



ICAO

International Civil Aviation Organization
North American, Central American and Caribbean Office

WORKING PAPER

MEVA/TMG/37 — WP/11
08/08/22

**Thirty Seventh MEVA Technical Management Group Meeting
(MEVA/TMG/37)**

Mexico City, Mexico, 8 to 10 August 2022

Agenda Item 2: Operations and Performance of the MEVA III Network

FOLLOW UP ON THE ACTIVITIES FOR BETTER FREQUENCY MANAGEMENT IN THE REGION

(Presented by Haiti)

EXECUTIVE SUMMARY	
This Working Paper is to provide information about the activities that occurred from June 2021 to June this year to provide awareness to the MEVA Member States about the aeronautical frequencies spectrum management and protection.	
Action:	Suggested actions are presented in Section 3.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Safety• Air Navigation Capacity and Efficiency
<i>References:</i>	<ul style="list-style-type: none">• MEVA TMG/36• NAM/CAR/SAM Workshop on the ICAO Position for ITU WRC23 https://www.icao.int/NACC/Pages/meetings-2021-cmr23.aspx• ICAO Panel FSMP and WRC-23 Workshop https://www.icao.int/NACC/Pages/meetings-2022-wrc23.aspx

1. Introduction

1.1 Since the TMG/36 meeting last year where the MEVA Frequency Management AdHoc group listed a set of actions that the States needed to follow up on to ensure that the radio spectrum used for current and future air navigation services is available, many activities took place to emphasize the fact that current and future communication, navigation, and surveillance/air traffic management (CNS/ATM) systems are highly dependent upon the availability of sufficient, suitably protected radio spectrum that can support the high integrity and availability requirements associated with aeronautical safety systems.

2. Discussion

2.1 There has been ongoing work with the PoCs of the MEVA member States to update the region's frequency COM Lists 1, 2 ,and 3. Significant work was done by the majority of the MEVA Member States to provide to ICAO their updated COM Lists. The table below gives a summary of what was done so far:

STATE	Organisation	POC	email	COM list 1	COM List 2	COM List 3
Aruba	ANSA	Joselito Correia de Andrade	Joselito.correideandrade@ansa.aw	N/A	Updated	Updated
Cayman	Cayman Islands Airport Authority	Cleavy A. Scott	Cleavy.Scott@caymanairports.com	Updated	Updated	Updated
COCESNA	COCESNA	Manuel Flores	manuel.flores@cocesna.org	Work ongoing		
Cuba	IACC	Carlos M. Jiménez Guerra	carlosm.jimenez@iacc.avianet.cu	Updated	Updated	Updated
Curacao	DC-ANSP	Jean Baptiste Getrouw	J.Getrouw@dc-ansp.org	No Changes	No Changes	Updated
Dom Rep	IDAC	Elvis A. Collado	ecollado@idac.gov.do	No changes	No changes	Updated
Freeport	BANSND	Earl A. Rahming	rahmingearl@gmail.com	Updated	Updated	Updated
Haiti	OFNAC	Nadia Leopold	nleopold@hotmail.com	N/A	Updated	Updated
Jamaica	JCAA	Derrick Grant	derrick.grant@jcaa.gov.jm	Updated	Updated	Updated
Mexico	SCT	Daniel Castañeda Cruz	dcastane@sct.gob.mx	Updated	Updated	Updated
Nassau	BANSND	Earl A. Rahming	rahmingearl@gmail.com	Updated	Updated	Updated
Panama						
Puerto Rico	FAA	Rodney Murphy/ Lorena Carvajal	(Rodney.Murphy@faa.gov (Lorena.Carvajal@faa.gov)			
St Maarten	SXM	Lloyd Hinds	lhinds@sxmairports.com			

The lists can be found on the link below with the last updates by November 2021:

<https://www.icao.int/NACC/Pages/frequency.aspx>.

2.2 Many activities were carried out by ICAO through the NACC Regional Office from October last year and all year round to emphasize the attention of the Member States on the importance of supporting the ICAO position for the next ITU WRC-23, through the respective coordination and participation with their National Frequency Spectrum Authorities to ensure that the results of WRC-23 reflect civil aviation's continued need for radio frequency spectrum in support of current and future safety-of-flight applications.

2.3 ICAO also shared their concerns on the potential interference to Radio Altimeters operating in the 4 200-4 400 MHz frequency band, due to the deployment of 5G mobile service systems planned to operate in frequency bands adjacent/nearby to the 4 200-4 400 MHz frequency band. ICAO is requesting States to take the pertinent actions to mitigate operational risks. Radio altimeter interference is a major problem for aviation because it decreases operational safety, especially in descent and climb procedures in the different airports.

2.4 Related information can be found at the different events that this Office has held to address these issues:

1. NAM/CAR/SAM Workshop on the ICAO Position for the International Telecommunication Union (ITU) World Radio communication Conference (2023) (WRC-23), October 2021
<https://www.icao.int/NACC/Pages/meetings-2021-cmr23.aspx>
2. ICAO Frequency Spectrum Management Panel (FSMP) and 2023 World Radio communication Conference (WRC-23) Workshop, February 2022
<https://www.icao.int/NACC/Pages/meetings-2022-wrc23.aspx>

2.5 It was also presented at the ICAO FSMP WRC-23 virtual workshop the updates on the Frequency Finder, a tool to assist ICAO Regional Offices and States to manage and coordinate aeronautical frequency assignments. It was a tutorial on the SSR module and the new NAV module.

2.6 On 2 March this year, Frequentis operated a new MEVA frequency change because of interference on the IS-14 satellite due to bad cross-pol isolation. The transition was done successfully and Frequentis assured us that we will not be forced mid-term to move our frequency again. States are encouraged to register this new satellite frequency with their local spectrum regulator. The information about the new frequencies was transmitted via email to all the member States and can also be found in the table below:

Satellite	Intelsat 14/315
Transponder	A38CV/A38CV
Beam	AMCV/AMCV
Polarization	V/V
Lease Assignment	6338.0/4113.0 - 6339.8/4114.8
Lease Resource	1.8 MHz

The following carriers will be activated:

Carrier ID SLR ID	Tx E/S code	Rx E/S code	TX Freq MHz	RX Freq MHz	Modulation	Info. Rate (kbps)	Symbol Rate (ksps)	Coding	Allocated BW (MHz)	PEB (MHz)	U/L EIRP (dBW)	D/L EIRP dBW (B.C.)
CXR:30731330	US0626F1	US0626F1	6338.90000	4113.90000	QPSK	2250	1312.6	DIGITAL*FEC=6/7*RS=1/1	1.77200	1.80025	54.78	23.86

2.7 On July 8th 2022, the Radio communication Bureau (BR) of ITU issued, to its Member States, a Circular Letter (CR/488), *Prevention of harmful interference to Radio Navigation Satellite Service Receivers in the 1559 – 1610 MHz frequency band*. It informed of a significant number of cases of harmful interference to the radio navigation-satellite service (RNSS) in the 1 559 – 1 610 MHz frequency band affecting receivers on board aircraft and causing degradation or total loss of the service for passengers, cargo, and humanitarian flights. In some cases, this has also led to misleading information provided by RNSS receivers to pilots. A number of 10 843 radio-frequency interference events were detected globally in 2021. The majority of these events occurred in the Middle East region, but several events were also detected in the European, North American, and Asian regions. The Circular summarizes the Radio Regulations Board (RRB) decisions on the issue, formulates recommendations concerning the mitigation of harmful interference to the radio navigation satellite service, and provides a list of the relevant ITU-R reference documents.

3. Suggested actions

3.1 The States are invited to:

- a) review the information presented in this Working Paper;
- b) support the ICAO Position for WRC-23 on a local and regional level;
- c) reinforce navigation systems' resilience to interference;
- d) work jointly with their national agencies that manage the allocation of aeronautical frequencies; and
- e) work together with the local telecommunications companies responsible for the implementation of 5G technology and in the same way with the airline operators.