



Radiocommunication Bureau (BR)

Circular letter
6/LCCE/104

27 February 2020

**To Administrations of Member States of the ITU of Region 1, Radiocommunication Sector
Members of Region 1 and the Islamic Republic of Iran**

Subject: Questionnaire on spectrum use and spectrum needs for terrestrial television broadcasting in the UHF frequency band in connection with WRC-23 agenda item 1.5

References: Administrative Circular CA/251

Under the terms of the decision of CPM23-1, Working Party 6A is responsible for providing information on, *inter alia*, spectrum use and needs by the Broadcasting Service in the band 470-960 MHz to TG 6/1, as required for studies under WRC-23 agenda item 1.5.

Report ITU-R [BT.2302](#) "Spectrum requirements for terrestrial television broadcasting in the UHF frequency band in Region 1 and the Islamic Republic of Iran" was approved by Study Group 6 in 2014 as part of the preparations for WRC-15. The table in Attachment 1 to Annex 1 of this Report contains the detailed responses received from administrations in 2014.

WP 6A proposes to revise this Report to assist with provision of information to TG 6/1 on the spectrum use and needs for the broadcasting service amongst administrations of Region 1 and the Islamic Republic of Iran.

You are invited to answer a questionnaire to update the information in Report ITU-R BT.2302. The questionnaire is available online at <http://itu.int/go/wrc23-ai1-5-questionnaire>. Alternatively, responses can be sent to brsgd@itu.int or rsg6@itu.int. An offline version of the questionnaire is available at the same web address. Please note that the response should come via the Designated Focal Point for your administration or organisation.

Please note that some questions correspond to questions in the 2012 survey – found in Circular letter [6/LCCE/78](#). The wording in this questionnaire has been modified to reduce ambiguities found in the first survey.

Sources of information that may be helpful in compiling your response are available at the following websites:

1. The WP 6A SharePoint site: <https://extranet.itu.int/rsg-meetings/sg6/wp6a/Lists/DTTB%20Questionnaire/overview.aspx>
2. The ITU-D “Status of the transition to Digital Terrestrial Television” database: <https://www.itu.int/en/ITU-D/Spectrum-Broadcasting/DSO/Pages/default.aspx>
3. ITU-R [Handbook on Digital Terrestrial Television Broadcasting networks and systems implementation](#) - Chapter 3 “Requirements for the implementation of digital terrestrial television broadcasting networks”
4. [Report ITU-R BT.2302](#) “Spectrum requirements for terrestrial television broadcasting in the UHF frequency band in Region 1 and the Islamic Republic of Iran”

Answers are requested by **14 August 2020** to allow for processing the responses and their consideration by WP 6A in its next meeting in October 2020.

You are further asked to note that if any administration does not respond to the questionnaire by 14 August 2020, the Rapporteur Group (on WRC-23 AI 1.5) compiling the information for Working Party 6A will assume that the information received in response to the 2012 questionnaire is still valid, recognising that there is not full correspondence between the 2012 questions and those in the current questionnaire.

Additionally, you are reminded that you are welcome to submit any proposals for modifications to the rest of Report ITU-R BT.2302. Such proposals may be submitted directly to the next meeting of Working Party 6A in October 2020. The deadline for submission of proposals to the meeting of WP 6A is one week before the start of the meeting.

The BR remains at your disposal should you have any questions or require any assistance regarding this process. Please direct any questions to brsgd@itu.int or to rsg6@itu.int.

Please note that this questionnaire has been developed by ITU-R WP 6A. At the request of the Chairman of Working Party 6A, it is sent for consideration of the Administrations of Member States, Sector Members, as appropriate.



Mario Maniewicz
Director

Attachment: Spectrum needs and use questionnaire

ATTACHMENT

Questionnaire on spectrum use and spectrum needs for terrestrial television broadcasting in the UHF frequency band in Region 1 and the Islamic Republic of Iran in connection with Resolution 235 (WRC-15)

(To be attached to draft Circular Letter)

Deadline for response: 14 August 2020

This questionnaire can be completed online at <http://itu.int/go/wrc23-ai1-5-questionnaire>
Alternatively, responses can be sent to brsgd@itu.int or rsg6@itu.int

Name of the Administration:	
Contact person:	
E-mail address:	
Telephone number:	

Name of the Sector Member	
Contact person:	
E-mail address:	
Telephone number:	
What best describes your organisation? Commercial broadcaster/Public service broadcaster/ Service provider(please describe)	
The geographical area over which you operate:	

Question number	Field	Data Type	Example answer	Response from Administration/Sector Member etc.	Corresponding field in Att. 1 to Annex 1 to Report ITU-R BT.2302 (for possible update)
1	What is the total proportion of the population that view programs using terrestrial television broadcasting in your country? ¹	<i>Number (Percentage)</i>	75%		Total proportion of users who receive television by terrestrial broadcasting (including first and second sets, including reception through cable headends, when indicated)
2	When did or will DTTB ² start in your country?	<i>Date (Year)</i>	1997		No corresponding question
3	When did or will ASO ³ occur in your country?	<i>Date (Year)</i>	2012		Date of ASO completion in the UHF band
4	What DTTB transmission technology is used in your country (multiple answers are possible)?	<i>DVB-T, DVB-T2, ISDB-T, DTMB, DTMB-A, ATSC, ATSC3.0</i>	DVB-T DVB-T2		Technology
5	Do you anticipate the introduction of a more advanced DTTB transmission technology in your country?	<i>Y/N/Not known</i>	Not known		No corresponding question

¹ This should include all uses: Main TV set, Secondary TV set (Bedroom, Kitchen, etc.), including both analogue and digital reception.

² DTTB: Digital Terrestrial Television Broadcasting.

³ ASO: Analogue Switch Off.

Question number	Field	Data Type	Example answer	Response from Administration/Sector Member etc.	Corresponding field in Att. 1 to Annex 1 to Report ITU-R BT.2302 (for possible update)
6	What percentage of population in your country is covered by DTTB networks?	<i>Number (Percentage)</i>	98.5%		No corresponding question
7	If you have current plans to change the percentage of population covered by DTTB networks in your country, what is your target coverage?	<i>Number (Percentage)</i>	98.7		No corresponding question
8	What is the total number of operational or planned national DTTB multiplexes in the 470-960 MHz band in your country?	<i>Number</i>	8		Number of currently operational or planned DTT multiplexes in the UHF band (excluding very small coverage local multiplexes when indicated)
9	What is the total number of operational or planned national DTTB multiplexes in the 470-694 MHz band in your country?	<i>Number</i>	6		No corresponding question
10	What is the maximum number of operational or planned local or regional DTTB multiplexes in the 470-960 MHz band in one geographical coverage area in your country? ⁴	<i>Number</i>	3		No corresponding question

⁴ For example, if Area A has 3 local multiplexes, and Area B has 2, respond with 3.

Question number	Field	Data Type	Example answer	Response from Administration/Sector Member etc.	Corresponding field in Att. 1 to Annex 1 to Report ITU-R BT.2302 (for possible update)
11	What is the maximum number of operational or planned local or regional DTTB multiplexes in the 470-694 MHz band in one geographical coverage area in your country? ⁴	<i>Number</i>	3		No corresponding question
12	What is the current frequency range that you use for the operation of DTTB in the 470-960 MHz band in your country?	<i>Frequency range (xyz MHz - x'y'z' MHz)</i>	470-758 MHz		No corresponding question
13	How many national free to air TV programme services ⁵ are broadcast on DTTB in your country? ⁶	<i>Number</i>	110		No corresponding question
14	How many local or regional free to air TV programme services are broadcast on DTTB in your country? ⁶	<i>Number</i>	55		No corresponding question

⁵ A multiplex in a TV channel provides the transmission capacity for several TV programme services at the same time (e.g. 6 to 8 TV programme services). An analogue channel provides a single TV programme service.

⁶ Please provide this supplementary data, considering the wide range of possible configurations of DTTB networks, which will naturally have different capacity bitrate.

Question number	Field	Data Type	Example answer	Response from Administration/Sector Member etc.	Corresponding field in Att. 1 to Annex 1 to Report ITU-R BT.2302 (for possible update)
15	How many pay-TV programme services are broadcast on DTTB in your country? ⁶	<i>Number</i>	27		No corresponding question
16	Do you anticipate the introduction of more programmes on DTTB in your country in the future?	<i>Y/N/Not known</i>	Y		No corresponding question
17	Do you anticipate the introduction of enhanced services (e.g. HDTV, UHD TV, HDR, others) on DTTB in your country in the future?	<i>Y/N/Not known</i>	Y		No corresponding question
18	Do you foresee the need to allow for additional reception modes (e.g. portable, mobile) on terrestrial broadcasting in your country in the future?	<i>Y/N/Not known</i>	N		No corresponding question
19	Do you use or plan to use interactive broadcast broadband (IBB) ⁷ systems on your DTTB platform?	<i>Y/N/Not known</i>	Y		No corresponding question

⁷ Definition of IBB (from <https://www.itu.int/en/irg/ibb/Pages/default.aspx>): “An IBB system is based on the combination of the technologies of both broadband and various broadcasting including over-the-air and cable. Various multiple devices are used for effective presentation of content and user interactivity. Wide range of services are enabled by the IBB system.”

Question number	Field	Data Type	Example answer	Response from Administration/Sector Member etc.	Corresponding field in Att. 1 to Annex 1 to Report ITU-R BT.2302 (for possible update)
20	What is the total number of operational or planned DTTB transmitters in the band 470-694 MHz? ⁸	<i>Number</i>	5561		No corresponding question
21	What is the total number of operational or planned DTTB transmitters in the band above 694 MHz? ⁷	<i>Number</i>	50		No corresponding question
22	What other services (including applications in these services) are in operation in the 470-694 MHz band in your country, and what is their status of allocation?	<i>Services names (PMSE, Radio-Astronomy, Aeronautical Radio Navigation service, etc.) Primary/Secondary/ Other</i>	PMSE / Secondary Radio- Astronomy / Primary		Other usages of the UHF band
23	What is the total amount of spectrum needed in the UHF range in your country for broadcasting service taking into account the need for quality of service and answers to Questions above (in particular Questions 16, 17, 18, 19)? ⁷	<i>Total Number of MHz required</i>	224 MHz		Required amount of spectrum in the UHF band in the future (MHz)

⁸ This refers to the transmitters for every multiplex on every transmitter site as well as redundant or reserve transmitters.

Question number	Field	Data Type	Example answer	Response from Administration/Sector Member etc.	Corresponding field in Att. 1 to Annex 1 to Report ITU-R BT.2302 (for possible update)
24	What is/are the frequency range(s) that you consider necessary to accommodate the needs of the broadcasting service within the band 470-960 MHz in your country? ⁹	<i>Frequency range(s) (xyz MHz - x'y'z' MHz)</i>	470-694 MHz		No corresponding question
25	Date of response to the questionnaire	<i>Date (Year/Month)</i>	2020/02		Date of arrival

Any additional comments relevant to the answers you have given above (optional)

⁹ Using any current or future broadcasting technology.