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## WORLD BROADCASTING UNIONS TECHNICAL COMMITTEE

### WBU-TC Positions on WRC-23 Agenda Items

The Technical Committee of the World Broadcasting Unions (WBU-TC) draws the attention of participants in the ITU Inter-Regional Workshop on WRC-23 Preparation to the positions on relevant agenda items, as shown in the Annexes.

The WBU-TC is the standing technical body of the World Broadcasting Unions and a sector member of the ITU, whose members are: Asia-Pacific Broadcasting Union (ABU), Arab States Broadcasting Union (ASBU), African Union of Broadcasting (AUB), Caribbean Broadcasting Union (CBU), European Broadcasting Union (EBU), International Association of Broadcasting (IAB) and North American Broadcasters Association (NABA).

#### **Annex 1: WBU-TC Position on WRC-23 Agenda Item 1.2**

To consider identification of the frequency bands 3 300-3 400 MHz, 3 600-3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz and 10.0-10.5 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution 245 (WRC-19).

#### **Background**

This agenda item seeks to identify further “mid band” spectrum for IMT. The candidate bands identified in Resolution 245 have different uses in different ITU Regions, and the agenda item has distinct provisos for each:

- 3 300-3 400 MHz and 3 600-3 800 MHz (Region 2);
- 3 300-3 400 MHz (Region 1 – agenda item limited to amending the existing footnote);
- 6 425-7 025 MHz (Region 1);
- 7 025-7 125 MHz (globally);
- 10.0-10.5 GHz (Region 2),

Broadcasters have examined these bands, and have so far identified the following uses:

- 3 600-3 800 MHz (Region 2) – C-Band satellite downlink channels. In parts of Region 2, these bands are no longer used for broadcasters’ distribution or are being withdrawn from such use. In the remaining cases, there is often no suitable alternative satellite spectrum available to replace any loss particularly in areas subject to high rainfall rates.

- 7 025-7 125 MHz – Electronic Newsgathering (ENG) use in various parts of the world (terrestrial applications of the mobile service) – Working Party 5A is also considering the band 5 925-7 125 MHz for RLAN use, and WBU-TC has made a contribution to the November 2021 meeting of WP5A urging protection of those ENG applications.

### **World Broadcasting Unions' Position**

The WBU-TC position is that broadcasters' use of the parts of the bands identified above should be protected.

### **Annex 2: WBU-TC Position on WRC-23 Agenda Item 1.3**

To consider primary allocation of the band 3600 – 3800 MHz to mobile service within Region 1 and take appropriate regulatory actions, in accordance with Resolution 246 (WRC-19)

#### **Background**

This agenda item seeks to identify further “mid band” spectrum for the mobile service, presumably for IMT.

The band 3 600 - 3 800 MHz in Region 1 was originally used for C-Band satellite downlink channels. However, in parts of Region 1, this band is no longer available for broadcasters' distribution or is being withdrawn from such use as they have been used by mobile services for IMT applications. There is no suitable alternative satellite spectrum available to replace any further loss of C-Band spectrum, particularly in areas subject to high rainfall rates.

### **World Broadcasting Unions' Position**

The WBU-TC position is that broadcasters' use of 3600 - 3800 MHz in the remaining parts of Region 1 should be protected.

### **Annex 3: WBU-TC Position on WRC-23 Agenda Item 1.4**

To consider, in accordance with Resolution 247 (WRC-19), the use of high-altitude platforms stations as IMT base stations (HIBS) in the mobile service in certain frequency bands below 2.7 GHz already identified for IMT, on a global or regional level.

#### **Background**

This agenda item is considering three bands for possible use by HIBS:

- 694-960 MHz;
- 1 710-1 885 MHz (1 710-1 815 MHz to be used for uplink only in Region 3); and
- 2 500-2 690 MHz (2 500-2 535 MHz to be used for uplink only in Region 3, except 2 655-2 690 MHz in Region 3)

Of these, we are aware of broadcaster use of parts of the band 694-960 MHz for DTTB as a primary service in parts of Regions 1, 2 and 3.

In that band, there is the possibility of interference to DTTB from IMT downlink over a wide area, due to the nature of the HIBS stations.

Working Party 6A has communicated technical characteristics for DTTB in this band to the responsible working party (WP5D), and WP5D has been urged to consider this case when conducting sharing studies.

WBU members should consider submitting sharing studies for the case of HIBS downlink interference to DTTB in the band 694-960 MHz to Working Party 5D.

### **World Broadcasting Unions' Position**

The WBU-TC position is that any HIBS system in 694-960 MHz must not cause interference to any existing or planned stations of the broadcasting service, bearing in mind that HIBS have the potential to cause interference over a very wide area.

### **Annex 4: WBU-TC Position on WRC-23 Agenda Item 1.5**

To review the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz in Region 1 and consider possible regulatory actions in the frequency band 470-694 MHz in Region 1 on the basis of the review in accordance with Resolution 235 (WRC-15).

The UHF band is widely used for broadcasting around the world and returns huge public and societal value, through allowing access to universally-available media services, enabling content production and by facilitating creative industries. Almost all countries use the UHF band for the free distribution of digital terrestrial TV (DTT) by both public service and private media companies. The broadcasting media continue to be the main protagonists in the production and dissemination of national and local content. The opportunistic use of unoccupied broadcast spectrum for PMSE audio systems, such as wireless/radio microphones by broadcasters, and by artistic, religious and other civic society organisations is also found in almost all countries.

The UHF band is often the only spectrum available for these DTT and PMSE uses.

The UHF broadcasting band has been subject to major changes over the past decades, beginning with the loss of the 800 MHz band in many countries, which was partially offset by the transition from analogue transmission. This was followed by clearance of the 700 MHz band in some countries, resulting in fewer television broadcast stations, with a reduction in services available. The future potential for DTT platforms has been reduced in all countries by this reduction in available UHF spectrum for broadcasting.

The WBU emphasizes the relevance of the free and open-service nature of broadcasting, which seeks to reach the entire population and especially the less-favoured social sectors. DTT's technical resilience is essential for national sovereignty and for reaching people in times of crisis. Broadcasters have played an integral role during the COVID-19 pandemic in keeping their communities safe and informed. DTT on UHF brings public value to society. Its economic, social and cultural benefits are intertwined with the allocation of spectrum for broadcasting. Broadcast TV informs, educates and entertains, while always providing vital public information and critical survival information in emergency situations. Further, as it is the only platform that offers free communications directly with citizens, it promotes social cohesion, inclusion and national identity. These functions are critically important in any society.

At the same time, the interleaved use of the spectrum for PMSE by broadcasters, and more widely across the creative industries, has been squeezed. The move toward digital techniques for these systems has allowed some improved efficiencies in spectrum use, but as demand for complex productions continues to increase, there is a real risk that the availability of spectrum for these audio PMSE applications will not meet demand.

Studies submitted to ITU-R Task Group 6/1 (group responsible for studies under this agenda item) as per Resolution 235 (WRC-15) have shown that:

- The large majority of Region 1 Administrations requires full access to the 470-694 MHz band for DTT.
- Co-channel sharing between DTT and IMT is very difficult requiring very large separation distances.

The studies were not “completed or approved by ITU-R” as required by Resolution 235 (WRC-15).

Considering a possible agenda item at either WRC-27 or WRC-31, the EBU notes that the pace of market development is such that DTT and PMSE will need to retain access to the sub-700 MHz band well beyond 2030 in most European countries. Therefore, the EBU is of the view that WRC-27 would be too early to make an informed decision, and that WRC-31 would be a more appropriate timeframe to review the technological and market developments in the UHF band.

The WBU maintains that broadcasters’ use of the UHF spectrum requires stability in the Radio Regulations in order to be delivered. Indeed, introducing changes at this time would likely jeopardise the investment required to maximise public value from the UHF spectrum. The EBU has published a [White Paper](#) setting out the rationale for the above position.

### **World Broadcasting Unions’ Position**

The WBU-TC therefore supports a position of No Change to the Radio Regulations under WRC-23 Agenda Item 1.5 for Region 1. For Regions 2 and 3, the WBU-TC position is that no further reduction to the UHF spectrum for broadcasting is acceptable.

### **Annex 5: WBU-TC Position on WRC-23 Agenda Item 1.12**

To conduct, and complete in time for WRC-23, studies for a possible new secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, taking into account the protection of incumbent services, including in adjacent bands, in accordance with Resolution 656 (Rev. WRC-19).

### **World Broadcasting Unions’ Position**

The WBU-TC points out that the Broadcasting Service is allocated, on a primary basis, spectrum at 54 MHz, which is above the proposed frequency band.

The World Broadcasting Union contends that no new secondary allocation at or around 45 MHz shall cause any in-band or out-of-band interference to existing or planned Broadcasting Services.

## **Annex 6: WBU-TC Position on WRC-23 Agenda Item 8**

To consider and take appropriate action on requests from Administrations to delete their country footnotes to have their country name deleted from footnotes, if no longer required, taking into account Resolution 26 (Rev. WRC-19).

### **World Broadcasting Unions' Position**

The WBU-TC urges all Administrations to review all of their existing footnotes with the specific goal of eliminating all those which are either no longer relevant or no longer required.

The WBU opposes any Administration adding themselves to existing footnotes or adding new footnotes, as such actions are not within the scope of the WRC-23 Agenda.

## **Annex 7: WBU-TC Position on WRC-23 Agenda Item 9.1c**

To study the use of International Mobile Telecommunication system for fixed wireless broadband in the frequency bands allocated to the fixed services on primary basis, in accordance with Resolution 175 (WRC-19).

### **World Broadcasting Unions' Position**

The WBU-TC notes that topics under Agenda Item 9.1 do not have the same status as full agenda items and that (as detailed in Annex 4 of Administrative Circular CA/251, the Report of CPM-23) Working Parties 5A and 5C have been invited to simply prepare a short summary of the results of the studies on topic "c" for the CPM Report.

This topic does not address any particular frequency band. The WBU-TC notes that in many bands allocated to the fixed services on a primary basis, there are also primary allocations to other services used by broadcasters for many different applications including terrestrial broadcasting, satellite Direct-To-Home reception, contribution and distribution to cable head-ends. Studies are necessary to protect those services with primary allocations in the frequency bands which might be considered in any studies to be done, as well as in adjacent frequency bands, taking into account the planned development of the affected services.

The WBU-TC believes that use of IMT for fixed wireless broadband in bands allocated to the fixed service can be addressed at the Study Group and Working Party level and through any necessary revision of ITU-R Recommendations or Reports as per the results of studies performed. The WBU-TC believes that studies under Agenda Item 9.1 should not result in any regulatory change and that there should be no change to the Radio Regulations.