



ITUEvents

4th 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



Organized with the support of:



Organized by:



Introduction of the coordination in the requirements file

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Consideration of the coordination information in the requirements – New feature

- Administrations participating in the *ITU Regional Frequency Coordination for Central America and Caribbean* are encouraged to submit, for the ITERATIONS, the relevant electronic notices containing the agreements obtained from affected administrations
- Information to be captured within the respective <COORD> sections using ***TerRaNotices***

BR IFIC (Terrestrial Services)

A screenshot of a web browser window displaying the BR IFIC (Terrestrial Services) interface. The window title is "BR IFIC 2878". The page has a blue background with a radial light effect. On the left side, there are several navigation buttons: "Latest Publication", "MIFR & Plans", "Software", "TerRaQ", "TerRaNotices", "Documentation", "Information Note", "Preface", "Install BR IFIC", and "Back". The "Software" section is currently selected. On the right side, under the heading "Latest Publication", there is text stating "The Official Publication portion of the BR IFIC (Terrestrial services) contains:" followed by a bullet point linking to "Part I, II, III & IIB and Special Sections". At the bottom of the page, there is a footer with the ITU logo, the text "International Telecommunication Union", and the text "Terrestrial Services BR IFIC".



TerRaNotices : COORDINATION section

TerRaNotices 1.2 (BETA) - [BLZ-VHF-fixed1.txt - T02]

File Tools View Language Options Window Help

Notice browser

Notice type	Description
BLZ-VHF-fixed1.txt	
Head section	BLZ - 02/08/2016
✓ T02 ADD	BLZ VHF001
✓ T02 ADD	BLZ VHF003
✓ T02 ADD	BLZ VHF005

Date of notification: 2 8 2016 ID1/ Assignment's unique identifier: BLZ VHF001

Fragment: Article 11 Notification intended for: Addition

Assignment characteristics: Antenna characteristics

Station information

4A/ Antenna site name: Belize City	4C/ Longitude: 88° 11' 37" W	9EA/ Altitude of site above sea level: 4 m	3A1/ Call sign:
4B/ Geographic area: BLZ	Latitude: 17° 30' 6" N		3A2/ Station identification:

Emission characteristics

1A/ Assigned frequency: 201 MHz	7C1/ TV system: T9	8BH/ Horizontal e.r.p.: 30 dBW	7AB/ Bandwidth: 6000 kHz	1E0/ Offset: 0 kHz
7A1/ Frequency stability:	9D/ Polarization: H	8BV/ Vertical e.r.p.: dBW	7A/ Class of emission: X7F--	

Antenna characteristics

9/ Antenna directivity: ND	9EB/ Maximu: 47
----------------------------	-----------------

Coordination successfully completed with the following adm 13C/ Confirmed remarks

Available administrations	Selected administrations
AFG	
AFS	
AGL	
ATP	

Coordination successfully completed with the following adm 13C/ Notified remarks

Available administrations	Selected administrations
SEY	GTM
SLM	MEX
SMO	SLV
CMD	



Some Definitions

Available (Av) Channel

Refers to the channel(s) compatible with affected analogue broadcasting assignments and assignments to other primary services, hence available for assigning to a digital requirement.

Assignable Channel

Refers to the channel(s) among the list of *available channels* compatible with assignments and requirements to digital, analogue broadcasting and other primary services.



Assumptions for the consideration of assignable channels

STEP 1: Results of compatibility examination

- downloaded from *eTools*, CA_compat
- Results of the iterations available at

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

Access database (mdb)

contains:

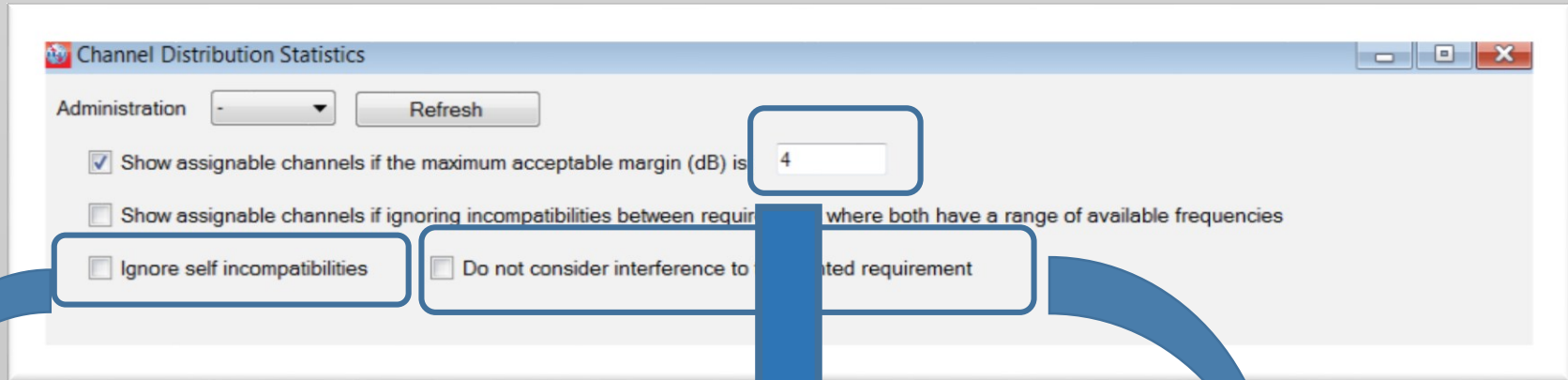
All the incompatibilities where

- Margin > 1.25 dB (Digital)
- Margin > 0.5 dB (Analog)
- Margin > 1 dB (Fixed and Mobile)



Assumptions for the consideration of assignable channels

STEP 2: Selection in CAdisplay



Margin may be raised (user choice)

If Margin higher than selected margin (above):

Incompatibilities within an Administration can be ignored

Interference received can be ignored



Assumptions for the consideration of assignable channels

STEP 3: COORDINATION

All the DTT Requirements with a margin higher than the limiting margins **affecting** :

MIFR assignments (digital, analog or other primary services)

or

DTT requirements

of the neighboring countries

should be coordinated (otherwise the channel will not be assigned)



Coordination of DTT Reqts vs. **RECORDED** frequency assignments

Assignment(s) **affected** by my requirement:

- Coordination is necessary and the Adm of the *affected* assignment has to provide its agreement .
- Adm code must be provided in the COORDINATION section of my requirement).

Assignment(s) **affecting** my requirement:

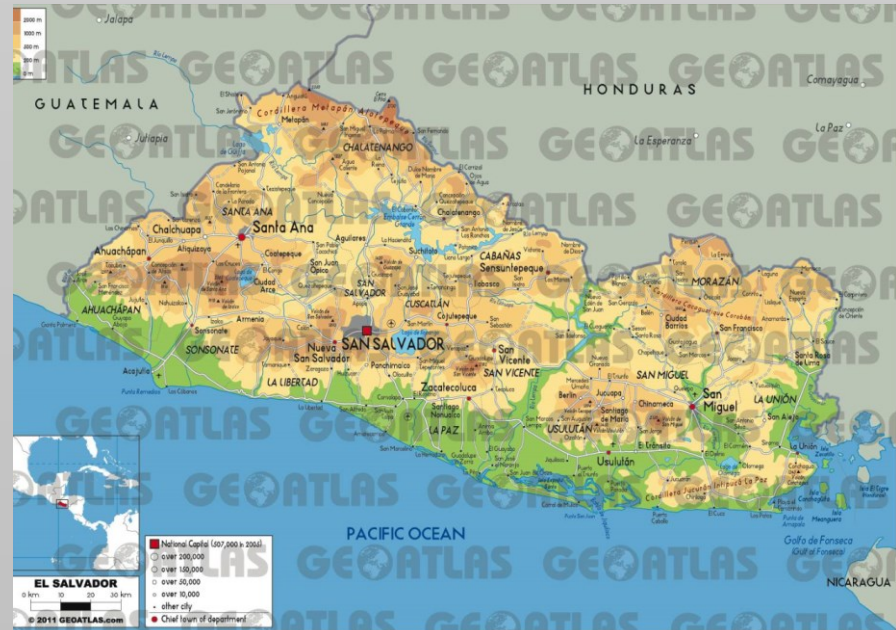
- Detailed analysis is required.
- It is the my responsibility to assign this channel to my requirement



Assumptions for the consideration of assignable channels

STEP 3: Coordination – Detailed analysis: Terrain

The CA compat analysis does not consider the terrain. During the coordination process, 2 Administrations may reach agreement based on more detailed calculations taking the terrain into account.



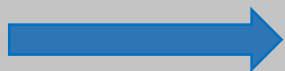


Assumptions for the consideration of assignable channels

STEP 3: Coordination (cont'd)

Consideration of requirements/assignments affected by requirement(s) (of adm A) with margin higher than the maximum acceptable margin

Case	Administration A Requirement R1	Administration B Requirement R2	Coordination of R1 with B	Channel for R1
2	R1 interferes R2	R2 does not interfere R1	Obtained	Assigned
3	R1 interferes R2	R2 interferes R1	Obtained	Assigned



For Adm A, Coordination is necessary with Adm B for R1



Assumptions for the consideration of assignable channels

STEP 3: Coordination - example

[M:\BRTSD\BCD\Assistance\COMTELCA\Iterations_UHF\Iter 38\Res_38UHF.mdb] CA Display - [Channel Distribution Details ♦ Digital assignments]

File Edit View Preferences Help

UHF Channel Distribution VHF Channel Distribution

No.	Adm	Geo Are	Adm Ref Id	Not.Typ	Site/Allot Name	Ch/block	Avail. Ch/block	Assignable Ch/block	Coord Compl
1	SLV	SLV	SLV_081	T02	Isla Meanguera del	14	14	14	
2	SLV	SLV	SLV_063	T02	San Salvador hotel	14	14	14	
3	SLV	SLV	SLV_031	T02	Cerro El Pacayal	15	15		
4	SLV	SLV	SLV_032	T02	El Boqueron	15	15	15	
5	SLV	SLV	SLV_110	T02	Isla Meanguera del	16	16	16	
6	SLV	SLV	SLV_064	T02	San Salvador hotel	16	16	16	
7	SLV	SLV	SLV_035	T02	Cerro El Cachio	17	17	17	
8	SLV	SLV	SLV_033	T02	Cerro El Pacayal	17	17		
9	SLV	SLV	SLV_036	T02	Cerro El Pital	17	17	17	
10	SLV	SLV	SLV_034	T02	El Boqueron	17	17	17	
11	SLV	SLV	SLV_066	T02	Cerro Santa Lucia	18	18	18	
12	SLV	SLV	SLV_065	T02	El Picacho	18	18	18	
13	SLV	SLV	SLV_037	T02	El Boqueron	19	19	19	
14	SLV	SLV	SLV_002	T02	Cerro El Pacayal	20	20		
15	SLV	SLV	SLV_001	T02	EL Boqueron	20	20	20	
16	SLV	SLV	SLV_005	T02	Laguna Verde	20	20	20	GTM
17	SLV	SLV	SLV_038	T02	El Boqueron	21	21	21	
18	SLV	SLV	SLV_067	T02	San Salvador hotel	22	22	22	GTM
19	SLV	SLV	SLV_041	T02	Cerro Cacahuatique	23	23		
20	SLV	SLV	SLV_039	T02	Cerro El Cachio	23	23		
21	SLV	SLV	SLV_042	T02	Cerro El Pacayal	23	23		
22	SLV	SLV	SLV_040	T02	El Picacho	23	23	23	
23	SLV	SLV	SLV_007	T02	Cerro El Pacayal	24			
24	SLV	SLV	SLV_006	T02	El Boqueron	24	24	24	
25	SLV	SLV	SLV_010	T02	Laguna Verde	24	24	24	
26	SLV	SLV	SLV_046	T02	Cerro El Cachio	25	25	25	
27	SLV	SLV	SLV_044	T02	Cerro El Faro	25	25	25	
28	SLV	SLV	SLV_043	T02	Cerro El Pacayal	25	25		GTM
29	SLV	SLV	SLV_045	T02	El Picacho	25	25	25	
30	SLV	SLV	SLV_012	T02	Cerro El Pacayal	26	26		
31	SLV	SLV	SLV_011	T02	El Boqueron	26	26	26	
32	SLV	SLV	SLV_015	T02	Laguna Verde	26	26	26	
33	SLV	SLV	SLV_048	T02	Cerro El Cachio	27	27	27	
34	SLV	SLV	SLV_049	T02	Cerro El Faro	27	27	27	
35	SLV	SLV	SLV_047	T02	El Picacho	27	27	27	
36	SLV	SLV	SLV_017	T02	Cerro El Cachio	28	28	28	
37	SLV	SLV	SLV_018	T02	Cerro El Pacayal	28	28	28	



Assumptions for the consideration of assignable channels

STEP 3: Coordination - example

The screenshot shows a software interface with a map of a region (likely South America) and a table of digital interferences. The table has columns for No., Adm., Geo. Are., Not. Typ., Adm. Ref. Id., Site/Allot Name, Channel, Avail. Ch, Assigned C, 8BH (dBW), 8BV (dBW), Wanted Ch, Interf. Chan, Distance (k), CNFS (dB(u)), Margin (dB), and Relation. The first row is circled in red.

No.	Adm.	Geo. Are.	Not. Typ.	Adm. Ref. Id.	Site/Allot Name	Channel	Avail. Ch	Assigned C	8BH (dBW)	8BV (dBW)	Wanted Ch	Interf. Chan	Distance (k)	CNFS (dB(u))	Margin (dB)	Relation
1	SLV	SLV	T02	SLV_002	Cerro El Pacayal	20	20		23	20	20		109.8	69.5	16	Interference

29 August 2018
Wednesday



Assumptions for the consideration of assignable channels

STEP 3: Coordination - example

The screenshot shows a software window titled "[M:\BRTSD\BCD\Assistance\COMTELCA\Iterations_UHF\ter 38\Res_38UHF.mdb] CA Display - [General Analysis Results]". The interface includes a map of Central America with a red square and a blue circle on the Guatemalan coast. A table at the bottom displays digital interferences, with the 'Digital Interferers' tab selected and circled in red.

No.	Adm	Geo Are	Adm Ref Id	BR Id	Site Name	Analog Ch.	Interf. Dig. Ch.	8BH (dBW)	8BV (dBW)	Distance (k)	NFS (dB μ V)	Margin (dB)	Relation
1	SLV	SLV	Canal 21	116139744	El Boquerón	21	20		37				Tx inside
2	SLV	SLV	Canal 19	116139743	El Boquerón	19	20		37				Tx inside

Channel assignable & SLV does not need to submit coordination with GTM for SLV_001



Assumptions for the consideration of assignable channels

STEP 3: Coordination - example

[M:\BRTSD\BCD\Assistance\COMTELCA\Iterations_UHF\Iter_38\Res_38UHF.mdb] CA Display - [General Analysis Results]

File Edit View Preferences Help

Administration SLV
 Administration Unique Identifier
 SLV_001
 Site/Allotment Name
 EL Boqueron
 Show multi-channel reqs.

Details Colours Frequencies Symbols

Geographical area SLV
 Notice Type T02
 Not linked

Acceptable Channel/Frequency Block
 20

Available Channel/Frequency Block
 20

Assigned Channel/Frequency Block

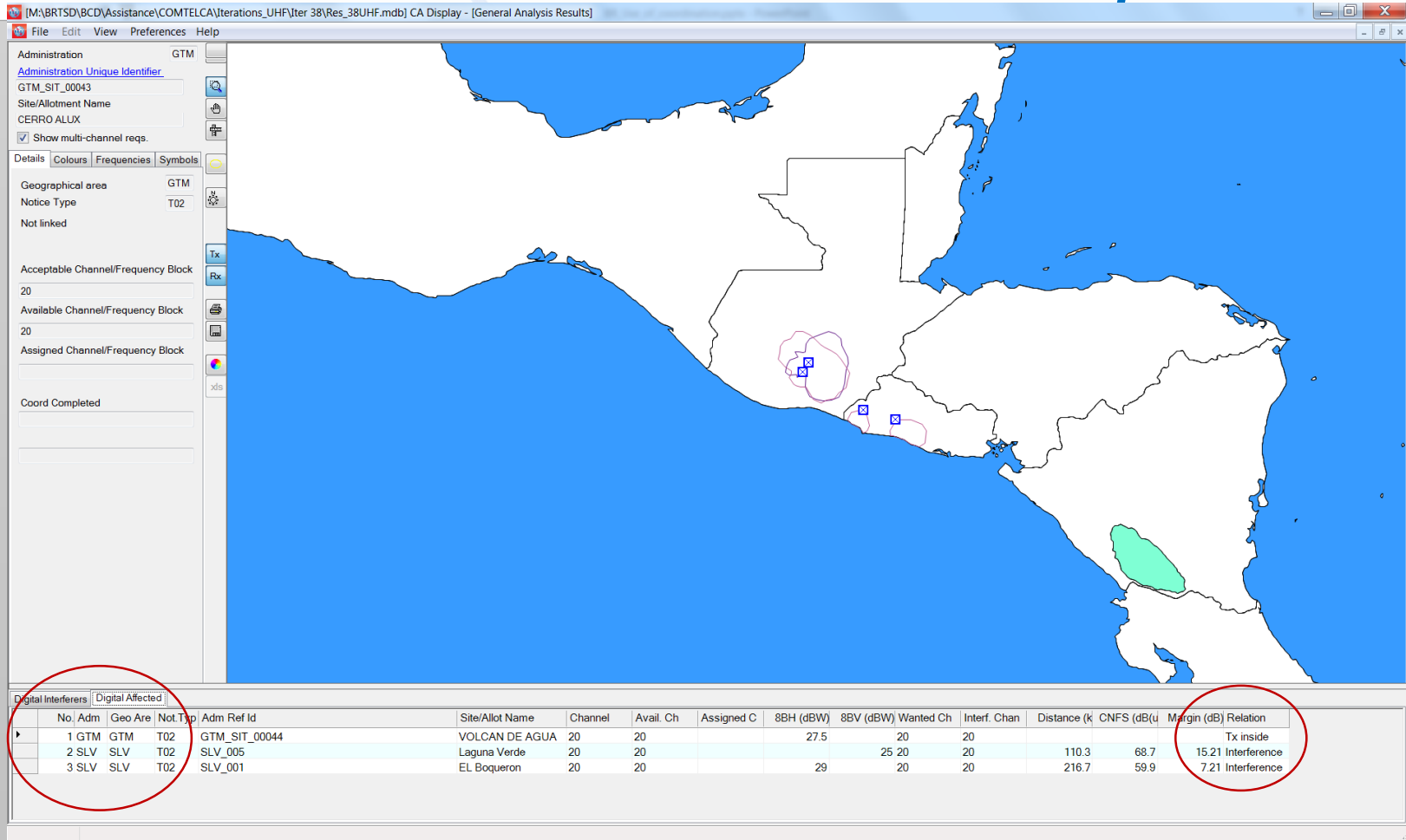
Coord Completed
 GTM

Digital Interferers		Digital Affected		Analogue TV Affected												
No.	Adm	Geo Area	Not Typ	Adm Ref Id	Site Name	Channel	Avail. Ch	Assigned C	8BH (dBW)	8BV (dBW)	Wanted cha	Interf. chan	Distance (K)	CNFS (dB(u)	Margin (dB)	Relation
1	GTM	GTM	T02	GTM_SIT_00043	CERRO ALUX	20	20		37	20	20	20	216.7	59.9	7.21	Interference
2	GTM	GTM	T02	GTM_SIT_00044	VOLCAN DE AGUA	20	20		27.5	20	20	20	199.4	57.8	5.63	Interference
3	HND	HND	T02	CANAL20GRACIASLEM	GRACIAS LEMPIRA	20	20			37.1	20	20	117.3	55.8	4.29	Interference

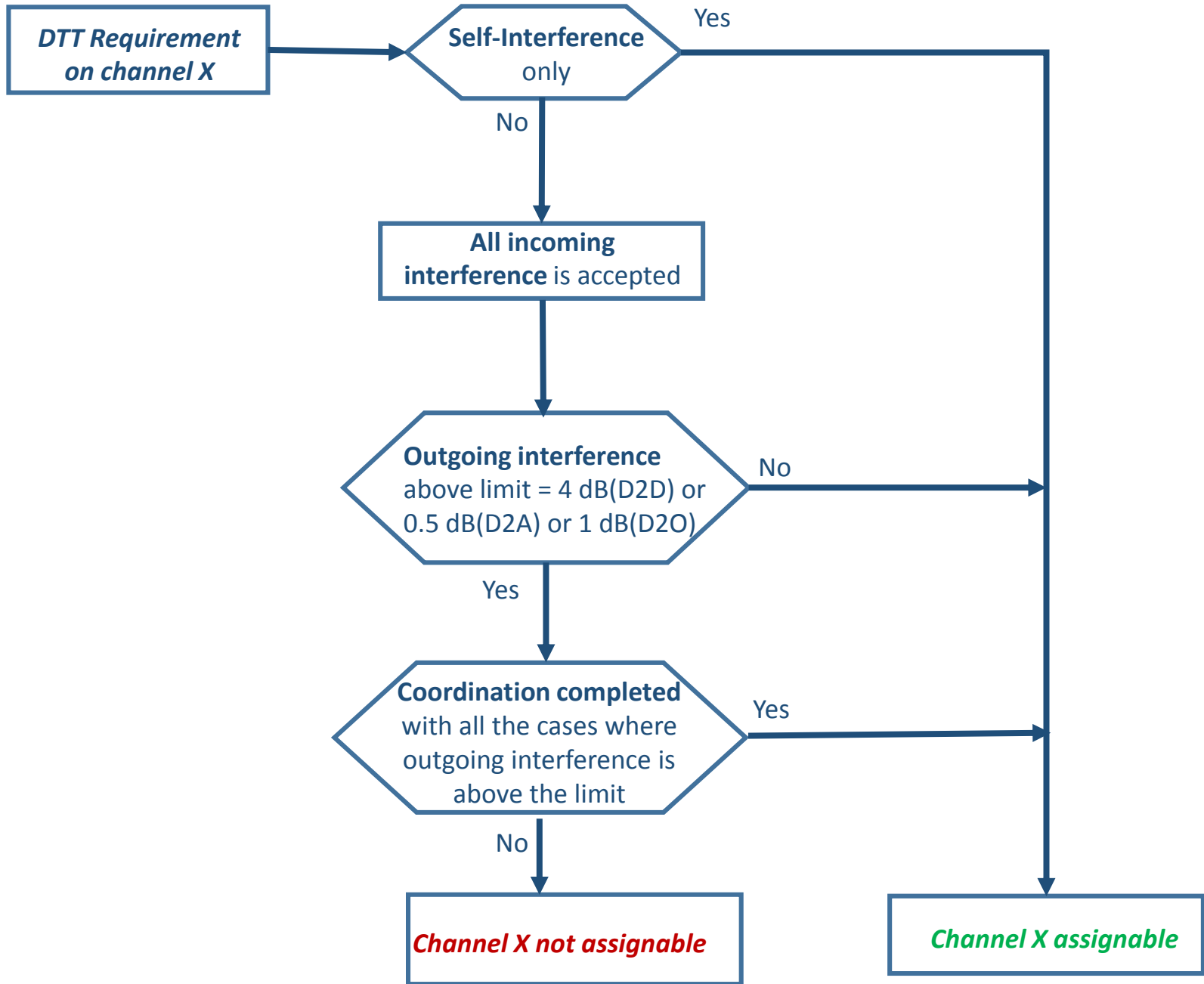


Assumptions for the consideration of assignable channels

STEP 3: Coordination - example



GTM needs to submit coordination with SLV for GTM_SIT_00043





“Thank you for your attention!”