



## UGANDA TABLE OF FREQUENCY ALLOCATIONS FOR 9KHz - 100 GHz BAND RANGE

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Second Edition 2008

### PART I

#### 1. INTRODUCTION

- 1.1 This publication provides a breakdown of Uganda Table of current Frequency Allocations between 9 KHz and 100 GHz. The table divides the radio spectrum plan into a number of frequency bands and specifies the general purpose for which the bands may be used.
- 1.2 This table, which was developed based on the relevant parts of Radio Regulations associated with International Convention and formulated on the basis of ITU frequency allocations for Region 1, took into account national frequency requirements and the current frequency assignments in operation in Uganda and requirements although the table is not exhaustive in details but it provides for alteration in frequency allocations in future.
- 1.3 A National Table of frequency allocations is a basic instrument to assist in spectrum management process. It provides the general plan for spectrum use and the basic structure to ensure systematic allocation and assist in the radio spectrum and prevention of radio interference between radio services. It is through the table that users are able to know where to operate and manufacturers are guided where in the radio spectrum range they are able to design and build the equipment.

#### 1.4 LIST OF ABBREVIATIONS.

UGA:	Uganda
UCC:	Uganda Communications Commission
RR:	Radio Regulations.
ITU:	International Telecommunications Union
WRC:	World Radiocommunications Conference.
IMO:	International Maritime Organisation
Rev.	Revised
GMDSS:	Global Maritime Distress Services

ITU-R:	International Telecommunications Union Radiocommunications Bureau
GSM:	Global System for Mobile Communications
IMT-200:	International Mobile Telecommunications
GMPCS:	Global Mobile Personal Communications Services
STL:	Studio Transmitter Link
MMDS:	Multi-Channel Multipoint Distribution Services
SART:	Search and Rescue Transponder
HF:	High Frequency
VHF:	Very High Frequency
UHF:	Ultra High Frequency
E.R.P:	Effective Radiated Power
E.I.R.P:	Effective Isotropic Radiated Power
Db:	Decibels.
WRC:	World Radiocommunications Conference

## **2. REFERENCE TO RADIO REGULATIONS**

- 2.1 The term *Radio Regulations* means the publications of accumulated product of agreements reached in World Radiocommunications Conferences of the International Telecommunications Union (ITU). Future conferences may modify the ITU Table of Frequency allocation to radio services and such modifications may prompt changes to Uganda national table of allocations.
- 2.2 It is expected that amendments made in the table will be published from time to time, depending on the volume and importance of the modifications. This is the second (Edition 2008) edition of Uganda Table of Frequency Allocations prepared by the Uganda Communications Commission (UCC) based on the first edition (Edition 2003) that was made in 2003.
- 2.3 The table reflects the latest decisions made at the World Radiocommunication Conference of 2007.
- 2.4 The Articles and other Radio Regulations provisions that are not included in this document can be found in the publications of the ITU Radio Regulations which are usually updated every after World Radiocommunication Conference, in this case Radio Regulations of edition 2008.
- 2.5 Radio communication service users are advised to consult with UCC to ensure the accuracy of this document so that it reflects the radio spectrum requirements for the services they wish to provide to the public.
- 2.6 This table of frequency allocation is the fundamental guide to all organisations, companies and individuals that are interested in the use of the radio frequency

spectrum. It forms a basis for frequency planning and allocations for the nation in the management of radio spectrum in Uganda.

### **3. STRUCTURE OF THE UGANDA TABLE OF FREQUENCY ALLOCATIONS**

- 3.1 The Table, which is divided into three columns indicates the radio frequency spectrum from 9 KHz to 100 GHz, where there is utilisation of the frequencies with the country.
- 3.2 The radio frequency allocations to services as shown in **Article 5** of the ITU Radio Regulations for Region 1 (in which Uganda is located) is reproduced in the first column of the table. The frequency allocations to services in Uganda are shown in the second column. The first two columns contain the frequency bands and the type of services that can be offered in those bands.
- 3.3 Radio services with Primary Status are listed in upper case whereas those in lower case are denoted secondary status as defined in Part III section 5.1 of this document. The categorisation of these services is in accordance with the convention currently used in the ITU Radio Regulations.
- 3.4 In the first two columns, the numbers **5.XXX** and **UGA.YYY** are footnotes, which describes the conditions under which the frequencies in that band can be used. The 5.XXX are relevant ITU footnotes whereas the UGA.YYY are footnotes relevant to Uganda which are intended to cover special situations applicable in Uganda (UGA). These footnotes are contained in the National Tables of Frequency allocations in PART II, which also includes the frequency allocations Region 1 to which Uganda falls in the ITU table of Frequency allocations.
- 3.5 The footnote(s) that appear at the bottom of a particular block of the tables below the listed services apply to all services to which the indicated band is allocated.
- 3.6 The footnote(s) that appear to the right and immediately below the name of a particular service apply only to that service.
- 3.7 For any footnotes, which are referred to and not included in this document, please make reference to the ITU Radio Regulations.
- 3.8 In the first two columns, in the case where the name of the service is followed by an addition in parenthesis, that service allocation is restricted to the type of operation that is indicated. For Example, "Fixed-Satellite (Earth-to Space)" limits transmitting stations in the fixed-satellite service to operate in the Earth to Space direction.

3.9 The name of a service may be followed by additional remarks. For example, MOBILE except aeronautical mobile limits the allocation to the land mobile and maritime mobile service and excludes the aeronautical mobile service.

**PART II**

**UGANDA TABLE OF FREQUENCY ALLOCATIONS**

<b>ITU Region1:Table of Allocations</b>	<b>UGANDA TABLE OF ALLOCATIONS</b>
<b>9 – 117.975 KHz</b>	
<b>Below 9</b> Not Allocated 5.53 5.54	<b>Below 9</b> Not Allocated
<b>9-14</b> RADIONAVIGATION	<b>9-14</b> RADIONAVIGATION
<b>14-19.95</b> FIXED MARITIME MOBILE 5.55 5.56 5.57	<b>14-19.95</b> FIXED MARITIME MOBILE
<b>19.95-20.05</b> STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	<b>19.95-20.05</b> STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)
<b>20.05-70</b> FIXED MARITIME MOBILE 5.57 5.56 5.58	<b>20.05-70</b> FIXED MARITIME MOBILE
<b>70-72</b> RADIONAVIGATION 5.60	<b>70-72</b> RADIONAVIGATION
<b>72-84</b> FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.60 5.56	<b>72-84</b> FIXED MARITIME MOBILE RADIONAVIGATION
<b>84-86</b> RADIONAVIGATION 5.60	<b>84-86</b> RADIONAVIGATION
<b>86-90</b> FIXED MARITIME MOBILE 5.57 RADIONAVIGATION 5.56	<b>86-90</b> FIXED MARITIME MOBILE RADIONAVIGATION
<b>90-108</b> RADIONAVIGATION 5.62 Fixed 5.64	<b>90-108</b> RADIONAVIGATION Fixed
<b>108 - 117.975</b> AERONAUTICAL RADIONAVIGATION 5.197 5.197A	<b>108 - 117.975</b> AERONAUTICAL RADIONAVIGATION

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>117.975 – 130 - 156.5625 KHz</b>	
<b>117.975 - 130</b> AERONAUTICAL MOBILE ®  5.111 5.200 5.201 5.202	<b>117.975 - 130</b> AERONAUTICAL MOBILE ®
<b>130-135.7</b> FIXED MARITIME MOBILE  5.64 5.67	<b>130-135.7</b> FIXED MARITIME MOBILE
<b>135.7-137.8</b>  FIXED MARITIME MOBILE Amateur 5.67A  5.64 5.67 5.67B	<b>135.7-137.8</b>  FIXED MARITIME MOBILE Amateur
<b>137.8-148.5</b>  FIXED MARITIME MOBILE  5.64 5.67	<b>137.8-148.5</b>  FIXED MARITIME MOBILE
<b>148.5-150.05</b> BROADCASTING	<b>148.5-105.05</b> FIXED MARITIME MOBILE
<b>150.05 – 153</b> FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149	<b>150.05 – 153</b> FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY
<b>153 - 154</b> FIXED MOBILE except aeronautical mobile ® Meteorological Aids	<b>153 - 154</b> FIXED MOBILE except aeronautical mobile ® Meteorological Aids
<b>154 – 156.4875</b> FIXED MOBILE except aeronautical mobile ® 5.226	<b>154 – 156.4875</b> FIXED MOBILE except aeronautical mobile ®
<b>156.4875 – 156.5625</b> MARITIME MOBILE (distress and calling via DSC) 5.111 5.226 5.227	<b>156.4875 – 156.5625</b> MARITIME MOBILE (distress and calling via DSC)

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>156.5625- 415 KHz</b>	
<b>156.5625 – 156.7625</b> FIXED MOBILE except aeronautical mobile ® 5.226	<b>156.5625 – 156.7625</b> FIXED MOBILE except aeronautical mobile ®
<b>156.7625 – 156.8375</b> MARITIME MOBILE (distress and calling via DSC) 5.111 5.226	<b>156.7625 – 156.8375</b> MARITIME MOBILE (distress and calling via DSC)
<b>156.8375 – 174</b> FIXED MOBILE except aeronautical mobile ® 5.226 5.227A 5.229	<b>156.8375 – 174</b> FIXED MOBILE except aeronautical mobile ®
<b>174-225</b> BROADCASTING	<b>174-225</b> BROADCASTING
<b>255-283.5</b> BROADCASTING AERONAUTICAL RADIONAVIGATION 5.70 5.71	<b>255-283.5</b> AERONAUTICAL RADIONAVIGATION Aeronautical Mobile UGA 001
<b>283.5-315</b> AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73 5.72 5.74	<b>283.5-315</b> AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons)
<b>315-325</b> AERONAUTICAL RADIONAVIGATION Maritime radionavigation (radiobeacons) 5.73 5.72 5.75	<b>315-325</b> AERONAUTICAL RADIONAVIGATION Maritime radionavigation (radiobeacons) UGA 002
<b>325-405</b> AERONAUTICAL RADIONAVIGATION 5.72	<b>325-405</b> AERONAUTICAL RADIONAVIGATION Aeronautical Mobile UGA 001
<b>405-415</b> RADIONAVIGATION 5.76 5.72	<b>405-415</b> RADIONAVIGATION

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>415 – 1850 KHz</b>	
<b>415-435</b> MARITIME MOBILE 5.79 AERONAUTICAL RADIONAVIGATION 5.72	<b>415-435</b> MARITIME MOBILE AERONAUTICAL RADIONAVIGATION UGA 002
<b>435-495</b> MARITIME MOBILE 5.79 5.79A Aeronautical radionavigation 5.72 5.82	<b>435-495</b> MARITIME MOBILE Aeronautical radionavigation
<b>495 - 505</b> MOBILE 5.82A 5.82B	<b>495 - 505</b> MOBILE
<b>505 – 526.5</b> MARITIME MOBILE 5.79 5.79A 5.84 AERONAUTICAL RADIONAVIGATION 5.72	<b>505 – 526.5</b> MARITIME MOBILE AERONAUTICAL RADIONAVIGATION
<b>526.5-1606.5</b> BROADCASTING  5.87 5.87A	<b>526.5-1606.5</b> MOBILE UGA 003
<b>1 606.5-1 625</b> FIXED MARITIME MOBILE 5.90 LAND MOBILE 5.92	<b>1 606.5-1 625</b> FIXED MARITIME MOBILE LAND MOBILE
<b>1 625-1 635</b> RADIOLOCATION 5.93	<b>1 625-1 635</b> RADIOLOCATION
<b>1 635-1 800</b> FIXED MARITIME MOBILE LAND MOBILE 5.92 5.96	<b>1 635-1 800</b> FIXED MARITIME MOBILE LAND MOBILE
<b>1800 – 1810</b> RADIOLOCATION 5.93	<b>1800 – 1810</b> RADIOLOCATION
<b>1810 – 1850</b> AMATEUR 5.98 5.99 5.100 5.101	<b>1810 – 1850</b> AMATEUR



ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>1850 - 2 498 KHz</b>	
<b>1 850-2 000</b> FIXED MOBILE except aeronautical mobile 5.92 5.96 5.103	<b>1850 -2 000</b> FIXED MOBILE except aeronautical mobile
<b>2 000-2 025</b> FIXED MOBILE except aeronautical mobile (R) 5.92 5.103	<b>2 000-2 025</b> FIXED MOBILE except aeronautical mobile (R)
<b>2 025-2 045</b> FIXED MOBILE except aeronautical mobile (R) Meteorological aids 5.104 5.92 5.103	<b>2 025-2 045</b> FIXED MOBILE except aeronautical mobile (R) Meteorological aids
<b>2 045-2 160</b> FIXED MARITIME MOBILE LAND MOBILE 5.92	<b>2 045-2 160</b> FIXED MARITIME MOBILE LAND MOBILE
<b>2 160-2 170</b> RADIOLOCATION 5.93 5.107	<b>2 160-2 170</b> RADIOLOCATION
<b>2 170-2 173.5</b> MARITIME MOBILE	<b>2 170-2 173.5</b> MARITIME MOBILE
<b>2 173.5-2 190.5</b> MOBILE (distress and calling) 5.108 5.109 5.110 5.111	<b>2 173.5-2 190.5</b> MOBILE (distress and calling)
<b>2 190.5-2 194</b> MARITIME MOBILE	<b>2 190.5-2 194</b> MARITIME MOBILE
<b>2 194-2 300</b> FIXED MOBILE except aeronautical mobile (R) 5.92 5.103 5.112	<b>2 194-2 300</b> FIXED MOBILE except aeronautical mobile (R)
<b>2 300-2 498</b> FIXED MOBILE except aeronautical mobile ® BROADCASTING 5.113 5.103	<b>2 300-2 498</b> FIXED MOBILE except aeronautical mobile ® BROADCASTING

<b>ITU Region1:Table of Allocations</b>	<b>UGANDA TABLE OF ALLOCATIONS</b>
<b>2 498 - 3 400 KHz</b>	
<b>2498 – 2501</b> STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)	<b>2498 – 2501</b> STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)
<b>2501 - 2502</b> STANDARD FREQUENCY AND TIME SIGNAL Space Research	<b>2501 - 2502</b> STANDARD FREQUENCY AND TIME SIGNAL <b>Space Research</b>
<b>2 502-2 625</b> FIXED MOBILE except aeronautical mobile ® 5.92 5.103 5.114	<b>2 502-2 625</b> FIXED MOBILE except aeronautical mobile ®
<b>2625 – 2650</b> MARITIME MOBILE MARITIME RADIONAVIGATION 5.92	<b>2625 – 2650</b> MARITIME MOBILE MARITIME RADIONAVIGATION
<b>2 650-2 850</b> FIXED MOBILE except aeronautical mobile ® 5.92 5.103	<b>2 650-2 850</b> FIXED MOBILE except aeronautical mobile ®
<b>2 850-3 025</b> AERONAUTICAL MOBILE (R) 5.111 5.115	<b>2 850-3 025</b> AERONAUTICAL MOBILE (R)
<b>3 025-3 155</b> AERONAUTICAL MOBILE (OR)	<b>3 025-3 155</b> AERONAUTICAL MOBILE (OR)
<b>3 155-3 200</b> FIXED MOBILE except aeronautical mobile (R) 5.116 5.117	<b>3 155-3 200</b> FIXED MOBILE except aeronautical mobile (R)
<b>3 200-3 230</b> FIXED MOBILE except aeronautical mobile (R) BROADCASTING 5.113 5.116	<b>3 200-3 230</b> FIXED MOBILE except aeronautical mobile (R) BROADCASTING
<b>3 230-3 400</b> FIXED MOBILE except aeronautical mobile BROADCASTING 5.113 5.1165.118 5.117	<b>3 230-3 400</b> FIXED MOBILE except aeronautical mobile BROADCASTING

<b>ITU Region1:Table of Allocations</b>	<b>UGANDA TABLE OF ALLOCATIONS</b>
<b>3 400 - 4995 KHz</b>	
<b>3400-3 500</b> AERONAUTICAL MOBILE ®	<b>3400-3 500</b> AERONAUTICAL MOBILE ®
<b>3500 - 3 800</b> AMATEUR FIXED MOBILE except aeronautical mobile 5.92	<b>3500 - 3 800</b> AMATEUR FIXED MOBILE except aeronautical mobile
<b>3800 – 3900</b> FIXED AERONAUTICAL MOBILE ® LAND MOBILE	<b>3800 – 3900</b> FIXED AERONAUTICAL MOBILE ® LAND MOBILE
<b>3900 – 3950</b> AERONAUTICAL MOBILE ® 5.123	<b>3900 – 3950</b> AERONAUTICAL MOBILE ®
<b>3950 – 4000</b> FIXED BROADCASTING	<b>3950 – 4000</b> FIXED BROADCASTING
<b>4000 – 4063</b> FIXED MARITIME MOBILE 5.127 5.126	<b>4000 – 4063</b> FIXED MARITIME MOBILE
<b>4063 – 4438</b> MARITIME MOBILE 5.79A 5.109 5.110 5.130 5.131 5.132 5.128 5.129	<b>4063 – 4438</b> MARITIME MOBILE
<b>4 438-4 650</b> FIXED MOBILE except aeronautical mobile ®	<b>4 438-4 650</b> FIXED MOBILE except aeronautical mobile ®
<b>4 650-4 700</b> AERONAUTICAL MOBILE ®	<b>4 650-4 700</b> AERONAUTICAL MOBILE ®
<b>4 700-4 750</b> AERONAUTICAL MOBILE (OR)	<b>4 700-4 750</b> AERONAUTICAL MOBILE (OR)
<b>4 750-4 850</b> FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE BROADCASTING 5.113	<b>4 750-4 850</b> FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE BROADCASTING
<b>4 850-4995</b> FIXED LAND MOBILE BROADCASTING 5.113	<b>4 850-4995</b> FIXED LAND MOBILE BROADCASTING

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>4995 6525KHz</b>	
<b>4995 – 5003</b> STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)	<b>4995 – 5003</b> STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)
<b>5 003-5 005</b> STANDARD FREQUENCY AND TIME SIGNAL Space research	<b>5 003-5 005</b> STANDARD FREQUENCY AND TIME SIGNAL Space research
<b>5 005-5 060</b> FIXED BROADCASTING 5.113	<b>5 005-5 060</b> FIXED BROADCASTING
<b>5 060-5 250</b> FIXED MOBILE except aeronautical mobile 5.133	<b>5 060-5 250</b> FIXED MOBILE except aeronautical mobile
<b>5 250-5 450</b> FIXED MOBILE except aeronautical mobile	<b>5 250-5 450</b> FIXED MOBILE except aeronautical mobile UGA 004
<b>5 450-5 480</b> FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE	<b>5 450-5 480</b> FIXED AERONAUTICAL MOBILE (OR) LAND MOBILE UGA 004
<b>5 480-5 680</b> AERONAUTICAL MOBILE (R) 5.111, 5.115	<b>5 480-5 680</b> AERONAUTICAL MOBILE (R)
<b>5 680-5 730</b> AERONAUTICAL MOBILE (OR) 5.111, 5.115	<b>5 680-5 730</b> AERONAUTICAL MOBILE (OR)
<b>5 730-5 900</b> FIXED LAND MOBILE	<b>5 730-5 900</b> FIXED LAND MOBILE UGA 006
<b>5 900-5 950</b> BROADCASTING 5.134 5.136	<b>5 900-5 950</b> BROADCASTING
<b>5950-6200</b> BROADCASTING	<b>5950-6200</b> BROADCASTING
<b>6200 – 6525</b> MARITIME MOBILE 5.109 5.110 5.130 5.132 5.137	<b>6200 – 6525</b> MARITIME MOBILE

<b>ITU Region1:Table of Allocations</b>	<b>UGANDA TABLE OF ALLOCATIONS</b>
<b>6525 - -9500 KHz</b>	
<b>6525 – 6685</b> AERONAUTICAL MOBILE ®	<b>6525 – 6685</b> AERONAUTICAL MOBILE ®
<b>6685 – 6765</b> AERONAUTICAL MOBILE (OR)	<b>6685 – 6765</b> AERONAUTICAL MOBILE (OR)
<b>6 765-7 000</b> FIXED Land mobile 5.139 5.138	<b>6 765-7 000</b> FIXED Land mobile UGA 004
<b>7 000-7 100</b> AMATEUR AMATEUR-SATELLITE 5.140 5.141	<b>7 000-7 100</b> AMATEUR AMATEUR-SATELLITE
<b>7 100-7 300</b> BROADCASTING	<b>7 100-7 300</b> BROADCASTING UGA 005
<b>7 300-7 350</b> BROADCASTING 5.134 5.143	<b>7 300-7 350</b> BROADCASTING
<b>7 350-8 100</b> FIXED Land mobile 5.144	<b>7 350-8 100</b> FIXED Land mobile UGA 004
<b>8 100-8 195</b> FIXED MARITIME MOBILE	<b>8 100-8 195</b> FIXED MARITIME MOBILE UGA 004
<b>8 195-8 815</b> MARITIME MOBILE 5.109 5.110 5.132 5.145 5.111	<b>8 195-8 815</b> MARITIME MOBILE UGA 006
<b>8 815-8 965</b> AERONAUTICAL MOBILE (R)	<b>8 815-8 965</b> AERONAUTICAL MOBILE (R) UGA 007
<b>8 965-9040</b> AERONAUTICAL MOBILE (OR)	<b>8 965-9040</b> AERONAUTICAL MOBILE (OR) UGA 007
<b>9 040-9 400</b> FIXED	<b>9 040-9 400</b> FIXED
<b>9400-9500</b> BROADCASTING 5.134 5.146	<b>9400-9500</b> BROADCASTING

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>9500 - 12 100 KHz</b>	
<b>9500-9900</b> BROADCASTING 5.147	<b>9500-9900</b> BROADCASTING
<b>9900-9995</b> FIXED	<b>9900-9995</b> FIXED
<b>9995-10 003</b> STANDARD FREQUENCY AND TIME SIGNAL (10 000 KHz 5.111	<b>9995-10 003</b> STANDARD FREQUENCY AND TIME SIGNAL (10 000 KHz)
<b>10 003-10 005</b> STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111	<b>10 003-10 005</b> STANDARD FREQUENCY AND TIME SIGNAL Space research
<b>10 005-10 100</b> AERONAUTICAL MOBILE (R) 5.111	<b>10 005-10 100</b> AERONAUTICAL MOBILE (R)
<b>10 100-10 150</b> FIXED Amateur	<b>10 100-10 150</b> FIXED Amateur UGA 004
<b>10 150-11 175</b> FIXED Mobile except aeronautical Mobile (R)	<b>10 150-11 175</b> FIXED Mobile except aeronautical Mobile (R) UGA 004
<b>11 175-11 275</b> AERONAUTICAL MOBILE (OR)	<b>11 175-11 275</b> AERONAUTICAL MOBILE (OR)
<b>11 275-11 400</b> AERONAUTICAL MOBILE (R)	<b>11 275-11 400</b> AERONAUTICAL MOBILE (R)
<b>11 400-11 600</b> FIXED	<b>11 400-11 600</b> FIXED
<b>11 600-11 650</b> BROADCASTING 5.134 5.146	<b>11 600-11 650</b> BROADCASTING 5.134
<b>11 650-12 050</b> BROADCASTING 5.147	<b>11 650-12 050</b> BROADCASTING
<b>12 050-12 100</b> BROADCASTING 5.134 5.146	<b>12 050-12 100</b> BROADCASTING 5.134

<b>ITU Region1:Table of Allocations</b>	<b>UGANDA TABLE OF ALLOCATIONS</b>
<b>12 100 - 15 005 KHz</b>	
<b>12 100-12 230</b> FIXED	<b>12 100-12 230</b> FIXED
<b>12 230-13 200</b> MARITIME MOBILE 5.109 5.110 5.132 5.145	<b>12 230-13 200</b> MARITIME MOBILE
<b>13 200-13 260</b> AERONAUTICAL MOBILE (OR)	<b>13 200-13 260</b> AERONAUTICAL MOBILE (OR)
<b>13 260-13 360</b> AERONAUTICAL MOBILE (R)	<b>13 260-13 360</b> AERONAUTICAL MOBILE (R)
<b>13 360-13 410</b> FIXED RADIO ASTRONOMY 5.149	<b>13 360-13 410</b> FIXED RADIO ASTRONOMY
<b>13 410-13 570</b> FIXED Mobile except aeronautical mobile (R) 5.150	<b>13 410-13 570</b> FIXED Mobile except aeronautical Mobile (R)
<b>13 570-13 600</b> BROADCASTING 5.134 5.151	<b>13 570-13 600</b> BROADCASTING
<b>13 600-13 800</b> BROADCASTING	<b>13 600-13 800</b> BROADCASTING
<b>13 800-13 870</b> BROADCASTING 5.134 5.151	<b>13 800-13 870</b> BROADCASTING
<b>13 870-14 000</b> FIXED Mobile except aeronautical mobile (R)	<b>13 870-14 000</b> FIXED Mobile except aeronautical mobile (R)
<b>14 000-14 250</b> AMATEUR AMATEUR-SATELLITE	<b>14 000-14 250</b> AMATEUR AMATEUR-SATELLITE
<b>14 250-14 350</b> AMATEUR 5.152	<b>14 250-14 350</b> AMATEUR
<b>14 350-14 990</b> FIXED Mobile except aeronautical mobile (R)	<b>14 350-14 990</b> FIXED Mobile except aeronautical mobile (R)
<b>14 990-15 005</b> STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz) 5.111	<b>14 990-15 005</b> STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz)

<b>ITU Region1:Table of Allocations</b>	<b>UGANDA TABLE OF ALLOCATIONS</b>
<b>15 005 - 18 900 KHz</b>	
<b>15 005-15 010</b> STANDARD FREQUENCY AND TIME SIGNAL Space research	<b>15 005-15 010</b> STANDARD FREQUENCY AND TIME SIGNAL Space research
<b>15 010-15 100</b> AERONAUTICAL MOBILE (OR)	<b>15 010-15 100</b> AERONAUTICAL MOBILE (OR)
<b>15 100-15 600</b> BROADCASTING	<b>15 100-15 600</b> BROADCASTING
<b>15 600-15 800</b> BROADCASTING 5.134 5.146	<b>15 600-15 800</b> BROADCASTING
<b>15 800-16 360</b> FIXED 5.153	<b>15 800-16 360</b> FIXED
<b>16 360-17 410</b> MARITIME MOBILE 5.109 5.110 5.132 5.145	<b>16 360-17 410</b> MARITIME MOBILE
<b>17 410-17 480</b> FIXED	<b>17 410-17 480</b> FIXED
<b>17 480-17 550</b> BROADCASTING 5.134 5.146	<b>17 480-17 550</b> BROADCASTING
<b>17 550-17 900</b> BROADCASTING	<b>17 550-17 900</b> BROADCASTING
<b>17 900-17 970</b> AERONAUTICAL MOBILE (R)	<b>17 900-17 970</b> AERONAUTICAL MOBILE (R)
<b>17 970-18 030</b> AERONAUTICAL MOBILE (OR)	<b>17 970-18 030</b> AERONAUTICAL MOBILE (OR)
<b>18 030-18 052</b> FIXED	<b>18 030-18 052</b> FIXED
<b>18 052-18 068</b> FIXED Space research	<b>18 052-18 068</b> FIXED Space research
<b>18 068-18 168</b> AMATEUR AMATEUR-SATELLITE 5.154	<b>18 068-18 168</b> AMATEUR AMATEUR-SATELLITE
<b>18 168-18 780</b> FIXED Mobile except aeronautical mobile	<b>18 168-18 780</b> FIXED Mobile except aeronautical mobile
<b>18 780-18 900</b> MARITIME MOBILE	<b>18 780-18 900</b> MARITIME MOBILE



<b>ITU Region1:Table of Allocations</b>	<b>UGANDA TABLE OF ALLOCATIONS</b>
<b>18 900 - 23 000 KHz</b>	
<b>18 900-19 020</b> BROADCASTING 5.134 5.146	<b>18 900-19 020</b> BROADCASTING
<b>19 020-19 680</b> FIXED	<b>19 020-19 680</b> FIXED
<b>19 680-19 800</b> MARITIME MOBILE 5.132	<b>19 680-19 800</b> MARITIME MOBILE
<b>19 800-19 990</b> FIXED	<b>19 800-19 990</b> FIXED
<b>19 990-19 995</b> STANDARD FREQUENCY AND TIME SIGNAL Space research 5.111	<b>19 990-19 995</b> STANDARD FREQUENCY AND TIME SIGNAL Space research
<b>19 995-20 010</b> STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz) 5.111	<b>19 995-20 010</b> STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz)
<b>20 010-21 000</b> FIXED Mobile	<b>20 010-21 000</b> FIXED Mobile
<b>21 000-21 450</b> AMATEUR AMATEUR-SATELLITE	<b>21 000-21 450</b> AMATEUR AMATEUR-SATELLITE
<b>21 450-21 850</b> BROADCASTING	<b>21 450-21 850</b> BROADCASTING
<b>21 850-21 870</b> FIXED 5.155A 5.155	<b>21 850-21 870</b> FIXED
<b>21 870-21 924</b> FIXED 5.155B	<b>21 870-21 924</b> FIXED
<b>21 924-22 000</b> AERONAUTICAL MOBILE (R)	<b>21 924-22 000</b> AERONAUTICAL MOBILE (R)
<b>22 000-22 855</b> MARITIME MOBILE 5.132 5.156	<b>22 000-22 855</b> MARITIME MOBILE
<b>22 855-23 000</b> FIXED 5.156	<b>22 855-23 000</b> FIXED

<b>ITU Region1:Table of Allocations</b>	<b>UGANDA TABLE OF ALLOCATIONS</b>
<b>23 000 - 26 175 KHz</b>	
<b>23 000-23 200</b> FIXED Mobile except aeronautical mobile (R) 5.156	<b>23 000-23 200</b> FIXED Mobile except aeronautical mobile (R)
<b>23 200-23 350</b> FIXED 5.156A AERONAUTICAL MOBILE (OR)	<b>23 200-23 350</b> FIXED AERONAUTICAL MOBILE (OR)
<b>23 350-24 000</b> FIXED MOBILE except aeronautical mobile 5.157	<b>23 350-24 000</b> FIXED MOBILE except aeronautical mobile
<b>24 000-24 890</b> FIXED LAND MOBILE	<b>24 000-24 890</b> FIXED LAND MOBILE
<b>24 890-24 990</b> AMATEUR AMATEUR-SATELLITE	<b>24 890-24 990</b> AMATEUR AMATEUR-SATELLITE
<b>24 990-25 005</b> STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)	<b>24 990-25 005</b> STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)
<b>25 005-25 010</b> STANDARD FREQUENCY AND TIME SIGNAL Space research	<b>25 005-25 010</b> STANDARD FREQUENCY AND TIME SIGNAL Space research
<b>25 010-25 070</b> FIXED MOBILE except aeronautical mobile	<b>25 010-25 070</b> FIXED MOBILE except aeronautical mobile
<b>25 070-25 210</b> MARITIME MOBILE	<b>25 070-25 210</b> MARITIME MOBILE
<b>25 210-25 550</b> FIXED MOBILE except aeronautical mobile	<b>25 210-25 550</b> FIXED MOBILE except aeronautical mobile
<b>25 550-25 670</b> RADIO ASTRONOMY 5.149	<b>25 550-25 670</b> RADIO ASTRONOMY
<b>25 670-26 100</b> BROADCASTING	<b>25 670-26 100</b> BROADCASTING
<b>26 100-26 175</b> MARITIME MOBILE 5.132	<b>26 100-26 175</b> MARITIME MOBILE

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>26. 175 - 40.98 MHz</b>	
<b>26. 175-27 500</b> FIXED MOBILE except aeronautical mobile 5.150	<b>26. 175-27 500</b> FIXED MOBILE except aeronautical mobile
<b>27.5-28</b> METEOROLOGICAL AIDS FIXED MOBILE	<b>27.5-28</b> METEOROLOGICAL AIDS FIXED MOBILE
<b>28-29.7</b> AMATEUR AMATEUR-SATELLITE	<b>28-29.7</b> AMATEUR AMATEUR-SATELLITE
<b>29.7-30.005</b> FIXED MOBILE	<b>29.7-30.005</b> FIXED MOBILE
<b>30.005-30.01</b> SPACE OPERATION (satellite identification) FIXED MOBILE SPACE RESEARCH	<b>30.005-30.01</b> SPACE OPERATION (satellite identification) FIXED MOBILE SPACE RESEARCH
<b>30.01-37.5</b> FIXED MOBILE	<b>30.01-37.5</b> FIXED MOBILE
<b>37.5-38.25</b> FIXED MOBILE Radio astronomy 5.149	<b>37.5-38.25</b> FIXED MOBILE Radio astronomy
<b>38.25-39.986</b> FIXED MOBILE	<b>38.25-39.986</b> FIXED MOBILE
<b>39.986-40.02</b> FIXED MOBILE Space research	<b>39.986-40.02</b> FIXED MOBILE Space research
<b>40.02-40.98</b> FIXED MOBILE 5.150	<b>40.02-40.98</b> FIXED MOBILE

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>40.98 – 137 MHz</b>	
<b>40.98-41.015</b> FIXED MOBILE Space research 5.160 5.161	<b>40.98-41.015</b> FIXED MOBILE Space research
<b>41.015-44</b> FIXED MOBILE 5.160 5.161	<b>41.015-44</b> FIXED MOBILE
<b>44-47</b> FIXED MOBILE 5.162 5.162A	<b>44-47</b> FIXED MOBILE
<b>47-68</b> BROADCASTING 5.162A 5.163 5.164 5.165 5.169 5.171	<b>47-68</b> BROADCASTING FIXED MOBILE except aeronautical mobile UGA 008
<b>68-74.8</b> FIXED MOBILE except aeronautical mobile 5.149 5.174 5.175 5.177 5.179	<b>68-74.8</b> FIXED MOBILE except aeronautical mobile
<b>74.8-75.2</b> AERONAUTICAL RADIONAVIGATION 5.180 5.181	<b>74.8-75.2</b> AERONAUTICAL RADIONAVIGATION
<b>75.2-87.5</b> FIXED MOBILE except aeronautical mobile 5.175 5.179 5.184 5.187	<b>75.2-87.5</b> FIXED MOBILE except aeronautical mobile UGA 027
<b>87.5-108</b> BROADCASTING 5.190 5.192 5.194	<b>87.5-108</b> BROADCASTING UGA 009
<b>108-117.975</b> AERONAUTICAL RADIONAVIGATION 5.197 5.197A	<b>108-117.975</b> AERONAUTICAL RADIONAVIGATION UGA 010
<b>117.975-137</b> AERONAUTICAL MOBILE (R) 5.111 5.200 5.201 5.202	<b>117.975-137</b> AERONAUTICAL MOBILE (R) UGA 011

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>137 – 143.6 MHz</b>	
<p><b>137-137.025</b>  SPACE OPERATION (space-to-Earth)  METEOROLOGICAL-SATELLITE (space-to-Earth)  MOBILE-SATELLITE (space-to-Earth)  5.208A 5.209  SPACE RESEARCH (space-to-Earth)  Fixed  Mobile except aeronautical mobile (R)  5.204 5.205 5.206 5.207 5.208</p>	<p><b>137-137.025</b>  SPACE OPERATION (space-to-Earth)  METEOROLOGICAL-SATELLITE (space-to-Earth)  MOBILE-SATELLITE (space-to-Earth)  SPACE RESEARCH (space-to-Earth)  Fixed  Mobile except aeronautical mobile (R)</p>
<p><b>137.025-137.175</b>  SPACE OPERATION (space-to-Earth)  METEOROLOGICAL-SATELLITE (space-to-Earth)  SPACE RESEARCH (space-to-Earth)  Fixed  Mobile-satellite (space-to-Earth) 5.208A 5.209  Mobile except aeronautical mobile (R)  5.204 5.205 5.206 5.207 5.208</p>	<p><b>137.025-137.175</b>  SPACE OPERATION (space-to-Earth)  METEOROLOGICAL-SATELLITE (space-to-Earth)  SPACE RESEARCH (space-to-Earth)  Fixed  Mobile-satellite (space-to-Earth)  Mobile except aeronautical mobile (R)</p>
<p><b>137.175-137.825</b>  SPACE OPERATION (space-to-Earth)  METEOROLOGICAL-SATELLITE (space-to-Earth)  MOBILE-SATELLITE (space-to-Earth)  5.208A 5.209  SPACE RESEARCH (space-to-Earth)  Fixed  Mobile except aeronautical mobile (R)  5.204 5.205 5.206 5.207 5.208</p>	<p><b>137.175-137.825</b>  SPACE OPERATION (space-to-Earth)  METEOROLOGICAL-SATELLITE (space-to-Earth)  MOBILE-SATELLITE (space-to-Earth)  SPACE RESEARCH (space-to-Earth)  Fixed  Mobile except aeronautical mobile (R)</p>
<p><b>137.825-138</b>  SPACE OPERATION (space-to-Earth)  METEOROLOGICAL-SATELLITE (space-to-Earth)  SPACE RESEARCH (space-to-Earth)  Fixed  Mobile-satellite (space-to-Earth) 5.208A 5.209  Mobile except aeronautical mobile (R)  5.204 5.205 5.206 5.207 5.208</p>	<p><b>137.825-138</b>  SPACE OPERATION (space-to-Earth)  METEOROLOGICAL-SATELLITE (space-to-Earth)  SPACE RESEARCH (space-to-Earth)  Fixed  Mobile-satellite (space-to-Earth)  Mobile except aeronautical mobile (R)</p>
<p><b>138-143.6</b>  AERONAUTICAL MOBILE (OR)  5.210 5.211 5.212 5.214</p>	<p><b>138-143.6</b>  AERONAUTICAL MOBILE (OR)</p>

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>143.6 – 154 MHz</b>	
<b>143.6-143.65</b> AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth) 5.211 5.212 5.214	<b>143.6-143.65</b> AERONAUTICAL MOBILE (OR) SPACERESEARCH (space-to-Earth)
<b>143.65-144</b> AERONAUTICAL MOBILE (OR) 5.210 5.211 5.212 5.214	<b>143.65-144</b> AERONAUTICAL MOBILE (OR)
<b>144-146</b> AMATEUR AMATEUR-SATELLITE 5.216	<b>144-146</b> AMATEUR AMATEUR-SATELLITE
<b>146-148</b> FIXED MOBILE except aeronautical mobile (R)	<b>146-148</b> FIXED MOBILE except aeronautical mobile (R)
<b>148-149.9</b> FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) 5.209 5.218 5.219 5.221 5.219	FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space)
<b>149.9-150.05</b> MOBILE-SATELLITE (Earth-to-space) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.224B 5.220 5.222 5.223	<b>149.9-150.05</b> MOBILE-SATELLITE (Earth-to-space) RADIONAVIGATION-SATELLITE
<b>150.05-153</b> FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149	<b>150.05-153</b> FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY UGA 012
<b>153-154</b> FIXED MOBILE except aeronautical mobile (R) Meteorological Aids	<b>153-154</b> FIXED MOBILE except aeronautical mobile (R) Meteorological Aids UGA 012

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>154 – 272 MHz</b>	
<b>154-156.4875</b> FIXED MOBILE except aeronautical mobile (R) 5.226	<b>154-156.4875</b> FIXED MOBILE except aeronautical mobile (R) UGA 012
<b>156.4875-156.5625</b> MARITIME MOBILE (distress and calling via DSC) 5.111 5.226 5.227	<b>156.7625-156.8375</b> MARITIME MOBILE (distress and calling) FIXED UGA 012
<b>156.5625 – 156.7625</b> FIXED MOBILE except aeronautical mobile 5.226	<b>156.5625 – 156.7625</b> FIXED MOBILE except aeronautical mobile UGA 012
<b>156.7685 - 156.8375</b> MARITIME MOBILE (distress and calling) 5.111 5.226	<b>156.7685 - 156.8375</b> MARITIME MOBILE (distress and calling) FIXED UGA 012 UGA 013
<b>156.8375 – 174</b> FIXED MOBILE except aeronautical mobile 5.226 5.227A 5.229	<b>156.8375 – 174</b> FIXED MOBILE except aeronautical mobile
<b>174-230</b> BROADCASTING Fixed Mobile 5.235 5.237 5.243 5.246 5.247	<b>174-230</b> BROADCASTING UGA 014
<b>230-235</b> FIXED MOBILE 5.247 5.251 5.252	<b>230-235</b> FIXED MOBILE
<b>235-267</b> FIXED MOBILE 5.111 5.199 5.252 5.254 5.256	<b>235-267</b> FIXED MOBILE
<b>267-272</b> FIXED MOBILE Space operation (space-to-Earth) 5.254 5.257	<b>267-272</b> FIXED MOBILE Space operation (space-to-Earth)

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>272 - 399.9 MHz</b>	
<b>272-273</b> SPACE OPERATION (space-to-Earth) FIXED MOBILE 5.254	<b>272-273</b> SPACE OPERATION (space-to-Earth) FIXED MOBILE
<b>273-312</b> FIXED MOBILE 5.254	<b>273-312</b> FIXED MOBILE
<b>312-315</b> FIXED MOBILE Mobile-satellite (Earth-to-space) 5.254 5.255	<b>312-315</b> FIXED Mobile-satellite (Earth-to-space) UGA 015
<b>315-322</b> FIXED MOBILE 5.254	<b>315-322</b> FIXED UGA 015
<b>322-328.6</b> FIXED MOBILE RADIO ASTRONOMY 5.149	<b>322-328.6</b> FIXED MOBILE RADIO ASTRONOMY UGA 015
<b>328.6-335.4</b> AERONAUTICAL RADIONAVIGATION 5.258 5.259	<b>328.6-335.4</b> AERONAUTICAL RADIONAVIGATION
<b>335.4-387</b> FIXED MOBILE 5.254	<b>335.4-387</b> FIXED MOBILE UGA 015 UGA 016
<b>387-390</b> FIXED MOBILE Mobile-satellite (space-to-Earth) 5.208A 5.208B 5.254 5.255	<b>387-390</b> FIXED MOBILE Mobile-satellite (space-to-Earth) UGA 016
<b>390-399.9</b> FIXED MOBILE 5.254	<b>390-399.9</b> FIXED MOBILE UGA 016



ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>399.9 – 406 MHz</b>	
<b>399.9-400.05</b> MOBILE-SATELLITE (Earth-to-space) 5.209 5.224A RADIONAVIGATION-SATELLITE 5.222 5.224B 5.260 5.220	<b>399.9-400.05</b> MOBILE-SATELLITE <b>(Earth-to-space)</b> RADIONAVIGATION-SATELLITE
<b>400.05-400.15</b> STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1MHz) 5.261 5.262	<b>400.05-400.15</b> STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1MHz)
<b>400.15-401</b> METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.208A 5.209 SPACE RESEARCH (space-to-Earth) 5.263 Space operation (space-to-Earth) 5.262 5.264	<b>400.15-401</b> METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Space operation (space-to-Earth)
<b>401-402</b> METEOROLOGICAL AIDS SPACE OPERATION (space-to-Earth) EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile	<b>401-402</b> METEOROLOGICAL AIDS SPACE OPERATION (space-to-Earth) EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile
<b>402-403</b> METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile	<b>402-403</b> METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile
<b>403-406</b> METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile	<b>403-406</b> METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>406 – 456 MHz</b>	
<b>406-406.1</b> MOBILE-SATELLITE (Earth-to-space) 5.266 5.267	<b>406-406.1</b> MOBILE-SATELLITE (Earth-to-space)
<b>406.1-410</b> FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149	<b>406.1-410</b> FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY
<b>410-420</b> FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space) 5.268	<b>410-420</b> FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space)
<b>420-430</b> FIXED MOBILE except aeronautical mobile Radiolocation 5.269 5.270 5.271	<b>420-430</b> FIXED MOBILE except aeronautical mobile Radiolocation
<b>430-440</b> AMATEUR RADIOLOCATION 5.138 5.271 5.272 5.273 5.274 5.275 5.276 5.277 5.280 5.281 5.282 5.283	<b>430-440</b> AMATEUR RADIOLOCATION
<b>440-450</b> FIXED MOBILE except aeronautical mobile Radiolocation 5.269 5.270 5.271 5.284 5.285 5.286	<b>440-450</b> FIXED MOBILE except aeronautical mobile Radiolocation
<b>450-455</b> FIXED MOBILE 5.209 5.271 5.286 5.286A 5.286B 5.286C 5.286D 5.286E	<b>450-455</b> FIXED MOBILE UGA 017
<b>455-456</b> FIXED MOBILE 5.286AA  5.209 5.271 5.286A 5.286B 5.286C 5.286E	<b>455-456</b> FIXED MOBILE UGA 017

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>456 – 942 MHz</b>	
<b>456-459</b> FIXED MOBILE 5.286AA  5.271 5.287 5.288	<b>456-459</b> FIXED MOBILE UGA 017
<b>459-460</b> FIXED MOBILE 5.286AA  5.209 5.271 5.286A 5.286B 5.286C 5.286E	<b>459-460</b> FIXED MOBILE
<b>460-470</b> FIXED MOBILE 5.286AA Meteorological-Satellite (space-to-Earth) 5.287 5.288 5.289 5.290	<b>460-470</b> FIXED MOBILE Meteorological-Satellite (space-to-Earth) UGA 017
<b>470-790</b> BROADCASTING  5.149 5.291A 5.294 5.296 5.300 5.302 5.304 5.306 5.311A 5.312	<b>470-790</b> BROADCASTING UGA 019
<b>790-862</b> FIXED BROADCASTING MOBILE except aeronautical mobile 5.316B 5.317A 5.312 5.314 5.315 5.316 5.316A 5.319	<b>790-862</b> FIXED BROADCASTING MOBILE except aeronautical mobile UGA 019, UGA 020, UGA 018
<b>862-890</b> FIXED MOBILE except aeronautical mobile 5.317A BROADCASTING 5.322 5.319 5.323	<b>862-890</b> FIXED MOBILE UGA 018, UGA 021
<b>890-942</b> FIXED MOBILE except aeronautical mobile 5.317A BROADCASTING 5.322 Radiolocation 5.323	<b>890-942</b> FIXED MOBILE Radiolocation UGA 021

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>942 - 1 300 MHz</b>	
<b>942-960</b> FIXED MOBILE except aeronautical mobile 5.317A BROADCASTING 5.322 5.323	<b>942-960</b> FIXED MOBILE except aeronautical mobile BROADCASTING UGA 021 UGA 022
<b>960-1 164</b> AERONAUTICAL RADIONAVIGATION 5.328 AERONAUTICAL MOBILE ® 5.328A	<b>960-1 164</b> AERONAUTICAL RADIONAVIGATION
<b>1164 -1215</b> AERONAUTICAL RADIONAVIGATION 5.328 AERONAUTICAL MOBILE ® 5.328A	<b>1164 -1215</b> AERONAUTICAL RADIONAVIGATION AERONAUTICAL MOBILE ®
<b>1 215-1 240</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.329 5.329A SPACE RESEARCH (active) 5.330 5.331 5.332	<b>1 215-1 240</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) SPACE RESEARCH (active)
<b>1 240-1 260</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.329 5.329A SPACE RESEARCH (active) Amateur 5.330 5.331 5.332 5.334 5.335	<b>1 240-1 260</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) SPACE RESEARCH (active) Amateur
<b>1 260-1 300</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) 5.329 5.329A SPACE RESEARCH (active) Amateur 5.282 5.330 5.331 5.334 5.335 5.335A	<b>1 260-1 300</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) SPACE RESEARCH (active) Amateur

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>1 300 - 1 518 MHz</b>	
<b>1 300-1 350</b> AERONAUTICAL RADIONAVIGATION 5.337 RADIOLOCATION RADIONAVIGATION SATELLITE (Earth-to-space) 5.149 5.337A	<b>1 300-1 350</b> AERONAUTICAL RADIONAVIGATION RADIOLOCATION RADIONAVIGATION SATELLITE (Earth-to-space)
<b>1 350-1 400</b> FIXED MOBILE RADIOLOCATION 5.149 5.338 5.338A 5.339	<b>1 350-1 400</b> FIXED MOBILE RADIOLOCATION
<b>1 400-1 427</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.341	<b>1 400-1 427</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)
<b>1 427-1 429</b> SPACE OPERATION (Earth-to-space) FIXED MOBILE except aeronautical mobile 5.338A 5.341	<b>1 427-1 429</b> SPACE OPERATION (Earth-to-space) FIXED MOBILE except aeronautical mobile
<b>1 429-1 452</b> FIXED MOBILE except aeronautical mobile 5.338A 5.341 5.342	<b>1 429-1 452</b> FIXED MOBILE except aeronautical mobile
<b>1 452-1 492</b> FIXED MOBILE except aeronautical mobile BROADCASTING 5.345 BROADCASTING- SATELLITE 5.208B 5.345 5.341, 5.342	<b>1 452-1 492</b> FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING- SATELLITE
<b>1 492-1 518</b> FIXED MOBILE except aeronautical mobile 5.341 5.342	<b>1 492-1 518</b> FIXED MOBILE except aeronautical mobile

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>1 518 - 1 610.6 MHz</b>	
<b>1518 – 1525</b> FIXED MOBILE except aeronautical mobile MOBILE SATELLITE (space to Earth) 5.348 5.348A 5.348B 5.351A 5.341 5.342	<b>1518 – 1525</b> FIXED MOBILE except aeronautical mobile MOBILE SATELLITE (space to Earth)
<b>1 525-1 530</b> SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) 5.351A Earth exploration-satellite Mobile except aeronautical mobile 5.349 5.341 5.342 5.350 5.351 5.352A 5.354	<b>1 525-1 530</b> SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) Earth exploration-satellite Mobile except aeronautical mobile
<b>1 530-1 535</b> SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 5.351A 5.353A Earth exploration-satellite Fixed Mobile except aeronautical mobile 5.341 5.342 5.351 5.354	<b>1 530-1 535</b> SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Earth exploration-satellite Fixed Mobile except aeronautical mobile
<b>1 535-1 559</b> MOBILE-SATELLITE (space-to-Earth) 5.351A 5.341 5.351 5.353A 5.354 5.355 5.356 5.357 5.357A 5.359 5.362A	<b>1 535-1 559</b> MOBILE-SATELLITE (space-to-Earth)
<b>1 559-1 610</b> AERONAUTICAL- RADIONAVIGATION RADIONAVIGATION- SATELLITE (space-to-Earth)(space-to-space) 5.329A 5.341 5.362B 5.362C 5.363	<b>1 559-1 610</b> AERONAUTICAL-RADIONAVIGATION RADIONAVIGATION- SATELLITE (space-to-Earth)(space-to-space)
<b>1 610-1 610.6</b> MOBILE-SATELLITE (Earth-to-space) 5.351 <sup>a</sup> AERONAUTICAL RADIONAVIGATION 5.341 5.355 5.359 5.363 5.364 5.366 5.367 5.368 5.369 5.371 5.372	<b>1 610-1 610.6</b> MOBILE-SATELLITE (Earth-to-space) 5.351 <sup>a</sup> AERONAUTICAL RADIONAVIGATION

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>1 610.6 - 1668.4 MHz</b>	
<p><b>1 610.6-1 613.8</b>  MOBILE-SATELLITE  (Earth-to-space) 5.351<sup>a</sup>  RADIO ASTRONOMY  AERONAUTICAL  RADIONAVIGATION  5.149 5.341 5.355 5.359 5.363  5.150 5.364 5.366 5.367 5.368  5.369 5.371 5.372</p>	<p><b>1 610.6-1 613.8</b>  MOBILE-SATELLITE  (Earth-to-space) 5.351<sup>a</sup>  RADIO ASTRONOMY  AERONAUTICAL  RADIONAVIGATION</p>
<p><b>1 613.8-1 626.5</b>  MOBILE-SATELLITE  (Earth-to-space) 5.351<sup>a</sup>  AERONAUTICAL  RADIONAVIGATION  Mobile-satellite (space-to-Earth)  5.341 5.355 5.359 5.363 5.364 5.365  5.366 5.367 5.368 5.369 5.371 5.372</p>	<p><b>1 613.8-1 626.5</b>  MOBILE-SATELLITE  (Earth-to-space) 5.351<sup>a</sup>  AERONAUTICAL  RADIONAVIGATION  Mobile-satellite (space-to-Earth)</p>
<p><b>1 626.5-1 660</b>  MOBILE-SATELLITE (Earth-to-space)  5.351<sup>a</sup>  5.341 5.351 5.353A 5.354 5.355  5.357A 5.359 5.362A 5.374 5.375 5.376</p>	<p><b>1 626.5-1 660</b>  MOBILE-SATELLITE (Earth-to-space)</p>
<p><b>1 660-1 660.5</b>  MOBILE-SATELLITE (Earth-to-space)  5.351<sup>a</sup>  RADIO ASTRONOMY  5.149 5.341 5.351 5.354 5.362A 5.376A</p>	<p><b>1 660-1 660.5</b>  MOBILE-SATELLITE (Earth-to-space)  RADIO ASTRONOMY</p>
<p><b>1 660.5-1 668</b>  RADIO ASTRONOMY  SPACE RESEARCH (passive)  Fixed  Mobile except aeronautical mobile  5.149 5.341 5.379 5.379A</p>	<p><b>1 660.5-1 668</b>  RADIO ASTRONOMY  SPACE RESEARCH (passive)  Fixed  Mobile except aeronautical mobile</p>
<p><b>1668 – 1668.4</b>  MOBILE-SATELLITE (Earth-to-space)  5.351A 5.379B 5.379C  RADIO ASTRONOMY  SPACE RESEARCH (passive)  Fixed  Mobile except aeronautical mobile  5.149 5.341 5.379 5.379A</p>	<p><b>1668 – 1668.4</b>  MOBILE-SATELLITE (Earth-to-space)  RADIO ASTRONOMY  SPACE RESEARCH (passive)  Fixed  Mobile except aeronautical mobile</p>

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>1668.4 - 1 930 MHz</b>	
<b>1 668.4-1 670</b> METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.379C RADIO ASTRONOMY 5.149 5.341 5.379D 5.379E	<b>1 668.4-1 670</b> METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY
<b>1 670-1 675</b> METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.341 5.379D 5.379E 5.380A	<b>1 670-1 675</b> METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE
<b>1 675-1 690</b> METEOROLOGICAL AIDS FIXED METEOROLOGICAL- SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.341	<b>1 675-1 690</b> METEOROLOGICAL AIDS FIXED METEOROLOGICAL- SATELLITE (space-to-Earth) MOBILE except aeronautical mobile
<b>1 690-1 700</b> METEOROLOGICAL AIDS METEOROLOGICAL- SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile 5.289 5.341 5.382	<b>1 690-1 700</b> METEOROLOGICAL AIDS METEOROLOGICAL- SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile
<b>1 700-1 710</b> FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.289 5.341	<b>1 700-1 710</b> FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile UGA 022
<b>1 710-1 930</b> FIXED MOBILE 5.384A 5.388A5.388B 5.149 5.341 5.385 5.386 5.387 5.388	<b>1 710-1 930</b> FIXED MOBILE UGA 022, UGA 023, UGA 024, UGA 025



ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>1 930 - 2 200 MHz</b>	
<b>1 930-1 980</b> FIXED MOBILE 5.380 5.384A 5.388A 5.149 5.341 5.385 5.386 5.387 5.388, 5.388A	<b>1 930-1 980</b> FIXED MOBILE UGA 024
<b>1 980-2 010</b> FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.388 5.389A 5.389B 5.389F	<b>1 980-2 010</b> FIXED MOBILE MOBILE-SATELLITE (Earth-to-space)
<b>2 010-2 025</b> FIXED MOBILE 5.388A 5.388B 5.388	<b>2 010-2 025</b> FIXED MOBILE UGA 024
<b>2 025-2 110</b> SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space) FIXED MOBILE 5.391 SPACE RESEARCH (Earth-to-space) (space-to-space) 5.392	<b>2 025-2 110</b> SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space- to-space) FIXED MOBILE SPACE RESEARCH (Earth-to-space) (space-to-space)
<b>2 110-2 120</b> FIXED MOBILE 5.388A SPACE RESEARCH (deep space) (Earth- to-space) 5.388	<b>2 110-2 120</b> FIXED MOBILE SPACE RESEARCH (deep space) (Earth-to-space) UGA 024
<b>2 120-2 160</b> FIXED MOBILE 5.388A 5.388 5.392A	<b>2 120-2 170</b> FIXED MOBILE UGA 024
<b>2160 – 2170</b> FIXED MOBILE 5.388A 5.388B 5.388	<b>2160 – 2170</b> FIXED MOBILE UGA 024
<b>2 170-2 200</b> FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A 5.388 5.389A 5.389F 5.392A	<b>2 170-2 200</b> FIXED MOBILE MOBILE-SATELLITE (space-to-Earth)

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>2 200 - 2 520 MHz</b>	
<b>2 200-2 290</b> SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) FIXED MOBILE 5.391 SPACE RESEARCH (space-to-Earth) (space-to-space) 5.392	<b>2 200-2 290</b> SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) FIXED MOBILE SPACE RESEARCH (space-to-Earth) (space-to-space)
<b>2 290-2 300</b> FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)	<b>2 290-2 300</b> FIXED MOBILE except aeronautical mobile SPACE RESEARCH (deep space) (space-to-Earth)
<b>2 300-2 450</b> FIXED MOBILE 5.384A Amateur Radiolocation 5.150 5.282 5.395	<b>2 300-2 450</b> FIXED MOBILE UGA 025 Amateur Radiolocation
<b>2 450-2 483.5</b> FIXED MOBILE Radiolocation 5.150 5.397	<b>2 450-2 483.5</b> FIXED MOBILE Radiolocation
<b>2 483.5-2 500</b> FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) 5.351A Radiolocation 5.150 5.371 5.397 5.398 5.399 5.400 5.402	<b>2 483.5-2 500</b> FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) Radiolocation UGA 026
<b>2 500-2 520</b> FIXED 5.410 MOBILE except aeronautical mobile 5.384A 5.405 5.412	<b>2 500-2 520</b> FIXED 5.410 MOBILE UGA 025

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>2 520 -3 100 MHz</b>	
<b>2 520-2 655</b> FIXED 5.410 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.413 5.416  5.339 5.405 5.412 5.417C 5.418 5.418B 5.418C	<b>2 520-2 655</b> FIXED MOBILE UGA 025 BROADCASTING-SATELLITE
<b>2 655-2 670</b> FIXED 5.410 MOBILE except aeronautical mobile 5.384A BROADCASTING-SATELLITE 5.208B 5.413 5.416 Earth exploration-satellite (passive) Radio astronomy Space research (passive) 5.149 5.412	<b>2 655-2 670</b> FIXED MOBILE UGA 025 BROADCASTING-SATELLITE  Earth exploration-satellite (passive) Radio astronomy Space research (passive)
<b>2 670-2 690</b> FIXED 5.410 MOBILE except aeronautical mobile 5.384A Earth exploration-satellite (passive) Radio astronomy Space research (passive) 5.149 5.412	<b>2 670-2 690</b> FIXED MOBILE UGA025 Radio astronomy Space research (passive)
<b>2 690-2 700</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.421 5.422	<b>2 690-2 700</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)
<b>2 700-2 900</b> AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation 5.423 5.424	<b>2 700-2 900</b> AERONAUTICAL RADIONAVIGATION Radiolocation
<b>2 900-3 100</b> RADIONAVIGATION 5.426 Radiolocation 5.425 5.427	<b>2 900-3 100</b> RADIONAVIGATION Radiolocation

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>3 100 - 4 990 MHz</b>	
<b>3 100-3 300</b> RADIOLOCATION Earth exploration-satellite (active) Space research (active) 5.149 5.428	<b>3 100-3 300</b> RADIOLOCATION Earth exploration-satellite (active) Space research (active)
<b>3 300-3 400</b> RADIOLOCATION 5.149 5.429 5.430	<b>3 300-3 400</b> RADIOLOCATION FIXED MOBILE UGA 025
<b>3 400-3 600</b> FIXED FIXED-SATELLITE (space-to-Earth) Mobile 5.430A Radiolocation 5.431	<b>3 400-3 600</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE UGA 025 Radiolocation
<b>3 600-4 200</b> FIXED FIXED-SATELLITE (space-to-Earth) Mobile	<b>3 600-4 200</b> FIXED FIXED-SATELLITE (space-to-Earth) Mobile
<b>4 200-4 400</b> AERONAUTICAL RADIONAVIGATION 5.438 5.439 5.440	<b>4 200-4 400</b> AERONAUTICAL RADIONAVIGATION
<b>4 400-4 500</b> FIXED MOBILE 5.440A	<b>4 400-4 500</b> FIXED MOBILE
<b>4 500-4 800</b> FIXED FIXED-SATELLITE (space-to-Earth) 5.441 <b>MOBILE 5.440A</b>	<b>4 500-4 800</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE
<b>4 800-4 990</b> FIXED MOBILE 5.440A 5.442 Radio astronomy 5.149 5.339 5.443	<b>4 800-4 990</b> FIXED MOBILE Radio astronomy

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>4 990 - 5 350 MHz</b>	
<b>4 990-5 000</b> FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY Space research (passive) 5.149	<b>4 990-5 000</b> FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY Space research (passive)
<b>5000-5 030</b> AERONAUTICAL RADIONAVIGATION 5.367 5.443A 5.443b 5.444 5.444A	<b>5000-5 030</b> AERONAUTICAL RADIONAVIGATION
<b>5 030-5 091</b> AERONAUTICAL RADIONAVIGATION 5.367 5.444	<b>5 030-5 091</b> AERONAUTICAL RADIONAVIGATION
<b>5091 – 5150</b> AERONAUTICAL RADIONAVIGATION AERONAUTICAL MOBILE 5.444B 5.367 5.444 5.444A	<b>5091 – 5150</b> AERONAUTICAL RADIONAVIGATION AERONAUTICAL MOBILE
<b>5 150-5 250</b> AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-to-space) 5.447A MOBILE except aeronautical mobile 5.446A 5.446B 5.446 5.446C 5.447 5.447B 5.447C	<b>5 150-5 250</b> AERONAUTICAL RADIONAVIGATION FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile
<b>5 250-5 255</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.447D 5.448 5.448A	<b>5 250-5 255</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH
<b>5 255- 5 350</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.448 5.448A	<b>5 255- 5 350</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>5 350 - 5 925 MHz</b>	
<b>5 350-5 460</b> EARTH EXPLORATION-SATELLITE (active) 5.448B AERONAUTICAL RADIONAVIGATION 5.449 Radiolocation	<b>5 350-5 460</b> EARTH EXPLORATION-SATELLITE (active) AERONAUTICAL RADIONAVIGATION Radiolocation
<b>5 460-5 470</b> RADIONAVIGATION 5.449 Radiolocation	<b>5 460-5 470</b> RADIONAVIGATION Radiolocation
<b>5 470-5 650</b> MARITIME RADIONAVIGATION Radiolocation 5.450 5.451 5.452	<b>5 470-5 650</b> MARITIME RADIONAVIGATION Radiolocation
<b>5 650-5 725</b> RADIOLOCATION Amateur Space research (deep space) 5.282 5.451 5.453 5.454 5.455	<b>5 650-5 725</b> RADIOLOCATION Amateur Space research (deep space)
<b>5 725-5 830</b> FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur 5.150 5.451 5.453 5.455 5.456	<b>5 725-5 830</b> FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur
<b>5 830-5 850</b> FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Amateur-satellite (space-to-Earth) 5.150      5.451      5.453      5.455 5.456	<b>5 830-5 850</b> FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur Amateur-satellite (space-to-Earth)
<b>5 850-5 925</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.150	<b>5 850-5 925</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>5 925 - 7 750 MHz</b>	
<b>5 925-6 700</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B MOBILE 5.457C 5.149 5.440 5.458	<b>5 925-6 700</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE
<b>6700-7 075</b> FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 MOBILE 5.458 5.458A 5.458B 5.458C	<b>6700-7 075</b> FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 5.441 MOBILE
<b>7075-7 250</b> FIXED MOBILE 5.458 5.459 5.460	<b>7075-7 250</b> FIXED MOBILE
<b>7250-7 300</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE 5.461	<b>7250-7 300</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE
<b>7300-7 450</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.461	<b>7300-7 450</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile
<b>7450-7 550</b> FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.461A	<b>7450-7 550</b> FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile
<b>7 550-7 750</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	<b>7 550-7 750</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>7 750 - 8 400 MHz</b>	
<b>7750-7850</b> FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) 5.461B MOBILE except aeronautical mobile	<b>7750-7850</b> FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile
<b>7850-7900</b> FIXED MOBILE except aeronautical mobile	<b>7850-7900</b> FIXED MOBILE except aeronautical mobile
<b>7900-8 025</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.461	<b>7900-8 025</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE
<b>8 025-8 175</b> EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A	<b>8 025-8 175</b> EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE
<b>8 175-8 215</b> EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A	<b>8 175-8 215</b> EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) MOBILE
<b>8 215-8 400</b> EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 5.463 5.462A	<b>8 215-8 400</b> EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE



ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>8 400 - 9 300 MHz</b>	
<b>8 400-8 500</b> FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-Earth) 5.465 5.466 5.467	<b>8 400-8 500</b> FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-Earth)
<b>8 500-8 550</b> RADIOLOCATION 5.469	<b>8 500-8 550</b> RADIOLOCATION
<b>8 550-8 650</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.468 5.469 5.469A	<b>8 550-8 650</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)
<b>8 650-8 750</b> RADIOLOCATION 5.468 5.469	<b>8 650-8 750</b> RADIOLOCATION
<b>8 750-8 850</b> RADIOLOCATION AERONAUTICAL RADIONAVIGATION 5.470 5.471	<b>8 750-8 850</b> RADIOLOCATION AERONAUTICAL RADIONAVIGATION
<b>8 850-9 000</b> RADIOLOCATION MARITIME RADIONAVIGATION 5.472 5.473	<b>8 850-9 000</b> RADIOLOCATION MARITIME RADIONAVIGATION
<b>9 000-9 200</b> AERONAUTICAL RADIONAVIGATION 5.337 Radiolocation 5.471 5.473A	<b>9 000-9 200</b> AERONAUTICAL RADIONAVIGATION Radiolocation
<b>9 200-9 300</b> RADIOLOCATION MARITIME RADIONAVIGATION 5.472 5.473 5.474	<b>9 200-9 300</b> RADIOLOCATION MARITIME RADIONAVIGATION

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>9. 300 - 10.6 GHz</b>	
<b>9 300-9 500</b> RADIONAVIGATION EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (ACTIVE) RADIOLOCATION 5.427 5.474 5.475 5.475A 5.475B 5.476A	<b>9 300-9 500</b> RADIONAVIGATION EARTH EXPLORATION-SATELLITE (active) SPACE RESEARCH (ACTIVE) RADIOLOCATION
<b>9 500-9 800</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active) 5.476A	<b>9 500-9 800</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION SPACE RESEARCH (active)
<b>9 800-9 900</b> RADIOLOCATION Earth exploration-satellite (active) Space research (active) Fixed 5.477 5.478 5.478A 5.478B	<b>9 800-9 900</b> RADIOLOCATION Earth exploration-satellite (active) Space research (active) Fixed
<b>9 900-10 000</b> RADIOLOCATION Fixed 5.477 5.478 5.479	<b>9 900-10 000</b> RADIOLOCATION Fixed
<b>10-10.45</b> FIXED MOBILE RADIOLOCATION Amateur 5.479	<b>10-10.45</b> FIXED MOBILE RADIOLOCATION Amateur
<b>10.45-10.5</b> RADIOLOCATION Amateur Amateur-satellite 5.481	<b>10.45-10.5</b> RADIOLOCATION Amateur Amateur-satellite
<b>10.5-10.55</b> FIXED MOBILE Radiolocation	<b>10.5-10.55</b> FIXED MOBILE Radiolocation
<b>10.55-10.6</b> FIXED MOBILE except aeronautical mobile Radiolocation	<b>10.55-10.6</b> FIXED MOBILE except aeronautical mobile Radiolocation

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>10.6 - 13.25 GHz</b>	
<p><b>10.6-10.68</b>  EARTH EXPLORATION-SATELLITE (passive)  FIXED  MOBILE except aeronautical mobile  RADIO ASTRONOMY  SPACE RESEARCH (passive)  Radiolocation  5.149 5.482 5.482A</p>	<p><b>10.6-10.68</b>  EARTH EXPLORATION-SATELLITE (passive)  FIXED  MOBILE except aeronautical mobile  RADIO ASTRONOMY  SPACE RESEARCH (passive)  Radiolocation</p>
<p><b>10.68-10.7</b>  EARTH EXPLORATION-SATELLITE (passive)  RADIO ASTRONOMY  SPACE RESEARCH (passive)  5.340 5.483</p>	<p><b>10.68-10.7</b>  EARTH EXPLORATION-SATELLITE (passive)  RADIO ASTRONOMY  SPACE RESEARCH (passive)</p>
<p><b>10.7-11.7</b>  FIXED  FIXED-SATELLITE (space-to-Earth) 5.441 5.484A (Earth-to-space) 5.484  MOBILE except aeronautical mobile</p>	<p><b>10.7-11.7</b>  FIXED  FIXED-SATELLITE (space-to-Earth) (Earth-to-space)  MOBILE except aeronautical Mobile</p>
<p><b>11.7-12.5</b>  FIXED  MOBILE except aeronautical mobile  BROADCASTING  BROADCASTING-SATELLITE 5.492  5.487 5.487A</p>	<p><b>11.7-12.5</b>  FIXED  BROADCASTING  BROADCASTING-SATELLITE  MOBILE except aeronautical mobile</p>
<p><b>12.5-12.75</b>  FIXED-SATELLITE (space-to-Earth) 5.484A (Earth-to-space)  5.494 5.495 5.496</p>	<p><b>12.5-12.75</b>  FIXED-SATELLITE (space-to-Earth) (Earth-to-space)</p>
<p><b>12.75-13.25</b>  FIXED  FIXED-SATELLITE (Earth-to-space) 5.441  MOBILE  Space research (deep space) (space-to-Earth)</p>	<p><b>12.75-13.25</b>  FIXED  FIXED-SATELLITE (Earth-to-space)  MOBILE  Space research (deep space) (space-to-Earth)</p>

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>13.25 - 14.3 GHz</b>	
<p><b>13.25-13.4</b> EARTH EXPLORATION-SATELLITE (active) AERONAUTICAL RADIONAVIGATION 5.497 SPACE RESEARCH (active) 5.498A 5.499</p>	<p><b>13.25-13.4</b> EARTH EXPLORATION-SATELLITE (active) AERONAUTICAL RADIONAVIGATION SPACE RESEARCH (active)</p>
<p><b>13.4-13.75</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH 5.501A Standard frequency and time signal-satellite (Earth-to-space) 5.499 5.500 5.501 5.501B</p>	<p><b>13.4-13.75</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH Standard frequency and time signal-satellite (Earth-to-space)</p>
<p><b>13.75-14</b> FIXED-SATELLITE (Earth-to-space) 5.484A RADIOLOCATION Standard frequency and time signal-satellite (Earth-to-space) Space research 5.499 5.500 5.501 5.502 5.503 5.503A</p>	<p><b>13.75-14</b> FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Standard frequency and time signal-satellite (Earth-to-space) Space research</p>
<p><b>14-14.25</b> FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.506 5.506B RADIONAVIGATION 5.504 Mobile-satellite (Earth-to-space) 5.504B 5.504C 5.506A Space research 5.504A 5.505</p>	<p><b>14-14.25</b> FIXED-SATELLITE (Earth-to-space) RADIONAVIGATION Mobile-satellite (Earth-to-space) except aeronautical mobile-satellite Space research</p>
<p><b>14.25-14.3</b> FIXED-SATELLITE (Earth-to-space) 5.457A 5.457B 5.484A 5.506 5.506B RADIONAVIGATION 5.504 Mobile-satellite (Earth-to-space) 5.504B 5.506A 5.508A Space research 5.504A 5.505 5.508 5.509</p>	<p><b>14.25-14.3</b> FIXED-SATELLITE (Earth-to-space) RADIONAVIGATION Mobile-satellite (Earth-to-space) except aeronautical mobile-satellite Space research</p>

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>14.3 - 15.35 GHz</b>	
<p><b>14.3-14.4</b>  FIXED  FIXED-SATELLITE  (Earth-to-space) 5.457A 5.457B 5.484A  5.506 5.506B  MOBILE except aeronautical  mobile  Mobile-satellite (Earth-to-space) 5.504B  5.506A 5.509A  Radionavigation-satellite 5.504A</p>	<p><b>14.3-14.4</b>  FIXED  FIXED-SATELLITE  (Earth-to-space)  MOBILE except aeronautical  mobile  Mobile-satellite (Earth-to-space)  except aeronautical mobile-satellite  Radionavigation-satellite</p>
<p><b>14.4-14.47</b>  FIXED  FIXED-SATELLITE (Earth-to-space)  5.457A 5.457B 5.484A 5.506 5.506B  MOBILE except aeronautical mobile  Mobile-satellite (Earth-to-space) 5.504B  5.506A 5.509A  Space research (space-to-Earth) 5.504A</p>	<p><b>14.4-14.47</b>  FIXED  FIXED-SATELLITE (Earth-to-space)  MOBILE except aeronautical mobile  Mobile-satellite (Earth-to-space) except aeronautical mobile-  satellite  Space research (space-to-Earth)</p>
<p><b>14.47-14.5</b>  FIXED  FIXED-SATELLITE (Earth-to-space)  5.484A 5.506  MOBILE except aeronautical mobile  Mobile-satellite (Earth-to-space) except  aeronautical mobile-satellite  Radio astronomy  5.149</p>	<p><b>14.47-14.5</b>  FIXED  FIXED-SATELLITE (Earth-to-space)  MOBILE except aeronautical mobile  Mobile-satellite (Earth-to-space) except aeronautical mobile-  satellite  Radio astronomy</p>
<p><b>14.5-14.8</b>  FIXED  FIXED-SATELLITE (Earth-to-space)  5.510  MOBILE  Space research</p>	<p><b>14.5-14.8</b>  FIXED  FIXED-SATELLITE (Earth-to-space)  MOBILE  Space research</p>
<p><b>14.8-15.35</b>  FIXED  MOBILE  Space research  5.339</p>	<p><b>14.8-15.35</b>  FIXED  MOBILE  Space research</p>

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>15.35 - 17.3 GHz</b>	
<b>15.35-15.4</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340 5.511	<b>15.35-15.4</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)
<b>15.4-15.43</b> AERONAUTICAL RADIONAVIGATION 5.511D	<b>15.4-15.43</b> AERONAUTICAL RADIONAVIGATION
<b>15.43-15.63</b> FIXED-SATELLITE (Earth-to-space) 5.511A AERONAUTICAL RADIONAVIGATION 5.511C	<b>15.43-15.63</b> FIXED-SATELLITE (Earth-to-space) AERONAUTICAL RADIONAVIGATION
<b>15.63-15.7</b> AERONAUTICAL RADIONAVIGATION 5.511D	<b>15.63-15.7</b> AERONAUTICAL RADIONAVIGATION
<b>15.7-16.6</b> RADIOLOCATION 5.512 5.513	<b>15.7-16.6</b> RADIOLOCATION
<b>16.6-17.1</b> RADIOLOCATION Space research (deep space) (Earth-to-space) 5.512 5.513	<b>16.6-17.1</b> RADIOLOCATION Space research (deep space) (Earth-to-space)
<b>17.1-17.2</b> RADIOLOCATION 5.512 5.513	<b>17.1-17.2</b> RADIOLOCATION
<b>17.2-17.3</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.512 5.513 5.513A	<b>17.2-17.3</b> EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>17.3 - 19.3 GHz</b>	
<b>17.3-17.7</b> FIXED-SATELLITE (Earth-to-space) 5.516 (space-to-Earth) 5.516A 5.516B Radiolocation 5.514	<b>17.3-17.7</b> FIXED-SATELLITE (Earth-to-space) (space-to-Earth) Radiolocation
<b>17.7-18.1</b> FIXED FIXED-SATELLITE (space-to-Earth) 5.484A (Earth-to-space) 5.516 MOBILE	<b>17.7-18.1</b> FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) MOBILE
<b>18.1-18.4</b> FIXED FIXED-SATELLITE (space-to-Earth) 5.484A 5.516B (Earth-to-space) 5.520 MOBILE 5.519 5.521	<b>18.1-18.4</b> FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) MOBILE
<b>18.4-18.6</b> FIXED FIXED-SATELLITE (space-to-Earth) 5.484A MOBILE	<b>18.4-18.6</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE
<b>18.6-18.8</b> EARTH EXPLORATION- SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) 5.522B MOBILE except aeronautical mobile Space research (passive) 5.522A 5.522C	<b>18.6-18.8</b> EARTH EXPLORATION- SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile Space research (passive)
<b>18.8-19.3</b> FIXED FIXED-SATELLITE (space-to-Earth) 5.523A MOBILE	<b>18.8-19.3</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>19.3 - 22.21 GHz</b>	
<b>19.3-19.7</b> FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 5.523B 5.523C 5.523D 5.523E MOBILE	<b>19.3-19.7</b> FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) MOBILE
<b>19.7-20.1</b> FIXED-SATELLITE (space-to-Earth) 5.484A Mobile-satellite (space-to-Earth) 5.524	<b>19.7-20.1</b> FIXED-SATELLITE (space-to-Earth) Mobile-satellite (space-to-Earth)
<b>20.1-20.2</b> FIXED-SATELLITE (space-to-Earth) 5.484A MOBILE-SATELLITE (space-to-Earth) 5.524 5.525 5.526 5.527 5.528	<b>20.1-20.2</b> FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth)
<b>20.2-21.2</b> FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Standard frequency and time signal-satellite (space-to-Earth) 5.524	<b>20.2-21.2</b> FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Standard frequency and time signal-satellite (space-to-Earth)
<b>21.2-21.4</b> EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)	<b>21.2-21.4</b> EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)
<b>21.4-22</b> FIXED MOBILE BROADCASTING-SATELLITE 5.530	<b>21.4-22</b> FIXED MOBILE BROADCASTING-SATELLITE
<b>22-22.21</b> FIXED MOBILE except aeronautical mobile 5.149	<b>22-22.21</b> FIXED MOBILE except aeronautical mobile



ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>22.21 - 24.65 GHz</b>	
<b>22.21-22.5</b> EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) 5.149 5.532	<b>22.21-22.5</b> EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive)
<b>22.5-22.55</b> FIXED MOBILE	<b>22.5-22.55</b> FIXED MOBILE
<b>22.55-23.55</b> FIXED INTER-SATELLITE 5.338A MOBILE 5.149	<b>22.55-23.55</b> FIXED INTER-SATELLITE MOBILE
<b>23.55-23.6</b> FIXED MOBILE	<b>23.55-23.6</b> FIXED MOBILE
<b>23.6-24</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	<b>23.6-24</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)
<b>24-24.05</b> AMATEUR AMATEUR-SATELLITE 5.150	<b>24-24.05</b> AMATEUR AMATEUR-SATELLITE
<b>24.05-24.25</b> RADIOLOCATION Amateur Earth exploration-satellite (active) 5.150	<b>24.05-24.25</b> RADIOLOCATION Amateur Earth exploration-satellite (active)
<b>24.25-24.45</b> FIXED	<b>24.25-24.45</b> FIXED
<b>24.45-24.65</b> FIXED INTER-SATELLITE	<b>24.45-24.65</b> FIXED INTER-SATELLITE

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>24.65 - 29.1 GHz</b>	
<b>24.65-24.75</b> FIXED INTER-SATELLITE	<b>24.65-24.75</b> FIXED INTER-SATELLITE
<b>24.75-25.25</b> FIXED	<b>24.75-25.25</b> FIXED
<b>25.25-25.5</b> FIXED INTER-SATELLITE 5.536 MOBILE Standard frequency and time signal-satellite (Earth-to-space)	<b>25.25-25.5</b> FIXED INTER-SATELLITE MOBILE Standard frequency and time signal-satellite (Earth-to-space)
<b>25.5-27</b> EARTH EXPLORATION- SATELLITE (space-to Earth) 5.536B FIXED INTER-SATELLITE 5.536 MOBILE SPACE RESEARCH (space-to-Earth) 5.536C Standard frequency and time signal-satellite (Earth-to-space) 5.536A	<b>25.5-27</b> EARTH EXPLORATION- SATELLITE (space-to Earth) FIXED INTER-SATELLITE MOBILE Standard frequency and time signal-satellite (Earth-to-space)
<b>27-27.5</b> FIXED INTER-SATELLITE 5.536 MOBILE	<b>27-27.5</b> FIXED INTER-SATELLITE MOBILE
<b>27.5-28.5</b> FIXED 5.537A FIXED-SATELLITE (Earth-to-space) 5.484A 5.539 MOBILE 5.538 5.540	<b>27.5-28.5</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE
<b>28.5-29.1</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.484A 5.523A 5.539 MOBILE Earth exploration-satellite (Earth-to-space) 5.541 5.540	<b>28.5-29.1</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Earth exploration-satellite (Earth-to-space)

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>29.1- 31.3 GHz</b>	
<p><b>29.1-29.5</b>  FIXED  FIXED-SATELLITE  (Earth-to-space) 5.523C 5.523E  5.535A 5.539 5.541A  MOBILE  Earth exploration-satellite  (Earth-to-space) 5.541  5.540</p>	<p><b>29.1-29.5</b>  FIXED  FIXED-SATELLITE  (Earth-to-space)  MOBILE  Earth exploration-satellite  (Earth-to-space)</p>
<p><b>29.5-29.9</b>  FIXED-SATELLITE  (Earth-to-space) 5.484A 5.539  Earth exploration-satellite  (Earth-to-space) 5.541  Mobile-satellite (Earth-to-space)  5.540 5.542</p>	<p><b>29.5-29.9</b>  FIXED-SATELLITE  (Earth-to-space)  Earth exploration-satellite  (Earth-to-space)  Mobile-satellite (Earth-to-space)</p>
<p><b>29.9-30</b>  FIXED-SATELLITE  (Earth-to-space) 5.484A 5.539  MOBILE-SATELLITE  (Earth-to-space)  Earth exploration-satellite  (Earth-to-space) 5.541 5.543  5.525 5.526 5.527 5.538 5.540 5.542</p>	<p><b>29.9-30</b>  FIXED-SATELLITE  (Earth-to-space) MOBILE-SATELLITE  (Earth-to-space)  Earth exploration-satellite  (Earth-to-space)</p>
<p><b>30-31</b>  FIXED-SATELLITE (Earth-to-space)  5.338A  MOBILE-SATELLITE (Earth-to-space)  Standard frequency and  time signal-satellite (space-to-Earth)  5.542</p>	<p><b>30-31</b>  FIXED-SATELLITE (Earth-to-space)  MOBILE-SATELLITE (Earth-to-space)  Standard frequency and  time signal-satellite (space-to-Earth)</p>
<p><b>31-31.3</b>  FIXED 5.338A 5.543A  MOBILE  Standard frequency and  time signal-satellite (space-to-Earth)  Space research 5.544 5.545  5.149</p>	<p><b>31-31.3</b>  FIXED  MOBILE  Standard frequency and  time signal-satellite (space-to-Earth)  Space research</p>

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>31.3 - 34.2 GHz</b>	
<b>31.3-31.5</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	<b>31.3-31.5</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)
<b>31.5-31.8</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.546	<b>31.5-31.8</b> EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile
<b>31.8-32</b> FIXED 5.547A RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) 5.547 5.547B 5.548	<b>31.8-32</b> FIXED RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)
<b>32-32.3</b> FIXED 5.547A INTER-SATELLITE RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth) 5.547 5.547C 5.548	<b>32-32.3</b> FIXED INTER-SATELLITE RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)
<b>32.3-33</b> FIXED 5.547A INTER-SATELLITE RADIONAVIGATION 5.547 5.547D 5.548	<b>32.3-33</b> FIXED INTER-SATELLITE RADIONAVIGATION
<b>33-33.4</b> FIXED 5.547A RADIONAVIGATION 5.547 5.547E	<b>33-33.4</b> FIXED RADIONAVIGATION
<b>33.4-34.2</b> RADIOLOCATION 5.549	<b>33.4-34.2</b> RADIOLOCATION

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>34.2 - 37.5 GHz</b>	
<b>34.2-34.7</b> RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space) 5.549	<b>34.2-34.7</b> RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space)
<b>34.7-35.2</b> RADIOLOCATION Space research 5.550 5.549	<b>34.7-35.2</b> RADIOLOCATION Space research
<b>35.2-35.5</b> METEOROLOGICAL AIDS RADIOLOCATION 5.549	<b>35.2-35.5</b> METEOROLOGICAL AIDS RADIOLOCATION
<b>5.5-36</b> METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) 5.549 5.551A	<b>35.5-36</b> METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active)
<b>36-37</b> EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.149 5.550A	<b>36-37</b> EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)
<b>37-37.5</b> FIXED MOBILE SPACE RESEARCH (space-to-Earth) 5.547	<b>37-37.5</b> FIXED MOBILE SPACE RESEARCH (space-to-Earth)

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>37.5 - 40.5 GHz</b>	
<p><b>37.5-38</b>  FIXED  FIXED-SATELLITE  (space-to-Earth) 5.551AA  MOBILE  SPACE RESEARCH  (space-to-Earth)  Earth exploration-satellite  (space-to-Earth)  5.547</p>	<p><b>37.5-38</b>  FIXED  FIXED-SATELLITE  (space-to-Earth)  MOBILE  SPACE RESEARCH  (space-to-Earth)  Earth exploration-satellite  (space-to-Earth)</p>
<p><b>38-39.5</b>  FIXED  FIXED-SATELLITE  (space-to-Earth) 5.551AA  MOBILE  Earth exploration-satellite  (space-to-Earth)  5.547</p>	<p><b>38-39.5</b>  FIXED  FIXED-SATELLITE  (space-to-Earth)  MOBILE  Earth exploration-satellite  (space-to-Earth)</p>
<p><b>39.5-40</b>  FIXED  FIXED-SATELLITE  (space-to-Earth) 5.551AA  MOBILE  MOBILE-SATELLITE  (space-to-Earth)  Earth exploration-satellite  (space-to-Earth)  5.547</p>	<p><b>39.5-40</b>  FIXED  FIXED-SATELLITE  (space-to-Earth)  MOBILE  MOBILE-SATELLITE  (space-to-Earth)  Earth exploration-satellite  (space-to-Earth)</p>
<p><b>40-40.5</b>  EARTH EXPLORATION-SATELLITE (Earth-to-space)  FIXED  FIXED-SATELLITE  (space-to-Earth)  MOBILE  MOBILE-SATELLITE  (space-to-Earth)  SPACE RESEARCH  (Earth-to-space)  Earth exploration-satellite  (space-to-Earth)</p>	<p><b>40-40.5</b>  EARTH EXPLORATION-SATELLITE (Earth-to-space)  FIXED  FIXED-SATELLITE  (space-to-Earth)  MOBILE  MOBILE-SATELLITE  (space-to-Earth)  SPACE RESEARCH  (Earth-to-space)  Earth exploration-satellite  (space-to-Earth)</p>

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>40.5 - 47.5 GHz</b>	
<b>40.5-41</b> FIXED FIXED-SATELLITE (space-to-Earth) BROADCASTING BROADCASTING-SATELLITE Mobile 5.547	<b>40.5-41</b> FIXED FIXED-SATELLITE (space-to-Earth) BROADCASTING BROADCASTING-SATELLITE Mobile
<b>41-42.5</b> FIXED FIXED-SATELLITE (space-to-Earth) 5.551AA BROADCASTING BROADCASTING-SATELLITE Mobile 5.547 5.551F 5.551G	<b>41-42.5</b> FIXED FIXED-SATELLITE (space-to-Earth) BROADCASTING BROADCASTING-SATELLITE Mobile
<b>42.5-43.5</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE except aeronautical mobile RADIO ASTRONOMY 5.149 5.547	<b>42.5-43.5</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile RADIO ASTRONOMY
<b>43.5-47</b> MOBILE 5.553 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554	<b>43.5-47</b> MOBILE MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE
<b>47-47.2</b> AMATEUR AMATEUR-SATELLITE	<b>47-47.2</b> AMATEUR AMATEUR-SATELLITE
<b>47.2-47.5</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE 5.149 5.340 5.552A 5.555	<b>47.2-47.5</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>47.5 - 51.4 GHz</b>	
<b>47.5-47.9</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.552 (space-to-Earth) 5.516B 5.554A MOBILE	<b>47.5-47.9</b> FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) MOBILE
<b>47.9-48.2</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE 5.552A	<b>47.9-48.2</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE
<b>48.2-48.54</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.552 (space-to-Earth) 5.516B 5.554A 5.555B MOBILE	<b>48.2-48.54</b> FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) MOBILE
<b>48.54-49.44</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.552 MOBILE 5.149 5.340 5.555	<b>48.54-49.44</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE
<b>49.44-50.2</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.338A 5.552 (space-to-Earth) 5.516B 5.554A 5.555B MOBILE	<b>49.44-50.2</b> FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth) MOBILE
<b>50.2-50.4</b> EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive) 5.340	<b>50.2-50.4</b> EARTH EXPLORATION- SATELLITE (passive) SPACE RESEARCH (passive)
<b>50.4-51.4</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.338A MOBILE Mobile-satellite (Earth-to-space)	<b>50.4-51.4</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Mobile-satellite (Earth-to-space)



ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>51.4 - 58.2 GHz</b>	
<b>51.4-52.6</b> FIXED 5.338A MOBILE 5.547 5.556	<b>51.4-52.6</b> FIXED MOBILE
<b>52.6-54.25</b> EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive) 5.340 5.556	<b>52.6-54.25</b> EARTH EXPLORATION-SATELLITE (passive) SPACE RESEARCH (passive)
<b>54.25-55.78</b> EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE 5.556A SPACE RESEARCH (passive) 5.556B	<b>54.25-55.78</b> EARTH EXPLORATION-SATELLITE (passive) INTER-SATELLITE SPACE RESEARCH (passive)
<b>55.78-56.9</b> EARTH EXPLORATION-SATELLITE (passive) FIXED 5.557A INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	<b>55.78-56.9</b> EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE SPACE RESEARCH (passive)
<b>56.9-57</b> EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.558A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	<b>56.9-57</b> EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE SPACE RESEARCH (passive)
<b>57-58.2</b> EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 SPACE RESEARCH (passive) 5.547 5.557	<b>57-58.2</b> EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE SPACE RESEARCH (passive)

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>58.2 - 71 GHz</b>	
<b>58.2-59</b> EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive) 5.547 5.556	<b>58.2-59</b> EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)
<b>59-59.3</b> EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE 5.556A MOBILE 5.558 RADIOLOCATION 5.559 SPACE RESEARCH (passive)	<b>59-59.3</b> EARTH EXPLORATION-SATELLITE (passive) FIXED INTER-SATELLITE MOBILE RADIOLOCATION SPACE RESEARCH (passive)
<b>59.3-64</b> FIXED INTER-SATELLITE MOBILE 5.558 RADIOLOCATION 5.559 5.138	<b>59.3-64</b> FIXED INTER-SATELLITE MOBILE RADIOLOCATION
<b>64-65</b> FIXED INTER-SATELLITE MOBILE except aeronautical mobile 5.547 5.556	<b>64-65</b> FIXED INTER-SATELLITE MOBILE except aeronautical mobile
<b>65-66</b> EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH 5.547	<b>65-66</b> EARTH EXPLORATION-SATELLITE FIXED INTER-SATELLITE MOBILE except aeronautical mobile SPACE RESEARCH
<b>66-71</b> INTER-SATELLITE MOBILE 5.553 5.558 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.554	<b>66-71</b> INTER-SATELLITE MOBILE MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>71 - 81 GHz</b>	
<b>71-74</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)	<b>71-74</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)
<b>74-76</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) 5.561	<b>74-76</b> FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth)
<b>76-77.5</b> RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149	<b>76-77.5</b> RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth)
<b>77.5-78</b> AMATEUR AMATEUR-SATELLITE Radio astronomy Space research (space-to-Earth) 5.149	<b>77.5-78</b> AMATEUR AMATEUR-SATELLITE Radio astronomy Space research (space-to-Earth)
<b>78-79</b> RADIOLOCATION Amateur Amateur-satellite Radio astronomy Space research (space-to-Earth) 5.149 5.560	<b>78-79</b> RADIOLOCATION Amateur Amateur-satellite Radio astronomy Space research (space-to-Earth)
<b>79-81</b> RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) 5.149	<b>79-81</b> RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth)

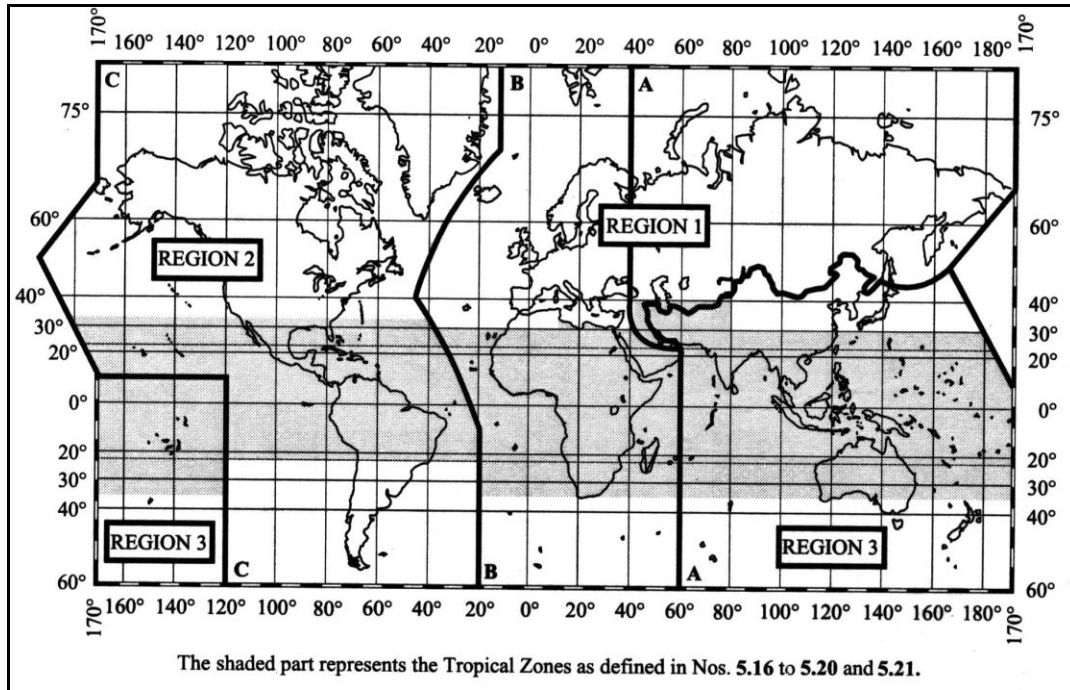
ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>81– 95 GHz</b>	
<b>81-84</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Space research (space-to-Earth) 5.149 5.561A	<b>81-84</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY Space research (space-to-Earth)
<b>84-86</b> FIXED FIXED-SATELLITE (Earth-to-space) 5.561B MOBILE RADIO ASTRONOMY 5.149	<b>84-86</b> FIXED FIXED-SATELLITE (Earth-to-space) MOBILE RADIO ASTRONOMY
<b>86-92</b> EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) 5.340	<b>86-92</b> EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)
<b>92-94</b> FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	<b>92-94</b> FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION
<b>94-94.1</b> EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Radio astronomy 5.562 5.562A	<b>94-94.1</b> EARTH EXPLORATION- SATELLITE (active) RADIOLOCATION SPACE RESEARCH (active) Radio astronomy
<b>94.1-95</b> FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION 5.149	<b>94.1-95</b> FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION

ITU Region1:Table of Allocations	UGANDA TABLE OF ALLOCATIONS
<b>95 – 100 GHz</b>	
<b>95-100</b> FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE 5.149 5.554	<b>95-100</b> FIXED MOBILE RADIO ASTRONOMY RADIOLOCATION RADIONAVIGATION RADIONAVIGATION-SATELLITE

## PART III

### 4. REGIONS AND AREAS

- 4.1 For allocation of frequencies the world has been divided into three regions as shown on the following map and described in Nos. 5.3 to 5.9:



- 4.2 **Region 1** includes the area limited on the east by line A (lines A, B and C are defined below) and on the west by line B, excluding any of the territory of the Islamic Republic of Iran which lies between these limits. It also includes the whole of the territory of Armenia, Azerbaijan, Russian Federation, Georgia, Kazakstan, Mongolia, Uzbekistan, Kyrgyzstan, Turkmenistan, Turkey and Ukraine and the area to the north of Russian Federation which lies between lines A and C.
- 4.3 **Region 2** includes the area limited on the east by line B and on the west by line C.
- 4.4 **Region 3** includes the area limited on the east by line C and on the west by line A, except any of the territory of Armenia, Azerbaijan, Russian Federation, Georgia, Kazakstan, Mongolia, Uzbekistan, Kyrgyzstan, Turkmenistan, Turkey and Ukraine and the area to the north of Russian Federation Armenia, Azerbaijan, Russian Federation, Georgia, Kazakstan, Mongolia, Uzbekistan, Kyrgyzstan, Turkmenistan, Turkey and Ukraine and the area to the north of Russian Federation. It also includes that part of the Islamic Republic of Iran lying outside those limits.

4.5 It should be noted that where the words 'regions' or 'regional' are without a capital 'R' in these Regulations, they do not relate to the three Regions here defined for purposes for frequency allocation.

4.6 The description where lines A, B and C can be drawn on a map may be found in Nos. **5.6** to **5.9** of the Radio Regulations.

4.7 A Sub-region is an area consisting of two or more countries in the same region. The shaded part represents the Tropical Zone as defined in Nos. **5.16** to **5.21** of the Radio Regulations. Use by the broadcasting service of the bands listed below is restricted to the Tropical Zone. Further details regarding the use of these bands may be found in Article 23 of the Radio Regulations.

2300 – 2498 kHz (Region 1)  
2300 – 2495 kHz (Regions 2 and 3)  
3200 – 3400 kHz (All Regions)  
4750 – 4995 kHz (All Regions)  
5005 – 5060 kHz (All Regions)

4.8 The Tropical Zone is defined as:

- a) the whole of that area in Region 2 between the Tropics of Cancer and Capricorn;
- b) the whole of that area in Regions 1 and 3 contained between the parallel 30 North and 35 South with the addition of:
  - i) the area contained between the meridians 40 East and 80 East of Greenwich and the parallels 30 North and 40 North;
  - ii) that part of Libya north parallel 30 North.

In **Region 2**, the Tropical Zone may be extended to parallel 33 North subject to special agreements between the countries concerned in that region.

## PART IV

### 5. ALLOCATIONS AND CATEGORIES OF SERVICES

#### 5.1 *Primary, Permitted and secondary services*

5.1.1 Where, in a box of the Table in this publication, a band is indicated as allocated to more than one service, either on a worldwide or Regional basis, such services are listed in the following order:

- a) Services, the names of which are printed in “capitals” (example: FIXED); these are called “primary” services;
- b) Services, the names of which are printed in “capitals between oblique strokes” (example: /RADIOLOCATION/); these are called “permitted” services;
- c) Services the names of which are printed in “normal characters” (example: Mobile); these are called “secondary” services.

5.1.2 Additional remarks are printed in normal character (example: MOBILE except aeronautical mobile).

5.1.3 Primary and Permitted services have equal rights, except that, when preparing frequency plans, the primary service, when compared with permitted service, shall have prior choice of frequencies in the band.

5.1.4 Stations of a secondary service:

- a) shall not cause harmful interference to stations of primary services to which frequencies are already assigned or to which frequencies may be assigned at a later date;
- b) cannot claim protection from harmful interference from stations of primary service to which frequencies are already assigned or may be assigned at a later date;
- c) can claim protection from harmful interference from stations of the same or other secondary service(s) to which frequencies may be assigned at a later date.

5.1.5 Where s band is indicated in a footnote of the Table as allocated to a service “on a secondary basis” in an area smaller than a Region, or in a particular country, this is a secondary service.



5.1.6 Where a band is indicated in a footnote of the Table as allocated to a service “on a primary basis ”smaller than a Region, or in a particular country, this is a primary service only in that area or country.

## **5.2 Additional allocations**

5.2.1 Where a band is indicated in a footnote of the Table as “also allocated” to a service in an area smaller than a Region, or in a particular country, this is an “additional” allocation, i.e. an allocation, which is added in this area or in this country to the service, or services which are indicated in the Table.

5.2.2 If the footnote does not include any restriction on the service or services concerned apart from the restriction to operate only in a particular area or country, stations of this service or these services shall have equality of right to operate with stations of other primary service or services indicated in the Table.

5.2.3 If restrictions are imposed on an additional allocation in addition to the restriction to operate only in a particular area or country, this is indicated in the footnote of the Table.

## **5.4 Alternative allocations**

5.4.1 Where a band is indicated in a footnote of the Table as “allocated” to one or more services in an area smaller than a Region, or in a particular country, this is an “alternative” allocation, i.e. an allocation which replaces, in this area or in this country, the allocation indicated in the Table.

5.4.1 If the footnote does not include any restriction on stations of the service or services concerned, apart from the restriction to operate only in a particular area or country, these stations of such a service or services shall have an equality of right to operate with stations of the primary service or services, indicated in the Table, to which the band is allocated in other areas or countries.

5.4.3 If restrictions are imposed on stations of a service to which an alternative allocation is made, in addition to the restriction to operate only in a particular country or area, this is indicated in the footnote.

## **5.5 Miscellaneous provisions**

5.5.1 Where it is indicated in these Regulations that a service may operate in a specific frequency band subject to not causing harmful interference, this means also that this service cannot claim protection from harmful interference caused by other services to which the band is allocated under Chapter III of these regulations.

5.5.2 Except if otherwise specified in a footnote, the term “fixed service”, where appearing in this publication, does not include systems using ionospheric scatter propagation.

## 5.6 DEFINITIONS

Unless otherwise specified, the terms used in this table have the following meaning:

5.6.1 *Administration*: Any governmental department responsible for discharging the obligations under the convention of ITU and the RR.

5.6.2 *Radio*: A general term applied to the use of radio waves.

5.6.3 *Telecommunication*: Any transmission, emission or reception of signs, signals, writing, images and sound or intelligence of any nature by wire, radio, optical or other electromagnetic systems.

5.6.4 *Radiocommunication*: Telecommunication by means of radio waves.

5.6.5 *Terrestrial Radio communication*: Any Radiocommunication other than space Radiocommunication or radio astronomy.

5.6.6 *Radiocommunication service*: Any service as defined in this section involving the transmission, emission and/or reception of radio waves for specific telecommunication purposes. In the table, unless otherwise stated, any Radiocommunication service relates to terrestrial radiocommunication.

5.6.7 *Allocation* (of a frequency band): Entry in the Table of Frequency Allocations of a given frequency band for the purpose of its use by one or more terrestrial or space *radiocommunication services* or the *radio astronomy service* under specific conditions. This term shall also be applied to the frequency band concerned.

5.6.8 *Allotment* (of a radio frequency or radio frequency channel): Entry of a designated frequency channel in an agreed plan, adopted by a competent conference, for use by one or more administrations for a terrestrial or space *radiocommunication services* in one or more identified countries or geographical areas and under specified conditions.

5.6.9 *Assignment* (of a radio frequency or radio frequency channel): Authorization given by an administration for a radio *station* to use a radio frequency or radio frequency channel under specified conditions.

5.6.10 *Fixed service*: A *radiocommunication service* between specified Fixed points.

5.6.11 *Fixed-satellite service*: A radiocommunication service between *Earth stations* at given positions, when one or more *satellites* are used; the given position may be a specified fixed point or any fixed point within specified areas; in some cases this service includes satellite-to-satellite links, which may also be operated in the *inter-satellite* service; the fixed-satellite service may also include *feeder links* for other *space radiocommunication services*.

5.6.11 *Inter-satellite service*: A radiocommunication service providing links between artificial *satellites*.

5.6.12 *Space operation service*: A radiocommunication service concerned exclusively with the operation of *spacecraft*, in particular *space tracking*, *space telemetry* and *space telecomm and*.

5.6.13 *Mobile service*: A radiocommunication service between mobile and land stations, or between mobile stations (CV).

5.6.1 *Mobile-satellite service*: A radiocommunication service:

- between *mobile earth stations* and one or more *space stations*, or between *space stations* used by this service; or
- between *mobile earth stations* by means of one or more *pace stations*.

5.6.15 *Land mobile service*: A mobile service between base stations and land mobile stations, or between land mobile stations.

5.6.16 *Land mobile-satellite service*: A mobile-satellite service in which mobile earth stations are located on land.

5.6.17 *Maritime mobile service*: A mobile service between coast stations and ship stations, or between ship stations, or between associated land mobile stations; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.

5.6.18 *Maritime mobile-satellite services*: A mobile-satellite service in which mobile earth stations are located on board ships; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.

5.6.19 *Port operations service*: A maritime mobile service in or near a port, between *coast stations* and *ship stations*, or between ship stations, in which messages are restricted to those relating to the operational handling, the movement and the safety of ships and, in emergency, to the safety of persons.

5.6.20 *Ship movement service*: A safety service in the maritime mobile service other than a port operations service, between coast stations and ship stations, or between

ship stations, in which messages are restricted to those relating to the movement of ships.

- 5.6.21 *Aeronautical mobile service*: A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radiobeacon stations may also participate in this service.
- 5.6.22 *Aeronautical mobile-satellite (R)\* service*: an aeronautical mobile service reserved for communications, including those relating to flight, primarily along national or international civil air routes.
- 5.6.23 *Aeronautical mobile (OR)\*\* service*: An aeronautical mobile service intended for communications, including those relating to flight coordination, primarily outside national or international civil air routes.
- 5.6.24 *Aeronautical mobile-satellite service*: A mobile-satellite service in which mobile earth stations are located on board aircraft; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.
- 5.6.25 *Aeronautical mobile-satellite service (R)\* service*: An aeronautical mobile-satellite service reserved for communications relating to safety and regularity of flights, primarily along national or international civil air routes.
- 5.6.26 *Aeronautical mobile satellite (OR)\*\* service*: An aeronautical mobile satellite services intended for communications, including those relating to flight Coordination, primarily outside national and international air routes
- 5.6.27 *Broadcasting service*: A radiocommunication services in which the transmissions are intended for direct reception by the general public. This service may include sound transmission, television transmission or other types of transmission (CS).
- 5.6.28 *Broadcasting-satellite service*: A radiocommunication service in which signals transmitted or retransmitted by space stations are intended for direct reception by the general public.
- 5.6.29 *Radiodetermination service*: a radiocommunication service for the purpose of radiodetermination.
- 5.6.30 *Radiodetermination-satellite service*: A radiocommunication service for the purpose of radiodetermination involving the use of one or more space stations. This service may also include *feeder links* necessary for its own operation.

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\* (R): route

\*\* (OR): off-route

- 5.6.31 *Radionavigation service*: A radiodetermination service for the purpose of *radionavigation*.
- 5.6.32 *Radionavigation satellite service*: A radiodetermination-satellite service used for the purpose of radionavigation. This service may also include feeder links necessary for its operation.
- 5.6.33 *Maritime radionavigation service*: a radionavigation service intended for the benefit and for the safe operation of ships.
- 5.6.34 *Maritime radionavigation-satellite service*: A radionavigation-satellite service in which earth stations are located on board ships.
- 5.6.35 *Aeronautical radionavigation service*: A *radionavigation service* intended for the benefit and for the safe operation of aircraft.
- 5.6.36 *Aeronautical radionavigation-satellite service*: A *radionavigation-satellite service* in which earth stations are located on board aircraft.
- 5.6.37 *Radiolocation service*: a radiodetermination service for the purpose of radiolocation.
- 5.6.38 *Radiolocation-satellite service*: A radiodetermination service used for the purpose of radiolocation. This service may also include the *feeder links* necessary for its operation.
- 5.6.39 *Meteorological aids service*: A *radiocommunication service* used for meteorological including, hydrological, observations and exploration.
- 5.6.40 *Earth exploration-satellite service*: A radiocommunication service between earth stations and one or more space stations, which may include links between space stations, in which:
- a) Information relating to the characteristics of the Earth and its natural phenomena, including data relating to the state of the environment, is obtained from *active sensors* or *passive sensors* on *Earth satellites*;
  - b) Similar information is collected from airborne or Earth-based platforms;
  - c) Platform interrogation may be included.
- 5.6.41 *Meteorological-satellite service*: an earth exploration-satellite service for meteorological purposes.
- 5.6.42 *Standard frequency and time signal service*: a radiocommunication service for scientific, technical and other purposes, providing the transmission of specified

frequencies time signals, or both, of stated high precision, intended for general reception.

- 5.6.43 *Standard frequency and time signal=satellite service*: a radiocommunication service using space stations on earth satellite for the same purposes as those of the standard frequency and time signal service. This service may also include feeder links necessary for its operation.
- 5.6.44 *Space research service*: a radiocommunication service in which spacecraft or other objects in space are used for scientific or technological research purposes.
- 5.6.45 *Amateur service*: a *radiocommunication service* for the purpose of self-training, intercommunication and technical investigation carried out by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.
- 5.6.46 *Amateur-satellite service*: a radiocommunication service using space stations on earth satellite for the same purposes as those of the amateur service.
- 5.6.47 *Radio astronomy service*: a service involving the use of *radio astronomy*.
- 5.6.48 *Safety service*: any radiocommunication service used permanently or temporarily for the safeguarding of human life and property.
- 5.6.49 *Special service*: a *radiocommunication service*, not otherwise defined in this Section, carried on exclusively for specific needs of general utility, and not open to public correspondence. There may be more than one unconnected effective foresight area to which a *single steerable satellite beam* is intended to be pointed.

## PART V

### FOOTNOTES TO FREQUENCY ALLOCATIONS

#### i) Uganda Footnotes

**UGA 001:** The bands 255 - 283.5 KHz and 325-405 KHz are allocated for Airspace where the frequency 258 KHz is assigned for NBD at Kisoro, 270 KHz at Port bell and 273 KHz at Kasese and the frequency 362 KHz is assigned for NBD at Soroti, 355 KHz at Entebbe and 375 KHz at Buwaya.

**UGA 002:** The bands 315- 325 KHz and 415-435 KHz are allocated for Non-directional radio beacon (NBD) systems.

**UGA 003:** The band 526.5-1606.5 is also allocated to mobile services on a secondary basis.

- UGA 004:** The bands 5 250-5 480 MHz, 5 730- 5 900 MHz, 6 765 - 7 000 MHz, 7 350 - 8 100 MHz, 8 100 - 8 195 MHz, 10 100 – 11175 MHz, 12 100- 12 230 MHz is used by Government, Non-Governmental Organisations (NGOs) and Companies for Private Radio Communication (PRC) for fixed and mobile services.
- UGA 005:** The frequencies 7195 KHz and 7110 KHz are used by the national broadcaster for shortwave radio broadcasting
- UGA 006:** The frequencies 8364 KHz, 8376 KHz and 8414 KHz are used for international distress emergencies.
- UGA 007 :** The band 8 815 – 9040 KHz is used by Civil Aviation Authority for Civil Aviation Services
- UGA 008:** The frequency band 47-68 MHz is also allocated to fixed and mobile services except aeronautical services on a primary basis.
- UGA 009:** The band 87.5 MHz- 108 MHz is used for FM sound broadcasting services. Frequency assignments are done in accordance with ITU GE84 Plan.
- UGA 010:** The band 108 - 117.975 MHz is used for Aircraft radio operations.
- UGA 011 :** The band 117.975 – 137 MHz is used by Civil Aviation Authority for Air Traffic Control in Uganda.
- UGA 012:** The band 150.05–174.0 MHz, is used by Government, NGOs and Companies for Private Radio Communication for fixed and mobile services.
- UGA 013:** The band 156.7685 - 156.8375 is for Security and Public Protection Services.
- UGA 014:** The band 174 - 230 is used for analogue television broadcasting services, whose frequency assignments are done in accordance with ITU GE89 Plan. Band is planned for DVB-T and T-DAB 2015 in accordance with ITU GE06 Agreement.
- UGA 015:** The bands 312–328 MHz and 336-380 MHz are used for Radio Transmission Links (Studio to Transmitter Links) of commercial radio broadcasting stations on a primary basis.

- UGA 016:** The bands 380-385 MHz and 390-395 MHz are reserved for use Public protection and disaster relief services.
- UGA 017:** The bands 450 - 457 MHz and 460-467 MHz are used mobile services based on CDMA technology in the 450 MHz band.
- UGA 018:** The bands 806-821 MHz and 851-866 MHz and 824-834 MHz and 869-879 MHz are used mobile services based on CDMA technology in the 850 MHz band.
- UGA 019:** The band 470 - 799 MHz is used for Analogue Broadcasting Services in accordance with ITU GE89 Plan. It has been planned for Digital Video Broadcasting –Terrestrial (DVB-T) services. The deadline for implementation of DVB-T is fixed for 17 January 2015 in accordance with ITU GE06 Agreement.
- UGA 020:** The band 799 - 862 is reserved for Mobile Communication Services.
- UGA 021:** The bands 880 - 890 MHz and 925-935 MHz in the E-GSM 900 MHz and the bands 890 – 915 MHz and 935 – 960 MHz in the GSM 900 MHz band are used for global mobile communications based on the GSM technology.
- UGA 022:** The bands 942 - 960 MHz and 1700-1930 MHz are used by Jamming Devices in banks in accordance with guidelines provided by UCC. Jamming devices operate at an output power not exceeding 500 mW (+27dBm) with coverage area not exceeding 20m from the premises outside the banks using such devices.
- UGA 023:** The bands 1710–1785 MHz and 1805 – 1880.0 MHz in the GSM 1800 MHz band are used for global mobile communications based on the GSM technology.
- UGA 024:** The bands 1920-1980 MHz, 2110-2170 MHz based on FDD mode and 2010-2025 based on TDD mode are used for mobile communications in the application of broadband services based on 3G/UMTS systems.
- UGA 025:** The bands 1787-1802, 2300-2400 MHz, 2500-2569 MHz, 3300-3400 MHz and 3400-3600 are used for broadband mobile services /broadband Wireless Access Services based on TDD/FDD modes.
- UGA 026:** Users of this band require authorisation from UCC.
- UGA 027:** Portions in the band 75.2-87.5 MHz is used for paging services.

ii) **Relevant ITU Footnotes**



These footnotes as they appear in this table of allocations are mainly those relating to frequency allocations in Region 1 or across all regions, or for additional/alternative allocations where Uganda falls or in countries of the region where they falls

- 5.56** The stations of services to which the bands 14-19.95 kHz and 20.05 – 70 kHz and in Region 1 also the bands 72-84 kHz and 86-90 kHz are allocated may transmit standard frequency and time signals. Such stations shall be afforded protection from harmful interference. In Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Kazakhstan, Mongolia, Kyrgyzstan, Slovakia, Russian Federation, Tajikistan, and Turkmenistan, the frequencies 25 kHz and 50 kHz will be used for this purpose under the same conditions. (WRC-07)
- 5.57** The use of the bands 14-19.95 kHz and 20.05-70 kHz and 70-90 kHz (72-84 kHz and 86-90 kHz in Region 1) by the maritime mobile service is limited to coast radiotelegraph stations (A1A and F1B only). Exceptionally, the use of class J2B or J7B emissions is authorised subject to the necessary bandwidth not exceeding that normally used for class A1A or F1B emissions in the band concerned.
- 5.60** In the bands 70-90 kHz (70-86 kHz in Region 1) and 110-130 kHz (112-130 kHz in Region 1), pulsed radionavigation systems may be used on condition that they do not cause harmful interference to other services to which these bands are allocated.
- 5.62** Administrations, which operate stations in the radionavigation service in the band 90-110 kHz are urged to coordinate technical and operating characteristics in such a way as to avoid harmful interference to the services provided by these stations.
- 5.64** Only classes A1A or F1B, A2C, F1C or F3C emissions are authorised for stations of the fixed service between 90 kHz and 160 kHz (148.5 kHz in Region 1) and for stations of the maritime mobile service in the bands allocated to this service between 110 kHz and 160 kHz (148.5 kHz in Region 1). Exceptionally, class J2B or J7B emission are also authorised in the bands between 110 kHz and 160 kHz (148.5 kHz in Region 1) for stations of the maritime mobile service.
- 5.67A** Stations in the Amateur service using frequencies in the band 135.7 – 137.8 KHz shall not exceed a maximum radiated power of 1 W (e.i.r.p) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. 5.67. (WRC-07)
- 5.73** The band 285-325 kHz (283.5-325 kHz in Region 1) in the maritime radionavigation service may be used to transmit supplementary navigational

information using narrow-band techniques, on condition that no harmful interference is caused to radiobeacon stations operating in the radionavigation service. (WRC-97)

- 5.74** *Additional allocation:* in Region 1, the frequency band 285.3-285.7 kHz is also allocated to the maritime radionavigation service (other than radiobeacons) on a primary basis.
- 5.76** The frequency 410 kHz is designated for radio direction-finding in the maritime radionavigation service. The other radionavigation services to which the band 405-415 kHz is allocated shall not cause harmful interference to radio direction-finding in the band 406.5-413.5 kHz.
- 5.79A** When establishing coast stations in the NAVTEX service on the frequencies 490 kHz, 518 kHz and 4209.5 kHz, administrations are strongly recommended to coordinate the operating characteristics in accordance with the procedures of the International Maritime Organisation (IMO) (see Resolution 339(Rev.WRC-07)) (WRC-07).
- 5.82** In the maritime mobile service, the frequency 490 kHz is to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy. The conditions for use of the frequency 490 kHz are prescribed in Articles S31 and S52. In using band 415-495 kHz for the aeronautical radionavigational service, administrations are requested to ensure that no harmful interference is caused to the frequency 490 kHz. (WRC-07)
- 5.82A** The use of the band 495 – 505 KHz is limited to radiotelegraphy. (WRC – 08)
- 5.82B** Administrations authorizing the use of frequencies in the band 495 – 505 KHz by services other than the maritime mobile service shall ensure that no harmful interference is caused to the maritime mobile service in this band or to the services having allocations in the adjacent bands, noting in particular the conditions of use of the frequencies 490 KHz and 518 KHz, as prescribed in Articles 31 and 52. (WRC – 07)
- 5.84** The conditions for the use of the frequency 518 kHz by the maritime mobile service are prescribed in Articles 31 and 52. (WRC-07)
- 5.90** In the band 1605-1705 kHz, in cases where a broadcasting station of Region 2 is concerned, the service area of the maritime mobile stations in Region 1 shall be limited to that provided by ground wave propagation.

- 5.92** Some countries of Region 1 use radio determination systems in the bands 1606.5-1625 kHz, 1635-1800 kHz, 1850-2160 kHz, 2194-2300 kHz, 2502-2850 kHz and 3500-3800 kHz, subject to agreement obtained under No.S9.21. The radiated mean power of these stations shall not exceed 50W.
- 5.100** In Region 1, the authorisation to use the band 1810-1830 kHz by the amateur service in countries situated totally or partially north of 40°N shall be given only after consultation with the countries mentioned in Nos.S5.98 and S5.99 to define the necessary steps to be taken to prevent harmful interference between amateur stations and stations of other services operating in accordance with Nos. S5.98 and S5.99.
- 5.103** In Region 1, in making assignments to stations in the fixed and mobile services in the bands 1850-2045 kHz, 2194-2498 kHz, 2502-2625 kHz and 2650-2850 kHz, administrations should bear in mind the special requirements of the maritime mobile service.
- 5.104** In Region 1, the use the band 2025-2045 kHz by the metrological aids service is limited to oceanographic buoy stations.
- 5.108** The carrier frequency 2182 kHz is an international distress and calling frequency for radiotelephony. The conditions for the use of the band 2173.5-2190.5 kHz are prescribed in Articles S31 and S52. (WRC-07)
- 5.109** The frequencies 2187.5 kHz, 4207.5 kHz, 6312 kHz, 8414.5 kHz, 12577 kHz and 16804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article S31.
- 5.110** The frequencies 2174.5 kHz, 4177.5 kHz, 6268 kHz, 8376.5 kHz, 12520 kHz and 16695 kHz are international distress frequencies for narrow-band direct printing telegraphy. The conditions for the use of these frequencies are prescribed in Article S31.
- 5.111** The carrier frequencies 2182 kHz, 3023 kHz, 5680 kHz, 8364 kHz and the frequencies 121.5 MHz and 156.8 MHz and 243 MHz may also be used, in accordance with the procedures in force for terrestrial Radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Article 31.

The same applies to the frequencies 10003 kHz, 14993 kHz and 19993 kHz, but in each of these cases emissions must be confined in a band of  $\pm 3$  kHz about the frequency. (WRC-07)

- 5.113** For the conditions for the use of the bands 2300-2495 kHz (2498 kHz in Region 1), 3200-3400 kHz, 4750-4995 kHz and 5005-5060 kHz by the broadcasting service, see Nos. S5.16 to S5.20, S5.21 and S23.3 to S23.10.
- 5.115** The carrier (reference) frequencies 3023 kHz and 5680 kHz may also be used, in accordance with Article S31 by stations of the maritime mobile service engaged in coordinated search and rescue operations. (WRC-07)
- 5.116** Administrations are urged to authorise the use of the band 3155-3195 kHz to provide a common worldwide channel for low power wireless hearing aids. Additional channels for these devices may be assigned by administrations in the bands between 3155 kHz and 3400 kHz to suit local needs.
- It should be noted that frequencies in the range 3000 kHz to 4000 kHz are suitable for hearing aid devices which are designed to operate over short distances within the induction field.
- 5.127** The use of the band 4000-4063 kHz by the maritime mobile service is limited to ship stations using radiotelephony (see No.S52.220 and Appendix S17).
- 5.128** Frequencies in the band 4063 – 4123 KHz and 4130 – 4438 KHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 W, on condition that harmful interference is not caused to the maritime mobile service. In addition, in Afghanistan, Argentina, Armenia, Azerbaijan, Belarus, Botswana, Burkina Faso, Central African Republic, China, the Russian Federation, Georgia, India, Kazakhstan, Mali, Niger, Kyrgyzstan, Tajikistan, Chad, Turkmenistan and Ukraine, in the bands 4063-4123 kHz, 4130-4133 kHz and 4408-4438 kHz, stations in the fixed service with a mean power not exceeding 1 KW, can be operated on condition that they are situated at least 600 km from the coast and that harmful interference is not caused to the maritime mobile service. (WRC-07)
- 5.130** The conditions for the use of the carrier frequencies 4125 kHz and 6215 kHz are prescribed in Articles 31 and 52.(WRC-07).
- 5.131** The frequency 4209.5 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct-printing techniques. (WRC-97)
- 5.132** The frequencies 421 kHz, 6314 kHz, 8416.5 kHz, 12579 kHz, 19680.5 kHz, 22376 kHz and 26100.5 kHz are the international frequencies for the transmission of maritime safety information (MSI) (see Appendix S17).
- 5.134** The use of the bands 5900-5950 kHz, 7300-7350 kHz, 9400-9500 kHz, 11600-11650 kHz, 12050-12100 kHz, 13570-13600 kHz, 13,800-13,870

kHz, 15600-15800 kHz, 17480-17550 kHz and 18900-19020 kHz by the broadcasting service is subject to the application of the procedure of Article 12. Administrations are encouraged to use these bands to facilitate the introduction of digitally modulated emissions in accordance with the provisions of Resolution 517 (Rev.WRC-07).

**5.136** *Additional allocation:* frequencies in the band 5900-5950 kHz may be used by stations in the following services, communicating only within the boundary of the country in which they are located: fixed service (in all three Regions), land mobile service (in Region 1), mobile except aeronautical mobile (R) service (in Region 2 and 3), on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these frequencies by the broadcasting services, administrations are urged to use the minimum power required and take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations (WRC-07).

**5.137** On condition that harmful interference is not caused to the maritime mobile service, the bands 6200-6213 kHz and 6220.5 – 6525 kHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50W. At the time of notification of these frequencies, the attention of the Bureau will be drawn to the above conditions.

**5.138** The following bands:

6765 -6795 kHz (Centre frequency 6780 kHz)

433.05–434.79 kHz (Centre frequency 433.92 MHz) in Region 1 except in the countries mentioned in No.S5.280)

61 – 61.5 GHz (Centre frequency 61.25 GHz)

122-123 GHz (Centre frequency 122.5 GHz),

244-246 GHz (Centre frequency 245 GHz)

are designed for industrial, scientific and medical (ISM) applications. The use of these frequency bands for ISM applications shall be subject to special authorisation by the administration concerned, in agreement with other administrations whose Radiocommunication services might be affected. In applying this provision, administrations shall have due regard to the latest relevant ITU-R Recommendations (WRC-07).

- 5.143** *Additional allocation:* frequencies in the band 7300-7350 kHz may be used by stations in the fixed service and in the land mobile service, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations.
- 5.145** The conditions for the use of the carrier frequencies 8291 kHz, 12290 kHz and 16420 kHz as prescribed in Articles S31 and S52 (WRC-07).
- 5.146** *Additional allocation:* frequencies in the bands 9400-9500 kHz, 11600-11650 kHz, 12050-12100 kHz, 15600-15800 kHz, 17480-17550 kHz and 18900-19020 kHz may be used by stations in the fixed service, communicating only within the boundary of the country which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies in the fixed service, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulation. (WRC-07)
- 5.147** On condition that harmful interference is not caused to the broadcasting service, frequencies in bands 9775-9900 kHz, 11650-11700 kHz and 11975-12050 kHz may be used by stations in the fixed service communication only within the boundary of the country in which they are located, each station using a total radiating power not exceeding 24dBW.
- 5.149** In making assignments to stations of other services to which the bands:  
73 – 74.6 MHz in Regions 1 and 3,  
150.05 – 153 MHz in Region 1  
608 – 614 in Regions 1 and 3  
31.5 – 31.8 GHz Regions 1 and 3
- 5.155B** The band 21870-21924 kHz is used by the fixed service for provision of services related to aircraft flight safety.
- 5.156A** The use of the band 23200-23350 kHz by the fixed service is limited to provision of services related to aircraft flight safety.
- 5.200** In the band 117.975-136 MHz, the frequency 121.5 MHz is the aeronautical emergency frequency and, where required, the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz. Mobile stations of the maritime mobile service may communicate on these frequencies under the conditions laid down in Article S31 and Appendix S13 for distress and safety purposes with stations of the aeronautical mobile service. (WRC-07)

**5.208 A** In making assignments to space stations in the mobile-satellite service in the bands 137-138 MHz, 387-390 MHz and 400.15-401 MHz, administrations shall take all practicable steps to protect the radio astronomy service in the bands 150.05-153 MHz, 322-328.6 MHz, 406.1-410 MHz and 608-614 MHz from any interference from unwanted emissions. The threshold levels of interference detrimental to the radio astro service are shown in Table 1 of Recommendation ITU-R RA.769-1.(WRC-07).

**5.208B** In the bands:

137 – 138 MHz,  
387 – 390 MHz,  
400.15 – 401 MHz,  
1452 -1492 MHz,  
1525 – 1610 MHz,  
1613.8 – 1626.5 MHz,  
2655 – 2690 MHz,  
21.4 – 22 GHz,

Resolution 739 (Rev. WRC – 07) applies. (WRC-07)

**5.218** *Additional allocation:* the band 148-149.9 MHz is also allocated to the space operation service (Earth to space) on a primary basis, subject to agreement obtained under No.S9.21. The bandwidth of any individual transmission shall not exceed  $\pm 25$ kHz.

**5.219** The use of the band 148-149.9 MHz by the mobile-satellite service is subject to coordination under No.S9.11A. The mobile-satellite service shall not constrain the development and use of the fixed, mobile and space operation services in the band 148-149.9 MHz.

**5.220** The use of the bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service is subject to coordination under No.S9.11A. The mobile-satellite service shall not constrain the development and use of the radionavigation-satellite service in the bands 149.9-150.05 MHz and 399.9-400.05 MHz.

**5.221** Stations of the mobile-satellite service in the band 148-149.9 MHz shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services operating in accordance with the Table of Frequency Allocations in the following countries: Albania, Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Benin, Bosnia and Herzegovina, Botswana, Brunei Darussalam, Bulgaria, Cameroon, China, Cyprus, Congo, the Republic of Korea, Cote d'Ivoire, Croatia, Cuba, Denmark, Egypt, the United Arab Emirates, Eritrea,

Spain, Estonia, Ethiopia, the Russian Federation, Finland, France, Gabon, Ghana, Greece, Guinea, Guinea Bissau, Hungary, India, Iran (the Islamic Republic of), Ireland, Iceland, Israel, Italy, the Libyan Arab Jamahiriya, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, the former Yugoslav Republic of Macedonia, Lesotho, Latvia, Lebanon, Liechtenstein, Lithuania, Luxembourg, Malaysia, Mali, Malta, Mauritania, Moldova, Mongolia, Montenegro, Mozambique, Namibia, Norway, New Zealand, Oman, Uganda, Uzbekistan, Pakistan, Panama, Papua New Guinea, Paraguay, the Netherlands, Philippines, Poland, Portugal, Qatar, the Syrian Arab Republic, , Kyrgyzstan, Dem, People's Rep. of Korea, Slovakia, Romania, the United Kingdom, Senegal, Serbia, Sierra Leone, Singapore, Slovenia, Sri Lanka, South Africa, Sweden, Switzerland, Swaziland, Tanzania, Chad, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Vietnam, Yemen, Zambia, and Zimbabwe.(WRC 07).

**5.222** Emissions of the radionavigation-satellite service in the bands 149.9-150.05 MHz and 399-400.05 MHz may also be used by receiving earth stations of the space research service.

**5.223** Recognising that the use of the bands 149.9-150.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation-satellite service, administrations are urged not to authorise such use of application of No.S4.4

**5.226** The frequency 156.525 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service using digital selective calling (DSC). The conditions for the use of this frequency and the band 156.4875 – 156.5625 MHz are contained in Article S31 and 52, and in Appendix S18.

The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. The conditions for the use of this frequency and the band 156.7625 – 156.8375 MHz are contained in Article 31 and Appendix 18.

In the bands 156-156.4875 MHz, 156.5625-156.7625 MHz, 156.837-157.45 MHz, 160.6-160.975 MHz and 161.475-162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as assigned to stations of the maritime mobile service by the administration (see Articles 31 and 52, Appendix 18).

Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such might cause harmful interference to the maritime mobile VHF radiocommunication.



However, the frequencies 156.8 MHz and 156.525 MHz and the frequency bands in which priority is given to the maritime mobile service may be used for radiocommunications on inland waterways subject to agreement between interested and affected administrations and taking into account current frequency usage and existing agreements. (WRC-07)

- 5.227** *Additional allocation:* the bands 156.4875 – 156.5125 MHz and 156.5375 – 156.5625 MHz are also allocated to the fixed and land mobile services on a primary basis. The use of these bands by the fixed and land mobile services shall not cause harmful interference to nor claim protection from the maritime mobile VHF radio-communication. (WRC-07)
- 5.227A** *Additional allocation:* the bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz are also allocated to the mobile-satellite service (Earth-to-space) on a secondary basis for the reception of automatic identification system (AIS) emissions from stations operating in the maritime-mobile service (see Appendix 18). (WRC-07)
- 5.254** The bands 235-322 MHz and 335.4-399.9 MHz may be used by the mobile-satellite service, subject to agreement obtained under No.S9.21, on condition that stations in this service do not cause harmful interference to those of other services operating or planned to be operated in accordance with the Table of Frequency Allocations.
- 5.255** The bands 312-315 MHz (Earth-to-space) and 387-390 MHz (space-to-Earth) in the mobile-satellite service may also be used by non-geostationary-satellite systems. Such use is subject to coordination under No.9.11A.
- 5.256** The frequency 243 MHz is the frequency in this band for use by survival craft stations and equipment used for survival purposes. (WRC-07)
- 5.257** The band 267-272 MHz may be used by administrations for space telemetry in their countries on a primary basis, subject to agreements obtained under No.9.21.
- 5.258** The use of the band 328.6-335.4 MHz by the aeronautical radionavigation service is limited to Instrument Landing Systems (glide path).
- 5.260** Recognising that the use of the band 399.9-400.05 MHz by the fixed and mobile services may cause harmful interference to the radionavigation satellite service, administrations are urged not to authorise such use of application of No.S4.4.
- 5.261** Emissions shall be confined in a band of  $\pm 25$  kHz about the standard frequency of 400.1 MHz.

- 5.263** The band 400.15-401 MHz is also allocated to the space research service in the space-to-space direction for communications with manned space vehicles. In this application, the space research service will not be regarded as a safety service.
- 5.264** The use of the band 400.15-401 MHz by the mobile-satellite service is subject to coordination use in 9.11A. The power flux-density limit indicated in Annex 1 of Appendix S5 shall apply until such time competent world Radiocommunication conference revises it.
- 5.266** The use of the band 406-406.1 MHz by the mobile-satellite service is limited to low power satellite emergency position-indicating radio beacons (see also Article 31). (WRC-07)
- 5.267** Any emission capable of causing harmful interference to the authorised uses of the band 406-406.1 MHz is prohibited.
- 5.268** Use of the band 410-420 MHz by the space research service is limited to communications within 5 km of an orbiting, manned space vehicle. The power flux-density at the surface of the Earth produced emissions from extra-vehicular activities shall not exceed  $-153$  dB (W/m<sup>2</sup>) for  $0^\circ \leq \delta \leq 5^\circ$ ,  $-153 = 0.077 (\delta - \text{dB (W/m}^2\text{)})$  for  $5^\circ \leq \delta \leq 70^\circ$  and  $-148$  dB (W/m<sup>2</sup>) for  $70^\circ \leq \delta \leq 90^\circ$ , where  $\delta$  is the angle of arrival of the radius frequency wave and the reference bandwidth is 5kHz. No. S4.10 does not apply to extra vehicular activities. In the frequency band the space research (space-to-space) service shall not claim protection from, nor constrain the use and development of, stations of the fixed and mobile services.(WRC-97).
- 5.286AA** The band 450 – 470 MHz is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT). This identification does not preclude the use of this band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations
- 5.287** In the maritime mobile service, the frequencies 457.525 MHz, 457.550 MHz, 457.575 MHz, 467.525 MHz, 467.550 MHz and 467.575 MHz may be used by on-board communication stations. Where needed, equipment designed for 12.5 KHz channel spacing using also the additional frequencies 457.5375 MHz, 457.5625 MHz, 467.5375 MHz and 467.5625 MHz may be introduced for on-board communications. The use of these frequencies in territorial waters may be subject to the national regulations of the administration concerned. The characteristics of the equipment used shall conform to those specified in Radiocommunication ITU-R M.1174-2

- 5.304** *Additional allocation:* in the African Broadcasting Area (see Nos.S5.10 to S5.13), the band 606-614 MHz is also allocated to the radio astronomy service on a primary basis.
- 5.306** *Additional allocation:* in Region 1, except in the African Broadcasting Area (see Nos. 5.10 to S5.13), and in Region 3, the band 608-614 MHz is also allocated to the radio astronomy service on a secondary basis.
- 5.311A** For the frequency band 620 – 790 MHz, see also Resolution 549 (WRC-07). (WRC-07)
- 5.316A:** *Additional allocation:* in Spain, France, Gabon and Malta, the band 790-830 MHz, in Angola, Bahrain, Benin, Botswana, Congo (Rep. of the), French overseas departments and communities of Region 1, Gambia, Ghana, Guinea, Kuwait, Lesotho, Lebanon, Malawi, Morocco, Mauritania, Namibia, Niger, Oman, Uganda, Poland, Qatar, Rwanda, Senegal, Sudan, South Africa, Swaziland, Tanzania, Chad, Togo, Yemen, Zambia and Zimbabwe, the band 790-862 MHz, in Georgia, the band 806-862 MHz, and in Lithuania, the band 830-862 MHz is also allocated to the mobile, except aeronautical mobile, service on a primary basis subject to the agreement by the administrations concerned obtained under No. 9.21 and under the GE06 Agreement, as appropriate, including those administrations mentioned in No. 5.312 where appropriate. However, stations of the mobile service in the countries mentioned in connection with each band referred to in this footnote shall not cause unacceptable interference to, nor claim protection from, stations of services operating in accordance with the Table in countries other than those mentioned in connection with the band. Frequency assignments to the mobile service under this allocation in Lithuania and Poland shall not be used without the agreement of the Russian Federation and Belarus. This allocation is effective until 16 June 2015. (WRC-07)
- 5.316B** In Region 1, the allocation to the mobile, except aeronautical mobile, service on a primary basis in the frequency band 790-862 MHz shall come into effect from 17 June 2015 and shall be subject to agreement obtained under No. 9.21 with respect to the aeronautical radionavigation service in countries mentioned in No. 5.312. For countries party to the GE06 Agreement, the use of stations of the mobile service is also subject to the successful application of the procedures of that Agreement. Resolution 224 (Rev.WRC-07) and 749 (WRC-0) shall apply. (WRC-07)
- 5.317A** Those parts of the band 698 – 960 MHz in Region 2 and the band 790 – 960 MHz in Region 1 and 3 which are allocated to the mobile service on a primary basis are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT). This identification does not preclude the use of these bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations

- 5.322** In Region 1, in the band 862-960 MHz, stations of the broadcasting service shall be operated only in the African Broadcasting Area (See Nos.S510 to S5.13) excluding Algeria, Egypt, Spin, Libya, Morocco, Namibia, Nigeria, South Africa, Tanzania Zimbabwe and Zambia, subject to agreement obtained under No.S9.21.(WRC-2000).
- 5.327A** The use of the band 960 – 1164 MHz by the aeronautical mobile ® service is limited to systems that operate in accordance with recognised international aeronautical standards. Such use shall be in accordance with Resolution 417 (WRC-07)
- 5.328A** Stations in the radionavigation-satellite service in the band 1164 – 1215 MHz shall operate in accordance with the provisions of Resolution 609 and shall not claim protection from stations in the aeronautical radionavigation service in the band 960 – 1215 MHz. No. 5.43A does not apply. The provisions of No. 21.18 shall apply (WRC-07).
- 5.328B** The use of the bands 1164 – 1300 MHz, 1559 – 1610 MHz and 5010 – 5030 MHz by systems and networks in the radionavigation-satellite service for which complete coordination or notification information, as appropriate is received by the Radiocommunication Bureau after 1 January 2005 is subject to the application of the provisions of Nos. 9.12, 9.12A and 9.13. Resolution 610 (WRC-03) shall also apply, however, in the case of radionavigation-satellite service (space – to – space) networks and systems, Resolution610 (WRC-03) shall only apply to transmitting space stations. In accordance with No. 5.329A, for systems and networks in the radionavigation-satellite service (space-to-space) in the bands 1215 – 1300 MHz and 1559 – 1610 MHz, the provisions of Nos. 9.7, 9.12, 9.12A and 9.13 shall only apply with respect to other systems and networks in the radionavigation-satellite service (space-to-space). (WRC-07)
- 5.329A** Use of systems in the radionavigation-satellite service (space-to-space) operating in the bands 1215 – 1300 MHz and 1559 – 1610 MHz is not intended to provide safety service applications, and shall not impose any additional constraints on radionavigation-satellite service (space-to-Earth) systems or on other services operating in accordance with the Table o Frequency Allocations. (WRC-07)
- 5.332** In the band 1215-1260 MHz, active space borne sensors in the earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints of operation or development of the radiolocation service, the radionavigation-satellite service and other service allocated on a primary basis.

- 5.341** In the bands 1400-1727 MHz, 101-120 GHz and 197-220 GHz, passive research is being conducted by some countries in a programme for the search for intentional emissions of extraterrestrial origin.
- 5.351** The bands 1525-1544 MHz, 1545-1559 MHz, 1626-1645.5 MHz and 1646.5-1660.5 MHz shall not be used for feeder links of any service. In exceptional circumstances, however, an earth station at a specified fixed point in any of the mobile-satellite services may be authorised by an administration to communicate via space stations using these bands.
- 5.351A** For the use of the bands 1518-1544 MHz, 1545-1559 MHz, 1610-1645.5 MHz, 1646.5-1660.5 MHz, 1668-1675 MHz, 1980-2010 MHz, 2170-2200 MHz, 2483.5-2520 MHz and 2670-2690 MHz by the mobile-satellite service, see Resolutions 212 (Rev.WRC-07) and 225 (Rev.WRC-07)
- 5.352A** In the band 1525-1530 MHz, stations in the mobile-satellite service, except stations in the maritime mobile-satellite service, shall not cause harmful interference to, or claim protection from, stations of the fixed service in France and French overseas territories in Region 3, Algeria, Saudi Arabia, Egypt, Guinea, India, Israel, Italy, Jordan, Kuwait, Mali, Malta, Morocco, Mauritania, Nigeria, Oman, Pakistan, Philippines, Qatar, Syria, Tanzania, Viet Nam and Yemen notified prior to 1 April 1998.
- 5.353A** In applying the procedures of section II of Article 9 to the mobile-satellite service in the bands 1530-1544 MHz and 1626.5-1645.5 MHz, priority shall be given to accommodating the spectrum requirements for distress, urgency and safety communications of the Global Maritime Distress and Safety System (GMDSS). Maritime mobile-satellite distress, urgency and safety communications shall have priority access and immediate availability over all other mobile satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, distress, urgency and safety communications of the GMDSS. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (The provisions of Resolution **222(WRC –2000)** shall apply.
- 5.354** The use of the bands 1525-1559 MHz and 1626.5-1660.5 MHz by the mobile-satellite services subject to coordination under No.S9.11A
- 5.356** The use of the band 1544-1555 MHz by the mobile-satellite service (space-to-Earth) is limited to distress and safety communications (see Article S31).
- 5.357** Transmissions in the band 1545-1555 MHz from terrestrial aeronautical stations directly to aircraft stations, or between aircraft stations, in the aeronautical mobile (R) service are also authorised when such transmissions are used to extend or supplement the satellite-to-aircraft links.

- 5.357A** In applying the procedures of No.S9.11A to the mobile-satellite service in the bands 1545-1555 MHz and 1646.5-1656.5 MHz, priority shall be given to accommodating the spectrum requirements of the aeronautical-satellite (R) service providing transmission of messages with priority 1 to 6 in Article 44. Aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article 44 shall have priority operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article 44. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (See Resolution 218 (WRC-97).)
- 5.364** The use of the band 1610-1626.5 MHz by the mobile-satellite service (Earth-to-space) and by the radiodetermination-satellite service (Earth-to-space) is subject to coordination under No.9.11A. A mobile earth station operating in either of the services in this band shall not produce a peak e.i.r.p density in excess of  $-15$  dB (W/4 kHz) in the part of the band used by the systems operating in accordance with the provisions of No.S5.33 (to which No.S4.10 applies), unless otherwise agreed by the affected administrations. In the part of the band where such systems are not operating, the mean e.i.r.p density of a mobile earth station shall not exceed  $-3$  dB (W/4 kHz). Stations of the mobile-satellite service shall not claim protection from stations in aeronautical radionavigation service, stations operating in accordance with the provisions of No.S5.33 and stations in the fixed service operating in accordance with the provisions of No.S5.519. Administrations responsible for the coordination of mobile-satellite networks shall make all practicable efforts to ensure protection of stations operating in accordance with the provisions of No.S5.33.
- 5.366** The band 1610-1626.5 MHz is reserved on a worldwide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground based or satellite borne facilities. Such satellite use is subject to agreement obtained under No.9.21.
- 5.367** *Additional allocation:* The bands 1610-1626.5 MHz and 5000-5150 MHz are also allocated to the aeronautical mobile-satellite (R) service on a primary basis, subject to agreement obtained under No.9.12.
- 5.371** *Additional allocation:* in Region 1, the bands 1610-1626.5 MHz (Earth-to-space) and 2483.5-2500 MHz (space-to-Earth) are also allocated to the radiodetermination-satellite service on a secondary basis, subject to agreement obtained under no. S9.21.

- 5.372** Harmful interference shall not be caused to stations of the radio astronomy service using the band 1610-1673.8 MHz by stations of the radiodetermination and mobile-satellite services (No.29.13 applies).
- 5.375** The use of the band 1645.5-1646.5 MHz by the mobile-satellite service (Earth-to-Space) and for inter-satellite links is limited to distress and safety communications (see Article **31**).
- 5.376A** Mobile earth stations operating in the band 1660-1660.5 MHz shall not cause harmful interference to stations in the radio astronomy service.(WRC-97)
- 5.379A** Administrations are urged to give all practicable protection in the band 1660.5-1668.4 MHz for future research in radio astronomy, particularly by eliminating air-to-ground transmissions in the meteorological aids service in the band 1664.4-1668.4 MHz as soon as possible.
- 5.379B** The use of the band 1668 – 1675 MHz by the mobile-satellite service is subject to coordination under No. 9.11A. In the band 1668 – 1668.4 MHz, Resolution 904 (WRC-07) shall apply. (WRC-07)
- 5.379D** For sharing of the band 1668.4 – 1675 MHz between the mobile-satellite service and the fixed and mobile services, Resolution 744 (rev. WRC-07) shall apply. (WRC-07)
- 5.380A** In the band 1670 – 1675 MHz, stations in the mobile-satellite shall not cause harmful interference to, nor constrain the development of, existing earth stations in the meteorological-satellite service notified before 1 January 2004. Any new assignment to these earth stations in this band shall also be protected from harmful interference from stations in the mobile-satellite service
- 5.384A** The bands, or portions of the bands, 1710 – 1885 MHz, 2300 – 2690 MHz, are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution 223 (rev. WRC-07). This identification does not preclude the use of these bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-07)
- 5.385** *Additional allocation:* the bands 1718.8-1722.2 MHz, 150-151 GHz, 174.42-175.02 GHz, 177-177.4 GHz, 178.2-178.6 GHz, 181-181.46 GHz and 257.5-258 GHz are also allocated to the radio astronomy service on a secondary basis for special line observations.
- 5.388** The bands 1885-2025 MHz and 2110-2200 MHz are intended for use, on a worldwide basis, by administrations wishing to implement International

Mobile Telecommunications-2000 (IMT-2000). Such use does not preclude the use of these bands by other services to which they are allocated. The bands should be made available for IMT-2002 in accordance with Resolution 212 (Rev.WRC-97).(See also Resolution 223(WRC 2000) (WRC 2000).

- 5.389A** The use of the bands 1980-2010 MHz and 2170-2200 MHz by the mobile-satellite service is subject to coordination under No.S9.11A and to the provision of Resolution 716 (Rev. WRC-2000).
- 5.392** Administrations are urged to take all practicable measures to ensure that space-to-space transmissions between two or more non-geostationary satellites, in the space research, space operations and Earth exploration-satellite services in the bands 2025-2110 MHz and 2200-2290 MHz, shall not impose any constraints on Earth-to-space, space-to-Earth and other space-to-space transmissions of those services and in those bands between geostationary and non-geostationary satellites.
- 5.398** In respect of the radiodetermination-satellite service in the band 2483.5-2500 MHz, the provisions of No.S4.10 do not apply.
- 5.399** In Region 1, in countries other than those listed in No. 5.400, harmful interference shall not be caused to, or protection shall not be claimed from, stations of the radiolocation service by stations of the radiodetermination satellite service.
- 5.402** The use of the band 2483.5-2500 MHz by the mobile-satellite and the radiodetermination-satellite services is subject to the coordination under No.S9.11A. Administrations are urged to take all practicable steps to prevent harmful interference to the radio astronomy service from emissions in the 2483.5-2500 MHz band, especially those caused by second-harmonic radiation that would fall into the 4990-5000 MHz band allocated to the radio astronomy service worldwide.
- 5.403** Subject to agreement obtained under No.S9.21, the band 2520-2535 MHz may also be used for the mobile-satellite (space-to-Earth), except aeronautical mobile-satellite, service for operation limited within national boundaries. The provisions of No.S9.11A apply. (WRC-07)
- 5.410** The band 2500 – 2690 MHz may be used for tropospheric scatter systems in Region 1, subject to agreement obtained under No. 9.21. Administrations shall make all practical efforts to avoid developing new tropospheric scatter systems in this band. When planning new tropospheric scatter radio-relay links in this band, all possible measures shall be taken to avoid directing the antennas of these links towards the geostationary-satellite orbit



- 5.414** The allocation of the frequency band 2500 – 2520 MHz to the mobile-satellite service (space-to-Earth) is subject to coordination under No. 9.11A. (WRC-07)
- 5.419** When introducing systems of the mobile-satellite service in the band 2670-2690 MHz, administrations shall take all necessary steps to protect the satellite systems operating in this band prior to 3<sup>rd</sup> March 1992. The coordination of mobile-satellite systems in the band shall be in accordance with No. 9.11A. (WRC-07)
- 5.420** The band 2655-2670 MHz may also be used for mobile-satellite (Earth-to-space), except aeronautical mobile-satellite, service for operation limited to within national boundaries, subject to agreement obtained under No. 9.21. The coordination under No. 9.11A applies. (WRC-07)
- 5.423** In the band 2700-2900 MHz, ground-based radars used for meteorological purposes are authorised to operate on a basis of equality with stations of aeronautical radionavigation service.
- 5.429** *Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, China, the Congo, the Republic of Korea, Cote d'Ivoire, the United Arab Emirates, India, Indonesia, the Islamic Republic of Iran, Iraq, Israel, the Libyan Arab Jamahiriya, Japan, Jordan, Kenya, Kuwait, Lebanon, Libya, Malaysia, Oman, Uganda, Pakistan, Qatar, the Syrian Arab Republic, Democratic People's Republic of Korea, and Yemen, the band 3300-3400 MHz is also allocated to the fixed and mobile services on a primary basis. The countries bordering the Mediterranean shall not claim protection for their fixed and mobile services from the radiolocation service. (WRC-07)
- 5.438** Use of the band 4200-4400 MHz by the aeronautical radionavigation service is reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground. However, passive sensing in the earth exploration-satellite and space research services may be authorised in this band on a secondary basis (no protection is provided by the radio altimeters).
- 5.440** The standard frequency and time signal-satellite service may be authorised to use the frequency 4202 MHz for space-to-Earth transmissions and the frequency 6427 MHz for Earth-to-space transmissions. Such transmissions shall be confined within the limits of  $\pm 2$  MHz of these frequencies, subject to agreement obtained under No. 9.21.
- 5.441** The use of the bands 4500-4800 MHz (space-to-Earth), 6725-7025 MHz (Earth-to-space) by the fixed-satellite service shall be in accordance with the

provisions of Appendix 30B. The use of the band 10.7-10.95 GHz (space-to-Earth), 11.2-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by geostationary-satellite systems in the fixed-satellite service shall be in accordance with the provisions of Appendix 30B. (WRC-2000).

**5.442** In the bands 4825-4835 MHz and 4950-4990 MHz, the allocation to the mobile service is restricted to the mobile, except aeronautical mobile, service. In Region 2 (except Brazil, Cuba, Guatemala, Paraguay, Uruguay and Venezuela), and in Australia, the band 4825-4835 MHz is allocated to the aeronautical mobile service, limited to aeronautical mobile telemetry for flight testing by aircraft stations. Such use shall be in accordance with Resolution 416 (WRC-07) and shall not cause harmful interference to the fixed service. (WRC-07)

**5.443A** Additional allocation: The band 5000-5010 MHz is allocated to the radionavigation –satellite service (Earth –to-space) on a primary basis. See Resolution **603 (WRC-2000)**

**5.444** The band 5030 – 5150 MHz is to be used for the operation of the international standard system (microwave landing system) for precision approach and landing. In the band 5030 – 5091 MHz, the requirements of this system shall take precedence over other uses of this band. For the use of the band 5091 – 5150 MHz, No. 5.444A and Resolution 114 (Rev. WRC-03) apply. (WRC-07)

**5.444A** *Additional allocation:* the band 5091-5150 MHz is also allocated to the fixed-satellite service (Earth-to-space) on a primary basis. This allocation is limited to feeder links of non-geostationary mobile-satellite systems in the mobile-satellite service and is subject to coordination under No. 9.11A.

In the band 5091-5150 MHz, the following conditions also apply:

- Prior to 1 January 2018, the use of the band 5091-5150 MHz by feeder links of non-geostationary-satellite systems in the mobile-satellite service shall be made in accordance with Resolution 114 (Rev. WRC-03).
- After 1 January 2016, no new assignments shall be made to earth stations providing feeder links of non-geostationary mobile-satellite systems;
- After 1 January 2018, the fixed-satellite service will become secondary to the aeronautical radionavigation service. (WRC-07)

**5.444B** The use of the band 5019 – 5150 MHz by the aeronautical mobile service is limited to:

- systems operating in the aeronautical mobile <sup>®</sup> service and in accordance with aeronautical standards, limited to surface

applications at airports. Such use shall be in accordance with Resolution 748 (WRC-07).

- aeronautical telemetry transmissions from aircraft stations (see. No. 1.83) in accordance with Resolution 418 (WRC-07)
- aeronautical security transmissions. Such use shall be in accordance with Resolution 419 (WRC-07)

**5.446A** The use of the bands 5150 – 5350 MHz and 5470 – 5725 MHz by the stations in the mobile, except aeronautical mobile, service shall be in accordance with Resolution 229 (WRC-03). (WRC-07)

**5.446C** *Additional allocation:* in Region 1 (except Algeria, Saudi Arabia, Bahrain, Egypt, United Arab Emirates, Jordan, Kuwait, Lebanon, Morocco, Oman, Syrian Arab Republic, Sudan and Tunisia) and in Brazil, the band 5150-5250 MHz is allocated to the aeronautical mobile service on a primary basis, limited to aeronautical telemetry transmissions from aircraft stations (see No. 1.83), in accordance with resolution 418 (WRC-07). These stations shall not claim protection from other stations operating in accordance with Article 5. No. 5.43A does not apply. (WRC-07)

**5.447A** The allocation to the fixed-satellite service (Earth-to-space) is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite and is subject to coordination under No. **9.11A**.

**5.447B** *Additional allocation:* the band 5150-5216 MHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. This allocation is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to provisions of No. **9.11A**. The power flux-density at the Earth's surface produced by space stations of the fixed-satellite service operating in the space-to-Earth direction in the band 5150-5216 MHz shall in no case exceed  $-164$  dB (W/m<sup>2</sup>) in any 4 kHz band for all angles of arrival.

**5.447C** Administrations responsible for fixed-satellite service networks in the band 5150-5250 MHz operated under Nos. **5.447A** and **5.447B** shall coordinate on an equal basis in accordance with No. S9.11A with administrations responsible for non-geostationary-satellite networks operated under No. **5.446** and brought into use prior to 17 November 1995. Satellite networks operated under No. **5.466** brought into use after 17 November 1995 shall not claim protection from, and shall not cause harmful interference to, stations of the fixed-satellite service operated under Nos. **5.447A** and **5.447B**.

- 5.447D** The allocation of the band 5250-5350 MHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis.
- 5.448A** The use of the frequency band 5250-5350 MHz by the earth exploration-satellite (active) and space research (active) services shall not constrain the future development and deployment of the radiolocation service.(WRC-97)
- 5.448B** The earth exploration-satellite (active) service operating in the band 5350-5460 MHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service on a primary basis.(WRC-97)
- 5.449** The use of the band 5350-5470 MHz by the aeronautical radionavigation service is limited to airborne radars and associated airborne beacons.
- 5.452** Between 5600 MHz and 5650 MHz, ground-based radars used for meteorological purposes are authorised to operate on a basis of equality with stations of the maritime radionavigation service.
- 5.458** In the band 6425-7075 MHz, passive microwave sensor measurements are carried out over the oceans. In the 7075-7250 MHz, passive microwave sensor measurements are carried out. Administrations should bear in mind the needs of the Earth exploration-satellite (passive) and space research (passive) services in their future planning of the bands 6425-7025 MHz and 7075-7250 MHz.
- 5.458A** In making assignment in the band 6700-7075 MHz to space stations of the fixed-satellite service, administrations are urged to take all practicable step to protect spectral line observations of the radio astronomy service in the band 6650-6675.2 MHz from harmful interference from unwanted emissions.
- 5.458B** The space-to-Earth allocation to the fixed-satellite service in the band 6700-7075 MHz is limited to feeder links for non-geostationary-satellite systems of the mobile-satellite service and is subject to coordination under No.S9.11A. The use of the band 6700-7075 MHz (space-to-Earth) by feeder links for non-geostationary satellite systems in the mobile-satellite service is not subject to No. 22.2.
- 5.458C** Administrations making submissions in the band 7025-7075 MHz (Earth-to-space) for geostationary-satellite systems in the fixed-satellite service after 17 November 1995 shall consult on the basis of relevant ITU-R Recommendations with the administrations that have notified and brought into use non-geostationary-satellite systems in this frequency band before 18 November 1995 upon request of the latter administrations. This consultation shall be with a view to facilitating shared operation of both

geostationary-satellite systems in the fixed-satellite service and non-geostationary-satellite systems in this band.

- 5.460** *Additional allocation:* the band 7145-7235 MHz is also allocated to the space research (Earth-to-space) service on a primary basis, subject to agreement obtained under No. 9.21. The use of the band 7145-7190 MHz is restricted to deep space; no emission to deep space shall be effected in the band 7190-7235 MHz.
- 5.461** *Additional allocation:* the bands 7250-7375 MHz (space-to-Earth) and 7900-8025 MHz (Earth-to-space) are also allocated to the mobile-satellite service on a primary basis, subject to agreement obtained under No. 9.21.
- 5.461A** The use of the band 7450-7550 MHz by the meteorological-satellite service (space-to-Earth) is limited geostationary-satellite systems in this band notified before 30 November 1997 may continue to operate on a primary basis until the end of their lifetime.
- 5.462A** In Regions 1 and 3 (except for Japan), in the band 8025-8400 MHz, the earth exploration-satellite service using geostationary-satellites shall not produce a power flux-density in excess of the following provisional values for angles of arrival ( $\theta$ ), without the consent of the affected administration:
- |  |  |
|--|--|
| -174 dB (W/m <sup>2</sup> ) in a 4 kHz band                        | for $0^\circ \leq \theta < 5^\circ$      |
| -174 + 0.5 ( $\theta - 5$ ) dB (W/m <sup>2</sup> ) in a 4 kHz band | for $5^\circ \leq \theta < 25^\circ$     |
| -164 dB (W/m <sup>2</sup> ) in a 4 kHz band                        | for $25^\circ \leq \theta \leq 90^\circ$ |
- These values are subject to study under Resolution 124 (WRC-97).
- 5.463** Aircraft stations are not permitted to transmit in the band 8025-8450 MHz is limited to deep space.
- 5.465** In the space research service, the use of the band 8400-8450 MHz is limited to deep space.
- 5.469A** In the band 8550-8650 MHz, stations in the earth exploration-satellite service (active) and space research (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radiolocation service.(WRC-97).
- 5.472** In the bands 8850-9000 MHz and 9200-9225 MHz, the maritime radionavigation is limited to shore-based radars.

- 5.473A** in the band 9000-9200 MHz, the stations operating in the radiolocation service shall not cause harmful interference to, or claim protection from, systems identified in No. 5.337 operating in the aeronautical radionavigation service, or radar systems in the maritime radionavigation service operating in this band on a primary basis in the countries listed in No. 5.471. (WRC-07)
- 5.474** In the band 9200-9500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate ITU-R Recommendation (see also Article S31).
- 5.475** The use of the band 9300-9500 MHz by aeronautical radionavigation service is limited to airborne weather radars and ground-based radars. In addition, ground based radar beacons in the aeronautical radionavigation service are permitted in the band 9300-9320 MHz on condition that harmful interference is not caused to the maritime radionavigation service. (WRC-07)
- 5.475A** The use of the band 9300-9500 MHz by the Earth exploration-satellite service (active) and the space research service(active) is limited to systems requiring necessary bandwidth greater than 300 MHz that cannot be fully accommodated within the 9500 – 9800 MHz band. (WRC-07)
- 5.475B** In the band 9300 – 9500 MHz, stations operating in the radiolocation service shall not cause harmful interference to, nor claim protection from from, radars operating in the radionavigation service in conformity with the Radio Regulations. Ground-based radars used for meteorological purposes have priority over other radiolocation uses. (WRC-07)
- 5.476A** In the band 9300-9800 MHz, stations in the earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or nor claim protection from, stations of the radionavigation and radiolocation services.(WRC-07)
- 5.478A** The use of the band 9800 – 9900 MHz by the Earth exploration-satellite service (active) and the space research service (active) is limited to systems requiring necessary bandwidth greater than 500 MHz that cannot be fully accommodated within the 9300 – 9800 MHz. (WRC-07)
- 5.478B** In the band 9800 – 9900 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, nor claim protection from stations of the fixed service to which this band is allocated on a secondary basis. (WRC-07)
- 5.479** The band 9975-10025 MHz is also allocated to the meteorological-satellite on a secondary basis for use by weather radars.

- 5.482** In the band 10.6-10.68 GHz, the power delivered to the antenna of the stations of the fixed and mobile, except aeronautical mobile, services shall not exceed -3 dBW. This limit may be exceeded, subject to agreement obtained under No. 9.21. However, in Algeria, Saudi Arabia, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, Egypt, the United Arab Emirates, Georgia, India, Indonesia, the Islamic Republic of Iran, Iraq, Jordan, Libyan Arab Jamahiriya, Kazakhstan, Kuwait, Lebanon, Morocco, Mauritania, Moldova, Nigeria, Uzbekistan, Pakistan, the Philippines, Qatar, Syrian Arab Republic, Kyrgyzstan, Singapore, Tajikistan, Tunisia, Turkmenistan and Viet Nam, this restriction on the fixed and mobile, except aeronautical mobile, services are not applicable. (WRC-07)
- 5.482A** For sharing of the band 10.6 – 10.68 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile, except aeronautical mobile, services, Resolution 751 (WRC-07) applies. (WRC-07)
- 5.484** In Region 1, the use of the band 10.7-11.7 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.
- 5.484A** The use of the bands 10.95-11.7 GHz (space-to-Earth), 11.45-11.7 GHz, 11.7-12.2 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth) in Region 2, 12.2-12.75 GHz (space-to-Earth) in Region 3, 12.5-12.75 GHz (space-to-Earth) in Region 1, 13.75-14.5 GHz (Earth-to-space), 17.8-18.6 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth), 27.5-28.6 GHz (Earth-to-space), 29.5-30 GHz (Earth-to-space) by non-geostationary and geostationary-satellite systems in the fixed-satellite service is subject to the provisions of Resolution 130 (WRC-97). The use of the band 17.8-18.1 GHz (space-to-Earth) by non-geostationary fixed-satellite service systems is also subject to the provisions of the Resolution 538 (WRC-2000).
- 5.497** The use of the band 13.25-13.4 GHz by the aeronautical radionavigation service is limited to Doppler navigation aids.
- 5.498A** The Earth exploration-satellite (active) and space research (active) services operating in the band 13.25-13.4 GHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service.
- 5.501A** The allocation of the band 13.4-13.75 GHz to space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis.(WRC-97)
- 5.501B** In the band 13.4-13.75 GHz, the Earth exploration-satellite (active) and space research (active) services shall not cause harmful interference, or constrain the use and development of, the radiolocation service.

**5.502**

In the band 13.75-14 GHz, an earth station of a geostationary fixed-satellite service network shall have a minimum antenna diameter of 1.2 m and an earth station of a non-geostationary fixed satellite service system shall have a minimum antenna diameter of 4.5 m. In addition the e.i.r.p, averaged over one second, radiated by a station in the radiolocation or radionavigation services shall not exceed 59dBW for elevation angles above 2° and 65 dBW at lower angles. Before an administration brings into use an earth station in the geostationary-satellite network in the fixed-satellite service in this band with an antenna diameter smaller than 4.5 m, it shall ensure that the power flux-density produced by this earth station does not exceed:

- -115 dB(W/(m<sup>2</sup>.10 MHz) for more than 1% of the time produced at 36 m above sea level at the low water mark, as officially recognised by the coastal state;
- -115 dB(W/(m<sup>2</sup>.10 MHz) for more than 1% of the time produced at 3 m above ground at the border of the territory of an administration deploying or planning to deploy land mobile radars in this band, unless prior agreement has been obtained.

For earth stations within the fixed-satellite service having an antenna diameter greater than or equal to 4.5 m, the e.i.r.p of any emission should be at least 68 dBW and should not exceed 85 dBW. (WRC-07)

**5.503**

In the band 13.75-14 GHz, geostationary space stations in the space research service for which information for advance publication has been received by the Bureau prior to 31 January 1992 shall operate on an equal basis with stations in the fixed-satellite service; after that date, new geostationary space stations in the space research service will operate on a secondary basis.

- The e.i.r.p density of emissions from any earth station in the fixed-satellite service shall not exceed 71 dBW in and 6 MHz band in the frequency range 13.772-13.778 GHz.
- The e.i.r.p density of emissions from any earth station in the fixed – satellite service operating with a space station in non-geostationary-satellite orbit shall not exceed 51Dbw in the 6 MHz band from 13.772 to 13.778 GHz.

Automatic power control may be used to increase the e.i.r.p density above 71 dBW in and 6 MHz band in this frequency range to compensate for rain attenuation, to the extent that the power-flux density at the fixed-satellite service space station does not exceed the value resulting from use of an e.i.r.p of 71 dBW in any 6 MHz band in clear sky conditions.(WRC –2000).



- 5.503A** Until 1 January 2000, stations in the fixed-satellite service shall not cause harmful interference to non-geostationary space stations in the space research and Earth exploration-satellite services. After that date, these non-geostationary space stations will operate on a secondary basis in relation to the fixed-satellite service. Additionally, when planning earth stations in the fixed-satellite service to be brought into service between 1<sup>st</sup> January 2000 and 1<sup>st</sup> January 2001, in order to accommodate the needs of space borne precipitation radars operating in the band 13.793- 13.805 GHz, advantage should be taken of the consultation process and the information given in Recommendation ITU-R SA.1071
- 5.504** The use of the band 14-14.3 GHz by the radionavigation service shall be such as to provide sufficient protection to space stations of the fixed-satellite service.
- 5.506** The band 14-14.5 GHz may be used, within the fixed-satellite service (Earth-to-space), for feeder links for the broadcasting-satellite service, subject to coordination with other networks in the fixed-satellite service. Such use of feeder links is reserved for countries outside Europe.
- 5.511A** The band 15.43-15.63 GHz use of the band 15.43-15.63 GHz by the fixed-satellite service (space-to-Earth (see Resolution 123 (WRC-97)) and Earth-to-space) is limited to feeder links of non-geostationary systems in the mobile-satellite service, subject to coordination under No. 9.11A. In the space-to-Earth direction, the minimum earth stations elevation angle above and gain towards the local horizontal plane and the minimum earth station protect and earth station from harmful interference shall be in accordance with Recommendation ITU-R S.1341. Also in the space-to-Earth direction, harmful interference shall not be caused to stations of the radio astronomy service using the band 15.35-15.4 GHz. The threshold levels of interference and associated power flux-density limits which are detrimental to the radio astronomy service are given in the Recommendation ITU-R RA.769-1. Special measures will need to be employed to protect the radio astronomy service in the band 15.35-15.4 GHz.
- 5.511C** Stations operating in the aeronautical radionavigation service shall limit the effective e.i.r.p in accordance with Recommendation ITU-R S.1340. The minimum coordination distance required to protect the aeronautical radionavigation stations (No.S4.10 applies) from harmful interference from feeder-link earth stations and the maximum e.i.r.p transmitted towards the local horizontal plane by a feeder-link earth station shall be in accordance with Recommendation ITU-R S.1340.(WRC-97).
- 5.511D** Fixed-satellite service systems for which complete information for advance publication has been received by the Bureau by 21 November 1997 may

operate in the bands 15.4-15.43 GHz and 15.63-15.7 GHz in the space-to-Earth direction and 15.63-15.65 GHz in the Earth-to-space direction. In the bands 15.4-15.43 GHz and 15.65-15.7 GHz, emissions from a non-geostationary space station shall not exceed the power flux-density limits at the Earth's surface of  $-146$  dB(W/m<sup>2</sup>/MHz) for any angle of arrival. In the band 15.63-15.65 GHz, where and administration plans emissions from a non-geostationary space station that exceed  $-146$  dB(W/m<sup>2</sup>/MHz) for any angle of arrival, it shall coordinate under No.S9.11 with the affected administrations. Stations in the fixed-satellite operating in the band 15.63-15.65 GHz in the Earth-to-space direction shall not cause harmful interference to stations in the aeronautical radionavigation service (No. 4.10 applies).(WRC 97).

- S5.516** The use of the band 17.3-18.1 GHz by geostationary-satellite systems in the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. For the use of the band 17.3-17.8 GHz in Region 2 by feeder links for the broadcasting-satellite service in the band 12.2-12.7 GHz, see Article 11. The use of the bands 17.3-18.1 GHz (Earth-to-space) in Regions 1 and 3 and 17.8-18.1 GHz (Earth-to-space) in Region 2 by non-geostationary-satellite systems in the fixed-satellite service is subject to the provisions of No.9.12 for coordination with other non-geostationary-satellite, systems in the fixed-satellite service.(WRC-2000).
- 5.520** The use of the band 18.1-18.4 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.
- 5.522** In making assignments to stations in the fixed and mobile services, administrations are invited to take account of passive sensors in the Earth exploration satellite and space research services operating in the band 18.6-18.8 GHz. In this band, administrations should endeavour to limit as far as possible both the power delivered by the transmitter to the antenna and the e.i.r.p in order to reduce the risk of interference to passive sensors to the minimum.
- 5.523** In assigning frequencies to stations in fixed-satellite service in the direction space-to-Earth, administrations are requested to limit as far as practicable the power flux-density at the Earth's surface in the band 18.6-18.8 GHz, in order to reduce the risk of interference to passive sensors in the earth-exploration-satellite and space research services.
- 5.523A** The use of the bands 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) by geostationary and non-geostationary fixed-satellite service networks is subject to the application of the provisions of S9.11A and No.S22.2 does not apply. Administrations having geostationary-satellite networks under coordination prior to 18 November 1995 shall cooperate to

the maximum extent possible to coordinate pursuant to No.S9.11A with non-geostationary-satellite networks for which notification information has been received by the Bureau prior to that date, with a view to reaching results acceptable to all the parties concerned. Non-geostationary-satellite networks shall not cause unacceptable interference to geostationary fixed-satellite service networks for which complete Appendix S4 notification information is considered as having been received by the Bureau prior to 18 November 1995.(WRC-97).

**5.523B** The use of the band 19.3-19.6 GHz (Earth-to-space) by the fixed-satellite service is limited to feeder links for non-Geostationary-satellite systems in the mobile-satellite service. Such use is subject to the application of the provisions of No. 9.11A and No. 22.2 does not apply.

**5.523C** No.22.2 of the Radio Regulations shall continue to apply in the bands 19.3-19.6 GHz and 29.1-29.4 GHz, between feeder links of non-geostationary mobile satellite service networks and those fixed-satellite service networks for which complete Appendix 4 coordination information, or notification information, is considered as having been received by the Bureau prior to 18 November 1995.(WRC 97)

**5.523D** The use of the band 19.3-19.7 GHz (space-to-Earth) by Geostationary fixed-satellite service systems and by feeder links for non-Geostationary-satellite systems in the mobile-satellite service is subject to the application of the provisions of No.9.11A, but not subject to the provisions of No.22.2. The use of this band for other non-Geostationary fixed-satellite service systems, or for the cases indicated in Nos.5.523C and 5.523E, is not subject to the provisions of No.9.11A and shall continue to be subject to Articles 9 (except No.9.11A) and 11 procedures, and to the provisions of No.22.2.(WRC-97)

**5.523E** No.22.2 of the Radio Regulations shall continue to apply in the bands 19.6-19.7 GHz and 29.4-29.5 GHz, between feeder links of Non-Geostationary mobile-satellite service networks and those fixed-satellite service networks for which complete Appendix 4 coordination information, or notification information, is considered as having been received by the Bureau by 21 November 1997.(WRC 97).

**5.525** In order to facilitate interregional coordination between networks in the mobile-satellite and fixed-satellite services, carriers in the mobile-satellite service that are most susceptible to interference shall, to the extent practicable, be located in the higher parts of the bands 19.7-20.2 GHz and 29.5-30 GHz.

**5.526** In the bands 19.7-20.2 GHz and 29.5-30 GHz in Region, and in the band 20.1-20.2 GHz and 29.9-30 GHz in Regions 1 and 3, networks with are both in the fixed-satellite service and in the mobile-satellite service may include

links between earth stations at specified or unspecified points or while in motion, through one or more satellites for point-to-point and point-to-multipoint communications.

- 5.527** In the bands 19.7-20.2 GHz and 29.5-30 GHz, the provisions of No. 4.10 do not apply with respect to the mobile-satellite service.
- 5.528** The allocation to the mobile-satellite service is intended for use by networks, which use narrow spot-beam antennas and other advanced technology at the space stations. Administrations operating systems in the mobile-satellite service in the band 19.7-20.1 GHz in Region 2 and in the band 20.1-20.2 GHz shall take all practicable steps to ensure the continued availability of these bands for administrations operating fixed and mobile systems in accordance with the provisions of No. 5.524.
- 5.529** The use of the bands 19.7-20.1 GHz and 29.5-29.9 GHz by the mobile-satellite service is limited to satellite networks which are both in the fixed-satellite service and in the mobile-satellite service as described in No. 5.526.
- 5.530** In Regions 1 and 3, the use of the band 21.4-22 GHz by the broadcasting-satellite service is subject to the provisions of Resolution 525 (WRC-07).
- 5.532** The use of the band 22.21-22.5 GHz by the Earth exploration-satellite (passive) and space research (passive) services shall not impose constraints upon the fixed and mobile, except aeronautical mobile, services.
- 5.536** Use of the 25.25-27.5 GHz band by inter-satellite service is limited to space research and Earth exploration-satellite applications, and also transmissions of data originating from industrial and medical activities in space.
- 5.536A** Administrations installing earth exploration-satellite earth stations cannot claim protection from fixed and mobile stations operated by neighbouring administrations. In addition, earth stations operating in the earth exploration-satellite service should take into account Recommendation ITU-R SA.1278.(WRC-2000).
- 5.536B** In Germany, Saudi Arabia, Austria, Belgium, Brazil, Bulgaria, China, the Republic of Korea, Denmark, Egypt, the United Arab Emirates, Spain, Estonia, Finland, France, Hungary, India, the Islamic Republic of Iran, Ireland, Israel, Italy, Jordan, Kenya, Kuwait, Lebanon, Libya, Liechtenstein, Lithuania, Moldova, Norway, Oman, Uganda, Pakistan, the Philippines, Poland, Portugal, Syria, Slovakia, the Czech Republic, Romania, the United Kingdom, Singapore, Sweden, Switzerland, Tanzania, Turkey, Viet Nam and Zimbabwe, earth stations operating in the Earth exploration-satellite service in the band 25.5-27 GHz shall not claim protection from, or constrain the use and deployment of, stations of the fixed mobile services.(WRC-97).

- 5.538** *Additional allocation:* the bands 27.500-27.501 GHz and 29.999-30.000 GHz are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis for the beacon transmissions intended to up-link power control. Such space-to-Earth transmissions shall not exceed an equivalent isotropically radiated power (e.i.r.p) of +10 dBW in the direction of adjacent satellites in the Geostationary-satellite orbit. (WRC-07)
- 5.539** The band 27.5-30 GHz maybe used by the fixed-satellite service (Earth-to-space) for the provision of feeder links for the broadcasting service.
- 5.540** *Additional allocation:* the band 27.501-29.999 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a secondary basis for beacon transmissions intended for up-link power control.
- 5.541** In the band 28.5-30 GHz, the earth exploration-satellite service is limited to the transfer of data between stations and not the primary collection of information by means of active or passive sensors.
- 5.541A** Feeder links of non-stationary networks in the mobile-satellite service and Geostationary networks in the fixed-satellite service operating in the band 29.1-29.5 GHz (Earth-to-space) shall employ uplink adaptive power control or other methods of fade compensation, such that the earth station transmissions shall be conducted at the power level required to meet the desired link performance while reducing the level of mutual interference between both networks. These methods shall apply to networks for which Appendix S4 coordination information is considered as having been received by the Bureau after 17 May1996 and until they are changed by a future competent world radiocommunication conference. Administrations submitting Appendix S4 information for coordination before this date are encouraged to utilise these techniques to the extent practicable. These methods are also subject to review by ITU-R (see Resolution 121 (Rev.WRC-97))
- 5.543** The band 29.95-30 GHz may be used for space-to-space links in the Earth exploration-satellite service for telemetry, tracking, and control purposes, on a secondary basis.
- 5.547** The bands 31.8-33.4 GHz, 37-40 GHz, 40.5-43.5GHz, 51.4-52.6 GHz, 55.78-59 GHz and 64-66 GHz are available for high-density applications in the fixed service (see Resolutions **75 (WRC-2000)**). Administrations should take this into account when considering regulatory provisions in relation to these bands. Because of the potential deployment of high-density applications in the fixed-satellite service in the bands 39.5-40 GHz, and 40.5-42 GHz (see No. 5.516B), administrations should further take into

account potential constraints to high density applications in the fixed service, as appropriate. (WRC –07)

- 5.548** In designing systems for the inter-satellite and radionavigation services in the band 32-33 GHz, and for the space research service (deep space) in the band 31.8-32.3 GHz, administrations shall take all the necessary measures to prevent harmful interference between these services, bearing in mind the safety aspects of the radionavigation service (see Rec. 707).
- 5.552** The allocation of the spectrum of the fixed-satellite service in the bands 42.5-43.5 GHz and 47.2-50.2 GHz for Earth-to-space transmission is greater than that in the band 37.5-39.5 GHz for space-to-Earth transmission in order to accommodate feeder links to broadcasting satellites. Administrations are urged to take all practicable steps to reserve the band 47.2-49.2 GHz for feeder links for the broadcasting-satellite service operating in the band 40.5-42.5 GHz.
- 5.554** In the bands 43.5-47 GHz, 66-71 GHz, 95-100 GHz, 123-130 GHz, 191.8-200 GHz and 252-265 GHz satellite links connecting land stations at specified fixed points are also authorised when used in conjunction with the mobile-satellite service or the radionavigation-satellite service.(WRC-2000).
- 5.555** *Additional allocation:* the bands 48.94-49.04 GHz is also allocated to the radio astronomy service on a primary basis.(WRC 2000).
- 5.556** In the bands 51.4-54.25 GHz, 58.2-59 GHz and 64-65 GHz radio astronomy observations may be carried out under national arrangements.
- 5.556A** Use of the bands 54.25-56.9 GHz, 57-58.2 GHz, and 59-59.3 GHz by the inter-satellite is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density at all altitudes from 0 km to 1000 km above the earth's surface produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, shall not exceed –147 dB(W/m<sup>2</sup>/100MHz) for all angles of arrival.(WRC-97)