



ICAO

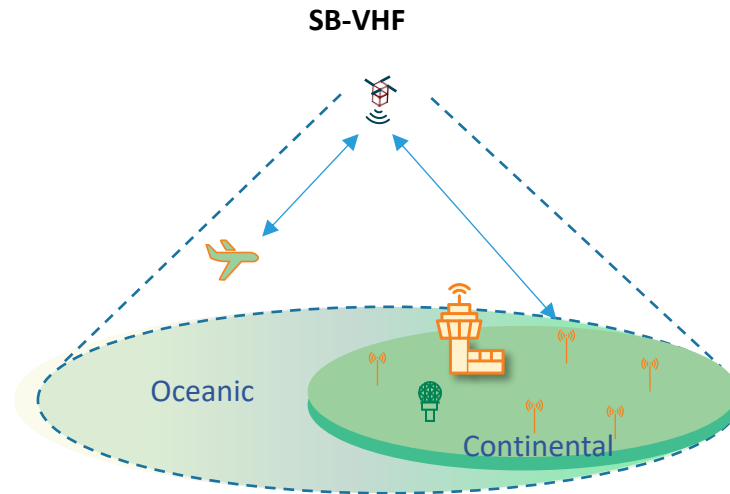
# INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY

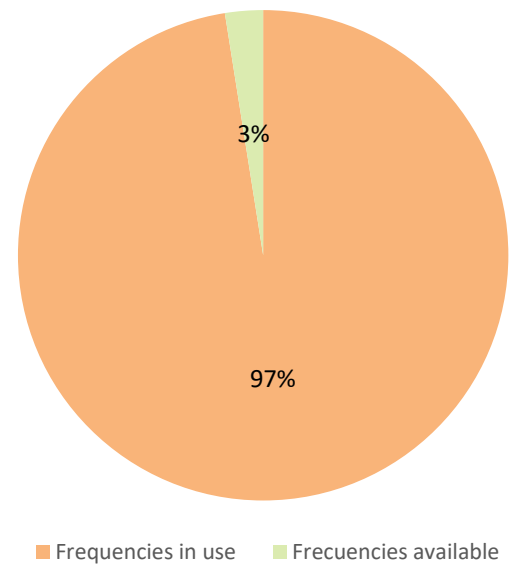
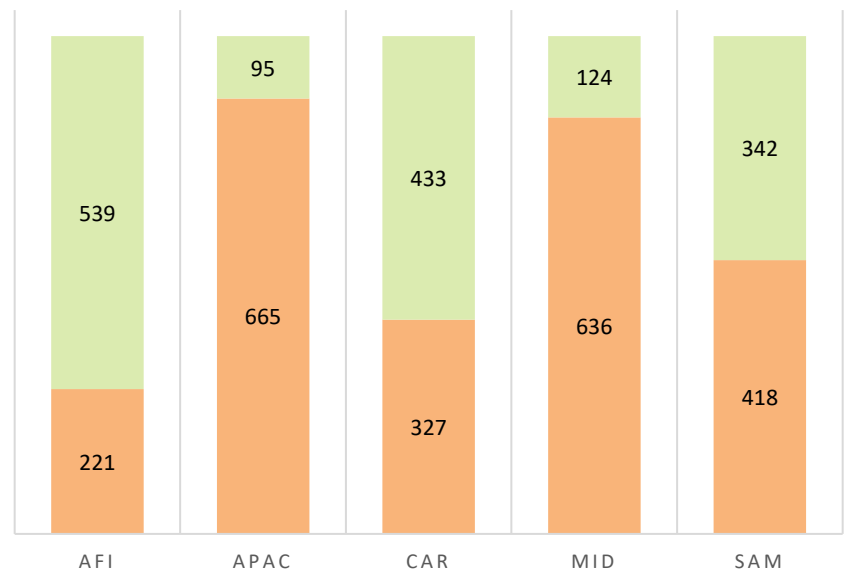
## VHF COM FREQUENCY DATA BASE QUALITY CONTROL

# SPACE BASED VHF VOICE COMMUNICATIONS

- OCEANIC and REMOTE areas have limited VHF infrastructure.
- SB-VHF will provide GLOBAL COVERAGE of A/G VHF VOICE COMMUNICATIONS SERVICES
- SB-VHF has a larger footprint than terrestrial voice communications



# GLOBAL USE OF VHF COM CHANNELS (except Europe and North America)



VHF COM Channels in use vs available


Only 19 VHF COM 25kHz channels are **not** in use worldwide, mainly within the sub-band 134.000 – 136.975 MHz

# SPACE BASED VHF VOICE COMMUNICATIONS

To ensure that SB-VHF and terrestrial VHF are **compatible** and that the SB-VHF does not cause **interference** to the terrestrial VHF services:

- Accurate and consistent frequency data base is needed
- Inter-regional coordination will be implemented in Frequency Finder

# FREQUENCY FINDER 2

- Phase 1: VHF COMMUNICATION SYSTEMS MODULE  launched
- Web-based application
  - Online database. No need to synchronize
  - Management and coordination of frequency assignments between ICAO Contracting States and ICAO Regional Offices.

# FREQUENCY FINDER 2

- Phase 2: NAVIGATION SYSTEMS MODULE
- Phase 3: SURVIELLANCE MODULE
- Phase 4: IMPROVEMENTS OF FREQUENCY FINDER : SPACE-BASED VHF

# DATABASE QUALITY CONTROL

One Excel file will be provided to each state:

- First sheet containing the combined data from the AIP and the VHF COM3 frequency list in Frequency Finder
- Second sheet called “FF” containing the current data from the VHF COM3 frequency list in Frequency Finder. Only for reference.

# DATABASE QUALITY CONTROL

ICAO Regional Office	Country	Country code	FF key	Location Airport name	Airport ICAO code	Latitude	Longitude	Frequency	Service	Range	Height	ER group	Category	ICAO HQ
RRR	Ccccc	CCC	000000	Airport 1	AAAA	ddmmss.sN	dddmmss.sW	125.900	APP-I	75	25000		ICAO	
RRR	Ccccc	CCC		Airport 1	AAAA	ddmmss.sN	dddmmss.sW	118.100	AFIS					
			000000	Airport 2	BBBB	ddmmss.sN	dddmmss.sW	131.400	AOC	100	250		NAT	
			000000	Airport 3		ddmmss.sN	dddmmss.sW	118.325	TWR	25	4000		NAT	
			000000	Location 1		ddmmss.sN	dddmmss.sW	126.200	ACC-U	25	4000		ICAO	

- Text in black comes from the AIP
- Text in red comes from VHF COM3 frequency list in Frequency Finder and needs to be checked.
- Frequencies highlighted in green are included in both AIP and VHF COM3 frequency list in Frequency Finder
- Specific details are included in the column “ICAO HQ”

# DATABASE QUALITY CONTROL

ICAO Regional Office	Country	Country code	FF key	Location Airport name	Airport ICAO code	Latitude	Longitude	Frequency	Service	Range	Height	ER group	Category
RRR	Ccccc	CCC	000000	Airport 1	AAAA	ddmmss.sN	dddmmss.sW	125.900	APP-I	75	25000		ICAO
RRR	Ccccc	CCC		Airport 1	AAAA	ddmmss.sN	dddmmss.sW	118.100	AFIS				
			000000	Airport 2	BBBB	ddmmss.sN	dddmmss.sW	131.400	AOC	100	250		NAT
			000000	Airport 3		ddmmss.sN	dddmmss.sW	118.325	TWR	25	4000		NAT
			000000	Location 1		ddmmss.sN	dddmmss.sW	126.200	ACC-U	25	4000		ICAO

- Frequency included in both the AIP and the VHF COM3 frequency list in Frequency Finder
- Data has been combined
- States are requested to confirm all the information or modify accordingly

# DATABASE QUALITY CONTROL

ICAO Regional Office	Country	Country code	FF key	Location Airport name	Airport ICAO code	Latitude	Longitude	Frequency	Service	Range	Height	ER group	Category
RRR	Ccccc	CCC	000000	Airport 1	AAAA	ddmmss.sN	dddmmss.sW	125.900	APP-I	75	25000		ICAO
RRR	Ccccc	CCC		Airport 1	AAAA	ddmmss.sN	dddmmss.sW	118.100	AFIS				
			000000	Airport 2	BBBB	ddmmss.sN	dddmmss.sW	131.400	AOC	100	250		NAT
			000000	Airport 3		ddmmss.sN	dddmmss.sW	118.325	TWR	25	4000		NAT
			000000	Location 1		ddmmss.sN	dddmmss.sW	126.200	ACC-U	25	4000		ICAO

- Frequency included in the AIP but not in the VHF COM3 frequency list in Frequency Finder
- States are requested to confirm whether the frequency is in use and complete the missing information (Range, Height, ER Group and Category)

# DATABASE QUALITY CONTROL

ICAO Regional Office	Country	Country code	FF key	Location Airport name	Airport ICAO code	Latitude	Longitude	Frequency	Service	Range	Height	ER group	Category
RRR	Ccccc	CCC	000000	Airport 1	AAAA	ddmmss.sN	dddmmss.sW	125.900	APP-I	75	25000		ICAO
RRR	Ccccc	CCC		Airport 1	AAAA	ddmmss.sN	dddmmss.sW	118.100	AFIS				
			000000	Airport 2	BBBB	ddmmss.sN	dddmmss.sW	131.400	AOC	100	250		NAT
			000000	Airport 3		ddmmss.sN	dddmmss.sW	118.325	TWR	25	4000		NAT
			000000	Location 1		ddmmss.sN	dddmmss.sW	126.200	ACC-U	25	4000		ICAO

- Frequency included in the VHF COM3 frequency list in Frequency Finder but not in the AIP
- States are requested to confirm whether the frequency is in use
- States are requested to confirm all the information or modify accordingly

# DATABASE QUALITY CONTROL

ICAO Regional Office	Country	Country code	FF key	Location Airport name	Airport ICAO code	Latitude	Longitude	Frequency	Service	Range	Height	ER group	Category	States
RRR	Ccccc	CCC	000000	Airport 1	AAAA	ddmmss.sN	dddmmss.sW	125.900	APP-I	75	25000		ICAO	in use
RRR	Ccccc	CCC		Airport 1	AAAA	ddmmss.sN	dddmmss.sW	118.100	AFIS	25	4000		ICAO	in use
			000000	Airport 2	BBBB	ddmmss.sN	dddmmss.sW	131.400	AOC	100	250		NAT	in use
			000000	Airport 4		ddmmss.sN	dddmmss.sW	118.325	TWR	25	4000		NAT	in use
			000000	Location 1		ddmmss.sN	dddmmss.sW	126.200	ACC-U	25	4000		ICAO	out of use

## How to amend the Excel sheet:

- Use text in green for the new or modified data
- Do not delete any row, even if the frequency is not in use
- Any additional comments should be included in the column “States”

# DATABASE QUALITY CONTROL

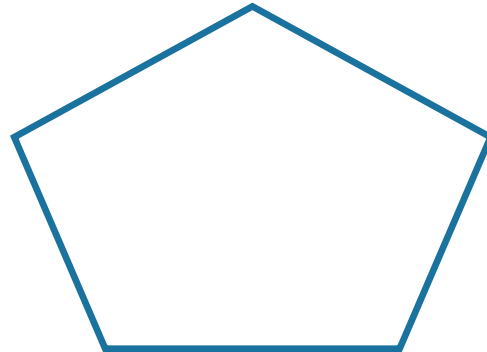
## STATES ARE REQUESTED TO:

- Review the information contained in the Excel file (Sheet1).
- Confirm or correct the listed frequencies.
- Add any additional frequency.
- Complete the missing fields (ICAO code, Service, Range, Height, ER group and Category).
- Category:
  - Frequencies for civil airports are generally International (ICAO), unless used for non-aviation purposes (for example, fire service).
  - the NAT category is related to military, defence or government use and not to domestic airports.
- Include in the column “States”:
  - if the frequency is **in use** or **out of use**
  - if the frequency data is **sensitive** or **not-sensitive**, when the Category is NAT

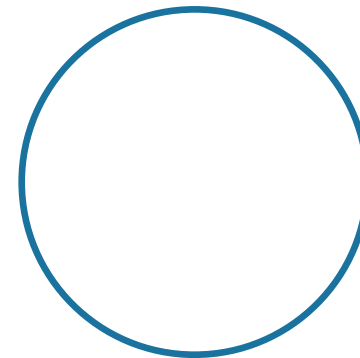
# DATABASE QUALITY CONTROL

## STATES ARE REQUESTED TO:

- In case more than one service is assigned to a frequency , only the service with the larger DOC should be considered (for example, TWR/APP)
- For frequencies with ACC/APP services, States are encouraged to use an Area DOC rather than a circular DOC and provide the SECTOR name and coordinates that define the polygon



Area DOC  
(name & coordinates)



Circular DOC  
Range & Height

# DATABASE QUALITY CONTROL

**To be considered** for the new Frequency Finder tool Database :

- Use of airport names and coordinates published in the AIP
- Service names according Doc 9718 (chapter 2.6). Note that current names may be modified (for example, SMC -> AS)
- Range and Height default values according Doc 9718 ( chapter 2.6).
- Frequencies out of use will be deleted
- Once the quality control process is complete, the new database will be used for the Frequency Finder 2. No need to update the data in the current Frequency Finder

# ACTIONS

## ICAO HQ

- Send the Excel file to each state
- Participate in meetings

## STATES

- Check the Excel file
- Confirm which frequencies are in use and add the missing frequencies and information
- Participate in meetings

## RO

- Set up meetings with each state



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Thank You!