Act.

6.2 Contributing to the Fund

6.2.1 Who should contribute to the Fund?

Section 24 (1) (g) of the Telecommunications Act states that:

“A concession for a public telecommunications network or a public telecommunications service shall require the concessionaire to adhere, where applicable, to conditions requiring the concessionaire to provide and contribute to universal service in accordance with section 28.”

In addition, Section 28 (4) of the Act further states that:

“The Authority may, with the approval of the Minister, require that closed user group services, private telecommunications services and value added services as well as the users of such services and all telecommunications services generally, contribute to the funding of universal service.”

Therefore in accordance with the above sections of the Act, all concessionnaires operating a public telecommunications network or providing a public telecommunications service are required to contribute to the Universality Fund. The Authority also proposes to seek the approval of the Minister to require all providers of closed user group and private telecommunications services to contribute to the UF.

Furthermore, in accordance with section 53 (4) of the Telecommunications Act which states:

“A percentage of the funds collected in respect of concessions and licences may be transferred to the account opened in accordance with subsection (6), at the discretion of the Authority”

the Authority may allocate a percentage of the funds collected in respect of concessions and licences fees from service providers towards the Universality Fund.

Statement on UF Contributors:

All concessionaires operating a public telecommunications network or providing a public telecommunications service are required to contribute to the UF in a manner to be prescribed by the Authority. The Authority proposes to seek the approval of the Minister at this time to require all providers of closed-user group and private telecommunications services to contribute to the UF. The Authority also proposes to monitor the extent to which other groups identified in Section 28(4) of the Act should be required to contribute to the UF in the future and to seek the approval of the Minister accordingly. It must be noted that any contributions towards the UF required by service providers, cannot be passed on/imposed on customers unless authorised by the Authority.

The Authority may allocate a percentage of of the funds collected from concession and licences fees, after all the Authority's expenses have been covered, towards the Universality Fund.

6.3 Accounting and Budgeting Separation for the Fund

Section 53 (6) of the Telecommunications Act states:

'The Authority shall keep and maintain a separate account opened with the approval of the Minister of Finance for the purpose of depositing funds collected in respect of the funding of the services referred to in section 28 and such funds shall not be used for any other purpose.'

Consistent with the above, the Authority has established a stand-alone account for the UF. The budget for the UF will also be shown separately within the Authority's

annual budget²² in order to ensure transparency and proper recording of the collection and disbursement of universality funds.

The Authority proposes that accounting procedures, established in accordance with the Authority's Financial Rules and the Telecommunications Act, be followed for collecting, tabulating and distributing monies from the UF.

6.3.1 Contributions

The Authority proposes the following general guidelines for collecting UF contributions:

1. Service providers should submit their audited financial statements to the Authority within six (6) months after the end of their financial year;
2. Within twenty-eight (28) days of receiving the audited financial statements, the Authority should then issue invoices to all relevant service providers outlining the amount of contribution to be paid to the UF;
3. On submission of the invoices, service providers should be required to make the necessary payment within twenty-eight (28) days.

6.3.2 Fund Accounts and Budgets

The Authority proposes that access to the bank accounts of the UF be limited as per the Authority's financial rules, and that the total UF amounts be divided into three primary budget categories, which can be accomplished through accounting allocations. The three primary budget categories being proposed are²³:

- (i) Project Fund – the bulk of the fund, to be allocated to Universality initiatives in accordance with the fund's mandate and criteria;
- (ii) Administration Budget – funds required to cover the cost of UF administration and which should be no greater than 15% of the total fund budget in any given year;

²² The Authority's annual budget is published in the GoRTT Draft Estimates of Expenditure

²³ From "Trends in Telecommunications Reform 2003," by International Telecommunications Union

- (iii) Reserve Fund – a contingency fund that may be required to cover cost over-runs and unanticipated needs and which should be no greater than 10% of the total fund budget. This may also include a special projects allocation, where the Fund Administration Committee considers it appropriate.

6.3.3 Individual Project Budgets

The Authority considers that service providers should be required to maintain separate records and accounts in relation to universality initiatives for which they are responsible that is financed by the UF. The Authority considers that such accounts must be submitted annually to the Fund Administration Committee one (1) month after the end of the Authority's financial year. The Authority proposes that such records and accounts should contain the following, at a minimum:

- Project budget estimates
- Detailed expenditure records
- Revenue earned from the project
- Forecasts of future needs and anticipated resources

In addition to the above, these records and accounts should be audited and submitted six months after the end of the service provider's financial year in order to be reconciled with the previously submitted statements.

7 Universality Obligations

Section 18 (1) (c) of the Telecommunications Act reads:

‘Subject to the provisions of this Act, the Authority may exercise such functions and powers as are imposed on it by this Act and in particular determine universal service obligations throughout Trinidad and Tobago, pursuant to Section 28, and ensure that such obligations are realised.’

Section 28 (3) continues:

‘In accordance with the policy established by the Minister, the Authority shall periodically determine the manner in which a public telecommunications services or value added services shall be provided and funded in order to meet the requirements of universal service for that service, including the obligations, if any, of the providers and users of the service’

Additionally, A15 b. of the concession awarded to all concessionnaires states:

‘...where the concessionaire is authorised to operate public domestic mobile, public domestic fixed, and/ or public international telecommunications networks, and/or provide public domestic fixed, public domestic mobile, public international telecommunications, and/or broadcasting services, remit such amount no greater than three per cent (3%) of gross annual revenues from such networks and services as may be specified by the Authority regarding universal service, into an account or fund to be specified by the Authority for the development of a universal service and access programme.’

This section highlights a few approaches the Authority is considering for implementation to facilitate the provision of basic telecommunications services to all persons in Trinidad and Tobago.

The Authority proposes to use:

- Mandatory Universality Obligations – these are obligations to be imposed on all relevant concessionaires through the Authority’s Universality Regulations.
- Contractual Universality Obligations – these are projects to be implemented by concessionaires selected through the reverse auction process.

The Authority recognises that some concessionaires may be responsible for implementing Universality obligations (‘playing’ aspect), in addition to the general requirement for all concessionaires to contribute to the Universality Fund (‘paying’ aspect). However those concessionaires who may be responsible for implementing certain obligations may be reimbursed from the fund as determined by the Authority. The following sub-sections describe the approach proposed by the Authority to be taken in respect of imposing universality obligations that it considers would be fair and non-discriminatory for all.

7.1 Mandatory ‘Paying’ Universality Obligations

The following table gives an example of ‘paying’ universality obligations imposed by regulators in other jurisdictions:

Table 8: Examples of UF Contributions

Country	Amount Contributed by Service Providers to UF
Argentina	1% of all operators' gross revenues – Argentine operators can contribute either by paying 1% of revenues to the fund or by proving that they are installing service in under-served areas.
Brazil	1% of service providers' gross operational revenues earned from the provision of telecom services
Chile	Government’s Budget
Colombia	5% of national and long distance operators' revenues plus funds from license fees

Country	Amount Contributed by Service Providers to UF
Dominican Republic	2% levy on users' telephone and cable TV bills
Ecuador	1% operator levy on fixed line operators
Guatemala	Transfers from government and 70% of the amount collected through spectrum auctions until 2003
India	5% of all operators' revenues
Jamaica	-US\$0.03 per minute on all incoming international calls terminating on the fixed wired network -US\$0.02 per minute on all incoming international calls terminating on the mobile network
Malaysia	Fixed and mobile network operators contribute 6% of their weighted revenue from designated services to the Fund (approximately 2% of total revenue)
Pakistan	1.5% levy on the revenues of all operators
Peru	1% of all telecom and CATV operators' gross revenues
South Africa	0.2% of all operators' revenues
Venezuela	1% levy on all operators' revenues

Source: From "Universal Access & Service Fund Update 2007," by Intelecon, December 2007, - <http://www.inteleconresearch.com/pages/reports.html>

Given the level of concession and licence fees charged by the Authority and the ability of the Authority to allocate a percentage of its income to Universality (Section 53 (3) of the Act), the Authority proposes to impose universality obligations of a contribution to the UF that is:

- 0.5% of gross revenues arising from relevant telecommunications services²⁴ and/or network facilities from domestic concessionaires

²⁴ Relevant telecommunications services include the provision of both wholesale and retail services authorised by the Authority

- 1% of gross revenues arising from relevant telecommunications services and/or network facilities of international concessionaires
- 2% of gross revenues arising from relevant telecommunications services²⁵ and/or network facilities of all providers of closed user group and private telecommunications services (when directed by the Authority subject to the approval of the Minister).

This approach allows a fixed percentage of contributions to be collected from service providers which grants a level of certainty with respect to the amount of contributions they are required to pay for the year. The Authority considers that the monies collected will be used towards the cost of funding universality initiatives identified by the Fund Administration Committee in the biennial Strategic Implementation Report.

It must be noted that predictability, timing and frequency of funding is necessary to allow proper planning and constancy for the projects to be implemented.

Statement on Contributions to the UF as the ‘Paying’ Aspect of Universality Obligations:

The Authority proposes to impose universality obligations of a contribution to the UF that is:

- *0.5% of gross revenues arising from relevant telecommunications services²⁴ and/or network facilities from domestic concessionaires*
- *1% of gross revenues arising from relevant telecommunications services and/or network facilities of international concessionaires*
- *2% of gross revenues arising from relevant telecommunications services²⁵ and/or network facilities of all providers of closed user group and private telecommunications services (when directed by the Authority subject to the approval of the Minister)*

²⁵ Relevant telecommunications services include closer user group and private telecom services as defined by the Act

The Authority proposes that all concessionaires will be required to pay into the UF according to the guidelines above. However concessionaires who are authorised to implement Universality 'playing' obligations may be allowed to claim a reimbursement from the fund.

7.1.1 Provision for Deficits and Surpluses within the UF

The fixed percentage approach described in 7.1. has been adopted for the following reasons:

- To give service providers the opportunity to budget for their contributions towards the UF;
- To allow the Authority to estimate the amounts of available funds so as to plan for Universality initiatives to be implemented for the period

If a circumstance arises where there is a deficit or shortfall of funds in the UF to implement the planned Universality obligations, the Authority proposes to reschedule the projects to be carried out for the period. These adjustments will be reflected in the Universality Strategic Implementation Report.

In cases where contributions to the UF exceed the approved expenditure for the given period, including on-going commitments, the Authority proposes to roll-over the surplus amounts collected to the next year. The Authority may also consider the expansion of the budget for the next year's universality projects to be implemented. Similarly, such adjustments will be reflected in the Universality Strategic Implementation Report.

Furthermore, where there is a reasonable surplus in the fund, the Authority may consider the granting of payment holidays or other types of incentives programmes.

In addition to the above, the Authority may review the level of contributions to the UF every three (3) years, in order to ensure that adequate funding will be available for Universality projects.

Statement on Deficits and Surpluses within the UF:

In instances where there is a deficit in the Fund, the Authority proposes to reschedule the projects to be implemented for a given period. Alternatively, where there are surpluses in the Fund, the Authority proposes to roll-over the surplus amounts collected to the next year or to consider the expansion of the budget for the next year's universality projects to be implemented.

The above adjustments will be reflected in the Universality Strategic Implementation Report.

In instances where there are reasonable surpluses in the UF, the Authority may consider the granting of payment holidays or other types of incentives programmes to the service providers.

The Authority may review the level of contributions to the UF every three (3) years.

7.1.2 Implementation of the Universality Fund

The Authority shall begin issuing invoices to concessionaires for their contributions in accordance with the Universality Regulations, once it has been laid in Parliament and published.

Even though Universality contributions have not yet been collected from concessionaires, the Authority has been allocating a percentage of revenues collected from concession and licence fees every year towards the account established for the purpose of Universality in accordance with Section 53 of the Act. The existing monies in this account may be used by the Authority to fund the implementation of Universality obligations that may be necessary prior to the collection of contributions from concessionaires.

7.2 Mandatory 'Playing' Universality Obligations

The Authority proposes that all concessionaires offering public telecommunications services should have the obligation of providing the following:

- Access to Emergency Services
- Directory Assistance Services
- Free Itemised billing upon request
- Assistive Technologies for the differently-abled
- Assistive Services for the differently-abled
- Special packages for low income subscribers

It must be noted some of these obligations may not be eligible for universality funding.

7.2.1 SERVICE DEVELOPMENT OBLIGATIONS

Access to Emergency services

Emergency services form an integral part of universality provision. All telephone services whether fixed line, fixed wireless, mobile or payphone should have the capability of providing a connection to emergency services for access to any individual free of charge. These include the police (999), fire (990), ambulance (811) and other government emergency numbers. As a result the Authority will require all concessionaires to meet this obligation of providing emergency services to the public, including persons who are differently-abled, without access to subsidies from the UF.

Statement on Emergency Services :

The Authority proposes that all concessionaires provide emergency services to the public, including persons who are differently-abled, without access to subsidies from the UF

Directory Assistance services

All concessionaires will be required to provide directory assistance services (directly or indirectly²⁶) to all users. For persons who are visually impaired, it must be noted those who are currently registered with the Blind Welfare Association of Trinidad and Tobago should have access to free directory assistance services. The Authority proposes that the provision of this service to the visually-impaired be considered eligible for universality funding. The level of funding will be determined by the Authority.

The Authority may also direct a fixed concessionaire to provide an integrated electronic braille directory to persons who are visually impaired, free of charge which should be updated at least once a year. This obligation is in accordance with Section C30 of the Concession agreement which states:

'The concessionaire shall, if directed to do so by the Authority, provide free of charge printed annual (or at such other reasonable interval agreed with the Authority) integrated directories to all subscribers of telephone services.'

The Authority proposes that the provision of this service to the differently-abled will qualify for universality funding, the level of which to be determined by the Authority.

Statement on Directory Assistance Services :

The Authority proposes that all concessionaires be required to provide directory assistance services (directly or indirectly) to all users. In addition, the Authority intends to direct a fixed concessionaire to provide an integrated electronic braille directory to persons who are visually impaired, free of charge.

The following obligations may be eligible for universality funding:

- 1. Directory Assistance for persons who are visually impaired*
- 2. Electronic Braille directories for the visually impaired*

The level of funding will be determined by the Authority.

²⁶ Indirect provision of directory assistance is where the concessionaire does not provide the directory assistance services themselves but provides access to such services provided by another concessionaire through an interconnection arrangement.

Free Itemised Billing

Itemized billing provides specific details of all charges levied against the account of a consumer by a concessionaire. This facility allows consumers to detect and report billing errors or inconsistencies to ensure that they only pay for the services they have used or requested. All concessionaires should ensure that access to free itemized billing electronically or otherwise, is provided to all consumers inclusive of persons who are differently-abled. If this service is not currently available, the service should be provided upon request. This can either be done on the consumer's bill or on a separate statement of account provided by the concessionaire. Itemised billing should be provided at no additional charge to consumers. This obligation would not qualify for funding from the UF.

Statement on Free Itemised Billing:

The Authority proposes all concessionaires be required to provide free itemized billing electronically or otherwise, to all consumers inclusive of persons who are differently-abled, upon request.

This obligation would not qualify for funding from the UF.

7.2.2 ASSISTIVE TECHNOLOGIES AND SERVICES

Ensuring Access by Persons with Disabilities: Assistive Technologies

It is of importance that the needs of the differently-abled members of society are considered in the provision of universality. Most regulators have imposed obligations on service providers to offer a range of affordable essential facilities to facilitate the differently-abled having access to basic telecommunications services. For this reason, the Authority proposes to place obligations on all telecommunications concessionaires to provide subsidised basic assistive technology devices to ensure that individuals with

disabilities can afford to access and use basic telecommunications services. Obligations to be met by the concessionnaires may include, but may not be limited to:

1. The provision of phones suitable for persons who are blind or visually impaired.

Features should include:

- Talking caller id
- Large print, easy-to-read character display
- Braille keypads
- Speed dialing capabilities / one-touch dial memory

2. The provision of phones for persons who are deaf or hearing impaired. Features should include, but may not be limited to:

- Text telephone (TTY) capabilities – this allows persons who are hearing impaired to type messages back and forth to others without talking and listening
- Voice and tone control for incoming and outgoing amplification of calls
- Bright ring flasher alert for incoming calls
- Amplified ringer for incoming calls
- Hearing aid compatible handset

3. The provision of phones for persons with limited mobility. Features should include, but may not be limited to:

- Light weight handset
- Hands-free handset or speakerphone capabilities
- One-touch dial memory

It must be noted that while service providers will have the option to choose the types of equipment provided to the differently-abled, such equipment must be approved and certified by the Authority.

Statement on Assistive Technologies:

The Authority proposes to place obligations on concessionnaires to provide subsidised basic assistive technology devices to ensure that individuals with disabilities can afford to access and use basic telecommunications services. Such devices must be certified by the Authority in accordance with the ‘Procedures for Equipment Certification for the Telecommunications and Broadcasting Sectors’.

The Authority proposes that this obligation be eligible for universality funding, the level of which to be determined by the Authority.

Ensuring Access by Persons with Disabilities: Customer Support Services

While it is important for differently-abled persons to have available assistive technology devices, it is equally important for these persons to access customer support services and value added services when using these devices. As a result, the Authority proposes that concessionnaires be required to ensure that persons who are differently-abled have access to the customer support services normally provided to customers in general. Such services may include:

- Mobile balance information via text and/or voice
- Access to billing information online
- Caller identification display services
- Telephone Relay Service (TRS) for the deaf/hearing impaired– this provides for the receipt and translation of voice messages into text and the conveyance of that text to the text phone of customers through the assistance of an operator. The operator also assists with the translation of text messages to voice messages for recipients without a text telephone.

Statement on Assistive Services:

The Authority proposes to place obligations on concessionnaires that would enable the differently-abled having access to customer support services. The implementation of these obligations will not normally be eligible for funding from the UF. However, the Authority may give consideration to providing some level of subsidy for the provision of Text Relay Services.

7.2.3 SPECIAL PACKAGES FOR LOW INCOME SUBSCRIBERS

Special tariff packages are sometimes imposed on service providers to facilitate access to basic telecommunications services by persons who are unable to afford those services in the manner in which they would normally be provided. These types of packages are developed to target customers who may be on or below the low-income threshold. There are two popular packages that can be implemented to address this:

1. The first scheme offers a lower tariff scheme to individuals who limit their usage, however this does not only target low income customers.
2. An alternative scheme may include some or all of the following features:
 - A lower installation charge or the normal installation charge to be paid in installments over a specified period;
 - A discounted monthly line/phone rental charge;
 - A call allowance to be given every quarter, or other specific timeframe;
 - A special rate for local calls;
 - A 'Pay-as-you-go' option.

In some instances, the implementation of such schemes may require that the provider be given a subsidy for providing the service below cost (e.g. discounted monthly line rentals). In other instances, no subsidy may be required since the scheme would merely

enable the consumer to have more control over their monthly expenditure (e.g. limited usage packages and pay-as-you-go).

The Authority proposes to require all concessionaires providing Internet and fixed voice services to offer special packages that would enable consumers to have more control over their spending. Such packages may include, but may not be limited to :

- A Prepaid Scheme, similar to the one currently offered by mobile service providers, for Internet and fixed voice services;
- A Limited Usage Package where a number of bundled minutes can be allocated to a customer for usage within a specified time period. Similarly this package can apply to both fixed voice and Internet users;

These special packages will not be eligible for subsidy from the UF. However, concessionaires will have the flexibility of designing these packages as they consider appropriate prior to seeking the approval of the Authority.

Additionally where the Authority deems it necessary, it may also consider the imposition of an obligation on concessionaires to provide a Discounted Package which may include discounted rates on installation, line rental and/or local calls. Such an obligation, if imposed, will be eligible for universality funding. However, before imposing such an obligation, the Authority will give consideration to the following:

- The extent to which cost-based prices are unaffordable for persons that fall on or below the low-income threshold (based on future digital divide surveys); and
- The extent to which it would be feasible and sustainable for such an obligation to be imposed on all concessionaires.

Statement on Special Packages for Low Income Customers:

The Authority proposes to require providers of retail Internet and fixed voice services to offer special packages for low income subscribers. Such packages may include, but may

not be limited to:

- *Prepaid schemes*
- *Low Usage Package with Limited Minutes*

These packages must be approved by the Authority and will not be eligible for subsidies from the UF.

The Authority may also consider requiring concessionnaires to provide a Discounted Package that will be eligible for universality funding. However, before imposing such an obligation, the Authority will give consideration to the following:

- *The extent to which cost-based prices are unaffordable for persons that fall on or below the low-income threshold (based on future digital divide surveys); and*
- *The extent to which it would be feasible and sustainable for such an obligation to be imposed on all concessionnaires.*

7.3 Contractual ‘Playing’ Universality Obligations

As mentioned previously, contractual universality obligations are those to be implemented in communities and to population groups determined to fall within the access gap. These obligations will be imposed by the Authority via a reverse auction process where existing concessionnaires will have the option of participating. The successful concessionaire will be contracted to carry out the universality obligations with funding made available through the UF.

7.3.1 Identifying Communities and Population Groups within the Access Gap

From the results of surveys and data collected from the existing service providers, the Authority will identify the communities or population groups within the access gap. In the case of obligations specific to the communities, these will be used as the demarcation areas for the reverse auction process. The segregation of these areas is

important because if the tender areas are too large, it may discourage participation by non-dominant concessionaires but if the tender areas are too small, the cost of administering the selection process and monitoring the performance of all the universality providers by the Authority may be too high. Therefore it is important that the segregated areas be economically feasible to both the Authority and the industry. Additionally, the Authority considers that only concessionaires authorised to provide the relevant services would be allowed to participate in a reverse auction for this purpose.

The Authority proposes the following process for a reverse auction conducted by the Authority in respect of selecting Universality providers:

1. The Authority will conduct a market and cost analysis so as to identify the priority areas for universality and to estimate how much it would cost to implement these. The market and cost analysis should involve the following:
 - A *Needs Assessment*, which would involve a thorough analysis of the unmet demand for basic telecommunication services by using secondary data provided by the service providers and by using data collected in digital divide surveys. The analysis would identify locations, population groups and areas with the greatest need, the type of services that the market is not providing, and the initiatives that would have to be implemented to meet the unmet demand.
 - A *Cost Analysis*, which will estimate the level of financing required to subsidise the investment and/or the operating costs involved in implementing the universality initiatives identified above. It is proposed that this estimate be for a five year timeframe taking into account changing technologies, demand for service and other evolving factors.

This estimate would act as the maximum amount to be allocated in the competitive bidding process.

2. The Authority will prepare a Request for Proposal (RFP) outlining the technical and social requirements the bidders will be required to meet. These requirements may include minimum levels of quality of service, timeframe for rollout, minimum level of basic telecommunications required, etc.
3. Concessionaires will then be invited to submit bids for the RFP. In addition to the above, the proposals should be evaluated based on criteria identified by the Authority that it considers appropriate to assess the extent to which the initiative would be successful. The concessionaire that requires the least universality funding and meets the criteria outlined by the Authority would be granted the right to implement the universality obligation and to access the UF to do so. The evaluation criteria may include, but may not be limited to the following:
 - The location of the proposed service –areas of the community to which priority will be attached;
 - Quality of Service –the nature of the technology to be deployed and the extent of service features and functions;
 - Cost requirements –an estimate of the amount of UF needed to rollout and/or support the implementation and maintenance of the universality project;
 - Timeframe –the length of time funding from the UF will be required;
 - Bidder qualifications – evaluation of communities where the concessionaire has existing services and the quality of these services; and

- Implementation Plan – the implementation plan submitted by concessionaires should describe the short-term process for installing facilities and services and the long-term plan for operating and maintaining the services. This will set the foundation to ensure that the networks and services will be sustainable after the UF subsidy has been exhausted. Therefore the implementation plan should include, where applicable:
- Business plans - three to five year budget projections, break-even analysis and market demand analysis should be provided.
 - Tariff and other pricing proposals – these should include interconnection agreements with other carriers
 - Management plan – these should detail the organization of the project, the responsibility of personnel etc.
 - Implementation schedule – specific dates and sequence of events, the timing of equipment installation and operation start-up dates should be included.
 - Monitoring and reporting plans – there should be provisions for informing the UF administrator about progress in implementation, the public response to the services, lessons learnt, identified obstacles and possible improvements.²⁷

4. For concessionaires selected through the reverse auction process, the Authority will prepare a contract outlining the terms and conditions required

²⁷ Adopted from Information and Communication Technologies Authority “Consultation Document: Ref. 2004/1 – Implementation of the Universal Service for ICTs in Mauritius”

to be met by the concessionaire in respect of the Universality obligations as defined in the RFP.

5. If a concessionaire is unsuccessful in the reverse auction process, the Authority will formally respond giving reasons for its decision not to impose the Universality obligation on that concessionaire.
6. If no concessionaire enters the reverse auction for any particular universality obligation, the respective obligation will be imposed on the concessionaire with the highest available network capacity and the least infrastructural build out required to provide services to that region/ population group.

7.3.2 Examples of Contractual Universality Obligations

It must be noted that only the provision of basic telecommunications services for areas and population groups proven to be within the access gap will be eligible for some level of funding from the UF.

Some of the contractual universality obligations that may be imposed by the Authority through the reverse auction process may include, but may not be limited to:

- fixed telephony services – to be made available to all households within the Universality areas and population groups within the access gap;
- public access nodes (including payphones) – to be made available in all communities within Universality areas and in preferred locations as specified by the Authority;
- broadband Internet services of throughput no less than five hundred and twelve kilo bits per second (512 kbps) - to be made available to all households within Universality Areas and population groups within the access gap.

INFRASTRUCTURE DEVELOPMENT INITIATIVES

The provision of fixed telephony services in Universality Areas (UAs)

A fundamental requirement of this obligation would be for the concessionnaire to satisfy requests for connection at a fixed location to the public telephone network, and for access to publicly available telephone services at a fixed location within Universality Areas.

This initiative should support:

- Local calls
- International calls

Concessionnaires will be required to use the most cost-effective solution for the provision of infrastructure which may include the use of wireless technologies. In recent times, many jurisdictions have turned to the alternative of using wireless technologies to provide basic telecommunications services including both wireless fixed telephony and Internet services. Reasons for the preferred use of wireless technologies include:

- It is more feasible where geographical terrain prevents or limits the build-out of wired infrastructure; and
- It is less costly than building out wired infrastructure, thereby making it cheaper for the service provider to provide services to customers.

Therefore, for those communities where it may not be economically feasible to provide the required wired infrastructure, concessionnaires have the option to use wireless infrastructure for the provision of basic services to promote cost effectiveness.

The provision of broadband Internet services in Universality Areas (UAs)

This contractual obligation will require the provision of, at minimum, a 512 Kbps connection/access to Internet services in the respective UAs no matter the geographic location. This obligation will also apply to the provision of Internet services to public institutions including all schools, libraries, and community access centres.

Concessionaires should use the most cost effective solution in fulfilling this obligation. The Authority will therefore encourage the use of mobile or fixed wireless technologies by service providers to ensure all communities, including those where it may not be economically feasible to install wired infrastructure, have access to broadband Internet services.

Public Access Nodes

Another contractual universality obligation may be the provision of public payphone service and broadband Internet services using public access nodes. This can be a critical component of any universality programme especially in sparsely populated rural areas where household income is low and both availability and affordability is a concern. Public access nodes are also of importance to the urban poor as network coverage might make service readily available but access to the network may be limited due to income constraints. The provision of public access nodes can be used as the starting point for ensuring that access to telecommunication services are universally available with access to individual household service made available overtime.

At present, all domestic fixed telecommunication network and service providers have a concession obligation to provide no less than fifty public nodes, inclusive of pay phones or Internet kiosks, per national county and parish. As a result, the incumbent fixed telecommunication service provider has installed 1,311 payphones throughout the country. The Authority is currently assessing some of the issues and challenges associated with the provision of public payphones as required by the existing concession.

However, in order to complement the above-mentioned concession obligation, there may be need for an obligation to install public access nodes at strategic locations as the Authority deems appropriate, in order to ensure all population groups have access to both telephony and broadband Internet services. Taking this into consideration, the Authority proposes to determine which concessionaire(s) this obligation would apply to through a

reverse auction process. The Authority is in the process of gathering information to determine the feasibility of this obligation.

The Authority recognises that the cost of maintaining these public access nodes could be over run as a result of vandalism. In this regard, the Authority will consider that where this additional universality obligation is imposed, that public access nodes should be installed at facilities or locations that are likely to be secured in order to minimise the risk for vandalism and to allow wider access to the public. In determining which locations would be appropriate for the installation of public access nodes, the Authority proposes to give consideration to the following minimum criteria:

- Locations that are easily accessible by the public and in particular in underserved communities that fall within the access gap;
- Preferred locations for the installations of public access centres include outside or close proximity to schools, libraries, hospitals, clinics, public transportation terminals, police stations, post offices, community centres and other public buildings as specified by the Authority;

The Authority also considers that a minimum of 5% of public access nodes in each community should have facilities to accommodate persons who are differently-abled.

Statement on Contractual Universality Obligations:

The Authority proposes that only the provision of basic telecommunications services for areas and population groups proven to be within the access gap will be eligible for some level of funding from the UF.

Some of the contractual universality obligations that may be imposed by the Authority through the reverse auction process may include, but may not be limited to:

- *fixed telephony services – to be made available to all households within Universality Areas and population groups within the access gap;*
- *public access nodes (including payphones) – to be made available in all communities within the Universality areas and in preferred locations as specified by the Authority;*

- *broadband Internet services of throughput no less than five hundred and twelve kilo bits per second (512 kbps) - to be made available to all households within Universality Areas and population groups within the access gap.*

Contractual Universality obligations will be imposed by the Authority via a reverse auction process. The Authority proposes that if no concessionnaire participates in any particular reverse auction, the respective obligation will be imposed on the concessionnaire with the highest available network capacity and the least infrastructural build out required to fulfil the obligation. That concessionnaire will be allowed to access the UF to subsidise the implementation of the obligation, under similar terms and conditions that would have been granted to the successful bidder in the reverse auction.

In respect of public access nodes, the Authority proposes to take into consideration the following minimum criteria when specifying suitable locations for installation:

- *Locations that are easily accessible by the public and in particular in underserved communities that fall within the access gap;*
- *Locations outside or in close proximity to schools, libraries, hospitals, clinics, public transportation terminals, police stations, post offices, community centres and other public buildings as specified by the Authority.*

The Authority also proposes to require that a minimum of 5 % of public access nodes in each community have facilities to accommodate persons who are differently abled.

7.4 Community Access Centres

Community Access Centres (CACs) are useful tools for providing members of any community with a point of access to both basic telecommunication services and other ICT services. There are three main advantages associated with such centres. They:

- Offer universal access to basic telephone and Internet services at a reasonable distance from the household;
- Provide the hardware and software required to access the above telecommunication services; and
- Facilitate other services including computer training classes etc.

These centres are strategically placed within the underserved communities of a country and each established CAC can shape their services to suit the needs of the specific community. The process for defining the right mix of services to offer often involves undertaking a community ‘needs analysis’ so as to not only measure the demand for particular services but also to identify the specific types of applications that persons in those communities need.

These CACs are somewhat different from public access nodes as they not only provide telephony and Internet services but may also provide:

- Facsimile services
- Printing and Photocopying services
- Computer services

The services available at CACs are normally provided at a subsidized price to ensure that they are affordable and accessible to customers.

Current Community Initiatives

Previously mentioned in Section 1.2 is the GoRTT’s initiative to set up community access centres throughout Trinidad and Tobago, where the need has been identified. The

Authority views this project as a Universality initiative and such may allocate 5% of the Universality Budget on an annual basis towards CACs in Universality Areas.

In addition to the Government's initiative highlighted above, service providers have also embarked on private projects to promote Universality in Trinidad and Tobago. One such project is that of the Telecommunications Services of Trinidad and Tobago (TSTT). TSTT has established seven Community Communication Centres (CCCs) across the country in an effort to lessen the disparity of ICT accessibility. These CCCs are located in Navet, Blanchieusseuse, Cumana, Morvant, Plymouth and Speyside.

Statement on Universality Initiatives undertaken by Government and Private Agencies:

The Authority proposes to allocate a maximum of 5% of the Universality Budget annually towards government initiated projects.

Annex A: List of Underserved Communities in Trinidad and Tobago

1. Communities below the country average: Proportion of households with a fixed line telephone

Geographical Region	Communities
Arima Borough	TUMPUNA ROAD, CALVARY HILL, MOUNT PLEASANT
Arima Tunapuna	MATURITA
Chaguanas	LENDORE VILLAGE, CHARLIEVILLE, CUNUPIA, MUNROE SETTLEMENT, ENTERPRISE, ST. CHARLES VILLAGE
Couva Chaguanas	LONGDENVILLE
Couva Mayaro	SAN PEDRO
Couva Princes town	PIPARO
Couva Tabaquite	BRASSO TAMANA, BRASSO VENADO, INDIAN TRAIL, LAS LOMAS (NOS. 1 & 2), MAMORAL NO.2, ARENA, BONNE AVENTURE, BRASSO MANUEL JUNCTION, CALCUTTA ROAD NO.2, CHANDERNAGORE, CHASE VILLAGE, DOW VILLAGE, ESPERANZA, MACAULAY, MADRAS SETTLEMENT, NANCOO VILLAGE, PHOENIX PARK, RAVINE SABLE, WATERLOO, CALCUTTA SETTLEMENT NO.2, CHICKLAND, PALMISTE, CAPARO, CLAXTON BAY, OUPLAY VILLAGE, PARFORCE, BUTLER VILLAGE, CARAPICHAIMA, COALMINE, COROSAL, MOUNT PLEASANT, SUM SUM HILL, TABAQUITE, WARREN VILLAGE, SPRING VILLAGE, TALPARO, SAN RAPHAEL/BRAZIL, AGOSTINI VILLAGE, BRASSO CAPARO VILLAGE, BRICKFIELD, BRICKFIELD/NAVET, BROTHERS ROAD, CARLSEN FIELD, CEDAR HILL, FARNUM VILLAGE, FELICITY HALL, FLANAGIN TOWN, FORRES PARK, GUARACARA, HERMITAGE, MAYO, MUNDO NUEVO, ORANGE VALLEY, PEPPER VILLAGE, ST. MARYS VILLAGE, TAMANA ROAD, TODDS STATION, WELCOME
Diego Martin	BLUE BASIN, INDUSTRIAL ESTATE, SIMEON ROAD, COVIGNE, GREEN HILL VILLAGE, RICH PLAIN, BAGATELLE, BIG YARD, DIBE/BELLE VUE, LANSE MITAN', LE PLATTE, NORTH POST,

Geographical Region	Communities
	PARAMIN, PATNA VILLAGE, SAUT DEAU, UPPER ST. JAMES, WATER HOLE
Mayaro Rio Claro	MAFEKING, GUAYAGUAYARE, FONROSE VILLAGE, RIO CLARO, BICHE, CANQUE, CHARUMA VILLAGE, COCAL ESTATE/MAYARO, CUSHE/NAVET, DEEP RAVINE/CLEAR WATER, ECCLESVILLE, LA SAVANNE, MAINFIELD, MAYARO, MORA SETTLEMENT, NAVET VILLAGE, ORTOIRE, PLAISANCE, POOLE, UNION VILLAGE
Penal Debe	PENAL ROCK ROAD, CHARLO VILLAGE, HERMITAGE VILLAGE, MONKEY TOWN, PENAL, DEBE PROPER, LENGUA VILLAGE, LA FORTUNE, LA ROMAIN, WELLINGTON, BATCHYIA VILLAGE, MORNE DIABLO, PICTON ROCHARD ROAD, SCOTT ROAD VILLAGE
Penal Princes Town	BORDE NARVE, BARACKPORE, ST. CROIX VILLAGE
Penal Siparia	SYNE VILLAGE, SAN FRANCIQUE, TULSA VILLAGE
Point Fortin	POINT LIGOURE, EGYPT VILLAGE, FANNY VILLAGE, NEW VILLAGE HOLLYWOOD
Point Fortin Siparia	CAP DE VILLE, COCHRANE
Port of Spain	BELMONT, EAST PORT OF SPAIN, SEALOTS
Princes Town	HARMONY HALL, KUMAR VILLAGE, LENGUA VILLAGE/BARRACKPORE, ST. JULIEN, BROOMAGE, LA RUFFIN, PALMYRA, PRINCES TOWN PROPER, STE. MADELEINE, BEN LOMOND, JORDAN VILLAGE, BASSE TERRE, BON JEAN, BROTHERS SETTLEMENT, BUEN INTENTO, CLEGHORN AND MT. PLEASANT, DYERS VILLAGE, FIFTH COMPANY, HINDUSTAN, IERE VILLAGE, INDIAN WALK, LA LUNE, LA SAVANNE, MALGRETOUTE, MARAC, MATILDA, PETIT CAFE', PETIT MORNE, ROBERT VILLAGE, SISTERS VILLAGE, SIXTH COMPANY, ST. CLEMENTS, ST. MARYS VILLAGE, TABLELAND

Geographical Region	Communities
San Fernando	NAVET, EMBACADERE, UNION VILLAGE, TAROUBA, BROADWAY, VICTORIA VILLAGE
San Juan Tunapuna	BEJUCAL, BAMBOO GROVE
Sangre Grande	VALENCIA, CAIGUAL, GUAICO, MAHOE, SANGRE GRANDE, ANGLAIS SETTLEMENT, BALANDRA, BICHE, BROOKLYN SETTLEMENT, CARMICHAEL, COAL MINE, CORYAL, CUMACA, CUMANA, CUNARIPO, FISHING POND, FOUR ROADS – TAMANA, GRAND RIVIERE, GUATOPAJARO, HOWSEN VILLAGE, LANSE NOIR', MANZANILLA, MARAJ HILL, MATELOT, MATURA, MELAJO, MONTE VIDEO, MORIN BAY, NORTH MANZANILLA, OROPOUCHE, PLUM MITAN, RAMPANALGAS, SALYBIA VILLAGE, SAN SOUCI, SANGRE CHIQUITO, TAMANA, TOCO, TOMPIRE, TURURE
Siparia	DELHI SETTLEMENT, ERIN PROPER, LA FORTUNE/PLUCK, SANTA FLORA, SUDAMA VILLAGE, BENNET VILLAGE, FYZABAD, GUAPO, HARRIS VILLAGE, PEPPER VILLAGE, MON DESIR/SILVER STREAM, ROUSILLAC, GRANVILLE, WADDLE VILLAGE, APEX OIL FIELD, BEACH CAMP, BOIS BOUGH, SIPARIA, ST. JOHN, VESSIGNY, CEDROS, PARRY LANDS SOUTH, QUARRY VILLAGE, THICK VILLAGE, BAMBOO VILLAGE, CARAPAL, COROMANDEL, ERIN/BUENOS AYRES, FULLERTON, GHEERAHOO, ICACOS, JACOB VILLAGE, LORENSOTTE, LOS BAJOS, LOS CHAROS, LOS IROS/ERIN, OROPOUCHE, PALO SECO, RANCHO QUEMADO, ROBERT HILL/SIPARIA, SALAZAR VILLAGE, SOBO VILLAGE, VANCE RIVER
Siparia Point Fortin	GONZALES
Tobago	CONCORDIA, MOUNT ST GEORGE, SHERWOOD PARK, BUCCOO CORAL GARDENS, MASON HALL, MOUNT GRACE, BETSY HOPE, HOPE FARM JOHN DIAL, CHARLOTTEVILLE, PATIENCE HILL, BETHLEHEM, TOP HILL, MORIAH, ARGYLE KENDAL, ARNOS VALE, BELLE GARDENS, BETHEL, BETHEL MT GOMERY, BLOODY BAY, CAMBLETON CHARLOTTEVILLE, CARNBEE, PATIENCE HILL, CASTARA, ORANGE HILL, CULLODEN, DELAFORD, DELAFORD LOUIS DOR LAND SETT, GLAMORGAN, GOLDEN LANE, GOODWOOD, KINGS BAY,

Geographical Region	Communities
	LANSE FORMI, LUCY VALE, MARYS HILL ZION HILL, PEMBROKE, ROXBOROUGH, SIGNAL HILL PATIENCE HILL, PARLATUVIER
Tunapuna Piarco	ARIMA HEIGHTS/TEMPLE VILLAGE, MARACAS ST JOSEPH, CAURA, FIVE RIVERS, LA PAILLE VILLAGE, LA SEIVA VILLAGE, KANDAHAR, MALONEY, OROPUNA VILLAGE/PIARCO, ST. AUGUSTINE SOUTH, SAMAROO VILLAGE, ST. HELENA VILLAGE, WARREN VILLAGE, RED HILL, ERIC WILLIAMS MEDICAL SCIENCES COMPLEX, ACONO VILLAGE, BLANCHISSEUSE VILLAGE, BRASSO SECO VILLAGE, CARAPO, FREDERICK SETTLEMENT, SURREY VILLAGE, KELLY VILLAGE, LA LAJA, LOPINOT VILLAGE, MOUNT ST. BENEDICT, PEYTONVILLE, PINTO ROAD, ST. JOHNS VILLAGE, HEIGHTS OF GUANAPO, WALLERFIELD

2. Communities below the country average: Mobile Cellular Subscribers per 100 inhabitants

Geographical Region	Community
Arima Borough	CALVARY HILL, MOUNT PLEASANT
Chaguanas	ST. CHARLES VILLAGE, CUNUPIA, MUNROE SETTLEMENT
Couva Chaguanas	LONGDENVILLE
Couva Mayaro	SAN PEDRO
Couva Princes town	PIPARO
Couva Tabaquite	AGOSTINI VILLAGE, BRASSO CAPARO VILLAGE, BRICKFIELD, BRICKFIELD/NAVET, BROTHERS ROAD, CARLSEN FIELD, CEDAR HILL, FARNUM VILLAGE, FELICITY HALL, FLANAGIN TOWN, FORRES PARK, GUARACARA, HERMITAGE, MAYO, MUNDO NUEVO, ORANGE VALLEY, PEPPER VILLAGE, ST. MARYS VILLAGE, TAMANA ROAD, TODDS STATION, UNION VILLAGE, WELCOME, BUTLER VILLAGE, CARAPICHAIMA, COALMINE, COROSAL MOUNT PLEASANT SUM SUM HILL SAN RAPHAEL/BRAZIL
Diego Martin	BAGATELLE, BIG YARD, DIBE/BELLE VUE, LANSE MITAN', LE PLATTE, NORTH POST, PARAMIN, PATNA VILLAGE, SAUT DEAU, UPPER ST. JAMES, WATER HOLE, SIMEON ROAD, GREEN HILL VILLAGE, RICH PLAIN
Mayaro Rio Claro	BICHE, CANQUE, CHARUMA VILLAGE, COCAL ESTATE/MAYARO, CUSHE/NAVET, DEEP RAVINE/CLEAR WATER, ECCLESVILLE, LA SAVANNE, MAINFIELD, MAYARO, MORA SETTLEMENT, NAVET VILLAGE, ORTOIRE, PLAISANCE, POOLE
Penal Debe	MORNE DIABLO, PICTON, ROCHARD ROAD, SCOTT ROAD VILLAGE, LA FORTUNE, LA ROMAIN, WELLINGTON, BATCHYIA VILLAGE
Penal Princes Town	BARACKPORE, ST.CROIX VILLAGE, BORDE NARVE

Geographical Region	Community
Penal Siparia	SAN FRANCIQUE, TULSA VILLAGE
Point Fortin	HOLLYWOOD
Point Fortin Siparia	CAP DE VILLE
Point Fortin Siparia	COCHRANE
Port of Spain	EAST PORT OF SPAIN, SEALOTS, BELMONT
Princes Town	BASSE TERRE, BON JEAN, BROTHERS SETTLEMENT, BUEN INTENTO, CLEGHORN AND MT. PLEASANT, DYERS VILLAGE, FIFTH COMPANY, HINDUSTAN, IERE VILLAGE, INDIAN WALK, LA LUNE, LA SAVANNE, MALGRETOUTE, MARAC, MATILDA, PETIT CAFE', PETIT MORNE, ROBERT VILLAGE, SISTERS VILLAGE, SIXTH COMPANY, ST. CLEMENTS, ST. MARYS VILLAGE, TABLELAND, JORDAN VILLAGE
San Fernando	BROADWAY, VICTORIA VILLAGE, NAVET, TAROUBA
San Juan Lavantille	BEETHAM ESTATE, EASTERN QUARRY, FEBEAU VILLAGE, LAS CUEVAS, MALICK, MARACAS, MON REPOS, NEVER DIRTY, ROMAIN LANDS, LA CANOA, SOCONUSCO
San Juan Tunapuna	BAMBOO GROVE
Sangre Grande	ANGLAIS SETTLEMENT, BALANDRA, BICHE, BROOKLYN SETTLEMENT, CARMICHAEL, COAL MINE, CORYAL, CUMACA, CUMANA, CUNARIPO, FISHING POND, FOUR ROADS – TAMANA, GRAND RIVIERE, GUATOPAJARO, HOWSEN VILLAGE, LANSE NOIR', MANZANILLA, MARAJ HILL, MATELOT, MATURA, MELAJO, MONTE VIDEO, MORIN BAY, NORTH MANZANILLA, OROPOUCHE, PLUM MITAN, RAMPANALGAS, SALYBIA VILLAGE, SAN SOUCI, SANGRE CHIQUITO, TAMANA, TOCO, TOMPIRE, TURURE
Siparia	BAMBOO VILLAGE, CARAPAL, COROMANDEL, ERIN/BUENOS AYRES, FULLERTON, GHEERAHOO, ICACOS, JACOB VILLAGE, LORENSOTTE, LOS BAJOS, LOS CHAROS, LOS IROS/ERIN, OROPOUCHE, PALO SECO, RANCHO QUEMADO, ROBERT HILL/SIPARIA, SALAZAR VILLAGE, SOBO VILLAGE, VANCE RIVER, APEX OIL FIELD, BEACH CAMP, BOIS BOUGH, SIPARIA, ST. JOHN, VESSIGNY, THICK VILLAGE
Siparia Point Fortin	GONZALES

Geographical Region	Community
Tobago	ARGYLE KENDAL, ARNOS VALE, BELLE GARDENS, BETHEL, BETHEL MT GOMERY, BLOODY BAY, CAMBLETON CHARLOTTEVILLE, CARNBEE PATIENCE HILL, CASTARA, CHARLOTTEVILLE, CULLODEN DELAFORD, DELAFORD LOUIS DOR LAND SETT, GLAMORGAN GOLDEN LANE, GOODWOOD, KINGS BAY, LANSE FORMI, LUCY VALE MARYS HILL, PARLATUVIER, PEMBROKE, ROXBOROUGH, SIGNAL HILL PATIENCE HILL, ZION HILL, BETSY HOPE, HOPE FARM JOHN DIAL, ORANGE HILL, PATIENCE HILL, MORIAH
Tunapuna Piarco	ACONO VILLAGE, BLANCHISSEUSE VILLAGE, BRASSO SECO VILLAGE, CARAPO, FREDERICK SETTLEMENT, HEIGHTS OF GUANAPO, KELLY VILLAGE, LA LAJA, LOPINOT VILLAGE, MOUNT ST. BENEDICT, PEYTONVILLE, PINTO ROAD, ST. JOHNS VILLAGE, SURREY VILLAGE, WALLERFIELD, KANDAHAR, ST. HELENA VILLAGE, WARREN VILLAGE, ERIC WILLIAMS MEDICAL SCIENCES COMPLEX

3. Communities below the country average: Proportion of households with Internet access at home

Geographical Region	Community
Arima Borough	CALVARY HILL, MOUNT PLEASANT, TUMPUNA ROAD
Chaguanas	ST. CHARLES VILLAGE, CUNUPIA, MUNROE SETTLEMENT, CHARLIEVILLE, LENDORE VILLAGE
Couva Mayaro	SAN PEDRO
Couva Princes Town	PIPARO
Couva Tabaquite	SPRING VILLAGE, TALPARO, AGOSTINI VILLAGE, BRASSO CAPARO VILLAGE, BRICKFIELD, BRICKFIELD/NAVET, BROTHERS ROAD, CARLSEN FIELD, CEDAR HILL, FARNUM VILLAGE, FELICITY HALL, FLANAGIN TOWN, FORRES PARK, GUARACARA, HERMITAGE, MAYO MUNDO NUEVO, ORANGE VALLEY, PEPPER VILLAGE, ST. MARYS VILLAGE, TAMANA ROAD, TODDS STATION, UNION VILLAGE, WELCOME, BUTLER VILLAGE, CARAPICHAIMA, COALMINE, COROSAL, MOUNT PLEASANT, SUM SUM HILL, ARENA, BONNE AVENTURE, BRASSO MANUEL JUNCTION, CALCUTTA ROAD NO.2, CHANDERNAGORE, CHASE VILLAGE, DIAMOND, DOW VILLAGE, ESPERANZA, MACAULAY, MADRAS SETTLEMENT, NANCOO VILLAGE, PHOENIX PARK, RAVINE SABLE, WATERLOO, CAPARO, CLAXTON BAY, OUPLAY VILLAGE, PARFORCE, BRASSO TAMANA, BRASSO VENADO, INDIAN TRAIL, LAS LOMAS (NOS. 1 & 2), MAMORAL NO.2
Diego Martin	BAGATELLE, BIG YARD, DIBE/BELLE VUE, LANSE MITAN', LE PLATTE, NORTH POST, PARAMIN, PATNA VILLAGE, SAUT DEAU, UPPER ST. JAMES, WATER HOLE, SIMEON ROAD, BLUE BASIN, INDUSTRIAL ESTATE
Mayaro Rio Claro	BICHE, CANQUE, CHARUMA VILLAGE, COCAL ESTATE/MAYARO, CUSHE/NAVET, DEEP RAVINE/CLEAR WATER, ECCLESVILLE, LA SAVANNE, MAINFIELD, MAYARO, MORA SETTLEMENT, NAVET VILLAGE, ORTOIRE, PLAISANCE, POOLE, GUAYAGUAYARE, FONROSE VILLAGE, RIO CLARO, UNION VILLAGE, MAFEKING
Penal Debe	MORNE DIABLO, PICTON, ROCHARD ROAD, SCOTT ROAD VILLAGE,

Geographical Region	Community
	LA FORTUNE, LA ROMAIN, WELLINGTON, DEBE PROPER, LENGUA VILLAGE, PENAL ROCK ROAD
Penal Princes Town	BARACKPORE, ST.CROIX VILLAGE, BORDE NARVE
Penal Siparia	SAN FRANCIQUE, TULSA VILLAGE, SYNE VILLAGE
Point Fortin	HOLLYWOOD, EGYPT VILLAGE, FANNY VILLAGE, NEW VILLAGE, POINT LIGOURE
Point Fortin Siparia	CAP DE VILLE, COCHRANE
Port of Spain	EAST PORT OF SPAIN, SEALOTS, BELMONT
Princes Town	BASSE TERRE, BON JEAN, BROTHERS SETTLEMENT, BUEN INTENTO, CLEGHORN AND MT. PLEASANT, DYERS VILLAGE, FIFTH COMPANY, HINDUSTAN, IERE VILLAGE, INDIAN WALK, LA LUNE, LA SAVANNE, MALGRETOUTE, MARAC, MATILDA, PETIT CAFE', PETIT MORNE, ROBERT VILLAGE, SISTERS VILLAGE, SIXTH COMPANY, ST. CLEMENTS, ST. MARYS VILLAGE, TABLELAND, BROOMAGE, LA RUFFIN, PALMYRA, BEN LOMOND, HARMONY HALL, KUMAR VILLAGE, LENGUA VILLAGE/BARRACKPORE, ST. JULIEN
San Fernando	BROADWAY, VICTORIA VILLAGE, NAVET, EMBACADERE
San Juan Lavantille	BEETHAM ESTATE, EASTERN QUARRY, FEBEAU VILLAGE, LAS CUEVAS, MALICK, MARACAS, MON REPOS, NEVER DIRTY, ROMAIN LANDS, LA CANOA, SOCONUSCO, MOUNT DOR, MARACAS BAY, PICTON, MARIE ROAD, PETIT CURUCAYE, ST. BARBS, UPPER BELMONT
San Juan Tunapuna	BAMBOO GROVE, BEJUCAL
Sangre Grande	MISSION, ANGLAIS SETTLEMENT, BALANDRA, BICHE, BROOKLYN SETTLEMENT, CARMICHAEL, COAL MINE, CORYAL, CUMACA, CUMANA, CUNARIPO, FISHING POND, FOUR ROADS – TAMANA, GRAND RIVIERE, GUATOPAJARO, HOWSEN VILLAGE, LANSE NOIR', MANZANILLA, MARAJ HILL, MATELOT, MATURA, MELAJO, MONTE VIDEO, MORIN BAY, NORTH MANZANILLA, OROPOUCHE, PLUM

Geographical Region	Community
	MITAN, RAMPANALGAS, SALYBIA VILLAGE, SAN SOUCI, SANGRE CHIQUITO, TAMANA, TOCO, TOMPIRE, TURURE, CAIGUAL, GUAICO, MAHOE, SANGRE GRANDE, VALENCIA
Siparia	CEDROS, PARRY LANDS SOUTH, QUARRY VILLAGE, BAMBOO VILLAGE, CARAPAL, COROMANDEL, ERIN/BUENOS AYRES, FULLERTON, GHEERAHOO, ICACOS, JACOB VILLAGE, LORENSOTTE, LOS BAJOS, LOS CHAROS, LOS IROS/ERIN, OROPOUCHE, PALO SECO, RANCHO QUEMADO, ROBERT HILL/SIPARIA, SALAZAR VILLAGE, SOBO VILLAGE, VANCE RIVER, APEX OIL FIELD, BEACH CAMP, BOIS BOUGH, SIPARIA, ST. JOHN, VESSIGNY, BENNET VILLAGE, FYZABAD, GUAPO, HARRIS VILLAGE, PEPPER VILLAGE, GRANVILLE, WADDLE VILLAGE, DELHI SETTLEMENT, ERIN PROPER, LA FORTUNE/PLUCK, SANTA FLORA, SUDAMA VILLAGE
Siparia Point Fortin	GONZALES
Tobago	BETHLEHEM, TOP HILL, ARGYLE KENDAL, ARNOS VALE, BELLE GARDENS, BETHEL, BETHEL MT GOMERY, BLOODY BAY, CAMBLETON CHARLOTTEVILLE, CARNBEE PATIENCE HILL, CASTARA, CHARLOTTEVILLE, CULLODEN, DELAFORD, DELAFORD LOUIS DOR LAND SETT, GLAMORGAN, GOLDEN LANE, GOODWOOD, KINGS BAY, LANSE FORMI, LUCY VALE, MARYS HILL, PARLATUVIER, PEMBROKE, ROXBOROUGH, SIGNAL HILL PATIENCE HILL, ZION HILL, BETSY HOPE, HOPE FARM JOHN DIAL, ORANGE HILL, PATIENCE HILL, BUCCOO CORAL GARDENS, MASON HALL, MOUNT GRACE, CONCORDIA, MOUNT ST GEORGE, SHERWOOD PARK
Tunapuna Piarco	RED HILL, ACONO VILLAGE, BLANCHISSEUSE VILLAGE, BRASSO SECO VILLAGE, CARAPO, FREDERICK SETTLEMENT, HEIGHTS OF GUANAPO, KELLY VILLAGE, LA LAJA, LOPINOT VILLAGE, MOUNT ST. BENEDICT, PEYTONVILLE, PINTO ROAD, ST. JOHNS VILLAGE, SURREY VILLAGE, WALLERFIELD, KANDAHAR, ST. HELENA VILLAGE, WARREN VILLAGE, CAURA, FIVE RIVERS, LA PAILLE VILLAGE, LA SEIVA VILLAGE, SAMAROO VILLAGE, OROPUNA VILLAGE/PIARCO, ST. AUGUSTINE SOUTH, ARIMA HEIGHTS/TEMPLE VILLAGE, MARACAS ST JOSEPH

4. Communities below the country average: Internet users per 100 inhabitants

Geographical Region	Community
Arima Borough	CALVARY HILL, MOUNT PLEASANT, TUMPUNA ROAD
Chaguanas	ST. CHARLES VILLAGE, CHARLIEVILLE, CUNUPIA, MUNROE SETTLEMENT, LENDORE VILLAGE
Couva Chaguanas	LONGDENVILLE
Couva Mayaro	SAN PEDRO
Couva Princes town	PIPARO
Couva Tabaquite	AGOSTINI VILLAGE, BRASSO CAPARO VILLAGE, BRICKFIELD, BRICKFIELD/NAVET, BROTHERS ROAD, CARLSEN FIELD, CEDAR HILL, FARNUM VILLAGE, FELICITY HALL, FLANAGIN TOWN, FORRES PARK, GUARACARA, HERMITAGE, MAYO, MUNDO NUEVO, ORANGE VALLEY, PEPPER VILLAGE, ST. MARYS VILLAGE, TAMANA ROAD, TODDS STATION, UNION VILLAGE, WELCOME, ARENA, BONNE AVENTURE, BRASSO MANUEL JUNCTION, CALCUTTA ROAD NO.2, CHANDERNAGORE, CHASE VILLAGE, DIAMOND, DOW VILLAGE, ESPERANZA, MACAULAY, MADRAS SETTLEMENT, NANCOO VILLAGE, PHOENIX PARK, RAVINE SABLE, WATERLOO, BUTLER VILLAGE, CARAPICHAIMA, COALMINE, COROSAL, MOUNT PLEASANT, SUM SUM HILL, BRASSO TAMANA, BRASSO VENADO, INDIAN TRAIL, LAS LOMAS (NOS. 1 & 2), MAMORAL NO.2, CAPARO, CLAXTON BAY, OUPLAY VILLAGE, PARFORCE, SAN RAPHAEL/BRAZIL, SPRING VILLAGE, TALPARO
Diego Martin	BAGATELLE, BIG YARD, DIBE/BELLE VUE, LANSE MITAN', LE PLATTE, NORTH POST, PARAMIN, PATNA VILLAGE, SAUT DEAU, UPPER ST. JAMES, WATER HOLE, SIMEON ROAD, BLUE BASIN, INDUSTRIAL ESTATE, GREEN HILL VILLAGE, RICH PLAIN
Mayaro Rio Claro	BICHE, CANQUE, CHARUMA VILLAGE, COCAL ESTATE/MAYARO, CUSHE/NAVET, DEEP RAVINE/CLEAR WATER, ECCLESVILLE, LA SAVANNE, MAINFIELD, MAYARO, MORA SETTLEMENT, NAVET VILLAGE, ORTOIRE, PLAISANCE, POOLE, GUAYAGUAYARE, MAFEKING, FONROSE VILLAGE, RIO CLARO, UNION VILLAGE

Geographical Region	Community
Penal Debe	MORNE DIABLO, PICTON, ROCHARD ROAD, SCOTT ROAD VILLAGE, LA FORTUNE, LA ROMAIN, WELLINGTON, PENAL ROCK ROAD, DEBE PROPER, LENGUA VILLAGE, BATCHYIA VILLAGE
Penal Princes Town	BARACKPORE, ST.CROIX VILLAGE, BORDE NARVE
Penal Siparia	SAN FRANCIQUE, TULSA VILLAGE, SYNE VILLAGE
Point Fortin	HOLLYWOOD, EGYPT VILLAGE, FANNY VILLAGE, POINT LIGOURE, NEW VILLAGE
Point Fortin Siparia	CAP DE VILLE, COCHRANE
Port of Spain	EAST PORT OF SPAIN, SEALOTS, BELMONT
Princes Town	BASSE TERRE, BON JEAN, BROTHERS SETTLEMENT, BUEN INTENTO, CLEGHORN AND MT. PLEASANT, DYERS VILLAGE, FIFTH COMPANY, HINDUSTAN, IERE VILLAGE, INDIAN WALK, LA LUNE, LA SAVANNE, MALGRETOUTE, MARAC, MATILDA, PETIT CAFE', PETIT MORNE, ROBERT VILLAGE, SISTERS VILLAGE, SIXTH COMPANY, ST. CLEMENTS, ST. MARYS VILLAGE, TABLELAND, BROOMAGE, LA RUFFIN, PALMYRA, HARMONY HALL, KUMAR VILLAGE, LENGUA VILLAGE/BARRACKPORE, ST. JULIEN, BEN LOMOND, JORDAN VILLAGE
San Fernando	BROADWAY, VICTORIA VILLAGE, EMBACADERE, NAVET, TAROUBA
San Juan Lavantille	BEETHAM ESTATE, EASTERN QUARRY, FEBEAU VILLAGE, LAS CUEVAS, MALICK, MARACAS, MON REPOS, NEVER DIRTY, ROMAIN LANDS, MOUNT DOR, LA CANOA, SOCONUSCO, MARIE ROAD, PETIT CURUCAYE, ST. BARBS, UPPER BELMONT, MARACAS BAY, PICTON
San Juan Tunapuna	BAMBOO GROVE, BEJUCAL
Sangre Grande	ANGLAIS SETTLEMENT, BALANDRA, BICHE, BROOKLYN , ETTLEMENT, CARMICHAEL, COAL MINE, CORYAL, CUMACA, CUMANA, CUNARIPO, FISHING POND, FOUR ROADS – TAMANA, GRAND RIVIERE, GUATOPAJARO, HOWSEN VILLAGE, LANSE NOIR',

Geographical Region	Community
	MANZANILLA, MARAJ HILL, MATELOT, MATURA, MELAJO, MONTEVIDEO, MORIN BAY, NORTH MANZANILLA, OROPOUCHE, PLUM MITAN, RAMPANALGAS, SALYBIA VILLAGE, SAN SOUCI, SANGRE CHIQUITO, TAMANA, TOCO, TOMPIRE, TURURE, CAIGUAL, GUAICO, VALENCIA, MAHOE, SANGRE GRANDE, MISSION
Siparia	BAMBOO VILLAGE, CARAPAL, COROMANDEL, ERIN/BUENOS , YRES, FULLERTON, GHEERAHOO, ICACOS, JACOB VILLAGE, LORENSOTTE, LOS BAJOS, LOS CHAROS, LOS IROS/ERIN, OROPOUCHE, PALO SECO, RANCHO QUEMADO, ROBERT HILL/SIPARIA, SALAZAR VILLAGE, SOBO VILLAGE, VANCE RIVER, BENNET VILLAGE, FYZABAD, GUAPO, HARRIS VILLAGE, PEPPER VILLAGE, APEX OIL FIELD, BEACH CAMP, BOIS BOUGH, SIPARIA ST. JOHN, VESSIGNY, DELHI SETTLEMENT, ERIN PROPER, LA FORTUNE/PLUCK, SANTA FLORA, SUDAMA VILLAGE, GRANVILLE, WADDLE VILLAGE, THICK VILLAGE, CEDROS, PARRY LANDS SOUTH, QUARRY VILLAGE
Siparia Point Fortin	GONZALES
Tobago	ARGYLE KENDAL, ARNOS VALE, BELLE GARDENS, BETHEL, BETHEL MT GOMERY, BLOODY BAY, CAMBLETON , HARLOTTEVILLE, CARNBEE PATIENCE HILL, CASTARA, CHARLOTTEVILLE, CULLODEN, DELAFORD, DELAFORD LOUIS DOR LAND SETT, GLAMORGAN, GOLDEN LANE, GOODWOOD, KINGS BAY, LANSE FORMI, LUCY VALE, MARYS HILL, PARLATUVIER, PEMBROKE, ROXBOROUGH, SIGNAL HILL PATIENCE HILL, ZION HILL, BUCCOO CORAL GARDENS, MASON HALL, MOUNT GRACE, BETSY HOPE, HOPE FARM JOHN DIAL, ORANGE HILL, PATIENCE HILL, CONCORDIA, MOUNT ST GEORGE, SHERWOOD PARK, MORIAH, BETHLEHEM, TOP HILL
Tunapuna Piarco	ACONO VILLAGE, BLANCHISSEUSE VILLAGE, BRASSO SECO VILLAGE, CARAPO, FREDERICK SETTLEMENT, HEIGHTS OF GUANAPO, KELLY VILLAGE, LA LAJA, LOPINOT VILLAGE, MOUNT ST. BENEDICT, PEYTONVILLE, PINTO ROAD, ST. JOHNS VILLAGE, SURREY VILLAGE, WALLERFIELD, CAURA, FIVE RIVERS, LA PAILLE VILLAGE, LA SEIVA VILLAGE, SAMAROO VILLAGE, KANDAHAR, ST. HELENA VILLAGE, WARREN VILLAGE, ARIMA HEIGHTS/TEMPLE VILLAGE, MARACAS ST JOSEPH, OROPUNA VILLAGE/PIARCO, ST. AUGUSTINE SOUTH, ERIC WILLIAMS MEDICAL SCIENCES COMPLEX, RED HILL

ANNEX B: Decisions on Recommendations

The following summarizes the comments and recommendations received from stakeholders on the first draft of this document (dated 4th June, 2008), and the decisions made by TATT as incorporated in this revised document (dated March, 2009).

Document Sub-Section	Submission Made By: Stakeholder Category ²⁸	Comments Received	Recommendations Made	TATT's Decisions
General Comments				
General Comments	Ministry of Public Administration	This document, while well written and comprehensive in the amount of background info provided, does not really get into the specifics expected of an implementation plan. It appears to be more strategic and seeks to bridge the gap between the Universality Policy and a final Implementation Plan.	The document should probably be referred to as a "Universality Strategic Plan"	Noted. The Authority has changed the name of the document to Universality Framework.
General Comments	ICNTT	<p>The Ministry of public Administration in September 2006 and again in May 2007 undertook the consultation on a Draft Policy on Universality²⁹. At the time it was stated that the Ministry's Policy would define the policy framework in which TATT's implementation strategy would be structured.</p> <p>This seemed reasonable in view of the legislative context:</p> <p>(i) Section 19 of the Telecommunications Act ("the Act") obliges TATT to follow the "general policy directions of the Minister", and</p>	In the interest of transparency, TATT and the Ministry of Public Administration should cause to be published the final, approved version of the Policy on Universality for consideration and information of all stakeholders.	<p>The Ministry's Policy on Universality has since been revised in June 2008.</p> <p>The Authority agrees that this final version should be published for public consumption.</p>

²⁸ Regional regulatory or Governmental agencies, Existing service and/ or network provider and affiliates, Potential service and/ or network providers and affiliates, Service/ Network Provider Associations/ Clubs/ Groups, General Public

²⁹ Ministry of Public Administration and Information, (2007) "Draft Policy on the Universality of telecommunications service provision in Trinidad and Tobago (2007 – 2008)". Available here: <http://www.fastforward.tt/files/cms/Draft%20Policy%20on%20Universality%2022May2007.pdf>

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
		<p>(ii) Section 28 of the Act which identifies Universal Service as one such area of Minister defined general policy.</p> <p>Presuming that the Ministry's Policy is not materially changed from its last publication, ICNTT expected that this Implementation Plan would be more closely aligned to Ministry's document, and would thus focus on defining the specific elements therein identified as under TATT's jurisprudence.</p> <p>This does not seem the case, as ICNTT notes that this policy does not seem constrained or at all contextualised by the Ministry's Policy.</p> <p>However, ICNTT notes that there are citations interspersed throughout the consultation paper which suggests material variation of the GoRTT Policy from the version last made publicly available.</p>		<p>The Authority notes the comment made by ICNTT however, it must be recognised that the Ministry of Public Administration's Universality policy acted as a general guideline in the drafting of the Authority's Universality Framework.</p> <p>The Authority held meetings with the Ministry of Public Administration and both parties have made revisions to the documents such that there is</p>

Document Sub-Section	Submission Made By: Stakeholder Category ²⁸	Comments Received	Recommendations Made	TATT's Decisions
				consistency throughout.
Section 1				
1.2 WSIS Plan	Ministry of Public Administration	The existing overview of ttconnect on page 6 is not consistent with MPA's view of the initiative. Please consider the suggested language here instead.	ttconnect <u>Current State:</u> Trinidad & Tobago's National e-Government Portal, ttconnect online (www.ttconnect.gov.tt) seeks to provide access to all appropriate Government information and services online. It introduces a new way of interacting and transacting with Government, consistent with current transformation efforts to become more service-oriented, while at the same time increasing overall transparency, efficiency, effectiveness, accessibility and availability. Today, ttconnect online provides information on	While the Authority notes the Ministry's comment, this section was meant to summarise the connectivity projects being undertaken by the government. However this section has been updated in the framework based on the recommendation made by the Ministry.

Document Sub-Section	Submission Made By: Stakeholder Category ²⁸	Comments Received	Recommendations Made	TATT's Decisions
			<p>over four hundred (400) Government services and resources. Efforts are already underway to introduce numerous Government services online.</p> <p><u>Expected State:</u></p> <p>The Government of the Republic of Trinidad and Tobago (GoRTT), under the banner of fastforward, the National ICT Strategy, has undertaken a series of initiatives aimed at increasing the effectiveness and efficiency of its service delivery. One such key initiative is the development of a National e-Government Portal to provide online access to all appropriate government information and services.</p>	

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
			<p>The National e-Government Portal (ttconnect online) represents a new channel of service delivery, consistent with Government's overall efforts to become more service-oriented, while at the same time increasing its transparency, accessibility and availability.</p> <p>ttconnect online has been designed to be a one-stop, non-stop shop for access to "all of government" from a single location, 24/7. A user-centric approach was employed in its design, such that information and services are arranged / presented around the needs of the various users, and not around the structure of government (ministries, agencies, etc). ttconnect online will :-</p>	

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
			<ol style="list-style-type: none"> 1. Provide online access to government information and services in a manner consistent with the needs of clients irrespective of Ministry or organization; 2. Make government information and services more accessible and easy to use, increasing service standards and client satisfaction; 3. Leverage existing applications, technology and infrastructure where possible, minimizing development costs; 4. Provide a foundation for the future introduction of more sophisticated electronic services, using multiple 	

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
			<p>delivery channels; and</p> <p>5. Provide appropriate support for citizens, visitors, businesses, government employees and the Diaspora.</p>	
1.2 WSIS Plan and National Universality Policy	TSTT	<p>TSTT is supportive of the aims of both the WSIS Plan and the National Universality Policy and indeed already supports a number of initiatives that are compatible with those aims. In addition to its current Universal Service Obligations set out in its Concession, TSTT has also embarked upon universal service initiatives of its own, and in particular can point to the establishment of its Community Communications Centres (CCCs) in certain disadvantaged areas of Trinidad and Tobago. CCCs are located in Navet, Blanchieusseuse, Barrackpore, Cumana, Morvant and two in Tobago at Plymouth and Speyside. The objectives that were used to establish these CCCs were outlined in TSTT's response to the TATT's questionnaire, dated 28th May 2008, entitled "Current status of service provision in underserved communities".</p>	<p>The document should give recognition to existing universal service obligations currently imposed on Concessionaires and voluntary universal service initiatives undertaken by them, if any. Moreover the fact that such services whether voluntary or imposed are priced so as to be affordable and are therefore largely loss making, has not been acknowledged in this document.</p>	<p>The Authority has updated the relevant sections in the document giving reference to the Universality initiatives currently implemented by service providers including TSTT Community Access Centres, and payphones.</p>

Document Sub-Section	Submission Made By: Stakeholder Category ²⁸	Comments Received	Recommendations Made	TATT's Decisions
		<p>In addition to its voluntary contribution to universal service, TSTT also complies with existing universality obligations with respect to payphones as required under the Concession issued to the company. It is to be noted that in this regard, TSTT's roll out of payphone services not only exceeds the requirements of the concession but the entire service is offered at a significant loss.</p> <p>Quite apart from this, it is respectfully submitted that price regulation makes much of the residential access service that TSTT also provides loss making which should qualify as an obligation designed to further universal service.</p>	<p>TSTT recommends therefore that the appropriate acknowledgements are made and that the funding of any legitimate loss-making be adequately addressed</p> <p>Suggestions include:</p> <ul style="list-style-type: none"> • freeing existing service providers from the obligation of providing some of these services 	<p>The Authority notes the comments made by TSTT, however the price regulation regime and the Access Deficit Claim are currently under investigation. This 'loss-making' identified by TSTT will be addressed outside of this Universality Framework.</p>

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
			<ul style="list-style-type: none"> • including the estimated loss-making of existing services in the universal service funding described in the document; and/or • designing a separate, sustainable funding mechanism for those services. 	
Section 1.3, 1.4 and 4	Digicel	<p>Digicel fully supports the objectives to be attained through universal service in Trinidad and Tobago.</p> <p>We believe these objectives of universal service can be obtained by free operation of market forces, which are still taking effect. Competitive markets should be the main driver for improving delivery of telecommunications services in Trinidad and Tobago.</p>	The Authority defers plans for implementation of a US plan until such time as the various sectors have matured and the positive effects of free market forces in those respective sectors have had an impact on reducing the access gap.	The Authority notes the comments submitted by Digicel. While we agree that further liberalization of the telecommunications sector is needed before the Universality Framework is actually implemented, there is still the need to consult on the process that will be adopted as outlined in this document.

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
		<p>The implementation of universal service (US) requirements at this time in a nascent industry would be premature. The imposition of charges for a universal service fund at this time may run counter to the public's best interests in the long term. That approach has the potential (i) to create time consuming and wasteful bureaucracies that absorb resources from the regulator, government and the private operators, (ii) to cause significant market distortions and send faulty investment signals to the detriment of competition and consumers and (iii) to divert financial resources that could be put to other more beneficial uses particularly for relatively new entrants in any of the sectors of the telecommunications industry.</p> <p>Universal service policies should be a possible adjunct to market developments and not the determining factor. Private investors and entrepreneurs have generally been better able determine and direct resources to where telecommunications investment would be most beneficial for citizens. The Authority is proposing a regulator managed USF with a default subsidy to the incumbent. This proposal has shades of monopolistic competition and central government planning of telecommunications infrastructure, which has clearly not worked in the past given the access gap revealed by the Digital Divide survey.</p>	<p>The most effective way to optimize the provision of telecommunications services in Trinidad and Tobago is:</p> <p>a/ remove barriers and give incentives for the introduction of new services such as Wimax;</p> <p>b/ improve the robustness of the liberalization regime to more effectively deal with anti-competitive behaviour;</p> <p>c/ permit market based reforms and recently liberalized sectors time to diminish the access gap before hastily embarking on a USF approach to achieving the same results.</p>	<p>The Authority agrees that this proposed 3-step process should be followed and has already begun by:</p> <p>a) Removing barriers through the market liberalization and the recent auctioning of the BWA spectrum bands.</p> <p>b) Putting measures in place through the implementation of various policies including the pricing and costing frameworks, to address issues associated with anti-competitive behaviour.</p> <p>c) Permitting recently liberalized sectors, for instance the introduction of FLOW and BWA Internet services, to diminish the access gap.</p>

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
		<p>Given the population density and economic conditions in Trinidad and Tobago, a USF policy may not be the most effective means to achieve the USO required by the Telecommunications Act. These factors may distinguish Trinidad and Tobago from other countries whose USF policies have been used as reference points by the Authority.</p> <p>In the English speaking Caribbean, only Jamaica has implemented a US policy. Of course, Jamaica was the first territory that liberalized its mobile market. That is not surprising as market based reform is one of the first methods to be exhausted prior to the imposition of any policy to create a universal service fund. The potential gain from that approach is already discernible in the context of Trinidad and Tobago. Two (2) years after liberalization of the mobile telecommunications sector, the Authority itself concluded that mobile telecommunications need not be included in the US plans given the high penetration level in that sector.</p>		<p>The Authority agrees that with the introduction of new players in the market, competition should be given time to develop and such reduce the market gap in the industry. The Authority plans to conduct frequent digital divide surveys and independent surveys to monitor the extent of the market and access gap.</p> <p>In addition, the Authority will be ensuring through enforcement policies that current concession obligations (mandatory service obligations) are being met by service providers, thus further reducing the market gap in the industry.</p> <p>However it must be noted that the Authority intends to only fund those areas and population groups that fall within the access gap.</p>
1.3 National Universality	Ministry of	1. The Universality Policy was a requirement of the Telecom		This section has been amended.

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
Policy	Public Administration	<p>Act, not fastforward.</p> <p>2. Perhaps this section should refer to “some” of the benefits of ICTs, rather than giving the impression that this is the be-all and end-all of access to ICTs</p>		<p>This section has been redrafted in line with the Ministry’s suggestion.</p>
1.4 Role of the Telecommunications Authority of Trinidad and Tobago	Ministry of Public Administration	<p>The aim of this Regulatory framework is therefore to facilitate, encourage and incentivise an ICT enabled society.</p>		<p>One of the main objects of the Act (Section 3 (c) (i)) states:</p> <p>“The objects of the Act are to establish conditions for promoting and protecting the interests of the public by promoting access to telecommunications services;”</p> <p>More specifically, as quoted in Section 28(1) of the Telecommunications Act:</p> <p>“In accordance with the policy established by the Minister, the Authority shall determine the</p>

Document Sub-Section	Submission Made By: Stakeholder Category ²⁸	Comments Received	Recommendations Made	TATT's Decisions
				<p>public telecommunications services in respect of which the requirement of universal service shall apply.”</p> <p>The Authority believes this comment forms part of the fastforward mandate and not part of this framework’s mandate which is to specifically promote access and affordability to basic telecommunications services which form part of ICT services.</p>
1.6 The Consultation Process	Ministry of Public Administration	It should be noted that the current “Procedures for Consultation” are currently under consultation.		The ‘Procedures for Consultation’ are not currently under consultation. The Authority has invited specific key stakeholders commonly involved in previous consultations to provide input in the Authority’s review of the existing procedures.

Section 2

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
2.1 Universality Policy of Trinidad and Tobago	Ministry of Public Administration	There is no "Fastforward Division" of the Ministry of Public Administration.	Substitute the reference to "Fastforward Division" with "National Information & Communication Technology Centre"	The name change is reflected on page 9 of the plan released for the 1 st round of consultation.
2.2 Defining Universality	Ministry of Public Administration	How does TATT plan to effectively determine the market efficiency frontier and the Access Gap? Do you intend to use the model proposed here?		<p>A revised model has been included in the framework. However the Authority does intend to use this proposed model to determine both the market gap and the access gap.</p> <p>In addition to the model, the Authority recently collected information from the service providers on their current level of service provision in the underserved areas. This coupled with the data from the 2007 Digital Divide survey and future surveys to be conducted by the Authority will feed into the model so as to identify the position of the market and access gaps.</p>

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
2.2 Defining Universality	TSTT	<p>The discussion reads as if no service provision is currently being undertaken to fill the access gap whereas TSTT already provides services at a loss that qualify as access gap services. As noted in section 1 above, these services include the provision of payphones and below-cost residential access services as required under TSTT's Concession, and the provision of own-initiative projects such as Community Communications Centres in disadvantaged areas of Trinidad and Tobago.</p> <p>The diagram does not do what that text says it does, i.e., describe the difference between universal access and universal service. What the diagram appears to be describing is the difference between "the market gap" (which in the text is sometimes referred to as the "market efficiency gap") and "the access gap".</p> <p>The market gap is effectively what the expansion in the telecoms services beyond the current situation given ideal well functioning competitive conditions.</p> <p>The access gap is what additional expansion can be expected if the government assists in subsidizing the start-up and other costs of incremental service that business wouldn't otherwise</p>	This existing access gap service provision should be acknowledged as described in Section 1 above.	<p>The relevant sections have been modified so as to identify the universality initiatives already in place by TSTT.</p> <p>The model has been significantly revised to reflect differences in the market gap and access gap.</p>

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
		<p>provide.</p> <p>TSTT also notes that following:</p> <ul style="list-style-type: none"> • There are labels for universal service and universal access, but they are not explained appropriately in the text • In particular the labels seem to suggest that universal access is an objective when supply of service is high cost. In contrast universal service is an objective when the problem is low income. That type of distinction, which we believe would be an incorrect one, is at variance with what the text preceding the diagram says. 	<p>Remove the red boxes from the diagram, or eliminate the diagram entirely and replace with appropriate text.</p>	
Section 2.3, 2.4 and 4	Digicel	<p>The Authority has identified the internet and fixed telephony segments as the areas where the access gap needs to be addressed. The Authority has already laid the foundation for market forces to bring about an expansion of these services to consumers by the grant of concessions to Columbus Communications Limited (“Flow”) for fixed lines, internet, cable and international calling services. Flow then is well positioned to be the triple play provider in Trinidad and Tobago.</p>	<p>Same comment as above.</p>	<p>As mentioned above, the Authority has recognized the need to allow more time for competitive forces to take effect with the introduction of new players in the market. This will help in reducing the market gap and identifying the true access gap.</p> <p>However, the Authority notes that</p>

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		<p>In addition, the incumbent provider Telecommunications Services of Trinidad and Tobago Limited (“TSTT”) was granted mobile telecommunications, international calling services, fixed line, internet and cable concessions. Hence two integrated providers of telecommunications services were set to offer their services to the public in the very areas that the Authority has identified are now inadequate. There are also several other smaller internet service providers to cater for demand in both the residential and business markets.</p> <p>Notably, the concessions for those services other than mobile do not seem to contain the mandatory obligations that could have bridged part of the digital divide revealed by the survey.</p> <p>The Authority has failed to indicate why contributions could not be sufficiently met by the providers of fixed telephony and internet services together with allocations from the government.</p>		<p>while concessions have been granted for the provision of Internet and fixed telephony, there still exist areas that may not be economically feasible for any operator to provide services. These areas will be labeled the Universality Areas (UAs) in the framework, and will be one of the main focus of the Universality Fund.</p> <p>The Authority will be enforcing the concession obligations (mandatory obligations) of all concessionaires including fixed and Internet, so that a proper assessment can be made in identifying the UAs.</p> <p>The Authority believes the contributions to Universality are a social obligations/responsibility of all service providers in the industry not just an obligation for fixed and Internet service</p>

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		<p>Furthermore, the Authority has not allowed the effect of market forces to run their course prior to assessing the access gap that is the underlying basis for the application of the universal service funding obligations. In fact, the Authority placed a moratorium on the grant of spectrum for the frequencies that could have been used to address the areas where it now says an access gap exists.</p>		<p>providers.</p> <p>It must be noted that UF subsidies will not only focus on the rolling out of infrastructure, but on facilitating services for the certain population groups including low income and differently-abled persons.</p> <p>The Authority notes that the full effect of competition was not realized before measuring the digital divide in 2007. However the Authority intends to conduct frequent digital divide surveys and independent surveys to continually assess the market and access gap.</p> <p>Additionally, the moratorium in the 2.3 and 2.5 MHz bands has been lifted allowing operators to enter the market.</p>
2.3 Definition of Basic	Ministry of	Does the definition of basic data services include wired and		Yes, the definition of data services

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Telecommunications Services (Paragraph 2, second bullet)	Public Administration	wireless and/or mobile? Please also include “free itemised billing, upon request by the user” as a basic service, in accordance with the Policy		includes the use of both wired and wireless technologies, including mobile. 'Free itemized billing, upon request' has been added to the list of basic telecommunications services.
2.3 Definition of Basic Telecommunications Services/Achieving Universality	TSTT	In interpreting “access” to mean “in household” service, the TATT plan appears to set much higher (and more expensive) goals than the WSIS Plan and National Universality Policy.	It is important that the goals set be consistent with the industry's ability to fund them. The costs of the TATT plan do not yet appear to have been estimated. Once it is, and if those costs are too high because, for example, they are based on achieving universal services (that is, private access for all initiatives) then TATT should revert to goals that are more consistent with those outlined by the WSIS Plan and National Universality Policy whereby some goals are achieved through providing	The Authority's intention is to promote universal service where practically feasible as a result of the current level of penetration. However the Universality Framework has been revised to provide greater clarity that while Universal Service is being promoted, Universal Access type of initiatives will be considered on a case by case basis.

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			universal access at public locations, at least in the short term.	
Section 2.3	ICNTT	<p>According to citations in this section, GoRTT has been amended to define public data services of throughput of 512 kbps as a basic telecommunications service.</p> <p>This varies from the last published version of GoRTT's Policy which identified basic telecommunications services as including:</p> <p>“narrowband public data services...no less than 56 kbps”.</p> <p>In any case, such as definition is ambitious and, if contested, TATT may be hard pressed to identify a precedent anywhere globally as Broadband is generally not included in the basket of “basic services” due to the specific requirements necessary for its deployment. While advances in telecommunications are reducing such barriers, as a rule, Broadband service remains seen as a premium Internet Access Service³⁰.</p>	<p>TATT and the Ministry of Public Administration should cause to be published the final, approved version of the Policy on Universality for consideration and information of all stakeholders.</p>	<p>The Authority's agrees with the suggestion that the final version of the Ministry of Public Administration's Universality Policy should be published.</p>

³⁰ The World Bank (2005) “Extending telecommunications beyond the market: Toward universal service in competitive environments”, available online at <http://rru.worldbank.org/Documents/PublicPolicyJournal/206welle.pdf>

Document Sub-Section	Submission Made By: Stakeholder Category ²⁸	Comments Received	Recommendations Made	TATT's Decisions
		<p>To be clear, in the scheme of broadband service provision, 512 kbps is not insurmountable and is not particularly great. Currently, the provision of 5 and 10Mbps to the home is facilitated in particular markets in the country.</p> <p>However, if the term “basic telecommunications” is intended to have the connotation of “the minimum service provided as a right to consumers³¹,” then 512kbps throughput is indeed ambitious given the state of the telecommunications sector domestically because:</p> <ul style="list-style-type: none"> - The 2G and 2.5G mobile technologies deployed in T&T cannot provide this throughput, making them fail the primary test of providing “basic” service; - Older traditional fixed line facilities may require substantial (costly) overhaul to provide this level of service; 		

³¹ Telecommunications Authority of Trinidad and Tobago, 2005, “Consumer Rights and Obligations Draft Policy.” Available here: <http://www.tatt.org.tt/ddocs/pcro9.pdf>

Document Sub-Section	Submission Made By: Stakeholder Category ²⁸	Comments Received	Recommendations Made	TATT's Decisions
		<ul style="list-style-type: none"> - Relatively low priced point-to-multipoint wireless technologies (outside of WiMAX) rarely assure throughput above 512 kbps as a “guaranteed.” This is particularly so in commercial settings where deployment must allow for cost recovery by maximizing the number of users per access point. These technologies tend to advertise BURSTS of speeds which reach the higher throughputs, but the spectrum bandwidth required to guarantee 512 kbps for all users, assured at 99.999% of the time, makes system provision tend to economically unfeasibility; 	<p>TATT and GoRTT should reconsider the definition of Broadband, even as low as 256kbps as a basic service subject to Universality obligations.</p> <p>ICNTT recommends that the “basic service” should be the least burdensome version of the service that achieves the defined strategic objective – in this case, narrowband data services of 56 kbps.</p> <p>TATT should properly consider the implication of such a failure to be classified as a “basic telecommunications service”, considering mobile usage is predominantly the foremost means of telecommunications by the public.</p>	<p>The Authority has included the minimum provision of 512kbps as a basic service on the recommendation of the Ministry of Public Administration Universality’s policy.</p> <p>Please note comment above.</p> <p>The Authority notes ICNTT suggestion relating to wireless technologies.</p>

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			As much of the Spectrum to be used for the new technologies is still not available for use, and further, tends to be expensive, TATT should consider whether this puts an unwieldy burden on the provider, and has a draining impact on the Universality Fund.	The Authority has recently auctioned blocks of the 700Mhz band with the expectation of promoting Broadband Wireless services.
2.4 Achieving Universality	Ministry of Public Administration	<p>If this document IS the Plan, then why does the Statement on the Promotion of Universality sound as if it's discussing a future state?</p> <p>We need to discuss the definition of the "access gap". The funding mechanisms must consider both supply side (operator)</p>	It should probably read ...In doing so the Regulatory Framework should place emphasis...	<p>The framework is undergoing the consultation process thus the reasoning behind the use of suggestive language. When the document is finalized the language will be changed from suggestive to definitive.</p> <p>The relevant changes have been made to the section of the framework to include consumer</p>

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		and demand side (consumer) imperatives.		imperatives.
Section 2.4	ICNTT	<p>Within the discourse of Universality models utilized worldwide, the term “Universal Access” refers to an obligation to provide service to points of aggregation – those locations where the general public may commune and thereby share access, such as payphone banks. Simultaneously, the term “Universal Service” then refers to the obligation to provide service to the home of the users. As can be imagined, the scope and complexity of Universal Service implementation dwarfs that associated with Universal Access implementation.</p> <p>In its last published version of its Policy, GoRTT clearly outlined intent to pursue a policy geared towards the implementation of Universal Access. This may have been based on considerations for limiting the cost associated with Universality Programme – balancing the objective of access to telecommunications services within a given geographical radius, and the burden associated with both infrastructure development and service subsidy to the community in question.</p> <p>The GoRTT Policy went on in section 8.3 clause 10, to apparently identify the aggregator points as either:</p>	<p>TATT and the Ministry of Public Administration should cause to be published the final, approved version of the Policy on Universality for consideration and information of all stakeholders.</p> <p>ICNTT prefers the option of Universal Access Provision as a means of achieving the broad</p>	<p>The Authority agrees with the suggestion.</p> <p>It must also be noted that the Ministry has changed the term ‘universal access’ in its policy to ‘universality’ which is consistent with the Authority’s framework.</p> <p>As mentioned in the Universality framework, due to the maturity of the telecommunications market</p>

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		<p>(i) Access nodes identified installed by the operator for that purpose, the number to be deployed to be determined by TATT; or</p> <p>(ii) GoRTT's Community Access Centres.</p> <p>Despite this defined framework, TATT seems to suggest here that it is ignoring that approach and is instead encouraging Universal Service via infrastructure development and usage subsidies to the individual homes within a community.</p> <p>As discussed above, this has a material impact on the cost of the Universality Programme – a cost that the GoRTT Policy seems to have been geared to control. No justification has been provided for this shift in approach, and there seems little consideration of the impact of this shift on the wider telecommunications sector.</p>	<p>goals of Universality while controlling the cost and recurrent risk associated with the Universal Service paradigm.</p> <p>If the GoRTT Policy has not shifted from the provision of Universal Access, TATT should provide some justification for its proposed adjustment.</p> <p>That justification should include, at a minimum a cost-benefit comparison of the approaches and their impacts on the sustainability of operators in the marketplace.</p>	<p>and the population density of Trinidad and Tobago, the Authority is promoting the use of universal service mechanisms.</p> <p>Please see comment above.</p>

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Section 3				
3.1 Definition of Digital Divide	Ministry of Public Administration	This may be an over-simplification as it seems to suggest that the divide only exists between those who have information/knowledge about ICTs, rather than access to the ICTs themselves.		The statement in the framework has been revised accordingly.
Section 3.2 The Digital Divide Survey	Digicel	<p>The Digital Divide Survey (“the survey”) was not effective in delivering key pieces of information that would have been critical to better understanding the divergence in access to telecommunications services in Trinidad and Tobago.</p> <p>The survey was carried out prior to the introduction of Flow’s triple play service and therefore is not representative of the current or the prospective state of the market. The survey was also conducted at a time when four operators other than Flow and TSTT were authorized to provide fixed line services (see pg. 12 of TATT’s Annual Market Report: Telecommunications and Broadcasting Sectors – 2006) but as far as we are aware have failed to introduce their service.</p> <p>No indication is given as to how frequently the access gap will be assessed. The most critical part of a USF regime is to apply funds to projects in locations where they are needed at that</p>	In order to make the best decisions where US is concerned, Digicel would like TATT and SALISES to provide:	<p>The Authority notes the comment submitted by Digicel. However the Digital Divide survey was conducted three years after the start of the Authority’s operations and it is believed a survey was important at that time to assess the Digital Divide in the country before the drafting of the Universality Framework.</p> <p>The Authority does intend to conduct frequent digital divide surveys and other independent surveys to measure the access gap.</p>

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		<p>time. The Authority should design some measure to take into account in the survey, already planned expansion by operators in areas where services were inadequate. Periodic surveys serve a necessary auditing function that will demonstrate the effectiveness of market based reforms as well.</p>	<p>1/ the raw percentages of the relevant communities that fall below the country average when it comes to mobile subscribers per 100 inhabitants. We would like to assess to what extent these areas fall below the national average and whether there are plans to increase coverage in these areas;</p> <p>2/ how many persons in the survey have two phones, in both absolute and percentage terms;</p> <p>3/ the number of households that do not have fixed lines,</p>	<p>While all of the data requested by Digicel was not measured in the 2007 Digital Divide survey, these points will be taken into consideration in the drafting of the future survey initiatives.</p>

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			<p>but have at least one mobile phone;</p> <p>4/ the number of households that do not have fixed lines and do not want a fixed line;</p> <p>5/ what definition of coverage is used by TATT i.e. population or geographic coverage. If coverage is analogous to population coverage, what methodology does TATT employ to determine this?</p> <p>6/ how often will the surveys be conducted with a view to regularly assessing the access gap?</p>	
3.2.2 Results of the Survey – National	Ministry of Public	The statistic “Proportion of households with Internet access at home = 27.3%” needs to be verified.		The average has been verified. However a note has been included

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(Table 3: Country Average by Service)	Administration			in the framework explaining that the figures in the table represent the national average of the 585 communities surveyed. These figures may vary somewhat with the actual country average as they are a sample of the national population.
3.2.3 Results of the Survey - Community	Ministry of Public Administration	1. What is the basis for setting the targets given in Table 4: Community Target by Service? The targets should be set by GoRTT policy, with TATT responsible for determining regulatory mechanisms/ measures to achieve those targets.		<p>These community targets were guided by the Ministry's Digital Access Index (DAI) target of 0.75 outlined in the revised GoRTT's Universality Policy.</p> <p>In addition, the fixed and mobile targets were based on the national average calculated in the 2007 Digital Divide survey which the Authority considered reasonable to set as community targets. The Internet target however had been extracted from the Ministry's presentation on ICT Vision Strategy for the year 2008.</p>

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		<p>2. Does the statistic “Internet users per 100 inhabitants = 51%” include both fixed and mobile Internet users?</p> <p>3. How did the Authority determine that the current country average for both fixed and mobile telephony “showed an acceptable level of penetration...”</p>		<p>However, the Authority notes the comment submitted by the Ministry and has included a benchmark study in the plan to justify the set targets.</p> <p>As mentioned above this target was set by the Ministry and the Authority has verified this statistic includes both fixed and mobile Internet users.</p> <p>To justify this statement, the Authority has included a benchmark study in the framework which compares Trinidad and Tobago targets with the other</p>

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		<p>4. While we agree that the country average for Internet users per 100 inhabitants is "...alarming low for both a country average and community average...", we would appreciate some further information as to what benchmark comparisons were used.</p>		<p>countries measuring a DAI of 0.75.</p> <p>As mentioned, the Authority has included a benchmark study in the framework so as to justify the targets set.</p>
3.2 Digital Divide Survey	TSTT	<p>The SALISES Survey speaks to 585 pre-defined geographical regions or "communities" across Trinidad and Tobago. Potential universal service providers would be starting from a given network configuration that demarcates consumer clusters in a different manner, e.g., by exchange area. This could have measurement implications, such as uniform service expansion appearing as irregularly measured progress.</p>	<p>Naturally TSTT understands it is too late to change how the SALISES review was conducted but it believes that some attempt should be made to map the SALISES review against the demarcation of the country that the Universal Service Providers, such as TSTT, would have used (e.g., by exchange areas) so that any inconsistencies or inaccurate conclusions can be identified</p>	<p>The Authority notes TSTT's concern and will as far as possible attempt to map predefined geographical areas with the exchange areas so as to more accurately estimate any expansion of service in future studies.</p>

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			and taken into account. In fact, TSTT has already provided information by exchange area to the TATT in response to the questionnaire “Current status of service provision in underserved communities”.	
3.2.2 Table 3	TSTT	It is unclear whether Trinidad and Tobago has been compared with countries with similar GDP or not.	More discussion of the international benchmarks TATT is using is necessary.	<p>The figures in the table were derived from the 2007 Digital Divide survey.</p> <p>However a note has been included to explain that these national figures may vary somewhat with the actual country average as they are a sample of the national population.</p>
3.2.3 Results of Survey	TSTT	TATT is proposing that the fixed and mobile DAI and DOI readings for each community be the same as the country average. Can we assume TATT means fixed, mobile and Internet DAI and DOI for the country average at the time of the survey? TSTT respectfully submits that a moving average could never be met.	TSTT proposes that the last sentence in the penultimate paragraph in section 3.2.3 should read: “The Authority is proposing that the fixed and mobile DAI and DOI readings for each community should, at	<p>Within the framework the Authority has proposed the community targets be the same as the country average at the time of the survey.</p> <p>The Authority agrees with TSTT's suggestion and the change has</p>

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			minimum, be the same as the country average indicated in the 200[6] SALISES study.”	been included in the revised framework.
3.3 Identifying Basic Telecommunications Services requiring regulatory Intervention for Achieving Universality	Ministry of Public Administration	Are fixed and mobile service considered mutually exclusive for the purposes of universality? If the universality objective can be met in a particular area more feasibly/efficiently with mobile services, they should not be excluded from the universality programme by virtue of the market's competitive ability to proliferate. Simply because there are different levels of mobile investment operators can engage in e.g. market forces may not drive wireless broadband internet in certain areas as profitably as it does mobile telephony and in that event USO funding to mobile operations may be a viable broadband solution		<p>It is the intention of the Authority to include both fixed and mobile service as part of the definition of basic telecommunications services.</p> <p>It is however not the Authority's intention to exclude mobile data services from universality funding. The term mobile telephony relates to mobile voice telephony which the Authority believes is not eligible for funding based on the criteria outlined.</p> <p>Furthermore, mobile Internet services may be eligible for services based on the criteria developed by the Authority, primarily if the area is considered a UA.</p>

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3.3 Identifying Basic Telecommunications Services requiring Regulatory intervention for achieving universality	TSTT	TATT concludes that public mobile telephony services do not meet the criteria for inclusion as a basic telecommunications service requiring regulatory intervention, and so is not proposing the provision of assistance from any universality funding mechanisms. TSTT agrees with this conclusion as it should help to minimize the funding burden on the industry and ensure that universality funds are directed at the areas that are most in need of support.	TSTT supports TATT's statement that providers of mobile telephony services should not receive assistance from any universality funding mechanism.	Noted.
Section 3.3	ICNTT	<p>As a point to note - Mobile telephony technologies deployed in Trinidad and Tobago do not pass the first criteria identified in this section – specifically, they cannot guarantee 512 kbps to the end user.</p> <p>In fact, they cannot achieve those throughputs in ideal conditions:</p> <ul style="list-style-type: none"> - GSM-GPRS maxes at 171kbps, with practical application averaging at about 64kbps while 		

³² TATT, 2008, “Annual Market Report - Telecommunications and Broadcasting Sectors. January to December 2007.” Available here: http://www.tatt.org.tt/ddocs/Market_Report_2007.pdf

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		<p>- GSM-EDGE maxes out at 473kbps, with practical application averaging between 110 and 200 kbps.</p> <p>Accordingly, as stated above, current mobile telecommunications services do not meet the requirement of a basic telecommunications service!!</p> <p>Further, with regard to the first test identified – considering the requirement of such a basic service “allowing the user to meaningfully interact...”, the 89%³² of Internet users who have dial-up connections primarily may argue that the 56kbps access meets that objective.</p> <p>While it is recognized that GoRTT would like to encourage broadband deployment throughout the country, ICNTT expresses concern that defining broadband as basic may not be the appropriate means to achieve that objective given the ancillary demands from, and consequences on, provider obligations.</p>	<p>ICNTT expresses concern of the possible implication of such in the context of TATT's stated objective of developing the telecommunications sector.</p> <p>GORTT and TATT should reconsider the definition of broadband as a basic telecommunications service and component of Universal</p>	<p>This section of the Universality framework has been modified to refer to only mobile telephony services not requiring regulatory intervention.</p> <p>The Authority notes the comment.</p> <p>However, the Authority has included the minimum provision of 512kbps as a basic service on</p>

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			Service.	the recommendation of the Ministry of Public Administration Universality's policy.
3.4 Identifying Communities that fall within the Access Gap	Ministry of Public Administration	<p>1. In addition to making the admission that there is a lack of competition in certain markets or that concessionaires are not fulfilling their roll-out obligations, it would be useful at this stage to suggest the measures by which TATT will work to address the problem.</p> <p>2. If TATT believes that the service providers are not living up to their roll-out obligations, then those providers can't</p>		<p>Where there currently exists lack of competition in certain areas, it is the Authority's intention to promote competition rather than automatically provide funding through the UF for service provision.</p> <p>In addition, where concessionaires are not fulfilling their rollout obligations, the Authority considers this a compliance matter and is pursuing enforcement initiatives outside this Universality framework.</p> <p>Noted. The Authority will take this</p>

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		<p>be used as the sole source of information for determining the access gap. Independent studies are also necessary to identify these areas.</p> <p>3. In underserved areas, funding should be provided for the build out of infrastructure. To address the affordability issue, however, funding should be provided to the users who cannot afford the basic services.</p> <p>4. It would have been useful to include an introductory list of the communities under discussion here to commence the consultation with the industry via this document.</p>		<p>into consideration. The Digital Divide survey conducted by SALISES in 2007 was one such independent study. The Authority is however considering a combination of other independent studies to be implemented on a timely basis.</p> <p>The Authority agrees with this statement. Section 7 highlights universality initiatives which addresses the affordability issue.</p> <p>The list provided in Appendix A highlights the underserved areas throughout the country as concluded from the Digital Divide survey.</p> <p>In addition to this, the Authority has begun dialogue with the</p>

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				service providers to determine the current level of service provision in the underserved areas. This, coupled with other independent studies, will help the Authority in identifying the UAs to be considered for universality funding.
3.4 Identifying communities that fall within the Access GAP	TSTT	<p>TATT concludes that fixed telephony penetration and Internet usage are low primarily because of the inadequate infrastructure in support of these services within those communities. TATT further acknowledges that Internet usage is low because of the low number of persons owning computers.</p> <p>TSTT is of the view also that the low level of computer ownership is the singular significant reason for the low level of Internet usage. If this issue is not tackled as a matter of urgency, despite further rollout of the necessary service support infrastructure in support of USO, the issue of low broadband penetration will continue to be the norm due to lack of the basic equipment necessary to access the internet.</p> <p>TATT suggests the possibility that increased competition in</p>	<p>TSTT recommends that TATT considers the availability of universal service funding for subsidized home PCs</p> <p>Again, TATT must address the</p>	<p>The Authority agrees with this comment. This initiative however, is currently being undertaken by the GoRTT through tax breaks and other projects under the fastforward plan.</p>

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		the broadband internet market necessarily translates into a reduction in the number of underserved communities. This is particularly true with respect to existing universal service provision.	funding of existing universal service provision.	The Authority is currently collecting data from relevant service providers so as to have a position on funding existing universality obligations.
Section 3.4	ICNTT	<p>With regard to the Funding to be provided as part of the Universality Programme, is TATT's intention to provide recurrent funding for the provision of service in these areas? The language here suggests that.</p> <p>Alternatively, is the TATT limiting such financing from the Fund to the capital build out of infrastructure, thereby leaving the recurrent operational costs to the provider?</p> <p>Clarity is required, as in the context of the earlier discourse in Sections 2.3 and 2.4 on the definition of the "Sustainability Fringe" and the subsequent policy statement focusing on the "Access Gap" that discourse suggested that Funding would not be facilitated in areas outside of the Sustainability Fringe, as the service would be unsustainable for the provider even with some subsidy. If ICNTT's understanding is correct, then what exactly are the limiting conditions to the policy</p>		<p>It is the Authority's intention to subsidise both the infrastructural development costs and the ongoing maintenance costs for projects, as the need be, to areas and population groups that fall within the access gap.</p> <p>Financing of both infrastructural development costs and the ongoing maintenance costs will be derived from the UF.</p> <p>The model explaining the Market and Access gap has been modified and simplified in the revised document.</p>

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		<p>statement?</p> <p>In the rubric of these frameworks, and TATT's decision to pursue a Universal Service (as opposed to Universal Access) agenda, it begs the question whether every home in a Community that has been identified for infrastructure funding will be eligible for usage subsidies as well? Such an approach will be extremely burdensome on the Fund for substantial periods of time – reducing its ability to function in multiple geographic regions, and eliminating the impetus of competition to drive innovation, better technologies and more efficient implementation of solutions in serving these constituents.</p> <p>Alternatively, are those eligible for subsidy limited by those targeted audience identified in the policy statement in section 3.5?</p>	<p>TATT needs to more adequately reconcile the many elements introduced in this Implementation Framework into a consistent whole. Many elements seem to be in conflict with each other including the identification of what the Fund will be eligible to finance or subsidise.</p>	<p>The revised framework addresses these issues highlighted by ICNTT. The Authority is proposing that service providers offer special packages for low income subscribers such that there is no need for the fund to subsidise the bills of consumers.</p> <p>The revised framework provides clarity to the concern raised by ICNTT.</p>
3.5 Identifying Population	Ministry of	1. Directory assistance is no longer free, so what regulatory		The Blind Welfare Association has

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groups that fall within the Access Gap	Public Administration	<p>as well as practical methods can be put in place to ensure that someone requesting directory assistance e.g. over the phone, is in fact visually- impaired?</p> <p>2. We need to discuss the channels to be used for delivering the subsidy to these groups, as the definitions offered in the Statement (on pg. 24) may prove difficult to be practically addressed.</p> <p>3. As a general comment, the objectives of all the consultations to be held in future with relevant stakeholders discussed throughout this document should be</p>		<p>set up a system with TSTT such that those persons registered with the association can access directory services free of charge.</p> <p>In addition to this, the Authority is also liaising with the relevant stakeholders to develop a mechanism where differently-abled individuals may receive financial support of assistive technologies through the universality funding in order to allow easier access to basic telecommunications services.</p> <p>As mentioned above the Authority has begun liaising with the relevant stakeholders who can identify persons who fall within 1, 2, 3 and 4 categories.</p> <p>Noted.</p>

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		<p>SMART (Specific Measurable Achievable Relevant Time framed)</p> <p>4. How can “current penetration of the basic telecommunications service...” be measured for population groups?</p>		<p>This statement has been revised in the current framework.</p> <p>However these criteria can be measured by conducting tailored surveys focused on these population groups.</p>
3.5 Identifying Population Groups that fall within the Access Gap	Ministry of Social Development, Disability Affairs Unit	<p>Assistive technology devices should be considered not only for persons with cognitive and mental disabilities but for all types of disabilities.</p> <p>Directories should also be available electronically.</p> <p>Websites should include accessible features for all persons</p>	For more information on website accessibility, check out www.w3.org	<p>As a far as it is practicable the Authority will consider making accessible assistive technologies to facilitate all types of disabilities.</p> <p>The Authority agrees with this comment.</p> <p>The feature of website accessibility will be addressed</p>

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		with disabilities.		under the Authority's Consumer Rights and Obligations Policy.
Section 3.5	ICNTT	<p>ICNTT notes that among the audiences targeted for subsidy, TATT identified (broadly) the unemployed.</p> <p>Without some qualifiers for applicability, and in the context of the Universal Service framework proposed, is TATT proposing that Broadband Services should be provided, and subsidized at the cost of the sector, to the homes of able-bodied individuals who may not be seeking meaningful employment? Is this not an overly burdensome position, pushing the welfare burden of the State unto Private operators?</p> <p>If this is implemented, what then is the role of the Community Access Centres mentioned in this Policy as part of the National ICT Plan?</p> <p>This is unreasonable and unprecedented in liberalized marketplaces in the Commonwealth.</p>		<p>The Authority notes ICNTT's concern. However the Authority will liaise with the relevant stakeholders, including the Ministry of Social Development, to minimise the occurrence of such a situation.</p> <p>As mentioned in the framework, the Authority is focused on achieving universal service. This can be achieved by facilitating the access of Internet services to households. One of the main objectives of the GoRTT's CAC programme is to make government</p>

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		<p>Here the Plan seems to put a significant aspect of its social burden on the telecommunications sector which may be more appropriately managed by GoRTT's Social Service Delivery framework.</p>	<p>The subgroup "unemployed" should be removed from the targeted audience. The cost of such social engineering should be borne by GoRTT's Social Service Delivery Framework.</p>	<p>services more accessible by the public.</p> <p>The Authority notes ICNTT's comment, however still considers the 'unemployed' an important category to include in the universality framework.</p>
<p>3.6 Objectives of the Universality Implementation Plan</p>	<p>Ministry of Public Administration</p>	<ol style="list-style-type: none"> 1. The first objective listed ("To achieve an increase in the national DAI from 0.67 to 0.79", can be supplemented by "...and thus put T&T into the high access range, according to ITU standards." 2. There needs to be some sort of analysis to determine an appropriate quota for the universality funding contribution. 		<p>The recommended change has been added to the objective.</p> <p>The Authority agrees with this comment and has incorporated a benchmark study on universality contributions in the plan. In addition, the Authority has included a detailed analysis</p>

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		<p>3. We need to discuss the exclusion of public mobile telephony services.</p>		<p>illustrating the method used by the Authority in determining the UF contributions by the concessionaires such that the universality initiatives are supported.</p> <p>As mentioned in the framework, the Authority does not intend to fund mobile voice telephony services as normal commercial and market forces are sufficient to make this service available for use by all.</p>
Section 4				
4 Universality Funding Mechanisms	CCTL	CCTL believes that additional mechanisms (of those listed) can be considered in order to maximize funding to achieve universality. CCTL hopes that the Authority appreciates that the national infrastructure in Trinidad and Tobago is not nearly as developed as that in North America and countries in the European Union, where there is already close to 100% penetration of fixed line services. In contrast, Trinidad can only claim a 75% penetration of households, and 25% penetration of the overall population. In this regard, significant	CCTL recommends that domestic concessionaires that provide termination to inbound international traffic should be allowed to charge a Universality Contribution Charge (UCC), which would facilitate those domestic concessionaires generating	The Authority notes the recommendation of CCTL and has revised the contributions to the UF required by concessionaires in the framework.

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		<p>investment in infrastructure is required to achieve Government's ambitious broadband and universality plans. As such, the Authority should not adopt policy decisions taken by these regulatory agencies, because the environment in which Universality is being undertaken is drastically different.</p> <p>In this regard, CCTL would like to draw to the Authority's attention the use of a Universal Service Levy by Jamaica on incoming international calls. This has proven to be a useful mechanism for the generation of significant amounts of revenue by the Government to fund universality programmes. In this regard, CCTL suggests that the Authority look at a similar model, where domestic concessionaires terminating inbound international traffic should be allowed to charge a <u>Universality Contribution Charge (UCC) on that traffic only</u>, which would facilitate domestic concessionaires generating sufficient revenue in order to fund their domestic network builds. This would be a cost-based charge based on the cost elements necessary to achieve universality objectives. This is in effect a limited form of Access Deficit Charge, but only charged on inbound international traffic.</p> <p>This should be facilitated in addition to the Universality Fund contribution, as it provides a revenue generator for all domestic concessionaires at no expense to the users within Trinidad and Tobago, and ensures that incoming settlement</p>	<p>sufficient revenue in order to fund their domestic network builds and enable them to better afford Universality Fund contributions.</p>	

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		<p>rates, and therefore revenues, remain at a beneficial level for the telecommunications sector in Trinidad and Tobago. This additional revenue would also mean greater contributions to the Universality Fund by participants in the sector, as concessionaires would generate greater gross revenues annually.</p>		
<p>4 Universality Funding Mechanism</p>	<p>TSTT</p>	<p>The uncertainty over the level of funding is cause for concern. TATT variously stipulates the level to be “no greater than 2% of gross revenue” (page 26), 2% of gross revenue (page 43) and “no greater than 3% of gross revenue (page 41 – reference to A15b of the Concession).</p>		<p>Clause A15(b) of the Concession has defined universality contributions as ‘no greater than three per cent (3%) of gross annual revenues from such networks and services as may be specified by the Authority’.</p> <p>However the Authority, based on the comments received from the 1st round of consultation, has reduced the levels of contributions to be imposed on the public domestic concessionaires.</p>

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		<p>As a general point, TSTT feels that until the Authority precisely identifies the universal service goals, and estimates the costs of meeting those goals, TATT is not in an authoritative position to state what the exact funding mechanism/requirement would be. Taking into account the cumulative total of even a minimum of 1% of the gross revenues of each provider per year, the question must indeed be asked whether the rollout of basic infrastructure and services would be substantially over-funded or under-funded. There is also the danger that such allocation, particularly if unnecessarily burdensome could inhibit investment elsewhere in the market.</p> <p>International best practice with respect to the funding requirements of Universal Service is to either a) allow a reasonable level of funding dictate the speed of achievement of universal service goals or b) first estimate the net avoidable costs of meeting the relevant universal service projects, where net avoidable costs are defined as all the costs that would be incurred (including a reasonable return on capital) in providing a specific universal service project, less any revenues that would be received for that service. Only when the net avoidable costs have been identified will it be possible to assess the level of contributions that will be required from service providers. For example, within the European Union, the Universal Service Directive (2002/22/EC) requires the</p>	<p>The phrase “no greater than” is appropriate in the current circumstances where the exact scope of universal service is out to consultation. But once the scope of universal service has been identified it will be necessary for TATT to estimate the net costs of the USO requirements on an ongoing (annual) basis.</p>	<p>The Authority has adopted the UF approach where a fixed percentage of contributions are collected from service providers and this will form the cost basis of the initiatives implemented for the following year.</p> <p>This approach gives the service providers a level of certainty with respect to the amount of contributions they are required to pay for the year as well as prevents a situation of under-funded projects arising by the Authority.</p>

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		<p>National Regulatory Authorities (NRAs) of the individual Member States to estimate the net cost of universal service provision where they consider it may represent an unfair burden on the universal service provider. NRAs may then either introduce a public funding mechanism for compensation or share the net cost between operators. In most EU countries the cost is shared between operators but there are exceptions – for example, in Finland the net cost of providing the USO is met from state funds.</p>		
4 Universality Funding Mechanisms	Digicel	<p>The Authority's own surpluses collected from concession and license fees is one possible source of US funding, as is the case in Bolivia, Chile, El Salvador and other countries.</p> <p>If this alternative is ignored, TATT needs to consider that the imposition of a burdensome US obligation on mobile providers may trigger an increase in retail prices. TATT must be aware of and take into consideration the market distortions that can be caused by charging at the retail end. We would even propose a separate entry "Universal Service Tax" be included on the consumer's mobile telephone bill in order to assure the public that the increase in their bills is not due to operators' decisions but actually the policy of TATT.</p>		<p>The Authority agrees that surpluses from licence and concession fees collected should be source of UF funding. The change has been included in the revised framework.</p> <p>While the Authority notes Digicel's recommendation on adding the 'universal service tax' to the end-user bill, we do not see this approach as appropriate at this time.</p> <p>The Authority believes that the contributions should be collected</p>

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		<p>If TATT is not in agreement with the above suggestion and is intent on charging mobile providers a US tax, it should consider financing the fund entirely through incoming international calls, which is done in Jamaica. The underlying reasoning is that the concessionaires for international services do not contribute to the physical infrastructure for the telecommunications networks in Trinidad and Tobago though they benefit from their existence. The application of USF obligations to concessionaires for international traffic would be an appropriate secondary means of financing the fund.</p>	<p>Digicel believes that the source of funds in orders of priority for the USF should be:</p> <p>1/ government grants;</p> <p>2/ surpluses earned by the Authority should be transferred to the USF and not the Consolidated Fund;</p>	<p>from the service providers, not the end-users, as this is part of the industry's social responsibility.</p> <p>The Authority does not believe it is appropriate to collect grants from Government at this time.</p> <p>Agreed. The change has been included in the revised framework.</p>

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			<p>3/ a percentage of the revenues of operators in the deficient sectors should be used to fund the USF. This would exclude mobile revenues, which are outside the universal obligations requiring regulatory intervention in Trinidad and Tobago; and then</p> <p>4/ a percentage of the revenues of concessionaires for international services.</p>	<p>The Authority does not agree with this statement. Even though it is suggested that mobile voice telephony would not be financed through the UF, the opposite may occur for mobile data services. This is one of the reasons mobile operators are required to contribute to the UF.</p> <p>The Authority agrees with this suggestion.</p> <p>Revisions have been made to the framework on the above suggestions.</p>
4.1.5 Universality Funds	Ministry of Public Administration	I believe it is a foregone conclusion from the Act that a Universality Fund methodology would be used. There probably is no need to get into the discussion of other types of subsidy approaches.		This section has been revised to reflect the requirements of the Act and to give some background information on the different

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				approaches that can be implemented to finance universality initiatives.
4.2 Proposed Universality Funding Mechanism	Ministry of Public Administration	There is no need to propose that a Universality Fund be established as it's required by the Act.	The policy statement should take note of the Act's requirements e.g. "Consistent with the Act, the Authority shall..."	The policy statement has been revised accordingly.
Section 5				
5 Establishment of Universality Fund	Ministry of Public Administration	<ol style="list-style-type: none"> 1. What are the criteria that the Authority would establish and would they be part of the regulatory framework or contained in a separate document. 2. It would help the consultation along to a more useful conclusion at a faster rate if these criteria (even early drafts) were included here. 		The criteria referred to are discussed in detail under Section 6 of the plan.
5 Establishment of Universality Fund	TSTT			

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		and numbering fees ,	of implementation of the Universal Fund to allow providers to accrue the potential payout in their following annual budgets. The sum is potentially huge and therefore proper financial provisioning will be necessary	their requirement to contribute towards the UF as stated in Section A15(b) of the Concession. However the Authority has intentions of implementing the UF after publication of the Universality Regulations. This is adequate notice for the service providers to put in place provisions for their UF contributions.
5.1 Administration and Structure of the Fund	Digicel	<p>In our view, the Authority cannot embark on any plan to establish a universality fund prior to having a comprehensive framework for its operation through Universal Service Fund Regulations passed under s. 78 (1)(g) of the Act.</p> <p>The Authority has excluded service providers from being members of the Fund Administration Committee ("FAC"). The contributing members to any USF must have representation on the body that determines how the fund ought to be used. The contributors cannot be relegated to "ad hoc" working groups whose views could be easily disregarded. Regulations can even be made to exclude representatives from particular</p>	Digicel would like to recommend the following, where regulatory framework of the proposed USF is concerned.	<p>The Authority will be finalizing its Universality Regulations which will present the guidelines for the Universality Fund. The Authority has intentions of implementing the UF after publication of the Universality Regulations.</p> <p>The Authority has revised the plan to include the representation of service providers on the ad-hoc groups.</p> <p>It must be noted that the recommendations of the ad-hoc</p>

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		<p>decisions where conflicts of interest arise.</p> <p>The Authority has noted that USF support would not extend to investments which would otherwise be made by private operators on a purely commercial basis or which would give a competitive advantage or disadvantage to any operator. We would be grateful if the Authority would outline in detail the transparent and objective process it will implement to assess proposed investments and thereby determine whether or not same fall within the stated exceptions.</p> <p>The Authority has concluded that based on an assessment of the advantages and disadvantages associated with funding mechanisms in section 4.1 and certain statutory provisions that the establishment of a USF is the most appropriate mechanism for funding universality in Trinidad and Tobago. That aside, the Authority has only set out advantages and disadvantages of different methods but has failed to publish how the pros and cons of a universality fund outweigh those of the alternatives such as market based reforms and mandatory obligations in the</p>		<p>groups will be considered by the FAC in its decision-making.</p> <p>For this process, the Authority has collected data from the service providers on the level of service provision in the areas that were labeled underserved from the Digital Divide survey. This information as well as customized market assessment and/or surveys to be conducted by the Authority will be used in the determination of the Universality Areas (UAs) throughout Trinidad and Tobago.</p> <p>The Authority does recognize that market based reforms and mandatory obligations are needed to achieve universality. These mechanisms are already implemented by the Authority. However, the Telecommunications Act mandates the collections of funds for the provision of universal service. This is</p>

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		<p>context of the telecommunications industry in Trinidad and Tobago at the time of publication of the plan.</p> <p>It is wholly unsatisfactory to give such a cursory and vague evaluation of the alternatives to a plan that could potentially exact up to 2% of the gross revenues of service providers. That approach suggests that the Authority may even have come into the evaluation of the alternatives with predetermined notions of how the USF should be funded. The Authority may also have been influenced by the simplicity and ease with which that system could be implemented from the Authority's administrative viewpoint. Instead the Authority should have assessed whether this funding arrangement would properly be in the best long term interests of consumers, given the possible impact on prices and the restrictions on resources available to service providers for (i) promotions and (ii) expansion and maintenance of the standard and range of telecommunications services in Trinidad and Tobago.</p> <p>Mention is made of the Authority's financial rules being the basis for access to the accounts of the USF. We would be grateful if the official version of these rules would be provided to concessionaires and ask that such rules be promptly incorporated into USF regulations that would be sent to Parliament.</p>		<p>highlighted in Section 28 and 53 of the Act. Aside from the advantages and disadvantages of each of the funding mechanisms, this was the main driving factor of the decision for choosing Universality Funds.</p> <p>The Authority's Financial Rules will be published on the website.</p>

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		<p>On the 'paying aspect' of the USO, the Authority has tabulated contributory information from certain Latin American jurisdictions. This information was taken into account in determining that 2% of gross revenues should be a sufficient contribution to the USF. No explanation is given as to the criteria for choosing these jurisdictions or why the policies there would have been a proper benchmark for what should be adopted in Trinidad and Tobago. Notably no reference is made to the actual or proposed plans for implementation of USF's in other Caribbean territories. This is significant as it those countries that share a similar background with Trinidad and Tobago by having affiliated incumbents which set out the initial infrastructure for fixed line and internet services. Moreover, these are the countries that may have the most similar in geographical and other characteristics such as the existence of two major players in the mobile sector that make them better comparators than Latin American nations. Those factors directly drive market forces to provide widespread mobile network coverage as in Trinidad and Tobago. Essentially, the scope of USO's in the Latin America would be much wider, given the vast area of land and population to be covered, and the attendant costs far greater than in smaller Caribbean nations. As a result, a funding methodology may be suitable to Latin American markets and not in Trinidad and Tobago.</p>	<p>a/ the plan should clarify whether the subsidies should be one-off or recurrent. It is our view that the initiatives undertaken pursuant to USO should be self-financing once established and no resort should be had to the USF for completed projects save and except in exceptional circumstances;</p> <p>b/ the Authority has described the procedure for assessing a concessionaire's contribution and for making timely payment to the Authority. However the Authority has given no objective rationale as to why it believes 2% is an</p>	<p>There may be some UAs that may require one-off funding, however there may also exist other areas that may require continuous funding as they may never become sustainable. This is highlighted in the definition of access gap in the plan. The Authority, based on investigations to be conducted, will determine such areas.</p> <p>Revisions have been made in the plan to reflect a benchmark study for countries in order to determine an appropriate % contribution for the fund.</p>

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			<p>appropriate percentage as opposed to a lower figure. Even if benchmarking were used, no disclosure is made as to the methodology for selecting benchmark countries or their similarity to Trinidad and Tobago. What is also conspicuously missing is guidelines for the commencement and completion of projects and provisions for prompt repayment of monies and interest, should the USF's not be used for their designated purposes in a reasonable timeframe.</p> <p>c/ the issuance of USF invoices by the Authority should not be pegged against the financial</p>	<p>In addition a rationale for the methodology has also been included in the plan.</p> <p>The guidelines for the commencement and completion of projects will be included in the Universality Strategic Implementation report to be published annually by the Authority.</p> <p>In addition, any surpluses collected from the fund will be rolled over to the next year's contributions. The Authority may also consider the granting of payment holidays or other types of incentives programmes where over-funding occurs.</p> <p>The Authority may also revise the UF contributions every 3 years to deal with this issue.</p> <p>The Authority disagrees with this</p>

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			<p>year end of the operators. Rather the year end results should be used to set the maximum that could be levied on the operator for the following financial year. However, invoices for payment should not be issued to operators until thirty (30) days prior to commencement date of a project. The current proposal seems to place emphasis on exacting the percentage of annual revenues of the operator when the focus should be on levying specified charges that are adequate to cover expenses that are reasonably certain to occur when firm plans have been made for the start of a particular project.</p> <p>d/ We wish to suggest that the Authority should determine which projects will definitely get off the ground in a three</p>	<p>statement. This will affect the planning and implementation stage of the projects. The Authority must be in a position to pay mobilization fees etc for the projects to be undertaken.</p> <p>Contributions should be collected before the commencement of projects such that the Authority can estimate the amount of funds that can be allocated towards these initiatives.</p> <p>It must be noted that predictability, timing and frequency of funding is necessary to allow proper planning and constancy for the projects to be implemented.</p> <p>The Authority has adopted the UF approach where a fixed percentage</p>

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			<p>month and then compute a total cost to be covered by the operators after any deductions such as from government grants, surpluses from the Authority and any other alternative source of financing. That cost should then be apportioned according to the individual operator's percentage of the entire sector's revenue and an invoice issued for the apportioned cost, which amount would not exceed the 2% of the operator's revenues. This is crucial to avoid excessive funds accumulating and not being used, which could have been used by the operators for investments in the industry whether in terms of product research or even promotions or subsidies on phones.</p> <p>e/ as regards arrangements for government institutions, airports, schools, hospitals and</p>	<p>of contributions are collected from service providers which will form the cost basis of the project initiatives to be implemented for the following year. Therefore the amount of UF contributions for the period will not be directly affected by the cost of the projects.</p> <p>The FAC will determine the projects to be undertaken for the period based on the priority of the projects and the amount of contributions collected from service providers.</p>

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			<p>public payphones, the Authority should clarify whether these funds will only be used for the initial construction of these facilities or the upgrade and maintenance as well.</p> <p>f/ With respect to public payphones, before any project relating to same could be approved under the USO, TATT would first need to set out:</p> <ul style="list-style-type: none"> - where all existing payphones are located - what percentage are working - what obligations have been placed on the fixed line providers where payphones are concerned <p>-will the new payphone initiative under USF</p>	<p>The concession agreements lay out the provisions of these activities that must be met by the operators. Funding for these projects are addressed in the revised framework.</p> <p>The Authority is aware this data is necessary and is actively in the process of collecting and evaluating this data from TSTT.</p>

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			require replacement of all payphones (working and non-working)	
5.1 Administration and Structure of the Fund	Digicel		The decision of the Authority to exercise its powers to impose universal service charges on revenues from the mobile sector must be assessed within the context of the background set out in the comments.	Noted. See the Authority's earlier response to this issue.
5.1.1 Hierarchical Structure of the Universality Fund	Ministry of Public Administration	1. We suggest that there should be a dotted line reporting function from the FAC to the Board through the Board's Audit Committee or a committee formed for such a function.		While the Authority recognises the Ministry's concern, it must be noted that all functions of the Authority are audited through the Auditor General.

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		<p>2. We need to look at the governance structure for this Fund. The composition of this FAC should be rotated and should be dedicated to this process and NOT involved in the usual TATT operations (potential conflict of interest). We believe that the reporting function of the operations of the FAC should be differently structured and manned than that of TATT for obvious reasons. As an example, what is the process by which any member of the FAC can issue a minority report?</p> <p>3. A possible composition of the Committee could include</p>		<p>Further to this, an Audit Report of all the Authority's operations is reviewed by the Board's Audit and Tenders Committee.</p> <p>Therefore, as there is adequate accountability in the reporting process, the Authority does not believe there is need for the FAC to report directly to the Board's Audit Committee.</p> <p>The Authority does not agree that the current composition of the FAC is a conflict of interest. The Act identifies the UF as funds of the Authority and as such will be governed by the Authority's Financial Rules. Due to this process, there is adequate governance for the FAC to comprise of staff members.</p> <p>The Authority's agrees that the Committee should comprise of members with varying expertise.</p>

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		<p>persons with legal, accounting, economic and telecom engineering expertise. What other countries have followed this approach of having staff govern their UF? The money deposited to this UF will be large sums beyond the custodian responsibility of line management operating staff.</p> <p>4. For the purpose of UF administration, it is proposed that in the absence of an Audit Committee for the Board, a Compliance Committee comprising Board members, Ministry representatives and other key independent stakeholders be established to report to the Minister and retain a dotted line relationship with the UF committee.</p>		<p>Revisions have been made to the framework accordingly.</p> <p>With respect to the responsibility of managing the funds in the UF, as mentioned above all of the Authority's accounts are governed in accordance the Financial Rules to ensure transparency and accountability.</p> <p>In addition to this, the accounts of the fund will be published annually in the Fund Accounting Report which can be queried by the public.</p> <p>In accordance with Section 56 (2) of the Act, the Minister will receive reports and financial statements from the Authority in keeping with the requirements to submit to the Minister its budgets and finances.</p>

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5.1.2 Review of Universality Fund Activities	Ministry of Public Administration	This speaks to the review of the universality implementation, but does not sufficiently address the use of the UF, awarding of contracts etc. Hence the need for a Compliance Committee		<p>The framework speaks to the publication of :</p> <ul style="list-style-type: none"> • an Universality Strategic Implementation Plan which will address the universality initiatives to be financed through the UF; • an annual Fund Accounting Report showing the collection and disbursement of the UF. <p>Furthermore, the criteria to be met for the awarding of universality contracts is explained in the Section 7.</p>
Section 5.2.1	ICNTT	It should be first noted that, other than referencing the opportunity provided in the Act for such a request, TATT has		

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		<p>NOT justified why it intends to broaden the scope of applicability of the Obligation to Contribute to Universality Fund to include private telecommunications service providers and closed user groups.</p> <p>ICNTT believes the broadening of scope of applicability seems unjustified because:</p> <p>(a) A fundamental premise for the market funding Universality projects, is that the same market participants gain from otherwise unrealised revenue gained from the usage of the service by those provided to - consider the person who now has access to telecommunications services using those services to call persons on any network in the country, thus injecting new revenue into the sector.</p> <p>This premise is not true in the case of the Closed User Group or Private Telecommunications Provider. New usage on the public network will not impact the profitability of their solutions as that usage will not interact with their infrastructure or service product. It is thus unbalancing to the market for these participants to contribute to something for which they gain nothing, when other contributors stand to make direct or indirect gains.</p>	<p>The scope of applicability of the obligation to contribute to Universality should not be increased to include Closed User Groups and Private Telecommunications Service Providers until a quantitative and qualitative case has been made that such contributions are necessary to meet Programme Resource requirements.</p> <p>A concessionaire's revenues associated with the provision of closed user group services should not be included in the gross revenue total considered for the calculation of that provider's Universality obligation.</p>	<p>The Authority notes the comment. However the Authority believes that it should be fair and transparent in determining the contributors to the fund and as such has included the categories of closed user groups and private telecom service providers.</p>

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		<p>(b) With appropriate cost separation mechanisms – much like those proposed by the Authority, it should be transparent to TATT what revenues are generated via the provision of public versus closed user group services by the major providers. Accordingly, the regulatory oversight of TATT should be limited to revenues accrued through the provision of public services (except in the case where unwarranted fiscal transfers are determined to be happening). Therefore, in the context of (a) above, there is no need to further confuse the accounting separation framework by having these revenues further tapped by TATT, and mixing with new revenues generated as part of the Universality Programme. This will lead to opportunities for accounting maneuvers to facilitate cross subsidies.</p> <p>(c) This action will very likely have the effect of increasing the telecommunications costs to business, negatively impacting the competitiveness of the country as a destination of (non-energy) foreign direct investment. This is counter to the Object of the Act, and compromises a major aspect of GoRTT's strategy for market liberalization.</p>		

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		In effect, this seems like over-regulation or regulatory scope-creep which should be avoided.		
5.3 Accounting and Budgeting Separation for the Fund	Ministry of Public Administration	We need some clarification as to how the FAC members (who are TATT employees) will be remunerated for their activities in administration of the UF, in relation to their substantive duties. Also will their time management be practical allowing a fair deal to their substantive posts and the UF in the scheme of all things?		The Authority intends to hire additional staff members whose duties will include providing assistance to the FAC. As a result, persons who will perform the FAC substantive duties will be able to manage the Committee's responsibility. Therefore no additional remuneration is planned for the FAC members.
5.3.1 Contributions	Ministry of Public Administration	<ol style="list-style-type: none"> 1. These provisions should be placed in Regulations. This should simply be a general statement on the "basis of the contributions", rather than specific details. 2. How is the Regulator going to treat with the internal costs to service providers in providing compliance with UF regulations and policy? What form of recovery is being 		<p>The Authority has produced Universality Regulations to compliment the Universality Framework.</p> <p>These internal costs will form part of the total costs of the service provider's projects under the</p>

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		suggested or recommended? Inclusion as unavoidable costs in service costing or not?		obligations which will be funded by the UF. The service providers will provide the relevant accounts for the projects which the Authority will examine before issuing the relevant funding.
5.3.2 Fund Accounts and Budgets	Ministry of Public Administration	<ol style="list-style-type: none"> 1. Do the “accounts” mentioned refer to the UF bank accounts or the accounting records? 2. Is there a reference or benchmark for the 15% Administration Budget value, as it appears to be a bit too high? 10% may be more appropriate. Any excess should be transferred back to the Project Fund. 3. A finance strategy and investment policy giving specific details on how this money is to be kept/invested, and for what purposes it can be accessed needs to be included in Regulations. 		<p>The accounts refer to the UF's Bank account. The change is reflected in the revised document.</p> <p>The 15% is intended to cover the UF's administration costs consisting of the market assessments, needs assessments, independent surveys, the reverse auction process etc.</p> <p>The Act currently does not permit the Authority to invest monies collected for the UF.</p>

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5.3.2 Fund Accounts and Budgets	TSTT	<p>The Authority proposes that access to the account of the Universal Fund be limited as per the Authority's financial rules.</p> <p>TSTT notes also that TATT proposes to divide the UF into 3 budget categories, including an administrative budget, which will take potentially as much as 15% of the total budget. TSTT is concerned that there is potential for wasting financial resources in duplicating the existing administrative resources. If TATT maintains this position that such is necessary, then TSTT feels that greater accountability will be required in terms of how the Administrative Fund resources are utilized.</p>	<p>Are these rules publicly available? If not, it is recommended that they should be for transparency.</p> <p>Strict rules (available for public comment) should be established with respect to the Administration Budget to avoid unnecessary/unreasonable utilisation /duplication of the budget resources.</p>	<p>The Authority's Financial Rules will be published.</p> <p>The Authority notes TSTT's concern on the administrative budget.</p>
Section 5.3.2	ICNTT	<p>TATT has not justified why any of the Universality Fund should be expended on an "Administrative Budget."</p> <p>As provided for by the Act, TATT already garnishes substantial concession and licence fees annually to cover all its administrative and operational costs. The introduction of another revenue stream for general "Administrative Costs" seems overly burdensome to the sector, unwarranted and worst of all, provides an opportunity for fiscal malfeasance.</p>	<p>The Administrative Budget should be stricken from the provisioning of the Universality Fund.</p> <p>All costs associated with the administration of the Fund should be covered by TATT's annual Concession and</p>	<p>The Fund Administration Committee is the body responsible for overseeing the management of the Universality Fund. As such the Administrative budget should be extracted from the fund. It must be noted that the budget will be no more than 15% of the total budget fund.</p> <p>The 15% is intended to cover the</p>

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		<p>Secondly, considering the governance framework outlined in Section 5.1, every person identified therein (other than the ad hoc committee) is already the staff of the TATT. Thus all operational and administrative expenses should be covered by the fees accrued from the Concession and Licence fees, as mentioned above.</p> <p>Finally, TATT proposes comparative quanta of these Funds, without providing estimates for the consideration of the reader. Considering the amount of money discussed, it is untenable that such a budget - which is largely unaccounted for or justified in this proposal could be as great as 15% of the total fund. As outlined below, this could account for over TT\$10.068 Million annually, quite a significant sum which may be better utilized as investments directly into the marketplace.</p>	Licensing fees as well as miscellaneous service charges.	UF's administration costs consisting of the market assessments, needs assessments, independent surveys, the reverse auction process etc.
5.3.3 Individual Project Budgets	Ministry of Public Administration	Does TATT anticipate that each service provider would have to establish a separate UF accounting sub-unit to achieve this requirement? If so, would the cost of that additional sub-unit be allowed as a recoverable cost element in the service costing as well?		The Authority does not foresee the need for the service providers to establish separate UF accounting sub-units as this will be similar to any other project implemented by

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				the service provider. However this is a decision to be made by the individual service providers.
Section 6				
6.1 Universality Obligations	Ministry of Public Administration	The maximum contribution should be linked to some rationale (via calculation or detailed study) rather than just an intractable benchmark.		A detailed benchmark study has been incorporated into this section of the framework.
Section 6.1.1 The 'Paying' and 'Playing' Aspects of Universality Obligations	Digicel	<p>It is not sufficient to simply list 7 illustrative countries, where USF contributions are made on a percentage of revenue basis, as the foundation for a policy that could impact up to 2% of the revenues of all providers.</p> <p>In our view the telecommunications service has been improved throughout several developing countries via privately funded provision of wireless services without intervention from governments. It is passing strange that the Authority would wish to implement a policy for instance that may seek to expand fixed telephony in areas where the residents may not have it but would be (or already are) fully satisfied with access to mobile telecommunications. This is one example of how a USF approach may result in the Authority running the risk of directing investments into technologies that are either</p>	In order to truly be transparent and objective, the Authority should disclose an extensive list of countries where various approaches were used to accomplish USO's (not only those with USF's). The Authority should then direct the providers to the countries where a USF is used and demonstrate why the circumstances in Trinidad and Tobago are sufficiently similar that the implementation of a USF would be appropriate.	<p>Agreed. Revisions have been made to the framework.</p> <p>It must also be noted that fixed line provision has been considered a basic service in the framework therefore the reason for ensuring it is provided.</p>

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		<p>undesirable by the community or which are slowly becoming outdated.</p> <p>The Authority essentially has not shown how net benefit will accrue from the adoption of the its proposed universal fund policy – in other words, that the communal benefit will outweigh the diversion of financial and other resources from the operators that will accompany the USF policy in its current form.</p>	<p>The supporting evidence that lays the foundation for the Authority's approach to fulfilling USO's should be based on independently verifiable information and empirical studies conducted in several countries that can be shown to be relevant to the circumstances and market conditions existing in Trinidad and Tobago.</p>	<p>Agreed. Revisions have been included in the framework.</p> <p>The Authority does not believe the communal benefits arising out of universality can be quantified at this stage.</p>
6.1.1 Gross Revenue	TSTT	<p>A precise definition of "gross revenue" is required. Good international practice is to ensure that the revenues calculated for the purposes of determining an individual operator's contribution to the USF do not involve any double-counting of revenues, i.e., payments for interconnection or wholesale revenues should not be counted. Wholesale and interconnection payments form part of the cost-base on which retail services are sold. For example, in France and Spain, contributions are determined in proportion to turnover, less interconnect revenues; in Italy, each operator's contribution is calculated as a proportion of revenues less interconnection, leased lines and roaming costs. The U.S. uses end-user</p>	<p>To avoid double counting, eligible revenue should be collected end-user revenue. We believe that the U.S. has one of the more transparent contribution mechanisms for collection of revenues and aspects of it should be adopted. Most importantly, it allows for the end-user revenue contribution to be identified and collected as part of end-</p>	<p>A definition of gross revenue has been included in the framework.</p> <p>While the Authority notes TSTT's recommendation on adding the universality contribution to the end-user bill, we do not see this approach as appropriate at this time.</p> <p>The Authority believes that the</p>

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		<p>revenue.</p> <p>TSTT believes that funds should be collected from providers in a way that is transparent to all parties. This means that the total net costs of meeting the universal service requirement should be estimated as accurately as possible in the initial years and the results of those calculations published. That way, the contributions that need to be collected from operators can be directly linked to the costs of providing universal service, rather than being arbitrarily linked to their revenues. Some regulators, such as in Australia, achieve transparency by publishing both the total costs of the universal fund and the individual contributions made by each operator towards that fund.</p>	<p>user billing. In addition to conveying to the consumer how much the industry is investing in universal service. It also can ensure that collected revenues, as opposed to billed revenues, are the basis of contributions and therefore avoid undue burden on the service provider in the event of significant bad debt.</p> <p>TSTT submits that clear criteria should be developed to determine the best way to collect revenues for the Universality Fund. Regulatory best practice suggests that criteria such as economic efficiency, administrative efficiency, sustainability and equity are key components in determining the ideal way to bring revenues into the fund. TSTT respectfully refers TATT to the Regulatory Handbook, Module 6 pp 24</p>	<p>contributions should be collected from the service providers, not the end-users, as this is part of the industry's social responsibility.</p> <p>The Authority believes that its criteria for collecting UF contributions are one that promotes economic efficiency, administrative efficiency, sustainability and equity.</p>

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			<p>and 25.</p> <p>TSTT would also recommend as much transparency as possible with respect to publicising the total net costs of meeting the universal service requirement. It may also wish to consider publicising the contributions of individual service providers to the extent this is possible without revealing any confidential information.</p>	<p>As mentioned in the framework, the Authority will be publishing the costs of all universality initiatives and the contributions collected from service providers in its annual Fund Accounting Report.</p>
6.1.1. The 'Paying' Aspect of Universality Obligations	TSTT	<p>TATT proposes (at page 43) a review of contributions within a three year timeframe to avoid over or under contributions to the UF. However, it is not at all clear whether the objectives stated in section 3.6 to be achieved in two years would be any where achieved with a budget of 2% of gross revenues. Further, it is not clear what the TATT proposes to do in the event that there has been either over- or under-contribution to the UF (see also next comment).</p>	<p>We suggest that TATT either</p> <ul style="list-style-type: none"> eliminate the two-year requirement in favour of seeing what is practically possible with the contributions available, or 	<p>The Authority has revised the proposed timeframes in the framework.</p>

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			<ul style="list-style-type: none"> conduct a more detailed forecast of what the cost of achieving the objectives of 3.6, the likely budget available from concessionaires and set the timeframe for achievement accordingly 	
6.1.1. The 'Paying' Aspect of Universality Obligations	TSTT	<p>Until the net cost of providing universal service in any given year/time period is calculated or estimated, the possibility of over- or under-contributions arises. It is not clear what the TATT proposes to do in such circumstances. TSTT notes that Section 53 (6) of the Telecommunications Act states that a separate account should be kept and maintained by the Minister of Finance for depositing of funds and that the funds should not be used for any other purpose. However, it is not clear whether any over- or under-funding in a particular year/time period will be carried forward to the next year/period, or whether providers will be given refunds for any over-contributions or required to make additional contributions to meet any shortfall.</p>	<p>Clarification with respect to treatment of over- or under-contributions would be welcomed.</p>	<p>With regard to the over-or-under contribution issue, the Authority has adopted the UF approach where a fixed percentage of contributions is collected from service providers which will form the cost basis of the project initiatives to be implemented for the following year.</p> <p>As a result there should be limited, if not any, instances where a deficit of funds for the planned projects may arise.</p>

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				<p>Instances where the contributions may exceed the cost of initiatives for the year, the surplus amount will be rolled over to the next year contributions.</p> <p>In addition, the Authority may consider the granting of payment holidays or other types of incentives programmes where over-funding occurs.</p> <p>It must also be noted that the Authority intends to review the contribution levels every three years to limit the occurrences of over or under contributions.</p> <p>The above decisions have been included in the revised framework.</p>
6.1.1. The 'Paying' Aspect of Universality Obligations	TSTT	Whatever the contribution basis, the Ministry must commit to providing the industry the opportunity to recover such a levy.	As discussed, above, TSTT recommends a U.S. type approach is used whereby contributing service providers pass-through and identify the	The Authority views the service providers' contributions to the UF as a social responsibility and as such does not agree with the approach of introducing a levy on

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		<p>The universal service levy--in any form--will increase the cost of service provision of each contributing service provider. It is only fair therefore that each service provider should have the opportunity to recover that cost from the users of its services. The fact that the costs of universal service will ultimately need to be recovered from customers reinforces the need to ensure that the net costs of providing universal service are calculated as accurately as possible and published in the interests of transparency to all parties.</p>	<p>cost of the universal service levy to consumers explicitly on the consumers bills.</p>	<p>consumer bills.</p> <p>As mentioned above, the Authority has lessened the amount of universality contributions required by public domestic concessionaires.</p>
6.1.1. The 'Paying' Aspect of Universality Obligations	TSTT	<p>The pass-through of carrying the universal service levy should be transparent.</p>	<p>Service providers should list the charge to the end-user on his or her bill and TATT should clarify that any such charge cannot form part of the revenues for the purpose of determining the service providers' contributions to the universal service fund.</p>	<p>As mentioned above, the Authority views the service providers' contributions to the UF as a social responsibility and as such does not agree with the approach of introducing a levy on consumer bills.</p>
6.1.1. The 'Paying' Aspect of Universality Obligations	TSTT	<p>TSTT believes that all service providers getting benefit from the Trinidad & Tobago market should contribute to the universal service regime. For example, the possibility of including a universal service levy on all incoming international calls being terminated on fixed, fixed wireless or mobile</p>	<p>TATT should consider a non-discriminatory charge on international carriers.</p>	<p>The Authority notes the comment by TSTT. The section on contributions to the UF has been revised.</p>

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		<p>networks could be considered.</p> <p>It would be important to ensure, however, that such a measure would not result in foreign operators being unduly taxed. However, a non-discriminatory means could be adopted by ensuring, for example, that foreign operators contributed no more than domestic operators to the universal service fund.</p>		
6.1.1 The 'Paying' Aspect of Universality Obligations	Ministry of Social Development, Disability Affairs Unit	In Colombia, the percentage of net revenues from fixed telephone, VAS, trunking etc is left out.	Please review	The amendment is made in the revised framework.
<p>6.1.1 Statement on Contributions to the UF as the 'Paying' Aspect of Universality Obligations:</p> <p>The Authority proposes to impose a universality obligation of a contribution to the UF that is 2% of total gross annual revenue on all concessionaires which operate</p>	CCTL	CCTL believes this statement does not recognize that domestic concessionaires already contribute to Universality by just having their domestic networks deployed and in service. Therefore, domestic concessionaires should contribute substantially less than parties without domestic networks to the Universality Fund. This model was suggested by the Government of Trinidad and Tobago's discussion paper on Universality of Telecommunications Services in T&T, and CCTL believes that such approach is the most rational.	<p>CCTL recommends that this Statement be re-drafted as follows:</p> <p>Statement on Contributions to the UF as the 'Paying' Aspect of Universality Obligations:</p> <p>The Authority proposes to impose a universality</p>	<p>TATT does not agree with the statement "domestic concessionaires should contribute substantially less than parties without domestic networks to the Universality Fund."</p> <p>However, the Authority has revised the level of contributions initially suggested in the plan.</p>

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a public telecommunications network or provide a public telecommunications service and other groups designated to contribute to the UF pursuant to Section 28(4) of the Act.			obligation of a contribution to the UF that is 1% of total gross annual revenue on services provided by all concessionaires which operate a domestic public telecommunications network or provide a domestic public telecommunications service, and 2% of total gross annual revenue on services provided by all concessionaires which operate an international public telecommunications network or provide public international telecommunications services and other groups designated to contribute to the UF pursuant to Section 28(4) of the Act.	
Section 6.1.1	ICNTT	Most troubling of all the concerns mentioned above is that, with all the information offered regarding the number of communities with various DAI's and DOI's, TATT does not provide a quantifiable estimate of the expected cost of the Universality Programme. Without such rough budgeting figure it is quizzical how the amount of contribution identified in this Section can be reasonable or justifiable.		The estimated costs of the projects will be published in the Authority's Universality Strategic Implementation Report and its Universality Fund Accounting Report. These reports will be made available to the public.

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		<p>Further, of the jurisdictions used for the benchmark, none is a small island developing state (SIDS), as is Trinidad and Tobago. Further, none is comparative for population amount and/ or geographic distribution as is the context of Trinidad and Tobago.</p> <p>ICNTT proposes to develop some context of the scope of money being considered. According to the Report of the Telecommunications Market to December 2007, the revenue generated in the Public Telecommunications Sector was estimated at TT\$3.356 billion. Here, the TATT proposes to demand 2%, or TT\$67.12 million annually from the market. This is a significant surcharge to demand without appropriate budgeting estimates, instead armed only with theory and good will.</p> <p>This is not adequate transparency considering the sum of money being discussed. TATT must recognize that Universality contributions, as an obligation, can impact an operator's ability to meet debt servicing requirements. Accordingly, the application and quanta of such provisions</p>	<p>TATT should review its benchmark jurisdictions, instead considering nation's of similar context to Trinidad and Tobago.</p> <p>TATT should provide a provisional plan of action, and provisional budgetary estimate for the Programme. This cost should be used as the fund raising target when determining the percentage charge on concessionaire revenues.</p>	<p>The revisions have been made to the document.</p> <p>The Authority intends to provide this information in the Universality Strategic Implementation Report and the Universality Fund Accounting Report.</p> <p>In addition, the Authority is adopting a fixed percentage approach such that service providers are granted a level of certainty with respect to the amount of contributions they are required to pay for the year.</p>

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		<p>should be made carefully, with consideration for minimising the impact to/ burden on the sector while assuring enough resources are accrued to ensure TATT achieving its goals.</p> <p>Without an estimate of demanded revenue over an initial period, the setting of 2% seems arbitrary and punitive. Further, the quanta seems geared to the larger providers that may be able to support such a levy. It does not at all consider the impact on the smaller participants, the entrepreneurs in the marketplace.</p> <p>Finally, there is no discussion about what is to happen to any surplus funds that may remain in the Fund after the completion of a Programme Cycle. To ensure efficiency of use, there should be a framework where surplus funds is returned to the concessionaires in accordance of their percentage contributions to the Funds ultimate value.</p>	<p>Provisions should be included for the return of unused funds to the market participants.</p>	<p>Revisions have been made to the document which explains how the Authority will treat surpluses in the UF.</p>
6.1.2 The 'Playing' Aspect of Universality Obligations	TSTT	<p>TSTT has noted the reverse auction process. In this regard TSTT has two comments as follows</p> <ul style="list-style-type: none"> • TSTT believes that the level of detail submitted at this stage for the reverse auction process is premature and at this 	<p>TSTT thinks that at this stage it is more important for TATT to concentrate on identifying the exact scope of the universal service/access obligation and estimating the net costs of meeting that obligation.</p>	<p>As previously mentioned, the Authority is adopting a fixed percentage approach such that service providers are granted a level of certainty with respect to the amount of contributions they are required to pay for the year.</p>

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		<p>stage it is more important to concentrate on identifying the exact scope of the universal service/universal access obligation and estimating the net costs of meeting that obligation. TSTT recognizes, however, that one of the perceived benefits of a “pay or play” type system of funding universal service projects is that it is easier to establish upfront the costs of providing a specific universal service/access project.</p> <ul style="list-style-type: none"> • TSTT believes that there could be a role for such a process but only once specific projects have been identified and some estimate of the net costs of delivering those projects calculated. This would also ensure that any bids received could be judged in terms of value for money. <p>If no-one chooses to participate in the particular auction for the roll out of services, TATT proposes that the obligation will be placed on the service provider with the highest penetration rate</p>	<p>TATT needs to identify and agree with the industry and consumer groups etc. the exact areas that require universal service, in terms of location, services etc. and the mechanism for supplying that service – whether through a “pay or play” type auction process or more traditional means - be determined thereafter. An estimate of the net cost of the universal service project should be made, regardless of whether the project is then put out to auction.</p> <p>TSTT seeks clarification on how penetration rates will be determined, particularly where a service can be /is being provided using different technologies.</p>	<p>Therefore the amount of UF contributions for the period will not be directly affected by the cost of the projects.</p> <p>In addition, the Authority has begun collecting data to be used for the identification of the UAs.</p> <p>After which the Authority intends to implement both market and cost assessments for the purpose of estimating the net costs of delivering the universality projects for the period. This estimated net cost will form the financial basis of the auction process.</p> <p>The term ‘penetration’ in this statement has been changed to capacity such that the service provider with the highest available network capacity and the least infrastructural build out required</p>

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		<p>in the region. For such a proposal to work it will be necessary to ensure that the service provider that is given the obligation is compensated for the net costs of providing the project.</p> <p>TSTT notes also that one of the bidding criteria will be for the provider to describe benefits to the community. The concern here is that telecommunications providers are being asked to step outside of their area of expertise. This goes to the earlier point about the role of other agencies in improving the digital access /opportunity indicators for Trinidad and Tobago. In other words, TSTT's view is that the role of providers should be limited to the provision of a service that has the potential to lead to a desired outcome. However that desired outcome (increasing the digital access/opportunity indicators) should fall squarely within the ambit of Government, NGO's, schools, libraries and other public institutions.</p>	<p>The community benefit consideration should be removed from the RFP as well as any other indicator that tends to imply that telecommunications service providers are responsible for both the eventual outcome as well as the initial provisioning of the service (e.g publicity and community inclusion programmes should not form part of the provider responsibility).</p>	<p>to rollout services in that region will be responsible for carrying out the universality obligation for the community.</p> <p>The Authority agrees with TSTT's comment and has removed this section from the document.</p>

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6.1.2 The 'Playing' Aspect of Universality Obligations	Ministry of Social Development, Disability Affairs Unit	The Ministry of Social Development fully supports a needs assessment.		Noted.
<p>6.1.2 Statement on 'Playing' Aspect of Universality Obligations:</p> <p>In addition to, and after contributing towards the UF, the Authority proposes that concessionaires authorised to provide fixed telephony services and broadband Internet services (≥ 512kbps) would also have the option of bidding to implement universality initiatives identified for communities and population groups found to be within the access gap.</p>	CCTL	CCTL reminds the Authority of the construction of A15(1)(a) and (b) of all parties' Concessions, which allows parties to deduct their investments to universality from their contribution to the Universal Service Fund. The present policy does not attempt to mirror this framework which was very fair and reasonable – the present policy implies that parties have to contribute 2% of gross revenue, while still fulfilling Universality obligations. That seems patently unfair to domestic concessionaires who may wish to fulfill Universality Service Obligations by simply expanding their plant into, or providing public access (i.e. payphone or Community Access Centre) services in uneconomic areas in preference to paying to a UF – however, this provision as drafted will act as an absolute disincentive for operators to demonstrate such practices. Ultimately, what the Authority is trying to achieve is universality of services, not creating a huge Universality Fund	CCTL recommends that the incentive to allow operators to satisfy its Universality obligations, as a substitute to contributions to the Universality Fund, be retained.	<p>The UF approach presented in the framework does not contradict Clause A15(1)(a) and (b) of the concession. While service providers are required to submit their contributions to the Authority up front, they will be fully compensated for all universality obligations to be undertaken.</p> <p>This approach is simpler than that suggested by CCTL and it allows a level of certainty to service providers in determining the amount of UF to be paid for the period.</p>

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<p>Section 6.2 Universality Obligations on Service Providers successful in Reverse Auctions.</p>	<p>Digicel</p>	<p>The Authority has determined that mobile telephony shall be excluded from universal service obligations under section 28(1). This position was adopted given the high penetration level for mobile telephony in light of the mobile operators' satisfaction of rollout obligations in their concessions. Mobile operators were therefore already mandated in their concessions to undertake vast expenditure that was in the nature of carrying out universal service obligations in their sector. To impose a further financial obligation in respect of universal service would be tantamount to double taxation.</p> <p>Those concessionary obligations were not to be taken lightly as there were performance bonds put up by the operators and one mobile operator who failed to meet the coverage obligations has been fined and has had their concession revoked. Further, we have already mentioned that in addition to the extraordinarily high penetration level in Trinidad and Tobago, promotional offers have been running from time to time on prices of phones and tariffs since our launch.</p> <p>Section 28(8) of the Act provides that the obligation to provide and contribute to universal service funding shall be applied on a non-discriminatory basis as between all similarly situated telecommunications providers. Digicel is not clearly not</p>	<p>Section 6.2 Universality Obligations on Service Providers successful in Reverse Auctions.</p>	<p>It must be noted that similar obligations are required of fixed and internet service providers.</p> <p>The Authority sees the contributions towards universality as a social responsibility required of all service providers. All concessionaires have to meet these obligations.</p> <p>This concessionaire referred to here failed to launch therefore was unable to meet its coverage obligations.</p> <p>The Authority disagrees with this statement as Digicel has a</p>

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		<p>“similarly situated” with integrated service providers offering various services where an access gap does exist such as TSTT (fixed telephony, mobile telephony, internet and cable) and Flow (cable, internet and fixed telephony).</p> <p>Consequently, Digicel should not be expected to make contributions to the universal service fund at the same level as those providers, if at all. If the charges were imposed on Digicel, even then it should incur an amount that is lower than that of integrated providers, who were until recently monopoly providers still with the benefit of monopolistic profits accrued over the years in the form of retained earnings.</p> <p>Coincidentally it is these very same providers who at the time when they enjoyed monopolistic profits refused to lay out the necessary telecommunications infrastructure that is responsible for the current access gap. The Authority is now asking new entrants in individual sectors to subsidise those providers to finance activities that should have been carried out by them when they were accruing monopoly profits.</p>		<p>significant percentage of the mobile market share.</p> <p>In addition, the Authority is technologically neutral and cannot discriminate against service providers offering other services.</p> <p>There will be no discrimination against any concessionaire regarding their levels of contribution towards the UF.</p> <p>However, revisions have been made to the framework regarding the level of UF contributions required by concessionaires.</p>
Section 6.2	ICNTT	Despite the many references to “access nodes” in GoRTT’s	Payphones should be included	Revisions have been made to the

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		<p>Universality Policy, This section provides the first declaration that “public payphone services” are included as a basic service. This is not in alignment with Section 2.3 above, and thus seems unconsidered by the provisions outlines in the document up to this point.</p> <p>First, ICNTT would like to make it clear that it is not against the continued implementation of payphones throughout Trinidad and Tobago, however, payphones are aspects of a Universal Access regime as opposed to the Universal Service regime proposed by TATT. Further, with the proliferation of mobile phones, the sustainability of payphones is severely hampered. The discourse up to this point has not adequately addressed reasonable mechanisms to address these operational concerns for inclusion in the implementation framework.</p> <p>Most ominously, TATT states that it will “impose the obligation” on some undefined person or sub set of persons to provide these payphones – without any subsidy from the Universality Service Fund. Such an obligation would thus represent a double charge on the obliged provider requiring:</p> <ul style="list-style-type: none"> (i) the 2% of gross revenue remittance, and (ii) the absorbing of unknown operational costs for public 	<p>in Section 2.3 as an obligation associated with Universality.</p> <p>TATT should provide some context into the continued feasibility of payphones in Trinidad and Tobago.</p> <p>TATT should clearly articulate to whom the obligation is to imposed on. Further, the cost of meeting that obligation should either:</p> <ul style="list-style-type: none"> (i) be subsidized by the Fund; or 	<p>framework.</p> <p>The comment is noted. The Authority is currently pursuing such an exercise.</p> <p>The comment is noted. Revisions have been made to the framework.</p>

³³ MPAI, 2005, “Unified Telecommunications Concession.” Available here: <http://www.fastforward.tt/files/cms/TandT%20Telecoms%20Concession.pdf>

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		<p>payphones.</p> <p>TATT even recognizes the substantial cost risk of such an endeavour – particularly one not planned as part of the firm's business case. Despite this, it proposes to still demand such an obligation. ICNTT also notes that such a double charge exceeds the similar obligation enshrined in the Concession³³, where the cost of the operation of payphones was deducted from the Fund contribution demarked by a similar percentage of gross revenue.</p> <p>This raises a number of concerns which ICNTT finds introduces unreasonable risk and cost burdens which will challenge the viability of an operation in Trinidad and Tobago. As TATT has not identified who will be so obliged, and as such obligation is more onerous than that agreed to in the Concession, ICNTT rejects this proposal out of hand as being unreasonable in conjunction with an already arbitrary and burdensome obligation of contribution to the Fund amounting to 2% of gross revenue. ICNTT may deem such a provision as TATT over-extending the agreement enshrined in the Concession.</p>	<p>(ii) Be included as part of the operator's 2% of gross revenue remittance.</p>	

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<p>6.2.1 Infrastructure Development Initiatives</p> <p>Payphones</p>	<p>Ministry of Public Administration</p>	<ol style="list-style-type: none"> <li data-bbox="852 358 1666 467">1. We may want to also consider universality funding coverage for certain 800 call services from e.g. non-profit, NGOs, government agencies, or other social services <li data-bbox="852 781 1666 1031">2. This amounts to geographic averaging, a regime that is being avoided internationally by most regulators. Instead, has any consideration been given to rate rebalancing? If that were done, the true cost of access would be charged to all users and special or “explicit” subsidies could then be offered to the most needy users via credits on their bills or pre-paid receipt. 	<p>We suggest that the affordability subsidy be calculated and disbursed on the basis of de-averaged rates.</p>	<p>The Authority believes these prescribed initiatives should be funded by the relevant Ministries. However the Authority may consider providing some level of funding for those agencies not subsidized.</p> <p>The Authority disagrees with this comment.</p> <p>The amount charged for the service should be based on the economic costs and level of affordability of that service.</p> <p>As such, the price charged by the service provider should be reflective of the true price of providing that service in the area and not the average price of providing the service throughout the country.</p>

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Directory assistance services		<p>3. GENERAL COMMENT: There needs to be a clear distinction in terms and application, between “wireless” and “mobile”. It appears that the terms are being used interchangeably.</p> <p>4. Consideration should be given to fixed wireless or even “fixed mobile” technologies to deploy payphone infrastructure as well.</p>		<p>In addition, Trinidad and Tobago may be too small to pursue such an initiative as it will be somewhat difficult to implement.</p> <p>We believe the price of the service should be uniform throughout the country.</p> <p>The framework has been revised so as to provide clarity between the two terms.</p> <p>The Authority is adopting a technology neutral approach for the deployment of services. Thus service providers have the option to adopt the relevant technology they deem cost-efficient and practical for the provision of the service.</p>

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		5. What's the plan for having a universal directory assistance service for the country?		This issue is covered in Section 7 of the framework.
6.2.1 Payphones	TSTT	<p>TATT considers payphones to be the starting point for ensuring that access to telecommunications services are universally available. TSTT notes that there has been no recognition in the document of the servicing of this obligation by TSTT. Furthermore, TSTT believes that, given the level of mobile penetration, and the consequent reduction in use of this service, that there should be some reconsideration of payphones as a service that falls under universality obligation</p> <p>Vandalism is only one factor affecting the viability of this service. The most significant factor, however, is that subscribers are increasingly using other means of communication resulting in significant losses for this service. TATT is invited to review the attached spreadsheet, showing the ongoing decline in revenues from October '06 to July '08</p> <p>The above will be compounded by TATT's proposal that it intends that only a certain number of payphones will benefit from a subsidy from the UF.</p>	<p>It is recommended that the number of payphones required to satisfy the universality obligation for that service be</p>	<p>The Authority has given recognition to the universality initiatives already in place by service providers in the revised framework.</p> <p>While the Authority notes the concerns of TSTT, The objective of mandating payphone services is to satisfy the need of the public if they cannot get access to an individual fixed line or mobile service.</p> <p>The Authority notes the comment by TSTT and as such has made the appropriate revisions to this section of the document.</p>

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			reduced significantly, or the level of funding /subsidy proposed by TATT be increased.	
6.2.1 Internet	TSTT	There appears to be an assumption in favour of utilizing the fixed transmission network as the basis for rollout of the necessary infrastructure. TSTT would caution against such a restrictive prescription. Wireless transmission infrastructure could be a viable option in some parts of the country and under such circumstances it would be legitimate to use universal service funds for this purpose, as this would be distinct from the general rule that universal service funds should not be made available for public mobile telephony services, mentioned above.	Wireless transmission infrastructure should be considered a viable option particularly in geographically challenged areas of the country	The Authority is adopting a technology neutral approach for the deployment of services. Thus service providers have the option to adopt the relevant technology they deem cost-efficient and practical for the provision of the service, including that of Internet services. For clarity revisions have been made to the framework.
6.2.1 Infrastructure Development Initiatives	Ministry of Social Development, Disability Affairs Unit	2 nd paragraph should probably read, "In recent times, many Jurisdictions..." rather than "...may Jurisdictions."	Please review	Correction noted.

Document Sub-Section	Submission Made By: Stakeholder Category²⁸	Comments Received	Recommendations Made	TATT's Decisions
6.2.1- Infrastructure Development Initiatives	Ministry of Social Development, Disability Affairs Unit	Payphones should be physically accessible and include essential accessible features for all persons with disabilities.	<ul style="list-style-type: none"> • Payphones should include accessible features similar to those indicated on pg 52 • Where pay phones are installed at schools, community centers etc, the facility should be physically accessible for persons with mobility challenges. 	<p>The Authority intends to provide a percentage of payphones throughout the country with appropriate facilities for the differently-abled.</p> <p>The Authority will liaise with the relevant agencies to determine the distribution of such payphones such that they are easily accessible for example in libraries, cities.</p>
6.2.1 Infrastructure Development Initiatives	Ministry of Social Development, Disability Affairs Unit	Consideration should be made for visually impaired persons etc, to have access to emergency services.		This section has been revised in the framework.
6.2.1 Infrastructure Development Initiatives	Ministry of Social	Directory assistance services should be made available in a manner accessible to all persons with disabilities.	The printed directory of subscribers should also be	This section has been revised in the framework.

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- Directory Assistance Service	Development, Disability Affairs Unit		available in electronic and Braille format.	
6.2.2 Assistive Technologies	Ministry of Social Development, Disability Affairs Unit		Similarly, provision of directories and bills should be available in electronic format for visually impaired persons.	This section has been revised in the framework.
6.2.2 ASSISTIVE TECHNOLOGIES Ensuring Access by Persons with Disabilities	CCTL	CCTL understands and appreciates the Authority's intent in this regard. However, due to the relatively small numbers associated with providing these assistive technologies, it would be more economic if one entity or body purchases these technologies, and funding for these purchases be sourced from the Universality Fund, whether as a deduction from a party's Universality Fund Contribution, or as a direct payment from the Universality Fund.	CCTL recommends due to economies of scale that one entity or body purchase these assistive technologies, and funding for these purchases be sourced from the Universality Fund, whether as a deduction from a party's Universality Fund Contribution, or as a direct payment from the Universality Fund.	The Authority is considering this recommendation by CCTL.
6.2.2 Assistive Technologies	Ministry of Public	We need to address assistive technologies or services for broadcasting services (e.g. sign language or closed caption on		Section D6 of the concession document addresses this concern.

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	Administration	news programmes). We recognize that this is not currently covered under the Act; however, it was raised by the differently-abled community as a desired service.		The Authority will be ensuring that the broadcasters meet this concession obligation.
6.2.3 Special Tariffs Scheme (for Low Income Users) Call Barring Prepaid Scheme	Ministry of Public Administration	<ol style="list-style-type: none"> 1. We should consider tempering this option with usage bands i.e. applying different tariffs depending on number of minutes used per month. 2. Considering that international rates have been dropping and will continue to do so, we may want to revisit the feasibility of this option particularly for certain population groups 3. There is no need for prepaid rates being set higher than normal, since there are several avoidable costs with prepaid e.g. billing systems, debt management, customer centres, etc. 4. There needs to be a rational relationship between the prepaid rates charged and the objective of this universality service. 		<p>With the service providers current billing system this initiative will be difficult to implement.</p> <p>This option is possible with call barring if the customer purchases a prepaid phone card. However revisions have been made to the framework.</p> <p>This recommendation has been included in the framework.</p> <p>Noted.</p> <p>This section has been significantly revised in the framework.</p>

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<p>6.2.4 Statement on Universality Initiatives undertaken by Government Agencies:</p> <p>The Authority proposes that Community Access Centres, and any other Universality initiative undertaken by a Government agency, should be eligible for funding from the UF to the extent that it may be required. The Authority proposes that the Fund Administration Committee would be required to determine the extent to which the UF could subsidize universality initiatives undertaken by Government for a given year, in consultation with the Ad hoc Input Group, which should have representatives from the respective government agency and contributors to the UF.</p>	CCTL	<p>It is absolutely necessary that contributors to the UF have visibility to any funding being provided from the Universal Service Fund for these initiatives, especially if a contributor believes it can provide the infrastructure services at a lower price than that being charged by the selected provider in question, for the particular initiative. This would ensure that the most efficient and cost-effective solution is utilized in achieving Universality objectives.</p>	<p>CCTL agrees with the proposal for contributors to the UF having visibility of projects expensed to the UF.</p>	<p>Noted. These projects will be listed in the Universality Strategic Implementation Report and the Fund Accounting Report to be published.</p>

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6.2.4 Access to Telecommunications Development Initiatives Community Access Centers	Ministry of Public Administration	<ol style="list-style-type: none"> 1. The Ministry through the National ICT Centre intends to deploy CACs as part of its NICT Plan. In adherence to the principles of US funding will government CACs be eligible for US funding and will this mean the NICT Centre will have to be classified a service provider and contribute to the US fund as well? 2. Conversely, Government intervention via CAC funding could be considered a direct subsidy to the US fund and treated as an accounting adjustment to the balance in the Fund i.e. increasing contributions or reducing operator liability. 3. To follow the trail of true economic costs and measure the trends of efficiency won in the market, the ideal of cost based pricing should be upheld. Any subsidy should be shown as an “explicit” subsidy and netted against the full economic (cost-based) price. 		<p>The Authority has considered this proposal and has made revisions to the framework such that a maximum of 5% of the Universality budget may be allocated annually towards government initiated projects.</p> <p>Noted.</p>
6.2.4 Community Access Centres	TSTT	TSTT notes again that there has been no acknowledgement of the initiatives by providers in the rollout of universal service obligations. The forerunner to the Government’s Community	TSTT therefore respectfully submits that TATT consider the funding/subsidy of such	The Authority will consider the suggestion proposed by TSTT.

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		<p>Access Centres Programme, the TSTT Community Communication Centres, started about four years ago and to date TSTT has rolled out about seven such Centres in areas as diverse as Navet, Blanchisseuse, Speyside and Morvant. These have proven to be loss-making and some consideration may have to be given to terminating the programme in the event that the TATT does not determine that they too should be eligible for funding from the UF.</p>	voluntary programmes.	
Section 6.2.4	ICNTT	<p>The policy statement on Community Access Centres (CAC's) is noted considering that, as pointed out above, the GoRTT Universality Policy Framework identified such CAC's as both:</p> <ul style="list-style-type: none"> (i) the targets of infrastructure development projects of the Universality Programme; and (ii) eligible for telecommunications service usage subsidies from the Universality Fund. <p>Worryingly, the Policy statement does not specify exactly which operations of the CAC will be subsidised. While the GoRTT Universality Policy seemed to suggest that the subsidy would only apply to reducing the cost of telecommunications</p>	TATT and the Ministry of Public Administration should cause to be published the final, approved version of the Policy on Universality for consideration and information of all stakeholders.	The Authority agrees with the recommendation.

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		<p>services associated with the operation of a CAC (school, library or other such identified locations³⁴), TATT's statement proposes broader application of the Fund to subsidise all operations of CAC's or "similar initiatives of GoRTT".</p> <p>Returning to the principle guiding the self-funding approach to Universality, services such as photocopying, training and tutorials and word processing etc. do not fall under the ambit of services for which telecommunications operators generate revenues. For the contributions of the Fund to be used to subsidise these services seems unwieldy and inappropriate. Further there seems no provision for ensuring efficiency in these operations to maximize the impact of such subsidy.</p> <p>Cumulatively, this continues the paradigm throughout this implementation framework of widespread, inefficient taxing of the operations, and thus profitability, of telecommunications concessionaires.</p>	<p>TATT should clarify what aspects of a CAC's operation is to be subsidized by the Fund. ICNTT strongly recommends that the subsidy should only apply to telecommunications services utilized.</p> <p>It is recommended that the application of the Fund be more focused on the core objective of the Programme, so as to ensure that the fiscal and operational burden of the concessionaires is minimized.</p>	<p>The Authority notes the recommendations by ICNTT.</p>

³⁴ Federal Communications Commission (2005), "FCC's Universal Service Programme for Schools and Libraries", available online at <http://www.fcc.gov/cgb/consumerfacts/usp.school.html>

