



***4th and final  
CAC frequency  
coordination meeting  
on the use of the VHF band  
(174-216 MHz) and the UHF  
band (470-806 MHz)***

*Belize City 11-14 September 2018*

***Radiocommunication Bureau***

ITUEvents

**4<sup>th</sup> ITU Regional Frequency  
Coordination Meeting  
for Central America and  
the Caribbean Region**

*On the use of the VHF and UHF bands*

11 - 14 September 2018

Belize City, Belize

[www.itu.int/go/belize](http://www.itu.int/go/belize)



Organized with the support of:



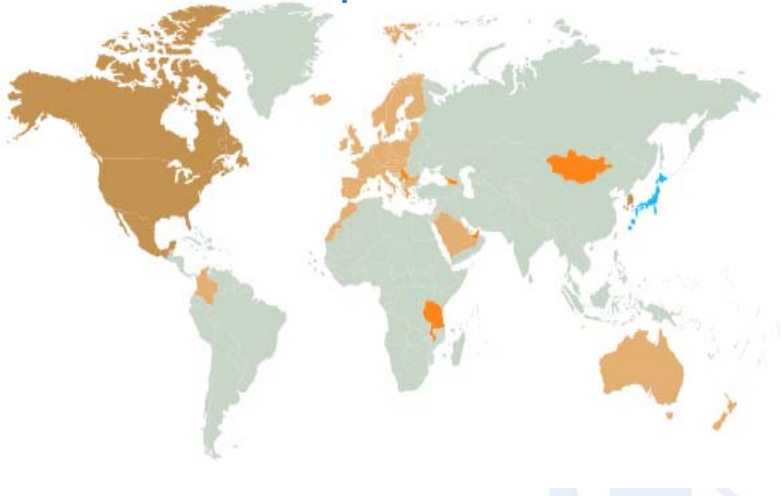
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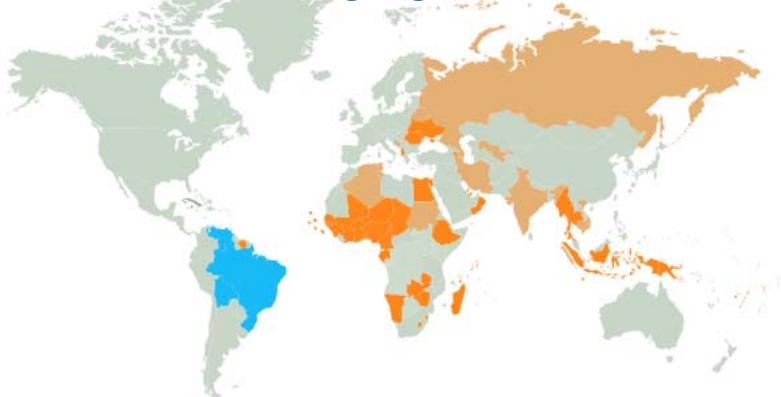


# DSO World (196 countries)

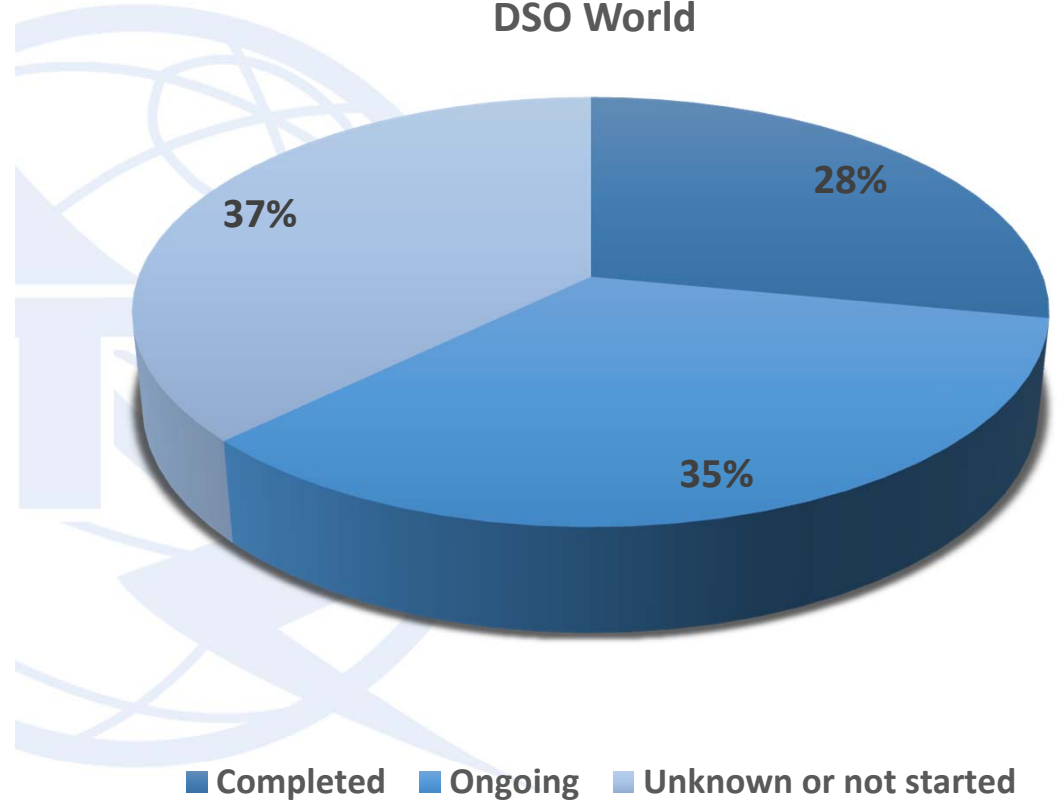
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Ongoing



DSO World



Source: <http://www.itu.int/en/ITU-D/Spectrum-Broadcasting/Pages/DSO/Default.aspx>



# DSO – Americas (36 countries)

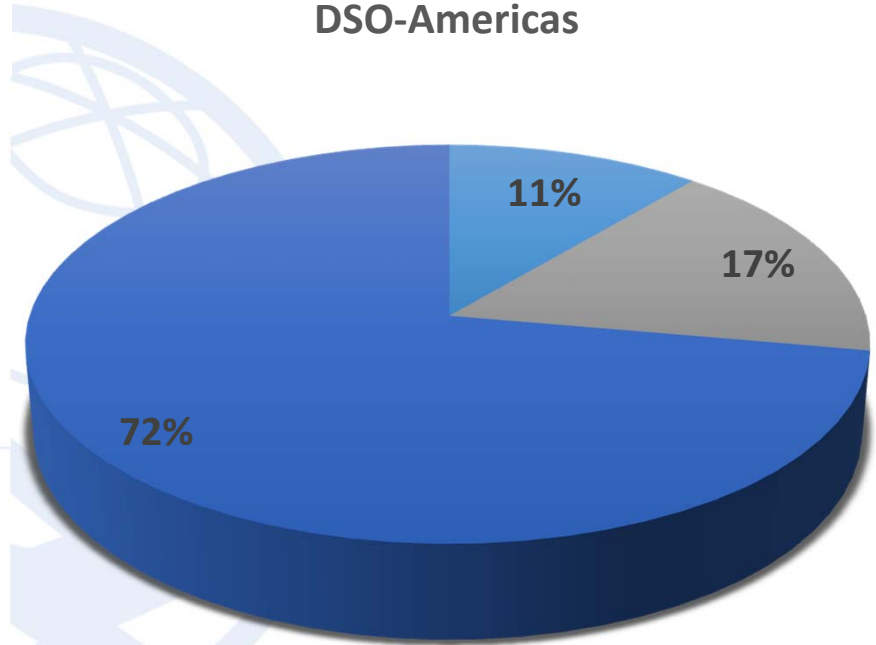
Completed



Ongoing



DSO-Americas



■ Completed ■ Ongoing ■ Unknown or not started



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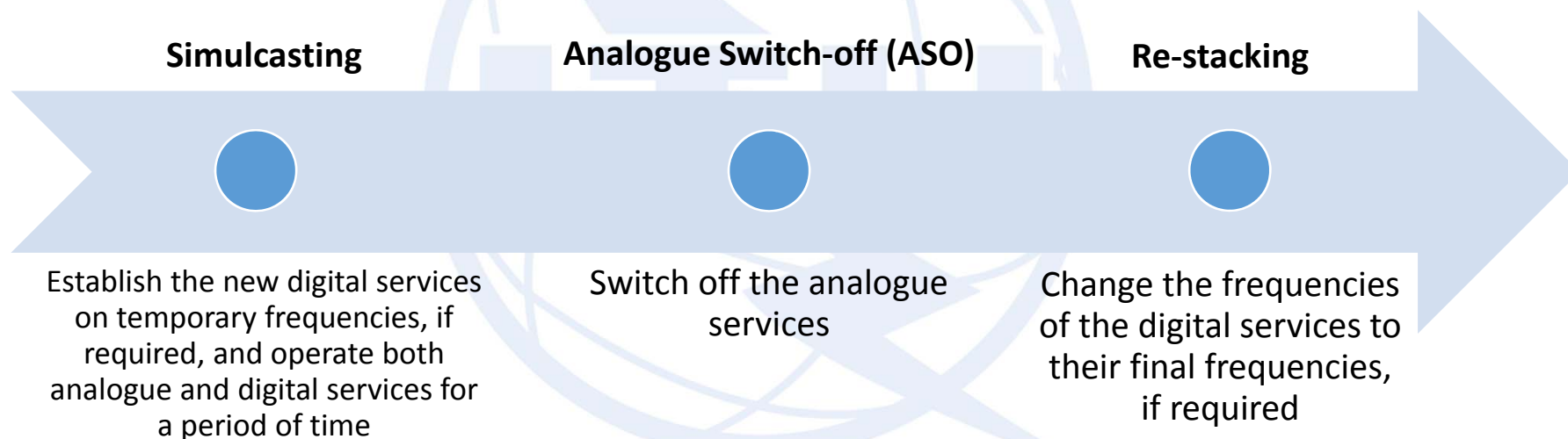


# Definitions

## Digital Switch Over (DSO)

**DSO is the process in which analogue television broadcasting is replaced by digital television broadcasting.**

**DSO normally involves the following steps:**





# DSO and DD Benefits



- Instead of one analog program, many **digital programs** of equivalent or better quality can be broadcast in the same 6, 7 or 8 MHz wide channel
- **Improved picture and sound** quality and potential for **interactivity (HDTV, ...)**
- **Financial benefits** for broadcasters (less power, less transmitters, more attractive service, new business opportunities...)
- **Digital Dividend (DD):** release a part of the band to Mobile Broadband
- A significant amount of high quality **radio spectrum** can be made **available for new services** (such as IMT) or to increase TV offer and new TV services.
- Support national economic and social development

**DD is the amount of spectrum made available by the transition of terrestrial television broadcasting from analogue to digital.**



# Digital Dividend (s) following WRCs decisions

470-806 MHz  
BROADCASTING

470-610/614* MHz BROADCASTING	610/614-698 MHz MOBILE**/ BROADCASTING	694/698-806 MHz MOBILE/ BROADCASTING
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\*\* In Bahamas, Barbados, Belize, Canada, Colombia, United States and Mexico

Need for more DTT channels in the band 470-610/698 MHz to compensate for the loss of the 600 and/or 700 MHz band





## Frequency Coordination is Key for both transition to digital TV and release of the digital dividend!





VHF/UHF frequency  
coordination

**Central America &  
Caribbean**

To secure the operation of  
broadcasting stations and  
Enable the Digital Dividend

Following the:

- Central American Summit on Digital Terrestrial Television and the Digital Dividend, El Salvador on 25 and 26 July 2016, and
- the “San Salvador Declaration” adopted by COMTELCA Members on 26 July 2016

With the participation  
of:

- CITEL
- COMTELCA
- CTU





# Regional Frequency Coordination for Central America and Caribbean



Adm.: ATG, B, BAH, BLZ, BRB, CLM, CTR, CUB, DMA, DOM, F, G, GTM, GRD, GUY, HOL, HON, HTI, JMC, KNA, LCA, NCG, MEX, PNR, SLV, SUR, TRD, USA, VCT, VEN



# Purpose of the frequency coordination meeting

The Regional Frequency Coordination Meeting on the use of the VHF band (174-216 MHz) and the UHF band (470-790 MHz)

## Objective

- Facilitate the transition from analog to Digital Television (DTT) and the use of the Digital Dividend,
- Avoid harmful interference,
- Build informal consensus in the region towards the conclusion of formal agreements between the administrations involved before notification of the frequency assignments to the ITU.



# Basis of compatibility assessment

The meeting focuses on ensuring the compatibility of the national frequency plans in support of terrestrial television broadcasting and mobile broadband, taking into account:

Existing analog television broadcasting emissions and broadband mobile transmissions,

Current and future plans, if any, for DTT and Mobile Broadband,

The need, where applicable, for simulcast digital and analog transmissions,

The standards adopted at national level for DTT and Mobile Broadband,

The timelines and activities for frequency assignment and planning.



# BR support

Use of the compatibility analysis software used for GE-06 Planning, suitably modified to take into account:

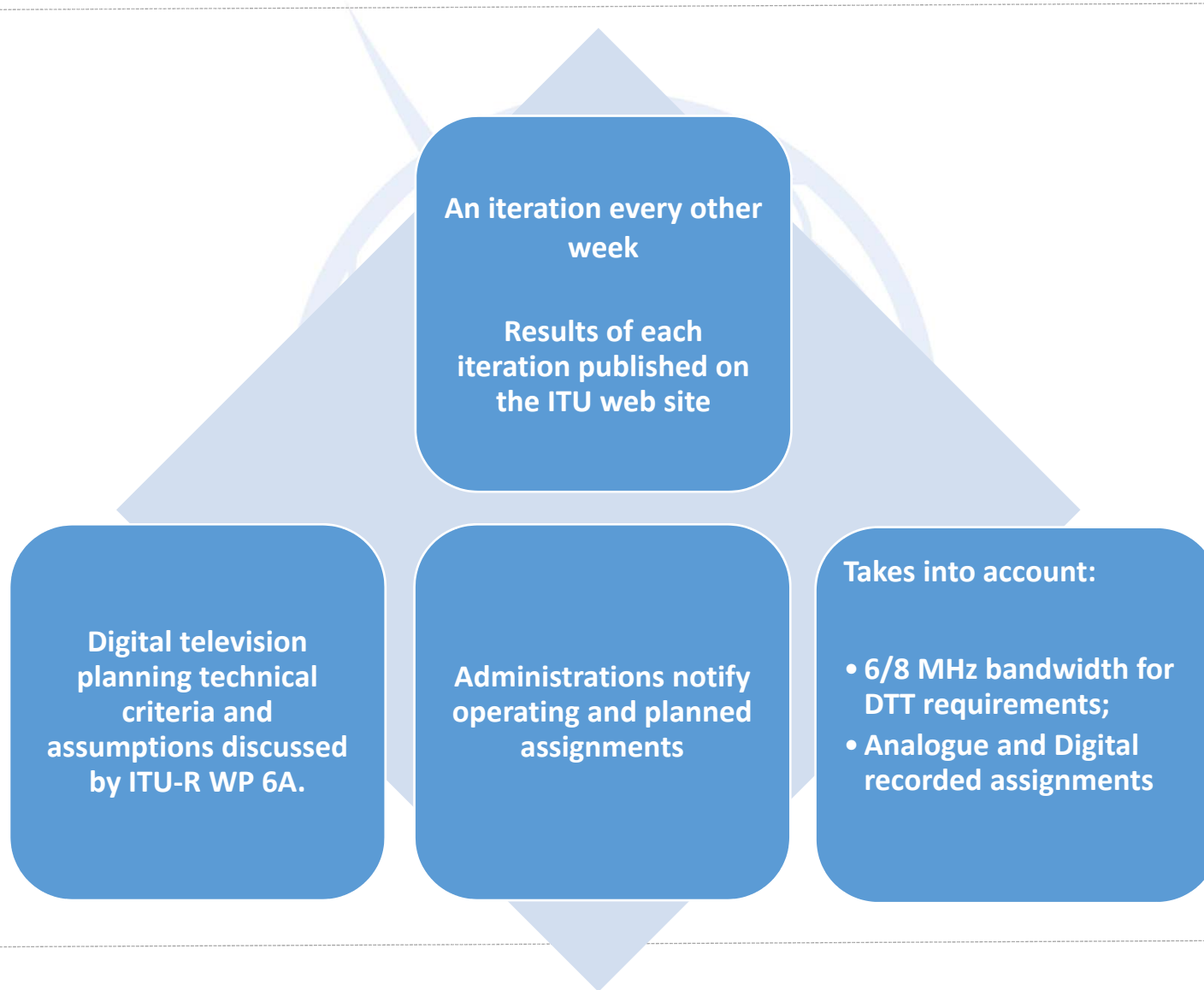
*Channeling  
arrangements*

*Standards and sharing  
criteria*

*Need for capacity  
building and assistance*



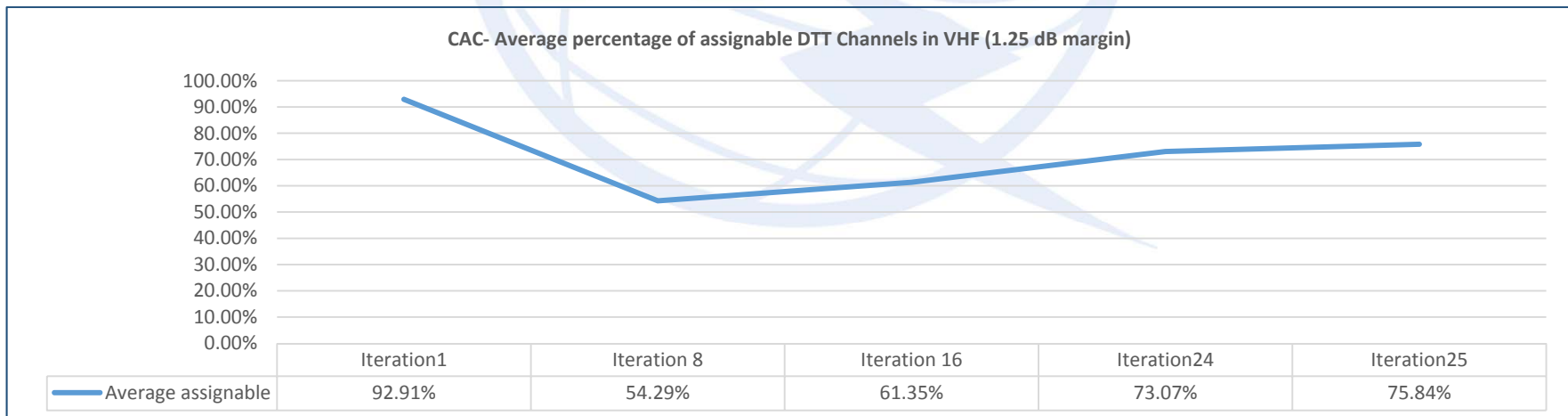
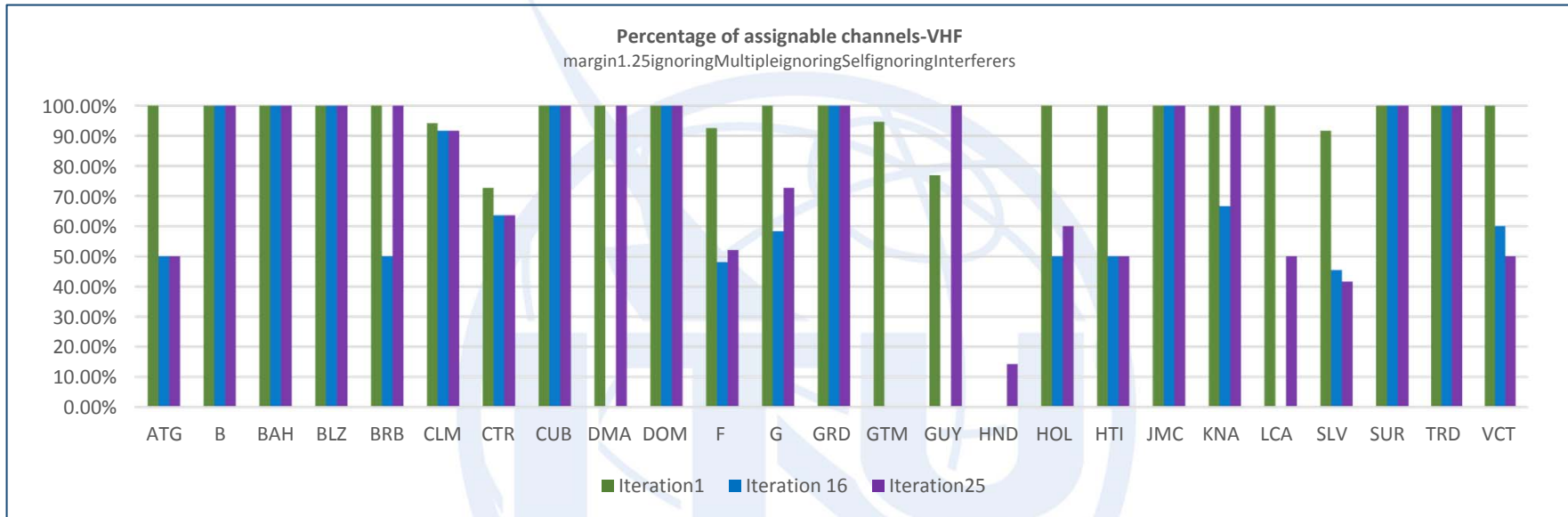
# Coordination process





# Results up to now...

## VHF Band

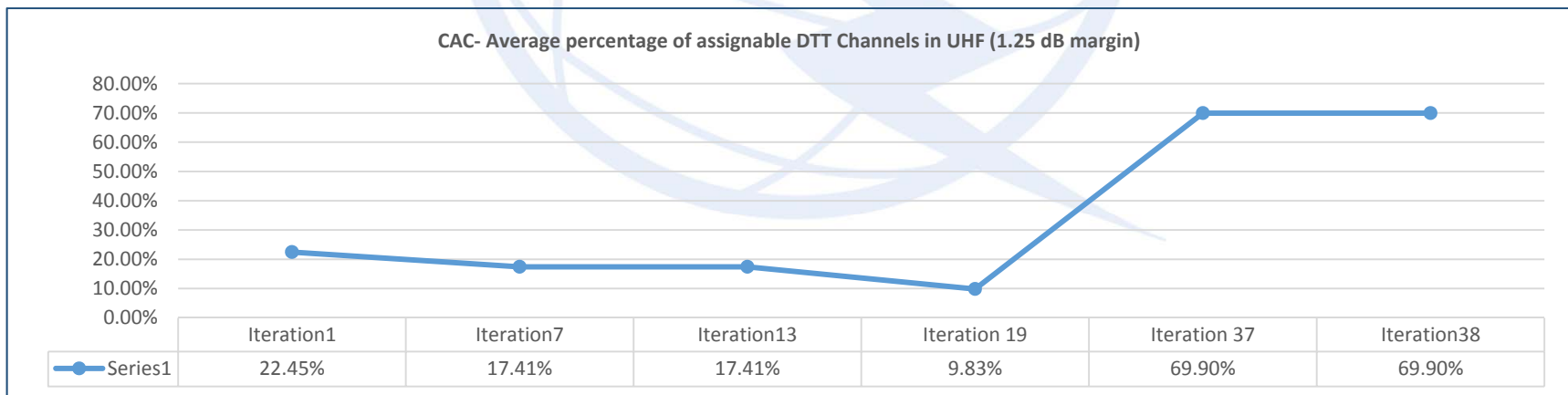
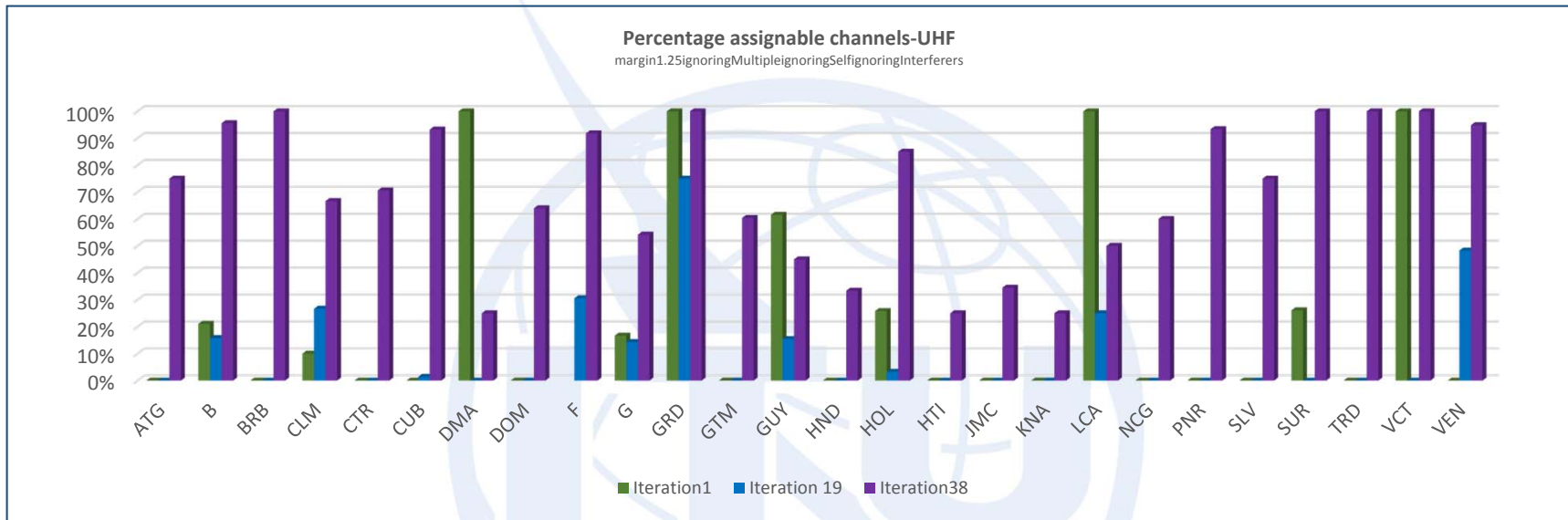






# Results up to now...

## UHF Band

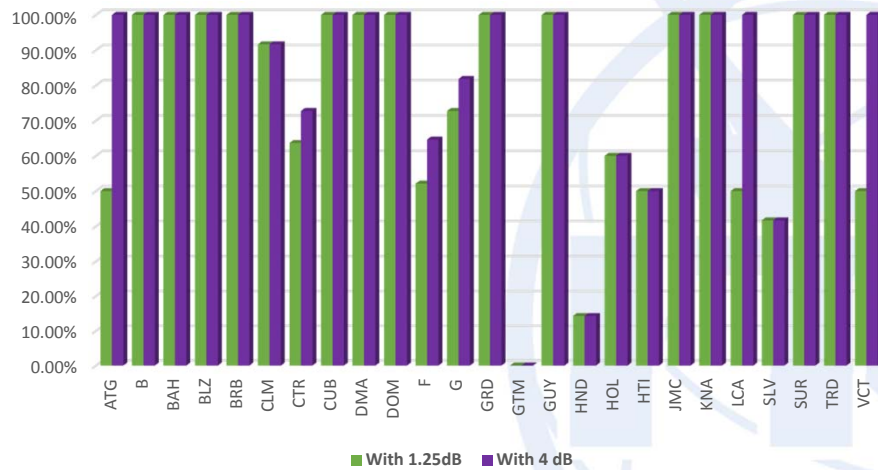




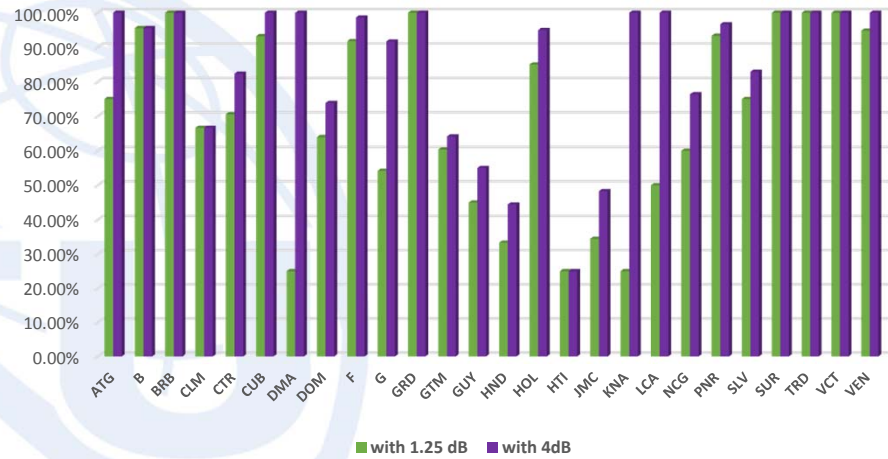
# Results according to the adopted coordination margin

(Document Info4 on [https://www.itu.int/en/ITU-R/terrestrial/broadcast/Americas/Documents/Info/INFO-4-E\\_margins.pdf](https://www.itu.int/en/ITU-R/terrestrial/broadcast/Americas/Documents/Info/INFO-4-E_margins.pdf))

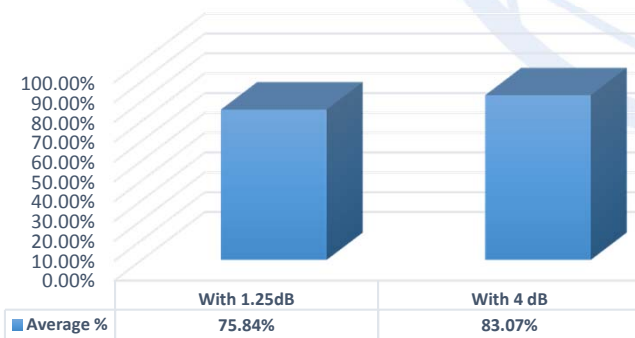
Percentage of assignable channels in VHF-Iteration 25



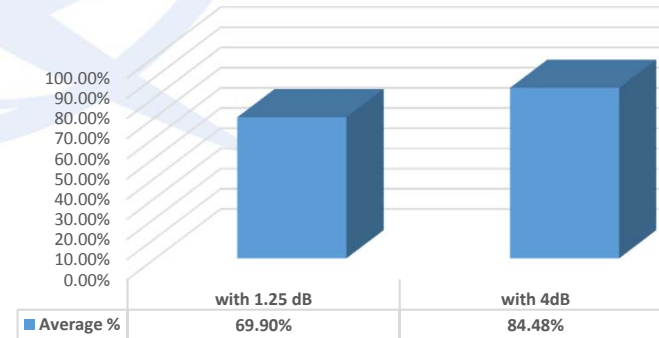
Percentage of assignable channels in UHF-Iteration 38



Average assignable channels in VHF-Iteration 25



Average assignable channels in UHF-Iteration 38





# Outcome of the meetings

Administrations made a step forward towards a successful coordination agreement

## 700 MHz

Harmonize the use of the 700 MHz by Mobile Services, to the maximum extent possible

No new or modified assignments to the MIFR in the concerned bands, until after the last iteration at the 4th meeting (around 6 months).

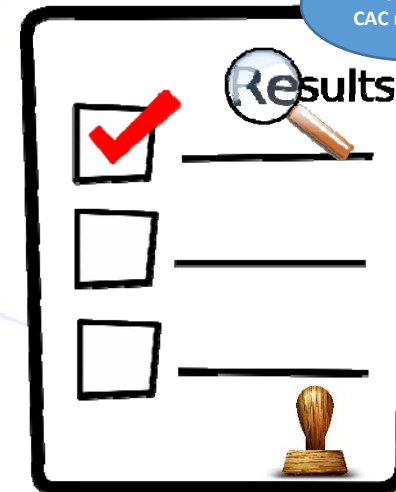
## 600MHz

Avoid the assignment of DTT channels in the band during the frequency coordination if the Administration intends to use the band for Mobile Services

Freeze the last iteration's assignable or agreed channels and keep a reference list of assigned frequencies.

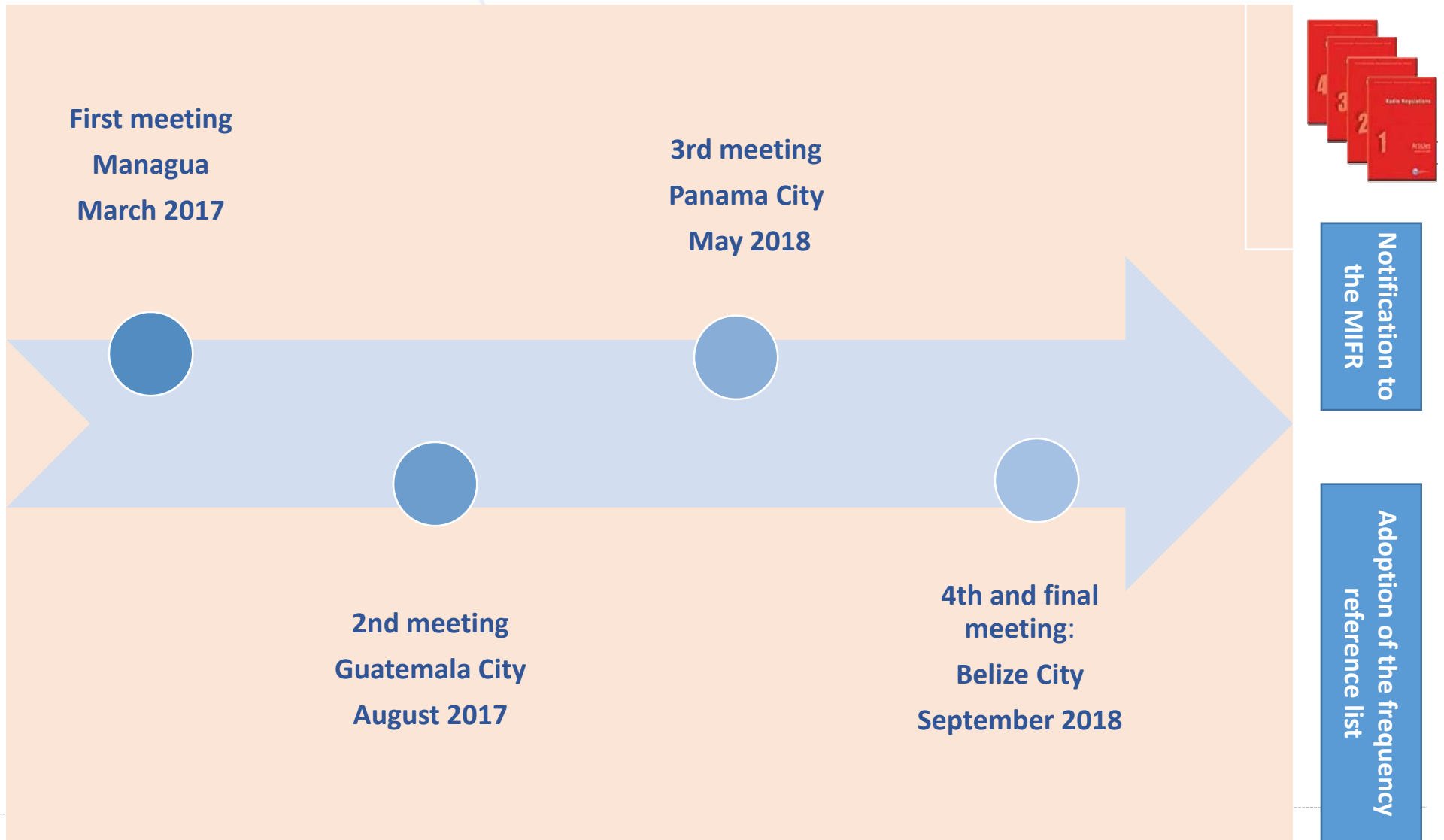


4<sup>th</sup> and final CAC meeting





## Schedule for the CAC frequency coordination meetings





**Thank you**