



CONNECT THE WORLD

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The ITU

- ***ITU is the United Nations specialized agency for information and communications technologies - ICTs***
- ***192 Member States and over 700 private-sector entities and academic institutions***
- ***3 Sectors:*** allocating global radio spectrum & satellite orbits;
 - developing the technical standards that ensure networks & technologies seamlessly interconnect; and
 - striving to improve access to ICTs & telecommunications to underserved communities worldwide
- ***ITU is committed to connecting all the world's people – wherever they live and whatever their means. Through our work, we protect and support everyone's fundamental right to communicate.***

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MAJOR Events

- World Radio communication Conference
- World Telecommunication Standardization Assembly
- Global Symposium for Regulators
- Connect Summit Series
- WSIS Forum
- Plenipotentiary Conference
- + Study Groups, workshops...

Major Focus

- the Caribbean

- HIPCAR
- Caribbean Nodes for Centre of Excellence
- Provision of equipment: disaster management and ICT
- Spectrum management
- Transition from Analogue to Digital Broadcasting
- Fellowships to international meetings and conventions

- international

- International Telecommunication Regulations (ITR)
- Digicel's Mobile Country Codes (MCC)
- World Radio Conference
- Cyber security - IMPACT/CIRT

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ABOUT the WRC – 12

World Radio communication Conference 2012 (WRC-12)

- ❖ 23 January – 17 February 2012 (4 weeks)
 - Preceded by the Radio communication Assembly (16 – 20 January 2012)
 - Followed by the first Conference Preparatory Meeting (CPM) for the WRC-15 conference, 20-21 February 2012
- ❖ Location: Geneva, Switzerland
- ❖ WRC-12 includes 33 Agenda Items
 - 28 Agenda Items at WRC-07

Other MAJOR MEETINGS/EVENTS & Dates:

1.Connect the Americas: Panama City, Panama, from 17 to 19 July 2012.

2.The Plenipotentiary Conference (2014) is the key event at which ITU Member States decide on the future role of the organization, thereby determining the organization's ability to influence and affect the development of (ICTs) worldwide. Council Working Group to Prepare for the World Conference on International Telecommunications in 2012 (CWG-WCIT12). Focus – ITR . **WCIT 12, 3-14 December 2012**

3.The World Telecommunication Standardization Assembly (WTSA) is the regular four yearly event that defines the next period of study for ITU-T. The assembly reviews working methods including approval process, the work programme and the structure of Study Groups. Preparations for WTSA-12 will take place throughout 2012, notably in regional preparatory meetings. **IT will be convened in Dubai, United Arab Emirates, 20 to 29 November 2012.**

4.The World Summit on the Information Society (WSIS) is an annual The goal of WSIS is to achieve a common vision, desire and commitment to build a people-centric, inclusive and development-oriented Information Society where everyone can create, access, utilize and share information. **WSIS Forum 2012 will be held from 14th to 18th May 2012 , Geneva**

5.Telecom World – October 2012

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Projects: HIPCAR

Objective is to assist CARICOM / ACP countries in the Caribbean to harmonize their ICT policies, legislation and regulatory processes, and create an enabling environment for ICT development and connectivity

Harmonization will facilitate & promote investment, competition and better services in the ICT sector across the region

Funded by EU and ITU, and implemented by ITU in collaboration with CTU, CARICOM Secretariat & other regional and national stakeholder organizations in the Caribbean

Part of a broader project covering also ACP countries in sub-Saharan Africa & the Pacific

Caribbean context: Caribbean Single Market & Economy (CSME); Liberalization of services sector; CARICOM Connectivity Agenda; WSIS and MDGs

HIPCAR's 9 Work Areas

■ Information Society Issues

- e-Commerce (Transactions)
- e-Commerce (Evidence)
- Privacy and Data Protection
- Interception of Communications
- Cybercrime / e-Crimes
- Access to Public Information (Freedom of Information)

■ Telecommunications

- Universal Service/Access
- Interconnection
- Licensing

STATUS of Assistance

Country	WG 1 - Information Society Issues					WG 2 - Telecommunications			
	e-Transactions	e-Evidence	Privacy & Data Protection	Interception of Communications	Cybercrime	Access to Public Information / FOI	Universal Access / Service	Interconnection	Licensing
Barbados	R	U	R	U	U	R	U	U	U
Dominica	EGRIP & invitation to participate as observers at HIPCAR Consultations (OECS countries)								
Dominican Republic		R	R					S	
Grenada	EGRIP & invitation to participate as observers at HIPCAR Consultations (OECS countries) and subsequently received R						R	R	R
Haiti	R/S	R/S	R/S	R/S	R/S	R/S	R/S	R/S	R/S
Jamaica	R	R	R			R	R	R	R
St. Kitts & Nevis	R	C	R	C	C	R	S	S	S
St. Lucia			EGRIP	C	EGRIP	C	C	C	C
St. Vincent & Grenadin.	EGRIP & invitation to participate as observers at HIPCAR Consultations (OECS countries)								
Suriname	U (Translation of Model Texts in all nine areas of work; specific technical assistance TBC)								
Trinidad & Tobago	C	R	S	TBC	S	R	R	R	R

R- Request

U- Underway

S-Started

C- Completed

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PREPARATORY Process –

Work Plan

- Work Plan agreed by CWG-WCIT12

27-30 Sep 11	27-29 Feb 12	23-25 Apr 12	20-22 Jun 12	3-14 Dec 12
Discussion of proposals compilation of proposals, including new proposals.	1 st draft of new ITRs	2 nd draft of new ITRs	Final draft of the future ITRs	WCIT -12
Review 1 st draft of report to WCIT-12	Progress the report to WCIT-12	Progress the report to WCIT-12	Finalize report to WCIT-12	

Further information available at:

CWG-WCIT12:

<http://www.itu.int/council/groups/cwg-wcit12/index.html>

2007 Background document:

<http://www.itu.int/md/T05-ITR.EG-INF-0002/en>

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WHY the ITRs are Important

- Establish general principles relating to the provision and operation of international telecoms;
- Facilitate global interconnection and interoperability;
- Underpin harmonious development and efficient operation of technical facilities;
- Promote efficiency, usefulness, and availability of international telecommunication services;
- Treaty-level provisions are required with respect to international telecommunication networks and services.



THE World Radio communication Conferences

An international treaty conference that governs the use and revisions to the Radio Regulations, including the radio-frequency spectrum, the geostationary-satellite and non-geostationary-satellite orbits.

Under the terms of the ITU Constitution, a WRC can:

- ❖ Revise the Radio Regulations and any associated Frequency assignment and allotment Plans;
- ❖ Address any radio communication matter of worldwide character;
- ❖ Instruct the Radio Regulations Board and the Radio communication Bureau, and review their activities;
- ❖ Determine Questions for study by the Radio communication Assembly and its Study Groups in preparation for future Radio communication Conferences.

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AGENDA

Items (WRC)

SWG 1: Maritime, Aeronautical and Radionavigation issues

Chair: Mr. Carlos Eduardo Chhab, Argentina

- 1.3 Spectrum requirements of unmanned aircraft systems (UAS)
- 1.4 AM(R)S systems in 112-117.975, 960-1 164 and 5 000-5 030 MHz
- 1.9 Appendix 17 for new digital technologies for the maritime mobile service
- 1.10 Allocation requirements for safety systems for ships and ports
- 1.14 Allocations or regulatory provisions for radiolocation in 30-300 MHz
- 1.15 Allocations in the range 3-50 MHz to the radiolocation service for oceanographic radar applications
- 1.21 Primary allocation to the radiolocation service in the band 15.4-15.7 GHz

SWG 2: Fixed, Mobile and Broadcasting Issues

Chair: Mr. Gustavo Miranda, Costa Rica

- 1.5 Worldwide/regional harmonization of spectrum for ENG
- 1.8 Technical and regulatory issues relative to the fixed service in the bands between 71 GHz and 238 GHz
- 1.13 21.4-22 GHz band for BSS and feeder-links in Regions 1 and 3
- 1.17 Sharing studies between the mobile service and other services in the band 790-862 MHz in Regions 1 and 3
- 1.20 Spectrum for gateway links for high altitude platform stations (HAPS) in the range 5 850-7 075 MHz
- 1.23 Allocation of about 15 kHz in the band 415-526.5 kHz to the amateur service on a secondary basis

SWG 3: Satellite and Science issues

Chair: Ms. Chantal Beaumier, Canada

- 1.6 Review No. 5.565 of the Radio Regulations to update the spectrum use by the passive services, between 275 GHz and 3 000 GHz and to consider possible procedures for free space optical-links
- 1.7 Spectrum availability for the aeronautical mobile-satellite (R) service, while retaining unchanged the generic allocation for the mobile-satellite services in 1 525-1 559 MHz and 1 626.5-1 660.5 MHz
- 1.11 Allocation to space research service (Earth-to-space) in 22.55-23.15 GHz
- 1.12 Protect primary services in 37-38 GHz from aeronautical mobile service
- 1.16 Allocation below 20 kHz to passive systems for lightning detection in the meteorological aids service
- 1.18 Extend primary and secondary radiodetermination-satellite service (space-to-Earth) allocations in the band 2 483.5-2 500 MHz
- 1.24 Allocation to the meteorological-satellite service in 7 750-7 850 MHz to 7 850- 7 900 MHz for non-geostationary meteorological satellites (space-to-Earth)
- 1.25 Consider possible additional allocations to the mobile-satellite service
- 7 Consider possible changes to publication, coordination, notification and recording procedures for satellite networks (Res. 86)

SWG 4: Future Work Program and other issues

Chair: Mr. Carmelo Rivera, USA

- 1.1 Review of country footnotes
- 1.2 Enhance the international regulatory framework (Resolution 951)
- 1.19 Regulatory measures to enable the introduction of software defined radio and cognitive radio systems
- 1.22 Effect from short-range devices on radiocommunication services
- 2 ITU-R Recommendations incorporated by reference in the RR (Res 27 & 28)
- 4 Review Resolutions and Recommendations (Resolution 95)
- 8.1 Consider the Report of the BR Director
- 8.2 Agenda of future conferences

Agenda Item 1.2:

Resolution 951 – Enhancing the International Regulatory Framework

Issues

- Develop concepts and procedures for enhancing the Radio Regulations taking into account the evolution of technology and service convergence

Inter-American Proposal

CITEL supports enhancing the regulatory framework based on methods A2 (proposed changes to the definitions to the fixed service, fixed station, mobile station, and land station) and A3 (proposed changes to the definition of the fixed service, fixed station and other related provisions in the RR (Article **11** and Appendix 4)) of the CPM text, including any changes required to further enhance or combine those methods, with a view to concluding satisfactorily the work related to this Agenda item at WRC-12.

AGENDA Item 1.9:

PURPOSE: *to revise frequencies and channeling arrangements in the Radio Regulations in order to implement new digital technologies for the maritime mobile service.*

Option :

- Support modifying the Radio Regulations to promote the implementation of new digital technologies, while protecting existing applications
- Maintains channelization and duplex pairing for more efficient use of the spectrum and expands the NBDP core band to provide more channels for NBDP*
- Wideband channel requirements can be met with operations on multiple 3 kHz channels
- Global Maritime Distress and Safety System (GMDSS) channels should remain unchanged and protected.

US Proposal:

Rationale: This approach creates channelization and bandwidth limitations that will add structure and efficiency to the Radio Regulations.

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AGENDA Item 1:10

PURPOSE: *to examine the frequency allocation requirements with regard to operation of safety systems for ships and ports and associated regulatory provisions*

Objectives:

- Additional protection, and exclusive allocation, for Automatic Identification System (AIS) frequencies which are used for search and rescue, safety of navigation, ship movement and tracking of vessels.
- Additional channels for satellite detection allows for greater probability of vessel tracking, with resulting benefits to maritime safety and security.
- New allocations to the Maritime Mobile Service reflect need for continued and enhanced data rate transmissions in support of maritime safety information (MSI) and future security broadcasts. This allocation would provide a global harmonized band for this application.
- Harmonized digital bands using advanced data transmission techniques will benefit global port operations. Additional channel designations will ease congestion in port areas.

AGENDA Item 1:10 (Cont')

U.S. Position:

1. Exclusive allocation and additional protection and for Automatic Identification System (AIS) frequencies;
2. Primary allocation of additional channels for improved AIS satellite detection;

CITEL Position:

- MF* band allocations that reflect need for continued and enhanced data rate transmissions in support of maritime safety information (MSI) and future security broadcasts;
- Harmonized VHF** digital band using advanced data transmission techniques;

SECONDARY Maritime

AGENDA Items (1.3, 1.7, 1.14 & 1.23)

- AI 1.3: Coast Guard has interest in UAV operations for Maritime Safety and Maritime Domain Awareness.
- AI 1.7: Coast Guard and Marine Vessels use INMARSAT communication links in L-Band (1.5/1.6 GHz) for distress
- AI 1.14: VHF Radar allocation could interfere with distress and safety frequencies, and AIS SAT Detection.
- AI 1.23: Allocation to amateur service has potential for interference to Maritime Safety Information (MSI) broadcasts around 500 kHz.

AGENDA Item 1.3

Considers spectrum requirements and possible regulatory actions, including allocations, to support the safe operation of unmanned aircraft systems (UAS) in non-segregated airspace, based on the results of ITU-R studies, in accordance with Res 421 (WRC-07).

Background:

Everyone is familiar with the traditional military use of UAS and, in fact, we hear about the results of such uses relatively frequently. However, we think it is important to note that in the United States there is an association called UNITE, made up of numerous manufacturers including Boeing, that is promoting and developing important civilian applications of this technology. We believe that these applications will be of great benefit to all populations in the future.

Some examples of UAS applications :

Disaster management: aid in forest fire-fighting, flood monitoring, search and rescue,

National security : border patrol, law enforcement, counter drug operations,

Cargo transportation

Weather forecasting, atmospheric observations

Monitoring of petroleum pipelines and electricity distribution systems,

Crop dusting and harvest monitoring,

Broadcast (sport events) and airborne relay-type services,

City and highway traffic,

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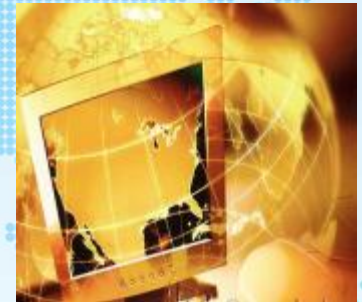
AGENDA Item 1.3

- ❖ The operation of unmanned aircraft (UA) outside segregated airspace requires addressing the same issues as manned aircraft, namely safe and efficient integration into the air traffic control system.
- ❖ This Agenda Item consists of three components:
 - Terrestrial line of sight (LOS) Command & Control (C&C) links
 - Satellite C&C links for Beyond LOS
 - Sense & Avoid radar for collision avoidance
- ❖ ITU-R Studies have been completed:
 - Report M.2171 UAS characteristics and spectrum requirements,
 - Report M.2204 Characteristics and spectrum considerations for unmanned aircraft system (UAS) Sense and Avoid,
 - Report M.2205 Results of studies of existing AM(R)S allocation in the band 960-1164 MHz and of the AMS(R)S allocation in the band 5 030-5 091 MHz to support control UAS
- ❖ Other ITU-R studies were approved in Nov 2011.

Growing Cybersecurity Threats

Information and communication technologies (ICTs)

- **ICTs have become an integral part of everyday life for many people of the world.**
- **ICT networks are regarded as indispensable national infrastructure.**
- **ICTs are also exposing our societies to the threat of cyberattacks.**
- **Vulnerability of national infrastructures increases as the use of ICTs take root.**
- **Nations will be susceptible to attacks of an unprecedented and limitless variety.**
- **Cyber attacks on ICTs are borderless and can be launched from virtually anywhere.**
- **As global reliance on ICTs grows, so does vulnerability to attacks on critical infrastructures through cyberspace.**



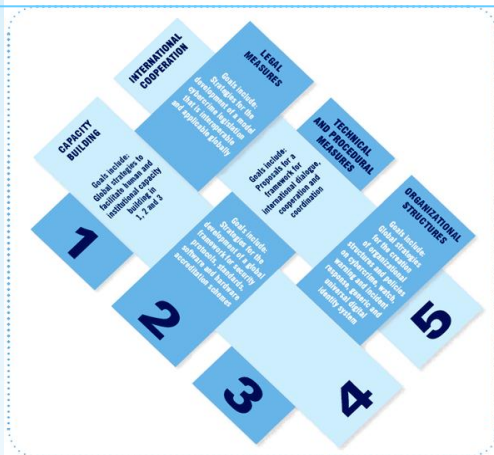
Major attacks 2010 - 2011

	2010	2011
January	<ul style="list-style-type: none"> •Attack on google to gain access to gmail accounts and google password management system •Attack on Intel •Attack on Morgan Stanley. Email leaked out 	<ul style="list-style-type: none"> •Major cyber intrusion in Defense Research and Development Canada. Finance Department and the Treasury Board forced to disconnect from the Internet.
February		
March	<ul style="list-style-type: none"> •Attack on NATO and European Union networks •200 attempts to hack into the networks of the legal defense team to gain inside information on the trial defense strategy 	<ul style="list-style-type: none"> •Hackers penetrate French government computer networks •South Korea defense network penetrated •RSA SecurID Compromised
April	<ul style="list-style-type: none"> •Indian Defense Ministry and Indian embassies compromised 	
May	<ul style="list-style-type: none"> •Canadian Security and Intelligence Service Memo leaked 	
June		<ul style="list-style-type: none"> •Sony •NATO •International Monetary Fund (IMF) •Turkish Government Website •EU's Commission and External Action Service •Operation Malaysia
October	<ul style="list-style-type: none"> •Stuxnet •Zeus Malwares steals over 12million\$ from 5 banks in US, UK 	
December	<ul style="list-style-type: none"> •British Foreign Ministry, a defense contractor and other British interests attacked traced back to white house. 	

ITU and Cybersecurity



2003
WSIS entrusted ITU as a sole facilitator for
WSIS Action Line C5
"Building Confidence and Security in the use of ICTs"



2007
ITU Secretary-General launched the Global
Cybersecurity Agenda (GCA)
A framework for international cooperation in
cybersecurity



2008 - 2010
ITU World Conferences and the ITU Plenipotentiary
Conference further strengthened
the role of ITU in Cybersecurity
ITU Membership endorsed the GCA as the ITU
-wide strategy on international cooperation



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Online Threats to Children



Cybergrooming

Sexual solicitation

Child abuse materials

Disclosure private information

Pornography

Child pornography



Threats & Risks



Violence

Racism

Cyberstalking

Online Fraud



Phishing attacks

Cyber Bullying

Spam

Youth-to-youth cybercrimes

Online Gaming & Addiction

Anorexia, self-harm or suicide

... so many!

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ITU Child Online Protection (COP)

- ITU launched the Child Online Protection (COP) Initiative in 2008 within the GCA framework aimed at bringing together partners from all sectors of the global community to ensure a safe and secure online experience for children everywhere.
- Key Objectives of COP
 - Identify risks and vulnerabilities to children in cyberspace;
 - Create awareness of the risks and issues through multiple channels;
 - Develop practical tools to help governments, organizations and educators minimize risk; and
 - Share knowledge and experience while facilitating international strategic partnership to define and implement concrete initiatives



Implementation and delivery strategy

IMPACT is the **cybersecurity executing arm of the (ITU)**. As the world's first comprehensive alliance against cyber threats, IMPACT brings together governments, academia and industry experts to enhance the global community's capabilities in dealing with cyber threats.

Based in Malaysia, IMPACT is the operational home of ITU's Global Cybersecurity Agenda (GCA). As an ITU's cybersecurity executing arm, **IMPACT provides ITU's 192 Member States access to expertise, facilities and resources to effectively address cyber threats, as well as assisting UN bodies in protecting their ICT infrastructures.**



Services for Member States

As of today, some 137 countries joined ITU-IMPACT

■ Region A – Americas – *21 Countries*

Antigua and Barbuda, Belize, Brazil, Costa Rica, Cuba, Dominican Republic, Ecuador, Grenada, Guatemala, Guyana, Haiti, Honduras, Panama, Paraguay, Peru, Saint Lucia, Saint Vincent and the Grenadines, Saint Kitts and Nevis, Suriname, Trinidad and Tobago, Uruguay, Venezuela

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many thanks!

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AMERICAS 2012

CONNECTING THE UNCONNECTED BY 2015...



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Cleveland Thomas
ITU Area Office Representative
Caribbean Regional Office

Cleveland.thomas@itu.int

1 246 431 0343 (office) 1 246 250 8906 (Mobile)

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