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# compatibility analysis software for Central America and Caribbean

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#### **Overview**

- Background
- Frequency bands and TV channels
- Tools to be used
- Compatibility calculations and analysis chain
- Some useful links



# Background

- ➤ Technical criteria used for compatibility analysis of digital terrestrial television assignments:
  - ITU-R Recommendations: BT.1368, BT.2033, BT.2036, BT.655, P.1546
  - ITU-R Reports: BT.2254, BT.2383, Draft New Report ITU-R BT.[DTTPLANNINGCAC]
- > DTT standards covered: ATSC 1.0, DVB-T, DVB-T2, ISDB-T, DTMB
- **▶** 6 and 8 MHz channel rasters relevant to a specific country
- > Assignments taken into account:
- Analogue and digital broadcasting assignments as well as assignments to other primary services recorded in the Master International Frequency Register (MIFR) or published in Part I of the BR IFICs are taken into consideration
  - Assignments included in the DTT frequency reference list



#### Frequency bands and TV channels

**Frequency bands:** VHF (174 – 216 MHz) and UHF (470 – 698 MHz) TV channels (assigned frequencies) – Doc. INFO-1: - 6 MHz raster: 7 (177 MHz) - 13 (213 MHz) 14 (473 MHz) - 51 (695 MHz), excl. ch.37 (611 MHz) - 8 MHz raster: 5 (178 MHz) - 9 (210 MHz) 21 (474 MHz) – 48 (690 MHz), excl. ch.38 (610 MHz) special case ("flexible channel"): - 6 MHz raster: For VHF band - ch82 (881 MHz) For UHF band - ch83 (887 MHz) - 8 MHz raster: For VHF band – ch68 (850 MHz) For UHF band – ch69 (858 MHz) "flexible channel" – means that during compatibility calculations, the software will scan all available channels in the frequency bands

mentioned above and show electromagnetic situation on each channel



#### Tools to be used



TerRaQ TerRaNotices

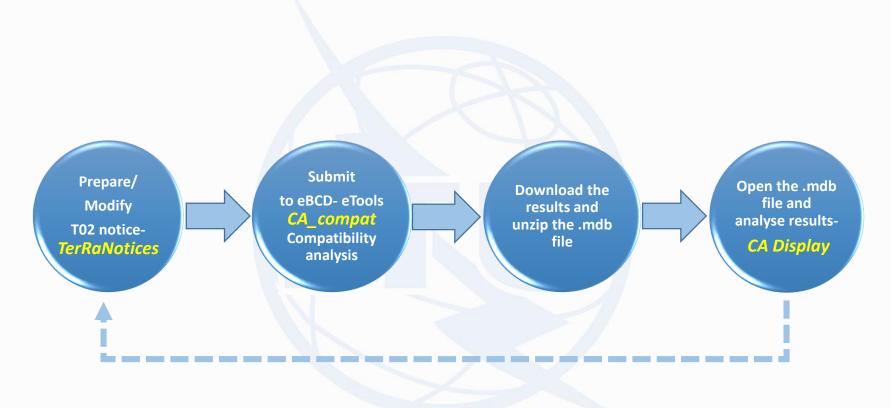




CA Display



## Compatibility calculations and analysis chain





#### Some useful links

ITU Regional Frequency Coordination for Central America and Caribbean:

https://www.itu.int/en/ITU-R/terrestrial/broadcast/Americas/Pages/default.aspx

Online Services and Software:

https://www.itu.int/en/ITU-R/terrestrial/broadcast/Pages/Services.aspx

**CA Display Manual:** 

https://www.itu.int/en/ITU-R/terrestrial/broadcast/Americas/Documents/CADisplay-E.pdf

eTools:

https://www.itu.int/ITU-R/eBCD/MemberPages/eCalculations.aspx



## Thank you for your attention!

Questions?

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