

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

Interconnection and Access: Model Policy Guidelines & Legislative Texts

HIPCAR

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



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Foreword

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

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

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

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

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

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

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



Brahima Sanou
BDT, Director

Acknowledgements

The present document represents an achievement of the regional activities carried out under the HIPCAR project “Enhancing Competiveness in the Caribbean through the Harmonization of ICT Policies, Legislation and Regulatory Procedures”, officially launched in Grenada in December 2008.

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

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

The HIPCAR Steering Committee – chaired by the Caribbean Telecommunications Union (CTU) – provided guidance and support to a team of consultants led by Ms. Sofie Maddens Toscano and including Mr. J Paul Morgan and Mr. Kwesi Prescod, who prepared the initial draft of this report. The document was then reviewed, finalized and adopted by broad consensus by the participants at two consultation workshops for HIPCAR’s Working Group on ICT Policy and Legislative Framework on Telecommunications matters, held in Trinidad and Tobago on 26-29 October 2009 and in Suriname on 12-15 April 2010 (see Annexes).

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

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

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

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Introduction

1.1. HIPCAR Project – Aims and Beneficiaries

The HIPCAR project¹ was officially launched in the Caribbean by the International Telecommunication Union (ITU) and the European Commission (EC) in December 2008, in close collaboration with the Caribbean Community (CARICOM) Secretariat and the Caribbean Telecommunications Union (CTU). The HIPCAR project is part of a global ITU-EC-ACP project encompassing also sub-Saharan Africa and the Pacific.

HIPCAR's objective is to assist CARICOM / ACP countries in the Caribbean to harmonize their information and communication technology (ICT) policies, legislation and regulatory procedures so as to create an enabling environment for ICT development and connectivity, thus facilitating market integration, fostering investment in improved ICT capabilities and services, and enhancing the protection of ICT consumers' interests across the region. The project's ultimate aim is to enhance competitiveness and socio-economic and cultural development in the Caribbean region through ICTs.

In accordance with Article 67 of the Revised Treaty of Chaguaramas, HIPCAR can be seen as an integral part of the region's efforts to develop the CARICOM Single Market & Economy (CSME) through the progressive liberalization of its ICT services sector. The project also supports the CARICOM Connectivity Agenda and the region's commitments to the World Summit on the Information Society (WSIS), the World Trade Organization's General Agreement on Trade in Services (WTO-GATS) and the Millennium Development Goals (MDGs). It also relates directly to promoting competitiveness and enhanced access to services in the context of treaty commitments such as the CARIFORUM states' Economic Partnership Agreement with the European Union (EU-EPA).

The beneficiary countries of the HIPCAR project include Antigua and Barbuda, The Bahamas, Barbados, Belize, The Commonwealth of Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

1.2. Project Steering Committee and Working Groups

HIPCAR has established a project Steering Committee to provide it with the necessary guidance and oversight. Members of the Steering Committee include representatives of Caribbean Community (CARICOM) Secretariat, Caribbean Telecommunications Union (CTU), Eastern Caribbean Telecommunications Authority (ECTEL), Caribbean Association of National Telecommunication Organisations (CANTO), Caribbean ICT Virtual Community (CIVIC), and International Telecommunication Union (ITU).

In order to ensure stakeholder input and relevance to each country, HIPCAR Working Groups have also been established with members designated by the country governments – including specialists from ICT agencies and national regulators, country ICT focal points and persons responsible for developing national legislation. The Working Groups also include representatives from relevant regional bodies (CARICOM Secretariat, CTU, ECTEL and CANTO) and observers from other interested entities in the region (e.g. civil society, the private sector, operators, academia, etc.).

¹ The full title of the HIPCAR Project is: "Enhancing Competitiveness in the Caribbean through the Harmonization of ICT Policies, Legislation and Regulatory Procedures". HIPCAR is part of a global ITU-EC-ACP project carried out with funding from the European Union set at EUR 8 million and a complement of USD 500,000 by the International Telecommunication Union (ITU). It is implemented by the ITU in collaboration with the Caribbean Telecommunications Union (CTU) and with the involvement of other organizations in the region. (see www.itu.int/ITU-D/projects/ITU_EC_ACP/hipcar/index.html).

The Working Groups have been responsible for covering the following two work areas:

1. *ICT Policy and Legislative Framework on Information Society Issues*, dealing with six sub-areas: e-Commerce (Transactions and Evidence), Privacy & Data Protection, Interception of Communications, Cybercrime, and Access to Public Information (Freedom of Information).
2. *ICT Policy and Legislative Framework on Telecommunications*, dealing with three sub-areas: Universal Access and Service, Interconnection, and Licensing in a Convergent Environment.

The reports of the Working Groups published in this series of documents are structured around these two main work areas.

1.3. Project Implementation and Content

The project's activities were initiated through a Project Launch Roundtable organized in Grenada, on 15-16 December 2008. To date, all of the HIPCAR beneficiary countries – with the exception Haiti – along with the project's partner regional organizations, regulators, operators, academia, and civil society have participated actively in HIPCAR events including – in addition to the project launch in Grenada – regional workshops in Trinidad & Tobago, St. Lucia, St. Kitts and Nevis, Suriname and Barbados.

The project's substantive activities are being led by teams of regional and international experts working in collaboration with the Working Group members, focusing on the two work areas mentioned above.

During Stage I of the project – just completed – HIPCAR has:

1. Undertaken assessments of the existing legislation of beneficiary countries as compared to international best practice and in the context of harmonization across the region; and
2. Drawn up model policy guidelines and model legislative texts in the above work areas, from which national ICT policies and national ICT legislation / regulations can be developed.

It is intended that these proposals shall be validated or endorsed by CARICOM / CTU and country authorities in the region as a basis for the next phase of the project.

Stage II of the HIPCAR project aims to provide interested beneficiary countries with assistance in transposing the above models into national ICT policies and legislation tailored to their specific requirements, circumstances and priorities. HIPCAR has set aside funds to be able to respond to these countries' requests for technical assistance – including capacity building – required for this purpose.

1.4. This Report

This report deals with Interconnection and Access, one of the three work areas of the HIPCAR Working Group on Telecommunications. It includes Model Policy Guidelines and a Model Legislative Text that countries in the Caribbean may wish to use when developing or updating their own national policies and legislation in this area.

Prior to drafting this document, HIPCAR's team of experts – working closely with the above Working Group members – prepared and reviewed an assessment of existing legislation on telecommunications in the fifteen HIPCAR beneficiary countries in the region focusing on three related regulatory issues: Universal Access and Service, Interconnection and Access, and Licensing. This assessment took account of accepted international best practices as reflected in legislation of the Common Market for Eastern and Southern Africa (COMESA), the Economic Community of West African States (ECOWAS), the Eastern Caribbean Telecommunications Authority (ECTEL), the European Union (Directive 97/33/EC, Directive 2002/19/EC, Regulation (EC) No 2887/2000, Commission Recommendation 2009/396/EC) and other jurisdictions (France, Ireland, Kenya, Malta, Norway, Singapore and Saudi Arabia).

This regional assessment – published separately as a companion document to the current report² – included a comparative analysis of current legislation on Interconnection and Access in the HIPCAR beneficiary countries and the identification of potential gaps in this regard, thus providing the basis for the development of the model policy framework and legislative text presented herein. In order to accurately reflect the socio-economic and legal environment of the Caribbean, legal and technical terminology commonly used in the region was taken into consideration when drafting these texts. By reflecting national, regional and international best practices and standards while ensuring compatibility with the legal traditions in the Caribbean, the model documents in this report are aimed at meeting and responding to the specific requirements of the region.

The initial drafts for these documents were prepared by a team of HIPCAR consultants led by Ms. Sofie Maddens Toscano and including Mr. J Paul Morgan and Mr. Kwesi Prescod. The documents were then reviewed, finalized and adopted by consensus by the participants at two consultation workshops for HIPCAR’s Working Group on Policy and Legislative Framework on Telecommunications (Universal Access and Service, Interconnection and Access, and Licensing), held in Trinidad and Tobago on 26-29 October 2010 and in Suriname on 12-15 April 2010 (see Annexes). Stakeholders had the opportunity to comment on the adopted documents prior to and after the workshops.

Following this process, the documents were finalized and disseminated to all stakeholders for consideration by the governments of the HIPCAR beneficiary countries.

1.5. The Importance of Effective Policies and Legislation on Interconnection and Access

Interconnection is essential for the development of competition in telecommunications. It enables any consumer to successfully complete a call to any other consumer irrespective of whether the originator of the call and the call recipient are connected to the same network. Without interconnection, new operators would be obliged to duplicate expensive infrastructure and consumers would have to subscribe to each of the different operators’ networks to be able to call each other. Interconnection enables consumers to contract with the supplier of their choice and still be able to receive all incoming calls, regardless of where they originate.

Given its fundamental impact on the overall operation of competing telecommunications networks, interconnection is one of the most crucial issues for operators. In addition, it is often the most contentious issue facing a regulator when a market becomes more competitive. It is therefore one of the most important regulations to put in place before competition can be successful.

Regulators play a critical role in overseeing interconnection. In most cases, they must review relevant economic principles regarding interconnection pricing, analyze and propose approaches to interconnection costing, develop common cost models to be used by all operators, and develop interconnection guidelines and regulations. To facilitate competition, regulators must ensure that the interconnection framework is clearly defined and that interconnection charges between networks are based on objective, economically sound, and solidly substantiated costs.

International best practices show that interconnection regulation is often focused on a certain key principles, including:

- Obligation of cost-oriented, transparent, and non-discriminatory interconnection;
- Definition and method for determining dominant operator or significant market power (SMP) status;
- Regulated process for interconnection negotiations amongst operators;

² See “ICT Policy and Legislative Framework on Telecommunications – Interconnection and Access: Assessment Report on the Current Situation in the Caribbean” available at www.itu.int/ITU-D/projects/ITU_EC_ACP/hipcar/

Introduction

- Reference Interconnection Offer and approved interconnection agreements;
- Obligation to share infrastructure;
- Unbundling of the local loop;
- Determination of (mobile) termination rates ((M)TRs);
- Dispute Resolution.

Section I: Model Policy Guidelines – Interconnection and Access

Following, are the Policy Guidelines that a country may wish to consider in relation to Interconnection and Access.

1. CARICOM/CARIFORUM COUNTRIES SHALL ENSURE THAT AT LEAST THE DOMINANT OPERATORS THOSE WHICH HAVE BEEN FOUND TO HAVE SIGNIFICANT MARKET POWER, AND PERHAPS ALL OPERATORS, MUST PROVIDE INTERCONNECTION TO THEIR NETWORKS ON A COST- ORIENTED, TRANSPARENT , NON-DISCRIMINATORY, TECHNICALLY AND ECONOMICALLY FEASIBLE & TIMELY BASIS

- Operators shall have a right and, when requested by other undertakings so authorized, an obligation to negotiate interconnection with each other for the purpose of providing telecommunications services.
- The law shall provide for an obligation for at least the dominant operators/operators with Significant Market Power to provide interconnection to their networks on a cost-oriented, transparent, non-discriminatory and technically feasible basis within a specified timeframe. Where justified, this obligation may be extended to all operators.

2. CARICOM/CARIFORUM COUNTRIES SHALL ENSURE THAT THERE IS A REGULATED PROCESS FOR ALL INTERCONNECTION NEGOTIATIONS, WHICH INCLUDES SPECIFIC TIMEFRAMES IN WHICH NEGOTIATIONS MUST BE COMPLETED AND APPROPRIATE ENFORCEMENT MECHANISMS WHICH PERMIT THE REGULATOR TO INTERVENE IF THE PARTIES DO NOT REACH AN AGREEMENT

- There shall be an obligation to make interconnection agreements publicly available, subject to confidentiality requirements as defined in the law.
- Interconnection agreements shall be submitted to the regulator for approval - the regulator shall review such agreements for conformity with the provisions of the legal and regulatory framework, as well as existing licenses and may request additional information for such a review as deemed necessary.
- The regulator may, in exceptional cases, require changes to be made to interconnection agreements already concluded, where justified to ensure effective competition and/or interoperability of services for users.
- The regulator may intervene in interconnection negotiations on their own initiative at any time, and shall do so if requested by either party, in order to specify issues which must be covered in an interconnection agreement, or to lay down specific conditions to be observed by one or more parties to such an agreement.
- Conditions set by the regulator may include, inter alia, conditions designed to ensure effective competition, technical conditions, tariffs, supply and usage conditions, conditions as to compliance with relevant standards, compliance with essential requirements, protection of the environment, and/or the maintenance of end-to-end quality of service and consumer protection.

.../...

- The regulator may, on its own initiative at any time or if requested by either party, set time limits within which negotiations on interconnection are to be completed. If agreement is not reached within the time allowed, the regulator shall take steps to bring about an agreement under procedures laid down by that authority. The procedures shall be open to the public. The regulator shall have the mandate to impose firm timeframes with a hard cut-off point for responding to requests for interconnection and for completing physical interconnection and billing testing.

3. CARICOM/CARIFORUM COUNTRIES SHALL ENSURE THAT WHERE OBLIGATIONS FOR DOMINANT OPERATORS OR OPERATORS WITH SIGNIFICANT MARKET POWER (SMP) DIFFER FROM OBLIGATIONS FOR NON-DOMINANT OPERATORS, THE LAW AND/OR REGULATION CLEARLY DEFINES HOW DOMINANT OR SMP STATUS IS DETERMINED AND WHAT TRIGGERS THE NEED FOR A SMP/DOMINANCE DETERMINATION, HOW AND WHICH OBLIGATIONS ARE IMPOSED, AND SUCH DETERMINATION SHOULD BE DECIDED ON A FAIR AND TRANSPARENT BASIS

- The law shall clearly define what is meant by dominant operator/operator with significant market power.
- The law shall clearly define who makes the determination of dominance and who is responsible for competition issues in general.
- The law shall clearly define who may initiate the market analysis procedure and how often a determination of dominance or SMP occurs.
- Criteria to determine dominance are clearly defined and transparent.
- Determinations of dominance or SMP or imposition of obligations shall be subject to public consultation.
- The decision to impose obligations on dominant operator/operator with significant market power shall take account of their appropriateness in each specific case and set the starting moment in time for the fulfilment of such obligations.
- Obligations imposed on dominant operator/operator with significant market power shall be reasonable, based on the nature of the problem identified, proportionate and justified in the light of the principles and objectives of the legal and regulatory framework.
- Obligations placed on dominant operators relating to access and interconnection may include any or all obligations relating to the obligation of transparency in relation to the publication of information, including reference offers; the obligation of non-discrimination, in relation to the provision of access and interconnection and the respective provision of information; the obligation for accounting separation in respect of specific activities related to access and interconnection; an obligation to respond to reasonable requests for access; and, the obligation of price control and cost accounting.
- The determination and imposition of obligations related to dominance is reviewed regularly.
- Where it is established on the basis of a relevant market analysis that the market characteristics do not justify the imposition of obligations on dominant operator/operator with significant market power and/or that there are no undertakings having significant market power in the said market, the regulator shall not impose any obligations relating to dominance and/or shall withdraw the obligations, if any, imposed on such undertakings.

4. CARICOM/CARIFORUM COUNTRIES SHALL ENSURE THAT DOMINANT OPERATORS OR THOSE HAVING SIGNIFICANT MARKET POWER MUST PUBLISH A REFERENCE ACCESS AND/OR INTERCONNECTION OFFER THAT IS APPROVED BY THE REGULATOR. ALL ACCESS/INTERCONNECTION OFFERS SHALL BE APPROVED BY THE REGULATOR AND MADE PUBLICLY AVAILABLE

- Dominant operator/operator with significant market power shall be obliged to publish a Reference Interconnection Offer (RIO) or Reference Access Offers (RAO).
- RAOs and RIOs shall be as detailed as possible in order to facilitate and smooth interconnection contract negotiations.
- RAOs and RIOs shall be approved by the regulator according to clear and transparent procedures governing approval of the RIO (timetable, submission of the RIO to competitors for comment, etc.).
- The legal and regulatory framework shall clearly provide for the legal standing of RIOs. A RIO is and should be a minimum offer (terms and conditions) a dominant operator has to offer an interconnect seeker. Any subsequent RIO should not “Over-ride” any interconnection agreement, but the non dominant operator should have the right to “upgrade” and add new provisions from a new RIO automatically upon request from it. The dominant operator should be entitled to request to negotiate any changes it would like but the ICA should prevail if no agreement is reached.
- The regulator may request the dominant/SMP operator to add to or modify services set out in its offer, when such additions or modifications are justified for compliance with the principles of non-discrimination and cost-orientation of interconnection.
- Regulators may publish guidelines or models for reference interconnection or reference access offers, which must be used by all the dominant/SMP operators.
- Notwithstanding the publication of guidelines as mentioned above, all RIOs shall contain at least the following services:
 - a. services for the routing of switched traffic (call termination and origination);
 - b. leased lines;
 - c. interconnection links;
 - d. supplementary services and implementation arrangements therefore;
 - e. description of all points of interconnection and conditions of access thereto, for the purposes of physical co-location;
 - f. comprehensive description of proposed interconnection interfaces, including the signaling protocol and possibly the encryption methods used for the interfaces;
 - g. technical and tariff conditions governing the selection of carrier and portability, where applicable.
 - h. third-party billing services;
 - i. at the request of the national regulatory authority, an alternative co-location offer if physical co-location is proven to be technically unfeasible;
 - j. as needed, the technical and financial conditions governing access to the operator's resources, in particular those relating to unbundling of the local loop, with a view to offering telecommunication services:

.../...

- Notwithstanding the publication of guidelines as mentioned above, reference access offers must, where applicable, include detailed information related to all of the following: (a) access to network elements and associated facilities, which may involve the connection of equipment, by fixed or non-fixed means; (b) access to physical infrastructure including buildings, ducts and masts; access to relevant software systems including operational support systems, access to number translation or systems offering equivalent functionality; (c) access to fixed and mobile networks, in particular for roaming, access to conditional access systems for digital television services; and, (d) access to virtual network services (e) indirect access.
- Reference access/interconnection offers shall be sufficiently unbundled so that the access seekers/interconnecting operators do not have to pay for network elements or facilities which are not necessary and shall contain a description of the components of the offer, associated terms and conditions, including the structure and level of prices.
- Regulators should have clearly defined rate determination methodology.

5. CARICOM/CARIFORUM COUNTRIES SHALL ADOPT MEASURES THAT HEIGHTEN COMPETITION AND STIMULATE TECHNICAL INNOVATION ON THE MARKET, THUS BOOSTING COMPETITIVE PROVISION OF A FULL RANGE OF TELECOMMUNICATION SERVICES OFFERED TO USERS, FROM SIMPLE VOICE TELEPHONY TO BROADBAND SERVICES

- *Infrastructure Sharing and Co-location*
- Infrastructure sharing shall be allowed and required in some cases, especially with regard to mobile networks towers.
- Regulatory authorities shall encourage the sharing of facilities and/or property with other organizations providing telecommunications networks and publicly available services, in particular where essential requirements deprive other organizations of access to viable alternatives.
- Member States shall ensure that there is an obligation for dominant operators/SMP operators to provide co-location and that a co-location offer, presenting no barrier to the entry of competitors, is included in the reference interconnect offer for network interconnection and in the unbundling offer for unbundling.
- Regulators may impose facility and/or property sharing arrangements (including physical collocation) after an appropriate period of public consultation during which all interested parties shall be given an opportunity to express their views. Such arrangements may include rules for apportioning the costs of facility and/or property sharing.
- *Access to International Gateways*
- Dominant operators/operators with SMP shall be required to offer access and collocation in international gateways, particularly for submarine cable landing stations.
- Access to international gateways (including submarine cable landing stations) shall be included in the standard interconnection offer/agreements.
- International gateways (including submarine cable landing stations) shall have specific collocation offer/provisions.
- *Access to Alternative Infrastructure*
- Regulators shall encourage access to alternative infrastructure on the basis of commercial negotiations, in order to foster and entrench competition as rapidly as possible. Such access shall be provided under conditions of non-discrimination of access.

.../...

Section I

- ***Unbundling of the Local Loop***
- The law shall consider unbundling of local loop where appropriate.
- New entrants shall be obliged, under their terms of reference, to install some minimum infrastructure capacity. But the dominant operator shall be mandated to provide access facilities to the new entrant. The latter can then install its own transmission systems on such access facilities.
- Where a determination has been made defining an operator as dominant, such operator shall define an unbundling offer in accordance with a list of the services to be included in the offer as determined by the regulator. Offers are subject to approval by the regulator in the same way as the RIO and such offer shall be made public.
- Regulators shall ensure that mechanisms are in place so that new entrants are provided with the information needed for unbundling purposes (address and coverage of splitters, space required for co-location, quality of lines, lead-time for providing unbundled lines).

- 6. REGULATORS SHALL EXAMINE MOBILE TERMINATION RATES (MTR), TRANSIT RATES AND FIXED TERMINATION RATES (FTR) AND DETERMINE WHETHER DOMINANT/SMP OPERATORS MUST OFFER COST-ORIENTED FIXED-TO-MOBILE OR MOBILE-TO-MOBILE AND MOBILE TO FIXED AND FIXED TO FIXED TERMINATION RATES AND TRANSIT RATES**
- Regulators in CARICOM/CARIFORUM countries shall examine: a) interconnection and call termination charges on mobile and fixed networks; b) charges and tariff structures, retail and interconnection prices and the sharing of revenues between originating and terminating operators for fixed-to-mobile calls; c) possible adjustments to the tariff structures of retail and interconnection prices; d) the relevance of the interconnection market; e) the relevance of the mobile and fixed termination market; f) the identification of dominant operators in these markets.
 - Regulators in CARICOM/CARIFORUM countries shall determine how to implement the necessary measures regarding mobile termination rates so as to promote a smooth development of the telecommunication market and the process of liberalization. Within this context, Regulators in CARICOM/CARIFORUM countries shall determine:
 - What methodology is used to set the MTRs, transit rates and FTRs (e.g., benchmarking or cost modeling).
 - Whether rates should be symmetrical or asymmetrical for fixed-to- mobile and mobile-to-mobile.
 - What factors should be included in costs to calculate MTRs, FTRs and transit rates (e.g. should the factors include non-network related costs or fixed costs).
 - Whether in the case of new entrants, sliding glide path asymmetric is used to avoid stranded MNO asset.
 - Regulators shall retain the right to regulatory intervention in determining termination rates subject to careful analysis as determined above and subject to consultation of stakeholders.
 - Should the incumbent have both a fixed and a mobile network then the new entrant mobile operator should be given the option to connect at the lowest cost point e.g. to avoid any possible transit charges from the fixed to the mobile network by allowing the new entrant mobile operator to connect directly to the incumbent's mobile switch.

- 7. CARICOM/CARIFORUM COUNTRIES SHALL ENSURE THAT INTERCONNECTION/ACCESS DISPUTES HAVE A SPECIFIC AND EXPEDITED PROCESS AND THAT PARTIES MAY REQUEST THE REGULATOR ADJUDICATION AT ANY TIME AND THAT APPROPRIATE ENFORCEMENT MECHANISMS ARE IN PLACE TO ALLOW THE REGULATOR TO GATHER INFORMATION AND ENFORCE DECISIONS**
- Regulators shall publish a referral procedure enabling players in the market to bring disputes before them in accordance with a clear and transparent procedure.
 - Regulators should have the power to make interim orders to expedite the dispute resolution process.
 - The legal and regulatory framework shall provide for a clear mandate granting the regulator sufficient powers with respect to inspection of, and the collection of current and past records from, actual and potential interconnection sites, facilities and equipment as well as the physical elements at the site.
 - Regulators shall ensure decisions on access/interconnection disputes are impartial, and, that they have the option of contracting outside experts to bring in expertise and/or of constituting expert committees comprised of people recognized for their expertise in the area and who are independent of interested parties in the matter.
 - Regulators shall set a maximum reasonable time-frame, no longer than 4 months for the settlement of disputes, which must be adhered to except in exceptional circumstances.
 - Legislation shall provide for the possibility of the authority initiating an action itself, and the possibility of injunction against an operator in the event of serious problems requiring urgent solution.
 - Regulators in the region shall cooperate as widely as possible, through CTU, and establish a group for exchanging experience via the Internet and a database of past disputes and their solutions (e.g. tariff benchmark data).

Section II: Model Legislative Text – Interconnection and Access

Following, is the Model Legislative Text that a country may wish to consider when developing national legislation relating to Interconnection and Access. This model text is based on the Model Policy Guidelines outlined previously.

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PART I – PRELIMINARY

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|---|----|---|
| Short Title | 1. | These Regulations may be cited as the “Access and Interconnection Regulations”, and shall come into force and effect [on xxx/ following publication in the <i>Gazette</i>]. |
| Objective | 2. | The objectives of these Access and Interconnection Regulations are to provide further details relating to: <ul style="list-style-type: none"> a. principles relating to access and interconnection b. interconnection procedures; and c. dispute resolution procedures. |
| International and National Cooperation | 3. | In order to promote regional harmonization and growth, the National Regulatory Authority (NRA) shall: <ul style="list-style-type: none"> a. Cooperate with regional regulatory authorities to the greatest extent possible b. Seek to participate in intergovernmental group dedicated to exchanging experiences and establishing a database of past disputes and subsequent resolutions. c. Regulators will endeavour to respond to substantive issues raised by operators in a reasonable timeframe. |
| Definitions | 4. | The following definitions apply: <ul style="list-style-type: none"> a. Authorisation: Administrative act (individual license, or class license) which grants a set of rights and obligations to an entity and grants the entity the right to establish and exploit information and communication networks or offer information and communication services. b. Days: refers to calendar days. c. Dominant Operator: a public network operator that, either individually or jointly with others, enjoys a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately end-users. d. Information and communications transmission means the emission, transmission or reception of information, including without limitation, voice, sound, data, text, video, animation, visual images, moving images and pictures, signals or a combination thereof by means of magnetism, radio or other electromagnetic waves, optical, electromagnetic systems or any agency of a like nature, whether with or without the aid of tangible conduct. e. Information and communications network means transmission systems and, where applicable, switching or routing equipment and other resources which permit the conveyance of signals by wire, by radio, by optical or by other electro-magnetic means, including satellite networks, fixed (circuit- and packet-switched, including internet) and mobile networks, electricity cable systems, to the extent that they are used for the purpose of transmitting signals, |

networks used for radio and television broadcasting, and cable television networks, irrespective of the type of information conveyed.

- f. Information and communications network operator means an entity which owns, operates or provides an information and communications network or network facilities.
- g. Information and communications service means a service normally provided for remuneration which consists of the conveyance of signals on information and communications networks, including information and communications services and transmission services in networks used for broadcasting as well as services providing or exercising editorial control over content transmitted using Information and Communications networks.
- h. Information and communications service provider means an entity providing an information and communications service as described in these Regulations to users.
- i. Network Facilities: refers to a physical component of a / information and communications network, including wires, lines, terrestrial and submarine cables, wave guides, optics, or other equipment or object connected therewith, used for the purpose of information and communications and any post, pole, tower, standard, bracket, stay, strut, insulator, pipe, conduit, or similar thing used for carrying, suspending, supporting or protecting the structure, but does not include terminal equipment belonging to the end customer.
- j. Interconnection: means the linking of / information and communications networks and services so as to enable the users of one provider of an information and communications service to communicate with the users of another provider of an information and communications service, provide access to the services provided by such other provider; and includes the provision of services such as transit services (including domestic transit, and outbound international transit) required to connect two third party networks to one another.
- k. Interconnecting Operator: an information and communications network operator who requests interconnection from another information and communications network operator pursuant to the [Act/Law] and these Regulations.
- l. Interconnection Provider: an information and communications network operator who provides interconnection to an interconnecting operator.
- m. Number Portability: the ability of a customer to retain the same telephone number upon changing information and communications operators or service providers.

PART II – PRINCIPLES AND OBLIGATIONS OF INTERCONNECTION

- Role of the NRA in Interconnection**
5. The NRA shall encourage and, where appropriate, ensure suitable and timely access and interconnection aimed at promoting efficiency and sustainable competition, and at providing maximum benefit to end-users, by:
- a. imposing obligations in matters of access and interconnection on undertakings that are determined to be dominant and
 - b. intervening upon its own initiative whenever justified or, in the absence of an agreement between undertakings, at the request of either of the parties involved.
- Conditions set by NRA**
6. Notwithstanding the provisions of Part IV in relation to conditions which may be imposed on dominant operators, in promoting the provision of information and communication in the country, the NRA may set conditions on interconnection, including:
- a. Conditions to ensure effective competition;
 - b. Technical conditions;
 - c. Conditions relating to tariffs;
 - d. Supply and usage conditions;
 - e. Conditions regarding compliance with relevant standards;
 - f. Conditions regarding compliance with essential requirements;
 - g. Conditions regarding the protection of the environment;
 - h. Maintenance of end-to-end quality of service and consumer protection;
 - i. Conditions regarding network disaggregation; and/or
 - j. Conditions regarding costing approaches and methodologies
- Rights of Interconnection**
7. (1) A public Information and communications network operator shall have a right, and when requested by other undertakings so authorised an obligation, to negotiate interconnection with other public Information and communications network operators for the purpose of providing information and communication services and in order to ensure provision and interoperability of services.
- (2) Notwithstanding the provisions of paragraph (1) above, no entity shall be granted interconnection unless it holds a valid authorisation for
- a. The operation of a public information and communications network; and
 - b. The provision of information and communication services to the public.
- Obligations for Interconnection**
8. (1) In accordance with these Regulations, each public Information and communications network operator shall:
- a. Act in a manner that enables interconnection to be established as soon as reasonably practicable.
 - b. Respond to requests for interconnection in good faith and within a reasonable time period.

- c. Not refuse interconnection if it is reasonable in terms of the requesting licensee's requirements on the one hand and the operator's capacity to meet it on the other.
- d. Notify and substantiate any refusal to interconnect to the requesting licensees and to the NRA.
- (2) Notwithstanding the provisions of paragraph (1) above, the NRA shall have the right to impose additional obligations on dominant operators in the relevant market, taking account of their appropriateness in each specific case and setting the starting moment in time for the fulfillment of such obligations in accordance with these Regulations.
- Access to Facilities** 9. Where access to any facilities is required to effect interconnection such access shall be provided together with the required interconnection, in accordance with these Regulations.
- NRA Treatment of Confidential Information** 10. (1) The NRA is bound to respect the confidentiality of non-public information to which it has access within the framework of interconnection negotiations or disputes
- (2) The provisions of the preceding paragraph do not prejudice the exercise of the supervisory and monitoring powers of the NRA.
- Confidentiality** 11. (1) Public Information and communications network operator shall respect and ensure the confidentiality of information received, transmitted or stored, before, during or after the process of negotiating and making agreement in respect of access or interconnection, and shall use that information solely for the purpose for which it was supplied.
- (2) The received information shall not be passed on to any other party, in particular other departments, subsidiaries or partners of either party, for whom such information could constitute a competitive advantage.
- Equal Responsibility** 12. An interconnection provider and an interconnecting operator shall act in a manner that enables access and interconnection to be established as soon as reasonably practicable.
- Publication of Information** 13. The NRA shall have available for the use of the general public, documentation on interconnection that is adequate and current and:
- a. Shall use any available media that it considers appropriate to inform the public of such documentation; and
- b. May impose a fee for providing the documentation to any person.

PART III – INTERCONNECTION NEGOTIATIONS AND AGREEMENTS

- Notice of Request for Interconnection** 14. An interconnecting operator may make a written interconnection request at any time directly to the interconnection provider and shall simultaneously forward a copy of such request in its entirety to the NRA.
- Nature of Agreement** 15. (1) Interconnection shall be the subject of a private legal agreement, commonly called the interconnection agreement, between the two parties in question.

Section II

**Model
Interconnection
Agreements**

(2) Notwithstanding the provisions of paragraph (1) above, the terms and conditions of access and interconnection provision shall be consistent with obligations imposed by the NRA in these Regulations.

16. Within the context of the objectives described in Regulation 2 above, the NRA may:
- a. following consultation with authorised public information and communications operators and other interested stakeholders, develop a set of service descriptions, terms and conditions for interconnection which shall be published as a Model Interconnection Agreement and kept up to date by the NRA;
 - b. amend the Model Interconnection Agreement from time to time, following publication of a notice stating that the NRA intends to amend the Model Interconnection Agreement, setting out the amendments and inviting comments on the amendments.
 - c. consider, when intervening on its own initiative or at the request of one or both parties to a negotiation for interconnection, that, except where one of the parties is required to have in place a Reference Interconnection Offer (RIO), the Model Interconnection Agreement forms the minimum set of service descriptions, terms and conditions that must be offered by the parties for the provision of interconnection to each other under an interconnection agreement; and
 - d. when determining a dispute concerning the terms and conditions that should apply to interconnection arrangements between authorised public information and communications network operators under these Regulations, consider the Model Interconnection Agreement as forming the minimum set of service descriptions and terms and conditions that must be offered by the parties for the provision of interconnection to each other under an interconnection agreement.

**Forms and
Contents of
Interconnection
Agreements**

17. Notwithstanding the provisions of Regulation 15 above, a Model Interconnection Agreement shall specify at a minimum:
- a. the date of entry into force, duration and arrangements for the modification, termination and renewal of the agreement;
 - b. arrangements for the establishment of interconnection and the planning of subsequent deployment, technical standards for interconnection, level of quality of service guaranteed by each network and coordination measures for monitoring quality of service and fault identification and clearance;
 - c. a description of the services provided by each party;
 - d. location of the points of interconnection;
 - e. measures relating to tests for interoperability;

- f. intellectual property rights;
- g. arrangements for the provision of equal access and number portability, where applicable;
- h. measures to provide facility sharing, including collocation;
- i. measures to ensure the maintenance of essential requirements;
- j. access to ancillary, supplementary and advanced services;
- k. access to basic services including emergency, free-phone and toll-free numbers, directory assistance and text messaging SMS termination services;
- l. access to special access services including premium rate services;
- m. arrangements for measuring traffic and setting fees for services, billing and settlement procedures;
- n. where applicable, determination of the unbundled part of the interconnection charge which represents a contribution to the net cost of universal service obligations;
- o. notification procedures and the contact details of the authorized representatives of each party for each field of competence;
- p. operational and maintenance procedures;
- q. rules for compensation in the case of failure by one of the parties;
- r. procedure in the event of alterations being proposed to the network or service offerings of one of the parties; and
- s. confidentiality of non-public parts of the agreements for measuring traffic and setting fees for services, billing and settlement procedures;
- t. Where applicable, determination of the unbundled part of the interconnection charge which represents a contribution to the net cost of universal service obligations;

Timeframes for Negotiations

18. The NRA may, on its own initiative or upon request by either party to an interconnection agreement, set a time limit within which negotiations on interconnection are to be completed:
- a. Any such direction shall set out the procedures to be taken if agreements are not reached within the time limit.
 - b. Those procedures outlined in sub-paragraph (a) shall be open to the public.
 - c. The NRA shall have the authority to impose firm timeframes for responding to requests for interconnection and for completing physical interconnection and billing testing.

Section II

- Regulatory Approval of Interconnection Agreement**
19. Within thirty (30) days after the parties to a negotiation regarding interconnection have concluded an interconnection agreement, the parties shall submit the proposed agreement to the NRA for approval. The NRA shall approve the proposed interconnection agreement if satisfied that it is not inconsistent with the [Law/Telecommunications Act³] these Regulations, the Model Interconnection Agreement, or the terms and conditions of the parties' licenses or other provisions of law.
- Additional Information for Interconnection Agreement**
20. The NRA may request additional information from the parties to a proposed interconnection agreement where it considers it necessary to further evaluate the terms, conditions and charges contained in the proposed interconnection agreement.
- Revision of Interconnection Agreement**
21. In those cases where the NRA deems the interconnection agreement to be inconsistent with the Act, these Regulations, the Model Interconnection Agreement, or the terms and conditions of the parties' licenses or other provisions of law, the NRA may require the parties to amend an interconnection agreement where justified to ensure effective competition and/or interoperability of services for users. In such cases, the NRA shall notify the parties that it does not consider that the proposed interconnection agreement or any part thereof should be approved. The parties to that agreement shall negotiate and submit a revised proposed interconnection agreement to the NRA, within a period agreed by the parties with the NRA.
- Publication of Interconnection Agreements**
22. Public information and communications operators shall make available to the public all portions of approved interconnection agreements that have not been designated as confidential by the NRA pursuant to Regulations 10 and 11.
- Amendment or Modification of Interconnection Agreement**
23. The parties to an interconnection agreement may amend or modify an agreement that has been approved by the NRA by:
- a. Giving not less than 30 days written notice before the effective date of the amendment or modification; and
 - b. Submitting a copy of the proposed amendment or modification to the NRA.
- Approval of Amendment or Modification**
24. No amendment or modification to any approved interconnection agreement shall take effect unless approved by the NRA, which will publish its decision within thirty (30) days of receiving the submission to amend or modify the agreement.
- Suspension of an Interconnection Agreement**
25. (1) No suspension of an interconnection agreement shall take effect unless approved by the NRA;
- (2) Notwithstanding subsection (1), where a Party wishes to suspend an interconnection agreement, that Party shall provide notice in accordance with the agreement at least fifteen (15) days simultaneously to the NRA and the other party, prior to suspending the agreement.

³ This refers to the relevant act/principle legislation that treats with administration of telecommunications sector.

(3) An interconnection agreement shall include provisions for the suspension of the agreement [or parts of the agreement] in the event of:

- a. Conduct that is illegal or interferes with the obligations of the interconnection provider, under the relevant licence, [Law/Act] or Regulations;
- b. Requirements that are not technically feasible;
- c. Health or safety problems;
- d. Circumstances that pose an unreasonable risk to the integrity or security of the network or services of the interconnection provider, from whom interconnection is requested; or
- e. It is necessary to deal with a material degradation of the interconnection provider's telecommunications network or services.

Termination of an Interconnection Agreement

26. Parties to an interconnection agreement shall provide at least thirty (30) days written notice to the NRA and to its customers in the case of the service provider to be terminated before terminating any interconnection agreement, provided:
- a. Such notice informs customers of the date upon which any services will be interrupted and shall also inform them of appropriate steps that can be taken to obtain such services from another operator.
 - b. Notwithstanding the right of the parties to terminate an interconnection agreement, the NRA shall have the authority to impose temporary measures and require any party to provide interconnection on such terms and conditions and at such rates as the NRA may deem appropriate, pending renewal or replacement of the interconnection agreement.

Implementation of Interconnection Agreements

27. (1) Every interconnection agreement shall stipulate a period not exceeding twenty-eight days within which interconnection shall be effected between the parties.
- (2) The NRA may, upon written application by an interconnection provider, extend this period provided that the interconnection provider uses all reasonable endeavours to effect operational interconnection within twenty-eight days of concluding a relevant interconnection agreement, provides the NRA with all relevant documentation proving that he has exhausted all practicable means to achieve interconnection and justifies the extension of the original time period. Such application shall be made within the original 28 day period.
- (3) Any extension of this period by the NRA in accordance with paragraph (2) shall not exceed ninety days.

Costs of Modification of Network or Equipment

28. (1) Where interconnection requires modification of the network or equipment of an interconnection provider, the cost of the modification shall be recoverable from the interconnecting operator.
- (2) Such costs shall be limited to the modification to interconnection specific facilities as outlined in the RIO approved in accordance with Regulation 47.

(3) As an incentive for the incumbent to neither inflate the cost of network modification nor unreasonable extend the period of implementation, the NRA may also require the incumbent to pay some fraction of this cost in accordance with a determined formula.

(4) For the purposes of this Regulation 28, “interconnection specific facilities” refers to physical transmission equipment and directly related infrastructure (inclusive of ducts, fibre, towers, antennae as appropriate) required to effect the point of interconnection and shall not include ancillary services such as power, space and air conditioning, or equipment which are required for the normal operation of the provider’s core and access network, in the absence of interconnection. The cost of these latter facilities may be recovered from other means which may include interconnection termination rates. The NRA shall on application by an interconnection provider or an interconnecting operator decide on the method of recovery within fifteen (15) days.

PART IV – DOMINANT PUBLIC TELECOMMUNICATIONS OPERATORS

Authority to Determine Dominance

29. Subject to the provisions of Regulations 30 to 32 below, the NRA shall have the authority and responsibility to determine which public network operators are dominant in their relevant markets, subject to consultation with the Competition Authority and take account of any recommendations made by that Authority in determining dominance, as provided for in Regulation 32 below.

Initiation of Market Analysis Procedure

30. Upon request by a public network operator or by the NRA on its own initiative, the NRA may at any time initiate a market analysis to determine if any public network operators are dominant in a relevant market. Such analysis shall be open, transparent and subject to public consultation.

Criteria to Determine Dominant Operators in a Relevant Market

31. The NRA shall take into account the following criteria to determine dominant public network operators:

- a. The relevant market;
- b. Technology and market trends;
- c. The market share of the public network operator in the relevant market;
- d. The power of the public network operator to introduce and sustain a material price adjustment independently of competitors as well as any barriers to entry;
- e. The degree of differentiation among networks and services in the market; and
- f. Other matters that the NRA considers relevant.

Section II

Determining a Dominant Operator in a Relevant Market

32. Prior to making a determination of dominance, the NRA shall assess the competitive conditions within the relevant market where, individually or jointly with others, the public network operator may enjoy a position of economic strength affording it the power to behave to an appreciable extent independently of competitors and users. The NRA by public notice in the Gazette and on its website, may designate a public network operator as dominant for the purposes of the [Telecommunications Act/Law], these Regulations and any other regulations under the Act provided:
- a. Before making a determination of dominance, the NRA shall invite submissions from members of the public on the matter; and
 - b. Consult with the Competition Authority and take account of any recommendations made by that Authority.

Imposition, Maintenance, Amendment or Withdrawal of Obligations

33. (1) The NRA is charged with determining the imposition, maintenance, amendment or withdrawal of the following obligations, in respect of access or interconnection applicable to Public Information and Communications Operators determined to be dominant:
- a. Obligation of transparency in relation to the publication of information, including reference offers;
 - b. Obligation of non-discrimination, in relation to the provision of access and interconnection and the respective provision of information;
 - c. Obligation for accounting separation in respect of specific activities related to access and interconnection;
 - d. Obligation of Co-Location;
 - e. Obligation of Providing Access to International Gateways;
 - f. Obligation of price control and cost accounting. Obligation to neither withdraw nor impair interconnection once already effected, except where authorised by the NRA or in accordance with dispute resolution procedures under the Law or by court order

(2) For the purposes of the preceding paragraph (1), the NRA shall impose the appropriate obligations, having regard to the nature of the problem identified, which obligations shall be proportionate and justified according to the objectives set out in these Regulations.

(3) The obligations set out in paragraph (1) of this Regulation shall not be imposed on operators who have not been designated as being dominant, except in the cases laid down in the law or where such imposition is necessary to comply with international commitments.

(4) In exceptional circumstances and where appropriate, the NRA may impose obligations other than those set out in paragraph (1) on dominant operators, subject to public consultation.

Obligation of Transparency

34. (1) The obligation of transparency consists of the requirement to publish appropriate information in respect of the provision of access and interconnection by a dominant operator, including relevant statutory accounting information, technical specifications, network characteristics and terms and conditions for supply and use, including prices. Accounting information should be interconnection economic costs not balance sheet.

Section II

Obligation of Non-Discrimination	35.	(2) For the purposes of the preceding paragraph (1), the NRA is charged with specifying the information to be published, and the form and manner of its publication.
Obligation of Accounting Separation	36.	<p>(1) The imposition of the obligation of non-discrimination consists particularly of the requirement for a dominant operator to apply equivalent conditions in equivalent circumstances to other operators providing equivalent services and to provide services and information to third parties under the same conditions and with the same quality as the services and information provided to its own departments or to those of its subsidiaries or partners.</p> <p>(2) For the purposes of the provision of the preceding paragraph (1), the NRA may specify the format and accounting methodology to be used.</p>
Co-Location Obligation	37.	<p>(1) The NRA shall ensure that there is an obligation for dominant operators to provide co-location and that a co-location offer, presenting no barrier to the entry of competitors, is included in the reference interconnection offer.</p> <p>(2) The NRA shall ensure that-</p> <ul style="list-style-type: none"> a. where physical co-location is impossible for some valid reason-such-as lack of space, an alternative co-location offer must be made by the dominant operators; b. it has a map of self-contained routing switches that are open to interconnection and are available for competitors' co-location. <p>(3) For purpose of paragraph (2) of this regulation, a working group comprising the NRA, the dominant operator and alternative operators shall, in a fully transparent manner, examine the problems of co-location and propose different solutions in order to solve any problems that might arise.</p> <p>(4) The NRA shall prevent the creation of any entry barriers inherent to co-location and provide solutions to conflicts referred to it as rapidly as possible.</p> <p>(5) The NRA shall establish the minimal set of conditions that must be fulfilled in any co-location offer, after consultation with the operators of public electronic communications networks.</p> <p>(6) The conditions established under paragraph (5) may lead to the specification, in every co-location offer, of the following-</p> <ul style="list-style-type: none"> a. information on co-location sites; b. precise location of the dominant operator's sites suitable for co-location; c. publication or notification of an updated list of sites;

- d. indications as to the availability of alternative solutions in the event that physical space for co-location is not available;
 - e. information on what types of co-location are available, and on the availability of electric systems and cooling equipment on the sites, as well as the rules governing sublease of the co-location premises;
 - f. indications on the time required to conduct feasibility studies for any co-location request;
 - g. information on equipment characteristics and any restrictions on equipment that can be accepted for co-location;
 - h. measures that dominant operators offering co-location must take to ensure the security of their premises and to identify and resolve problems;
 - i. conditions under which a competing operator’s personnel may enter the premises; and
 - j. conditions under which competing operators and the NRA may inspect a site where physical co-location is impossible, or a site where co-location has been refused on the grounds of lack of capacity.
- Appropriateness and Reasonableness of Obligations** 38. The NRA decision to impose obligations on a dominant operator shall:
- a. Take account of the appropriateness of each obligation in each specific case and set the starting moment in time for the fulfillment of such obligations.
 - b. Be reasonable, based on the nature of the problem identified, proportionate and justified in the light of the principles and objectives of the law, these Regulations and other regulations set forth under the law.
- Review of Determination of Dominance** 39. The determination and imposition of obligations related to dominance shall be reviewed regularly by the NRA. Additionally, dominant public network operator may at any time apply to the NRA to be classified as non-dominant. The NRA shall not make a determination in respect of that application unless it has invited submissions from members of the public on the matter and has taken account of any such submissions.
- Removal of Dominant Status** 40. (1) Where it is established on the basis of a relevant market analysis that the market characteristics do not justify the imposition of obligations on a dominant operator and/or that there are no operators having dominance in the said market, the NRA shall not impose any obligations relating to dominance and/or shall withdraw the obligations, if any, imposed on such operators.
- (2) Pursuant to a determination to remove the classification of dominance imposed on an operator, the NRA may consider transitional Glide path arrangements to effect the gradual removal of obligations from that operator.

PART V – REFERENCE INTERCONNECTION OFFER

- | | | |
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| RIO Obligation for Dominant Operators | 41. | <p>Each dominant operator shall publish a reference interconnection offer (RIO). The RIO may set out different tariffs, terms and conditions for different interconnection services, where such differences can be objectively justified and do not result in the unfair distortion of competition.</p> <ul style="list-style-type: none"> a. The provider shall apply the appropriate interconnection tariffs, terms and conditions when providing interconnection for its own services or those of its affiliates, subsidiaries or partners as outlined in the RIO. b. The charges of the RIO shall be sufficiently unbundled to ensure that the interconnecting operator requesting interconnection is not required to pay for services not related to the service requested. c. Interconnection rates set out in the RIO shall be cost-oriented. d. The RIO shall be publicly available under non-discriminatory terms, conditions and charges at a quality that is no less favorable than that provided in relation to its own services, including the services of its affiliate, and for services of other third parties. |
| Publication of RIO Guidelines | 42. | <p>(1) Subject to public consultation, the NRA may publish guidelines or models for reference interconnection offers, which must be used by all the dominant public information and communications network operators.</p> <p>(2) The NRA shall have the authority to enforce that a RIO is cost-oriented and compliant with the laws and regulations.</p> |
| Submission of RIO | 43. | <p>A dominant public information and communications network operator who is required to prepare a RIO under these Regulations shall, within sixty (60) days of notice to that effect by the NRA, and periodically thereafter as determined by the NRA and until such time as the requirement is withdrawn by the NRA, submit its RIO to the NRA for approval.</p> |
| Modification of RIO by NRA | 44. | <p>(1) The NRA may request the dominant operator to modify the terms and conditions on which interconnection shall be offered, provided such modifications are justified for compliance with the principles of non-discrimination and cost-orientation of interconnection.</p> <p>Where the NRA has made such a request, the dominant operator shall be required to amend and provide such amended RIO within twenty-one (21) days of notice from the NRA, to comply with the request and submit the amended RIO to the NRA for approval.</p> |
| Modification of RIO by Operator | 45. | <p>Within 30 days of any change in the RIO, the operator shall notify the NRA of such change.</p> |
| Regulatory Approval of RIO | 46. | <p>(1) The NRA shall review and approve, or decline to approve, subject to public consultation, a RIO or any modification or amendment thereof that is submitted to it pursuant to these Regulations, within thirty (30) days of conclusion of the public consultation above, which period may be extended by the NRA for good cause.</p> |

Section II

- (2) In the instance where there is an application for the approval of a revised RIO, until the new RIO is approved the existing approved RIO remains in effect.
- Publishing the RIO** 47. Within seven (7) days of approval of a reference interconnection offer by the NRA, a dominant operator shall publish its offer by:
- a. Posting the offer on its website; and
 - b. Making printed and electronic copies of the offer available to any public information and communications network operator upon request.
- Content of RIO** 48. Notwithstanding the provisions of Regulations 42 and 43 above, the RIO shall be as detailed as possible in order to facilitate contract negotiations and shall contain all of the terms and conditions contained in Regulation 17 above, as well as provisions covering the following if requested by at least one operator:
- a. Services for the routing of traffic (call or session termination and origination);
 - b. Leased lines;
 - c. Interconnection links;
 - d. Domestic and international outbound transit;
 - e. Supplementary services and implementation arrangements;
 - f. A description of all points of interconnection and conditions of access thereto, for the purposes of physical co-location;
 - g. Comprehensive description of proposed interconnection interfaces, including the signaling protocol and possibly the encryption methods used for the interfaces;
 - h. Technical and tariff conditions governing the selection of carrier and number portability, where applicable;
 - i. Third-party billing services;
 - j. At the request of the National Regulatory Authority, an alternative co-location offer if physical co-location proves to be technically unfeasible;
 - k. As needed, the technical and financial conditions governing access to the dominant operator's resources, in particular those relating to unbundling of the local loop, with a view to offering information and telecommunication services.
- Methodology for Rate Determination** 49. Subject to public consultation, the NRA shall develop and, where appropriate, revise accounting requirements and costing methodologies for use by dominant public information and communications network operators in accordance with internationally established and accepted accounting and costing principles and standards of practice.
- Legal Standing of RIO** 50. Every dominant public information and communications network operator shall ensure that its interconnection agreement and its RIO are consistent with each other. In instances where the interconnection agreement and RIO are inconsistent with each other, the terms and conditions of the RIO shall prevail.

Unbundling

51. The RIO shall include provisions requiring the dominant operator to unbundle distinct interconnection services and corresponding charges sufficiently so that an interconnecting operator need only pay for the specific network elements or facilities required. The RIO shall contain a description of the components of the offer, associated terms and conditions, including the structure and level of prices.

PART VI – REFERENCE ACCESS OFFER**Access Obligations for Dominant Operators**

52. To ensure effective competition, the NRA may, upon written notice, require a dominant public information and communications network operator to:
- a. Provide access to the dominant public information and communications network operator's facilities, which shall not be unreasonably withheld;
 - b. Negotiate in good faith on matters concerning access to facilities; and
 - c. Neither withdraw nor impair access once already granted, except where authorised by the NRA or in accordance with dispute resolution procedures under the Law or by court order.

RAO Obligation for Dominant Operators

53. The NRA may require a dominant public information and communications network operator to publish a Reference Access Offer (RAO) in addition to, or instead of, a Reference Interconnection Offer. The RAO shall abide by all relevant provisions stipulated in Part V of these Regulations (Reference Interconnection Offer) and the detailed information related to the following, where applicable:
- a. Access to network elements and associated facilities, which may involve the connection of equipment, by fixed or non-fixed means;
 - b. Access to physical infrastructure including buildings, ducts and masts;
 - c. Access to relevant software systems including operational support systems, access to number translation or systems offering equivalent functionality;
 - d. Access to fixed and mobile networks, in particular for roaming;
 - e. Access to conditional access systems for digital television services;
 - f. Access to virtual network services; and
 - g. Indirect access.

PART VII – MEASURES TO PROMOTE COMPETITION AND INNOVATION

Obligation of
Access

54. (1) The NRA may impose obligations on dominant operators to respond to reasonable requests for access to and use of specific network components and associated facilities, particularly in situations where the denial of access or the setting of unreasonable conditions would hinder the emergence of a sustainable competitive market at the retail level or harm the interests of end-users.
- (2) In exercising the competence provided for in the preceding paragraph (1), the NRA may, in particular, impose the following obligations on dominant operators:
- a. To give third parties access to specified network components and/or facilities;
 - b. Not to withdraw access to facilities where access has been already granted;
 - c. To interconnect networks or network facilities;
 - d. To provide co-location or other forms of facility sharing, including duct, building or mast sharing;
 - e. To provide specified services needed to ensure interoperability of end-to-end services to users, including a requirement for one operator to provide services enabling two third party operators to interconnect via the first operator's network, and including facilities for intelligent network services or roaming on mobile networks;
 - f. To grant open access to technical interfaces, protocols or other key technologies that are indispensable for the interoperability of services or virtual network services;
 - g. To provide specified services on a wholesale basis for resale by third parties;
 - h. To provide access to operational support systems or similar software systems necessary to ensure fair competition in the provision of services
 - i. To negotiate in good faith with authorised operators requesting access.
- (3) The NRA may attach conditions in respect of fairness, reasonableness and timeliness to the imposition of obligations provided for in the preceding paragraph (2).
- (4) In considering whether or not to impose the obligations set forth in paragraph (2) of this Regulation, the NRA shall take special account of the following factors, particularly when assessing whether such obligations would be proportionate to the regulatory objectives set out in this Regulation:
- a. The technical, environmental and economic viability of using or installing competing facilities, in the light of the rate of market development and taking into account the nature and type of interconnection and access involved;

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<p>Obligation of Providing Access to International Gateways</p>	<p>55. (1)The NRA shall ensure that there is an obligation for operators to offer access and collocation in international gateways, particularly for submarine cable landing stations, and that the access to international gateways (including submarine cable landing stations) shall be included in the standard interconnection offer/agreement.</p> <p>(2) Notwithstanding the provisions of paragraph (1) above, international gateways (including submarine cable landing stations) shall have specific collocation offer/ provisions.</p>
<p>Infrastructure Sharing</p>	<p>56. To encourage the sharing of facilities and/or property among public information and communications network operators, in particular where essential requirements deprive other operators of access to viable alternatives, a public information and communications network operator may, at any time apply to any other public information and communications network operator for access to facilities that it owns or controls.</p>
<p>Regulatory Intervention in Infrastructure Sharing</p>	<p>57. The NRA may impose general facility and/or property sharing arrangements (including physical co-location) after an appropriate period of public consultation during which all interested parties shall be given an opportunity to express their views. Such arrangements may include rules for apportioning the costs of facility and/or property sharing.</p>
<p>Access to Alternative Infrastructure</p>	<p>58. The NRA shall encourage access to alternative infrastructure on the basis of commercial negotiations, in order to foster competition as rapidly as possible. Such access shall be provided under conditions of fairness, non-discrimination and equality of access.</p>
<p>Unbundling of the Local Loop</p>	<p>59. Where appropriate and subject to public consultation, the NRA may require unbundling of local loop in which operators shall be obliged, under their terms of reference, to install some minimum infrastructure capacity and the dominant public information and communications network operator shall be required to provide access facilities to the new entrant to permit the new entrant to install its own transmission systems on such access facilities</p> <p>a. A dominant operator shall define an unbundling offer in accordance with a list of the services to be included in the offer as determined by the NRA.</p> <p>b. Such unbundling offers are subject to approval by the NRA in the same manner as the RIO under Regulation 48 (Regulatory Approval of RIO) and shall be made public.</p> <p>c. The NRA shall ensure that mechanisms are in place to provide new entrants with the information needed for unbundling purposes, including address and coverage of splitters, space required for co-location, quality of lines and lead-time for providing unbundled lines.</p>

**Wholesale
Charges**

60. When imposing price control and cost-accounting obligations on public information and communications network operators for wholesale services (e.g., “interconnection, transit and fixed and mobile termination markets”), as a result of a market analysis carried out in accordance with these Regulations, the NRA shall consider:
- a. Interconnection, transit and call termination charges on internet, mobile and fixed networks;
 - b. Charges and tariff structures, retail and interconnection prices and the sharing of revenues between originating and terminating operators for fixed-to-mobile calls;
 - c. Possible adjustments to the tariff structures of retail and interconnection prices;
 - d. The relevance of the interconnection market;
 - e. The relevance of the mobile termination market; and
 - f. The identification of dominant operators in these markets.

**Termination
Rates**

61. (1) In conjunction with the considerations in Regulation 60 above, the NRA shall determine how to implement the necessary measures regarding termination rates so as to promote development of the information and communications market and the process of liberalization.
- (2) The NRA shall retain the right to regulatory intervention in determining termination rates subject to consultation with stakeholders and careful analysis considering:
- a. Which methodology shall be used to set the termination rates (e.g., benchmarking or cost modeling);
 - b. Whether rates should be symmetrical or asymmetrical for fixed-to-mobile and mobile-to-mobile;
 - c. What factors should be included in costs to calculate termination rates (e.g. should the factors include non-network related costs or fixed costs);
 - d. In the case of new entrants, sliding glide path asymmetric is used to avoid stranded network operator assets.

PART VIII – RESOLUTION FOR INTERCONNECTION AND ACCESS DISPUTES**Interconnection
Dispute
Resolution
Guidelines**

62. Notwithstanding the provisions of this Part, the NRA may publish guidelines which contain additional procedures and provisions regarding dispute resolution for interconnection procedures.

**Authority to
Require
Information
and Inspection**

63. In order to resolve a dispute regarding interconnection or access, the NRA may serve a notice to a public information and communications network operator or service provider to allow for access for inspection of its facilities and/or ongoing monitoring of them and/or information provision described in the notice at the time and place and in the form or manner specified in the notice. The information requested may include the collection of current and past records regarding:

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Response to Request for Dispute Resolution	<ul style="list-style-type: none"> a. Actual and potential interconnection sites; b. Facilities and equipment; and c. Physical elements of the site. <p>64. The NRA, in responding to a request for assistance to resolve an interconnection or access dispute, may, in accordance with the law, choose to take one or more of the following actions:</p> <ul style="list-style-type: none"> a. Act as arbitrator of that dispute; or b. Appoint a mediator to that dispute; or c. Undertake other necessary forms of managed dispute resolution; or Direct the parties to commence or continue interconnection negotiations.
Regulatory Authority in Dispute Resolution	<p>65. The NRA has the following authority in the dispute resolution process:</p> <ul style="list-style-type: none"> a. Where the NRA appoints a mediator, it may direct that payment of the mediator’s reasonable costs and expenses are paid for by the relevant parties to the dispute. b. Where the parties cannot agree on a date upon which to commence negotiations, the NRA shall be empowered to compel both parties to commence negotiations by a prescribed date. c. The NRA may, if requested by either party, set a time limit within which negotiations on interconnection are to be completed. Any such direction shall set out the steps to be taken if agreement is not reached within the time limit.
Guidelines for Resolving Dispute	<p>66. (1) When acting as an arbitrator, the NRA shall attempt to achieve a fair balance between the legitimate interests of the parties to the dispute, and shall act as promptly as practicable, preserving any agreements between the parties over issues that are not in dispute.</p> <p>(2) The NRA may consider, where appropriate, the following factors in resolving the dispute:</p> <ul style="list-style-type: none"> a. Promotion of the long-term interests of consumers of information and communications services in the country; b. The interests of persons who have rights to use the information and communications networks concerned; c. The economically efficient operation of an information and communications network or the provision of an information and communications service; d. Availability of technically and commercially viable alternatives to the interconnection requested; e. Desirability of providing users with a wide range of information and communications services; f. Nature of the request in relation to the resources available to meet the request; g. Need to maintain a universal service; h. Need to maintain the integrity of the public information and communications network and the interoperability of services;

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| Timeframe for Disputes | 67. | <ul style="list-style-type: none"> i. Promotion of competition; j. Public interest; k. Regulatory obligations or constraints imposed on any of the parties; and l. Any other relevant and appropriate consideration. <p>(1) After a dispute is referred to and accepted by the NRA, the complainant has two (2) weeks within which to provide a clear and reasoned complaint statement and supporting documents regarding the issues in dispute to the NRA and to the other party, as well as any issues on which there is agreement. The opposing party shall respond to the complaint statement within thirty (30) days and shall state the reasons for its position including any statutory or regulatory justification for that position.</p> <p>(2) The NRA shall have no more than 120 days from the receipt of the complaint statement to make a decision and settle the dispute.</p> |
| Temporary Measures | 68. | <p>The NRA may initiate the dispute resolution process on its own initiative and may impose temporary measures against a public network operator to ensure interconnection disputes do not adversely affect the public interest.</p> |

ANNEXES

Annex 1

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

Officially Designated Participants and Observers

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Annex 2

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