



**IAFI**

**WORKING DOCUMENT ON SHARING AND COMPATIBILITY STUDIES  
OF IMT SYSTEMS IN THE FREQUENCY BANDS 6425-7 025 MHz AND 7  
025-7 125 MHz IN ACCORDANCE WITH RESOLUTION 245 (WRC-19)**

**1. Introduction**

During the interim spectrum group Meeting of WP 5D in April 22, the draft working document on sharing and compatibility studies of IMT systems in the frequency band 6425-7 125 MHz was further developed.

**2. Discussion**

It is noted that in the working document on sharing and compatibility studies of IMT systems, two separate frequency bands 6 425-7 025 MHz and 7025-7125 MHz have been merged together, which is quite confusing and illogical, as the sharing and compatibility scenarios for the two bands are entirely different. While the lower frequency band 6425-7025 covers a planned FSS band, the band 7025-7125 does not cover any part of the planned FSS band. Further, it may be recalled that these two bands viz. 6 425-7 025 MHz and 7025-7125 MHz are totally separate parts of the agenda and therefore these two bands need to be dealt separately, both in the CPM text as well as in the sharing and compatibility studies.

**3. Proposal**

Accordingly, it is proposed that proposed working document on sharing and compatibility studies of IMT systems dealing with these bands should be completely independent of each other. Revised draft of the main part of the document is enclosed for consideration of WP5D, based on the text already agreed in the previous meeting.

Enclosed:

1)WORKING DOCUMENT-1 ON SHARING AND COMPATIBILITY STUDIES OF IMT SYSTEMS IN THE FREQUENCY BAND 6 425-7 025 MHz

2)WORKING DOCUMENT-2 ON SHARING AND COMPATIBILITY STUDIES OF IMT SYSTEMS IN THE FREQUENCY BAND 7 025-7 125 MHz





WORKING DOCUMENT -1 ON SHARING AND COMPATIBILITY STUDIES  
 OF IMT SYSTEMS IN THE FREQUENCY BAND 6 425-7 025 MHz

MAIN PART

Adhoc “WRC-23 AI 1.2 Sharing 6 GHz”

*[Editor's note: Please cross check table and figure numbering to refute possible duplications.]*

**1 Introduction**

**2 Allocation information in 6 425-7 125-7 025 MHz and in adjacent frequency bands, as appropriate**

*[Editor’s note: Resolution 245 (WRC-19) calls for studies with respect to services in adjacent band, as appropriate, and these need to be considered on a case-by-case basis.]*

**5 925-7 145 MHz**

Allocation to services		
Region 1	Region 2	Region 3
<b>6 700-7 075</b>	FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 MOBILE 5.458 5.458A 5.458B	
<b>7 075-7 145</b>	FIXED MOBILE 5.458 5.459	
<b>7 145-7 190</b>	FIXED MOBILE SPACE RESEARCH (deep space) (Earth-to-space) 5.458 5.459	

For allocation details and footnotes text, please refer to the Radio Regulations, Edition of 2020.

**3 Technical characteristics**

### 3.1 Technical and operational characteristics of services and systems operating in 6 425-7 1257 025 MHz and in adjacent frequency bands, as appropriate

*[Editor's note: This section provides the sources of technical and operational characteristics of IMT from WP 5D and other services from other expert groups.]*

WP 5D #	Source	Services/Application/Models
<a href="#">245, 722</a>	WPs 3K and 3M	Propagation models
<a href="#">734, 897</a>	WP 4A	Fixed Satellite Service (FSS) Broadcasting Satellite Service (BSS)
<a href="#">377</a>	WP 4C	Mobile Satellite Service
<a href="#">227, 398</a>	WP 5B	Aeronautical Mobile (AMS) Radiodetermination (RDS) Radiolocation (RLS)
<a href="#">233, 583</a>	WP 5C	Fixed (FS)
<a href="#">5D/716 Annex 4.4</a>	WP 5D	IMT parameters (MS)
<a href="#">150, 559</a>	WP 7B	Space Operation (SOS) Space Research (SRS) Earth Exploration-Satellite (EESS) Inter-Satellite (ISS)
<a href="#">151, 353, 573</a>	WP 7C	Earth Exploration-Satellite (passive) (EESS (passive)) Space Research (passive) (SRS (passive))
<a href="#">561</a>	WP 7D	Radio astronomy

### 3.2 Propagation models for sharing and compatibility studies for IMT operating in 6 425-7 1257 025 MHz

*[Editor's note: This section provides the propagation models for sharing and compatibility studies from SG 3.]*

## 4 Sharing and compatibility studies

*[Editor's note: This section includes the sharing and compatibility studies for IMT operating in 6 425-7 1257 025 MHz.]*

The sharing and compatibility studies are contained in the Attachment to this Annex.

## 5 Abbreviations and acronyms

- Attachment 1:** Sharing and compatibility of the SRS operating in the frequency band 7 145-7 190 MHz and IMT operating in the frequency band 6 425-7 0+25 MHz
- Attachment 2:** Sharing and compatibility of the SOS operating in the frequency band 7 100-7 155 and IMT operating in the frequency band 6 425-7 0+25 MHz
- Attachment 3:** Sharing and compatibility of the fixed service and IMT operating in the frequency band 6 425-7 0+25 MHz
- Attachment 4:** Sharing and compatibility of the Fixed Satellite Service (FSS) (Earth-to-space) operating in the frequency band 6 425-7 025 MHz and IMT operating in the frequency band 6 425-7 0+25 MHz
- Attachment 5:** Sharing and compatibility of the Fixed Satellite Service (FSS) (space-to-Earth) operating in the frequency band 6 700-7 075 MHz and IMT operating in the frequency band 6 425-7 0+25 MHz

WORKING DOCUMENT-2 ON SHARING AND COMPATIBILITY STUDIES  
OF IMT SYSTEMS IN THE FREQUENCY BAND [6-4257025](#)-7 125 MHz

MAIN PART

*[Editor's note: Please cross check table and figure numbering to refute possible duplications.]*

**1 Introduction**

**2 Allocation information in [6-4257025](#)-7 125 MHz and in adjacent frequency bands, as appropriate**

*[Editor's note: Resolution 245 (WRC-19) calls for studies with respect to services in adjacent band, as appropriate, and these need to be considered on a case-by-case basis.]*

[5-9256700](#) -7 [19045](#) MHz

Allocation to services		
Region 1	Region 2	Region 3
<b>6 700-7 075</b>	FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) MOBILE 5.458 5.458A 5.458B	5.441
<b>7 075-7 145</b>	FIXED MOBILE 5.458 5.459	
<b>7 145-7 190</b>	FIXED MOBILE SPACE RESEARCH (deep space) (Earth-to-space) 5.458 5.459	

For allocation details and footnotes text, please refer to the Radio Regulations, Edition of 2020.

**3 Technical characteristics**

**3.1 Technical and operational characteristics of services and systems operating in [6-425-7 025](#) - 7 125 MHz and in adjacent frequency bands, as appropriate**

*[Editor's note: This section provides the sources of technical and operational characteristics of IMT from WP 5D and other services from other expert groups.]*

WP 5D #	Source	Services/Application/Models
<a href="#">245</a> , <a href="#">722</a>	WPs 3K and 3M	Propagation models

<a href="#">734, 897</a>	WP 4A	Fixed Satellite Service (FSS) Broadcasting Satellite Service (BSS)
<a href="#">377</a>	WP 4C	Mobile Satellite Service
<a href="#">227, 398</a>	WP 5B	Aeronautical Mobile (AMS) Radiodetermination (RDS) Radiolocation (RLS)
<a href="#">233, 583</a>	WP 5C	Fixed (FS)
<a href="#">5D/716 Annex 4.4</a>	WP 5D	IMT parameters (MS)
<a href="#">150, 559</a>	WP 7B	Space Operation (SOS) Space Research (SRS) Earth Exploration-Satellite (EESS) Inter-Satellite (ISS)
<a href="#">151, 353, 573</a>	WP 7C	Earth Exploration-Satellite (passive) (EESS (passive)) Space Research (passive) (SRS (passive))
<a href="#">561</a>	WP 7D	Radio astronomy

### 3.2 Propagation models for sharing and compatibility studies for IMT operating in [6-4257 025 -7 125 MHz](#)

*[Editor's note: This section provides the propagation models for sharing and compatibility studies from SG 3.]*

## 4 Sharing and compatibility studies

*[Editor's note: This section includes the sharing and compatibility studies for IMT operating in [6-4257025-7 125 MHz](#).]*

The sharing and compatibility studies are contained in the Attachment to this Annex.

## 5 Abbreviations and acronyms

- Attachment 1:** Sharing and compatibility of the SRS operating in the frequency band 7 145-7 190 MHz and IMT operating in the frequency band [6-4257 025 -7 125 MHz](#)
- Attachment 2:** Sharing and compatibility of the SOS operating in the frequency band 7 100-7 155 and IMT operating in the frequency band [6-4257 025-7 125 MHz](#)
- Attachment 3:** Sharing and compatibility of the fixed service and IMT operating in the frequency band [6-4257 025 -7 125 MHz](#)
- Attachment 4:** Sharing and compatibility of the Fixed Satellite Service (FSS) (Earth-to-space) operating in the frequency band [6700-425-7 025 MHz](#) and IMT operating in the frequency band [6-4257 025 -7 125 MHz](#)
- Attachment 5:** Sharing and compatibility of the Fixed Satellite Service (FSS) (space-to-Earth) operating in the frequency band 6 700-7 075 MHz and IMT operating in the frequency band [6-4257 025 -7 125 MHz](#)