



Project Title: Caribbean Spectrum Management Harmonization

Estimated Start Date: April 2012

Estimated End Date: September 2014

Government Coop. Agencies: Ministries of Communications, Regulatory Authorities, Regional Organizations

Implementing Agency: International Telecommunication Union (ITU)

Beneficiary Countries: Caribbean countries among the ACP Group of States

ITU Project Manager: Area Office, Barbados

SUMMARY OF CONTRIBUTIONS	
A) Project Budget	
Description	EUR*
Staff Costs	1,070,000
Missions	466,000
Training	25,000
External Services	27,000
Equipment and Supplies	37,200
Communication Services	103,800
Bank Charges and Exchange Losses	46,700
Miscellaneous and Other Costs	124,300
Total:	1,900,000
* EUR 1,900,000 (in-cash) equivalent USD 2,490,000	

Brief Description:

The “Caribbean Spectrum Management Harmonization Project (HSMCAR)” aims to strengthen Caribbean countries among the ACP Group of States in the field of frequency planning and assignments, spectrum management and radio monitoring by fostering regional cooperation through the development and implementation of harmonized policies and practices for spectrum management, the establishment of national spectrum management system by means of advanced quasi-automated system and human and institutional capacity building in this field.

The project will address the regulatory and technical challenges facing the beneficiary countries in the field of Spectrum Management with the goal of promoting a common, fair, transparent, stable, predictable and non-discriminatory enabling environment to foster technological and services innovation and encourage investment incentives.

The project will (a) prepare, in close collaboration with regional organizations (eg. CTU, CDEMA, CBU, OOCUR) and respective countries, guidelines for harmonized policies, legislation and regulatory framework, (b) develop National and Regional Frequency Allocation Tables (NFAT and RFAT), (c) provide direct assistance to countries in the establishment of National Spectrum Management System, setting up borderline frequency coordination mechanism and (d) develop regional expertise through capacity building expertise.

This project, which builds on initiatives undertaken in the region, in particular by the Caribbean Telecommunication Union (CTU), is complementary to the ITU-EC “Enhancing competitiveness in the Caribbean through the harmonization of ICT Policies, Legislation and Regulatory Procedures” (HIPCAR) project.

For the	Signature	Date	Name/Title
ITU:	_____	___/___/___	
Partner(s):	_____	___/___/___	
	_____	___/___/___	

1. BACKGROUND AND CONTEXT

Availability of an enhanced automated spectrum management system is essential for provision of radio based telecommunication services of all kinds such as aeronautical, maritime, space, radio navigation, broadcasting, IMT-2000 and beyond, broadband wireless access, microwave systems and many other Radio-based Terrestrial and space communications services.

Intelligent Spectrum Management and monitoring system aligned with harmonized policy frameworks will support the efficient utilization of spectrum; enable the provision of frequencies for existing and new services while minimizing the possibility of interference between various wireless communication services. In addition, while there have been gains in frequency efficiency due to technological innovations, there is growing challenge of balancing existing with new and varied spectrum uses.

Given the need to promote a regional enabling environment, the Caribbean Telecommunications Union (CTU) established a Caribbean Spectrum Management Task Force to address and update regional spectrum management policies, practices and procedures in light of the new demands for spectrum use. In addition, the region requested the International Telecommunication Union (ITU) support with regard to the rationalization, strengthening and harmonization of the activities of national regulatory bodies responsible for spectrum management in Member States.

1.1 Justification

With the changes in the telecommunication sector, the introduction of competition, the rapid deployment of mobile and wireless technologies and the high demand for frequencies from the operators, etc. the importance of spectrum management and of its effective and efficient use has become increasingly recognized by countries.

In order to properly deal with the fast changes of the ICT environment, in particular the rapid technological changes and the convergence of technological platforms, the Caribbean Governments recognized the need of developing and promoting regional harmonized ICT policy and regulatory framework in the field of spectrum. This would encourage private sector participation and investment and ensure more efficient and rational allocation and use of the spectrum.

In this context, the project will address the policy, regulatory and technical challenges facing the beneficiary countries in the field of spectrum management in line with ITU-D's Programme 1 on "Information and communication infrastructure and technology development" adopted by the World Telecommunication Development Conference (WTDC-10).

2. PROJECT DESCRIPTION

The proposed project is designed to assist the Caribbean region in strengthening and streamlining the activities of national regulatory bodies responsible for management of the radio spectrum; assist those Caribbean states, which have not yet been equipped with an appropriate quasi-automated spectrum management system (such as the SMS4DC) and monitoring system to establish their National Spectrum Management System and to harmonize approaches to spectrum management in the region including the problem of using R1 allocations in R2. In addition this project aims to develop regional expertise, to enhance the competencies of Caribbean spectrum experts on various aspects of Radio Frequency Spectrum and to establish mechanisms for dealing with cross-border interference, and to develop a regional Spectrum Pricing Policy Framework.

The project will in particular address the following topics:

- spectrum policies for frequency allocation (including new services) in accordance with agreed policy framework;
- Regional and National Frequency Allocation Table (RFAT and NFAT) preparation;
- frequency coordination procedures and cross-border interference (eg. Harmonized Calculation Method, HCM, European borderline frequency coordination agreement);
- spectrum management regime;
- spectrum pricing (methods and procedures);
- spectrum allocation for disaster/emergency communications; and
- advanced quasi-automated spectrum management system and monitoring services.

This list will be reviewed and confirmed or modified by the beneficiaries at the start of the project during a multi-stakeholder kick-off meeting taking into account results of the World Radiocommunication Conference (WRC).

Special consideration is given to a methodology, which will facilitate ownership of the proposed project by the beneficiary countries. National involvement from all countries will be an important aspect of the project. Therefore, deliverables and activities should be the result of a negotiated process involving the beneficiary countries, Caribbean institutions and other organizations.

In order avoid duplication or overlapping and to increase efficiency and maximize impact, the project will build on the work/activities already undertaken by other organizations/institutions, in particular by the CTU, in collaboration with partners among others the ITU. Furthermore, the project will be implemented in close collaboration with CTU and in coordination with all the concerned organizations and stakeholders.

3. PROJECT OBJECTIVES

This project aims to strengthen regional organizations and countries of the Caribbean in the fields of frequency planning and assignments, spectrum management and radio monitoring by fostering regional cooperation through the development and implementation of harmonized policies and practices in spectrum management, the establishment of spectrum management system and human and institutional capacity building in this field.

The project will, amongst others, develop National and Regional Frequency Allocation Tables (NFAT and RFAT), assist countries in the establishment of National Spectrum Management System, setting up borderline frequency coordination mechanism and develop a regional Spectrum Pricing Policy Framework and enhance regional expertise through capacity building activities.

4. EXPECTED OUTPUTS

The following outputs are envisaged:

- Recommendations and guidelines on spectrum management policies and practices in the region (including on cross-borders interference and on pricing) developed and adopted;
- National and harmonized Regional Frequency Allocation Tables (NFAT and RFAT) developed (including frequency allocation for disaster/emergency communications);
- Advanced quasi-automated spectrum management system, based on SMS4DC, established as required; and
- Capacity/skills on various aspects of spectrum management and monitoring techniques in beneficiary countries and regional organizations (eg. CARICOM, CTU, ECTEL, etc.) enhanced.

This list will be reviewed and confirmed or modified by the beneficiaries at stakeholders' meeting to be held at the start of the project.

5. INDICATORS

- Number of guidelines on spectrum management policies and practices developed and adopted;
- Number of NFAT developed (including RFAT); and
- Number of focal points and professionals trained.

6. MAIN ACTIVITIES

6.1 Multi-stakeholder (kick-off) meeting

At the start of the project, a multi-stakeholder (kick-off) meeting would be convened with all project beneficiaries to formally launch the project, recall its objectives and solicit views from relevant stakeholders. This meeting would review and confirm/modify priorities (see Chapter 2 – Project description) and agree upon an implementation plan, introduce necessary adaptations within the limits set by the financial partners and establish a consultative mechanism for countries to gain public input. It will also be an opportunity to ensure and formalize the full commitment and participation of all beneficiary organizations and countries.

6.2. Harmonization of spectrum management policies and practices

STEP 1: The first step activities will be mainly dedicated to information gathering and assessment of the existing situation in each country with regard to the priorities selected by the beneficiaries at the kick-off meeting (including international best practices).

STEP 2: Information will be analyzed and draft recommendations and guidelines on the selected topics, which will facilitate the harmonization process, will be prepared by the project team through a consultative process with participating governments, regional organizations and other stakeholders of the countries. These recommendations/guidelines aimed to improve efficiency and effectiveness of spectrum management procedures in the region will be validated by beneficiary countries in a face-to-face validation workshop.

STEP 3: Capacity building is critical for the success of the project. Following validation of the recommendations, training courses will be developed and will include training of national experts who will act later at the national level to facilitate the national ownership. Training will be provided on application of the new spectrum management system, particularly on administrative features, technical related aspects including point-to-point (link-budget calculation), point-to-multipoint, interference calculation, borderline frequency coordination system with its database structure and geographical considerations as well as on monitoring techniques. An agreement on Regional frequency allocation table (RFAT) would be reached/signed among the participating countries on frequency coordination and cross-border coordination procedures.

STEP 4: This step seeks to transfer the validated recommendations/guidelines for adoption through the CTU formal adoption channel.

6.3 National Transposition (Customization)

Direct assistance will be provided to help countries to convert the adopted recommendations into national policy, legislation and practices and to prepare and deliver related training to the appropriate personnel at national level.

In addition, assistance in the preparation of the National Frequency Allocation tables (NFAT) will be provided as well as training on how to update it after the World Radiocommunication Conference, if necessary.

6.4 Establishment of Comprehensive Advanced Quasi-automated Spectrum Management System

This activity is dedicated to the establishment of national spectrum management system, including high resolution map, by means of an advanced quasi-automated Spectrum Management System based on SMS4DC - encompassing administrative, technical and geographical requirements including licensing, billing, database, propagation models, frequency arrangements for different bands, frequency assignment, coordination and Interference calculation and specification of the required terrain data - and assistance in incorporating NFAT and RFAT into the software and in transferring and updating existing data to the new database structure.

7. INPUTS

ITU: ITU will be the executing agency. ITU will undertake to manage the staff resources that will be funded and hired through this project for project coordination. Information on the current practices concerning broadcasting issues, access to ITU existing materials, including training courses and relevant publications will be provided. ITU will exercise all reasonable skill, care and diligence to ensure the success of the project.

PROPOSED PARTNER: The Proposed Partner will provide funding support for the implementation of the project.

Beneficiaries: The regional organizations and respective countries will provide qualified and dedicated focal points that will play a key role both for ownership of the project and for effective transfer of the know-how. These focal points will be participating as far as possible in the formulation process, validation and statutory meetings and adapting the project deliverables to the national context of the concerned countries. Commitment from each beneficiary country as well as from the regional organization will be an important aspect of the project. The beneficiary countries are also expected to provide information/data necessary to carry out the work, access to all relevant documents, secured premises to host the project team meetings, workshops and training activities, logistics arrangements and support and any other assistance to the project that may be required by the project staff.

8. RISKS

The main advantage of this project, namely the fact that it addresses several countries at a time, can be viewed as a risk factor. In general, the decision process with a large number of countries can be slow and the degree of accountability and interest may be low compared to a single country case. In this project, this risk is reduced by closely linking the project to established regional organizations (eg. CARICOM, CTU) that are mandated at the highest political level for achieving economic integration of their respective countries and by benefiting from the dynamism created in the region by the ITU-EC project "Enhancing the competitiveness in the Caribbean through the harmonization of ICT Policies, Legislation and Regulatory Procedures" (HIPCAR).

In-country activities may suffer delays due to unforeseen local events and circumstances. This risk will be minimized through the close involvement of local staff and ITU Area Office in Barbados in this project.

9. MANAGEMENT

The roles and responsibilities of the different stakeholders are to be clearly defined. In order to facilitate the implementation of this project, a project team funded by the project, will be constituted by ITU. The project team will work in close collaboration with the personnel of the ITU Area Office of Barbados as well as of Headquarters and will be assisted by subject experts. The project team will perform the project

13. ESTIMATED BUDGET

SPONSOR CLASSES	DESCRIPTION	TOTAL
		EUR
STAFF COSTS		
3001	Permanent Staff – Base salaries	300.000
3002	Temporary Staff – Base salaries	
3003	Interpreters – Base salaries	
3004	External services – Consulting	700.000
3005	External services – Translation	50.000
3006	National professional project personnel – salaries	20.000
	Sub-total:	1.070.000
MISSIONS EXPENSES		
3111	Mission expenses DSA staff	25.000
3112	Mission expenses transportation staff	40.000
3113	Other mission expenses staff	6.000
3131	Fellowship mission expenses - DSA	50.000
3132	Fellowship mission expenses - transportation	20.000
3133	Fellowship - other mission expenses	6.000
3141	External services consulting DSA	200.000
3142	External services consulting - transportation	100.000
3143	External services consulting - miscellaneous	10.000
3161	National professional project personnel – DSA	3.000
3162	National professional project personnel – TKT	4.000
3163	National professional project personnel – misc.	2.000
	Sub-total:	466.000
TRAINING		
3201	Fellowship training	25.000
	Sub-total:	25.000
EXTERNAL SERVICES		
3310	Sub-contracts ITU-D	
3320	External services – Printing publication	
3330	Rental – Office space	
3331	Rental – Photocopiers	5.000
3332	Rental – Computer systems	8.000
3333	Rental – Audiovisual equipment	6.000
3334	Rental – Conference rooms	8.000
3335	Rental – Shuttle, bus, cars	
3340	Maintenance – Cleaning of premises	
	Sub-total:	27.000
PURCHASE OF EQUIPMENT AND SUPPLIES		
3410	Office supplies	3.200
3420	Purchase machine and technical equipment	8.000
3430	Purchase IT equipment	10.000
3440	Purchase office furniture	8.000
3450	Purchase computer software	8.000
	Sub-total:	37.200
COMMUNICATIONS SERVICES		
3510	Postage and expedition charges	
3520	Telecommunication services – fixed phone	46.000
3521	Telecommunication services – mobile phone	27.000
3522	Telecommunication services - internet	26.000
3530	External services – Insurance contracts	4.800
	Sub-total:	103.800

BANK CHARGES AND EXCHANGE LOSSES		
3610	UNDP service charges	31.700
3620	Bank charges	15.000
3630	Exchange losses realized	
3640	Exchange losses not realized	
Sub-total:		46.700
OTHER CHARGES		
3710	External auditing of accounts	
3720	Miscellaneous & contingency charges	
3740	Internal Invoicing (DPS)	
SUB-TOTAL PROJECT		1.775.700
3730	Administrative Overhead Support costs	124.300
3800	Contingency component/Reserve	
TOTAL BUDGET		1.900.000