

# **A TELECOMMUNICATIONS REGULATORY ENVIRONMENT**

## **PRINCIPLES OF AN APPROACH TO TELECOMMUNICATIONS IN THE CARIBBEAN**

AUTHOR: MICK REID  
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## Author's note:

This document is based on the results of 25 years of telecommunications reform in the European Union and the author's own experiences in restructuring the telecommunications sector in central and eastern Europe since 1994.

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Mick Reid can be contacted at:  
Systec Belgium  
Rue de Colinet 14/A  
B-1380 Lasne  
Belgium  
Tel: +32 2 633 2681  
email: [mick.reid@systec.be](mailto:mick.reid@systec.be)

## **1 INTRODUCTION**

Telecommunications liberalisation is the cornerstone of transition, lowering the price of communicating, and encouraging innovation and investment in new services and networks.

However, the transition from a monopoly world to a fully competitive one is not easy. In order for it to have concrete effects, detailed rules are necessary and the application of those rules needs to be carefully supervised. Resources must be focused on scrutinising the implementation and practical application of a telecommunications regulatory framework.

The National Regulatory Authorities (NRAs) for telecommunications have much to do. They should be set a range of tasks by a telecommunications regulatory framework, from the grant of new mobile and fixed network licences, to approving interconnection prices and agreements; policing prices charged to customers for changing operators, and dealing with the allocation of numbers to new market players. National competition authorities should also be called upon to examine alleged anti-competitive behaviour in the telecommunications market.

This is an overview of a framework, which should help those providing telecommunications services, businesses in general, and citizens to find their way around what could be a new telecommunications landscape.

Chapter 2 provides an overview of the basic principles.

Chapters 3 and 4 set out proposed rules governing the markets for networks and services and for telecommunications equipment respectively.

Chapter 5 identifies who could be responsible for regulating the sector.

## **2 PRINCIPLES OF AN APPROACH TO TELECOMMUNICATIONS IN THE CARIBBEAN**

Telecommunications in the Caribbean is characterised by a series of national monopolies. There are three main strands through which the Caribbean should seek to liberalise and regulate the telecommunications sector:

- a progressive liberalisation of a former monopoly sector;
- implement accompanying harmonisation measures; and
- apply equitable competition rules.

### **2.1. LIBERALISATION OF A MONOPOLY SECTOR**

Caribbean countries should require the removal of special or exclusive rights granted to undertakings in the Caribbean. In the telecommunications sector, the Caribbean should consider that giving certain enterprises special and exclusive rights to produce telecommunications equipment, provide telecommunications services or operate networks is contrary to the principles of free competition and market rules. Special and exclusive rights to import, market, connect, bring into service and maintain terminal equipment existing in the Caribbean should be removed; telecommunications services, including voice and data, should be liberalised

The major principles, which should be introduced, are as follows:

- the removal of special or exclusive rights: the requirement for Caribbean countries to ensure that any operator is allowed to supply telecommunications services;
- the regulator should be independent from national governments and telecommunication operators. These regulators are referred to as National Regulatory Authorities (NRAs) in this document although in some countries they may have other names;
- objective, non-discriminatory and transparent conditions: requirement for conditions for granting of licences and access to networks to be objective, non-discriminatory and transparent, together with a right to appeal.

### **2.2. ACCOMPANYING MEASURES**

Detailed harmonised regulation should be put in place to ensure that the aims and principles of competition are upheld.

The main principles are as follows:

- Open Networks (ON) This concept seeks to promote a single market in telecommunications by harmonising the conditions for access to and use of publicly available networks and services. ON conditions aim at ensuring a minimum set of services, securing access and interconnection, harmonising standards for technical interfaces of networks, and ensuring universal service. These conditions must be transparent, objective, proportionate and non-discriminatory.

- **Significant Market Power (SMP)** Since the Caribbean telecommunications market is generally dominated by one incumbent operator in each country, the ON concept introduces the concept of SMP. Operators with SMP should be subject to heavier regulation than other operators are, because of their power in the market. SMP is defined in a specific manner (in most cases, where an organisation providing telecommunications services has 25% of the national market, though NRAs should have some flexibility to determine otherwise depending on the national market situation).
- **Fixed/Mobile** There should be differentiation in the level of regulation applicable to the fixed and mobile sectors (essentially the obligations that apply to SMP operators in those sectors). The reason for this is primarily that the mobile sector, as a new technology, has always been subject to some degree of competition. Thus, the ON obligations that apply may be less onerous given that mobile operators are already subject to competitive pressure.

### **2.3. COMPETITION RULES**

Naturally, alongside detailed sector-specific legislation, national and Caribbean competition law should also apply to telecommunications as to any other sector. Caribbean governments should agree and publish harmonised guidelines on the application of a Caribbean competition law in the telecommunications sector and the application of competition rules to access agreements. Such agreements will be vital if new entrant operators are to be able to reach end-users served exclusively by the incumbent's network. Caribbean countries need to set out the access principles that define the interplay between competition law and the telecommunications regulatory framework; and explain how competition rules will be applied in a consistent way across the various sectors involved.

### **2.4. CONSUMER PROTECTION LEGISLATION**

Similarly, alongside the sector-specific legislation, national and Caribbean consumer protection law should also apply to the telecommunications as to any other sector. Among the most relevant to the sector would be legislation covering "Unfair terms in consumer contracts", "distance contracts" and "misleading advertising".. Caribbean countries should publish an "Inventory of Acts relating to consumer affairs and consumer health protection". This inventory should provide basic information regarding binding and non-binding acts relating to Caribbean consumer protection legislation.

### **3. A SINGLE MARKET IN TELECOMMUNICATIONS SERVICES AND INFRASTRUCTURE**

#### **3.1. THE LIBERALISATION OF TELECOMMUNICATIONS SERVICES AND INFRASTRUCTURE**

Liberalisation of services and networks in the Caribbean could proceed in a number of stages.

- require the abolition of special and exclusive rights over public telecommunications services
- liberalise networks and require Caribbean countries to allow Cable TV networks to be used to offer telecommunications services
- require the removal of restrictions on the way in which mobile networks operate (i.e. allowing operators to build their own infrastructure or microwave links, rather than relying on the networks provided by the national fixed network operator; allowing them to directly interconnect with mobile or fixed networks in other Caribbean countries, rather than having to interconnect via the incumbent operator in their home country.
- early liberalisation of alternative telecommunications networks, and set a deadline for full liberalisation
- in addition, set out a range of provisions addressing licensing, universal service, interconnection, and numbering, and establish basic regulatory principles derived from the competition rules.
- review the issue of cable network ownership by telecommunications operators and restrictions imposed on them which prevent them from offering broadcasting services over the telecommunications networks<sup>1</sup>

#### **3.2. GENERAL REGULATORY FRAMEWORK**

##### **3.2.1. Open Networks**

The regulatory framework for telecommunications should be based on the concept of Open Networks (ON). This is the need for harmonised conditions of access to public networks and services according to defined principles of *objectivity*, *transparency* and *non-discrimination*. These principles should apply to the actions of regulators and market players and define the basis for fair and even-handed regulation and commercial conduct in a liberalised telecommunications market.

One example of this is the requirement that operators apply similar interconnection terms and conditions to all operators offering similar services (including their own activities and those of subsidiaries and partners). Another less obvious example is the need for greater transparency than might be appropriate in more traditional markets, because in the transition from a monopoly to a liberalised environment, effective competition may require more information to be in the public domain because of the strong position enjoyed by incumbent operators. Consequently, there should be a requirement for interconnection agreements to be made available by the NRA to all interested parties.

### **3.2.2. Significant Market Power**

The concept of Significant Market Power is an important one in an ON regulatory framework. Operators with such power should be subject to additional regulatory obligations, such as the requirement to offer cost-oriented interconnection rates, or to meet all reasonable requests for access to their network. Generally, there should be a presumption that SMP exists where an operator, whether fixed or mobile, is judged by the NRA to have 25% or more in the relevant market, though the NRA may determine that an operator has SMP with less than 25% of the market, or indeed that it does not, even if the operator has more than 25%. Therefore, regulators should have flexibility whether SMP exists. Apart from determining the relevant market, existence of SMP is determined on a range of other factors: the organisation's ability to influence market conditions; its turnover relative to the size of the market; its control of the means of access to end-users; its access to financial resources and its experience in providing products and services in the market.

In the case of mobile operators, it should be a requirement that cost-oriented interconnection pricing should only apply where the operator has significant market power on the **national market for interconnection** (i.e. fixed and mobile).

### **3.2.3. Pricing principles**

In a fully competitive market, it is preferable that market forces and the commercial process should set prices rather than regulators. Nevertheless, in a transition to full and effective competition, these forces may not be sufficiently strong, and there should be legislation in the telecommunications sector containing two pricing principles that depart from this rule.

- Firstly, the requirement for **cost-oriented tariffs** should apply in a wide range of areas to operators having significant market power. This requirement should apply, inter alia, to interconnection charges, the provision of leased lines, the provision of special network access and voice telephony services.  
Given the importance of interconnection charges in securing strong competition in a newly liberalised market, guidelines to assist NRAs in determining whether interconnection charges are cost-oriented or not should be defined in guidelines on interconnection pricing.
- Secondly, a **requirement for affordability** should exist in legislation on the provision of universal service to be defined in Caribbean legislation. Affordability is for each Caribbean country to define in the light of the different priorities that exist for consumers in different countries and the differing standards of living.

### **3.2.4. National Responsibilities - the potential for additional national regulation**

The regulatory framework at the Caribbean level should establish a set of minimum requirements which Caribbean countries are obliged to implement and enforce, with the detailed application of those principles and requirements being carried out at a Caribbean country level. The use of Caribbean rules as the key legislative instrument in extending the Caribbean market and competition rules to the telecommunications sector means that implementation is left to each Caribbean country to decide according to its own requirements and national legal system. Day to day management and enforcement of the regulatory framework should be the responsibility of the NRAs of each Caribbean country. Licences are granted exclusively at national level, and NRAs decide whether particular services in their territory should be subject to general authorisations or individual licences, within the overall framework established by the Licensing rules.

Moreover, in certain areas, it should be possible for the Caribbean to impose additional national requirements on operators, for example in the area of mandatory service provision. The regulatory framework should introduce the concept of **universal service** - a set of minimum services that must be available to all. Caribbean legislation should give NRAs discretion to establish a universal service fund to compensate the universal service operator if it considers that the net cost of providing those services constitutes an unfair burden for this operator. In order to calculate the net cost the NRA must take into account the benefits of being a universal service operator.

It should be open to a Caribbean country to set additional obligations on operators as part of universal service in its territory. However, where a Caribbean country does so, such obligations may not be funded via a universal service funding mechanism. Normally, this means that any costs associated with such obligations must be met either by the operator(s) concerned or directly by the State.

### **3.2.5. Third countries & International aspects**

The Caribbean's trade relations with third countries in respect of telecommunications should principally be governed by the GATS Fourth Protocol on Basic Telecommunications Services, which came into force in February 1998.

#### ***3.2.5.1. General Agreement on Trade in Services (GATS): 4th Protocol on Basic Telecommunications Services***

In the context of the GATS, basic telecommunications means voice telephony, packet and circuit switched data transmission services, telex, telegraph, facsimile and leased lines services. The Protocol covers all telecommunications services sub-sectors: local, long-distance and international, irrespective of whether they consist of the transport of sound, data, images or any combinations thereof. Generally, the commitments made by WTO countries on basic telecommunications include all possible technological means of transmission: cable, radio or satellites.

48 WTO Members undertook commitments on regulatory principles based on the so-called Reference paper, which addresses issues such as interconnection, anti-competitive practices, licensing conditions, scarce resources, universal service and

independence of the regulatory authorities. They aim to underpin market access and national treatment commitments made by WTO Members.

During the Negotiations, a Chairman's note clarified that WTO Members could maintain policies on management of frequencies, in particular indicating that management of frequencies was not *per se* a measure that needed to be listed as a market access restriction. Thus, a WTO Member has the right to exercise spectrum management if such management complies with the criteria of Article VI (Domestic Regulation) of the GATS. This includes the ability to allocate frequency bands taking into account not only present, but also future needs.

### **3.2.6. Standardisation**

A key part of telecommunications liberalisation is standardisation. An ON framework should make provision for standards to be published and their use encouraged by Caribbean countries. Similarly, in the field of telecommunications terminal equipment, standards should be developed to be the basis for Common Technical Regulations, which permit a particular class of equipment to circulate freely within the Caribbean.

### **3.3. LICENSING FRAMEWORK**

#### **3.3.1. Aim**

There should be some form of licence or authorisation for companies wishing to offer telecommunications services or operate networks. Attention at the Caribbean level should focus on developing a common framework for these licences and for the procedures according to which they are granted in order to facilitate the development of a single market in telecommunications.

Licences are still granted by individual Caribbean countries. Current legislation does not contain a mechanism to grant licences at the Caribbean level covering more than one Caribbean country, although there should be provisions for the harmonisation of licensing conditions across the Caribbean and the development of a one stop shopping procedure. Nevertheless, Caribbean countries should be required to facilitate the provision of telecommunications services between Caribbean countries.

#### **3.3.2. Individual licences & general authorisations**

The Caribbean framework should envisage two approaches to licensing. Firstly, the use of general authorisations, (e.g. statutory provisions, class licences) and, secondly, the use of a heavier individual licensing procedure – to be used only in certain prescribed cases. In the case of general authorisations, the terms and conditions for operating a particular service should be defined by the Caribbean country. A company simply has to comply with those terms in offering its service (and possibly complete administrative formalities such as declaring to the NRA that it is a service provider).

Caribbean countries should only issue individual licences where the licensee has:

- access to radio frequencies or numbers;
- rights of way in respect of access to public or private land;
- obligations to provide certain services (i.e. under universal service obligations or other mandatory services under ON principles, e.g. provision of a minimum set of leased lines);
- obligations arising from a determination of significant market power (e.g. cost accounting requirements for interconnection or leased lines; cost-oriented tariffs for interconnection).

In addition to these four cases, there should be a general provision allowing individual licences to be used in relation to “the provision of publicly available voice telephony services, the establishment and provision of public telecommunications networks as well as other networks, involving the use of radio-frequency”. This general provision potentially means that all voice telephony service, public networks and all radio-based networks (public or private) could be subject to individual licences.

All other types of services and activities should only be subject to general authorisation regimes. Such regimes may take the form of class licences, or statutory provisions, where the basic freedom to provide telecommunications networks and services is defined in a Telecommunications Law without further licensing formalities.

### **3.3.3. Limitation on number**

There should be no limitation on the number of licences granted for a particular type of service or network. However, there are two important exceptions to this rule:

- first, limitations could be possible in the area of wireless systems, where the limitation to, say, three or four mobile telecommunications systems results from a physical limitation within the given spectrum band rather than from a subjective assessment by a Caribbean country of the number of players the market can support;
- second, limitations could be allowed on a temporary basis where insufficient numbers are available within the national numbering plan. However, there should be an obligation on Caribbean countries to make adequate numbers available so this provision should not be used in the context of a liberalised market.

When a Caribbean country decides to limit the number of licences for a given service, there should be certain procedures that must be followed, principally to ensure that the process is transparent and non-discriminatory. Caribbean countries should be required to allow interested parties to comment on the decision to limit before doing so; publish a reasoned decision; review the limitation at reasonable intervals, and invite applications for licences based on objective, non-discriminatory, detailed, transparent and proportionate criteria. If it becomes clear that the number of licences can be increased, this fact shall be published and applications for additional licences shall be invited.

### **3.3.4. Conditions**

There should be an exhaustive list of the types of conditions that may be attached to licences in an Annex. These cover a very wide range, from conditions relating to universal service, disabled users, effective use of radio frequency, to conditions to facilitate monitoring and enforcement by NRAs. Any licence conditions must be objectively justified, proportionate, non-discriminatory and transparent and Caribbean countries should not be permitted to introduce any further conditions in licences, except insofar as are necessary to safeguard the national public interest.

Licence conditions may be amended where objectively justified and in a proportionate manner. When Caribbean countries do so, they should publish their intention to ensure interested parties have a chance to comment. Similar transparent, objective and non-discriminatory procedures should be required for granting individual licences, and for revoking general authorisations and individual licences. Caribbean countries must ensure that an appeal mechanism (to an institution independent of the national regulatory authority) exists for operators to challenge a decision not to grant or to revoke a licence.

### **3.3.5. Fees and time frame for the grant of licences**

Fees for general authorisations should be limited to covering the costs of issuing, managing, controlling and enforcing the licence. Coverage of the administrative costs incurred should also be the principle for individual licences, but where these licences give access to scarce resources (frequency or numbers), charges may be imposed which “reflect the need to ensure the optimal use of these resources”. In this context, the

Caribbean framework should neither require nor rule out the use of administrative pricing (pricing which seeks to reflect the economic value of the spectrum) or auctioning as a means of allocating licences for radio spectrum. However, Caribbean countries must, when setting charges, take into account the need to foster the development of innovative services and competition.

Where charges are imposed, this must be done in a non-discriminatory way so one operator should not be charged more than another operator without some objective basis for doing so.

**Time limits** should be defined within which authorisation procedures or licensing should be completed:

- For general authorisations, if any administrative formalities are required prior to starting to operate (e.g. to check that the service falls within the terms of a class licence), the **time limit before starting to operate should not exceed 4 weeks** from receipt by the NRA of all the information it requires.
- For individual licences, an applicant must be informed of the Caribbean country's decision within 6 weeks of receipt of the application. An extension of up to 4 months (plus a further 4 months in the case of comparative bidding) may be required in objectively justified cases.

### **3.3.6. Provisions for harmonisation of licence conditions**

A mechanism should be established to promote further harmonisation of conditions and procedures for general authorisations within the Caribbean.

### **3.3.7. One stop shopping**

Since licences will continue to be issued at national level, the fact that an operator or service provider will be licensed in one Caribbean country does not remove the need to obtain a licence in other Caribbean countries for the right to provide services there. Therefore, existing mechanisms should be developed to allow companies to apply via a single point of contact for licences for particular categories of services in more than one Caribbean country. This "one stop shopping" facility needs to be operated by a single organization.

### **3.4. SCARCE RESOURCES**

#### **3.4.1 General principles**

National frequency assignment and licensing should be governed at the Caribbean level. Conditions governing access to frequencies, which is in most cases considered as a scarce resource, should be objective, non-discriminatory, transparent, published and proportionate to the objective sought.

There should be no artificial limits on the number of operators and service providers in the market. On a wire-based network, there is no resource scarcity, and thus no need to restrict the number of providers. However, radio- and satellite-based communications use the radio spectrum to carry traffic. Since the spectrum is a scarce resource which by its nature often cannot meet the totality of demand for its use for the provision of certain services, its exploitation must be rationed in some way. Numbers have traditionally been seen as a scarce resource, although as mentioned above, there should be a requirement for sufficient numbers to be made available to operators by NRAs, so scarcity of numbers should only now be an issue in relation to so-called golden numbers (numbers that are particularly attractive, easy to remember, or have some other significance).

The telecommunications regulatory framework should set out basic principles for the allocation of scarce resources. These are as follows:

- Responsibility for administration of scarce resources must rest with a body independent of operators;
- Allocation of scarce resources must be carried out in a non-discriminatory, objective and transparent manner;
- Any fees levied for the use of scarce resources must reflect the administrative costs of managing the resource, except insofar as is justified in order to ensure optimal use of those resources, taking into account to the need for non-discrimination, and the need to foster the development of innovative services and competition.

#### **3.4.2 Frequencies**

There should be a set of provisions to govern the allocation and use of frequencies by telecommunications operators.

##### ***3.4.2.1 Regulatory principles***

Access to radio frequencies may only be restricted where necessary to fulfil essential requirements such as effective use of frequency spectrum and avoidance of harmful interference. Caribbean countries could limit the number of licences issued for a particular service only where that service uses frequency spectrum. This recognises the use of spectrum as a factor justifying individual licensing and provides certain safeguards covering the manner in which it is awarded, such as a requirement for transparency, objectivity and non-discrimination in granting licences.

### ***3.4.2.2 Mobile and personal communications systems***

All remaining special or exclusive rights in the mobile sector should be abolished. In addition, Caribbean countries should only limit the number of licences for mobile and personal communications systems to be issued on the basis of essential requirements and only where related to the lack of availability of frequency spectrum and justified under the principle of proportionality. Therefore, as soon as frequencies are available, appropriate action should be taken to assign these frequencies in such way as to ensure efficient use of radio spectrum and effective competition amongst operators.

With regard to radio frequency planning and future designation of frequencies for specific communications services, Caribbean countries should be required to publish their frequency plans as well as procedures to be followed by operators to obtain frequencies within the designated frequency bands and to review frequency allocations at regular intervals. These plans should include a clear time-scale for further expansion; identify intermediate dates and steps for migration to be published. In cases where the number of licences should be limited based on spectrum scarcity, Caribbean countries must also review whether technological progress makes spectrum available for additional licences. This confirms the need for objective and transparent criteria for the designation of frequencies for specific communication services.

### ***3.4.2.3 Harmonised Frequency Bands.***

For certain services, there should be legislation at the Caribbean level to harmonise frequency allocation across the Caribbean. These are necessary to ensure the establishment of truly pan-Caribbean services and require the Caribbean to reserve certain frequency bands.

### ***3.4.2.4 Satellite-Personal Communication Systems (S-PCS)***

S-PCS are satellite systems, mostly in non-geostationary orbit, designed to enable global interconnectivity and mobility via the use of personal, handheld, voice -, data -, and, in the future, video communications equipment. In the case of these services, which by their nature have a footprint or service area that covers several countries, there should be a mechanism to co-ordinate the grant of licences according to common conditions.

### ***3.4.2.5 Universal Mobile Telecommunications System (UMTS)***

A similar approach should be adopted for the third generation of mobile communications systems (UMTS). This requires Caribbean countries to ensure that UMTS services are introduced and in particular that an authorisation system is in place. The provision of this class of service should be required to be in harmonised frequency bands using harmonised standards. Harmonisation of the Caribbean approach to authorisation could be envisaged where potential systems are incompatible.

### **3.4.3 Numbering**

Numbers should continue to be allocated at a national level as part of national numbering plans. Nevertheless, there should be specific rules at the Caribbean level for the allocation and of numbers.

#### ***3.4.3.1 Allocation***

Caribbean countries should be required to ensure that adequate telecommunications numbers are available for all telecommunications services. Numbers should be allocated in an objective, non-discriminatory and transparent manner. Numbering plans should be controlled by NRAs, in order to ensure independence from the incumbent operator. The main elements of national numbering plans should be published. Caribbean countries should be obliged to co-ordinate their national positions in international organisations and forums where numbering issues are discussed. Caribbean countries should ensure that organisations do not discriminate in the number sequences used to give access to the services of other telecommunications operators.

#### ***3.4.3.2 Golden numbers***

Numbers should no longer be regarded as a scarce resource in general terms, since Caribbean countries should be required to ensure there are sufficient available for all telecommunications services (although there may be temporary transitional scarcity if full capacity is reached in numbering plans before they are revised and expanded). However, there are certain numbers which distinguish themselves from all other numbers in a given number range because they are attractive to have, are easy to learn or remember, subjectively pleasing or are in use and known by the general public or client base. These numbers may have a significant commercial value. They may be viewed as a scarce resource, even though as numbering plans are expanded more may be released. NRAs must ensure that the allocation of these numbers is subject to the same principles of transparency, non-discrimination and objectivity.

#### ***3.4.3.3 Number portability***

Caribbean countries should be required to introduce operator number portability (allowing customers to switch to another phone company, but keep their telephone number if they remain at the same location) in the entire fixed network. There should also be an obligation on Caribbean countries to ensure that charges to consumers, and interconnection pricing to facilitate number portability, are reasonable.

#### ***3.4.3.4 Emergency Number and International Access Code.***

Finally, a specific measure on numbering could be agreed at the Caribbean level. It could require Caribbean countries to ensure the same number to be introduced as the number to access emergency services

## **3.5 THE INTERCONNECTION FRAMEWORK**

### **3.5.1 Aim**

An interconnection framework aims at providing a common regulatory framework for interconnection in the Caribbean by identifying the rights and obligations of different market actors and providing national regulatory authorities with the necessary powers to intervene in the essentially commercial and technical process of negotiating interconnection arrangements.

An interconnection framework is central to the successful development of a competitive telecommunications market, because at least in the early stages of liberalisation, all new entrants have to rely on the networks of incumbent operators to deliver, transit or terminate traffic from or to their customers. Increasing levels of competition and new technology mean that new entrants could roll out alternative networks in certain areas, especially for business customers. Nevertheless, a framework that provides fair and transparent interconnection terms is vital for the development of competition well into the medium term.

### **3.5.2 Definition**

Interconnection involves the physical and logical linking of telecommunications networks with the aim of allowing any to any communication between users. This means that interconnection rules are focused on situations where one company controls the access to a particular user.

### **3.5.3 Rights and obligations**

Underlying the approach to interconnection is recognition that this is principally an issue for commercial negotiation between the parties concerned. The regulatory framework, however, should ensure that almost all operators have a basic right and obligation to negotiate interconnection and promotes a high degree of transparency. In the absence of such a framework, there might be little incentive for incumbent operators to conclude interconnect arrangements with new entrants, or they would only do so on terms that reflected their natural advantages in terms of market position and information. The operators with significant market power should be required to meet **all reasonable requests for access** to the network.

Rights and obligations to negotiate interconnection should fall on any organisation providing public telecommunications networks and/or publicly available telecommunications services controlling access to customers. Heavier obligations related to interconnection in the licences of operators controlling infrastructure, and thus allowing these operators to benefit from more favourable interconnection rights in comparison with service providers should be in place. Naturally, these licence conditions must be non-discriminatory.

The level of regulation in respect of interconnection depends on two factors: the existence or otherwise of significant market power; and whether the operator provides mobile services or fixed ones.

### **3.5.4 Pricing and costing principles**

Whilst interconnection is principally a matter for commercial agreement, interconnection as highlighted above requires operators with significant market power to offer cost-oriented interconnection, though the legal framework should not mandate a particular type of costing methodology to be applied. As stated above, the definition of SMP for mobile operators in respect of cost-orientation should apply to the national market for interconnection (i.e. market covering all fixed-fixed as well as fixed-mobile and mobile-mobile interconnection), not just the mobile interconnection market. This means that most mobile operators' charges for terminating traffic from the fixed network are unlikely to be subject to cost-orientation.

The prices claimed should be strictly cost-oriented

### **3.5.5 Other forms of network access.**

Fixed and mobile network operators with significant market power should be required to meet all reasonable requests for access to their networks. This should stimulate innovation and new services, and so there is no precise definition of what is meant by access. Terms and conditions for access are for negotiation by the parties concerned, and the NRA should be called in to resolve disputes if necessary.

### **3.5.6 Third country interconnection.**

Aspects of interconnection between the Caribbean and third countries should be governed by the principles set out in the WTO agreement on basic telecommunications services, and in particular, on the additional obligations agreed by participants which govern regulatory principles for international services.

### **3.5.7 Carrier pre-selection**

Caribbean countries should take the necessary steps to facilitate the introduction of carrier selection (via short codes). Users should be able to pre-select the carrier of their choice, while maintaining a call-by-call override facility, where the carrier concerned (e.g. local, long-distance, or international) is interconnected to the customer's local network provider.

## **3.6 UNIVERSAL SERVICE**

### **3.6.1 Aim**

The political importance of ensuring a defined level of service at an affordable price for all users is widely recognised. In a monopoly environment service came from a single operator and lower charges for connection, line rentals and local calls could be subsidised out of the higher revenues generated by long-distance and international call charges.

The regulatory framework should address the issue of universal service by placing obligations on Caribbean countries which define the scope of universal service and which provide mechanisms for sharing any costs associated with its provision amongst market players, where this is considered necessary by the National Regulatory Authority.

### **3.6.2 Scope of universal service**

Universal service is defined in general terms as a minimum set of services of specified quality that is available to all users independent of their geographical location and, in the light of specific national circumstances, at an affordable price.

The precise elements to be included in this universal telephone service should be defined at the Caribbean level. The framework for the costing and financing of universal service needs to be defined.

Universal service therefore equates to:

- Provision of the public fixed telephone network, supporting voice telephony, group III fax and voice band data transmission via modems;
- Provision of fixed public telephone service i.e. provision to end-users at a fixed location of international and national calls, access to emergency services;
- the provision of operator assistance, directory services;
- the provision of public pay phones;

Caribbean countries may set additional obligations, but where they do so these may not be funded via a universal service funding mechanism. This means that any costs associated with such obligations must be met either by the operator(s) concerned or directly by the country.

### **3.6.3 Affordability**

Whilst affordability should be a legal requirement within universal service, the Caribbean framework should not attempt to provide a measure of what affordability should mean in each Caribbean country, given the very different economic and social conditions that apply. However, NRAs should publish their criteria for affordability, and the evolution of universal service, in terms of penetration, coverage, quality and affordability should be monitored through monitoring reports published on a regular basis.

In order to ensure affordability, the Caribbean should have special regard to prices in rural and remote areas and to allow the offer of special price packages, (e.g. low usage schemes). However, where such schemes exist, they must be proportionate, non-discriminatory, and transparent.

### **3.6.4 Cost and financing**

The framework for the costing and financing of universal service should be defined and the mandatory provision of these services may impose a cost on the operator or operators who are designated by the NRAs as the universal service provider for a certain area. If NRAs feel that this cost outweighs the benefits of being a universal service provider, and that it represents an unfair burden, there should be a provision in the legislation for NRAs to use one of two mechanisms if they decide to share these costs among the various market players:

- firstly, a system of direct payments between operators interconnected with the universal service provider(s); and
- secondly, the creation of an independently administered universal service fund.

Caribbean countries should publish Guidelines on the operation of national Universal Service Funds to assist NRAs, and to develop best practice. The Guidelines should set out criteria and conditions in respect of three key aspects of Universal Service Funds: the calculation of the net cost of universal service; the mechanisms for financing universal service obligations; and the determination of who contributes and how costs are shared between contributors.

Only organisations providing public telecommunications networks and/or public voice telephony services may be required under national schemes to contribute to a Universal Service Fund or to any system of supplementary charges. Such requirements for contributions must be in accordance with the principles of non-discrimination and proportionality.

### **3.6.5 Who must provide universal service?**

The regulatory framework should place obligations on Caribbean countries to ensure that universal service is delivered, but not specify which operator or operators should be responsible for providing the service or how they should be selected. Caribbean countries should be entitled to confer universal service obligations on one or a number of companies, providing they do so in a non-discriminatory, proportionate, and transparent manner. Nevertheless, Caribbean countries should ensure that at least one organisation is responsible for providing universal service at any given location.

Caribbean countries could also invite tenders for particular elements of universal service, either on a geographical or service-specific basis. In the event of there being no bid, the Caribbean country would retain the power to impose universal service obligations. Where this sort of “franchising” of universal service takes place, those providing elements of universal service should be able to offset the net cost of such provision against contributions that they would otherwise be required to make through a financing mechanism.

### **3.7 PROVISION OF MANDATORY AND RECOMMENDED SERVICES IN THE CARIBBEAN**

In addition to the requirements for universal service within the Caribbean, there are at least two other service elements which must be made available in the Caribbean.

#### **3.7.1 Voice Telephony**

In addition to the elements of universal service, there should be a range of obligations that fall on (generally fixed) network providers with significant market power or designated as a USO provider.

These include the provision of contracts for the customer; measuring of a range of quality of service indicators; itemised billing, tone dialling and selective call barring; requirement for cost-oriented pricing by operators with significant market power or designated as USO providers, as well as requirements to unbundle those offerings and to grant special network access where requested.

Additionally, cost accounting requirements should be placed on organisations required to offer cost oriented tariffs. Any discounts offered by those companies must be published and be non-discriminatory with NRAs enjoying a power to modify or withdraw such schemes.

Finally, Caribbean countries should put in place a mechanism ensuring that users are not cut off without warning, in the event of non-payment of their phone bills, and allow Caribbean countries to require operators to proceed with complete disconnection only after a stated period during which calls that do not incur a charge to that subscriber are permitted.

#### **3.7.2 Leased lines**

Caribbean countries should ensure that at least one operator is responsible for offering a minimum set of leased lines at any particular location within a Caribbean country, and that leased lines (whether within the minimum set or not) are supplied on the basis of certain defined conditions. In order to avoid over-regulation, the obligations should only apply in respect of leased lines offered by organisations with significant market power, except in the event that there is no SMP organisation in the area concerned.

The minimum set of leased lines includes 2 Mbit/s and 64 kbits circuits. In addition, Caribbean countries should encourage the provision of high-speed leased lines (up to 150 Mbit/s).

## **3.8 PROTECTION OF PERSONAL DATA AND PRIVACY**

The issue of data protection and privacy is an important one in the telecommunications field. Data protection should be recognised as one of the key essential requirements, the achievement of which could justify the imposition of conditions on operators.

### **3.8.1 Scope**

The scope applies to the processing of personal data in connection with the provision of publicly available analogue or digital telecommunications services, provided over public telecommunications networks (e.g. traffic data – who you call, for how long, etc). The processing of personal data over non-public networks could be covered by other legislation.

### **3.8.2 Security of services and networks**

Telecommunications service providers and network operators should be required to ensure that the network is protected against breaches in security and to inform their customers about any residual risks.

### **3.8.3 Confidentiality of communications**

The confidentiality of communications should be guaranteed, among other things, by explicitly prohibiting listening, tapping, storing, and interception of communications. There are however three exceptions that could apply:

- to restrict such confidentiality for purposes of national security, defence, public security, prevention, investigation, detection and prosecution of criminal offences or of unauthorised use of the telecommunications system;
- to not prevent legally authorised recordings of communications in the course of lawful business practice (e.g. where stock broking firms record orders made over the telephone for legal reasons);
- to users that give their consent to such practices.

### **3.8.4. Traffic and billing data**

The principle that traffic data must be deleted or made anonymous except when it is needed for subscriber billing and interconnection payments purposes should be established. The legislation should also specify which data might be stored and processed for billing purposes. In addition, providers of publicly available telecommunications services should only process such data for marketing their own telecommunications services if the subscriber has given his consent.

### **3.8.5. Calling line identification**

Callers should be able to eliminate, simply and free of charge, the presentation of the calling line identification (CLI) on a per-call and per-line basis. Subscribers called must be able to prevent the presentation of the CLI of incoming calls, again simply and “free of charge for reasonable use of this function”.

Subscribers called must also be able to reject incoming calls simply and free of charge where the caller or the subscriber has eliminated his CLI. They must also be entitled to eliminate, simply and free of charge, the presentation of the connected line identification to the calling user. This is particularly useful when the call should be forwarded.

### **3.8.6. Directories**

Personal data included in publicly available printed or electronic directories (or obtainable through directory enquiry services) should be limited to what is necessary to identify a particular natural subscriber (i.e. a private individual). An exception should be made when an individual subscriber has given unambiguous consent to the publication of additional personal data.

The individual subscriber should be entitled, free of charge and on request:

- to be omitted from a printed or electronic directory;
- to indicate that his/her personal data may not be used for direct marketing purposes;
- to have his/her address omitted in part and not to have a reference added revealing his or her sex.
- Caribbean countries may allow operators to require a payment for the exercise of the right not to have subscribers' details entered in a directory. This option depends on two conditions:
  - the sum requested should not be so high as to dissuade a subscriber from exercising his/her right;
  - the sum should be calculated to cover the costs incurred by the operator in adapting and updating the list of subscribers not wishing to have their details entered in a directory.

### **3.8.7. Unsolicited calls**

Automated calling systems without human intervention (automatic calling machines) or fax machines for direct marketing purposes should only be allowed to make calls to subscribers who have given their prior consent. For unsolicited direct marketing calls (other than by automatic calling systems), Caribbean countries should be free to choose one of the following two options: to establish either a negative list including subscribers who do not want to receive such calls or a positive list including subscribers who have indicated that they want to receive such calls.

### **3.8.8. Other provisions**

Where calls are forwarded automatically, Caribbean countries should ensure that subscribers have the option, free of charge and by simple means, to stop the call being forwarded automatically by a third party to the subscriber's terminal.

Subscribers should have the right to receive non-itemised bills in order to protect the privacy of the users of the telephone line.

## **4 OPENING THE MARKET FOR RADIO AND TELECOMMUNICATIONS TERMINAL EQUIPMENT**

### **4.1. LIBERALISATION**

Special and exclusive rights in relation to the supply, marketing, bringing into service, and maintenance of telecommunications terminal equipment should be removed. Any type approval or regulatory functions should be separated from the operational activities of the telephone companies with the monopoly rights in question. This might be controversial but special and exclusive rights are contrary to the principles of competition.

However, the removal of monopolies over the supply of equipment may not be enough on its own, given the need to have equipment approved and tested in order to place it onto the market in other Caribbean countries. Liberalisation measures must be accompanied by measures that support a mutual recognition of test results and then approvals granted in other Caribbean countries.

The liberalisation of terminal equipment should include equipment such as satellite earth stations, used in the provision of satellite telecommunications.

A more liberal system only requires a declaration by the manufacturer that a product meets the requirements in the Caribbean could be put in place.

### **4.2. PROPOSED REGIME**

#### **4.2.1. Basic principles**

This proposed regime will substantially deregulate approval procedures and reduce the regulatory requirements on equipment. In line with the overall principles of a new approach to standards and technical regulations and consistent with an overall liberalisation of the telecommunications market, it will not make standards mandatory. Moreover, it will abolish any conformity assessment procedures and replace them with procedures which are proportionate and in line with those used for related product sectors (consumer electronics, electrical appliances), and reduce the regulatory requirements which products have to meet.

The regime would cover not just telecommunications terminal equipment, but also radio equipment. All radio equipment, whether operating in harmonised or non-harmonised frequency bands, would be subject to the new regime.

Telecommunications terminal equipment and radio equipment have different needs and for this reason, different provisions could apply to different equipment, especially in respect of essential requirements, safeguards against interference, and conformity assessment.

A new approach to standardisation and technical regulations would be full harmonisation at the Caribbean level, no longer permitting co-existing national approval regulations. In particular, it would remove a requirement for conformity testing with a

harmonised standard as the condition of free movement. There would be a presumption of compliance with the essential requirements (and may therefore be attractive to manufacturers), but other means of satisfying the essential requirements are possible.

The new regime would abolish market access controls on products. Instead, the system would rely on the responsibility and liability of manufacturers and suppliers, as well as on ex post market surveillance by Caribbean countries. This should reduce time to market, and encourage greater product innovation.

#### **4.3.2. Essential requirements**

The essential requirements include less protection for networks, making manufacturers less reliant on operators for information on their networks when developing new products. This is appropriate given that most networks are now self-protecting and a product, which malfunctions, is therefore less likely to cause serious problems.

The regime would deal with telecommunications terminal equipment and radio equipment. There are several common essential requirements, as well as some that apply only to one type of equipment, and others that are applied to specific classes of equipment if the Caribbean countries think it is appropriate.

There would be three general essential requirements that apply to all equipment. These relate to compliance with Electro-magnetic Compatibility, Low Voltage, and a requirement to prevent harm to the network causing unacceptable degradation of service to third parties. In addition, there would be a requirement that radio equipment uses spectrum effectively to avoid harmful interference.

There are also five “optional” essential requirements that may apply to certain classes of equipment if the Caribbean countries think it is appropriate. These relate to features for users with special needs, emergency services, provisions to combat fraud, data protection and user privacy, and the need for end-to-end interworking.

#### **4.3.3. Conformity assessment procedures**

The new regime will remove the need for a priori testing of equipment in the Caribbean. For all fixed network equipment, manufacturers must declare that their product complies with the essential requirements of the regime in order for it to circulate freely in the Caribbean. The manufacturer must establish technical documentation that enables the conformity of the product with the essential requirements to be assessed. This also applies to imported equipment, where the manufacturer or the importer may make the declaration. The manufacturer would be liable for any damage to third parties caused by a product.

In the case of radio equipment, the manufacturer, in addition to declaring that the product complies with the essential requirements, must carry out certain specific radio tests. These must be identified by a notified body of his choice if they are not contained in the harmonised standard or if the manufacturer does not choose to use that standard.

For types of radio equipment where no harmonised standards exist, the manufacturer

must carry out tests as specified by a notified body of his choice. He must further give a copy of his technical documentation to that notified body (this documentation comprises proof of conformity with the radio tests as well as the documentation established to back up the declaration of conformity). A notified body must assess that file and give an opinion (within four weeks) that the file contains all the necessary information to be capable of demonstrating that the essential requirements have been met. The manufacturer must wait a maximum of four weeks for the opinion before placing his products on the market. It should be noted that even if the manufacturer receives a negative opinion from the notified body, he may still place his product on the market if he disagrees (at his own risk).

#### **4.3.4. Safeguards for radio equipment**

Radio equipment should be within the scope of a single Caribbean market. However, since many radio frequencies are not harmonised across the Caribbean, there is the potential for radio equipment operating in non-harmonised frequency bands to cause interference in certain countries. A new regime should include various safeguards for the Caribbean to manage such risks. These safeguards range from marking to the ultimate safeguard of not allowing radio equipment to be placed on the market on their territory if it is likely to cause or has already caused interference. Any such measures should of course be proportionate to the likely risk involved.

## 5. REGULATING THE MARKET - A SHARED RESPONSIBILITY

Many organisations play a role in telecommunications regulation. This chapter attempts to explain the role and relevance of the bodies that have, or could have, an impact on the regulatory framework.

### 5.1 IMPLEMENTATION AND ENFORCEMENT OF A REGULATORY FRAMEWORK

#### 5.1.1. National Regulatory Authorities (NRAs)

The Caribbean should ensure that a common regulatory framework exists and is applied in every country by implementing it into national law, but have flexibility in the means by which that is done. In the telecommunications sector, the responsibility for implementing and enforcing the regulatory framework should rest primarily with the NRAs. In this sense, the proper functioning of the legislation relies on NRAs carrying out their tasks effectively. Caribbean countries should be required to ensure that NRAs have the resources to carry out their tasks effectively. Caribbean countries should ensure that the regulatory functions are vested in independent bodies, and that where national governments retain some degree of ownership or control over organisations providing telecommunications networks and/or services, the regulatory function is structurally separate from activities associated with ownership or control.

The tasks of the NRA have been documented above. Briefly, the powers to be devolved to NRAs relate to:

- **licensing** (in particular supervision of the licensing procedure and the amendment and withdrawal of licences);
- **interconnection** (in particular the power to supervise the reference interconnection offer (RIO) and the implementation of suitable cost accounting systems and to secure interconnection and resolve disputes);
- **leased lines** (in particular supervision of refusal, interruption or reduction of availability and ensuring application of the non-discrimination principle);
- **universal service** (in particular ensuring affordability and monitoring any financing scheme); and
- **tariffs** (in particular supervision of the application of the principle of cost-orientation for voice telephony and leased lines and the implementation of suitable cost accounting systems).

Further powers relate to **numbering, frequencies and rights of way**.

The NRA should be the first port of call for any query about entering a national market. It is also responsible for dealing with disputes between operators or between an operator and its customer, and complaints about the behaviour of a particular operator or operators. The regulatory framework should establish two specific procedures to deal with disputes: conciliation (in respect of matters related to Leased Lines and Voice Telephony) and dispute resolution (dealing with interconnection disputes).

#### ***5.1.1.1. Conciliation***

The regulatory framework should define a procedure to allow any party, whether user, service provider, consumer or another organisation, with an unresolved complaint against a telecommunications network operator for an alleged breach of the legislation, to bring its case before the NRA. For example, where a user is in conflict with their network operator, they may complain to the NRA. NRAs must ensure that procedures for resolving the dispute are easily accessible and in principle relatively inexpensive.

Where the dispute involves organisations in more than one Caribbean country, the user or organisation may invoke a conciliation procedure by writing to the NRA. Where the NRA finds there is a case for further examination, the matter may be referred to the Chairman of the Open Network (ON) Committee. If the Chairman is satisfied that all reasonable steps have been taken to resolve the dispute at national level, he may convene a working group including at least two members of the ON Committee and one representative of the NRAs concerned. The party invoking the procedure, the NRAs and the organisation concerned shall be invited to submit their opinions on the matter. The working group shall endeavour to reach agreement between the parties involved within three months.

#### ***5.1.1.2. Dispute Resolution***

The regulatory framework should provide a mechanism for the resolution of disputes over interconnection. Where either party so requests, the NRA must take steps to resolve the dispute within six months of the request. The resolution of the dispute must represent a fair balance between the legitimate interests of both parties. In doing this, the NRA is obliged to take account of a number of factors: *inter alia*

- The user interest;
- Regulatory obligations or constraints imposed on any of the parties;
- The desirability of stimulating innovative market offerings and of providing users with a wide range of telecommunications services at a national and Caribbean level;
- The availability of technically and commercially viable alternatives to the interconnection required;
- Desirability of ensuring equal access arrangements;
- The need to maintain the integrity of the public telecommunications network and the interoperability of services;
- The nature of the request in relation to the resources available to meet the request;
- The public interest (e.g. the environment);
- The promotion of competition;
- The need to maintain universal service.

The final decision of the NRA must be made public and a full statement of the reasons on which it is based given to the parties.

The regulatory framework should also make a provision, where the dispute is between undertakings operating under authorisations from two different Caribbean countries, for the two NRAs to co-ordinate their efforts to resolve the dispute, also within six months.

### ***5.1.1.3 Consumer complaints***

Specific mechanisms should exist for handling consumer complaints in all Caribbean countries. Naturally, most complaints should be addressed in the first instance to the operator concerned. However, where complaints are not resolved, all the relevant governmental consumer protection institutions (at national, regional or municipal level) and the NRA or other sector-specific consumer body (ombudsman), should have specific complaint-handling roles.

### **5.1.2. Compliance with the regulatory framework**

Caribbean countries should be required to establish a mechanism whereby appeals can be made against a decision of the NRA at national level, if for example, an individual is not satisfied that his complaint should be properly dealt with by an NRA.

There should be an organisation whose role is to ensure that the Caribbean countries implement and enforce the regulatory framework in an effective and appropriate way.

If the organisation considers that a Caribbean country has not implemented the regulatory framework correctly, it should be able to require the country concerned to bring its national legislation into line with the framework.

### **5.1.3. Competition rules**

Telecommunications operators and service providers should be able to rely on the telecommunications regulatory framework even if the Caribbean country in which they are operating has not adequately implemented it. However, competition law should also apply to the telecommunications market. In many cases, this will mean the national competition law of the particular Caribbean country in question.

Individuals should be able to rely on general consumer protection legislation in Court if they contain provisions that confer rights on individuals. In this context, since consumer protection legislation should apply to the telecommunications sector, individuals may refer to this legislation, as implemented in the different Caribbean countries, in order to protect their consumer rights.

### **5.1.4. Telecommunications Committees**

In order to operate a common regulatory framework there is a need for agreement at the Caribbean level on certain areas. This could be organised by using specific committees covering three main areas: advisory, management and regulatory. For most tasks, an advisory committee could be sufficient. In this case, Caribbean countries could be obliged to take the utmost account of the opinion of the committee before acting, but the Committee would have no right of veto. In the other two types of committee, Caribbean countries would have the right to vote on whether a particular type of action is appropriate.

Under the telecommunications regulatory framework, three Committees could be created:

- an ON committee to deal with issues arising from legislation covering Open Networks (leased lines, voice telephony and interconnection);
- a Licensing committee dealing with issues arising from licensing legislation;
- and an Approvals committee for terminal equipment to consider issues arising from legislation covering terminal equipment.

These would be “mixed” committees, i.e. depending on the issue to be decided, the committees can be convened in their advisory or management forms. They would be attended by representatives of Caribbean countries from the Government ministries responsible for telecommunications and chaired on a rotating basis by the participating countries.

Although the main function of these Committees would be statutory one, they can also play a useful role in fostering informal co-operation between Caribbean countries, as well as providing a forum where countries can seek clarification and guidance on particular issues arising from the regulatory framework.

#### ***5.1.4.1. Open Network Committee***

As an advisory committee, it would be consulted on the following actions:

- requests for preparation of standards for interconnection and access;
- requests for preparation of standards for harmonised technical interfaces and/or service features for open networks;
- dispute resolution (see above).
- as a regulatory committee, it could be involved in the following actions:
  - technical adjustment of annexes to legislation covering Interconnection, Leased Lines and Voice Telephony;
  - making standards compulsory or withdrawing them.

#### ***5.1.4.2. Licensing Committee***

The Licensing Committee would be principally involved in the harmonisation of conditions for general authorisations and in the establishment of a one-stop shopping procedure. On harmonisation of conditions, it could be consulted (as an advisory committee) on certain topics and vote as a management committee on proposals for harmonised conditions.

#### ***5.1.5.3. Approvals Committee***

The principal task of the Approvals committee, for which it would meet as a regulatory committee, would be to give a formal opinion on proposals for Common Technical Regulations. It would also be involved in decisions as to whether it would be appropriate to require certain classes of equipment to comply with an “inter-working” essential requirement. Tasks that it would carry out as an advisory committee would concern shortcomings in harmonised standards or common technical regulations, or

where notified bodies or test laboratories do not meet the relevant criteria.

## **5.2. BODIES INVOLVED IN CARIBBEAN TELECOMMUNICATIONS**

### **5.2.1. CANTO**

The Caribbean Association of National Telecommunications Operators provides a forum for Caribbean telecommunication operators to discuss general policy and regulatory issues in the telecommunication sector, influence policy, provide information and knowledge in all aspects of the industry, and aims to facilitate and encourage dialogue and meaningful collaboration.

### **5.2.2. CTU**

The objectives of the Caribbean Telecommunications Union, which were defined when it was created in 1989, are:

- To facilitate the coordination of the planning, programming and development of intra regional and international communications networks to meet the immediate and future telecommunications needs of the Region.
- To assist the development of the national components of regional and international telecommunications networks.
- To promote the general awareness of the telecommunications needs of the Caribbean Region and its potential for promoting the socio-economic development of the Region.
- To encourage the exchange of information, views and ideas between the telecommunications administrations of Members.
- To foster coordination within the Caribbean Region of technical standards and routing plans for intraregional and international traffic.
- To seek the adoption of efficient operating methods in national, regional and international telecommunications services.
- To harmonize as far as possible the positions of Members in preparation for international and regional telecommunications conferences and other meetings.
- To encourage and assist members in the establishment and development of telecommunications industries.
- To encourage the transfer of technology in the field of telecommunications among Members.
- To establish linkages with the information bases of other telecommunications organisations and, in particular, the Centre for Telecommunications Development at the International Telecommunications Union (ITU) in Geneva.

### **5.2.3. CTO**

The Commonwealth Telecommunications Organisation (CTO) is an international development partnership between Commonwealth and non-Commonwealth governments, business and civil society organisations. It provides the international community with effective means to help bridge the digital divide and achieve social and economic development, by delivering to developing countries unique knowledge-sharing programmes in the use of information and communication technologies (ICT) in the specific areas of telecommunications, IT, broadcasting and the Internet.

### **5.2.4. OOCUR**

The Organisation of Caribbean Utility Regulators (OOCUR) is an organization whose purpose and objectives are to assist in the improvement of utility regulation, to foster transparent and stable utility regulation through autonomous and independent regulators in member countries, to undertake research, training & development, to facilitate understanding of regulation issues and sharing of information and experience.

### **5.2.5. ECTEL**

ECTEL - The Eastern Caribbean Telecommunications Authority was established by the Governments of five Eastern Caribbean states (Commonwealth of Dominica, Grenada, Saint Christopher and Nevis, Saint Lucia, Saint Vincent and the Grenadines) to promote market liberalization and competition in telecommunications of the contracting states.

ECTEL is a regional agency that provides advice, makes recommendations on telecommunications matters, and helps to manage the sector in its member states. The organization's headquarters is located in Castries, Saint Lucia.

It is supported at the national level in each member state by a National Telecommunications Regulatory Commission (NTRC) that interfaces with users and providers and helps to manage the licensing process.

### **5.2.6. CROSQ**

The CARICOM Regional Organisation for Standards and Quality (CROSQ) was created for the promotion and development of standards and standards related activities to facilitate international competitiveness and the sustainable production of goods and services within the CARICOM Single Market and Economy (CSME) for the enhancement of social and economic development.

## **Annex      Definition Of Terms**

The table below sets out the definition of terms used in this document.

<b>Term</b>	<b>Definition</b>
<b>authorisations</b>	Any permission setting out rights and obligations specific to the telecommunications sector and allowing undertakings to provide telecommunications services and, where applicable, to establish and/or operate telecommunications networks for the provision of such services, in the form of a “general authorisation” or “individual licence”
<b>cable TV network</b>	Any mainly wire-based infrastructure approved by a Caribbean country for the delivery or distribution of radio or television signals to the public
<b>consumer</b>	Any natural person who uses a publicly available telecommunications service for purposes which are outside his or her trade, business or profession
<b>essential requirements</b>	The non-economic reasons in the general interest that may cause a Caribbean country to restrict access to the public telecommunications network or public telecommunications services. These reasons are security of network operations, maintenance of network integrity, and, in justified cases, interoperability of services and data protection. Data protection may include protection of personal data, the confidentiality of information transmitted or stored as well as the protection of privacy. The non-economic reasons in the public interest which may cause a Caribbean country to impose conditions on the establishment and/or operation of telecommunications networks or the provision of telecommunications services. Those reasons shall be the security of network operations, the maintenance of network integrity and, where justified, the interoperability of services, data protection, the protection of the environment and town and country planning objectives as well as the effective use of the frequency spectrum and the avoidance of harmful interference between radio-based telecommunications systems and other space-based or terrestrial systems. Data protection may include protection of personal data, the confidentiality of information transmitted or stored and the protection of privacy
<b>exclusive rights</b>	The rights that are granted by a Caribbean country to one undertaking through any legislative, regulatory or administrative instrument, reserving it the right to provide a telecommunication service or undertake an activity within a given geographical area
<b>fixed public telephone network</b>	The public switched telecommunications network which supports the transfer between network termination points at fixed locations of speech and 3.1 kHz bandwidth audio information, to support inter alia: <ul style="list-style-type: none"> <li>- voice telephony,</li> <li>- facsimile Group III communications, in accordance with ITU-T Recommendations in the “T-series”</li> <li>- voice band data transmission via modems at a rate of at least 2,400 bit/s, in accordance with ITU-T Recommendations in the “V-series”</li> </ul> <p>Access to the end-user’s network termination point is via a number or numbers in the national numbering plan.</p>

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<b>general authorisations</b>	An authorisation, regardless of whether it is regulated by a “class licence” or under general law and whether such regulation requires registration, which does not require the undertaking concerned to obtain an explicit decision by the national regulatory authority before exercising the rights stemming from the authorisation
<b>individual licence</b>	An authorisation which is granted by a national regulatory authority and which gives an undertaking specific rights or which gives an undertaking specific rights or which subjects that undertaking’s operations to specific obligations supplementing the general authorisation where applicable, where the undertaking is not entitled to exercise the rights concerned until it has received the decision by the national regulatory authority
<b>interconnection</b>	The physical and logical linking of telecommunications networks used by the same or a different organisation in order to allow the users of one organisation to communicate with users of the same or another organisation, or to access services provided by another organisation. Services may be provided by the parties involved or other parties who have access to the network. The physical and logical linking of the telecommunications facilities of organisations providing telecommunications networks and/or telecommunications service, in order to allow the users of one organisation to communicate with the users of the same or another organisation or to access services provided by third organisations.
<b>Leased lines</b>	The telecommunications facilities provided in the context of the establishment, development and operation of the public telecommunications network, which provide for transparent transmission capacity between network termination points and which do not include on-demand switching (switching functions which the user can control as part of the leased line provision)
<b>mobile and personal communications services</b>	Services other than satellite services whose provision consists, wholly or partly, in the establishment of radio communications to a mobile user, and makes use wholly or partly of mobile and personal communications systems
<b>national regulatory authority</b>	The body or bodies, legally distinct and functionally independent of the telecommunications organisations, charged by a Caribbean country with the elaboration of, and supervision of compliance with, authorisations. The body or bodies in each Caribbean country entrusted by that Caribbean country with the regulatory functions for telecommunications.
<b>network termination point</b>	All physical connections and their technical access specifications which form part of the public telecommunications network and are necessary for access to and efficient communication through that public network. The physical point at which a user is provided with access to a public telecommunication network. The locations of network termination points shall be defined by the national regulatory authority and shall represent a boundary, for regulatory purposes, of the public telecommunications network.
<b>one-stop-shopping procedure</b>	A procedural arrangement facilitating the obtaining of individual licences from, or, in the case of general authorisations and if required, the notification to more than one national regulatory authority, in a co-ordinated procedure and at a single location
<b>ON Committee</b>	The Open Network Committee

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<b>open network conditions</b>	Harmonised conditions to govern open and efficient access to public telecommunications networks and, where applicable, publicly available telecommunications services and the efficient use of those networks and services. Without prejudice to their application on a case-by-case basis, open network conditions may include harmonised conditions with regard to: technical interfaces, including the definition and implementation of network termination points, usage conditions, tariff principles and access to frequencies and numbers/addresses/names, where required.
<b>organisation with significant market power</b>	<p>An organisation authorised to provide fixed public telephone networks and/or voice telephony services in a Caribbean country which should be designated by the national regulatory authority in that Caribbean country as having significant market power.</p> <p>An organisation shall be presumed to have significant market power when it has a share of 25% or more of the relevant market in the geographical area in a Caribbean country within which it is authorised to operate. National regulatory authorities may determine that an organisation with a market share of less than 25% in the relevant market has significant market power. They may also determine that an organisation with a market share of more than 25% in the relevant market does not have significant market power. In either case, the determination shall take into account the organisation's ability to influence market conditions, its turnover relative to the size of the market, its control of the means of access to end-users, its access to financial resources and its experience in providing products and services in the market.</p>
<b>packet-and circuit-switched data services</b>	The commercial provision for the public of direct transport of data between public switched network termination points, enabling any user to use equipment connected to such a network termination point in order to communicate with another termination point.
<b>public mobile telephone network</b>	A public telephony network where the network termination points are not at fixed locations
<b>public mobile telephone service</b>	A telephony service whose provision consists, wholly or partly, in the establishment of radio communications to one mobile user, and makes use wholly or partly of a public mobile telephony network.
<b>public pay telephone</b>	A telephone available to the public, for the use of which the means of payment are coins and/or credit/debit cards and/or pre-payment cards.
<b>public telecommunications network</b>	A telecommunications network used inter alia for the provision of public telecommunications services. A telecommunications network used, in whole or in part, for the provision of publicly available telecommunications services. The public telecommunications infrastructure which permits the conveyance of signals between defined network termination points by wire, by microwave, by optical means or by other electromagnetic means.
<b>public telecommunications service</b>	A telecommunications service available to the public.
<b>publicly available telephone services</b>	Fixed public telephone services and public mobile telephone services
<b>satellite communications services</b>	Services whose provision makes use, wholly or partly, of satellite network services.

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<b>satellite earth station equipment</b>	Equipment which is capable of being used for the transmission only, or for the transmission and reception ("transmit/receive"), or for the reception only ("receive only") of radio communication signals by means of satellites or other space based systems. Equipment which is capable of being used either for transmission only, or for transmission and reception (transmission/receive), or for reception only (receive-only), of radio-communication signals by means of satellites or other space-based systems, but excluding satellite earth station equipment intended for use as part of the public telecommunications network of a Caribbean country.
<b>satellite earth station network</b>	A configuration of two or more earth stations which interwork by means by means of a satellite.
<b>satellite network services</b>	The establishment and operation of satellite earth station networks; these services consist, as a minimum, in the establishment, by satellite earth stations, of radio communications to space segment ("uplinks"), and in the establishment of radio communications between space segment and satellite earth stations ("downlinks").
<b>satellite services</b>	The provision of satellite communications services and/or the provision of satellite networks services.
<b>simple resale of capacity</b>	The commercial provision on leased lines for the public of data transmission as a separate service, including only such switching, processing, data storage or protocol conversion as is necessary for transmission in real time to and from the public switched network.
<b>special or exclusive rights</b>	The rights granted by a Caribbean country or a public authority to one or more public or private bodies through any legal, regulatory or administrative instrument reserving them the right to provide a service or undertake an activity.
<b>special rights</b>	<p>The rights that are granted by a Caribbean country to a limited number of undertakings, through any legislative, regulatory or administrative instrument, which, within a given geographical area, - limits to two or more the number of such undertakings, otherwise than according to objective, proportional and non-discriminatory criteria, or - designates, otherwise than according to such criteria, several competing undertakings, or - confers on any undertaking or undertakings, otherwise than according to such criteria, any legal or regulatory advantages which substantially affect the ability of any other undertaking to import, market, connect, bring into service and/or maintain telecommunication terminal equipment in the same geographical area under substantially equivalent conditions.</p> <p>The rights that are granted by a Caribbean country to a limited number of undertakings through any legislative, regulatory or administrative instrument which, within a given geographical area, limits to two or more the number of such undertakings authorised to provide a service or undertake an activity, otherwise than according to objective, proportional and non-discriminatory criteria, or designates, otherwise than according to such criteria, several competing undertakings as being authorised to provide a service or undertake an activity, or confers on any undertaking or undertakings, otherwise than according to such criteria, legal or regulatory advantages which substantially affect the ability of any other undertaking to provide the same telecommunications service or to undertake the same activity in the same geographical area under substantially equivalent conditions.</p> <p>Rights that are granted by a Caribbean country to a limited number of undertakings through any legislative regulatory or administrative instrument which, within a given geographical area, limits to two or</p>

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	more the number of such undertakings authorised to provide a service or undertake an activity, otherwise than according to objective, proportionate and non-discriminatory criteria, or designates, otherwise than according to such criteria, several competing undertakings as being authorised to provide a service or undertake an activity, or confers, on any undertaking or undertakings, otherwise than according to such criteria, legal or regulatory advantages which substantially affect the ability of any other undertaking to provide the same service or to undertake the same activity in the same geographical area under substantially the same conditions
<b>standard</b>	A technical specification adopted by a recognised standards body for repeated or continuous application, compliance with which is not compulsory.
<b>subscriber</b>	Any natural or legal person who or which is party to a contract with the provider of publicly available telecommunications services for the supply of such services
<b>technical specification</b>	A specification contained in a document which lays down the characteristics required of a product such as levels of quality, performance, safety or dimensions, including the requirements applicable to the product as regards terminology, symbols, testing and test methods, packaging, marking and labelling.
<b>telecommunications network</b>	Transmission equipment and, where applicable, switching equipment and other resources which permit the conveyance of signals between defined termination points by wire, by radio, by optical or by other electromagnetic means. Transmission systems and, where applicable, switching equipment and other resources which permit the conveyance of signals between defined termination points by wire, by radio, by optical or by other electromagnetic means.
<b>telecommunications organisation</b>	Public or private bodies, and the subsidiaries they control, to which a Caribbean country grants special or exclusive rights for the provision of a public telecommunications network and, when applicable, telecommunications services.
<b>telecommunications services</b>	Services whose provision consists wholly or partly in the transmission and routing of signals on a public telecommunications network by means of telecommunications processes, with the exception of radio and television broadcasting to the public, and satellite services. Services whose provision consists wholly or partly in the transmission and/or routing of signals on a telecommunications network. Services whose provision consists wholly or partly in the transmission and routing of signals on telecommunications networks, with the exception of radio and television broadcasting.
<b>telex service</b>	The commercial provision for the public of direct transmission of telex messages in accordance with the relevant CCITT recommendation between public switched network termination points, enabling any user to use equipment connected to such a network termination point in order to communicate with another termination point

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<b>terminal equipment</b>	<p>Equipment directly or indirectly connected to the termination of a public telecommunications network to send, process or receive information. A connection is indirect if equipment is placed between the terminal and the termination of the network. In either case (direct or indirect), the connection may be made by wire, optical fibre or electromagnetically. Terminal equipment also means satellite earth station equipment.;</p> <p>Equipment intended to be connected to the public telecommunication network, namely:</p> <p>(a) to be connected directly to the termination of a public telecommunications network; or</p> <p>(b) to interwork with a public telecommunications network being connected directly or indirectly to the termination of a public telecommunications network in order to transmit, process or receive information.</p>
<b>Terrestrial connection to the public telecommunications network</b>	Any connection to the public telecommunications network which does not include a space segment
<b>undertaking</b>	A public or private body, to which a Caribbean country grants special or exclusive rights for the importation, marketing, connection, bringing into service of telecommunications terminal equipment and/or maintenance of such equipment
<b>universal service</b>	A defined minimum set of services of specified quality which is available to all users independent of their geographical location and, in the light of specific national conditions, at an affordable price
<b>users</b>	Individuals, including consumers or organisations, using or requesting publicly available telecommunications services
<b>voice telephony</b>	The commercial provision for the public of the direct transport and switching of speech in real-time between public switched network termination points, enabling any user to use equipment connected to such a network termination point in order to communicate with another termination point
<b>voice telephony service</b>	A service available to the public for the commercial provision of direct transport of real-time speech via the public switched network or networks such that any user can use equipment connected to a network termination point at a fixed location to communicate with another user of equipment connected to another termination point