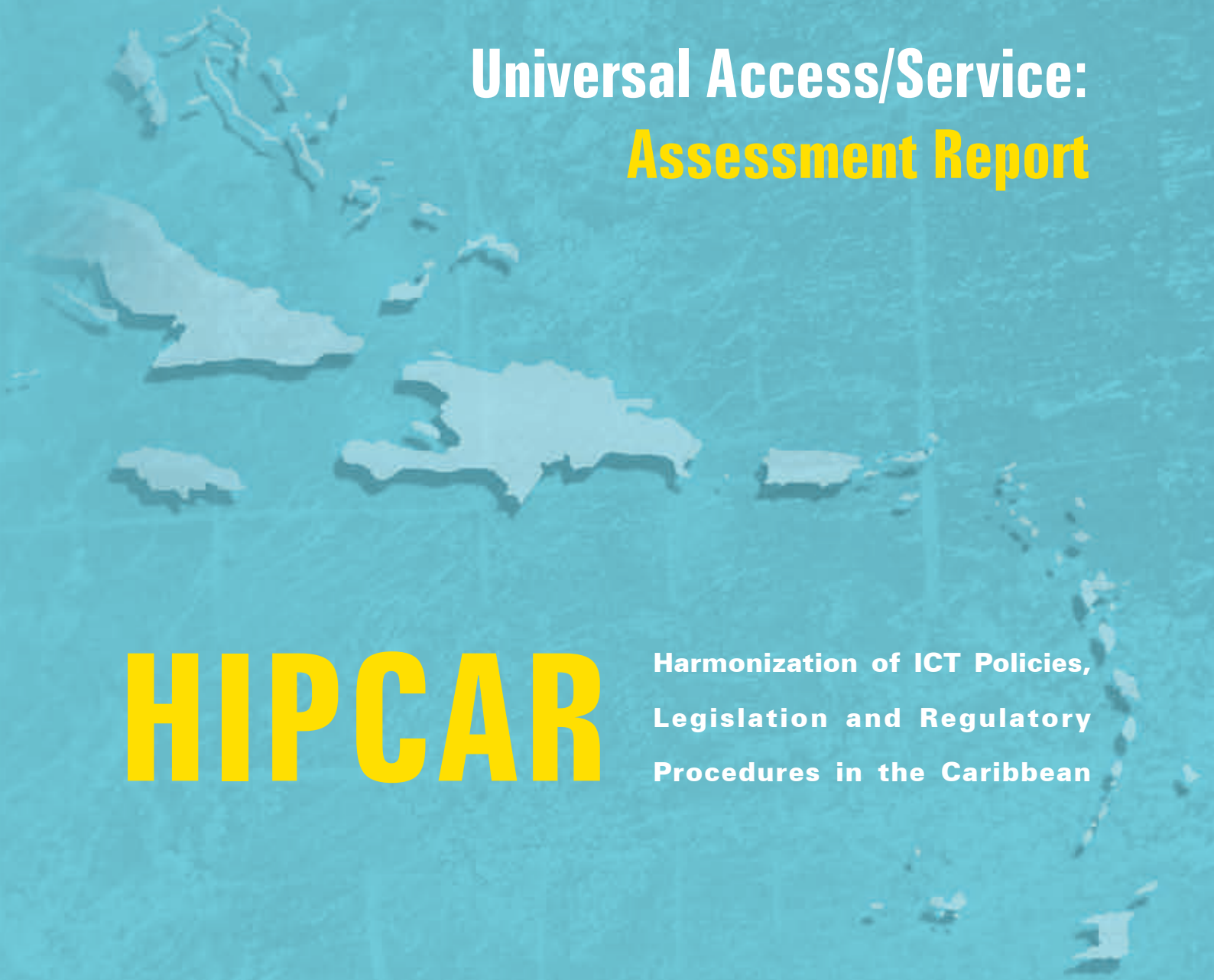
Establishment of Harmonized Policies for the ICT Market in the ACP countries

Universal Access/Service: Assessment Report



HIPCAR

Harmonization of ICT Policies, Legislation and Regulatory Procedures in the Caribbean

European Commission

CARICOM

CTU

ITU

Establishment of Harmonized Policies for the ICT Market in the ACP Countries

Universal Access/Service:

Assessment Report

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Foreword

Information and communication technologies (ICTs) are shaping the process of globalisation. Recognising their potential to accelerate the Caribbean region's economic integration and thereby its greater prosperity and social transformation, the Caribbean Community (CARICOM) Single Market and Economy has developed an ICT strategy focusing on strengthened connectivity and development.

Liberalisation of the telecommunication sector is one of the key elements of this strategy. Coordination across the region is essential if the policies, legislation, and practices resulting from each country's liberalisation are not to be so various as to constitute an impediment to the development of a regional market.

The project 'Enhancing Competitiveness in the Caribbean through the Harmonization of ICT Policies, Legislation and Regulatory Procedures' (HIPCAR) has sought to address this potential impediment by bringing together and accompanying all 15 Caribbean countries in the Group of African, Caribbean and Pacific States (ACP) as they formulate and adopt harmonised ICT policies, legislation, and regulatory frameworks. Executed by the International Telecommunication Union (ITU), the project has been undertaken in close cooperation with the Caribbean Telecommunications Union (CTU), which is the chair of the HIPCAR Steering Committee. A global steering committee composed of the representatives of the ACP Secretariat and the Development and Cooperation - EuropeAid (DEVCO, European Commission) oversees the overall implementation of the project.

This project is taking place within the framework of the ACP Information and Telecommunication Technologies (@CP-ICT) programme and is funded under the 9th European Development Fund (EDF), which is the main instrument for providing European aid for development cooperation in the ACP States, and co-financed by the ITU. The @CP-ICT aims to support ACP governments and institutions in the harmonization of their ICT policies in the sector by providing high-quality, globally-benchmarked but locally-relevant policy advice, training and related capacity building.

All projects that bring together multiple stakeholders face the dual challenge of creating a sense of shared ownership and ensuring optimum outcomes for all parties. HIPCAR has given special consideration to this issue from the very beginning of the project in December 2008. Having agreed upon shared priorities, stakeholder working groups were set up to address them. The specific needs of the region were then identified and likewise potentially successful regional practices, which were then benchmarked against practices and standards established elsewhere.

These detailed assessments, which reflect country-specific particularities, served as the basis for the model policies and legislative texts that offer the prospect of a legislative landscape for which the whole region can be proud. The project is certain to become an example for other regions to follow as they too seek to harness the catalytic force of ICTs to accelerate economic integration and social and economic development.

I take this opportunity to thank the European Commission and ACP Secretariat for their financial contribution. I also thank the Caribbean Community (CARICOM) Secretariat and the Caribbean Telecommunication Union (CTU) Secretariat for their contribution to this work. Without political will on the part of beneficiary countries, not much would have been achieved. For that, I express my profound thanks to all the ACP governments for their political will which has made this project a resounding success.

Brahima Sanou
BDT, Director

Acknowledgements

The present document represents an achievement of the regional activities carried out under the HIPCAR project "Enhancing Competiveness in the Caribbean through the Harmonization of ICT Policies, Legislation and Regulatory Procedures", officially launched in Grenada in December 2008. It is a companion document to the Model Policy Guidelines and Legislative Texts on this HIPCAR area of work[1].

In response to both the challenges and the opportunities from information and communication technologies' (ICTs) contribution to political, social, economic and environmental development, the International Telecommunication Union (ITU) and the European Commission (EC) joined forces and signed an agreement aimed at providing *"Support for the Establishment of Harmonized Policies for the ICT market in the ACP"*, as a component of the Programme "ACP-Information and Communication Technologies (@CP-ICT)" within the framework of the 9th European Development Fund (EDF) i.e., ITU-EC-ACP project.

This global ITU-EC-ACP project is being implemented through three separate sub-projects customized to the specific needs of each region: the Caribbean (HIPCAR), sub-Saharan Africa (HIPSSA) and the Pacific Islands Countries (ICB4PAC).

The HIPCAR Steering Committee was created and chaired by the Caribbean Telecommunications Union (CTU) who provided general guidance and support to a team of consultants led by Ms. Sofie Maddens Toscano and including Mr. J Paul Morgan and Mr. Kwesi Prescod, who prepared the initial draft documents. The documents were then reviewed, finalized and adopted by broad consensus by the participants at the First Consultation Workshop for HIPCAR's Working Group on ICT Policy and Legislative Framework on Telecommunications matters, held in Trinidad and Tobago on 26-29 October 2009. Based on the assessment report, Model Policy Guidelines and Legislative Texts were developed, reviewed and adopted by broad consensus by the participants at the Second Consultation Workshop held in Suriname on 12-15 April 2010.

ITU would like to especially thank the workshop delegates from the Caribbean ICT and telecommunications ministries and regulators as well as their counterparts in the ministries of justice and legal affairs, academia, civil society, operators, and regional organizations, for their hard work and commitment in producing the contents of the HIPCAR model texts. The contributions from the Caribbean Community (CARICOM) Secretariat and CTU are also gratefully acknowledged.

Without the active involvement of all of these stakeholders, it would have been impossible to produce a document such as this, reflecting the overall requirements and conditions of the Caribbean region while also representing international best practice.

The activities have been implemented by Ms Kerstin Ludwig, responsible for the coordination of activities in the Caribbean (HIPCAR Project Coordinator), and Mr Sandro Bazzanella, responsible for the management of the whole project covering sub-Saharan Africa, the Caribbean and the Pacific (ITU-EC-ACP Project Manager) with the overall support of Ms Nicole Darmanie, HIPCAR Project Assistant, and of Ms Silvia Villar, ITU-EC-ACP Project Assistant. The work was carried under the overall direction of Mr Cosmas Zavazava, Chief, Project Support and Knowledge Management (PKM) DepartmentThe document has further benefited from comments of the ITU Telecommunication Development Bureau's (BDT) Regulatory and Market Environment Division (RME). Support was provided by Mr. Philip Cross, ITU Area Representative for the Caribbean. The team at ITU's Publication Composition Service was responsible for its publication.

[1] HIPCAR Model Policy Guidelines and Legislative Texts, including implementation methodology, are available at www.itu.int/ITU-D/projects/ITU_EC_ACP/hipcar/index.html

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Section I:
Introduction

This Assessment Report has been prepared in accordance with the Phase I Workplan for the Working Group on Universal Access under the HIPCAR project which provides for a critical Assessment Report of existing Telecoms Acts in the region covering the work area. This report was discussed and adopted by the HIPCAR Working Group on Universal Access and Service which met in Port-of-Spain, Trinidad and Tobago, from 26 to 29 October 2009.

The aim of this Assessment Report is to provide an analysis of the key factors as they are reflected in the different Caribbean legal and regulatory telecommunications frameworks in relation to universal access and service, and to provide a common reference document that can be used to assess consistently the framework in the various countries. Such an Assessment will provide background for policymakers, regulators and other decision makers in the countries covered by the HIPCAR project paper as relates to universal access and service and provide a basis for policy guidelines and model regulatory texts provided under Phases 2 and 3.

The *Summary Chart of Key Elements and Status* included at the start of Section II, presents a quick overview of the status in the different countries. Section II also provides an overview of best practices from around the world and identifies key factors and regulatory trends relating to universal access and service (UAS), its scope and definition, regulatory reform measures to achieve universal access and service as well as financing mechanisms and the management of funds. The Assessment Report provides trends and identifies key issues based on International Best Practices, whilst also recognizing that universal access/service policies are *national* in scope, and that they therefore must be considered in the context of national legal, policy and institutional frameworks. The particular and specific physical, structural, and behavioral characteristics of the country attempting to develop universal service policies are of critical importance and must be taken into account. The Assessment Report also takes account of changes that have been introduced in universal access and service frameworks to accommodate convergence and competition.

The major themes identified in the Report include:

- Legal Mandate, definition of UAS and institutional framework
- Scope and Enforcement of UAS Obligations
- Variety of options of financing of UAS
- Existence of UAS Fund
- Fund Distribution
- Administration of Funds

The Report also highlights the varying uses of regulatory reforms of the market, utilization of licensing obligations such as roll out targets, or through civil sector driven public-private-partnerships, and the like to achieve Universal Access/ Service in jurisdictions ranging from states within the EU, India, Singapore, and Latin America.

Where Universal Service Funds are considered, the Report provides context necessary to ensure that where such frameworks are established, they were comprehensive, not overly burdensome to the sector participants and do not fall into common missteps. Some of the missteps identified include the lack of definition of targeted beneficiaries, or unclear mechanisms for program financing and funding disbursement.

Consequently, and in accordance with the terms of reference, Section III of this Assessment Report presents a snapshot of how key issues are reflected (or not) in legal and regulatory texts from the beneficiary countries under the HIPCAR Project (Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago), thereby classifying the situation in the beneficiary countries as related to regulation on universal access/service in categories ranging from none (texts do not make reference at all to key issues) to fair (there is some mention of the issue but it is not detailed or not at an appropriate level, e.g. in some form of consultation document or draft regulation or even in a regulation which is not in line with primary legislation) to good (the texts reflect all elements categorized under a key issue). The Assessment Report finds that the currently not many of the CARICOM members were actively implementing distinct Universal Service programs. It also finds that many of the jurisdictions have not adequately fleshed out targets, or systems that would guide the program's implementation.

This section also provides a comparison with target language from other countries around the world. The aim of including this target language is to illustrate how other comparable countries or regions have dealt with such key issues. Another aim is to provide the basis for future work to implement future Policy Guidelines/model regulation on universal access/service.

Section II:
Trends in Universal Access and Service Policies

In the past, and particularly before the 1980's, the supply of telecommunications services was mainly seen as a public service, alongside other services such as water and electricity. Government controlled all such resources and sought to offer public services to people throughout the country. Since telecommunications was seen as a public service offered by government or through government intervention, policy-makers believed that a public monopoly operator would be in the best position to build telecommunication networks effectively and that only such operators could make services available to citizens at equitable prices without siphoning off undue profits. Monopoly operators were expected to meet targets set for them, in exchange for certain benefits such as granting them periods in which they could enjoy exclusivity in the market. In most countries, the monopolistic operator was basically a state-owned enterprise, although a few countries did opt for a system of issuing licenses to private and/or state monopolies on a territorial or functional basis.

This model worked particularly well for many years in the more developed economies, where long-distance and international tariffs, which had stayed high despite technological changes, were decreasing in cost as opposed to the initial phases of their exploitation, thus enabling the development of the networks and of tele density and the sector-specific industrial development. In these markets, cross-subsidization by monopoly undertakings generally ensured the availability of basic services, in particular connection to the fixed network and local calls.

In the less developed countries, the scenario of cross-subsidization worked less well and incumbent operators had difficulties in providing both basic and new services and in keeping up with technological changes. Although financial resources were obtained in some cases from multilateral lending or donor agencies or from bilateral government or other government-sponsored sources, this trend was not to last, thus creating the need for different method of service offering so as to provide at least some basic service to the majority of citizens..

Since the 1980's, technological advances, the perceived need to further lower tariffs to bring tariffs in line with costs, the desire to increase the range of services available to the consumers and the desire to expand businesses based on viable communications infrastructure were among the factors that started to undermine "traditional" thinking about the telecommunications sector and the funding of access to telecommunications services. Governments were faced with a situation where they had a social obligation of ensuring access to basic telecommunications to their respective populations but their power to impose such obligations on incumbents was becoming slimmer and slimmer.

It is commonly accepted that in many ways the liberalization of telecommunications markets and the introduction of convergence friendly policies, if properly implemented, has generally increased efficiency, increased the number of people who receive services, lowered prices, and improved the choice and quality of services provided. However, even in open competition environments which are properly regulated, ensuring universal access and/or service remains a challenge. Within this context, specific policy and regulatory measures as well as financing mechanisms have been introduced in many countries around the world to achieve universal access and/or service and safeguard the concept of reasonable access for citizens at an affordable price — in the light of national conditions — irrespective of income levels and geographic location

Thus, for example, with the emergence of competitive service providers and multiple technologies for the provision of telephone services, changes were introduced in universal access and universal service policies. Regulators began to introduce explicit subsidies for higher-cost services or services in remote or rural areas. These programs required a substantial level of direct, detailed regulatory intervention.

Regulators now had to decide which operators or service providers had to contribute to universal service funds, how much subsidy funding should be collected and disbursed, what services should be subsidized, and which entities should receive the subsidies.

In addition, while it has been demonstrated that market forces, after liberalization and sector reform, have had the greatest impact on improvement of universal access (UA) and universal service (US) in many countries, for various reasons market gaps remained in place because of exceptionally challenging geographic characteristics combined with extremely low population densities or isolation (e.g., many islands) or extreme poverty. In other countries, markets might be able to achieve universal access (UA) or even universal service (US), but the timeframe in which this could be obtained, might be considered too long.

There is a clear need, in view of significant competitive, technological and service changes taking place in the telecommunications sector, to review traditional universal service obligations, their coverage, how they are financed and who is responsible for providing them. Indeed, universality has been achieved (to a greater or lesser extent) though a number of mechanisms, including market reform, the imposition of universal service obligations on certain or all market players, the designation of universal service providers, the financing of universal service obligations, the creation of Universal Service Funds, as well as through innovative measures such as public-private partnerships, business-NGO partnerships, etc. Although in some cases the creation of a Universal Service Fund has been seen as one of the key requirements to achieve universal access and/or service, the sole use of such Funds is increasingly being questioned, with policy-makers realizing that there are a series of elements to be taken into consideration when considering universality issues.

Section III:
Key Elements to Achieve and Manage Universal Access and/or Service

Key elements to achieve an effective framework to address universality include: defining the institutional framework for the definition and implementation of UAS Policy and regulation; defining the scope of universal service and access, thereby ensuring that the services are available, accessible and that the price of communications is affordable; defining innovative mechanisms, including further regulatory reform, public-private partnership mechanisms, etc. to achieve UA; and, identifying financing mechanisms and selecting appropriate funding mechanism for universal access and/or service (which, as stated above, should not be limited to the creation of a Universal Service Fund).

3.1 Institutional Framework

Key questions to be addressed in relation to the institutional framework are

- Is there a law/legal mandate to support or address the concept of Universal Access/Service (UAS)?
- Does the law/legal mandate direct the ministry or the regulator to develop a Universal Access/Service policy? Is the mandate clear?
- Is the regulator responsible for the implementation of the policy?

Achieving universal access/service to communications is a challenge for all countries. In order to ensure that universal access/service policy is a central part of the ICT framework and not construed as simply a form of corporate social responsibility, or an act of 'goodwill' by investors in the ICT sector, it is important that:

- universal access/service polices are properly formulated
- universal access/service polices are given a proper space in the national policy and legislative frameworks as well as in the institutional framework for telecommunications regulation.

Universal access/service policy and its institutional framework should therefore be captured in national legislation, regulations, licenses or Ministerial policy statements (preferably a combination of all these instruments), which establish the framework and limitations within which the policy must be implemented. Such a foundation is necessary to ensure the credibility, authority and enforceability of the policy, as well as to ensure that its terms are consistent with other national priorities and ongoing programs.

It is also essential to ensure that the mandate of actors is clear so that they can effectively define the principle stages of a universal service and access policy, including: planning, implementation and evaluation as well as specific policy objectives for UAS and regulatory measures in ICT Policy statements. Such a mandate must be set out as clearly as possible, preferably in the law.

In Hong Kong, for example, the ttelecommunications policy objectives of the Hong Kong Government were set out in its Position Paper issued in January 1994 as follows :

- *"that the widest range of quality telecommunications services should be available to the community at reasonable cost;*
- *that telecommunications services should be provided in the most economically efficient manner possible; and*

- *that Hong Kong should serve as the preeminent communications hub for the region now and into the next century."*

It is within this broad policy framework that the specific policy objectives of universal service of the Hong Kong government were set to:

- *ensure access to affordable basic telephone services for all persons in Hong Kong on a non-discriminatory basis irrespective of where they reside or carry on business;*
- *ensure the costs of providing basic services are fairly borne by the users of network services.*

These Universal Service Policy objectives are specifically addressed in the fixed telecommunication network services (FTNS) licences. For HKTC, for example, its license provides that it must ensure that it supplies -

"... a good, efficient and continuous Basic Service ... to all persons in Hong Kong ..."

In addition, the special conditions of all FTNS licences set out the obligation to pay to (or right to receive from) appropriate licensees the USC. The meaning of USC is defined in the special conditions of the FTNS licences to mean –

"Universal Service Contribution is that sum calculated in accordance with a formula adopted annually by the Authority, to ensure that the Hong Kong Telephone Company, where it has a Universal Service Obligation, and any other licensee with such an obligation, as the case may be, receives a fair contribution from other fixed telecommunication network services licensees towards the costs, net of attributable revenues, of serving customers with Basic Service whom would otherwise not be served because it is not economically viable to do so but who are required to be served under the Universal Service Obligation."[2]

That being said, there is no one solution to creating an "appropriate" institutional framework for universal access/service. Universal access/service policy may be implemented by the country's National Regulatory Authority (NRA), the ministry responsible for telecommunications and ICT, or an independent agency established to manage and administer universal access and service or even just the Fund.

In a number of countries, the ministry responsible for communications implements policy relating to universal access or service. This is, for example, the case in Colombia, Guatemala, and India. The advantage of such an approach is that the entity which defines policy also carries it out. The main disadvantage is that since such policies sometimes include special financing instruments such as a specific Universal Service Fund, which in many countries is mainly built up out of contributions from industry (which in some cases has little say in determining the level of contribution or indeed in the allocation of funds to projects), government is not perceived as being far enough removed to be an independent administrator of the finances. This is even more acutely felt where government still has any ownership interest in the industry.

In other countries, it is the National Regulatory Authority which implements universal access and/or service policies. Many recognize this as a more optimal and independent solution. Indeed, the 2005 WATRA Guidelines on Universal Access/Service state that: " National Regulatory Authority's (NRAs) must be established and capacitated to play a key role in implementing universal access policies first through addressing the market efficiency gap (letting the market deliver universal access/service), and second through the true access gap. NRAs should be responsible for implementing policies directed towards assuring the best quality reliable services at the most affordable prices that meet the needs of consumers-existing and future."

[2] Statement of the Telecommunications Authority, Hong Kong: "Universal Service Arrangements: the Regulatory Framework", 14 January 1998, available at: www.ofta.gov.hk/en/tas/ftn/ta980114.pdf

In Uganda, the 1997 Uganda Communications Act notes that the functions of the Uganda Communications Commission (UCC) will include enhancing the coverage of communications services and products in the country and expanding access to communications services in Uganda for all citizens. In March 2005, the UCC issued Communications (Universal Service) regulations outlining a comprehensive universal service policy for Uganda. These Regulations:

- ensure that the UCC has ample authority to specify and define universal service obligations for operators as well as to address services covered, that it can develop a suitable funding mechanism to support universal service, and that it has an appropriate enforcement authority
- identify the need to monitor delivery of universal service over time and review services captured in the universal service obligation, and to reassess coverage of services if need be;
- direct the UCC to establish a universal service fund to operate in concert with the already existing Rural Communications Development Fund (RCDF) which was established in 1997 by the Uganda Communications Act
- direct the UCC to both monitor and enforce the ability of the operators to carry out their universal service plans, as well as prescribing supply time and quality of service performance measurements intended to evaluate fulfillment of the universal service obligation

Having the NRA responsible for the implementation of UAS is generally seen to be a sound approach for many countries because:

- The regulator typically has the required industry sector expertise, and skilled technical, economic and financial staff;
- The regulator has a degree of independence and is perceived to be one step removed from politics; and

Once basic measures have been defined and implemented in the telecommunication sector, including opening the sector up to competition and establishing an independent regulatory agency, it is also the responsibility of policy-makers to monitor their implementation by conducting reviews at regular intervals and making any adjustments that may be needed. This is because a universal service and access strategy needs to be reviewed and fine-tuned from time to time in the light of social, commercial and technological developments, if it is to be effective.

3.2 Definition of Universal Access and Service

Key questions to be addressed in relation to the definition of Universal Access and/or Service are

- If a law/legal mandate exists, is there a distinction drawn between universal service and universal access?

As stated in the *Infodev* ICT Regulation Toolkit on Universal Access and Service,[3] the terms *universal access* (UA) and *universal service* (US) are used in a wide variety of contexts to describe or demonstrate objectives and policies that governments implement to ensure that all their citizens have access to the benefits of modern economic life. They refer to the ability of everyone, regardless of region or location, socio-economic status, ethnicity, gender, disability, or any other factor, to access services. The concepts are broadly promoted and widely accepted as the best expression of policies seeking to achieve equality and fairness of opportunity along with economic growth. Within this context, the key goal of a country's universal service/access policy is to develop the infrastructure and regulatory tools necessary to provide each member of its population with access to a point of communication.

[3] *Infodev* ICT Regulation Toolkit, Module 4: Universal Access and Service, available at: www.ictregulationtoolkit.org/en/Section.3126.html

Section III

In general, US refers to service at the individual or household level - typically a telephone in each home - whereas UA refers to a publicly shared level of service which is generally through public payphones or Internet telecentres. However, there is more to the definition of the terms than just the fact of providing a connection to every household as opposed to connectivity in every village. Indeed, the three main dimensions distinguishing Universal Access and Universal Service articulated by the ITU 2003 *Trends in Telecommunication Reform Report* are:

- **Availability**: The level of service is the same wherever a person lives or works, with no disadvantage stemming from geographic location. In particular, rural and urban distinctions do not affect a person's ability to access communication services. In the information age, the quality of services becomes even more important.
- **Affordability:** Everyone can afford service, and no one is disadvantaged by income level. Cost variations due to location, terrain or climate, which often dovetail with urban/rural factors, do not impact on one's access to ICT services. This dimension presents unique challenges with regard to addressing network expansion.
- **Accessibility:** People with disabilities can use the service; one's level of physical and mental ability does not affect access to communication services. In the information society, policy makers must look past physical accessibility and take into account the *relevance* of content and applications and the ability of users to understand it.

This has led to various definitions around the world. Under the EU Telecoms rules as set by the Universal Service Directive of 2002, for example, universal service is a safety net for achieving social inclusiveness. It ensures that basic communications services of good quality are always available at an affordable price, even if the market does not provide them under normal commercial conditions. This set of basic services, which are already available to the great majority of citizens and considered essential for participation in society, is called 'universal service'. The Universal Service Directive defines universal service as *"minimum set of services, of specified quality to which all end-users have access, at an affordable price in the light of national conditions, without distorting competition".*

In Hong Kong, the service scope of universal service is referred to as "Basic Service" in the special conditions of the FTNS licences. It is defined as -

"Basic Service means, subject to the Ordinance, the provision of:

(a) a public switched telephone service including the service connection, continued provision of connectivity, provision of a dedicated telephone number, an appropriate directory listing (except where the customer otherwise directs), a standard telephone handset without switching capacity listing (except where the customer elects to provide the handset), standard billing and collection services and relevant ancillary services and facilities necessarily utilized by the licensee; and

(b) a reasonable number of public payphones including payphones located within publicly or privately owned facilities to which the public have access, whether on a 24 hour basis or restricted to certain hours or days of the week; and

(c) a reasonable number of public payphones, designed for ease of effective use by the hearing impaired; and

(d) a reasonable number of public payphones, designed for access by the physically disabled, including but not limited to those persons using wheelchairs; and

(e) operator provided directory enquiries, fault reporting, service difficulty and connection services; and

(f) a tropical cyclone warning service; and

(g) a thunderstorm and heavy rain warning service; and

(h) a flood warning service; and

(i) access to a number or numbers for emergency services; and

(j) such other services, subject to the Ordinance, as the Authority may include."[4]

3.3 Scope and Enforcement of Universal Access/Service Obligations

Key questions to be addressed in relation to the scope and enforcement of Universal Access and/or Service obligations are

- Are there key principles or goals for Universal Access/Service defined in the law or any other document (e.g., Government policy)?
- Does the law define specific services that must be provided and to whom?
- Does the law provide that universal service targets are reviewed on a regular basis?
- Does the law provide that stakeholders are consulted regarding UAS targets?
- Are there specific criteria for determining which operators have or are subject to Universal Access/Service obligations?
- Do the obligations vary from operator to operator, such as a distinction drawn between dominant and non-dominant operators?
- If the operator fails to meet its Universal Access/Service obligations, or contribution requirements, what enforcement mechanisms are in place to address

The definition of universal access/service and the scope of the obligations attached to the respective definitions will differ from one country to the next depending on the economic and social context and the political will to achieve universality in terms of means of communications.

There is no fixed or standard definition for the scope of universal access/service obligations – however, currently established universal service/access policies typically seek to meet the objectives stated above: availability, affordability and accessibility.[5] The range of the scope of UAS obligations is very broad because developed and developing countries face different market conditions and must meet different objectives in order to provide unserved and underserved rural populations with universal service/access.

In most countries, the scope of universal access and service (UAS) includes the provision of basic telephony. However, the definition of the scope of UAS is evolving to include Internet connectivity and increasingly broadband. as technology develops and countries come closer to reaching their goals for voice service availability. Radio and television broadcasting has traditionally not been included in the definition of the scope of UAS, but this is also changing rapidly due to developments such as convergence, Internet broadcasting and broadcasters also offering Internet and telephony services (e.g., cable TV operators). Broadcasting policies and regulation typically have coverage requirements, though without specifics about actual access, whether by public means or for private subscribers. For example: the definitions in ECOWAS-UEMOA vary with most countries referring to voice, but a few like Ghana have considered including a wider range of services to include voice, data transmission, Internet access, access to relevant local content and broadband, in the scope of "basic."

[4] Statement of the Telecommunications Authority, Hong Kong: "Universal Service Arrangements: the Regulatory Framework", 14 January 1998, available at: www.ofta.gov.hk/en/tas/ftn/ta980114.pdf

[5] Rethinking Universal Service for a Next Generation Network Environment, Working Party on Telecommunication and Information Services Policies, OECD, April 2006, p. 10.

The scope of UAS is often specified in detail to ensure that it is fit for purpose. As mentioned above, it needs to be accessible and affordable as well as available. Features of UAS that might be specified include the following:

- Times of day when there is access to the service;
- Type of shelter for the terminals (e.g. secure building for a telecentre);
- Access to and usability of the terminal for people with physical disabilities;
- Convenience and pleasantness of location for all target groups of users (e.g., women might not wish to enter a bar to use a service);
- Quality of service (network reliability, fault repair times and call quality for telephony and prescribed down and upstream data rates for the Internet service).
- Payment methods (e.g., cash or prepaid cards) and for prepaid cards, availability of sales outlets; and
- Personal support for using the services.

Other services that are entering UAS policies include:

- Directories and directory enquiry services;
- Support services for Internet subscribers (e.g. help-lines, training);
- Emergency call answering facilities (dispatch of help for emergencies); and
- Special facilities to permit use by people with disabilities on par with all other facilities.

Figure 1 below shows the universal service obligations for designated universal service providers in the European Union, Uganda and India and illustrates how universal service/access objectives vary from one country to another.

Figure 1

European Union	EU Member States must ensure the following: 1. Access at a fixed location upon request, to enable users to make and receive local, national and long distance calls, fax communications, and to enable them to have functional access; 2. At least one comprehensive directory and one comprehensive enquiry service comprising the numbers of all fixed and mobile subscribers who so wish; 3. Availability of public pay phones over the whole territory; 4. Measures that ensure that the disabled have access to the same services at an affordable price. 5. (since 2005) Required to supply connection that provides "functional" Internet access (FIA), which is limited to a single narrowband connection and does not extend to ISDN or broadband. 6. Must respond to all reasonable requests to install a telephone line, offering the same prices irrespective of location.

Uganda	1. Ensure universal availability of connections by every person or individual households to public communication networks through inter alia pay phones, community telecentres, tele-boutiques, kiosks, cafes or community communications internet access terminals 2. Provide the following services: (i) connection to a fixed communication network able to support voice telephony, fax and data transmission,(ii) reasonable geographic access to public call boxes across Uganda, (iii) ability of consumers to access emergency and free services, operator assistance and directory inquiry services, (iv) ability to meet needs of people with disability,(v) delivery of affordable basic communication services to all customers on reasonable request, (vi) providing customers with disabilities with the same or equivalent services as all other customers so as to have access to the same level of universal service.
India	Stream I: Provision of Public Telecommunications and Information Services (a) Operate and maintain village public phones (VPT); (b) after target of one VPT per village achieved, provide additional public phone in villages of 2000+ without public call office; (c) replace multi access radio relay technology public phones; (d) upgrade public telephones to public tele-information centres; (e) install high speed public telecommunications information centres. Stream II: Provide household telephones in rural and remote areas as determined by central government

Source: What Rules for Universal Service in an IP-enabled NGN Environment? Background Paper, International Telecommunication Union, April 2006, pp. 5-8.; The Communications (Universal Service) Regulations of Uganda, 2003, Section 6; and Universal Service Obligation Fund, Department of Telecommunications, Ministry of Communications & Information Technology of India at www.dot.gov.in/uso/usoindex.htm.

These examples demonstrate that, despite the fact that countries have begun to adapt UAS obligation objectives to take advantage of the opportunities brought about by technological development (i.e., the Internet) and provide both voice and data communication services, most UAS obligation objectives still rely on the improvement and expansion of wireline networks to provide service and access to populations in unserved and underserved areas. Efforts to provide UAS through wireline networks have produced incremental results, but countries should consider the benefits that technologies – such as for example wireless technologies – can bring to telecommunications networks and to the fulfilment of universal service/access goals.

At present, technological change is challenging existing policies and forcing regulatory authorities to rethink the universal service obligations they impose on their carriers and establish a framework that will enable the government to carry out their universal service/access policies in a converging telecommunications sector.

3.4 Regulatory Reform and UAS

Key questions to be addressed in relation to regulatory reform and its role in addressing UAS include:

- Does the law provide that build out requirements may be included in licenses to achieve UAS targets?
- Does the law provide that coverage obligations (in terms of population or geographic area covered or other) may be included in licenses to achieve UAS targets?

Section III

Since markets have been opened to competition, policy makers and regulators have been using a variety of tools to achieve universal access or service. Good practice is that before using scarce public resources, governments and regulators exhaust available non-investment avenues to extend access. Often regulatory reform is one of the first steps in achieving universal access/service. This includes developing policies, regulations, and practices, including privatization design that goes beyond the more traditional framework of simply imposing obligations on designated universal service providers, which in most cases was the incumbent fixed-line operator. Such tools create incentives for the private sector to extend universal access to ICTs, as well as enacting enabling licensing and interconnection frameworks.

Establishing flexible spectrum policies as well as technology-neutral telecommunications policies that include a flexible and adaptable licensing regime can facilitate the entry and use of new and innovative technologies and provide a wider range of participants to achieve universal service/access goals. Revising universal service obligation objectives and implementing suitable mechanisms for the disbursement of universal service fund resources can also help in taking full advantage of multiple resources and technological development to better serve and benefit underserved and unserved populations.

Recently, new technologies have begun to provide unserved and underserved areas with faster service and more affordable access to communication. Mobile technologies are being used increasingly to provide rural and difficult to reach communities with fixed-wireless and mobile public payphones.[6] In many developing countries, mobile networks have become a substitute for fixed networks because (i) they can provide wider coverage, (ii) they can usually be easily and quickly deployed at a lower cost, (iii) their management and maintenance is simpler, and (iv) pricing schemes applied by mobile operators have made access to telephony service affordable for the urban poor.[7]

As third generation (IMT-2000 or 3G) wireless technologies are deployed around the world, they can offer both voice and data services at affordable costs and thus can provide even greater access to communications services. Third generation technologies, such as CDMA 2000 and WCDMA can support both voice and broadband wireless access, transmit large amounts of traffic in a small amount of spectrum, as well as provide wider coverage. CDMA operators in India (as a result of Unified Licences being introduced) have been able to build networks quickly and are offering low price plans in underserved areas.[8] In addition, operators in Brazil, China and the United States are using CDMA 2000 technology to expand and deploy Internet access across the country, including remote areas. In Peru, a clinic in the Andes is using 3G wireless voice and data equipment to communicate with medical professionals around the world to provide medical assistance to patients in this remote area of the country. The clinic, which had no connectivity of any kind until February 2006 and no fixed line communications, has been able to treat over 3,000 residents in the area. In the same manner, EV-DO high-speed wireless technology is being used in the Democratic Republic of the Congo to access vital patient information quickly and to notify doctors in case of emergency.[9]

Other technologies such as Voice over Internet Protocol (VoIP), very small aperture terminals (VSAT), and broadband over power-line (or power-line communications) which are not as widely used at present, are also options that can provide connectivity inexpensively and effectively to rural areas, and can help countries achieve universal service/access. [10]

Given the importance of new technologies in reaching unserved and underserved rural populations, regulatory authorities are modifying their universal service/access policies by incorporating new technologies and relying on them to reach rural populations. Forward-looking telecommunications policies can foster the use of new and innovative technologies and can be instrumental in helping countries to achieve their universal service/access goals.

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6 Mobile Operators: Their Contribution to Universal Service and Public Access, January 2003, pp. 7.

7 UMTS Forum Report "Benefits of Mobile Communications for Society", June 2004, Report No. 36.

8 Opportunity for All: Using Wireless to Provide Universal Access to Telecom Services, pp. 2-6.

9 3G Creating Digital Multimedia Access Opportunities Around the World, 3G CDMA Wireless Technologies Benefiting Society.

10 A New Model for Rural Connectivity, Development Through Enterprise, Al Hammond and John Paul, May 2006.

- **Technology Neutrality**

A critical factor in establishing progressive policies for achieving universal service/access is technology neutrality. In other words, when establishing universal service/access policies, countries can maximise the opportunities for achieving their universal service/access goals by not limiting technological choice.[11] By avoiding traditional paradigms that rely only on wireline operators to achieve universality, countries can encourage the use and application of innovative technologies and foster a more competitive and dynamic market that can further support universal service obligation goals by introducing technology-neutral policies. In turn, such policies will be conducive to a universal/access policy that will better answer the needs and demands of a country's rural population.

- **Licensing**

As telecommunications markets have liberalised, countries have moved away from restrictive individual licensing regimes, which can limit the scope of technologies and services that an operator can offer, to a variety of more progressive licensing options such as service or technology neutral licensing regimes. Unified (converged) licences, which can be described as a license that allows an operator to offer a panoply of services under one authorisation,[12] seem to be well-suited for countries trying to expand their telecommunications networks to reach as much of the population as possible. This type of regime opens the scope of technologies and services that can be offered by one operator and thus increases participation of new market entrants, encourages the introduction and use of new technologies, and also facilitates the process of obtaining a license. Countries such as India, Australia, individual member states of the European Union, Japan, Kenya, Malaysia, Mali, Mauritius, Singapore, Tanzania, and Uganda[13] have all introduced some form of converged licensing regime based on the characteristics and needs of their markets.

Regulators should follow a strategy of aggressive all-service licensing of operators willing to provide services in currently uncovered areas. In some countries, operators are expressing a preference for alternatives, such as accepting reasonable rural build-out targets in their licence, or negotiating ex-ante specific rural universal access and service (UAS) targets with the regulator in exchange for relief from UASF levies or taxes.

In establishing the framework necessary to provide universal service/access to rural populations, a country also should consider a licensing regime that will allow it the flexibility to take advantage of technological development and convergence. Build-out targets are increasingly used in licensing procedures as an important factor to evaluate applications alongside the bid price. Thus, for example, in Uganda, the Second National Operator's bid evaluation criteria included a network rollout plan in addition to the bid price. In India, the regional local fixed operator bid evaluation criteria gave weight to rural coverage plans, but only 15 percent compared to 72 percent weight of the amount of license fee offered.

Under these models, investment in the sector, rather than short-term fiscal benefits, is treated as a major or primary consideration—ensuring a higher rate of investment over the long run (Dyamond, Juntunen, and Navas-Sabater 2000). At the same time, licenses need to be designed carefully to ensure that the investments encouraged under the scheme will actually help meet access targets.

Brazil is an example of a country that, although it has developed a funding mechanism, generally achieves its universal objectives through coverage obligations imposed on its licensees. In fact, one could argue that Brazil's coverage obligations are more effective at achieving universal service goals than any of the

[11] What Rules for Universal Service in a an IP-enabled NGN Environment? Background Paper, International Telecommunication Union, April 2006, p. 20.

[12] The Challenge of Creating Policy and Regulation in a Converged ICT Era, Ernest C. A. Ndukwe, Telecom World Africa Conference 2005, Capetown, South Africa, p. 7.

[13] Licensing Approaches in an Era of Convergence, Global Symposium for Regulators, Geneva, Switzerland, 8-10 December, 2004.

special telecommunications development funds that have been created to fund or subsidize telecommunications projects. Because the Brazilian legal framework uses a variety of tools to achieve universal service, it took advantage of the new licenses being issued for third generation (3G) mobile services and imposed more expansive coverage obligations on those new 3G licensees than obligations previously imposed on mobile licensees. In so doing, Anatel recognized that imposing coverage obligations through licenses brings more immediate benefits to the population than other funding mechanisms. To this end, during the last tender for 3G mobile licenses, areas of low demand were not licensed in their own right, but were included as coverage obligations along with the more populous licenses.[14] For example, winners of the São Paulo metropolitan licenses (in the southeast of the country) are obligated to provide coverage in the northern states of Amazonas, Amapá, Pará, Maranhão and Roraima.

In addition, specific coverage obligations were also detailed in the licenses, according to the following chart:

Table 1 – 3G Licenses Coverage Obligations

Target	Threshold population	Coverage Obligations
I.	Without cellular service	Licensees will have the first 2 years to provide mobile services to 25% of the municipalities of each area acquired that still does not have cellular service.
II.	Less than 30,000	Licensees will provide 3G coverage to 15% of all municipalities within 5 years, and reach 60% coverage in all municipalities within 8 years.
III.	30,000 – 100,000	Licensees will provide 3G coverage to 50% of all municipalities within 5 years.
IV.	More than 100,000	Within 1 year, licensees must cover 50% of state capitals and municipalities with more than 500,000 inhabitants; within 2 years licensees must cover 100% of state capitals and municipalities with more 500,000 inhabitants; within 3 years, licensees must cover 50% of municipalities with more than 200,000 inhabitants; within 4 years, licensees must cover 100% of municipalities with more than 200,000 inhabitants; within 5 years, licensees must cover 100% of municipalities with more than 100,000 inhabitants.

Source: Anatel.

3.5 Multi-pronged Approach to achieving UAS

Key questions to be addressed in relation to the introduction of a multi-pronged approach to achieving UAS:

- Does the law provide for a multi-pronged approach to addressing universal access/service challenges and opportunities?
- What complementary strategies to meet the objectives targets are set out? Do they include:
  a. micro-credit programmes;
  b. 'build, operate and transfer' (BOT) or 'build, transfer and operate' (BTO) arrangements;

[14] *Edital de Licitação* (*"Bidding Terms"*) No. 002/2007. The tender was concluded in Dec. 31, 2007 and the 3G licenses were signed and published on the Brazilian Official Gazette in Apr. 29, 2008.

c. cooperatives and community-owned networks;

d. regional operators;

e. telecentres and multi-purpose community centres (MPCCs)?

Complementary strategies can be applied to ensure that objectives and targets are met through a mix of tools. As stated in the 2005 WATRA Guidelines: "Member States shall design universal access/service policies, regulations and practices in order to create incentives for the private sector to extend universal access to communications services." The Guidelines also provide that: "Member States shall use a multi-pronged approach to addressing universal access/service challenges and opportunities. That is, rely on complementary strategies to meet the objectives targets that have been set out."[15]

In Latin America, all 19 members of Regulatel[16] have established during the last decade some form of universal access programs or initiatives aimed at increasing access to telecommunications networks and services. Studies show that nearly all countries have implemented a wide-variety of initiatives that use one or a combination of the following four mechanisms that directly or indirectly aim to increase investments and access to telecommunications infrastructure in high-cost rural and low-income areas:

- Market liberalization combined with regulatory initiatives including universal access obligations and special regulations and conditions which favor projects and operations in high-cost or low-income areas (almost all countries have adopted aspects of this approach)
- Universal Service Funds (USFs) that provide partial subsidies for programs largely aimed at stimulating private sector provision of infrastructure in rural or unserved regions (12 countries out of 10 are using funds)
- Other financing methods and project initiatives by national, state and local governments, cooperatives, NGOs and others (13 countries). An increasing number of private operators are also putting in place programs aimed at expanding coverage in high cost rural areas and to increasing demand among lower income consumers
- State-mandated and controlled approaches using cross subsidies and other financing mechanisms aimed at state-owned companies (3 countries).[17]

The 2005 ITU West African Harmonization Report on Universal Access and Service Report provides that:

"Over the years, given the economic case for universal access/service, there has been a shift towards seeing universal access and service schemes not as "burdens" but as opportunities from a commercial perspective. This policy choice, between setting mandates and providing incentives, is often captured in the term "pay or play." That is, an operator can either pay to support universal access/service or undertake to provide it itself. The strategy of incentivizing operators to provide universal service does not diminish governments' role in addressing universal access/service. Governments retain the responsibility to set overall policies which will facilitate private-sector contributions to universal access/service.

A common approach of engaging operators and allowing them to "play" is to provide incentives for operators to provide telecommunications in less profitable areas. Such incentives could include purely commercial mechanisms (not necessarily directly related to the telecommunications sector and therefore requiring consultation with other government departments) aimed at targeting the operators' bottom line, such as tax concessions, removal of duties on telecommunication equipment targeted at rural and remote areas, or lifting of foreign exchange restrictions.

15 WATRA Guidelines, available at: www.itu.int/ITU-D/treg/projects/itu-ec/Ghana/modules/Compil-Guidelines_final.pdf

16 Members of Regulatel include: CNC of Argentina, SITTEL of Bolivia, ANATEL of Brazil, SUBTEL of Chile, CRT of Colombia, ARESEP of Costa Rica, MIC of Cuba, INDOTEL of Dominican Republic, CONATEL of Ecuador, SIGET of El Salvador, SIT of Guatemala, CONTATEL of Honduras, COFETEL of Mexico, TELCOR of Nicaragua, ANSP of Panama, CONATEL of Paraguay, OSIPTEL of Peru, URSEC of Uruguay and CONATEL of Venezuela.

17 Draft Rregulatel Report on "New Models for Universal Access in Latin America", October 2006.

Section III

Other ways in which universal access/service may be promoted include:

- *micro-credit programmes;*
- *'build, operate and transfer' (BOT) or 'build, transfer and operate' (BTO) arrangements;*
- *cooperatives and community-owned networks;*
- *regional operators; and*
- *telecentres and multi-purpose community centres (MPCCs)."*[18]

Bangladesh is a good example of a country where telecommunication access to most of the rural areas is mainly being provided not by government mandate but through Grameenphone's[19] Village Phone Program.[20]

The Telecommunication Act 2001 does not provide for the regulator, the Bangladesh Telecommunications Regulatory Commission (BTRC) to establish a universal service project or universal service fund. However, it does provide the BTRC discretion to include a compulsory obligation in the operator's license requiring them to provide the licensed services to rural and sparsely populated areas, although not exceeding ten percent of the licensee's capacity.[21] No universal service fund has been established and there is no specific funding mechanism for providing universal service.[22] Currently, fixed line operators and mobile operators have obligations to provide universal access/service, which is generally done by providing 5 percent of their network capacity to rural areas.[23] The result is that telecommunication access to most of the rural areas is mainly being provided not by government mandate but through Grameenphone's Village Phone Program.

The National Telecommunications Policy of 1998 (NTP) states that it is the Bangladesh government's goal to "facilitate universal telephone service throughout the country, and where there is demand, all those value added services such as cellular mobile telephone, paging, data services, access to Internet (including electronic mail), voice mail and video conferencing". Universal service is defined to include services to both urban and rural areas of Bangladesh. Services included in Bangladesh's definition of universal service include both fixed line private residential service and individual mobile cellular services. Under the NTP, universal service obligations for basic telephone services are to be included in the licenses of all network operators.

The BTRC, which began operation January 31, 2002, had the following mission:

- Increase the teledensity to at least 10 telephones per 100 inhabitants by 2010;
- Establish a phone in every village by 2006;
- Promote ICT applications to support socio economic development;
- Create an enabling environment and customer choice for ICT services;
- Encourage joint Public-Private cooperation in ICT development; and
- Encourage ICT applications which stimulate poverty reduction.

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18 EC/ITU Harmonization Project West Africa: Report on Universal Access/ Service, available at: www.itu.int/ITU-D/treg/projects/itu-ec/Ghana/modules/FinalDocuments/Universal_Service.pdf

19 Grameenphone is a joint venture enterprise between Norway's Telenor (62%) and Grameen Telecom Corporation (38%), a not-for-profit subsidiary of Grameen Bank, a micro-credit pioneer and "internationally reputed bank for the poor". See www.grameenphone.com/About Grameenphone/Shareholders.

20 Grameenphone was founded by three visionaries: (1) Iqbal Quadir, Muhammad Yunus, founder of the Grameen Bank, and Khalid Shams. *See* Grameen Telecom's Village Phone Programme in Rural Bangladesh: A Multi-Media Case Study, Final Report, March 17, 2000, available at www.telecommons.com/villagephone/contents.html.

21 Bangladesh Telecommunication Act of 2001, Chapter V, par. 37.

22 *Id*.

23 *Id*.

The Village Phone Program, started in 1997, is the initiative of the Grameen Bank, an NGO with an extensive rural banking network and an expert in microfinance programs that assists poor villagers in rural areas by providing loans to them under a micro-credit program for rural income generating activities. To implement the Village Phone Program, the Grameen Bank created an independent not-for-profit subsidiary called Grameen Telecom, which then established a for-profit company, Grameenphone, to fund the Village Program in Bangladesh with the profits it earns as a nationwide cellular mobile telephone provider. Grameen Telecom administers the Village Phone Program with the help of Grameen Bank, trains the operators, supplies them with handsets and handles all service-related issues.[24]

The Village Phone Program is able to provide modern digital wireless service to rural areas through Grameenphone's GSM network in Bangladesh. The program provides loans to Grameen Bank members, who are most often female, to purchase a mobile phone under the lease-financing program of Grameen Bank. These villagers then become Village Phone operators and earn money by offering telephone service to other people in their village. Each Village Phone operator is responsible for providing telephone services (sending and receiving calls), collecting call charges according to prescribed rates, remitting payments to Grameen Bank, and ensuring proper maintenance of the telephone. The Village Phone operator's income results from the difference between charges paid by customers and the airtime charges billed to the operator by Grameen Telecom, as well as a flat charge for incoming calls. Grameen Telecom buys airtime in bulk at a discounted rate from Grameenphone, which enables Grameen Telecom to pass on savings to the village operators.[25]

The initial goal of the Village Phone Program was to install 40,000 village phones by year end 2004. According to Grameenphone's 2006 Annual Report, there were over 280,000 village phone operators by year end 2006 and 300,000 operators as of May 2007.[26]

According to data from the International Telecommunication Union (ITU) ICT Eye Survey on Universal Service, the total telephone subscriber per 100 inhabitants in 2007 in Bangladesh was 22.41, of which 0.75 were fixed telephone line subscribers and 21.66 (or 96.7 percent of total telephone subscribers) were mobile cellular subscribers.[27] This low fixed line penetration rate is partly due to the fact that the state-owned Bangladesh Telegraph and Telephone Board (BTTB) had a monopoly in the telecommunications sector until 2004 and failed to increase its subscriber base because of capacity constraints, inadequate investments, and corruption within the state system.[28] The majority of villages across Bangladesh still do not have access to a landline[29] and where access has been fulfilled, it is provided by mobile phone networks.

Grameenphone obtained a national mobile operator license in November 1996, and commenced operation in March 26, 1997. It is currently the largest telecommunications services provider in Bangladesh, with a subscriber base of 19.58 million (out of a total of 42.04 million mobile subscribers) as of May 2008.[30] In comparison, the number of PSTN phone subscribers in May 2008 was only 1.26 million. Since it began operations in 1997, Grameenphone has also built the largest cellular network in

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24 Grameenphone website/About Grameenphone/Shareholders/Grameen Telecom Overview, at www.grameenphone.com.

25 Grameen Telecom's Village Phone Program in Rural Bangladesh: A Multi-Media Case Study, Final Report (Mar. 17, 2000), available at www.telecommons.com/ villagephone/finalreport.pdf. See also Grameen Telecom information at www.grameen-info.org/grameen/gtelecom/index.html.

26 Grameen Foundation, Village Phone Direct Manual: Enabling Microfinance Institutions to bring Affordable Communications to the Poor (2007).

27 *Universal Service Profile, Bangladesh* (2004), accessible at www.itu.int/ITU-D/ICTEYE/Regulators/Regulators.aspx# under "Country Reports".

28 M. Iqbal Ahmed and Erin C. Lentz, Enhancing the Livelihoods of the Rural Poor: The Role of Information and Communication Technology (Feb. 2007) at pp.8-9.

29 *Id*. at p. 9.

30 Bangladesh Telecommunication Regulatory Commission website data, Mobile Phone Subscribers (May 2008).

Bangladesh, installing over 10,600 base stations in more than 6100 locations, bringing nearly 98 percent of the country's population under its network coverage area.[31]

Apart from Grameenphone, other private operators such as Peoples Telecommunication and Information Services (PeoplesTel) and Integrated Services Limited (ISL) were also given licenses to provide fixed line PSTN services to rural areas in Bangladesh.[32]

The initiatives of private companies like Grameenphone and Grameen Telecom's Village Phone Program in Bangladesh demonstrate the possibility of successfully extending universal service and access to remote rural villages by means other than a universal service fund.

Furthermore, the Bangladesh Village Phone Program is also an example of the emergence of mobile technology as the dominant and preferred method to providing universal service/access, particularly in developing countries where mobile penetration rates are higher than fixed line penetration rates.[33]

In Singapore, Government decided in September 2008 to select a proposal from the *OpenNet Consortium* to design, build and operate the passive infrastructure for the Next Generation Broadband Networks in Singapore. The Government will provide a grant of up to S$750 million to the NetCo to support the network rollout. The aim of the project is to ensure that by 2012, homes and offices nationwide will be connected to Singapore's ultra high-speed and pervasive Next Generation National Broadband Network (Next Gen NBN). OpenNet is led by Axia NetMedia Corporation with Singapore Telecommunications Ltd, Singapore Press Holdings Ltd and SP Telecommunications Pte Ltd as the other members of the consortium. The NetCo Request-for-Proposal (RFP) was launched on 11 December 2007 and closed on 5 May 2008 with proposals from two consortia, namely Infinity and OpenNet. As the selected NetCo, OpenNet will design, build and operate the passive infrastructure of the Next Gen NBN that will be capable of delivering speeds of up to 1 Gbps and beyond.

To encourage premise owners to connect their homes and businesses to the network, OpenNet is required to waive installation charges for home and building owners when the network first reaches their premises. Under a Universal Service Obligation, which will take effect from 2013, OpenNet will also fulfil all subsequent requests to install fibre termination points in homes, offices and buildings. In its proposal, OpenNet committed to deploy and own all the fibre optic cables and offer wholesale dark fibre services to downstream operators on a non-discriminatory basis. OpenNet also committed to make use of relevant existing underlying passive infrastructure assets, such as ducts, manholes and exchanges, belonging to SingTel, to facilitate the deployment of its fibre network.

In launching the project, the Singapore Government underlined that it firmly believed that Effective Open Access through a structural and/or operational separation would be key to the achievement of a vibrant and competitive next generation broadband market, and that it would therefor consider the need for legislation to entrench Effective Open Access in this market over the long term.[34]

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31 Grameenphone website at www.grameenphone.com, "CEO Announces Q1 results, talks about new brand campaign", Press Release (April 2008).

32 PeoplesTel was previously Bangladesh Rural Telecom Authority (BRTA) and ISL is the successor of Sheba Telecom's rural telecommunication license.

33 GSM Association Report, Universal Access: How Mobile can Bring Communications to All, at www.gsmworld.com/documents/universal_access_full_report.pdf

34 IDA Press Release: "Government Selects OpenNet's Proposal To Build Passive Infrastructure", available at: www.ida.gov.sg/News%20and%20Events/20080926174755.aspx?getPagetype=20

Section III

3.6 Funding of Universal Access and Service

3.6.1 Financing of Universal Access/Service

Key questions to be addressed in relation to the financing of UAS include

- Does the law establish some sort of financial mechanism to support provision of UAS?
- Does the law provide that funding or subsidies provided must be targeted and determined and delivered in a manner that is transparent, non-discriminatory, inexpensive, and competitively neutral?
- Does the law establish an explicit funding arrangement for UAS or does it assume implicit (hidden) funding through fees and other indirect sources?
- Are there monies taken from a general government budget to support Universal Access/Service goals?
- Is there rate setting above cost to provide some mechanism of "support"? If so, which services have above-cost rates? Which services or infrastructure receives the support from these above-cost revenues?
- Are there other sources of implicit funding such as inter-carrier compensation fees? If so, which services or infrastructure receives the support from these implicit subsidies?
- Where government decides to fund operators through UAS programmes, are the subsidies 'smart subsidies' meaning that they are used to encourage operators to enter the market and not to create an unending dependency on subsidy?

The financing of Universal Access and Service has gone through various stages, ranging from the application of revenues from cross-subsidies to finance non-profitable areas under a monopolistic scenario, to the creation of Universal Service Funds funded solely from operator levies so as to be able to finance universality projects in a competitive market. Obviously, there are a range of other solutions between these two solutions.

Important is that countries do not focus solely on the creation of a Universal Service Fund and see it as the only way in which universality will be achieved, but that such Funds are seen as a tool amongst tools, and that in order to achieve universality, a variety of tools (as described throughout this document) are needed. Other public finance mechanisms such as loan guarantees and public private partnerships (PPPs) to enhance and target investments into priority areas in need of special finance may be applied and achieve universality more effectively.

Recently, such alternatives to Universal Service Funds have gained momentum around the world. Thus, for example, n September 2009, the European Commission adopted Guidelines on the application of EC Treaty state aid rules to the public funding of broadband networks. The Guidelines provide a clear and predictable framework for stakeholders and will help Member States to accelerate and extend broadband deployment by outlining the rules and conditions on how public funding could be provided to build broadband networks in line with the EU state aid rule. The Guidelines also contain specific provisions concerning the deployment of Next Generation Access networks, allowing public support to foster investment in this strategic sector without creating undue distortions of competition.[35]

The main aim of the Guidelines is to facilitate a rapid deployment of such networks in Europe by providing to all stakeholders (including local and regional authorities, as well as network operators) a clear, predictable and comprehensive framework for the public financing of such networks.

[35] European Commission Rapid Press Release of 17/09/2009: " State aid: Commission adopts Guidelines for broadband networks", Reference: IP/09/1332, available at: www.//europa.eu/rapid/pressReleasesAction.do?reference=IP/09/1332&format=HTML&aged=0&language=EN&guiLanguage=en

In the United States, The Recovery Act, passed on 13 February 2009,[36] appropriated $7.2 billion and directed the Department of Agriculture's Rural Utilities Service (RUS) and The Department of Commerce's National Telecommunications Information Administration (NTIA) to expand broadband access to unserved and underserved communities across the U.S., increase jobs, spur investments in technology and infrastructure, and provide long-term economic benefits. The result is the RUS Broadband Initiatives Program (BIP) and the NTIA Broadband Technology Opportunities Program (BTOP).[37]

Funded at $4.7 billion, BTOP provides grants to support the deployment of broadband infrastructure in unserved and underserved areas, to enhance broadband capacity at public computer centers, and to encourage sustainable adoption of broadband service. Through this support, BTOP will also advance the Recovery Act's objectives to spur job creation and stimulate long-term economic growth and opportunity. BIP will make loans and grants for broadband infrastructure projects in rural areas.

The first round of these grant and loan programs produced about 2,200 applications requesting nearly $28 billion in funding – almost seven times the amount of funding available in that round – for proposed broadband projects reaching all 50 U.S. states, 5 territories, and the District of Columbia. The agencies are currently reviewing these applications and expect to award up to $4 billion in loans, grants, and loan/grant combinations in this round. The agencies expect to begin announcing funding awards in December 2009.[38]

3.6.2 Universal Access/Service Funds

Key questions to be addressed in relation to the establishment of UAS Funds include

- Does the law clearly provide for the establishment of a fund?
- Does the law clearly identify who is responsible for the management and operation of the fund and ensure the independence of this entity through clear regulatory provisions?
- Does the law provide that all licensed entities must contribute to the fund?
- Does the law provide that the percentage, flat fee or other formula used to calculate an operator's contribution to the fund is clearly defined in the Law and is applied in a non-discriminatory manner to all similarly-situated service providers?
- Are fees are not excessive and assessed on revenues from telecommunications services?
- Are payments into the fund on an annual or quarterly basis?
- Are operators required to file revenue reports that the fund manager uses to calculate contributions on an annual basis?
- Are there other reporting requirements for operators?

A further mechanism used to help achieve the goal of universal access/service is the creation of universal service funds. These funds are being used increasingly in competitive markets to supplement market-based policies, and address access gaps and market failures in remote and under-served locations. However, there are some legitimate and understandable concerns regarding UASFs, fuelled mostly by a few unfortunate examples. Also, there have been concerns raised over the complexity of establishing and managing a UASF. Negotiating fair UAS contributions for all operators, which are equitable between all and accepted as fair, is not necessarily an easy feat.

Brazil is an example of a country which has struggled with its Fund. Although established in August 2000, the FUST has been unable to achieve its goals. FUST was first established with the purpose of creating a

[36] US Recovery Act, 2009, available at: www.recovery.gov/About/Pages/The_Act.aspx

[37] www.broadbandusa.gov/

[38] NTIA Press Release of 10 November 2009: " NTIA AND RUS STREAMLINE PROGRAMS TO BRING BROADBAND, JOBS TO MORE AMERICANS; Agencies Plan to Consolidate Final Two Funding Rounds, Seek Comment on Program Enhancements", available at: www.broadbandusa.gov/files/BTOPBIP_RFI_111009.pdf

financial resource that could complement the deployment of universal obligations of the fixed line operators, but in reality the cost of expanding services is being borne directly by the operators. FUST's most critical challenge is that it is not technologically neutral. It favors fixed service operators over other telecommunications providers as the funds can only be applied towards fixed service projects. However, all telecommunications service providers are required to contribute thus indicating favoritism of one service over another. Acknowledging that this is not the best approach for a funding mechanism, the Ministry of Communications, in its recent public consultation on Reforming the Brazilian Telecommunications Framework, called attention to this fact and proposed that the FUST should be, at the very least, technologically neutral in its distribution mechanism. In addition, the Ministry is also considering a variety of other ways to distribute funds and to determine appropriate projects. As operators have continued to build out their networks according to their roll-out obligations, the government has collected a significant amount of FUST funds, but has only implemented one project and has no clear strategy on how to use the rest of the funds, which amount to seven billion Reais (US$ 4.31 billion).

Mechanisms need to be put in place to make universal service funds accessible to a wider range of telecommunications service providers. Limiting access of funds only to a specific category of licensee or to licensed operators, for example, can create barriers that continue to support existing conditions (i.e., the expansion of wireline networks to provide universal service/access) and discourage the implementation of new technologies to provide service in unserved or underserved areas. In Peru, telecommunications services providers with concession contracts for final public services (fixed line, including pay phones, and mobile) and value added services (data services including broadband Internet access) can access FITEL funds. If the entity/company requesting the funds does not have a concession contract for the area for which it is requesting the funds, the entity/company needs to request the appropriate expansion of the concession contract from the Ministry of Transportation and Communications.[39] Letting a variety of entities have access to universal service funds allows countries to benefit from a greater number of possible resources to help it achieve its universal service goals. In addition, these resources can sometimes provide innovative solutions for small-scale projects that would not normally be considered profitable.

In addition, the development and presentation of project proposals for universal service funds consideration should not be restricted only to the fund authority or to telecommunications providers, but instead should be open to all entities with an interest in contributing to the fulfilment of universal service/access. In Chile, project proposals can be presented by telecommunications service providers, regional/provincial/municipal authorities, universities, non-governmental organisations (NGOs), neighbourhood communities and others. SUBTEL, the entity responsible for administering and managing the country's universal service fund, uses these project proposals to design and develop the fund's annual project agenda.[40] A system where multiple parties can submit project proposals allows all interested parties to contribute in achieving universal service obligation objectives. Having multiple sources for project proposals can provide a more realistic vision of the needs and conditions of the market, such as what type of service is required by localities and which technology is best suited, and are more likely to result in creative and resourceful project solutions.

The Universal Service Fund should not only support a country's present universal service objectives, but also be able to adapt to the demands and trends of a converging telecommunications sector by fostering the use of new and innovative technologies to achieve future universal service obligation goals. The advantages and benefits of wireless technologies require that countries reconsider their universal service obligation objectives and establish universal service fund disbursement mechanisms that will support the implementation of new technologies to serve rural populations.

[39] OSIPTEL Board of Directors Resolution # 025-2005-CD/OSIPTEL, May 2005.

[40] SUBTEL decree approving the Guidelines for the Telecommunications Development Fund (Fondo de Desarrollo de las Telecomunicaciones), December 28, 2001.

In order to encourage the use of new technologies in achieving universal service/access, countries first have to revise present universal service fund objectives. Given the importance mobile technologies are playing today in providing affordable access to previously unserved or underserved areas and the increasing usage of other new technologies in similar efforts, universal service funds should consider integrating and supporting the application and deployment of new technologies to meet universal service obligation requirements. In Colombia, South Africa and Uganda, mobile payphones and public access businesses have already been used to fulfil regulatory obligations or to meet universal service fund competition requirements.[41] Because wireless technologies can usually be deployed faster and more affordably, incorporating them into universal service fund programs can provide countries with the means necessary to meet universal service obligation priorities more efficiently and effectively.

To ensure the smooth incorporation of new technologies into universal service fund programs, and guarantee the equal participation of all telecommunications sector participants, countries also need to make certain that the purpose of the universal service fund and the role of the universal service provider is well-defined. When Peru's FITEL fund was established, it was determined that the fund would provide populations in rural areas and localities considered of "preferred" social interest with greater access to telecommunications services. In addition, the fund's administration and management regulations stipulated that FITEL would not finance past or future network expansion obligations imposed on telecommunications operators by the government. Thus, the incumbent operator was excluded from accessing FITEL funds to finance its rollout obligations.[42] In Uganda, RCDF funds are only used to improve and service rural areas. In addition, "serve or lose" clauses have been included in main operator licences with regards to rural areas motivating main operators to effectively comply with universal service obligation, but also providing new market entrants with an opportunity to provide those services if the main operator fails to do so.[43] In India, the universal service fund is currently facing problems because, aside from being eligible for universal service funds, the incumbent operator receives Access Deficit Charge (ADC) revenues (that have been reduced from 30 to 10 percent, but that come from the country's universal service fund) to cover its deficit for providing fixed lines in rural and urban areas. This gives the incumbent operator a "favoured" position in comparison to other telecommunications service providers that have access to the fund.

41 Universal Access and Universal Service Funds: Insights and Experience of International Best Practice, Intelcon, July 2005.

42 OSIPTEL Resolution No. 48-2000-CD/OSIPTEL approving Regulations for the Administration and Management of the Fondo de Inversion de Telecomunicaciones (FITEL), October 2000; and Aprueban Normas Complementarias al Reglamento de Administracion y Funcionamiento de FITEL y su Exposicion de Motivos, OSIPTEL Resolucion de Consejo Directivo No. 025-2005-CD/OSIPTEL, May 2005

43 The Challenge of Universal Access – African Solutions for Africa, Country Case: Universal Access in Uganda, Patrick F. Masambu, March 1-4, 2005.

Section IV:
Universal Access/Service:
Assessment of Regional Texts

This section presents a snapshot of how the key issues are reflected (or not) in legal and regulatory texts from the beneficiary countries under the HIPCAR Project (Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago), thereby classifying the situation in the beneficiary countries as related to regulation on UAS in categories ranging from none (texts do not make reference at all to key issues) to fair (there is some mention of the issue but it is not detailed or not at an appropriate level, e.g. in some form of consultation document or draft regulation or even in a regulation which is not in line with primary legislation) to good (the texts reflect all elements categorized under a key issue). The *Summary Chart of Key Elements and Status* presents a quick overview of the status in the different countries. The aim of this first discussion paper is to provide not only an analysis of the key factors that exist in the different Caribbean legal and regulatory telecommunications frameworks in relation to UAS, but also to provide a common reference document that can be used to assess consistently the framework in the various countries.

In addition, this discussion paper identifies some of the best practices from around the world related to the key factors to determine the direction that regulatory trends are moving. This section also provides a comparison between target language from other countries around the world and regional texts. The aim of including this target language is to illustrate how other comparable countries or regions have dealt with such key issues. Another aim is to provide the basis for work to define the Policy Guidelines and Model Regulation on UAS.

Country/Region	1. Legal Mandate and Institutional Framework	2. Scope and Enforcement of UAS	3. Financing of UAS	4. UAS Fund – General	5. Fund Distribution	6. Fund Management
Antigua and Barbuda	NONE	NONE	NONE	NONE	NONE	NONE
Bahamas	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
Barbados	GOOD	FAIR	GOOD	GOOD	FAIR	GOOD
Belize	GOOD	FAIR	FAIR	FAIR	NONE	NONE
Dominica	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
Dominican Republic	GOOD	NONE	FAIR	FAIR/GOOD	GOOD	FAIR/GOOD
Grenada	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
Guyana	NONE	NONE	NONE	NONE	NONE	NONE
Haiti	NONE	NONE	NONE	NONE	NONE	NONE
Jamaica	GOOD	GOOD	GOOD	FAIR	GOOD	GOOD
St. Kitts and Nevis	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
St. Lucia	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
St. Vincent and the Grenadines	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
Suriname	GOOD	LIMITED	LIMITED	LIMITED	NONE	NONE
Trinidad and Tobago	GOOD	FAIR	LIMITED	LIMITED	NONE	FAIR

Source: Telecommunications Management Group, Inc., 2009

***NOTE**: Legal texts are assessed as:*

"GOOD" if they provide for all, nearly all or the most substantive portions of the key elements;
"FAIR" if they include some key elements, but are missing substantial points; and
"LIMITED", if they only nominally address the key elements
"NONE" if they do not include the provisions or only nominally address the key elements.

4.1 Legal Mandate and Institutional Framework

International Best Practices and Regional Trends:

- There is a law/legal mandate to support or address the concept of Universal Access/Service (UAS)
- The law/legal mandate is clear and directs the ministry or the regulator to develop a Universal Access/Service policy
- The regulator/administrator is responsible for the implementation of the policy
- If such a law/legal mandate exists, there is a distinction drawn between universal service and universal access
- The law or other document (*e.g.*, Government policy) defines the key principles or goals for Universal Access/Service
- The law provides for a multi-pronged approach to addressing universal access/service challenges and opportunities in which there are complementary strategies to meet the objectives targets

4.1.1 Regional Examples

Antigua and Barbuda – NONE

*** Fair framework proposed in Telecommunications Bill of 2007, Articles 24 and 25**

Bahamas – GOOD: there is a Sector Policy pursuant to the Communications Act which clearly specifies the scope of UAS.

(1) The Minister shall specify in the sector policy or in a notice published in the Gazette the universal services and the universal service obligations.
[Communications Act of 2009, Section 41]

Barbados – GOOD: The Telecommunications Act is clear about the mandate of the Minister in terms of defining UAS.

32. The universal service policy of the Government of Barbados is aimed at ensuring that every resident and every business enterprise of Barbados has access to reliable, affordable telecommunications services throughout Barbados on an equitable basis.

33. (1) There shall be a universal service obligation which is an obligation imposed on the Universal Service Carrier designated by the Minister under section 34(1), to
(a) ensure that basic telecommunications service, which is the ability to access dial tone in order to make telephone calls to other end-users, is reasonably accessible to all people in Barbados on an equitable basis wherever they reside or carry on business;
(b) ensure that payphones are reasonably accessible to all people in Barbados;
(c) permit access to directory inquiries;
(d) permit access to emergency numbers free of charge;
(e) provide appropriate telecommunications equipment to disabled persons to ensure access by those persons to the basic telecommunications service.

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(2) In giving effect to the provisions of subsection (1), the Minister shall ensure, in furtherance of the policy referred to in that subsection, that

(a) the universal service obligation described in this Part is fulfilled as efficiently and economically as practicable;

(b) the net avoidable costs that result from providing services in the course of fulfilling the universal service obligation are recovered from all carriers and service providers in accordance with sections 35 and 36 on an equitable basis;

(c) the universal service obligation does not impose an unfair or unreasonable burden on the universal service provider or persons required to contribute to the provision of universal service;

(d) the provision of the universal service obligation is co-ordinated with cost-oriented pricing efforts so that rate structures and levels for telecommunications services appropriately reflect underlying cost structures and levels; and

(e) the universal service obligation is transparent, nondiscriminatory, non-preferential, and competitively neutral.

[Telecommunications Act of 2002, Sections 32 and 33]

Belize – GOOD: The Telecommunications Act is clear about the mandate of the PUC in terms of defining UAS.

33. (1) The PUC shall develop annual objectives for services to be provided with the purpose of ensuring that the public telecommunication service, in particular basic telephone service, is accessible to the widest number of users.

(2) The PUC shall determine the public telecommunications services in respect of which the requirement of universal service shall apply taking into account the needs of the public, affordability of the service and advances in technology.

(3) The PUC shall develop the regulations and any conditions for the provision of public telecommunications services with respect to universal service obligation.

[Telecommunications Act of 2002, Section 33]

Dominican Republic – GOOD: The Telecommunications Law clearly provides for the mandate of the regulator to promote universal service. Chapter 3 (Articles 43-50) includes more specifics. In addition, RESOLUCIÓN NO. 016-01 adopted in 2001 sets out more specific functions of Indotel.

3. The objectives of public and social interest of the present ordenance, in light of which its provisions must be interpreted, are the following:

a) To reaffirm the principle of universal service through:

i. The guarantee, in rural and urban low-income areas, of the possibility of access to a minimum and efficient telephone service at accessible prices, by means of the free functioning of markets and use of mechanisms provided by this law;

ii. The satisfaction of the demand for public telecommunications services in conditions of free competition, ensuring continuity, generality, equality, and neutrality of said services; and

iii. Free access to public telecommunications networks and services in conditions of transparency and non discrimination by the providers and users of telecommunications services, the generators and receivers of information, and the providers and users of information services;

77. (a) The regulatory body must promote the development of telecommunications, by implementing the principle of universal service defined by the present law;

[General Telecommunications Law No. 153-98]

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Guyana – NONE: only a consultation addresses UAS, which does not appear to have been adopted via regulations.

Establish a Universal Access Program – to provide service to non-economic areas and low income subscribers. This program would be funded through a Universal Access Fund (UAF). Revenues would be contributed to the fund by all licensed telecommunications service providers, in proportion to their gross revenues from licensed services. Additional revenues would be sought from other sources, particularly international financial institutions and donors. Payments out of the program would be based on a competitive bidding process. Service providers, including GT&T could bid to receive a UAF subsidy to extend networks and provide access services, such as community telecentres and public payphones, to unserved areas, such as those in the interior. A variety of technologies could be used to build such networks, including VSATs and Wireless Local Loop services. The bidder with the lowest subsidy requirement would receive the subsidy, conditional upon meeting its service expansion commitments.

[Consultation Paper, Reform of the Telecommunications Sector in Guyana of 2001]

Haiti – NONE: No mention of UAS

Jamaica – GOOD: clear definition and scope

38. Universal service shall be provided to customers in accordance with the following principles -

(a) connection to the public voice network shall be reasonably provided to all customers upon request, to the extent that such connection is feasible and economically reasonable;

(b) any obligations imposed by this Act with regard to the provision of universal service shall be fulfilled as efficiently, economically and practically as possible;

(c) a licensee who is required by this Act to provide universal service shall be entitled to compensation in relation to the net costs incurred in meeting that requirement;

(d) licensees shall pay the universal service levy in the prescribed manner.

[Telecommunications Act of 2000, Section 38]

Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines – GOOD: treat primarily with establishing the Fund

(1) The Minister may, [on the recommendation of ECTEL], include as a condition in the licence of a telecommunications provider a requirement to provide universal service, except that such requirement shall be carried out in a transparent, non-discriminatory and competitively neutral manner.

(2) A telecommunications provider who is required by its licence to provide universal service to any person shall do so at such price and with the quality of service specified in the licence.

(2) In using the Fund to promote universal service the Commission shall:

(a) encourage efficient access to and use of telecommunication networks and services throughout [Member State], with special focus on rural, under-served and maritime areas, with a goal to help promote social, educational and economic development;

(b) ensure the reasonable availability and affordability of basic and advanced telecommunications services, including voice telephony and Internet access, as well as broadband connectivity at the community, household and individual levels, particularly where the commercial telecommunications market may be unable to deliver such services in a financially viable manner independently, as well as to the physically challenged, elderly, and indigent communities;

(c) provide support for the introduction and expansion of telecommunications services to schools, health facilities and other organizations serving public needs;

(d) promote technological innovation in the telecommunications sector.

[Telecommunications Act of 2000, Dominica, Section 43]
[Telecommunications Act of 2000, Grenada, Section 42]
[Telecommunications Act of 2001, St. Vincent & the Grenadines, Section 41]
[Telecommunications Act of 2000, St. Lucia, Section 42]

Suriname – GOOD: Clear mandate

Article 40

1. In the general social interest by state decree public telecommunications services shall be designated that must be available for everyone at affordable prices and of a certain quality.
2. In the general social interest by or pursuant to a state decree rules shall be laid down as to the amount of the price and the required quality level referred to in paragraph 1 of this Article; in establishing the amount of the price, a distinction may be made between groups of consumers.
3. In order to support and guide the national information, communication and technological development, by state decree a national Information, Communication and Technological Institute shall be installed. Said state decree shall also lay down rules as regards the funding. This national institute shall directly come under the President, who may charge a Minister with the implementation thereof.

Article 41

1. The President may at the advice of the Minister, include as a condition in the concession that the concession holder shall provide universal services, on the condition that such a service takes place in a transparent, non-discriminatory and competitiveness-neutral manner.

[Telecommunications Act, 2000 Articles 40 and 41]

Trinidad and Tobago – GOOD: clear mandate in Act.

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, taking into account the needs of the public, affordability of the service and advances in technologies.

(2) Such services, as are referred to in subsection (1), shall include, at a minimum, a quality public telephone service.

[Telecommunications Act of 2001, Section 28]

*** GOOD provisions including appropriate detail is included in Draft Universality Regulations of 2009, Section 4**

4.1.2 International Examples and Regional Harmonization

ECTEL

The main goal of the Universal Service Fund (USF) is to support the provision of Universal Service in telecommunications throughout [Member State]. According to the Telecommunications Act, Universal Service includes the provision of:

(a) public voice telephony;
(b) internet access;
(c) telecommunications services to schools, hospitals and similar institutions, and the disabled and physically challenged; or
(d) other service by which people access efficient, affordable and modern telecommunications.

Accordingly, the Fund shall be available to support the expansion of affordable access to these services to locations and user groups that do not currently have sufficient access.
[Telecommunications Universal Service Guidelines of 2008, Section 2.1]

European Union

(1) The liberalization of the telecommunications sector and increasing competition and choice for communications services go hand in hand with parallel action to create a harmonised regulatory framework which secures the delivery of universal service. The concept of universal service should evolve to reflect advances in technology, market developments and changes in user demand. The regulatory framework established for the full liberalization of the telecommunications market in 1998 in the Community defined the minimum scope of universal service obligations and established rules for its costing and financing.

(4) Ensuring universal service (that is to say, the provision of a defined minimum set of services to all end-users at an affordable price) may involve the provision of some services to some end-users at prices that depart from those resulting from normal market conditions. However, compensating undertakings designated to provide such services in such circumstances need not result in any distortion of competition, provided that designated undertakings are compensated for the specific net cost involved and provided that the net cost burden is recovered in a competitively neutral way.

(1) Member States shall ensure that the services set out in this Chapter are made available at the quality specified to all end-users in their territory, independently of geographical location, and, in the light of specific national conditions, at an affordable price.

(2) Member States shall determine the most efficient and appropriate approach for ensuring the implementation of universal service, whilst respecting the principles of objectivity, transparency, non-discrimination and proportionality. They shall seek to minimise market distortions, in particular the provision of services at prices or subject to other terms and conditions which depart from normal commercial conditions, whilst safeguarding the public interest.
[EC, Universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) dated 7 March 2002, Articles 1 and 3]

ECOWAS

1) Member States shall take all necessary measures in order to:
   a) formulate a national policy that identifies appropriate and realistic universal access/service objectives which take into account the differences between universal access (public access to ICTs) and universal service (private or household access to ICTs);
   b) as frequently as possible, conduct public consultations with stakeholders to identify their needs and modify universal access/service policies, regulations and practices accordingly;
   c) design universal access/service policies, regulations and practices to create incentives for the private sector to extend universal access to communications services;
   d) use a multi-pronged approach to addressing universal access/service challenges and opportunities, relying on complementary strategies to meet the targets that have been set;
   e) establish a fair and transparent telecommunications regulatory framework that promotes universal access to ICTs while allowing the market to address universal access/service to the greatest extent possible, intervening only where the market has failed or seems likely to do so. This entails:
      i) promoting technologically neutral licensing practices enabling service providers to use the most cost-effective technology to provide services for end users;

ii) adopting a transparent and non-discriminatory interconnection framework in which interconnection rates are linked to costs;
iii) reducing regulatory burdens to lower the costs of providing services to end users;
iv) promoting competition in the provision of a full range of ICT services to increase access, affordability, availability and use of ICTs.

[Supplementary Act A/SA.6/01/07 on Universal Access/Service, Jan. 2007, Article 3]

Malaysia

(1) The following are the objectives of the universal service provision:
(a) collective access to basic telephony and Internet access services; and
(b) individual access to basic telephony and Internet access services.

(2) In the event that the objectives specified in subregulation (1) cannot be met simultaneously in a universal service target, the order of priority for the provision of universal service shall be as follows:
(a) collective access shall have priority over individual access; and
(b) access to basic telephony services shall have priority over Internet access services.

[Communications And Multimedia (Universal Service Provision) Regulations of 2002, Section 3]

4.2 Scope and Enforcement of Universal Access/Service

International Best Practices and Regional Trends:

- The law defines specific services that must be provided and to whom
- The law provides that universal service targets are reviewed on a regular basis
- The law provides that stakeholders are consulted regarding targets, funding and management of the USF
- The law provides that build out requirements may be included in licenses to achieve UAS targets
- The law provides that coverage obligations (in terms of population or geographic area covered or other) may be included in licenses to achieve UAS targets
- There are specific criteria for determining which operators have or are subject to Universal Access/Service obligations
- The obligations vary from operator to operator, such as a distinction drawn between dominant and non-dominant operators
- If the operator fails to meet its Universal Access/Service obligations, or contribution requirements, there are enforcement mechanisms in place to address the deficiencies

4.2.1 Regional Examples

Antigua and Barbuda – NONE: only mentions sanctions

48(2) A person commits an offence and is liable on summary conviction to a fine of $100,000 or to imprisonment for a term of one year or to both, or on conviction on indictment to a fine of $250,000 or to imprisonment for a term of two years or to both and, in the case of a continuing offence, to a further fine of $5,000 for each day that the offence continues after conviction, if the person knowingly:
(e) fails to contribute to the funding of universal service.

[Telecommunications Act of 2007, Article 48]

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Bahamas – GOOD: clear definition of who is designated as Universal Service Provider as well as the services included.

(1)For the purposes of this Act, the following existing licensees shall be subject to interim designations as universal service providers–

(a) Bahamas Telecommunications Company for –
  (i) basic dial-up internet services to all populated areas;
  (ii) basic internet services to specified institutions;
  (iii) basic telephony services to all populated areas; and
  (iv) public access to pay apparatus; and

(b) Cable Bahamas Limited for basic television services in specified locations.

[Communications Act of 2009, Schedule 5]

8.4 Initially, and for the duration of the Exclusivity Period, any obligation to provide universal service will be imposed upon BTC as the dominant provider. Additionally the Public Utilities Commission may impose the obligation to provide universal service on any other telecommunications service provider in such circumstances as it may deem necessary. Initially BTC will be obliged to:

- extend and upgrade its network to facilitate the provision of Internet services to all inhabited settlements of 10 or more households in The Bahamas;
- provide an adequate number of public pay apparatus in public places such as shopping centres, airports, health and community centres, major public highways, public parks and in densely populated areas;
- install a line at a standard single price to any applicant living within a specified distance of the network;
- provide free calls to emergency services to all subscribers and at all public pay apparatus, and to distress, emergency and safety services for shipping and aircraft in accordance with the Radio Regulations of the International Telecommunication Union;
- provide special equipment required by persons with hearing, sight or other disabilities to enable them to access voice telephone services at no extra cost or as instructed by the Commission;
- provide telecommunications services at reduced cost to support the provision of Internet services to designated places in the Family Islands;
- provide Internet access, inclusive of the supporting telecommunications services, to all schools free of charge;
- make the same schedule of tariffs available to all users regardless of location throughout The Bahamas; and
- offer affordable tariffs for basic services.

[Telecommunications Sector Policy of 2002, Section 8]

12.13. As required by Section 8.3 of the TSP, all licensed telecommunications operators will contribute to the USF on a proportionate basis.

12.14. The objective of setting contributions on a proportionate basis is intended to ensure that operators contribute to the USF in a way which reflects the extent to which they have successfully entered the market and taken market share from BTC. USF contribution calculations could be done on the basis of:

- operators' net revenues;
- operators' profits; or
- operators' minutes of traffic

[Public Consultation on the Universal Service Obligation of 2004, Section 12]

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Barbados – FAIR: the law and regulations authorize the Minister, after a public consultation, to determine which operators are or will be subject to UAS obligations, but there are not specific criteria provided, which can lead to arbitrary decisions.

34(1) The Minister shall designate in writing a carrier to be the universal service carrier for Barbados.

(2) A designation under this section takes effect on the date specified by the Minister and shall have effect for the duration of the licence of the universal service carrier unless otherwise specified by the Minister, or unless the Minister designates another carrier to be the universal service carrier.

(3) Where the Minister designates another carrier as a universal service carrier under subsection (2), the Minister shall give 12 months notice in writing of the new designation.

(4) The carrier licence or the service provider licence of a designated universal service carrier is subject to the condition that the carrier must fulfill the universal service obligation.
[Telecommunications Act of 2002, Chap 282B Section 34]

3(1) When the Minister designates a universal service carrier for Barbados pursuant to section 34(1), the designation
(a) shall be for all geographical areas and all persons residing in Barbados; and
(b) shall be published in the Official Gazette and in at least one daily newspaper that is circulated in Barbados.

(2)(a) [the Minister] has first consulted with all licensees and is satisfied that it is in the public interest to replace the existing universal service carrier; and

(b) provides the existing universal service carrier with at least 12 months notice of the replacement.

5.(1) At least ninety days before the commencement of the financial year, the universal service carrier shall submit to the Minister a draft universal service plan with respect to the fulfillment of the universal service obligation; and the Minister shall consult with licensees on the proposed plan.

(2) The plan referred to under paragraph (1) shall include an estimate of the net avoidable costs that the universal service carrier reasonably believes will arise during the following financial year to be called the "estimated net universal service costs".
[Telecommunications (Universal Service) Regulations of 2003, Sections 3 and 5]

Belize – FAIR: although here is mention of PUC defining USOs there is no provision for consultation or review of targets

33. (1) The PUC shall develop annual objectives for services to be provided with the purpose of ensuring that the public telecommunication service, in particular basic telephone service, is accessible to the widest number of users.

(2) The PUC shall determine the public telecommunications services in respect of which the requirement of universal service shall apply taking into account the needs of the public, affordability of the service and advances in technology.

(3) The PUC shall develop the regulations and any conditions for the provision of public telecommunications services with respect to universal service obligation.
[Telecommunications Act of 2002, Section 33]

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Dominican Republic – NONE

No mention in the law or Regulation of designation or obligations of designated operators.

Guyana – NONE

Haiti – NONE

Jamaica – GOOD

14(6) Subject to subsection (7), the Office may recommend to the Minister that a licence be suspended or revoked, as the case may be, if, on its own initiative or on representations made by any other person, the Office is satisfied that the licensee has –

(h) failed to make payments in a timely manner in connection with the universal service obligation levy or in respect of the regulatory fee imposed pursuant to section 16.

39. - (1) Subject to this section the obligation to provide universal service shall be provide determined

(a) by an agreement between the Minister and a licensee; and

(b) on the recommendation of the Office, in accordance with section 42.

(2) The obligation to provide universal service shall be based on the following principles, that is to say the need -

(a) to the extent technically feasible and economically reasonable, to promote access to single line voice telephone services throughout the Island to persons regardless of place of residence or work;

(b) to ensure that payphone services are reasonably accessible to customers on an equitable basis;

(c) to permit access to free calls to emergency services; and

(d) to the extent technically feasible and in so far as the necessary resources are available, to promote internet access throughout the Island in schools, public libraries and post offices.

(3) Where the universal service obligation is determined in accordance with subsection (1) (a), the provisions of this Part other than section 41, shall not apply to the provision of such service.

(4) Where the universal service obligation is determined otherwise than pursuant to subsection (1)(a), the Office shall, on the request of the Minister and subject to subsection (5), make recommendations as to the nature of the obligation to be imposed on the provider of such service.

(5) The Office shall, before making any such recommendations, consult with members of the public on the matter in order to ensure that any such recommendations are based on the most complete and reliable information available and, in making such recommendations, the Office shall have regard to -

(a) the estimated net cost of fulfilling the universal service obligation in each year, not exceeding five percent of the projected eligible revenue for each year in a period of three years;

(b) the need to avoid imposing an unfair or unreasonable burden on the universal service provider, persons who are required to contribute to the universal service levy or customers of specified services.

(6) In determining the obligations of a universal service provider under this section, the Minister shall have regard to any recommendations made by the Office, so, however, that the Minister shall not be bound by any such recommendations.

40(1) Subject to subsection (2), the Minister may -

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(a) designate the existing telecommunications carrier as a universal service provider; and

(b) on the recommendation of the Office, deem any other licensee to be a universal service provider or to be so eligible, for a specified area or in relation to a specific service.

(2) Before taking action under subsection (1), the Minister shall -
(a) consult with members of the public; and
(b) issue a written determination that the public interest requires the taking of such action.

41(1) Subject to subsection (2), a universal service provider shall -
(a) fulfill its universal service obligation in relation to the relevant area or service specified service, to the extent that it is technically feasible and provider. economically reasonable; and
(b) follow any guidelines issued by the Office in relation to universal service.
[Telecommunications Act of 2000, Sections 14, 39 and 40]

Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines – GOOD

7. The Commission, in carrying out its obligations under the Act and these Regulations, shall -
(a) develop appropriate indicators of telecommunications access within [Member State];
(b) identify appropriate targets for moving toward universal service nationwide within a reasonable time frame;
(c) determine, in consultation with ECTEL, the public and industry stakeholders, appropriate socio-economic criteria to identify the geographic areas, population groups, institutions and organizations that may be eligible to benefit from Fund Projects;
(d) establish the mechanisms for proper management of the Fund;
(e) approve the application, qualification, and competitive and restrictive bidding conditions for the awarding of funds under designated projects;
(f) evaluate and define the scope and terms of potential Fund Projects;
(g) monitor Fund Projects and enforce the terms of Fund Project contracts;
(h) monitor and enforce the mechanism for the assessment, collection and recovery of the required contributions to the Fund;
(i) liaise and consult with the Minister and ECTEL to promote consistency between the operation of the Fund and national and regional telecommunications policies and take into account the policy of Government when determining which fund projects would receive funding in any given financial year;
(j) liaise and consult with telecommunications providers and other industry stakeholders on the status of telecommunications industry technologies, markets, and other relevant developments;
(k) determine, in consultation with ECTEL, whether sole source procurement can be used;
(l) adopt the Guidelines issued by ECTEL for the effective carrying out of the provisions of these regulations; and
(m) implement the Guidelines for the operation of the Fund.
[Telecommunications (Universal Service Fund) Regulations of 2008, Section 7]

Suriname – LIMITED: Act includes the proposed governance of the Fund

3. In order to support and guide the national information, communication and technological development, by state decree a national Information, Communication and Technological Institute shall be installed. Said state decree shall also lay down rules as regards the funding. This national institute shall directly come under the President, who may charge a Minister with the implementation thereof.
[Telecommunications Act, 2000 Articles 40]

Section V

Trinidad and Tobago – FAIR. Basic principles are there without the details

28(8) The obligations to provide and contribute to the funding of the services referred to in subsection (1) shall be applied on a nondiscriminatory basis as between all similarly situated telecommunications service providers and users.
[Telecommunications Act of 2001, Section 28]

***GOOD provisions with sufficient details are included in Draft Universality Regulations of 2009, Sections 14, 15]**

4.2.2 International Examples and Regional Harmonization

ECTEL

3.2(ii)The Fund Administrator shall notify the Commission promptly regarding any Fund Contributions that are not received in due time and regarding any disputes as to amount of Fund Contributions.

Non-payment of a provider's contribution to the Fund shall constitute a breach of the provider's license liable to sanctions under Section [ ] of the Telecommunications Act.

4.4 The Commission shall establish, on an annual basis, a Fund Operating Plan. The Operating Plan shall summarize the current state of development of telecommunications in the country, and shall set forth the broad objectives, targets, and types of projects that the Fund may seek to promote during the current operating year. The Fund Operating Plan shall also include a budget outlining the resources available to support projects during the year, and the intended allocation of these resources. Once approved by the Commission, the Operating Plan shall be made available for inspection by interested parties.
[Telecommunications Universal Service Guidelines of 2008, Sections 3 and 4]

European Union

1. The Commission shall periodically review the scope of universal service, in particular with a view to proposing to the European Parliament and the Council that the scope be changed or re-defined. A review shall be carried out, on the first occasion within two years after the date of application referred to in Article 38(1), second subparagraph, and subsequently every three years.

2. This review shall be undertaken in the light of social, economic and technological developments, taking into account, inter alia, mobility and data rates in the light of the prevailing technologies used by the majority of subscribers. The review process shall be undertaken in accordance with Annex V. The Commission shall submit a report to the European Parliament and the Council regarding the outcome of the review.
[EC, Universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) dated 7 March 2002, Article 15]

Maldives

64. Universal service providers

The Authority may require that one or more carriers have a universal service obligation.

65. Universal service obligation

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A universal service obligation requires a carrier to ensure that a good, efficient and continuous basic service is, in the Authority's opinion, reasonably available to all persons within the areas of the Maldives covered by that obligation on an equitable basis, as determined by the Authority by written instrument.
[Maldives Telecommunications Regulations 2003, Section 64-65]

ECOWAS

Without prejudice to more generous domestic measures, Member States shall commit themselves to taking the necessary steps to ensure that, at a minimum, the entire populations within their territories have access to the services listed in this chapter, regardless of their geographic location and at affordable prices.

Member States shall ensure that requests for connection to a telecommunication network are satisfied by at least one operator and may, if necessary, designate one or more operators to that effect, such that all parts of the national territory are covered. The connection provided must be such as to enable the user to make domestic and international calls, send and receive voice messages and fax and data transmissions, and connect to the internet with an adequate transfer rate.

Member States shall periodically review the scope of the universal service, in particular with a view to making proposals for its modification or redefinition. The first such review shall be held no later than two years following the date of entry into force of this Supplementary Act, and thereafter a review shall be held every three years.

The review shall take account of social, economic and technological developments, and shall have particular regard to data mobility and transfer rates for the technologies most widely used by the majority of subscribers. Member States shall inform the Commission of any changes.

Member States shall determine the most effective and appropriate approach for ensuring the implementation of universal service, with due respect for the principles of objectivity, transparency, non-discrimination and proportionality. They shall endeavor to keep market distortions to a minimum, particularly where they take the form of service provision at rates or under conditions which differ from those normally prevailing in a commercial operation, while protecting the public interest.

To these ends, Member States may, where necessary, designate one or more companies to ensure the provision of universal service… that all parts of the territory can be covered. Member States may designate components of universal access/service and/or to cover different parts of the national territory.
[Supplementary Act A/SA.6/01/07 on Universal Access/Service, Jan. 2007, Articles 7, 8 and 13]

Section V

4.3 Financing of Universal Access/Service

International Best Practices and Regional Trends:

- The law establishes some sort of financial mechanism to support provision of UAS
- The law provides that funding or subsidies provided must be targeted and determined and delivered in a manner that is transparent, non-discriminatory, inexpensive, and competitively neutral
- Where government decides to fund operators through UAS programmes, the subsidies are 'smart subsidies' meaning that they are used to encourage operators to enter the market and not to create an unending dependency on subsidy
- Monies are taken also available from other sources such as from a general government budget or specific grants, PPP mechanisms, etc. to support Universal Access/Service goals
- There may be a rate setting above cost to provide some mechanism of "support." The law identifies the services with above-cost rates and the services or infrastructure that receives the support from these above-cost revenues
- There are other sources of implicit funding such as intercarrier compensation fees and the relevant services or infrastructure that receives the support from these implicit subsidies are identified

4.3.1 Regional Examples

Antigua and Barbuda – NONE

Bahamas – GOOD: variety of funds

(1) URCA may establish by determination or regulation a universal service fund or universal service funds, into which the following monies shall be paid–
  (a) any money appropriated by URCA for the purpose;
  (b) any grant, contribution or loans from any international organisations or donors; and
  (c) all money contributed by the Government for this purpose.

[Communications Act of 2009, Section 44]

Barbados – GOOD: various mechanisms foreseen

36(1) There is hereby established a fund to be known as a Universal Service Fund, the resources of which comprise such amounts as may be collected under the authority of this Act from all carriers and service providers for the purpose of funding the universal service.

[Telecommunications Act of 2002, Section 36]

8(1) The Universal Service Fund shall be
  (a) administered in accordance with the principles of the universal service obligation and these Regulations; and
  (b) conducted by means of payments between operators under the supervision of the Fund Administrator where the Minister considers it would not unreasonably prejudice the objective of universal service to do so, having regard to the impact on telecommunications carriers and service providers and universal service carriers.

11(1) A universal service carrier shall be entitled to recover the net avoidable costs of meeting the universal service obligation for each financial year from all carriers and service providers in accordance with section 33(2)(b) of the Act.

(2) For the purposes of section 33(5) of the Act "the net avoidable costs" covers
(a) administrative costs and the universal service carrier's cost of capital on relevant assets; and
(b) an interest component calculated from the date each cost is incurred to the date when payment is due and at a rate in accordance with the prevailing bank interest rate payable in respect of loans.

12(1) Within 90 days after the end of each financial year, the universal service carrier shall lodge with the Fund Administrator a statement of the net universal service costs incurred by the universal service carrier in fulfilling the universal service carrier's universal service obligation in the last financial year, in these Regulations called "the claim".

(2) The claim shall be in writing and in a form approved by the Fund Administrator and shall set out
(a) the universal service carrier's net avoidable costs of meeting the universal service obligation for the financial year;
(b) such data as may be necessary to verify the calculation by the universal service carrier of its net avoidable costs for the financial year; and
(c) such other information as is necessary for the purposes of the claim.

(3) The claim shall include a statement as to whether the net universal service costs incurred were greater than or less than the estimated net universal service costs in the plan, and any reasons for material deviation from those estimated costs.

16(1) The Fund Administrator shall as soon as practicable, and in any case within 120 days of the end of the financial year, issue a notice to each licensee specifying the contribution to be known as the "Fund Levy" to be made by each licensee to the net avoidable costs for that financial year.

(2) The Fund Levy for each licensee for each Financial Year shall be an amount equal to the net avoidable costs of the universal service carrier for the financial year divided by the total industry eligible revenue for the financial year multiplied by the eligible revenue of the licensee for that financial year.

18(c) the Minister shall take appropriate enforcement action under the Act against a defaulting licensee, including
(i) revocation or suspension of the licence of the defaulting licensee; and
(ii) fines imposed on the defaulting licensee for late levy payments.
[Telecommunications (Universal Service) Regulations of 2003, Sections 8, 11, 12, 16 and 18]

Belize – FAIR: although there is mention of funding, too much emphasis is placed on USF and no provision for management of funds or selection of projects.

34. (1) The PUC may establish a fund into which providers of telecommunications services (public and private) shall pay any fees the PUC may prescribe as universal access development fees.
[Telecommunications Act of 2002, Section 34]

Dominican Republic – FAIR – the law provides for funding by stakeholders, but there are exceptions to the contributors as well as to the services from which contributions are paid.

45.1. There is hereby created the “Contribution to the development of telecommunications (CDT), which shall consist of an aliquote of two percent (2%) over:
a) The pre-tax amounts perceived during the month prior to the liquidation of the CDT, from invoicing to end users of public telecommunications services, except for radio broadcasting;

Section V

and

b) The amounts perceived by those rendering public telecommunications services during the month prior to the liquidation of the CDT, as payments of correspondent relationship (liquidation) for international services, except for those of radiotransmission.

45.2. For purposes of the present article, end users of those rendering public telecommunications services, the owners of private telecommunications services, when the latters´ networks are connected to a public network of the former. On the other hand, end users of a party rendering its services to resalers and those rendering services with networks interconnected through the relationship of interconnection shall not be considered as end users.

46. The CDT shall be applied in a fixed percentage to the financing of the regulatory body and in a fixed percentage to the financing of development projects. The respective percentages shall be established by regulation.

[General Telecommunications Law No. 153-98]

Haiti – NONE

Jamaica – FAIR: Directions included in subsidiary Order provides appropriate funding mechanism. There is much contention about the implementation of this Order, particular from the USA

The April 19 2005 Ministerial Order established in international inbound traffic levy as a means to finance a Universal Service Fund to be managed by a dedicated Administrator.

Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines – GOOD: variety of mechanisms

9(1) The Commission shall take into account the objectives outlined in regulation 6 when allocating funds for Fund Projects.

(2) In identifying projects for fund allocation the Commission:

(a) shall promote the establishment of efficient, self-sustaining entities, which may continue to expand access to telecommunications on their own initiative, requiring the minimum amounts of Fund resources possible;

(b) may use the Fund to support projects that may not be economically feasible without Fund support;

(c) may use the Fund to finance projects to the extent necessary to create adequate economic incentives for investors.

Suriname – LIMITED: indication within explanatory language that states financing will be facilitated through contributions

Ter financiering van dit Instituut zullen alle dienstverleners van telecommunicatiediensten, inclusief de concessiehouders, verplicht worden gesteld een bijdrage te leveren aan de fondsvorming ter ondersteuning van de ontwikkeling van ICT.)

Trinidad and Tobago – LIMITED: facilitates the establishment of a Fund, but does not define sources.

"53. (1) The funds of the Authority shall consist of—

(d) sums collected in respect of universal service obligations;

(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."

[Telecommunications Act, 2002 Section 53]

*** GOOD Detailed provisions included in Draft Universality Framework, 2009**

4.3.2 International Examples and Regional Harmonization

ECTEL

2.2 To fulfill the goal of Universal Service, the Commission shall identify and define specific projects, for which the Fund may provide financial support. Also, the Fund shall seek to promote self-sustaining projects to the greatest extent possible. The Commission may, according to the procedures set forth in the USF Guidelines, establish priorities and criteria as to the identification and selection of preferred projects.

3.2(i) The Fund shall be financed primarily by the monies collected from telecommunications providers as stipulated in the Telecommunications (Universal Service Fund) Order. Additional funds may be received from direct Government appropriations, or in the form of grants donations, or other contributions made by individuals or legal entities.
[Telecommunications Universal Service Guidelines of 2008, Sections 2 and 3]

European Union

(18) Member States should, where necessary, establish mechanisms for financing the net cost of universal service obligations in cases where it is demonstrated that the obligations can only be provided at a loss or at a net cost which falls outside normal commercial standards. It is important to ensure that the net cost of universal service obligations is properly calculated and that any financing is undertaken with minimum distortion to the market and to undertakings, and is compatible with the provisions of Articles 87 and 88 of the Treaty.

(19) Any calculation of the net cost of universal service should take due account of costs and revenues, as well as the intangible benefits resulting from providing universal service but should not hinder the general aim of ensuring that pricing structures reflect costs. Any net costs of universal service obligations should be calculated on the basis of transparent procedures.

(21) When a universal service obligation represents an unfair burden on an undertaking, it is appropriate to allow Member States to establish mechanisms for efficiently recovering net costs. Recovery via public funds constitutes one method of recovering the net costs of universal service obligations. It is also reasonable for established net costs to be recovered from all users in a transparent fashion by means of levies on undertakings. Member States should be able to finance the net costs of different elements of universal service through different mechanisms, and/or to finance the net costs of some or all elements from either of the mechanisms or a combination of both. In the case of cost recovery by means of levies on undertakings, Member States should ensure that that the method of allocation amongst them is based on objective and non-discriminatory criteria and is in accordance with the principle of proportionality. This principle does not prevent Member States from exempting new entrants, which have not yet achieved any significant market presence. Any funding mechanism should ensure that market participants only contribute to the financing of universal service obligations, and not to other activities which are not directly linked to the provision of the universal service obligations. Recovery mechanisms should in all cases respect the principles of Community law, and in particular in the case of sharing mechanisms those of non-discrimination and proportionality. Any funding mechanism should ensure that users in one Member State do not contribute to universal service costs in another Member State, for example when making calls from one Member State to another.

(22) Where Member States decide to finance the net cost of universal service obligations from public funds, this should be understood to comprise funding from general government budgets including other public financing sources such as state lotteries.
[EC, Universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) dated 7 March 2002]

ECOWAS

1) Funding and subsidies must be targeted, and are to be determined and delivered in a manner that is transparent, non-discriminatory, inexpensive and competitively neutral.

2) Subsidies can be provided using several means, including:
a) a universal service fund, which should be developed as a mechanism within a broader market-oriented approach to achieving universal access;
b) universal service funds can be financed by a broad range of market players, managed by neutral bodies such as regulators, and be used to kick-start public access projects that meet the needs of the local community;
c) governments may also consider a full range of other financing mechanisms;
d) competitive minimum subsidy auctions could be used, as an option, to reduce the amount of financing necessary for public access projects financed by a universal service fund;
e) public access projects can be designed to achieve long-term financial self-sustainability, especially where consideration is given to innovative low-cost technologies.
[Supplementary Act A/SA.6/01/07 on Universal Access/Service, Jan. 2007, Article 20]

4.4 Universal Access/Service Fund – General

International Best Practices and Regional Trends:

- The law clearly provides for the establishment of a fund
- The law clearly identifies who is responsible for the management and operation of the fund and ensures the independence of this entity through clear regulatory provisions
- The law, where necessary, provides that all licensed entities must contribute to the fund
- The law provides that the percentage, flat fee or other formula used to calculate an operator's contribution to the fund is clearly defined in the Law and is applied in a non-discriminatory manner to all similarly-situated service providers
- The fees are not excessive and are assessed on revenues from telecommunications services
- Payments into the fund are on an annual or quarterly basis
- Operators are required to file revenue reports that the fund manager uses to calculate contributions on an annual basis
- There may be other reporting requirements for operators

4.4.1 Regional Examples

Antigua and Barbuda – NONE

*** FAIR provisions are included in the Telecommunications Bill of 2007, Article 10]**

Bahamas – GOOD: meets most principles listed above

(1) URCA may establish by determination or regulation a universal service fund or universal service funds, into which the following monies shall be paid –
(a) any money appropriated by URCA for the purpose;

(b) any grant, contribution or loans from any international organisations or donors; and
(c) all money contributed by the Government for this purpose.

(2) When establishing one or more universal service funds, URCA shall specify whether the funds shall be applied to all universal service obligations or whether only certain universal service obligations shall be included or excluded from the funds under which the designated universal service providers may apply for funding.

(3) Subject to subsection (2), the universal service funds shall be administered by URCA and may only be applied to the installation and maintenance of networks and the provision of universal services in an area where the gross avoidable cost of providing the universal services exceeds the revenue derived from those services.

(4) URCA may levy charges on licensees or content providers to contribute to one or more universal service funds.

(5) URCA may exempt any licensee or licensees or content provider or content providers from paying the charge set out in subsection (4) if its relevant turnover from a similar or related sector is below a designated threshold or if it does not operate in a similar or related sector to the universal service to which the fund relates.
[Communications Act of 2009, Section 44]

Barbados – GOOD: clear definitions

9(1) The Minister may appoint a Fund Administrator and notice of that appointment shall be published in the Official Gazette.

(2) The Fund Administrator shall oversee and administer the running and operation of the Fund in accordance with section 36(2) of the Act and these Regulations.

13(1) Within 90 days after the end of each financial year, each licensee shall lodge with the Fund Administrator a statement of eligible revenue which each licensee has received in the last financial year.

(2) The statement of eligible revenue of each licensee must be accompanied by a report of an approved auditor that
(a) states that the auditor has been given sufficient access to the licensee's records in order to audit the statement of eligible revenues;
(b) states that the auditor has audited the statement of eligible revenue for verification; and
(c) contains a declaration of the opinion of the auditor, as to the veracity of the statement of eligible revenue; and where the licensee is not a public company, the statement shall be contained in an affidavit sworn by the Chief Executive Officer or Financial Controller of the licensee.
[Telecommunications (Universal Service) Regulations of 2003, Sections 9 and 13]

Belize – FAIR: although there is mention of funding, too much emphasis is placed on USF and no provision for management of funds or selection of projects.

34. (1) The PUC may establish a fund into which providers of telecommunications services (public and private) shall pay any fees the PUC may prescribe as universal access development fees.

(2) The PUC may impose, as a condition of the grant of a licence, any obligations with regard to the provision of universal service to the widest users including those with disabilities or in a specified area or region, to the extent technically feasible and economically reasonable.

(3) A licensee who, under this Act, is required to provide universal service shall be entitled to compensation in relation to the actual costs incurred in meeting that obligation.
[Telecommunications Act of 2002, Section 34]

Dominican Republic – FAIR/GOOD: although the regulator is mandated to manage the fund independently, and the regulation sets out a number of principles, there should be more detail on management and operation of the fund and how to ensure the independence of this entity through clear regulatory provisions

45.1. There is hereby created the "Contribution to the development of telecommunications (CDT), which shall consist of an aliquote of two percent (2%) over:

a) The pre-tax amounts perceived during the month prior to the liquidation of the CDT, from invoicing to end users of public telecommunications services, except for radio broadcasting; and
b) The amounts perceived by those rendering public telecommunications services during the month prior to the liquidation of the CDT, as payments of correspondent relationship (liquidation) for international services, except for those of radiotransmission.

45.2. For purposes of the present article, end users of those rendering public telecommunications services, the owners of private telecommunications services, when the latters´ networks are connected to a public network of the former. On the other hand, end users of a party rendering its services to resalers and those rendering services with networks interconnected through the relationship of interconnection shall not be considered as end users.

46. The CDT shall be applied in a fixed percentage to the financing of the regulatory body and in a fixed percentage to the financing of development projects. The respective percentages shall be established by regulation.

49. The regulatory body shall administer, independently of all of the rest of its ordinary activities, a "Fund for the financing of development projects", to which effect it will open a special account. With the resources from this account it will pay or finance the development projects adjudicated.
[General Telecommunications Law No. 153-98]

Guyana – NONE

Jamaica – FAIR

Ministerial Order of April 19th 2005 pursuant to Sections 38 and 39 of the Telecommunications Act 2000 introduced a levy for all incoming international traffic. Annex to the Ministerial Order (May 31 2005) articulated procedures and operations for the collection of the Universal Service levy and established a Fund Administrator

Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines – GOOD: clear definition of need to establish Fund as appropriate, various finance sources.

5(1) In accordance with sections [-] and [-] of the Act, there shall be established a Universal Service Fund.

(2) The Fund shall be managed by the Commission which shall-

(a) collect and disburse monies accruing to the Fund; and
(b) make all relevant decisions with respect to the Fund consistent with the Act and these Regulations.

Section V

(3) The Fund shall consist of-
(a) contributions by telecommunications providers as specified under the Act and by Order of the Minister;
(b) any funds that may be directly appropriated by Parliament for purposes of the Fund; and
(c) official grants, donations, bequests or other contributions, or transfers granted by an individual or other legal entity.

(4) The Commission may refuse any bequest, donation, grant or other contribution if the Commission considers it inconsistent with the best interest of the Fund.

21(1) Notwithstanding the terms of its licence, any telecommunications provider shall be automatically considered eligible to bid for any Fund Project.
[Telecommunications (Universal Service Fund) Regulations of 2008, Sections 5, 21]

Suriname – LIMITED: indication in the explanatory memorandum of the Act

Ter financiering van dit Instituut zullen alle dienstverleners van telecommunicatiediensten, inclusief de concessiehouders, verplicht worden gesteld een bijdrage te leveren aan de fondsvorming ter ondersteuning van de ontwikkeling van ICT.)
[Telecommunications Act 2000]

Trinidad and Tobago – LIMITED: General Principles adhered to

(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 [UNIVERSAL SERVICE].

(4) 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.
[Telecommunications Act 2001 Section 54]

*** GOOD provisions included in Draft Universality Regulations of 2009, Section 5**

4.4.2 International Examples and Regional Harmonization

ECTEL

3.2(ii)The Fund Administrator shall maintain a record of the Fund Contributions due to the Fund and collected from all telecommunications providers, indicating:
- The verified gross revenues by year;
- The amount of Fund Contribution due for the current year;
- The Fund Contribution amounts collected;
- Fund Contribution amounts outstanding.

7.2 The Fund Administrator shall monitor Fund Projects, to ensure compliance with the terms and conditions of the Service Contracts. Project monitoring shall include a review of the periodic project reports submitted by the contractor as well as on-site inspection of the Fund Project, as necessary. The Commission shall determine based on information provided by the periodic project reports and from reports from on-site inspection whether additional investigation may be necessary to ensure compliance with the provisions of the service contract.
[Telecommunications Universal Service Guidelines of 2008, Sections 3 and 7]

European Union

Recovery of any net costs of Universal Service Obligations: The recovery or financing of any net costs of universal service obligations requires designated undertakings with universal service obligations to be compensated for the services they provide under non-commercial conditions. Because such a compensation involves financial transfers, Member States are to ensure that these are undertaken in an objective, transparent, non-discriminatory and proportionate manner. This means that the transfers result in the least distortion to competition and to user demand. In accordance with Article 13(3), a sharing mechanism based on a fund should use a transparent and neutral means for collecting contributions, that avoids the danger of a double imposition of contributions falling on both outputs and inputs of undertakings. The independent body administering the fund is to be responsible for collecting contributions from undertakings which are assessed as liable to contribute to the net cost of universal service obligations in the Member State and is to oversee the transfer of sums due and/or administrative payments to the undertakings entitled to receive payments from the fund.

[EC, Universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) dated 7 March 2002, Annex IV]

Jordan

The Board, with the approval of the Council of Ministers, may establish in the Commission a fund that enjoys financial independence and has its special account. The purpose of this fund shall be to increase the universality of telecommunications and information technology services in the Kingdom and to contribute to the expansion and development of the infrastructure of these services where actually needed for areas of collective habitation.

The composition of the financial sources of the fund shall be the following:

1) Amounts assigned to it by a decision of the Council of Ministers, upon the recommendation of the Board, from the returns provided for in Paragraph (a) of Article (18) of this Law.
2) The support provided to the fund by the Licensees on the issuance or renewal of their licenses.
3) Any other source agreed upon by the Board.
4) All matters pertaining to the work organization of the fund, its management, control and expenditure shall be specified in a special By-Law that shall be drawn up for this purpose.

[Telecommunications Law of 1995, Article 85]

Nigeria

71(1) In accordance with section 114(2)(b) of the Act, the Commission shall make financial contributions (hereafter in these Regulations referred to as the "Commission USP Contributions") to the USP Fund based on a portion of the annual levies paid to the Commission by licensees, as determined pursuant to sub-regulation (2) of this regulation.

(2) The Commission shall determine, from time to time, the amount of the Commission USP Contributions, in accordance with the following:

(a) the initial amount of the Commission USP Contributions shall be equal to 1% of net revenues of the licensees from which the Commission collects annual levies, as "net revenues" is defined by the Commission for the purposes of calculating its annual levies.

(b) prior to making a determination to increase or decrease the amount of the Commission USP Contributions, the Commission shall take into consideration:

(i) the estimated financing needs of the current USP Operating Plan;

(ii) any related recommendations prepared and submitted to the Commission by the USP Secretariat; and
(iii) any other information the Commission determines to be appropriate.

[Universal Access and Universal Service Regulations of 2007, Section 71]

Malaysia

(1) All licensees shall contribute to the USP Fund except for those licensees whose total net revenue for the previous calendar year derived from the designated services is less than the minimum revenue threshold.

(2) A licensee who is required to make contribution under subregulation (1) shall contribute six per cent of its weighted net revenue annually to the USP Fund, unless the Commission with the approval of the Minister, by notice in writing, decides to reduce the contribution to the USP Fund.

(2A) For the purpose of reducing the contribution to the USP Fund, the Commission may make an assessment from time to time of the USP Fund required to fulfill the universal service objectives by taking into consideration the economic performance of the industry, the amount of moneys available in the USP Fund and such other matters as the Commission deems fit and necessary.

(3) The payment of the contribution referred to in subregulation (1) shall be made in—
(a) one lump sum payment, not later than thirty days from the date of notification of acceptance of return under subregulation 31(1); or
(b) two equal instalments
(i) the first instalment, not later than thirty days from the date of notification of acceptance of return under subregulation 31(1); and
(ii) the second instalment, not later than six months from the date of the notification of acceptance of return under subregulation 31(1).

(4) The weighted net revenue is derived in accordance with the calculation as specified in Table B of the Schedule.

(5) A licensee who fails to make payment of the contribution in accordance with this regulation, commits an offence under these Regulations.

[Communications And Multimedia (Universal Service Provision) Regulations of 2002, Section 27]

United States

Currently, all telecommunications companies that provide service between states, including long distance companies, local telephone companies, wireless telephone companies, paging companies, and payphone providers, are required to contribute to the federal Universal Service Fund. Carriers providing international services also must contribute to the Universal Service Fund. Telecommunications companies pay contributions into one central fund. USAC makes payments from this central fund to support the four Universal Service Fund programs.

[USAC, Universal Service Fund, available at www.universalservice.org/about/universal-service/]

4.5 Fund Distribution

International Best Practices and Regional Trends:

- Several mechanisms are in place to distribute the funds – direct payment to operators, reverse auction, least subsidy, etc.
- All licensees are eligible to bid on Fund projects
- There are specific and clearly defined criteria for who else can benefit from the subsidies, including types of communities (e.g., un-served) or beneficiaries (e.g., schools and hospitals)
- Subsidies provided directly to consumers, or governmental or educational institutions may be done through discounts and operators are reimbursed for the difference
- Services or infrastructure eligible for subsidies are broader than just voice telephony and preferably technology neutral

4.5.1 Regional Examples

Antigua and Barbuda – NONE

Bahamas – GOOD: meets most criteria

43(1) A licensee subject to a universal service obligation is entitled to apply for one or more of the following–

(a) funding from a universal service fund; and

(b) such other means of funding, including market-based means, as may be determined by URCA.

(2) URCA shall consider all applications and shall determine whether the licensee is entitled to funding.

44(2) When establishing one or more universal service funds, URCA shall specify whether the funds shall be applied to all universal service obligations or whether only certain universal service obligations shall be included or excluded from the funds under which the designated universal service providers may apply for funding.

(3) Subject to subsection (2), the universal service funds shall be administered by URCA and may only be applied to the installation and maintenance of networks and the provision of universal services in an area where the gross avoidable cost of providing the universal services exceeds the revenue derived from those services.

[Communications Bill, 2009]

Barbados – FAIR: Direct payment to licensees is the only method of distributing the funds; not all licensees are eligible to bid and there are not criteria to determine who else can benefit from subsidies.

8(1) The Universal Service Fund shall be

(a) administered in accordance with the principles of the universal service obligation and these Regulations; and

(b) conducted by means of payments between operators under the supervision of the Fund Administrator where the Minister considers it would not unreasonably prejudice the objective of universal service to do so, having regard to the impact on telecommunications carriers and service providers and universal service carriers.

[Telecommunications (Universal Service) Regulations of 2003, Section 8]

Belize – NONE: although there is mention of funding, too much emphasis is placed on USF and no provision for management of funds or selection of projects.

34. (1) The PUC may establish a fund into which providers of telecommunications services (public and private) shall pay any fees the PUC may prescribe as universal access development fees.

(2) The PUC may impose, as a condition of the grant of a licence, any obligations with regard to the provision of universal service to the widest users including those with disabilities or in a specified area or region, to the extent technically feasible and economically reasonable.

(3) A licensee who, under this Act, is required to provide universal service shall be entitled to compensation in relation to the actual costs incurred in meeting that obligation.
[Telecommunications Act of 2002, Section 34]

Dominican Republic – GOOD: meets most criteria

43.1. For purposes of compliance with what is established by Article 3, clause a), sections i) and iii) of the present law, the regulatory body shall prepare a biannual plan of concrete projects to be financed, which shall be called "Development projects," according to the regulations.

43.2. Once each project has been assigned, it will perform follow up of its execution pursuant to the provisions of the regulation.

44.1. The projects shall be adjudicated by public bidding to the qualified bidder which requests the lowest subsidy, calculated on standardized preestablished bases, and shall contain an indication of zones of service; quality of service; maximum rate applicable, in its case; terms for rendering the service, and penalties for noncompliance.

44.2. The biddings may adjudicate the installation of systems, rendering of services, or both

50. Any interested party who has the qualifications to be a concessionaire of public telephone service may participate in the biddings provided for in Article 44.
[General Telecommunications Law No. 153-98 and Regulation on Universal Service]

Jamaica – GOOD: The subsidiary order system establishes much of the desired framework

The April 19 2005 Ministerial Order established in international inbound traffic levy as a means to finance a Universal Service Fund to be managed by a dedicated Administrator

Established by the May 31, 2005 Annex to the Ministerial Order of April 19 2005, the Universal Access Fund Co. Ltd. has the following mandate

(i) to collect the Universal Service levy
(ii) to analyse and recommend to Cabinet for implementation, project of a Universal Service Obligation nature
(iii) to disburse funds for the implementation of approved initiatives
(iv) to monitor implementation of projects
(v) to account for Funds collected and disbursed

Dominica, Grenada, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines – GOOD

17(l) A person may submit a proposal for a Fund Project, according to procedures and formats to be set forth by the Commission in the Guidelines.

(2) The Fund Administrator shall request and receive project proposals for review.

Section V

18. (1) The Commission shall establish criteria, in accordance with the Guidelines for determining the scope and nature of projects that may be eligible for Fund support in any given financial year.

(2) The Commission shall determine which proposed projects shall receive financial support from the Fund in any given financial year.

(3) A determination in accordance with sub-regulation (2) shall be based upon clear and transparent procedures, which may also include public consultations.

(4) Fund Project Bidding Documents shall not unduly favour any particular bidder.

22 (1) Subject to sub regulation (2) Fund project implementation contracts shall be awarded on the basis of an open competitive bidding procedure.

(2) Notwithstanding sub-regulation (1), where the Commission deems appropriate, Fund Project implementation contracts may be awarded on the basis of a restricted bidding procedure, a sole source procurement procedure or an emergency procurement procedure.

(3) The Commission shall determine which method of procurement is appropriate in the circumstances and manage the procurement process in accordance with the requirements and procedures set out in the Guidelines.

(4) Where the Commission intends to use a method of procurement other than open competitive bidding, it shall notify the public of its intention to do so and the grounds for the choice of the procurement method to be used.

[Telecommunications (Universal Service Fund) Regulations of 2008, Sections 17, 18, 22]

Suriname – NONE

Trinidad and Tobago – NONE

*** GOOD provisions included in Draft Universality Regulations of 2009, Section 11**

4.5.2 International Examples and Regional Harmonization

ECTEL – GOOD

3.3(ii) Financial support from the Fund to a telecommunications provider shall be awarded in the form of a fixed price contract. The award may be disbursed by the Commission in one or more payments to correspond to milestones established under the Service contract for each project. The proposed payment installments shall be set out in the Service Contract. Disbursements for Fund Projects may be in the form of reimbursements or advances. The Commission shall make disbursements only after disbursement conditions in the Service Contract have been met. The Fund Administrator shall prepare and manage all payment certifications, which shall certify that the contractor have met the obligations or milestones specified in their Service Contracts.

The Fund may reimburse the telecommunications provider for eligible expenses that the provider has pre-financed pursuant to the Service Contract.

The Commission may, in cases it deems appropriate provide, make an advance payment of no greater than 20% of the total project budget to a contractor. Advances shall be subject to reimbursement or a lien against equipment purchased in cases where a contractor fails to

meet its obligations under the service contract. The contractor may be required to provide supporting documents to the Commission to show that advances have been used to finance eligible expenses.

5.1 At the beginning of each operating year, the Fund Administrator shall initiate the process of identifying projects to be considered for funding within the operating year. This process will include (i) solicitation of proposals from telecommunications service providers and other interested parties, and (ii) development of proposals for projects identified by the Commission. This provision does not preclude the Commission from identifying and soliciting projects at any other time during the operating year. The process of soliciting project proposals from telecommunications service providers and other interested parties could be done through (i) public meetings, (ii) online advertisement/solicitation, (iii) public announcements, (iv) advertisements or, (v) appropriate promotional activities.

[Telecommunications Universal Service Guidelines of 2008, Sections 3 and 5]

Nigeria

48. USP Projects shall be awarded to one or more bidders, as the case may be, using a competitive selection process designed and implemented by the USP Secretariat in accordance with these Regulations.

49. The competitive selection processes used by the USP Secretariat may include minimum subsidy auctions or such other processes designed by the USP Secretariat that are in accordance with these Regulations. As an initial position to be confirmed or modified in the initial Operating Plan, the USP Secretariat shall use minimum subsidy auctions as its preferred form of competitive selection process.

50. Both service providers that are current Nigerian licensees and parties that are potential new entrants to the Nigerian communications sector shall be eligible to bid in a competitive selection process, subject to the qualification criteria established for the competitive selection process.

[Universal Access and Universal Service Regulations of 2007, Sections 48-50]

United States

The Universal Service Fund (USF) is one fund with four programs. The four programs are:

- High Cost – This support ensures that consumers in all regions of the nation have access to and pay rates for telecommunications services that are reasonably comparable to those in urban areas.
- Low Income – This support, commonly known as Lifeline and Link Up, provides discounts that make basic, local telephone service affordable for more than 7 million low-income consumers.
- Rural Health Care – This support provides reduced rates to rural health care providers for telecommunications and Internet services so they pay no more than their urban counterparts for the same or similar telecommunications services.
- Schools & Libraries – This support, commonly referred to as E-rate support, provides affordable telecommunications and Internet access services to connect schools and libraries to the Internet. This support goes to service providers that provide discounts on eligible services to eligible schools, school districts, libraries, and consortia of these entities.

[USAC, Universal Service Fund, available at www.universalservice.org/about/universal-service/]

Section V

4.6 Fund Management

International Best Practices and Regional Trends:

- The entity or government body charged with day to day management of the fund is independent and works according to transparent procedures
- There is an oversight entity/body, or requirement for the fund manager to report to the regulator or ministry
- The law provides for financial transparency for the USF, including accounting separation and standards
- Administrative costs of the fund should be kept to a minimum

4.6.1 Regional Examples

Antigua and Barbuda – NONE

Bahamas – GOOD: clear management principles

12.8. In the interests of transparency, the PUC intends to have an audit of the fund carried out on an annual basis and the said audit will be distributed directly to contributors to the USF.

12.9. The PUC will attempt to satisfy any complaints arising concerning the operation of the fund. However, any party wishing to take its grievance further may do so under Section 7 of the Telecommunications Act or seek judicial review under the law.

[Public Consultation on the Universal Service Obligation of 2004, Section 12]

119(1) Subject to subsection (2), on this Act coming into force the existing licensees listed in Schedule 5 shall be designated as universal service providers for the purpose of section 42(3) in respect of one or more of the following universal service obligations –

(a) affordable basic telephony services to all populated areas;
(b) affordable dial-up internet services to all populated areas;
(c) basic internet services to specified institutions;
(d) affordable public access to pay apparatus; and
(e) affordable basic television services in specified locations.

[Communications Act of 2009, Section 119]

Barbados – GOOD: clear management principles

9(1) The Minister may appoint a Fund Administrator and notice of that appointment shall be published in the Official Gazette.

(2) The Fund Administrator shall oversee and administer the running and operation of the Fund in accordance with section 36(2) of the Act and these Regulations.

(3) Where a Fund Administrator has not been appointed under paragraph (1), the duties of the Fund Administrator under these Regulations shall be fulfilled by the Minister.

(4) The Fund Administrator may recover costs reasonably incurred in the exercise of his duties under these Regulations from licensees through the Administrative Levy referred to in regulation 10.

(5) The Fund Administrator shall submit to the Minister for his approval, a budget detailing the total expected expenditure for the administration of the Fund for the following financial year 90 days before the start of the financial year; and the Minister shall make the budget available to the universal service carrier and licensees upon their request.

(6) The Fund Administrator shall keep proper accounts and adequate financial and other records which shall be made available to the Minister or the auditor at their request.

(7) Costs reasonably incurred by the Fund Administrator in the exercise of his duties under these Regulations and the accounts of the Fund itself under the control of the Fund Administrator, shall be subject to an annual audit conducted by an auditor who shall be appointed by the Minister.

(8) The Auditor General may at any time, and shall on direction of the Minister responsible for Finance, carry out an investigation or audit of the accounts of the Fund Administrator.

(9) Within 90 days of the end of each financial year, the Fund Administrator shall report to the Minister on the costs reasonably incurred in the exercise of his duties under these Regulations.

(10) Within 200 days of the end of each financial year, the Fund Administrator shall report to the Minister on the audited accounts of the Fund.

(11) The reports of the Fund Administrator provided to the Minister under paragraphs (9) and (10) shall be made available to the public on request.

[Telecommunications (Universal Service) Regulations of 2003, Section 9]

Belize – NONE: although there is mention of funding, too much emphasis is placed on USF and no provision for management of funds or selection of projects.

34. (1) The PUC may establish a fund into which providers of telecommunications services (public and private) shall pay any fees the PUC may prescribe as universal access development fees.

(2) The PUC may impose, as a condition of the grant of a licence, any obligations with regard to the provision of universal service to the widest users including those with disabilities or in a specified area or region, to the extent technically feasible and economically reasonable.

(3) A licensee who, under this Act, is required to provide universal service shall be entitled to compensation in relation to the actual costs incurred in meeting that obligation.

[Telecommunications Act of 2002, Section 34]

Dominican Republic – FAIR/GOOD: the principles are generally reflected in the law and the regulation.

49.- The regulatory body shall administer, independently of all of the rest of its ordinary activities, a "Fund for the financing of development projects", to which effect it will open a special account. With the resources from this account it will pay or finance the development projects adjudicated.

[General Telecommunications Law No. 153-98 and Regulation on Universal Service]

Jamaica – GOOD

Established by the May 31, 2005 Annex to the Ministerial Order of April 19 2005, the Universal Access Fund Co. Ltd. has the following mandate

(i) to collect the Universal Service levy
(ii) to analyse and recommend to Cabinet for implementation, project of a Universal Service Obligation nature
(iii) to disburse funds for the implementation of approved initiatives
(iv) to monitor implementation of projects
(v) to account for Funds collected and disbursed

Dominica, Grenada, St. Kitts and Nevis; St. Lucia; St. Vincent and the Grenadines – GOOD

10(1) There shall be a Fund Administrator who shall be appointed by the Commission.

(6) The Fund Administrator shall report to the administrative head of the secretariat of the Commission for all personnel and administrative matters.

(7) The Fund Administrator shall submit his recommendations for Fund Project decisions to:
(a) the administrative head of the secretariat of the Commission; and
(b) the Chairman of the Commission.

13(1) Any monies accruing to the Fund shall be kept in one or more accounts, separate and independent from any other operating accounts of the Commission.

(2) Any monies accruing to the Fund shall be initially deposited in a designated Fund bank account and shall be disbursed upon authorization of the Commission for specific Fund related activities in accordance with the Guidelines.

15. (1) The Commission shall keep books of accounts and maintain proper records of the operations of the Fund in accordance with International Accounting Standards.

(2) The accounts of the Fund may at any time and shall, at the end of each financial year, be audited by an independent auditor appointed by the Commission on such terms and conditions as the Commission may determine.

16. The Commission shall include in its Annual Report:
(a) the audited Financial Statements of the Fund;
(b) details of activities supported by the Fund; and
(c) details of awards of contracts.

[Telecommunications (Universal Service Fund) Regulations of 2008, Sections 10, 13, 15, 16]

Suriname – NONE

Trinidad and Tobago – FAIR

(5) Subject to subsection (6), such amounts appropriated by Parliament and the other sums referred to in subsection (1) shall be paid into a bank account opened with the approval of the Minister of Finance.

(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.

(7) At the end of each financial year, any surplus of funds remaining in the account opened in accordance with subsection (5), after defraying the expenditure referred to in subsection (2), shall be paid into the Consolidated Fund

[Telecommunications Act 2001 Section 54]

*** GOOD Provisions included in the Draft Universality Framework for Telecommunications Services in Trinidad and Tobago of 2009, Section 6]**

4.6.2 International Examples and Regional Harmonization

ECTEL – GOOD

3.1 The Fund shall be managed by the Commission, in accordance with the Regulations and these Guidelines. In the administration of the Fund the Commission shall ensure that:

- the Fund remains fiscally sound, and confirm revenue, cost, and financial performance projections;
- the collection of Fund Contributions from telecommunications providers in accordance with the Telecommunications (Universal Service Fund) Order;
- timely disbursement of subsidy and other eligible payments as per service contracts and the Fund's certifications according to payment milestones;
- The Fund's financial accounts and records are maintained;
- The Fund's Annual Report is prepared.

3.2(ii)The finances of the Fund shall at all times be kept in separate accounts from other Commission's finances, and shall be transparently maintained and operated as such. All monies accruing to the Fund shall be kept in a specially designated Fund Bank Account, separate and independent from any other bank accounts of the Commission. There shall be no commingling of Fund finances and any other finances at any time. The Fund Bank Account shall be managed in accordance with financial management policies and procedures approved by the Commission. The Commission shall specify the authorised signatories to the Fund Bank Account.

[Telecommunications Universal Service Guidelines of 2008, Section 3]

Nigeria

78. The financial year of the USP Board shall start on January 1st of each year and end on December 31st of the same year.

79(1) The USP Board shall keep proper records of the USP Fund accounts in respect of each financial year and shall cause the USP Fund accounts to be audited within 6 months from the end of each financial year by auditors whose appointment shall be approved by the USP Board and shall be subject to reappointment on an annual basis provided that such auditors are on the list of auditors approved from time to time by the Auditor-General for the Federation.

80(1) The USP Board shall prepare and submit an annual report to the National Assembly, through the President, not later than 6 months after the end of each financial year.

(2) The USP Board annual report shall include, but not be limited to:

(a) a description of the activities of the USP Board for the preceding financial year;
(b) the USP Fund's audited accounts for the year under review together with the auditors report thereon;
(c) the most recent USP Fund Managers quarterly report;
(d) the most recent approved Operating Plan; and
(e) any other information the USP Board considers relevant and appropriate for inclusion in the USP Board annual report.

[Universal Access and Universal Service Regulations of 2007, Sections 78-80]

Section V

United States

The FCC has determined that the USF is subject to the requirements of the Improper Payments Information Act of 2002 (IPIA), which requires federal agencies to review programs and activities they administer and identify those that may be susceptible to significant erroneous payments.
[USAC, Understanding Audits, available at www.usac.org/fund-administration/about/understanding-audits.aspx]

(a) Identification of Susceptible Programs and Activities.—

The head of each agency shall, in accordance with guidance prescribed by the Director of the Office of Management and Budget, annually review all programs and activities that it administers and identify all such programs and activities that may be susceptible to significant improper payments.

(b) Estimation of Improper Payments.—With respect to each program and activity identified under subsection (a), the head of the agency concerned shall—

(1) estimate the annual amount of improper payments; and
(2) submit those estimates to Congress before March 31 of the following applicable year, with all agencies using the same method of reporting, as determined by the Director of the Office of Management and Budget.

(c) Reports on Actions to Reduce Improper Payments.— With respect to any program or activity of an agency with estimated improper payments under subsection (b) that exceed $10,000,000, the head of the agency shall provide with the estimate under subsection (b) a report on what actions the agency is taking to reduce the improper payments, including—

(1) a discussion of the causes of the improper payments identified, actions taken to correct those causes, and results of the actions taken to address those causes;
(2) a statement of whether the agency has the information systems and other infrastructure it needs in order to reduce improper payments to minimal cost-effective levels;
(3) if the agency does not have such systems and infrastructure, a description of the resources the agency has requested in its budget submission to obtain the necessary information systems and infrastructure; and
(4) a description of the steps the agency has taken to ensure that agency managers (including the agency head) are held accountable for reducing improper payments.

[Improper Payments Information Act of 2002, Section 2]

Section V:
Legal Texts Consulted

5.1 Regional Texts

Antigua and Barbuda

Draft ICT Policy, available at: www.ab.gov.ag/gov_v2/government/parliament/laws/itc_draft_policy.pdf
Telecommunications Act of 2007, available at:
www.laws.gov.ag/bills/2007/Telecommunications_2007.pdf

Bahamas

The Communications Bill, 2009, available at:
www.bahamas.gov.bs/bahamasweb2/home.nsf/vContentW/GOV--Welcome--BILLS+PDF/$FILE/TheCommunicationsBill,2009_01.tuesday%2021.pdf
Utilities Regulation and Competition Authority Act, 2009, available at:
www.bahamas.gov.bs/bahamasweb2/home.nsf/vContentW/GOV--Welcome--BILLS+PDF/$FILE/Copy_of_URCA_ACTApril_9,2009_(Working_Copy)_FINALCOPYTuesdayafternoon.pdf
Public Consultation on the Universal Service Obligation of 2004, available at:
www.urcabahamas.bs/download/uso_consult_public.pdf

Barbados

Telecommunications Act of 2002, available at:
www.telecoms.gov.bb/Documents/telecommunications_act_cap282b.pdf
Telecommunications (Universal Service) Regulations of 2003, available at:
www.telecoms.gov.bb/Documents/Regulations/2003/si97.pdf

Belize

Telecommunications Act of 2002, available at:
www.puc.bz/publications/Belize%20Telecommunications%20Act_20-07-02.pdf

Dominican Republic

General Telecommunications Law No. 153-98, available at:
www.indotel.gob.do/component/option,com_docman/Itemid,578/task,cat_view/gid,20/
Regulation on Universal Service, available at:
www.indotel.gob.do/component/option,com_docman/Itemid,578/task,cat_view/gid,20/

Dominica

Telecommunications Act of 2000, available at:
www.ectel.int/Telecoms%20Regulations/Dominica/TelecommunicationsAct2000.pdf
Telecommunications (Universal Service Fund) Regulations, 2009, available at:
www.ectel.int/Telecoms%20Regulations/Dominica/Universal_Services_Fund_34_of_2009.pdf

Grenada

Telecommunications Act of 2000, available at:
www.ectel.int/Telecoms%20Regulations/Grenada/Telecommunications%20Act%2031%20of%202000.pdf
Telecommunications (Universal Service Fund) Regulations, 2009, available at:
www.ectel.int/Telecoms%20Regulations/Grenada/USF_21_of_2009.pdf
Telecommunications (Universal Service Fund Contribution) Order, 2009, available at:
www.ectel.int/Telecoms%20Regulations/Grenada/USF_Order_20_of_2009.pdf

Guyana
Consultation Paper, Reform of the Telecommunications Sector in Guyana of 2001, available at: www.itpag.org.gy/downloads/telecomsreform.pdf
Competition and Fair Trading Bill of 2004, available at: www.mintic.gov.gy/documents/Competition_and_Fair_Trading_Bill.pdf
Guyana Telecommunications Act, 1990, available at: www.gina.gov.gy/gina_pub/laws/Laws/cap4702.pdf

Haiti
Décret du 12 octobre 1977 sur les télécommunications, available at: www.conatel.gouv.ht/legislation/loitelecom.pdf

Jamaica
Draft Jamaica Telecoms Policy of 2007, available at: www.mmt.gov.jm/PDF%20Files/MMT/Draft%20Telecoms%20Policy%20(MMT)%20-%20May%202007.pdf
The Telecommunications Act of 2000, available at: www.mct.gov.jm/telecommunications_%20act_2000.pdf

St. Kitts and Nevis
Telecommunications Act, 2000, available at: www.ectel.int/Telecoms%20Regulations/St.%20Kitts/ACT.pdf
Telecommunications (Universal Service Fund) Regulations of 2008, available at: www.ectel.int/Telecoms%20Regulations/St.%20Kitts/Universal_Service_Fund_2_OF_2008.pdf
Telecommunications (Universal Service Fund Contribution) Order, 2008, available at: www.ectel.int/Telecoms%20Regulations/St.%20Kitts/Universal_Service_Fund_Order_4_of_2008.pdf

St. Lucia
Telecommunications Act, 2000, available at: www.ectel.int/Telecoms%20Regulations/St.%20Lucia/Telecommunications2000.pdf
Telecommunications (Universal Service Fund) Regulations of 2008, available at: www.ectel.int/Telecoms%20Regulations/St.%20Lucia/Universal_Service_Fund_120_of_2008.pdf
Telecommunications (Universal Service Fund Contribution) Order, 2009, available at: www.ectel.int/Telecoms%20Regulations/St.%20Lucia/Universal_Service_Fund_Order_45_of_2009.pdf

St. Vincent and the Grenadines
Telecommunications Act, 2001, available at: www.ectel.int/Telecoms%20Regulations/St.%20Vincent&%20Grenadines/Telecommunications_Act_1_of_2001.pdf
Telecommunications (Universal Service Fund) Regulations of 2008, available at: www.ectel.int/Telecoms%20Regulations/St.%20Vincent&%20Grenadines/Universal_Service_Fund_45_of_2008.pdf
Telecommunications (Universal Service Fund Contribution) Order, 2008, available at: www.ectel.int/Telecoms%20Regulations/St.%20Vincent&%20Grenadines/Universal_Service_fund_Order_9_of_2008.pdf

Suriname
Wet Telecommunicatievoorzieningen (S.B. 2004 no. 151), available at: www.mintct.sr/telecomwet.htm

Trinidad and Tobago
Telecommunications Act of 2001, available at: www.tradeind.gov.tt/Legislation%20Policies/Trinidad%20Legislation/The%20Telecommunications%20Act,%202001.pdf
Telecommunications (Amendment) of 2004, available at: www.ctu.int/attachments/030_A_ACT_to_amend_the_Telecommunications%20Act_2001.pdf
Draft Universality Framework for Telecommunications Services in Trinidad and Tobago of 2009, available at: www.tatt.org.tt/ddocs/Universality%20_Implementation_Plan.pdf

Draft Universality Regulations of 2009, available at:
www.tatt.org.tt/ddocs/Universality%20_Implementation_Plan.pdf

ECTEL
Telecommunications Universal Service Guidelines of 2008, available at:
www.ectel.int/grd/Documents/Universal%20Service%20Guidelines%20-%20July%202009.pdf

5.2 International and Harmonized Texts

ECOWAS
Supplementary Act A/SA.6/01/07 on Universal Access/Service, Jan. 2007, available at:
www.itu.int/ITU-D/treg/projects/itu-ec/index.html

European Union
Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), available at: www.eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0022:EN:NOT

Jordan
Telecommunications Law of 1995, as amended 2002, available at:
www.trc.gov.jo/index.php?option=com_content&task=view&id=3&Itemid=164&lang=english

Maldives
Maldives Telecommunication Regulation, 2003, available at:
www.tam.gov.mv/Maldives%20Telecommunications%20Regulation%202003%20-%20Final%20(with%20Decree).pdf

Malaysia
Communications and Multimedia (Universal Service Provision) Regulations of 2002, available at:
www.skmm.gov.my/what_we_do/usp/USP%20Notification2003.pdf

Nigeria
Universal Access and Universal Service Regulations of 2007, available at:
www.ncc.gov.ng/RegulatorFramework/Regulations_on_Universal_Access_07.pdf

United States
USAC, Universal Service Fund, available at www.universalservice.org/about/universal-service/

Annex 1

Participants of the First Consultation Workshop for HIPCAR Project Working Groups dealing with Telecommunications Acts – Universal Access & Service; Access & Interconnection; and Licensing.
Port of Spain, Trinidad and Tobago, 26-29 October 2009

Officially Designated Participants and Observers

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Barbados	Cable & Wireless Ltd.	DOWNES-HAYNES	Claire
Barbados	Ministry of Finance, Investment, Telecommunications and Energy	EVELYN	Renee
Barbados	Cable & Wireless Ltd.	MEDFORD	Glenda
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British Virgin Islands	Telecommunications Regulatory Commission	MALONE	Guy Lester
Grenada	National Telecommunications Regulatory Commission	FERGUSON	Aldwyn
Grenada	Office of the Prime Minister	ROBERTS	Vincent
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Jamaica	Digicel Group	GORTON	Andrew
Jamaica	Office of the Prime Minister	MURRAY	Wahkeen
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Saint Vincent and the Grenadines	Ministry of Telecommunications, Sciences, Technology and Industry	FRASER	Suenel
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Annex 1

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