

Table of Frequency Allocations

RR5FATViewer (Release 5.0) User's Guide

What is the RR5FATViewer Software Package about?

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What is RR5FATViewer Software package about?

A screenshot of the RR5FATViewer software interface, showing a complex data table with multiple columns and rows, likely representing frequency allocations and their associated footnotes.

The **RR5FATViewer** is a standalone application which runs on individual user's PC (it does not require network nor Internet connections). It provides a mechanism to electronically use, query and analyze the **Table of Frequency Allocations** (called the **Main Table** throughout this guide) and its associated footnotes, as they appear in the **Article 5 of Radio Regulations** (called Article 5 throughout this guide). It is built with a friendly user interface and deep search capabilities, around a electronic relational database model reflecting the layout, content and "meaning" of the various components of the Main Table and its associated footnotes.

RR5FATViewer enhances and compacts the **cross-referencing mechanisms** inside the Article 5 main Table and its components on one hand, and between the Article 5 Main Table provisions and other sources, on the other hand (Other RR Articles, Appendices, Rules of Procedure, Worldwide & Regional Agreements, etc.)

RR5FATViewer **minimizes the need for "working with paper copies"**, so as to ease the browsing and footnotes lookup when working with Article 5 Main Table. It hence helps the Membership Administrations in finding their appropriate frequency allocations, checking for their relevant footnotes, resolving contradicting provisions and interpretations, etc. via software tools.

RR5FATViewer enhances the readability of the Article 5 Main Table Radiocommunication Services and their categories (Primary, Secondary), by introducing **"non language dependent markers"** in the database (no interpretation of Latin upper case, no underline, no bold etc.).

RR5FATViewer allows for **customized "human" display, print and export of the Article 5 Main Table**, global or restricted to a given Region or Radiocommunication Service, and consolidated with only the relevant footnotes and various applicable provisions, regardless of their "place" in the paper textbook.

RR5FATViewer provides for **powerful "click-and-get" search tools** based on appropriate cross-references and combinations of frequency bands, Regions and geographical areas, and Radiocommunication Services, according to their definitions and inter-relationships in Article 1 of the **Radio Regulations** and their declensions and applications in Article 5. This may prove very useful when looking for "sharing" between various services and categories in given frequency bands and areas.

What is RR5FATViewer Software package about?

RR5FATViewer allows for the automatic “software-driven” extraction of the Frequency Allocations “International Plan” for a given geographic area (country), as it results from combining all the Article 5 Main Table allocations and relevant provisions and footnotes.

RR5FATViewer is equipped with various tools and utilities, allowing the tracing and comparison of the evolution of the Article 5 Main Table through the various editions of the **Radio Regulations**, as they resulted from the various **World Radiocommunication Conferences** (WRCs). This comparison mechanism goes back up to the Edition of 2001 (WRC-2000).

RR5FATViewer is also equipped with similar tracing and comparison tools for the evolution of the Article 5 footnotes through the various editions of the **Radio Regulations**, as they resulted from the various **World Radiocommunication Conferences** (WRCs). This comparison mechanism also goes back up to the Edition of 2001 (WRC-2000) and easily permits to find out which footnote was deleted, added or modified by a specific WRC, and when a given country joined or left a given footnote provisions.

| RR 2012 Edition (WRC-12) | | | RR 2016 Edition (Active Edition) (WRC-15) | | |
|---|---|---|---|---|---|
| Region 1 | Region 2 | Region 3 | Region 1 | Region 2 | Region 3 |
| 5 003 - 5 005 MHz STANDARD FREQUENCY AND TIME SIGNAL Space research | 5 003 - 5 005 MHz STANDARD FREQUENCY AND TIME SIGNAL Space research | 5 003 - 5 005 MHz STANDARD FREQUENCY AND TIME SIGNAL Space research | 5 003 - 5 005 MHz STANDARD FREQUENCY AND TIME SIGNAL Space research | 5 003 - 5 005 MHz STANDARD FREQUENCY AND TIME SIGNAL Space research | 5 003 - 5 005 MHz STANDARD FREQUENCY AND TIME SIGNAL Space research |
| 5 005 - 5 060 MHz BROADCASTING 5.113 FIXED | 5 005 - 5 060 MHz BROADCASTING 5.113 FIXED | 5 005 - 5 060 MHz BROADCASTING 5.113 FIXED | 5 005 - 5 060 MHz BROADCASTING 5.113 FIXED | 5 005 - 5 060 MHz BROADCASTING 5.113 FIXED | 5 005 - 5 060 MHz BROADCASTING 5.113 FIXED |
| 5 060 - 5 250 MHz FIXED Mobile except aeronautical mobile | 5 060 - 5 250 MHz FIXED Mobile except aeronautical mobile | 5 060 - 5 250 MHz FIXED Mobile except aeronautical mobile | 5 060 - 5 250 MHz FIXED Mobile except aeronautical mobile | 5 060 - 5 250 MHz FIXED Mobile except aeronautical mobile | 5 060 - 5 250 MHz FIXED Mobile except aeronautical mobile |
| 5.133 | 5.133 | 5.133 | 5.133 | 5.133 | 5.133 |
| 5 250 - 5 275 MHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A | 5 250 - 5 275 MHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A | 5 250 - 5 275 MHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A | 5 250 - 5 275 MHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A | 5 250 - 5 275 MHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A | 5 250 - 5 275 MHz FIXED MOBILE except aeronautical mobile Radiolocation 5.132A |
| 5.132A | 5.132A | 5.132A | 5.132A | 5.132A | 5.132A |
| 5 275 - 5 300 MHz FIXED MOBILE except aeronautical mobile | 5 275 - 5 300 MHz FIXED MOBILE except aeronautical mobile | 5 275 - 5 300 MHz FIXED MOBILE except aeronautical mobile | 5 275 - 5 300 MHz FIXED MOBILE except aeronautical mobile | 5 275 - 5 300 MHz FIXED MOBILE except aeronautical mobile | 5 275 - 5 300 MHz FIXED MOBILE except aeronautical mobile |
| 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) FIXED LAND MOBILE | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) FIXED LAND MOBILE | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) FIXED LAND MOBILE | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) FIXED LAND MOBILE | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) FIXED LAND MOBILE | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) FIXED LAND MOBILE |
| 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) |
| 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) | 5 400 - 5 400 MHz AERONAUTICAL MOBILE (AM) |

RR5FATViewer is equipped with many more features and utilities...


It is however

limited only to the scope and boundaries of the Article 5 of the Radio Regulations.

Getting started

Where can I find the software? How to get the software?

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RR5 Table of Frequency Allocations Software

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 TABLE OF FREQUENCY ALLOCATIONS SOFTWARE

RR5 Table of Frequency Allocations Software



2020 **New!** Publication Notice with Order Form

The RR5 Table of Frequency Allocations (TFA) Software is a stand-alone application that provides a mechanism to electronically use, query and analyse the Table of Frequency Allocations and its associated footnotes, as they appear in the Article 5 of Radio Regulations, as well as some other related texts (Resolutions, ITU-R Recommendations, Rules of Procedure .). This indispensable software application runs on individual user's PC and requires neither network nor Internet connection. It is limited to the scope and boundaries of the Article 5 of the Radio Regulations and is the perfect complement to the Radio Regulations (2020 Edition) that incorporates the decisions of the 2019 World Radiocommunication Conference.

Built around a relational database model, the software is equipped with various tools and utilities that allow, among others, for exporting data to various formats, as well as for the tracing and comparison of the evolution of the Article 5 Table and its associated footnotes (from the 2001 Edition onward). Ultimately, the software provides for the extraction and modification of the National Table of Frequency Allocations for a given geographic area (country), based on the corresponding "International Plan" which results after combining the information contained in the Article 5 of the Radio Regulations.

2020 edition available: 1 December 2020

Contact [ITU Sales](#)

What are the license requirements?

**Welcome to the RR5 Table of Frequency Allocations Software !
Important license information**

It seems that you have not yet activated your license. A few more steps before using the software!

1. Click the "Request license file from ITU sales" button below. An automatic email to ITU Sales will be generated and displayed, containing the requested information to prepare your license file, based on the displayed combination "logon user name/computer name".
2. Once you kindly send this email, ITU Sales will generate your personal license file and send it back to you within 12-48 hours.
3. Upon reception of the license file named "**RR5FATViewer2020.lic**", please save it to the following "License" folder
C:\Users\[username]\AppData\Local\RR5FATViewer\License
4. You should then be ready to use the software.

Please note that your purchased license allows for the use of the software for up to 5 PCs/laptops PER USER for a multi-user purchase of RR5. (A single-user purchaser cannot share the link or license with other users but can benefit from up to 5 different "logon user name/computer name" combinations for personal use.). Kindly contact ITU Sales (sales@itu.int) if you wish to upgrade your license to a multi-user environment for up to 10 users, 25 users or organization-wide.

If you already know these combinations, you may consolidate your request in a single email. However, as the license is CASE SENSITIVE, it is recommended that you install and launch the package on every one of the combinations, then run the software which will show the appropriate user name and computer name. You may then append these (by a copy/paste) to the prepared email.

ITU Sales will then generate a single license file for the requested combinations. This file will need to be saved to the previously mentioned folder on every computer where the software is to be used.

We hope that you will find this tool useful and we are looking forward to receiving your feedback!

We remain at your disposal for any further help and/or information.

Request license for the following logon user name / computer name combination

| | |
|---------------------------------|--|
| User name: Your username | Computer name: Your computer name |
|---------------------------------|--|

Upon the purchase of the package and the successful download of the installer followed by the successful installation, when the software is first launched, it checks for its license requirements and presents the screen shown here.

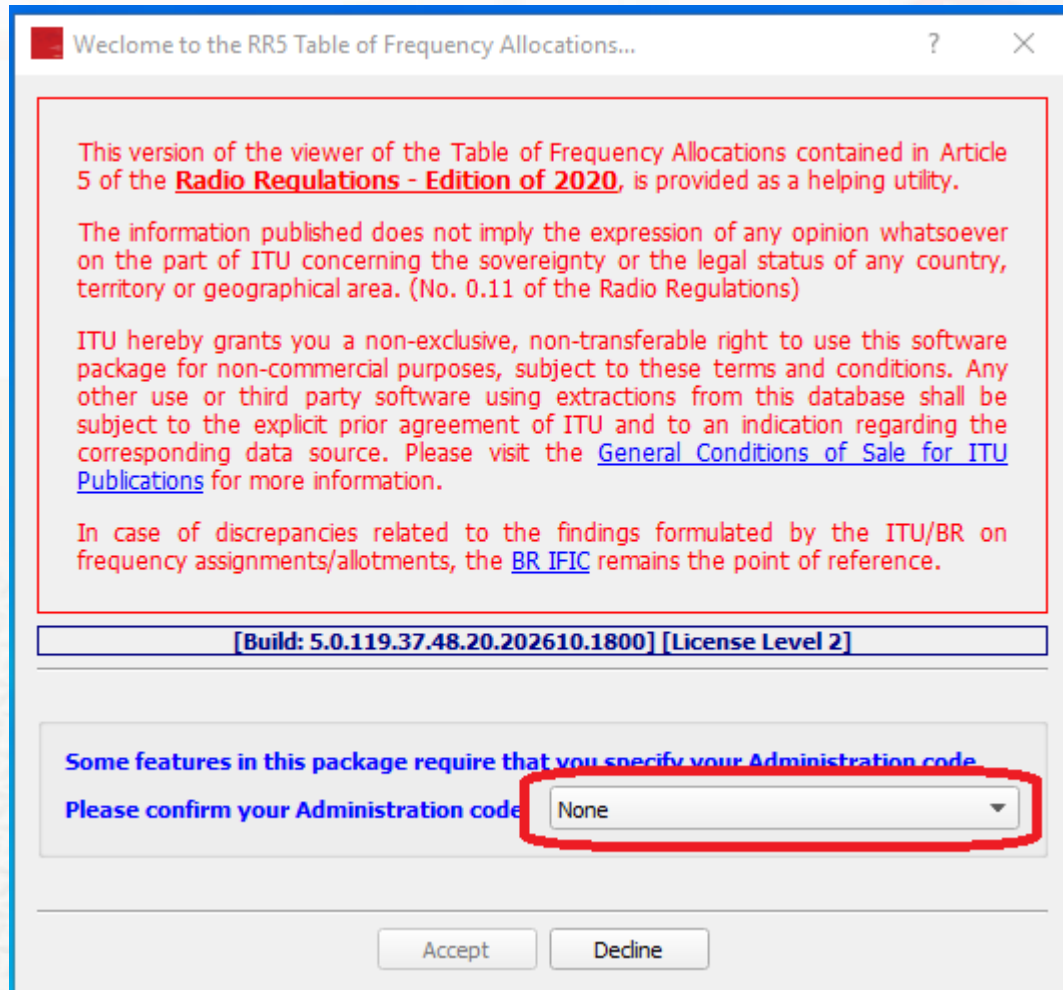
Please follow the described steps and note the indicated folder where the license file is to be saved once sent by ITU Sales and received.

The license file request email can be generated automatically with your configured mail client, or alternatively, prepared manually and sent

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Once the file is saved to the indicated folder, the software can be launched again and your RR5 Table of Frequency Allocations sessions can start !

Getting started



The **RR5FATViewer** is equipped with some features allowing for data export/import from/to various formats, as well as data editing and customization mechanisms. However editing and customization features are limited to the frequency allocations pertaining to the user's specified own Administration.

Hence, **when the software is first started (after successful licensing)**, you are prompted to confirm your Administration code to be used for that purpose, through the corresponding dropdown list as show here. The code specified here will later be used to control which data can be edited.

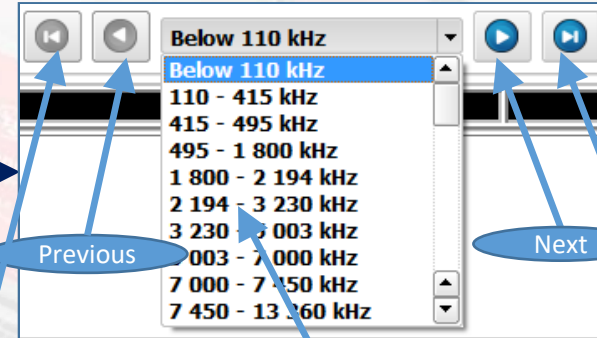
It is important to note that **once this is set, it can not be changed.**

The Main Table View

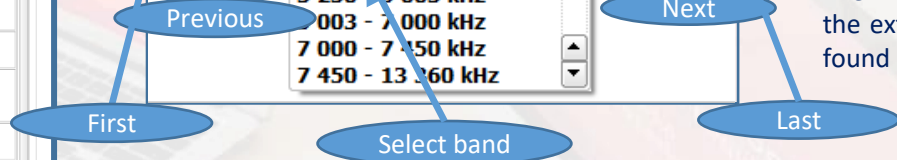
Use these boxes if you wish to restrict the Main Table display to one or two regions.



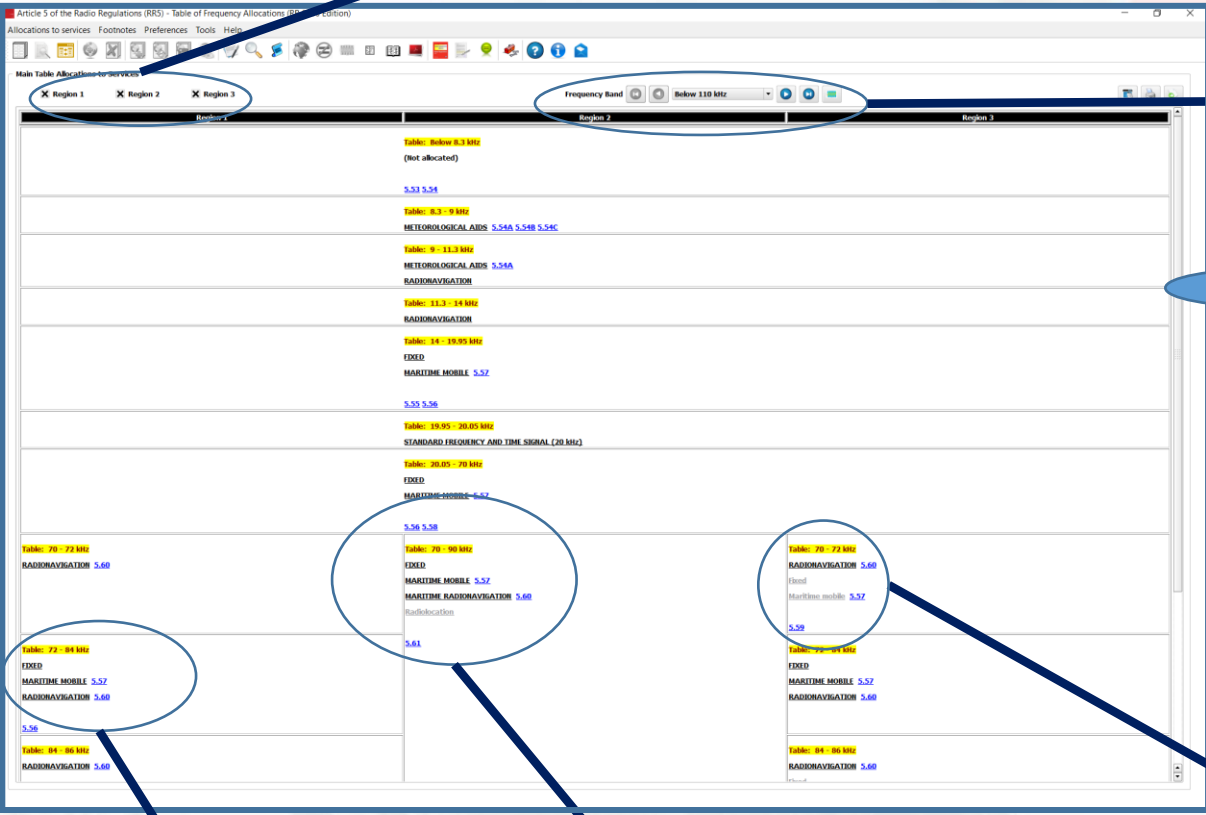
Use the Frequency Bands navigation pane, as shown here, to navigate the Main Table "partition". You may also drop down the "bands list" and directly select the desired frequency band. The displayed "page" will be updated accordingly.



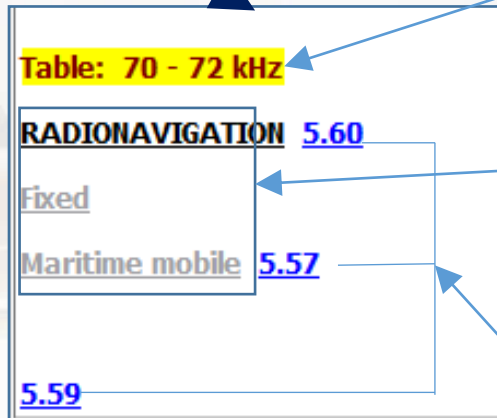
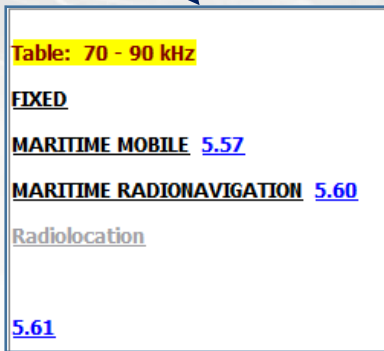
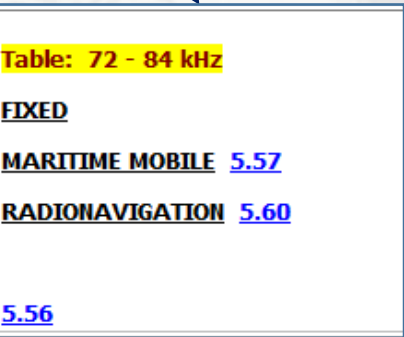
The frequency bands partition is matching (to the extent feasible) the corresponding partition found in the Article 5 textbook.



The **Main Table View** mode is the default operational mode of the *RR5FATViewer*. In this mode, the Main Table is presented and laid out (to the extent feasible) as it looks in the Article 5 text, with three columns representing the three Regions, and the corresponding "frequency allocations boxes".



Every frequency allocation box consists of:
a *highlighted indication of the frequency band* it covers;
an *enumeration of the radiocommunication services* to which the box is allocated; (Primary services are displayed by default as **BOLD-UNDERLINED-UPPERCASE**, and Secondary services by default as Gray-underlined-lowercase).
and *the list of footnotes* (if any) associated with each service or with the box as a whole.



The Main Table View

The radiocommunication services and footnotes inside every frequency allocation box are made “clickable” so as to provide more information as follows:

➤ When you **click on a given service** label, the software searches for all frequency allocation boxes **with an exact match to that service and its category**.

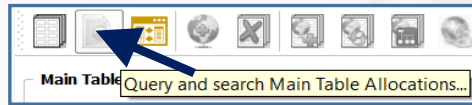
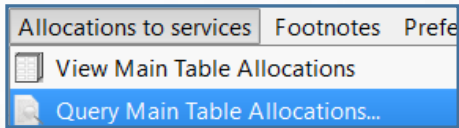
As the examples shown here illustrate, when **FIXED** is clicked, the software presents all “PRIMARY Allocations to FIXED”. And when **Radiolocation** is clicked, the software presents all “SECONDARY Allocations to RADIOLOCATION”.

➤ When you **click on a given footnote number** label, the software displays **the text of the relevant footnote**. When applicable, that is, when the concerned footnote refers to other provisions, further navigation may become available.

The screenshot displays the software interface with several windows and a main toolbar. The main toolbar at the bottom contains icons for 'Allocations to services' and 'Footnotes', with a 'View Main Table Allocations' button highlighted by a blue arrow. The interface is divided into three main sections: 'PRIMARY Allocations to FIXED', 'PRIMARY Allocations to MARITIME MOBILE', and 'SECONDARY Allocations to RADIOLOCATION'. Each section shows a table of frequency allocations across three regions. A red arrow points from the '5.61' footnote label in the 'SECONDARY Allocations to RADIOLOCATION' window to a detailed footnote window. Another red arrow points from the '5.57' service label in the 'PRIMARY Allocations to MARITIME MOBILE' window to a detailed service window. A third red arrow points from the '5.61' footnote label in the 'SECONDARY Allocations to RADIOLOCATION' window to the '5.61' footnote label in the 'PRIMARY Allocations to MARITIME MOBILE' window. The detailed footnote window for 5.61 contains the following text: "In Region 2, the establishment and operation of stations in the maritime radionavigation service in the bands 70-90 kHz and 110-130 kHz shall be subject to agreement obtained under No. 9.21 with administrations whose services, operating in accordance with the Table, may be affected. However, stations of the fixed, maritime mobile and radiolocation services shall not cause harmful interference to stations in the maritime radionavigation service established under such agreements." The detailed service window for 5.57 contains the following text: "The use of the bands 14-19.95 kHz, 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 authorized subject to the necessary bandwidth not exceeding that normally used for class A1A or F1B emissions in the band concerned."

You may restore the Main Table View at any moment by clicking the “View Main Table Allocations” icon on the main toolbar.

Querying the Main Table



Complex queries on the content of the Main Table can be performed by invoking the “Query Main Table Allocations” dialog. This is accessible via the menu item “**Allocations to services – Query Main Table Allocations...**” or, alternatively, by clicking on the corresponding icon on the main toolbar as shown here.

The Main Table Query dialog allows for the combination of various criteria, namely:

- Specify one (or more) region(s).
- Specify one (or more) frequency(ies) or frequency band(s). The specified frequency bands do not necessarily have to match exactly the Main Table Partition.
- Specify one (or more) radiocommunication service(s) and category(ies) and combine them “and/or” wise.
- Specify “smart upward” and/or “smart downward” search strategy, thus defining the way the software should walk through the **radiocommunication services families and relationships**.
- Specify one (or more) relevant footnote(s).

The following examples illustrate the usage of these criteria in details.

Querying the Main Table

Specifying frequencies or frequency bands

Type in the minimum and maximum frequencies, then click “Add frequency band”. You may specify more than one frequency band.

However, when adding a new band, if this box is checked and the specified bands are overlapping, the software will “merge” them by enlarging to bands union or restricting to bands intersection, according to the selected option. Thus, for instance, if after adding the band 500-900 MHz you chose to add the band 756.5-1203 MHz, the union merge results in the band 500-1203 MHz and the intersection merge results in the band 756.5-900 MHz, as shown here.

You may use these two buttons to remove a previously specified frequency band or to clear the frequency bands selection.

If you are only interested in a single specific frequency (say 13.23 GHz, for instance), simply make the minimum and maximum frequencies equal to the desired frequency value.

The image displays four sequential screenshots of a software interface for specifying frequency bands. Each screenshot shows a 'Frequency Bands' panel with input fields for 'From' and 'To' frequencies, a list of selected bands, and a control panel with an 'Add frequency band' button and options for merging overlapping bands.

- Panel 1:** 'From' is 500 MHz, 'To' is 900 MHz. The selected band list contains '500 - 900 MHz'. The 'Automatically merge overlapping bands' checkbox is checked. The 'Enlarge to bands union' radio button is selected.
- Panel 2:** 'From' is 756.5 MHz, 'To' is 1203 MHz. The selected band list contains '500 - 1 203 MHz'. The 'Automatically merge overlapping bands' checkbox is checked. The 'Enlarge to bands union' radio button is selected and highlighted with a red box.
- Panel 3:** 'From' is 756.5 MHz, 'To' is 900 MHz. The selected band list contains '756.5 - 900 MHz'. The 'Automatically merge overlapping bands' checkbox is checked. The 'Reduce to bands intersection' radio button is selected and highlighted with a red box. Two blue arrows point to the minus and clear buttons in the control panel.
- Panel 4:** 'From' is 13.23 GHz, 'To' is 13.23 GHz. The selected band list contains '13.23 GHz'. The 'Automatically merge overlapping bands' checkbox is unchecked. The 'Enlarge to bands union' radio button is selected.

Querying the Main Table

Specifying frequencies or frequency bands – Example 1

Query Main Table Allocations

Region 1 Region 2 Region 3

Frequency Bands

From 39.43 MH To 39.43 MH

39.43 MHz

Automatically merge overlapping bands

Enlarge to bands union

Reduce to bands intersection

Radiocommunication Services

Any of the following selected All of the following selected

Primary Services

AERONAUTICAL MOBILE
AERONAUTICAL MOBILE (OR)
AERONAUTICAL MOBILE (R)
AERONAUTICAL MOBILE-SATELLITE (R)
AERONAUTICAL RADIONAVIGATION
AMATEUR
AMATEUR-SATELLITE

Secondary Services

Aeronautical mobile
Aeronautical mobile (OR)
Aeronautical radionavigation
Amateur
Amateur-satellite
Amateur-satellite (space-to-Earth)
Earth exploration-satellite

Apply deep smart upward search on Radiocommunication Services

Apply deep smart downward search on Radiocommunication Services

Footnotes References

5.

5.53
5.54
5.54A
5.54B
5.54C
5.55

Query results

Region 1 Region 2 Region 3

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| Region 1 | Region 2 | Region 3 |
|--|---|---|
| <p>Table: 39.43 MHz</p> <p>FIXED</p> <p>MOBILE</p> <p>Radiolocation 5.132A</p> <p>5.159</p> | <p>Table: 39.43 MHz</p> <p>FIXED</p> <p>MOBILE</p> | <p>Table: 39.43 MHz</p> <p>FIXED</p> <p>MOBILE</p> |

Upon successful execution, the query results are presented and laid out in a similar way to the Main Table View. You may navigate the results in a “standard way”.

This query causes the software to search for the Main Table allocations on the frequency 39.43 MHz in all three Regions.

Querying the Main Table

Specifying frequencies or frequency bands – Example 2

Query Main Table Allocations

Region 1 Region 2 Region 3

Frequency Bands

From 13.23 GHz To 28 GHz

13.23 - 28 GHz

Automatically merge overlapping bands

Enlarge to bands union

Reduce to bands intersection

Radiocommunication Services

Any of the following selected All of the following selected

Primary Services

AERONAUTICAL MOBILE
AERONAUTICAL MOBILE (OR)
AERONAUTICAL MOBILE (R)
AERONAUTICAL MOBILE-SATELLITE (R)
AERONAUTICAL RADIONAVIGATION
AMATEUR
AMATEUR-SATELLITE

Secondary Services

Aeronautical mobile
Aeronautical mobile (OR)
Aeronautical radionavigation
Amateur
Amateur-satellite
Amateur-satellite (space-to-Earth)
Earth-exploration-satellite

Apply deep smart upward search on Radiocommunication Services

Apply deep smart downward search on Radiocommunication Services

Footnotes References

5.

5.53
5.54
5.54A
5.54B
5.54C
5.55

Search

Save Query...

Open Query...

Reset

Cancel

Query results

Region 1 Region 2 Region 3

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Region 1

Table: 13.23 - 13.25 GHz

FIXED

FIXED-SATELLITE (Earth-to-space) 5.441

MOBILE

Space research (deep space)

Space research (space-to-Earth)

Table: 13.25 - 13.4 GHz

AERONAUTICAL RADIONAVIGATION 5.497

EARTH EXPLORATION-SATELLITE (active)

SPACE RESEARCH (active)

5.498A 5.499

Table: 13.4 - 13.65 GHz

EARTH EXPLORATION-SATELLITE (active)

FIXED-SATELLITE (space-to-Earth) 5.499A 5.499B

RADIOLOCATION

SPACE RESEARCH 5.499C 5.499D

Standard frequency and time signal-satellite (Earth-to-space)

5.499 5.499E 5.500 5.501 5.501B

Table: 13.65 - 13.75 GHz

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

Table: 13.75 - 14 GHz

FIXED-SATELLITE (Earth-to-space) 5.484A

RADIOLOCATION

This query causes the software to search for all allocation boxes in the Main Table, corresponding to the frequency band 13.23-28 GHz, in Region 1 only.

Upon successful execution, the query results are presented in a series of pages, laid out in a similar way to the Main Table View. You may navigate the results in a “standard way”.

Querying the Main Table

Specifying radiocommunication services

Radiocommunication Services

Any of the following selected All of the following selected

Primary Services

AERONAUTICAL MOBILE
 AERONAUTICAL MOBILE (OR)
 AERONAUTICAL MOBILE (R)
 AERONAUTICAL MOBILE-SATELLITE (R)
 AERONAUTICAL RADIONAVIGATION
 AMATEUR
 AMATEUR SATELLITE

Secondary Services

Land mobile
 Maritime mobile
 Maritime mobile-satellite (Earth-to-space)
 Maritime radionavigation (radiobeacons)
 Meteorological aids
 Meteorological-satellite (space-to-Earth)

Apply deep smart upward search on Radiocommunication Services
 Apply deep smart downward search on Radiocommunication Services

Select the relevant radiocommunication service(s) from the lists of “available services”, according to the desired service category, then click “Add” to build the search list of the radiocommunication services. The lists of available services are already filtered according to their “existence” in the Main Table. That is, if a given service-category combination does not appear in the lists, it is mainly because no such allocation exists.

When you select more than one service, you may combine your selection in order to instruct the software to “or-wise” search for those frequency bands allocated to “any selected service”, or to “and-wise” search for those frequency bands allocated to “all select services”.

Radiocommunication Services

Any of the following selected All of the following selected

Primary Services

AERONAUTICAL MOBILE
 AERONAUTICAL MOBILE (OR)
 AERONAUTICAL MOBILE (R)
 AERONAUTICAL MOBILE-SATELLITE (R)
 AERONAUTICAL RADIONAVIGATION
 AMATEUR
 AMATEUR SATELLITE

Secondary Services

Land mobile
 Maritime mobile
 Maritime mobile-satellite (Earth-to-space)
 Maritime radionavigation (radiobeacons)
 Meteorological aids
 Meteorological-satellite (space-to-Earth)

Apply deep smart upward search on Radiocommunication Services
 Apply deep smart downward search on Radiocommunication Services

Thus, the first example shown here causes the software to search for all “frequency allocation boxes” where **either** AERONAUTICAL MOBILE (primary) **or** Maritime mobile-satellite (Earth-to-space) (secondary) appears.

Whereas the second example causes the software to search for all “frequency allocation boxes” (if any) where **both** AERONAUTICAL MOBILE (primary) **and** Maritime mobile-satellite (Earth-to-space) (secondary) appear.

Querying the Main Table

Specifying radiocommunication services – Example 1

Query Main Table Allocations

Region 1 Region 2 Region 3

Search

Save Query...
Open Query...
Reset
Cancel

Frequency Bands

From [] MH To [] MH

Automatically merge overlapping bands

Enlarge to bands union
Reduce to bands intersection

Radiocommunication Services

Any of the following selected All of the following selected

Primary Services

AERONAUTICAL MOBILE (OR)
AERONAUTICAL MOBILE (R)
AERONAUTICAL MOBILE-SATELLITE (R)
AERONAUTICAL RADIONAVIGATION
AMATEUR
AMATEUR-SATELLITE

AERONAUTICAL MOBILE

Secondary Services

Aeronautical mobile
Aeronautical mobile (OR)
Aeronautical radionavigation
Amateur
Amateur-satellite
Amateur-satellite (space-to-Earth)

Apply deep smart upward search on Radiocommunication Services
Apply deep smart downward search on Radiocommunication Services

Footnotes References

5. []

5.53
5.54
5.54A
5.54B
5.54C

Query results

Region 1 Region 2 Region 3

Page 1/1

| Region 1 | Region 2 | Region 3 |
|--|--|---|
| <p>Table: 5 091 - 5 150 MHz</p> <p>AERONAUTICAL MOBILE 5.444B</p> <p>AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA</p> <p>AERONAUTICAL RADIONAVIGATION</p> <p>FIXED-SATELLITE (Earth-to-space) 5.444A</p> <p>5.444</p> | <p>Table: 5 091 - 5 150 MHz</p> <p>AERONAUTICAL MOBILE 5.444B</p> <p>AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA</p> <p>AERONAUTICAL RADIONAVIGATION</p> <p>FIXED-SATELLITE (Earth-to-space) 5.444A</p> <p>5.444</p> | <p>Table: 3 900 - 3 950 kHz</p> <p>AERONAUTICAL MOBILE</p> <p>BROADCASTING</p> <p>Table: 5 091 - 5 150 MHz</p> <p>AERONAUTICAL MOBILE 5.444B</p> <p>AERONAUTICAL MOBILE-SATELLITE (R) 5.443AA</p> <p>AERONAUTICAL RADIONAVIGATION</p> <p>FIXED-SATELLITE (Earth-to-space) 5.444A</p> <p>5.444</p> |

Upon successful execution, the query results are presented and laid out in a series of pages, in a similar way to the Main Table View. You may navigate the results in a “standard way”.

It should be noted that this query setting causes a search for the exact matching service. That is, the software does not consider “ascendant/descendant” services relationships for the search. Hence, allocation boxes with primary allocation to MOBILE for instance are not taken into account. This behavior can be controlled using these boxes, as shown later in this section.

This query causes the software to search the Main Table for all allocation boxes in all the three Regions, where an allocation to AERONAUTICAL MOBILE as a primary service exists.

Querying the Main Table

Specifying radiocommunication services – Example 2

Query Main Table Allocations

Region 1 Region 2 Region 3

Frequency Bands

From [] MH To [] MH

Automatically merge overlapping bands

Enlarge to bands union

Reduce to bands intersection

Radiocommunication Services

Any of the following selected All of the following selected

Primary Services

AERONAUTICAL MOBILE
AERONAUTICAL MOBILE (OR)
AERONAUTICAL MOBILE (R)
AERONAUTICAL MOBILE-SATELLITE (R)
AERONAUTICAL RADIONAVIGATION
AMATEUR

BROADCASTING-SATELLITE
FIXED

Secondary Services

Aeronautical mobile
Aeronautical mobile (OR)
Aeronautical radionavigation
Amateur
Amateur-satellite
Amateur-satellite (space-to-Earth)

Apply deep smart upward search on Radiocommunication Services

Apply deep smart downward search on Radiocommunication Services

Footnotes References

5. []

5.53
5.54
5.54A
5.54B
5.54C

Query results

Region 1 Region 2 Region 3

| Region 1 | Region 2 | Region 3 |
|--|---|--|
| Table: 1 452 - 1 492 MHz BROADCASTING BROADCASTING-SATELLITE 5.208B FIXED MOBILE except aeronautical mobile 5.346 | Table: 1 452 - 1 492 MHz BROADCASTING BROADCASTING-SATELLITE 5.208B FIXED MOBILE 5.341B 5.343 5.346A | Table: 1 452 - 1 492 MHz BROADCASTING BROADCASTING-SATELLITE 5.208B FIXED MOBILE 5.341B 5.343 5.346A |
| 5.341 5.342 5.345 | 5.341 5.344 5.345 | 5.341 5.344 5.345 |
| Table: 2 520 - 2 655 MHz BROADCASTING-SATELLITE 5.413 5.416 FIXED 5.410 MOBILE except aeronautical mobile 5.384A | Table: 2 520 - 2 655 MHz BROADCASTING-SATELLITE 5.413 5.416 FIXED 5.410 FIXED-SATELLITE (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A | Table: 2 520 - 2 655 MHz BROADCASTING-SATELLITE 5.413 5.416 FIXED 5.410 FIXED-SATELLITE (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A |
| 5.339 5.412 5.418B 5.418C | 5.339 5.418B 5.418C | 5.403 5.414A 5.415A |
| Table: 2 655 - 2 670 MHz BROADCASTING-SATELLITE 5.208B 5.413 5.416 FIXED 5.410 MOBILE except aeronautical mobile 5.384A | Table: 2 655 - 2 670 MHz BROADCASTING-SATELLITE 5.413 5.416 FIXED 5.410 FIXED-SATELLITE (Earth-to-space) 5.415 FIXED-SATELLITE (space-to-Earth) 5.415 MOBILE except aeronautical mobile 5.384A | Table: 2 655 - 2 655 MHz BROADCASTING-SATELLITE 5.413 5.416 FIXED 5.410 MOBILE except aeronautical mobile 5.384A |
| Earth exploration-satellite (passive) Radio astronomy Space research (passive) | Earth exploration-satellite (passive) Radio astronomy Space research (passive) | 5.339 5.418 5.418A 5.418B 5.418C |
| 5.149 5.412 | 5.149 5.208B | Table: 2 655 - 2 670 MHz BROADCASTING-SATELLITE 5.208B 5.413 5.416 FIXED 5.410 |
| Table: 11.7 - 12.5 GHz BROADCASTING BROADCASTING-SATELLITE 5.492 FIXED MOBILE except aeronautical mobile | Table: 12.2 - 12.7 GHz BROADCASTING BROADCASTING-SATELLITE 5.492 FIXED MOBILE except aeronautical mobile | Table: 2 655 - 2 670 MHz BROADCASTING-SATELLITE 5.208B 5.413 5.416 FIXED 5.410 FIXED-SATELLITE (Earth-to-space) 5.415 MOBILE except aeronautical mobile 5.384A |
| 5.487 5.487A | 5.487A 5.488 5.490 | 5.339 5.418 5.418A 5.418B 5.418C |
| Table: 21.4 - 22 GHz BROADCASTING-SATELLITE 5.208B FIXED MOBILE | Table: 17.7 - 17.8 GHz | Table: 2 655 - 2 670 MHz BROADCASTING-SATELLITE 5.208B 5.413 5.416 FIXED 5.410 |
| | | Earth exploration-satellite (passive) Radio astronomy Space research (passive) |
| | | 5.149 5.420 |
| | | Table: 11.7 - 12.2 GHz BROADCASTING BROADCASTING-SATELLITE 5.492 |

This query causes the software to search the Main Table for all allocation boxes in all the three Regions, where there is a sharing between **BROADCASTING-SATELLITE** and **FIXED** services, both as primary services.

Upon successful execution, the query results are presented in a series of pages, laid out in a similar way to the Main Table View. You may navigate the results in a “standard way”.

Querying the Main Table

Specifying radiocommunication services – Applying the “smart” search

Query Main Table Allocations

Region 1 Region 2 Region 3

Frequency Bands

From [] MH To [] MH

Automatically merge overlapping bands

Enlarge to bands union
 Reduce to bands intersection

Radiocommunication Services

Any of the following selected
 All of the following selected

Primary Services

AERONAUTICAL MOBILE
 AERONAUTICAL MOBILE (OR)
 AERONAUTICAL MOBILE (R)
 AERONAUTICAL MOBILE-SATELLITE (R)

Secondary Services

Aeronautical mobile
 Aeronautical mobile (OR)
 Aeronautical radionavigation
 Amateur

Apply deep smart upward search on Radiocommunication Services
 Apply deep smart downward search on Radiocommunication Services

Footnotes References

5. []

5.53
5.54
5.54A
5.54B
5.54C

Search
Save Query...
Open Query...
Reset
Cancel

If you check this box, the search on services will follow a deep upward search, taking into account the inter-relationships between the various services and their ascendants. For instance, if you search for MARITIME MOBILE while this box is checked, the software will also search for all the corresponding upward components (MOBILE, MOBILE except aeronautical mobile etc.).

If you check this box, the search on services will follow a deep downward search, taking into account the inter-relationships between the various services and their descendants. For instance, if you search for MOBILE while this box is checked, the software will also search for all the corresponding downward components (MOBILE, AERONAUTICAL MOBILE, MARITIME MOBILE, LAND MOBILE, etc.).

Please refer to the [Used Radiocommunication Services and Applications Families](#) for more information.

Querying the Main Table

Specifying radiocommunication services – Example 3 - Using the “smart” search

The screenshot displays the 'Query Main Table Allocations' interface on the left and the 'Query results' window on the right. The query is configured for three regions (Region 1, Region 2, Region 3) and includes the following search criteria:

- Frequency Bands:** From [] MH To [] MH
- Radiocommunication Services:**
 - Primary Services: MARITIME MOBILE
 - Secondary Services: Aeronautical mobile
- Footnotes References:** 5. []

The 'Query results' window shows a table with three columns for Region 1, Region 2, and Region 3. The results are summarized in the table below:

| Region 1 | Region 2 | Region 3 |
|---|--|--|
| Table: 2 025 - 2 045 kHz FIXED MOBILE except aeronautical mobile (R) Meteorological aids 5.104 | Table: 2 190.5 - 2 194 kHz MARITIME MOBILE | Table: 2 170 - 2 173.5 kHz MARITIME MOBILE |
| 5.92 5.103 | Table: 2 194 - 2 300 kHz FIXED MOBILE | Table: 2 190.5 - 2 194 kHz MARITIME MOBILE |
| Table: 2 045 - 2 160 kHz FIXED LAND MOBILE MARITIME MOBILE | 5.112 | Table: 2 194 - 2 300 kHz FIXED MOBILE |
| 5.92 | Table: 2 300 - 2 495 kHz BROADCASTING 5.113 FIXED MOBILE | 5.112 |
| Table: 2 170 - 2 173.5 kHz MARITIME MOBILE | Table: 2 505 - 2 850 kHz FIXED MOBILE | Table: 2 300 - 2 495 kHz BROADCASTING 5.113 FIXED MOBILE |
| Table: 2 190.5 - 2 194 kHz MARITIME MOBILE | Table: 3 155 - 3 200 kHz FIXED MOBILE | Table: 2 505 - 2 850 kHz FIXED MOBILE |
| Table: 2 194 - 2 300 kHz FIXED MOBILE except aeronautical mobile (R) | Table: 3 155 - 3 200 kHz FIXED MOBILE except aeronautical mobile (R) | Table: 3 155 - 3 200 kHz FIXED MOBILE except aeronautical mobile (R) |
| 5.92 5.103 5.112 | 5.116 5.117 | 5.116 5.117 |
| 5.116 5.117 | Table: 3 200 - 3 230 kHz BROADCASTING 5.113 | 5.116 5.117 |

As it appears on the query results,

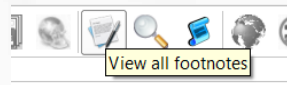
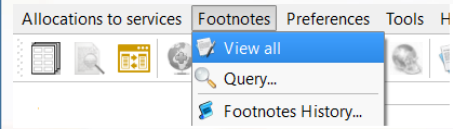
some allocation boxes are matched with the **exact service-category combination**

and some others are matched due to the suitable **“parent”-category combination**.

This query causes the software to search the Main Table for all allocation boxes in all the three Regions, where an allocation to MARITIME MOBILE as a primary service exists, taking into account all its **“parent” services**.

The Footnotes View

The **Footnotes View** mode is another important operational mode of the **RR5FATViewer**. It is accessible via the menu item "**Footnotes – View all**" or, alternatively, by clicking the corresponding icon on the main toolbar.



Article 5 of the Radio Regulations (RR5) - Table of Frequency Allocations (RR2020 Edition)

Allocations to services Footnotes Preferences Tools Help

List of footnotes in the Table of Frequency Allocations

Displayed 827/827 footnotes. Find footnote 5.

| Number | Source | Description | Scope | Entry into force | Applicable until |
|--------|----------|------------------------------------|------------------|------------------|------------------|
| 5.53 | WRC-2012 | Guidance | | In force | |
| 5.54 | WRC-2012 | Guidance | | In force | |
| 5.54A | WRC-2012 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.54B | WRC-2015 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.54C | WRC-2012 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.55 | WRC-2015 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.56 | WRC-2012 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.57 | WRC-1997 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.58 | WRC-2000 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.59 | WRC-2000 | Different Category of Service | TERRESTRIAL ONLY | In force | |
| 5.60 | WRC-1997 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.61 | WRC-1997 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.62 | WRC-1997 | Guidance | TERRESTRIAL ONLY | In force | |
| 5.63 | WRC-1997 | Suppress | | | |
| 5.64 | WRC-1997 | Limitation | | | |
| 5.65 | WRC-2000 | Different Category of Service | | | |
| 5.66 | WRC-1997 | Different Category of Service | | | |
| 5.67 | WRC-2019 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.67A | WRC-2007 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.67B | WRC-2019 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.68 | WRC-2015 | Alternative Allocation | TERRESTRIAL ONLY | In force | |
| 5.69 | WRC-1997 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.70 | WRC-2019 | Alternative Allocation | TERRESTRIAL ONLY | In force | |
| 5.71 | WRC-2019 | Suppress | | | |
| 5.72 | WRC-2012 | Suppress | | | |
| 5.73 | WRC-1997 | Additional Allocation - Limitation | TERRESTRIAL ONLY | In force | |
| 5.74 | WRC-1997 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.75 | WRC-2007 | Different Category of Service | TERRESTRIAL ONLY | In force | |
| 5.76 | WRC-1997 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.77 | WRC-2019 | Different Category of Service | TERRESTRIAL ONLY | In force | |
| 5.78 | WRC-1997 | Different Category of Service | TERRESTRIAL ONLY | In force | |
| 5.79 | WRC-2019 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.79A | WRC-2007 | Guidance | TERRESTRIAL ONLY | In force | |
| 5.80 | WRC-1997 | Limitation | TERRESTRIAL ONLY | In force | |

Used References

Click to select only those footnotes where the relevant reference appears

| Articles | Appendices | Resolutions | Recommendations | Regional Agreements | Rules of Procedure |
|------------------|------------|-------------|-----------------|---------------------|--------------------|
| Article 1 | | | | | |
| 1.83 | | | | | |
| Article 4 | | | | | |
| | 4.5 | | | 4.6 | |
| | 4.9 | | | 4.10 | |
| Article 5 | | | | | |
| | 5.10 | | | 5.11 | |
| | 5.13 | | | 5.21 | |
| | 5.29 | | | 5.30 | |
| | 5.31 | | | 5.32 | |
| | 5.33 | | | 5.43 | |
| | 5.43A | | | 5.67 | |
| | 5.98 | | | 5.99 | |
| | 5.162A | | | 5.166B | |
| | 5.167 | | | | |
| | 5.169B | | | | |
| | 5.208B | | | | |
| | 5.260A | | | 5.264A | |
| | 5.280 | | | 5.286D | |
| | 5.286E | | | 5.312 | |
| | 5.329A | | | 5.331 | |
| | 5.337 | | | 5.342 | |
| | 5.343 | | | 5.344 | |
| | 5.347A | | | 5.359 | |
| | 5.366 | | | 5.367 | |
| | 5.369 | | | 5.388A | |
| | 5.398A | | | 5.401 | |
| | 5.403 | | | 5.416 | |
| | 5.418 | | | 5.422 | |
| | 5.444A | | | 5.446 | |
| | 5.447B | | | 5.447A | |
| | 5.449 | | | 5.471 | |
| | 5.483 | | | 5.511 | |

Footnote text

5.67 View History Print View Main Table Related Allocations

Additional allocation: in [Kyrgyzstan](#), [Turkmenistan](#), the frequency band 130-148.5 kHz is also allocated to the radio... countries this service shall have an equal right to operate. (WRC-19)

The footnotes list area

The footnotes cross references area

The footnote text area

In this mode, the software loads and presents the **list of all footnotes** of the Article 5, associated with the Main Table. The display is organized in three main areas as shown here.

The Footnotes View

The footnotes list area

List of footnotes in the Table of Frequency Allocations

Displayed 827/827 footnotes.



Find footnote 5.

| Number ^ | Source | Description | Scope | Entry into force | Applicable until |
|----------|----------|---|------------------|------------------|------------------|
| 5.336 | WRC-1997 | Not used | | | |
| 5.337 | WRC-1997 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.337A | WRC-2000 | Explanatory - Guidance | | In force | |
| 5.338 | WRC-2000 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.338A | WRC-2019 | Explanatory - Guidance | SPACE ONLY | In force | |
| 5.339 | WRC-1997 | Additional Allocation | SPACE ONLY | In force | |
| 5.339A | WRC-2007 | Suppress | | | |
| 5.340 | WRC-2003 | Limitation | | In force | |
| 5.340.1 | WRC-1997 | Explanatory - Guidance | SPACE ONLY | In force | |
| 5.341 | WRC-1997 | Explanatory | | In force | |
| 5.341A | WRC-2015 | Explanatory | TERRESTRIAL ONLY | In force | |
| 5.341B | WRC-2015 | Explanatory | TERRESTRIAL ONLY | In force | |
| 5.341C | WRC-2015 | Explanatory | TERRESTRIAL ONLY | In force | |
| 5.342 | WRC-2015 | Additional Allocation - Limitation | TERRESTRIAL ONLY | In force | |
| 5.343 | WRC-1997 | Guidance | TERRESTRIAL ONLY | In force | |
| 5.344 | WRC-1997 | Alternative Allocation | TERRESTRIAL ONLY | In force | |
| 5.345 | WRC-2019 | Limitation | | In force | |
| 5.346 | WRC-2019 | Explanatory | TERRESTRIAL ONLY | In force | |
| 5.346A | WRC-2019 | Explanatory | TERRESTRIAL ONLY | In force | |
| 5.347 | WRC-2007 | Suppress | | | |
| 5.347A | WRC-2007 | Suppress | | | |
| 5.348 | WRC-2003 | Explanatory - Limitation | SPACE ONLY | In force | |

Footnote text

5.345 [View History](#) [Print](#) [View Main Table Related Allocations](#)

Use of the frequency band 1 452-1 492 MHz by the broadcasting-satellite service, and by the broadcasting service, is limited to digital audio broadcasting and is subject to the provisions of [Res. 528 \(Rev.WRC-19\)](#). (WRC-19)

You may use these buttons to print the details of the displayed footnote list, or to export it in various formats.

You may directly jump to a given footnote by typing its number in this box.

The footnotes list area shows a summary list with some “meta-data” relating to every footnote. This includes:

- the **footnote** (provision) **number**,
- its **source** (the last “known to the software” WRC which modified this footnote),
- a short **description** (this is typically describing the role of the footnote when it is modifying the Main Table allocations via Additional allocations, Alternative allocations or Different Category of Service provisions),
- the **scope** of the footnote; this indicates whether the footnote applies to Space Services only or to Terrestrial Services only. It is blank if it applies to both.
- And when and if applicable, the **dates of entry into force and expiry** of the provisions described in the footnote.

When a given row in the list is activated (via mouse click for instance), the text of the corresponding footnote appears in the footnote text area. Further actions may be available there as explained hereafter.

The Footnotes View

The footnote text area

Footnote text

5.202 [View History](#) [Print](#) [View Main Table Related Allocations](#)

Additional allocation: in [Saudi Arabia](#), [Armenia](#), [Azerbaijan](#), [Bahrain](#), [Belarus](#), [Bulgaria](#), [United Arab Emirates](#), [Russian Federation](#), [Georgia](#), [Iran \(Islamic Republic of\)](#), [Jordan](#), [Mali](#), [Oman](#), [Uzbekistan](#), [Poland](#), [Syrian Arab Republic](#), [Kyrgyzstan](#), [Romania](#), [Senegal](#), [Tajikistan](#), [Turkmenistan](#), [Ukraine](#), the frequency band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-19)

Click this link to display all allocation boxes from the Main Table where the relevant footnote applies.

| Region 1 | Region 2 | Region 3 |
|--------------------------------|--------------------------------|--------------------------------|
| Table: 117.975 - 137 MHz | Table: 117.975 - 137 MHz | Table: 117.975 - 137 MHz |
| AERONAUTICAL MOBILE (R) | AERONAUTICAL MOBILE (R) | AERONAUTICAL MOBILE (R) |
| 5.111 5.200 5.201 5.202 | 5.111 5.200 5.201 5.202 | 5.111 5.200 5.201 5.202 |

When the footnote text contains a list of geographic areas (countries), you may click on the country name to obtain either:

- The list of all explicit footnotes for that country or
- The list of all footnotes that are relevant to that country.

Show explicit footnotes for Poland

Show all relevant footnotes for Poland

By convention,

- **Explicit footnotes** for a given country are those RR5 footnotes where that country name explicitly appears.
- **Relevant footnotes** for a given country are those RR5 footnotes which, in addition to the explicit ones, are of importance to that country. These are usually footnotes with a larger applicability scope, such as worldwide or regional provisions (additional allocations, limitations, etc.), regional provisions applicable to the Region of the country, etc.

The example shown below clarifies this idea for Poland.

Click this link to display the relevant footnote history and examine its evolution through the various WRCs, since WRC-2000. Please refer to [The Footnotes History View](#) for more details.

Article 5 Footnotes History

RR 2020 (Active Edition) Footnotes All (522)

Find footnote RRS.

5.172
5.173
5.174
5.175
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5.216
5.217

5.202

RR 2020 Edition (WRC-19)

5.202

Additional allocation: in [Saudi Arabia](#), [Armenia](#), [Azerbaijan](#), [Bahrain](#), [Belarus](#), [Bulgaria](#), [United Arab Emirates](#), [Russian Federation](#), [Georgia](#), [Iran \(Islamic Republic of\)](#), [Jordan](#), [Mali](#), [Oman](#), [Uzbekistan](#), [Poland](#), [Syrian Arab Republic](#), [Kyrgyzstan](#), [Romania](#), [Senegal](#), [Tajikistan](#), [Turkmenistan](#), [Ukraine](#), the frequency band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-19)

RR 2016 Edition (WRC-15)

5.202

Additional allocation: in [Saudi Arabia](#), [Armenia](#), [Azerbaijan](#), [Belarus](#), [Bulgaria](#), [United Arab Emirates](#), [Russian Federation](#), [Georgia](#), [Iran \(Islamic Republic of\)](#), [Jordan](#), [Mali](#), [Oman](#), [Uzbekistan](#), [Poland](#), [Syrian Arab Republic](#), [Kyrgyzstan](#), [Romania](#), [Senegal](#), [Tajikistan](#), [Turkmenistan](#), [Ukraine](#), the frequency band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-15)

RR 2012 Edition (WRC-12)

5.202

Additional allocation: in [Saudi Arabia](#), [Armenia](#), [Azerbaijan](#), [Belarus](#), [Bulgaria](#), [United Arab Emirates](#), [Russian Federation](#), [Georgia](#), [Iran \(Islamic Republic of\)](#), [Jordan](#), [Mali](#), [Oman](#), [Uzbekistan](#), [Poland](#), [Syrian Arab Republic](#), [Kyrgyzstan](#), [Romania](#), [Senegal](#), [Tajikistan](#), [Turkmenistan](#), [Ukraine](#), the band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-12)

RR 2008 Edition (WRC-07)

5.202

Additional allocation: in [Saudi Arabia](#), [Armenia](#), [Azerbaijan](#), [Belarus](#), [Bulgaria](#), [United Arab Emirates](#), [Russian Federation](#), [Georgia](#), [Iran \(Islamic Republic of\)](#), [Jordan](#), [Mali](#), [Oman](#), [Uzbekistan](#), [Poland](#), [Syrian Arab Republic](#), [Kyrgyzstan](#), [Romania](#), [Senegal](#), [Tajikistan](#), [Turkmenistan](#), [Ukraine](#), the band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-07)

RR 2004 Edition (WRC-03)

5.202

Additional allocation: in [Saudi Arabia](#), [Armenia](#), [Azerbaijan](#), [Belarus](#), [Bulgaria](#), [United Arab Emirates](#), [Russian Federation](#), [Georgia](#), [Iran \(Islamic Republic of\)](#), [Jordan](#), [Latvia](#), [Moldova](#), [Oman](#), [Uzbekistan](#), [Poland](#), [Syrian Arab Republic](#), [Kyrgyzstan](#), [Slovakia](#), [Czech Rep.](#), [Romania](#), [Tajikistan](#), [Turkmenistan](#), [Ukraine](#), the band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-03)

RR 2001 Edition (WRC-2000)

5.202

Additional allocation: in [Saudi Arabia](#), [Armenia](#), [Azerbaijan](#), [Belarus](#), [Bulgaria](#), [United Arab Emirates](#), [Russian Federation](#), [Georgia](#), [Iran \(Islamic Republic of\)](#), [Jordan](#), [Latvia](#), [Moldova](#), [Oman](#), [Uzbekistan](#), [Poland](#), [Syrian Arab Republic](#), [Kyrgyzstan](#), [Slovakia](#), [Czech Rep.](#), [Romania](#), [Tajikistan](#), [Turkmenistan](#), [Ukraine](#), the band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-2000)

Filter for geographic area

You may restore the list of all footnotes at any moment by clicking the "View all footnotes" icon on the main toolbar.

View all footnotes

Show explicit footnotes for Poland

Show all relevant footnotes for Poland

List of footnotes in the Table of Frequency Allocations

Displayed 19/827 footnotes.

Find footnote 5. Automatically show related

| Number ^ | Source | Description | Scope | Entry into force | Applicable until |
|----------|----------|--|------------------|------------------|------------------|
| 5.93 | WRC-2015 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.96 | WRC-2015 | Guidance - Limitation | TERRESTRIAL ONLY | In force | |
| 5.162A | WRC-2019 | Additional Allocation - Limitation | TERRESTRIAL ONLY | In force | |
| 5.164 | WRC-2019 | Additional Allocation - Explanatory | TERRESTRIAL ONLY | In force | |
| 5.201 | WRC-2019 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.202 | WRC-2019 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.206 | WRC-2000 | Different Category of Service | TERRESTRIAL ONLY | In force | |
| 5.221 | WRC-2019 | Explanatory - Limitation | SPACE ONLY | In force | |
| 5.277 | WRC-2019 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.296 | WRC-2019 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.331 | WRC-2019 | Additional Allocation - Limitation | TERRESTRIAL ONLY | In force | |
| 5.359 | WRC-2019 | Additional Allocation - Guidance | TERRESTRIAL ONLY | In force | |
| 5.382 | WRC-2019 | Different Category of Service - Limitation | TERRESTRIAL ONLY | In force | |
| 5.469 | WRC-2012 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.473 | WRC-2019 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.506 | WRC-1997 | Limitation | SPACE ONLY | In force | |
| 5.510 | WRC-2015 | Limitation | SPACE ONLY | In force | |
| 5.536B | WRC-2019 | Limitation | | In force | |
| 5.546 | WRC-2019 | Different Category of Service - Limitation | TERRESTRIAL ONLY | In force | |

[5.93](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

Additional allocation: in [Armenia](#), [Azerbaijan](#), [Belarus](#), [Russian Federation](#), [Georgia](#), [Hungary](#), [Kazakhstan](#), [Latvia](#), [Lithuania](#), [Mongolia](#), [Nigeria](#), [Uzbekistan](#), [Poland](#), [Kyrgyzstan](#), [Slovakia](#), [Tajikistan](#), [Chad](#), [Turkmenistan](#), [Ukraine](#), the frequency bands 1 625-1 635 kHz, 1 800-1 810 kHz and 2 160-2 170 kHz are also allocated to the fixed and land mobile services on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-15)

[5.202](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

Additional allocation: in [Saudi Arabia](#), [Armenia](#), [Azerbaijan](#), [Bahrain](#), [Belarus](#), [Bulgaria](#), [United Arab Emirates](#), [Russian Federation](#), [Georgia](#), [Iran \(Islamic Republic of\)](#), [Jordan](#), [Mali](#), [Oman](#), [Uzbekistan](#), [Poland](#), [Syrian Arab Republic](#), [Kyrgyzstan](#), [Romania](#), [Senegal](#), [Tajikistan](#), [Turkmenistan](#), [Ukraine](#), the frequency band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-19)

[5.546](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

Different category of service: in [Saudi Arabia](#), [Armenia](#), [Azerbaijan](#), [Bahrain](#), [Belarus](#), [Egypt](#), [United Arab Emirates](#), [Spain](#), [Estonia](#), [Russian Federation](#), [Georgia](#), [Hungary](#), [Iran \(Islamic Republic of\)](#), [Israel](#), [Jordan](#), [Lebanon](#), [Moldova](#), [Mongolia](#), [Oman](#), [Uzbekistan](#), [Poland](#), [Syrian Arab Republic](#), [Kyrgyzstan](#), [Romania](#), [United Kingdom](#), [South Africa](#), [Tajikistan](#), [Turkmenistan](#), [Turkey](#), the allocation of the frequency band 31.5-31.8 GHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see 5.33). (WRC-19)

List of footnotes in the Table of Frequency Allocations

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Find footnote 5.

| Number ^ | Source | Description | Scope | Entry into force | Applicable until |
|----------|----------|------------------------------------|------------------|------------------|------------------|
| 5.53 | WRC-2012 | Guidance | | In force | |
| 5.54 | WRC-2012 | Guidance | | In force | |
| 5.54A | WRC-2012 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.56 | WRC-2012 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.57 | WRC-1997 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.60 | WRC-1997 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.62 | WRC-1997 | Guidance | TERRESTRIAL ONLY | In force | |
| 5.64 | WRC-1997 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.67A | WRC-2007 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.67B | WRC-2019 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.73 | WRC-1997 | Additional Allocation - Limitation | TERRESTRIAL ONLY | In force | |
| 5.74 | WRC-1997 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.76 | WRC-1997 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.79 | WRC-2019 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.79A | WRC-2007 | Guidance | TERRESTRIAL ONLY | In force | |
| 5.80A | WRC-2012 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.80B | WRC-2012 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.82 | WRC-2012 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.82C | WRC-2019 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.84 | WRC-2007 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.90 | WRC-1997 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.92 | WRC-1997 | Limitation | TERRESTRIAL ONLY | In force | |
| 5.93 | WRC-2015 | Additional Allocation | TERRESTRIAL ONLY | In force | |
| 5.96 | WRC-2015 | Guidance - Limitation | TERRESTRIAL ONLY | In force | |
| 5.100 | WRC-1997 | Guidance | TERRESTRIAL ONLY | In force | |

[5.74](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

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.

[5.136](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

Additional allocation: frequencies in the band 5 900-5 950 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 [Regions 2 and 3](#)), 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. (WRC-07)

[5.143](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

Additional allocation: frequencies in the band 7 300-7 350 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. (WRC-07)

[5.162A](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

Additional allocation: in [Germany](#), [Austria](#), [Belgium](#), [Bosnia and Herzegovina](#), [China](#), [Vatican](#), [Denmark](#), [Spain](#), [Estonia](#), [Russian Federation](#), [Finland](#), [France](#), [Ireland](#), [Iceland](#), [Italy](#), [Latvia](#), [Liechtenstein](#), [Lithuania](#), [Luxembourg](#), [Monaco](#), [Montenegro](#), [Norway](#), [Netherlands](#), [Poland](#), [Portugal](#), [North Macedonia](#), [Czech Rep.](#), [United Kingdom](#), [Serbia](#), [Slovenia](#), [Sweden](#), [Switzerland](#), the frequency band 46-68 MHz is also allocated to the radiolocation service on a secondary basis. This use is limited to the operation of wind profiler radars in accordance with [Res. 217 \(WRC-97\)](#). (WRC-19)

The Footnotes View

The footnote text area

Use this button to open the corresponding [footnote history view](#).

By convention in the context of the software, the country names appearing in the footnote text are highlighted using three different colors, according to their “conventional roles”:

Angola, Australia, China, Eritrea, Ethiopia,

➤ In **blue** when they are possible “**NOTIFIERS**” of frequency assignments in the context of the footnote. This covers the majority of cases.

In Region 2 (except in Mexico),

➤ In **green** when they are explicitly “**EXCEPTED**” or “**EXCLUDED**” from the provisions stated in the given footnote, or when the footnote is explicitly stating that a given service is not applicable in the relevant country (see No. 5.435 as an example).

China, Iran (Islamic Republic of), Japan, Uzbekistan.

➤ In **red** when they are identified in the text of the relevant footnote as “**AFFECTED**” countries: either the protection of their services is explicitly stated (see No. 5.379E for an example), or their explicit agreement is required or some hard limits are specified to protect the services in their territories (see No. 5.388B as an example).

Article 5 of the Radio Regulations (RR5) - Table of Frequency Allocations (RR5-2016-5)

Allocations to services Footnotes Preferences Tools Help

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Find footnote 5. 447C

| Number | Source | Description |
|--------|----------|------------------------------------|
| 5.447 | WRC-2012 | Additional Allocation |
| 5.447A | WRC-1997 | Limitation |
| 5.447B | WRC-1997 | Additional Allocation - Limitation |
| 5.447C | WRC-1997 | Guidance |
| 5.447D | WRC-1997 | Limitation |
| 5.447E | WRC-2015 | Additional Allocation - Limitation |
| 5.447F | WRC-2015 | Explanatory - Limitation |
| 5.448 | WRC-2012 | Additional Allocation |
| 5.448A | WRC-2003 | Guidance |
| 5.448B | WRC-2003 | Guidance |
| 5.448C | WRC-2003 | Guidance |

Footnote text

5.447C [View History](#) [Print](#) [View Main Table Related](#)

Administrations responsible for fixed-satellite service networks in the band 5 150-5 250 MHz operated under Nos. 5.447A and 5.447B shall coordinate on an equal basis in accordance with No. 9.11A 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. 5.446 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.

5.446

Additional allocation: in the countries listed in No. 5.369, the frequency band 5 150-5 216 MHz is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis, subject to agreement obtained under No. 9.21. In Region 2 (except in Mexico), the frequency band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a primary basis. In Region 1 and Region 3, except for the countries listed in No. 5.369 and Bangladesh, the frequency band is also allocated to the radiodetermination-satellite service (space-to-Earth) on a secondary basis. The use by the radiodetermination-satellite service is limited to feeder links in conjunction with the radiodetermination-satellite service operating in the frequency band 1 610-1 626.5 MHz.

5.369

Different category of service: in Angola, Australia, China, Eritrea, Ethiopia, India, Iran (Islamic Republic of), Israel, Lebanon, Liberia, Madagascar, Mali, Pakistan, Papua New Guinea, Syrian Arab Republic, Dem. Rep. of the Congo, Sudan, South Sudan, Togo, Zambia, the allocation of the band 1 610-1 626.5 MHz to the radiodetermination-satellite service (Earth-to-space) is on a primary basis (see No. 5.33), subject to agreement obtained under No. 9.21 from countries not listed in this provision. (WRC-12)

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 service and is subject to coordination under 9.11A.

When a given footnote text is making reference to other Article 5 footnotes, these references are highlighted. If you click on a referenced footnote number, the software “pops-up” a window displaying the corresponding footnote text, as shown above. The same “navigating” facilities are then also available in the newly opened window.

The Footnotes View

The cross references area – Example 1 – Footnotes referencing another footnote

List of footnotes in the Table of Frequency Allocations

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Find footnote 5.

| Number | Source | Description | Scope | Entry into force | Applicable until |
|------------------------|----------|--------------------------|------------|------------------|------------------|
| 5.341A | WRC-2015 | Explanatory | | In force | |
| 5.346 | WRC-2015 | Explanatory | | In force | |
| 5.348B | WRC-2003 | Explanatory - Limitation | SPACE ONLY | In force | |

Used References

Click to select only those footnotes where the relevant reference appears

[Articles](#) [Appendices](#) [Resolutions](#) [Recommendations](#) [Regional Agreements](#) [Rules of Procedure](#)

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| 5.280 | 5.286D |
| 5.286E | 5.31 |
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| 5.329A | 5.37 |
| 5.331 | 5.342 |
| 5.340.1 | 5.344 |
| 5.343 | 5.359 |
| 5.347A | |

List of footnotes referencing No. 5.342

Footnote text

[5.341A](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

In **Region 1**, the frequency bands 1 427-1 452 MHz and 1 492-1 518 MHz are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with **Res. 223 (Rev.WRC-15)**. This identification does not preclude the use of these frequency bands by any other application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of IMT stations is subject to agreement obtained under No. **9.21** with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. **5.342** (WRC-15)

5.342

[5.342](#)

Additional allocation: in [Armenia](#), [Azerbaijan](#), [Belarus](#), [Russian Federation](#), [Uzbekistan](#), [Kyrgyzstan](#), [Ukraine](#), the frequency band 1 429-1 535 MHz is also allocated to the aeronautical mobile service on a primary basis, exclusively for the purposes of aeronautical telemetry within the national territory. As of 1 April 2007, the use of the frequency band 1 452-1 492 MHz is subject to agreement between the administrations concerned. (WRC-15)

The Footnotes View

The cross references area – Example 2 – Footnotes referencing provisions from another article

List of footnotes in the Table of Frequency Allocations

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| Number | Source | Description | Scope | Entry into force | Applicable until |
|--------|----------|-------------------------------|------------|------------------|------------------|
| 5.251 | WRC-1997 | Additional Allocation | | In force | |
| 5.252 | WRC-1997 | Alternative Allocation | | In force | |
| 5.254 | WRC-2003 | Explanatory - Limitation | SPACE ONLY | In force | |
| 5.257 | WRC-1997 | Explanatory | SPACE ONLY | In force | |
| 5.259 | WRC-2012 | Additional Allocation | SPACE ONLY | In force | |
| 5.279 | WRC-1997 | Additional Allocation | | In force | |
| 5.286 | WRC-1997 | Explanatory | SPACE ONLY | In force | |
| 5.290 | WRC-2012 | Different Category of Service | SPACE ONLY | In force | |
| 5.291 | WRC-1997 | Additional Allocation | SPACE ONLY | In force | |
| 5.292 | WRC-2015 | Different Category of Service | | In force | |

List of footnotes
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No. 9.21

Used References

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Automatically show related Rules of Procedure Show all used references in Article 5 footnotes

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| | Article 11 | | | | |
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Footnote text

[5.259](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

Additional allocation: in [Egypt, Syrian Arab Republic](#), the band 328.6-335.4 MHz is also allocated to the mobile service on a secondary basis, subject to agreement obtained under No. [9.21](#). In order to ensure that harmful interference is not caused to stations of the aeronautical radionavigation service, stations of the mobile service shall not be introduced in the band until it is no longer required for the aeronautical radionavigation service by any administration which may be identified in the application of the procedure invoked under No. [9.21](#). (WRC-12)

The Footnotes View

The cross references area – Example 3 – Footnotes referencing a given Resolution

List of footnotes in the Table of Frequency Allocations

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Search footnotes text

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| Number ^ | Source | Description | Scope | Entry into force | Applicable until |
|----------|----------|--------------------------|------------------|------------------|------------------|
| 5.532AA | WRC-2019 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |
| 5.534A | WRC-2019 | Explanatory - Limitation | TERRESTRIAL ONLY | In force | |

List of footnotes referencing Res. 166 (WRC-19)

Used References

Click to select only those footnotes where the relevant reference appears

- Articles
- Appendices
- Resolutions**
- Recommendations
- Regional Agreements
- Rules of Procedure

| Resolutions | |
|---------------------------------------|---|
| Res. 32 (WRC-19) | Res. 339 (Rev.WRC-07) |
| Res. 75 (WRC-2000) | Res. 413 (Rev.WRC-07) |
| Res. 114 (Rev.WRC-15) | Res. 416 (WRC-07) |
| Res. 122 (Rev.WRC-19) | Res. 417 (Rev.WRC-15) |
| Res. 143 (Rev.WRC-19) | |
| Res. 145 (Rev.WRC-19) | |
| Res. 150 (WRC-12) | |
| Res. 155 (WRC-15) | |
| Res. 156 (WRC-15) | |
| Res. 163 (WRC-15) | Res. 539 (Rev.WRC-19) |
| Res. 164 (WRC-15) | Res. 608 (Rev.WRC-19) |
| Res. 165 (WRC-19) | Res. 609 (Rev.WRC-07) |
| Res. 166 (WRC-19) | Res. 610 (WRC-03) |
| Res. 167 (WRC-19) | Res. 612 (Rev.WRC-12) |
| Res. 168 (WRC-19) | Res. 660 (WRC-19) |
| Res. 169 (WRC-19) | Res. 616 (Rev.WRC-2000) |
| Res. 205 (Rev.WRC-19) | Res. 731 (Rev.WRC-19) |
| Res. 212 (Rev.WRC-07) | Res. 739 (Rev.WRC-19) |
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| Res. 217 (WRC-97) | Res. 743 (WRC-03) |
| Res. 221 (Rev.WRC-07) | Res. 744 (Rev.WRC-07) |
| Res. 222 (WRC-2000) | Res. 748 (Rev.WRC-19) |
| Res. 222 (Rev.WRC-12) | Res. 749 (Rev.WRC-19) |
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| Res. 224 (Rev.WRC-19) | Res. 752 (WRC-07) |
| Res. 225 (Rev.WRC-07) | Res. 760 (Rev.WRC-19) |
| Res. 229 (Rev.WRC-19) | Res. 761 (Rev.WRC-19) |

Click this to display the text of the Resolution through the Resolutions Browser

- View Res. 166 (WRC-19) text
- View relevant footnotes for Res. 166 (WRC-19)

Click this to display the text of the Resolution through the Resolutions Browser

Footnote text

[5.532AA](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

The allocation to the fixed service in the frequency band 24.25-25.25 GHz is identified as a fixed service to which this frequency band is allocated on a co-primary basis, and of [Res. 166 \(WRC-19\)](#) (WRC-19)

... identification does not preclude the use of this frequency band by other fixed-service applications or by other service allocation by HAPS is limited to the HAPS-to-ground direction and shall be in accordance with the provisions

The Footnotes View

The cross references area – Example 4 – Footnotes referencing a given ITU-R Recommendation

List of footnotes in the Table of Frequency Allocations

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Find footnote 5.

| Number | Source | Description | Scope | Entry into force | Applicable |
|--------|----------|-------------|------------|------------------|------------|
| 5.372 | WRC-2019 | Limitation | SPACE ONLY | In force | |
| 5.551H | WRC-2015 | Limitation | SPACE ONLY | In force | |

Used References

Click to select only those footnotes where the relevant reference appears

Automatically show related Rules of Procedure Show all used references in Article 5 footnotes

Articles Appendices Resolutions Recommendations

| Recommendations | Articles | Appendices | Resolutions |
|---|----------|------------|-------------|
| Annex 1, Part B of Rec. ITU-R M.1643-0* | | | |
| Rec. 707 | | | |
| Rec. ITU-R F.1613-0* | | | |
| Rec. ITU-R M.1371 | | | |
| Rec. ITU-R M.2010 | | | |
| Rec. ITU-R P.452 | | | |
| Rec. ITU-R RA.1631-0 | | | |
| Rec. ITU-R RA.769-2 | | | |
| Rec. ITU-R RS.1862 | | | |
| Rec. ITU-R S.1586-1* | | | |
| Rec. ITU-R SA.1862 | | | |
| Rec. ITU-R M.1174-4* | | | |
| Rec. ITU-R M.1583-1* | | | |
| Rec. ITU-R M.2057 | | | |
| Rec. ITU-R RA.1513-2* | | | |
| Rec. ITU-R SA.1154-0* | | | |

* These ITU-R Recommendations are incorporated by reference in footnotes of Article 5 of the RR. They are listed in RR Volume 4 together with the other ITU-R Recommendations incorporated by reference in other RR provisions.

View Rec. ITU-R RA.1631-0 text

View relevant footnotes for Rec. ITU-R RA.1631-0

Footnote text

5.372 [View History](#) [Print](#) [View Main Table Related Allocations](#)

Harmful interference shall not be caused to stations of the radio astronomy service using the frequency band 1 610.6-1 613.8 MHz by stations of the radiodetermination-satellite and mobile-satellite services (No. 29.13 applies). The equivalent power flux-density (epfd) produced in the frequency band 1 610.6-1 613.8 MHz by all space stations of a non-geostationary-satellite system in the mobile-satellite service (space-to-Earth) operating in frequency band 1 613.8-1 626.5 MHz shall be in compliance with the protection criteria provided in [Rec. ITU-R RA.769-2](#) and [Rec. ITU-R RA.1513-2](#), using the methodology given in [Rec. ITU-R M.1583-1](#), and the radio astronomy antenna pattern described in [Rec. ITU-R RA.1631-0](#). (WRC-19)

Rec. ITU-R RA.1631 1

RECOMMENDATION ITU-R RA.1631

Reference radio astronomy antenna pattern to be used for compatibility analyses between non-GSO systems and radio astronomy service stations based on the epfd concept

(Question ITU-R.1467)

(2003)

The ITU Radiocommunication Assembly,

considering

a) that there is a need to determine the levels of interference which may occur at typical observatory sites, due to various sources of interference;

b) that, to determine these levels of interference, a reference antenna pattern needs to be defined;

c) that Recommendation ITU-R SA.509 gives a reference antenna pattern which represents the side-lobe gain levels that are not expected to be exceeded at most off-axis angles in the majority of antennas used in the service;

d) that the antenna pattern given in Recommendation ITU-R SA.509 is appropriate in some compatibility or sharing analyses;

e) that if the peak envelope radiation pattern such as given in Recommendation ITU-R SA.509 is used in the assessment of the aggregate interference consisting of many interference entries, the predicted interference will result in values that are greater than values that would be experienced in practice;

f) that Recommendation ITU-R S.1586 and Recommendation ITU-R M.1583 provide a methodology based on the epfd concept as defined in No. 22.5C of the Radio Regulations to calculate the level of unwanted emission levels produced by a non-geostationary-satellite system at radio astronomy stations;

List of footnotes referencing Rec. ITU-R RA.1631.0

Click this to display the text of the Recommendation

When displaying the list of Recommendations referenced in Article 5 footnotes, the software tentatively marks with a specific color those ITU-R Recommendations incorporated by reference in RR5 footnotes and listed in Volume IV together with the other ITU-R Recommendations incorporated by reference in other RR provisions.

See Res. 26 (Rev. WRC-19) and Res. 27 (Rev. WRC-19)

The Footnotes View

The cross references area – References to/from relevant Rules of Procedure (RoPs)

The software is also equipped with cross-linking mechanisms to/from the relevant Rules of Procedure in the most recent revision of the active edition of the **RRB's Rules of Procedure**.





These are **limited to and taken from the PARTA1/AR5 section in the RoPs**, which pertains to the RR5 footnotes. They can be viewed by activating the corresponding tab in the cross-references area as shown here.

The RoPs are also cross-linked so that when the link to a given RoP is activated, the software displays

- The text of the relevant RoP, but also the text of any other RoP relating to any other RR5 footnote referenced in the select RoP text;
- The list of relevant RR5 footnotes: this consists of the concerned RR5 footnote, but also any other RR5 footnotes referenced in RoP text.

The following examples illustrate these cross-linking mechanisms.

List of footnotes in the Table of Frequency Allocations

Displayed 1/827 footnotes.     Search footnotes text

Find footnote 5:

Automatically show related Rules of Procedure Show all used references in Article 5 footnotes

| Number | Source | Description | Scope | Entry into force | Applicable |
|--------|----------|-------------|------------------|------------------|------------|
| 5.327A | WRC-2015 | Limitation | TERRESTRIAL ONLY | In force | |

Used References

Click to select only those footnotes where the relevant reference appears

[Articles](#) [Appendices](#) [Resolutions](#) [Recommendations](#) [Regional Agreements](#) **[Rules of Procedure](#)**

Relevant Rules of Procedure
(RoP 2017 (Rev.7) - 01/11/2020)

| | |
|--|--|
| PART A1 / AR5 / 5.73 | PART A1 / AR5 / 5.132A |
| PART A1 / AR5 / 5.145A | PART A1 / AR5 / 5.149 |
| PART A1 / AR5 / 5.161A | PART A1 / AR5 / 5.164 |
| PART A1 / AR5 / 5.172 | PART A1 / AR5 / 5.233 |
| PART A1 / AR5 / 5.257 | PART A1 / AR5 / 5.281 |
| PART A1 / AR5 / 5.291 | PART A1 / AR5 / 5.312A |
| PART A1 / AR5 / 5.316B | PART A1 / AR5 / 5.327A |
| PART A1 / AR5 / 5.328AA | PART A1 / AR5 / 5.329 |
| PART A1 / AR5 / 5.340 | PART A1 / AR4 / 4.4 |
| PART A1 / AR5 / 5.341A | PART A1 / AR5 / 5.346 |
| PART A1 / AR5 / 5.351 | PART A1 / AR5 / 5.357 |
| PART A1 / AR5 / 5.364 | PART A1 / AR5 / 5.366 |
| PART A1 / AR5 / 5.376 | PART A1 / AR5 / 5.399 |
| PART A1 / AR5 / 5.415 | PART A1 / AR5 / 5.416 |
| PART A1 / AR5 / Band 2 630-2 655 MHz | PART A1 / AR5 / 5.418C |
| PART A1 / AR5 / 5.441 | PART A1 / AR5 / 5.441B |
| PART A1 / AR5 / 5.444B | PART A1 / AR5 / 5.446A |
| PART A1 / AR5 / 5.484 | PART A1 / AR5 / 5.485 |
| PART A1 / AR5 / 5.488 | PART A1 / AR5 / 5.492 |

Footnote text

[5.327A](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

The use of the frequency band 960-1 164 MHz by the aeronautical mobile (R) service is limited to systems that operate in accordance with recognized international aeronautical standards. Such use shall be in accordance with [Res. 417 \(Rev.WRC-15\)](#). (WRC-15)

RoP 2017 (Rev.7) / PART A1 / AR5 / 5.327A






1 [Res. 417 \(Rev.WRC-15\)](#) does not contain data elements which would enable examination as to whether the notified frequency assignment is associated to a system that operates in accordance with recognized international aeronautical standards or to a system that operates under other standards. As the Bureau has no means to make such differentiation, the Board decided that the Bureau shall make no examination of the notified frequency assignment to a station in the aeronautical mobile (R) service (AM(R)S) from the view point of its conformity with this provision.

2 With respect to the requirements contained in resolves 2 and 3 of [Res. 417 \(Rev.WRC-15\)](#), the Board decided that the Bureau shall make no examination of the notified frequency assignment to a station in the AM(R)S from the view point of its conformity with these provisions since [Res. 417 \(Rev.WRC-15\)](#) does not contain data elements which would enable to determine whether the notification is related to a Universal Access Transceiver system or to another system in the AM(R)S.

The Footnotes View

The cross references area – References to/from relevant Rules of Procedure (RoPs) – Examples

List of footnotes in the Table of Frequency Allocations

Displayed 1/827 footnotes.     

Find footnote: 5.

Automatically show related Rules of Procedure Show all used references in Article 5 footnotes

| Number | Source | Description | Scope | Entry into force | Applicable until |
|--------|----------|-----------------------|------------|------------------|------------------|
| 5.415 | WRC-2007 | Guidance - Limitation | SPACE ONLY | In force | |

Used References

Click to select only those footnotes where the relevant reference appears

| | |
|--|--|
| PART A1 / ARS / 5.351 | PART A1 / ARS / 5.357 |
| PART A1 / ARS / 5.364 | PART A1 / ARS / 5.366 |
| PART A1 / ARS / 5.376 | PART A1 / ARS / 5.399 |
| PART A1 / ARS / 5.415 | PART A1 / ARS / 5.416 |
| PART A1 / ARS / Band 2 650-2 655 MHz | PART A1 / ARS / 5.418C |
| PART A1 / ARS / 5.441 | PART A1 / ARS / 5.441B |
| PART A1 / ARS / 5.444B | PART A1 / ARS / 5.446A |

Footnote text

[5.415](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

The use of the bands 2 500-2 690 MHz in **Region 2** and 2 500-2 535 MHz and 2 655-2 690 MHz in **Region 3** by the fixed-satellite service is limited to national and regional systems, subject to agreement obtained under No. **9.21**, giving particular attention to the broadcasting-satellite service in **Region 1**. (WRC-07)

RoP 2017 (Rev.7) / PART A1 / ARS / 5.415

1 In this provision, the allocation "is limited to national and regional systems". The Board concluded that a national system is a system having a service area limited to the territory of the notifying administration. As a consequence of this, the regional system to which reference is made shall be considered to be an aggregate of two or more national systems; they shall be limited to the territories (which are not necessarily restricted to bordering countries) of the administrations concerned and they shall be notified by one of these administrations on behalf of all the administrations concerned. When the allocation is made to more than one Region, a regional system may cover territories in those Regions for which the allocation exists. The Board reached this conclusion keeping in mind No. **5.2.1**, relating to the interpretation of the word "regional" without a capital "R".

2 In accordance with this provision, the fixed-satellite service is limited for use by national or regional systems in the band 2 500-2 690 MHz in Region 2 and in the bands 2 500-2 535 MHz and 2 655-2 690 MHz in Region 3. Only those assignments which satisfy the following conditions shall be considered to be in conformity with the Table of Frequency Allocations:

a) The service area for a regional system is within the Region concerned, i.e. in Region 2 only in the band 2 535-2 655 MHz or in Regions 2 and 3 in the other bands between 2 500 and 2 690 MHz and:

i) When an administration submits a coordination request for a service area that covers its national territory and extends beyond it, the responsible administration shall submit at the same time the list of administrations that agreed to form the regional system and the service area shall be formed accordingly. If no agreement is obtained, the service area shall be limited to its national territory;

ii) When an administration submits a coordination request for a service area that does not include its national territory but only territories of other administrations, it shall submit at the same time the list of administrations that agreed to form the regional system and the service area shall be formed accordingly. If no agreement is obtained, the relevant assignments shall be considered not to be in compliance with the Table of Frequency Allocations and the finding shall be unfavourable.

b) In the case of a national system, the service area is limited to the territory under the jurisdiction of the notifying administration.

c) If the satellite network is operated within the framework of an international system to which other countries pertain, the notice must indicate that the use is limited to the Region(s) concerned.

RoP 2017 (Rev.7) / PART A1 / ARS / 5.416

1) See comments under the Rules of Procedure concerning No. **5.415** about the use limited to national and regional systems.

2) In view of the indications in this provision, the Board concluded that the reference to the coordination procedure of No. **9.19** in this provision is a matter for administrations. Consequently, at the stage of examination under No. **11.32**, the Bureau will not make any examination of the notified frequency assignment to a transmitting station of a terrestrial service or to a transmitting earth station in the FSS (Earth-to-space) from the viewpoint of its conformity with No. **9.19**.

When activating the link to the RoP on No. 5.415, the software displays the text of the corresponding footnote.

It can be noted that the displayed RoPs texts comprise both RoP 5.415 and RoP 5.416.

This results from the fact that RoP 5.416 also references No. 5.415.

The Footnotes View

The cross references area – References to/from relevant Rules of Procedure (RoPs) – Examples

When activating the link to the RoP on No. 5.416, the list of displayed footnotes also include footnote No. 5.415. This results from the fact that RoP 5.416 references No. 5.415.

It can be noted that the displayed RoPs texts also comprise on the frequency band 2 630-2 655 MHz, as this also references No. 5.416.

Links to other RR5 footnotes referenced in the RoPs texts can be activated so as to display the corresponding footnote, as shown here for 5.415.

List of footnotes in the Table of Frequency Allocations

Displayed 2/827 footnotes. Search footnotes text

Automatically show related Rules of Procedure Show all used references in Article 5 footnotes

| Number | Source | Description | Scope | Entry into force | Applicable until |
|--------|----------|-----------------------|------------|------------------|------------------|
| 5.415 | WRC-2007 | Guidance - Limitation | SPACE ONLY | In force | |
| 5.416 | WRC-2007 | Guidance - Limitation | SPACE ONLY | In force | |

Used References

Click to select only those footnotes where the relevant reference appears

| | |
|--|--|
| PART A1 / ARS / 5.351 | PART A1 / ARS / 5.357 |
| PART A1 / ARS / 5.364 | PART A1 / ARS / 5.366 |
| PART A1 / ARS / 5.376 | PART A1 / ARS / 5.399 |
| PART A1 / ARS / 5.415 | PART A1 / ARS / 5.416 |
| PART A1 / ARS / 5.416 | PART A1 / ARS / 5.418C |
| PART A1 / ARS / Band 2 630-2 655 MHz | PART A1 / ARS / 5.441B |
| PART A1 / ARS / 5.441 | PART A1 / ARS / 5.441B |
| PART A1 / ARS / 5.444B | PART A1 / ARS / 5.446A |
| PART A1 / ARS / 5.484 | PART A1 / ARS / 5.485 |
| PART A1 / ARS / 5.488 | PART A1 / ARS / 5.492 |
| PART A1 / ARS / 5.496 | PART A1 / ARS / 5.502 |
| PART A1 / ARS / 5.503 | PART A1 / ARS / 5.504B |

Footnote text

[5.416](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

The use of the band 2 520-2 670 MHz by the broadcasting-satellite service is limited to national and regional systems for community reception, subject to agreement obtained under No. 9.21. The provisions of No. 9.19 shall be applied by administrations in this band in their bilateral and multilateral negotiations. (WRC-07)

RoP 2017 (Rev.7) / PART A1 / ARS / 5.416

- See comments under the Rules of Procedure concerning **No. 5.415** about the use limited to national and regional systems.
- In view of the indications in this provision, the Board concluded that the reference to the coordination procedure of No. 9.19 in this provision is a matter for administrations. Consequently, at the stage of examination under No. 11.32, the Bureau will not make any examination of the notified frequency assignment to a transmitting station of a terrestrial service or to a transmitting earth station in the FSS (Earth-to-space) from the viewpoint of its conformity with No. 9.19.

RoP 2017 (Rev.7) / PART A1 / ARS / Band 2 630-2 655 MHz

- Provisions **(Nos. 5.416, 5.418, 5.418A, 5.418B and 5.418C)** provide information on the different constraints and procedures applying to the broadcasting-satellite service (BSS) and fixed-satellite service (FSS) in the frequency range 2 630-2 655 MHz.
- The Board undertook an in-depth examination of the different provisions and the applicability of the different coordination procedures (space network-to-space network (Nos. 9.7, 9.12, 9.12A and 9.13)) that apply to satellite systems in the band 2 605-2 655 MHz and noted the possible difficulty in assessing the service (BSS (sound), BSS (television), FSS) and the nature of the satellite network (GSO or non-GSO) to which Nos. 5.418A, 5.418B and 5.418C, should apply, taking due account of the dates of reception of the complete Appendix 4 coordination or notification information, as appropriate. Indeed, in the band 2 630-2 655 MHz, No. 5.418A refers to the application of the provisions of No. 9.12A for non-GSO systems in the BSS (sound) in certain countries listed in No. 5.418, in respect of GSO systems; without further details on the involved services; No. 5.418B refers to the application of the provisions of No. 9.12 for non-GSO systems in the BSS under No. 5.418, in respect of other non-GSO systems; and No. 5.418C refers to the application of No. 9.13 by GSO networks in respect of non-GSO systems in the BSS (sound), allocated under No. 5.418.
- Taking the above into account and in the light of WRC-03 discussions and decisions, in particular the addition of an explicit reference to No. 5.418 in Nos. 5.418B, 5.418C, the Board undertook further studies and reached the following conclusions on the different cases of coordination as follows: non-GSO BSS (sound) (Nos. 5.418) systems vis-à-vis any GSO systems under No. 9.12A, and vis-à-vis any non-GSO systems under No. 9.12, and vice versa, i.e. any GSO systems vis-à-vis non-GSO BSS (sound) (Nos. 5.418) systems under No. 9.13, and any non-GSO systems vis-à-vis non-GSO BSS (sound) (Nos. 5.418) systems under No. 9.12A, as described in the Table below. This Table applies to coordination requirements between GSO and non-GSO satellite systems for which the API has been received following 1 January 1999 and complete coordination/notification information was received after 2 June 2000 in the band 2 630-2 655 MHz and after 4 July 2003 in the band 2 630-2 655 MHz

| Coordination request (CR): | Non-GSO BSS (sound) | GSO BSS, (5.416, 5.418) or FSS, (5.418) | Non-GSO BSS, (5.416) or FSS, (Region 2) |
|---|---------------------|---|---|
| Column vis-à-vis Row: (2 630-2 655 MHz) | (5.416) | (5.416, 5.418) or FSS, (Region 2) | (5.416) or FSS, (Region 2) |
| Non-GSO BSS (sound) | 9.12 | 9.13 | 9.12 |

5.415

RoP 2017 (Rev.7) / PART A1 / ARS / 5.415

1 In this provision, the allocation "is limited to national and regional systems". The Board concluded that a national system is a system having a service area limited to the territory of the notifying administration. As a consequence of this, the regional system to which reference is made shall be considered to be an aggregate of two or more national systems; they shall be limited to the territories (which are not necessarily restricted to bordering countries) of the administrations concerned and they shall be notified by one of these administrations on behalf of all the administrations concerned. When the allocation is made to more than one Region, a regional system may cover territories in those Regions for which the allocation exists. The Board reached this

The Footnotes View

The cross references area – References to/from relevant Rules of Procedure (RoPs)

The automatic visibility of the relevant Rules of Procedure can be controlled using the corresponding box shown here.

When activated (this is the default behavior), the software automatically displays the relevant RoPs together with RR5 footnotes, when a footnote is displayed in each context.

When deactivated, the software displays an additional link tool, allowing to display/hide the relevant RoPs together with RR5 footnotes, when a footnote is displayed in each context.

The screenshot displays the 'List of footnotes in the Table of Frequency Allocations' interface. At the top, it shows 'Displayed 827/827 footnotes.' and a search bar. A checkbox labeled 'Automatically show related Rules of Procedure' is checked. Below the table, there are tabs for 'Articles', 'Appendices', 'Resolutions', 'Recommendations', 'Regional Agreements', and 'Rules of Procedure'. The 'Rules of Procedure' tab is active, showing a list of related RoPs for footnote 5.132A, including 'RoP 2017 (Rev.7) / PART A1 / ARS / 5.132A' and 'PART A1 / ARS / 5.132A'.

| Number | Source | Description | Scope | Et |
|--------|----------|-----------------------|------------------|------|
| 5.53 | WRC-2012 | Guidance | | In f |
| 5.54 | WRC-2012 | Guidance | | In f |
| 5.54A | WRC-2012 | Limitation | TERRESTRIAL ONLY | In f |
| 5.54B | WRC-2015 | Additional Allocation | TERRESTRIAL ONLY | In f |

The 'Footnote text' window for 5.132A shows the text: 'Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed or mobile services. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with [Res. 612 \(Rev.WRC-12\)](#). (WRC-12)'. A link 'View Related Rules of Procedure' is highlighted in red.

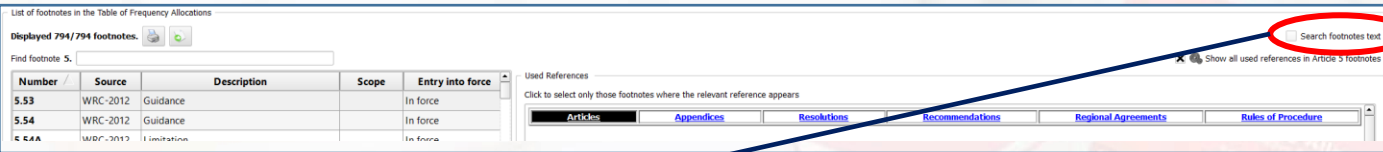
The '5.145A' window shows the text: 'Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed service. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with [Res. 612 \(Rev.WRC-12\)](#)'. A link 'View Related Rules of Procedure' is highlighted in red.

The '5.132A' window shows the text: 'Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed or mobile services. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with [Res. 612 \(Rev.WRC-12\)](#). (WRC-12)'. A link 'View Related Rules of Procedure' is highlighted in red.

The Footnotes View

The footnotes "text search utility"

When working with the Footnotes View, the software provides a utility for "basic exact text matching search" in the text of the Article 5 footnotes. This is accessible by clicking the box shown here.



3 Click the "Find..." button to perform your text search and obtain the list of all footnotes containing the matching text.

1 Type in the text you would like to find in this box. (The software "remembers" your last 10 searches)

2 Specify any additional "criteria" for your text search. Please refer to **Conditional Allocations and Footnotes** for more information about the use of conditional footnotes.

4 Once the "matching footnotes" are displayed, you may "navigate" them in the standard "Footnotes View" way described previously and check their text, "allocation boxes", cross references, history, etc.

Click the "Find..." button to perform your text search and obtain the list of all footnotes containing the matching text.

List of footnotes in the Table of Frequency Allocations

Displayed 25/794 footnotes.

Find footnote 5.

| Number / | Source | Description | Scope | Entry into force | Applicable until |
|----------|----------|-------------------------------------|-------|------------------|------------------|
| 5.286AA | WRC-2015 | Explanatory | | In force | |
| 5.295 | WRC-2015 | Explanatory - Guidance - Limitation | | In force | |
| 5.296A | WRC-2015 | Explanatory - Guidance - Limitation | | In force | |
| 5.308A | WRC-2015 | Explanatory - Guidance - Limitation | | In force | |
| 5.313A | WRC-2015 | Explanatory - Guidance - Limitation | | In force | |
| 5.317A | WRC-2015 | Explanatory - Guidance - Limitation | | In force | |
| 5.341A | WRC-2015 | Explanatory - Guidance - Limitation | | In force | |
| 5.341B | WRC-2015 | Explanatory - Guidance - Limitation | | In force | |
| 5.341C | WRC-2015 | Explanatory - Guidance - Limitation | | In force | |
| 5.346 | WRC-2015 | Explanatory | | In force | |
| 5.346A | WRC-2015 | Explanatory | | In force | |
| 5.384A | WRC-2007 | Explanatory - Guidance | | In force | |
| 5.388 | WRC-2015 | Explanatory - Guidance | | In force | |
| 5.388A | WRC-2012 | Explanatory - Guidance | | In force | |

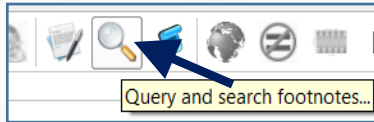
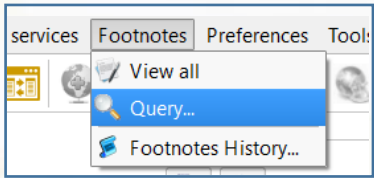
List of footnotes whose text matches "International Mobile Telecommunications"

Footnote text

5.286AA [View History](#) [Print](#) [View Main Table Related Allocations](#)

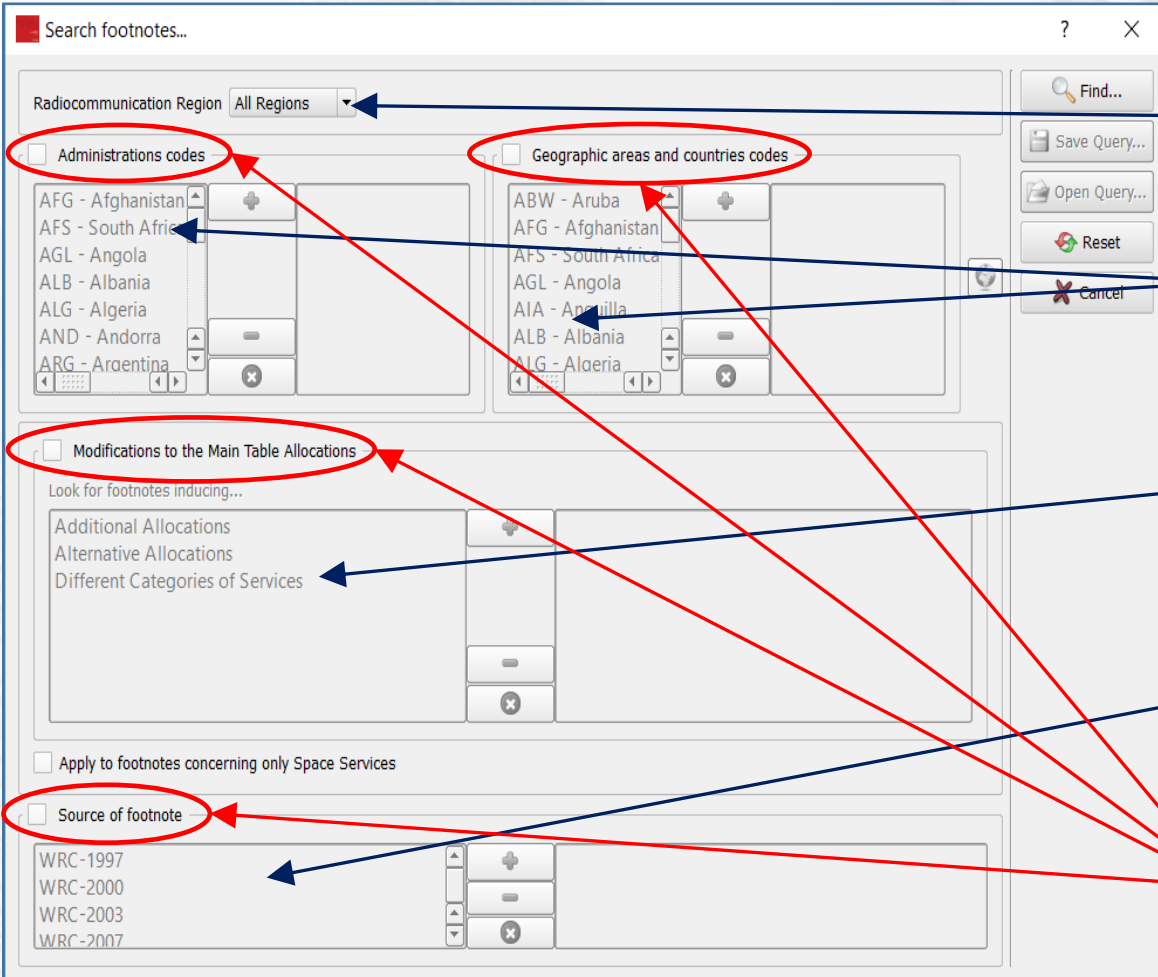
The frequency band 450-470 MHz is identified for use by administrations wishing to implement **International Mobile Telecommunications (IMT)**. See **Res. 224 (Rev.WRC-15)**. This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-15)

Querying Footnotes



Advanced queries on the Article 5 footnotes meta-data can be performed by invoking the “Search footnotes” dialog. This is accessible via the menu item “**Footnotes – Query...**” or, alternatively, by clicking on the corresponding icon on the main toolbar as shown here.

The Search footnotes dialog allows for the combination of various criteria, namely:



- Specify one (or more) region(s).
- Specify one (or more) Administrations, or one (or more) geographic areas or countries (depending on the selected Region. The implemented relationships between Regions, Administrations and country codes is further described on the next page).
- Specify one (or more) type of modifiers of the Main Table (Additional allocations, Alternative allocations, Different Categories of Services provisions).
- Specify one (or more) footnote source, being understood that the footnote source is the considered to be either the WRC which introduced or suppressed the footnote, or the last “known to the software” WRC which modified the footnote.

Combining these various criteria can be controlled by checking/unchecking the corresponding boxes.

The following examples illustrate the usage of these criteria in details.

Querying Footnotes

Implemented Regions-Administrations-Geographic areas relationships

When a given Region (or Regions) is (are) specified, the software automatically adjusts and fills in the lists of geographic areas and Administrations accordingly (as shown below), so that **only those geographic areas and countries “belonging” to the specified Region(s) are available for selection and only those Administrations responsible for “territories” in the specified Region(s) are available for selection.**

Three screenshots of the software interface showing the 'Search footnotes...' dialog for Region 1, Region 2, and Region 3. Each screenshot shows a dropdown menu for 'Radiocommunication Region' and two lists: 'Administrations codes' and 'Geographic areas and countries codes'. The lists are filtered based on the selected region.

Furthermore, it should be noted that the “direct” selections of Administrations and Geographic areas are **mutually exclusive**. Checking one of the corresponding boxes disables the other box, as shown below.

The idea here being that upon specifying a given Region and an appropriate Administration code, the software automatically adjusts and fills in the list of Geographic areas with those in the specified Region, falling under the responsibility of the specified Administration.

The examples shown here illustrate how this concept applies for instance to the territories under the responsibility of the French Administration in Region 2, or under the responsibility of the US Administration in Region 3.

Screenshot of the software interface showing 'Administrations codes' selected. The 'Administrations codes' list is active, and 'Geographic areas and countries codes' is disabled.

Screenshot of the software interface showing 'Geographic areas and countries codes' selected. The 'Geographic areas and countries codes' list is active, and 'Administrations codes' is disabled.

Screenshot of the software interface showing 'Region 3' selected. The 'Administrations codes' list is active, and 'USA - United States' is selected. The 'Geographic areas and countries codes' list is disabled.

Screenshot of the software interface showing 'Region 2' selected. The 'Administrations codes' list is active, and 'F - France' is selected. The 'Geographic areas and countries codes' list is disabled.

Querying Footnotes

Example 1

Find all footnotes specifying **Additional Allocations** in **Region 1**.

Search footnotes...

Radiocommunication Region: **Region 1**

Administrations codes

Geographic areas and countries codes

AFS - South Africa
AGL - Angola
ALB - Albania
ALG - Algeria
AND - Andorra
ARM - Armenia
ARS - Saudi Arabia
AUT - Austria
AZE - Azerbaijan

AFS - South Africa
AGL - Angola
ALB - Albania
ALG - Algeria
AND - Andorra
ARM - Armenia
ARS - Saudi Arabia
ASC - Ascension
AUT - Austria

Modifications to the Main Table Allocations

Look for footnotes inducing...

Additional Allocations
Alternative Allocations
Different Categories of Services

Add

Apply to footnotes concerning only Space Services

Source of footnote

WRC-1997
WRC-2000
WRC-2003
WRC-2007

List of footnotes in the Table of Frequency Allocations

Displayed 110/794 footnotes.

Find footnote 5.

Search footnotes text

Show all used references in Article 5 footnotes

| Number | Source | Description | Scope | Entry into force | Applicable until |
|--------|----------|------------------------------------|-------|------------------|------------------|
| 5.54B | WRC-2015 | Additional Allocation | | In force | |
| 5.55 | WRC-2015 | Additional Allocation | | In force | |
| 5.58 | WRC-2000 | Additional Allocation | | In force | |
| 5.67 | WRC-2007 | Additional Allocation | | In force | |
| 5.69 | WRC-1997 | Additional Allocation | | In force | |
| 5.73 | WRC-1997 | Additional Allocation - Limitation | | In force | |
| 5.74 | WRC-1997 | Additional Allocation | | In force | |
| 5.87 | WRC-2012 | Additional Allocation | | In force | |
| 5.87A | WRC-1997 | Additional Allocation - Limitation | | In force | |
| 5.93 | WRC-2015 | Additional Allocation | | In force | |
| 5.99 | WRC-2012 | Additional Allocation - Limitation | | In force | |
| 5.107 | WRC-2012 | Additional Allocation - Limitation | | In force | |
| 5.122 | WRC-1997 | Additional Allocation | | In force | |

List of footnotes specifying Additional Allocations in Region 1

Footnote text

[5.67](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

Additional allocation: in **Mongolia, Kyrgyzstan, Turkmenistan**, the band 130-148.5 kHz is also allocated to the radionavigation service on a secondary basis. Within and between these countries this service shall have an equal right to operate. (WRC-07)

Footnote text

[5.74](#) [View History](#) [Print](#) [View Main Table Related Allocations](#)

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.

It is worth noting that this query finds matching footnotes specifying Additional Allocations which apply to countries “belonging” to the specified Region(s) as well as “Global” Additional Allocations applying to the whole specified Region(s) (Region 1 in this case), as shown here.

Once the “matching footnotes” are displayed, you may “navigate” them in the standard “Footnotes View” way described previously and check their text, “allocation boxes”, cross references, history, etc.

Querying Footnotes

Example 2

Find all footnotes:

specifying Additional Allocations,

which apply to a any of the specified Geographic areas (countries),

Search footnotes...

Radiocommunication Region: All Regions

Administrations codes

AFG - Afghanistan
AFS - South Africa
AGL - Angola
ALB - Albania
ALG - Algeria
AND - Andorra
ARG - Argentina

Geographic areas and countries codes

ABW - Aruba
AFG - Afghanistan
AFS - South Africa
AGL - Angola
AIA - Anguilla
ALB - Albania
ALG - Algeria

F - France
G - United Kingdom

Modifications to the Main Table Allocations

Look for footnotes inducing...

Alternative Allocations
Different Categories of Services

Additional Allocations

Apply to footnotes concerning only Space Services

Source of footnote

WRC-1997
WRC-2000
WRC-2003
WRC-2007

List of footnotes in the Table of Frequency Allocations

Displayed 14/794 footnotes.

Find footnote 5.

Search footnotes text

Show all used references in Article 5 footnotes

| Number | Source | Description | Scope | Entry into force | Applicable until |
|---------------|----------|--|------------|------------------|------------------|
| 5.162A | WRC-2000 | Additional Allocation - Limitation | | In force | |
| 5.164 | WRC-2015 | Additional Allocation - Explanatory | | In force | |
| 5.210 | WRC-2007 | Additional Allocation | SPACE ONLY | In force | |
| 5.211 | WRC-2015 | Additional Allocation | | In force | |
| 5.225A | WRC-2012 | Additional Allocation - Limitation | | In force | |
| 5.235 | WRC-1997 | Additional Allocation | | In force | |
| 5.281 | WRC-1997 | Additional Allocation | SPACE ONLY | In force | |
| 5.296 | WRC-2015 | Additional Allocation | | In force | |
| 5.331 | WRC-2012 | Additional Allocation - Limitation | | In force | |
| 5.359 | WRC-2015 | Additional Allocation - Guidance | | In force | |
| 5.451 | WRC-1997 | Additional Allocation - Limitation | | In force | |
| 5.471 | WRC-2015 | Additional Allocation - Limitation | | In force | |
| 5.495 | WRC-2015 | Additional Allocation - Limitation | | In force | |

Footnote text

5.162A [View History](#) [Print](#) [View Main Table Related Allocations](#)

Additional allocation: in [Germany](#), [Austria](#), [Belgium](#), [Bosnia and Herzegovina](#), [China](#), [Vatican](#), [Denmark](#), [Spain](#), [Estonia](#), [Russian Federation](#), [Finland](#), [France](#), [Ireland](#), [Iceland](#), [Italy](#), [The Former Yugoslav Rep. of Macedonia](#), [Latvia](#), [Liechtenstein](#), [Lithuania](#), [Luxembourg](#), [Monaco](#), [Montenegro](#), [Norway](#), [Netherlands](#), [Poland](#), [Portugal](#), [Czech Rep.](#), [United Kingdom](#), [Serbia](#), [Slovenia](#), [Sweden](#), [Switzerland](#), the band 46-68 MHz is also allocated to the radiolocation service on a secondary basis. This use is limited to the operation of wind profiler radars in accordance with **Res. 217(WRC-97)**. (WRC-12)

Once the “matching footnotes” are displayed, you may “navigate” them in the standard “Footnotes View” way described previously and check their text, “allocation boxes”, cross references, history, etc.

Querying Footnotes

Example 3

Find all footnotes:

specifying either Additional Allocations or Different Categories of Services,

which apply to a given Administration,

and which were introduced or last modified by WRC-12 or WRC-15.

Search footnotes

Radiocommunication Region: All Regions

Administrations codes

Geographic areas and countries codes

RUS - Russian Federation

Modifications to the Main Table Allocations

Look for footnotes including...

Alternative Allocations

Additional Allocations
Different Categories of Services

Apply to footnotes concerning only Space Services

Source of footnote

WRC-1997
WRC-2000
WRC-2003
WRC-2007

WRC-2012
WRC-2015

Find... Save Query... Open Query... Reset Cancel

List of footnotes in the Table of Frequency Allocations

Displayed 26/794 footnotes.

Find footnote 5.

| Number | Source | Description | Scope | Entry into force | Applicable until |
|--------|----------|--|------------|------------------|------------------|
| 5.54B | WRC-2015 | Additional Allocation | | In force | |
| 5.55 | WRC-2015 | Additional Allocation | | In force | |
| 5.77 | WRC-2012 | Different Category of Service | | In force | |
| 5.93 | WRC-2015 | Additional Allocation | | In force | |
| 5.133 | WRC-2012 | Different Category of Service - Limitation | | In force | |
| 5.163 | WRC-2012 | Additional Allocation | | In force | |
| 5.179 | WRC-2012 | Additional Allocation - Limitation | | In force | |
| 5.201 | WRC-2015 | Additional Allocation | | In force | |
| 5.202 | WRC-2015 | Additional Allocation | | In force | |
| 5.225A | WRC-2012 | Additional Allocation - Limitation | | In force | |
| 5.256A | WRC-2015 | Additional Allocation | SPACE ONLY | In force | |
| 5.262 | WRC-2012 | Additional Allocation | | In force | |
| 5.277 | WRC-2012 | Additional Allocation | | In force | |
| 5.290 | WRC-2012 | Different Category of Service | SPACE ONLY | In force | |
| 5.312 | WRC-2015 | Additional Allocation | | In force | |
| 5.323 | WRC-2012 | Additional Allocation - Limitation | | In force | |
| 5.331 | WRC-2012 | Additional Allocation - Limitation | | In force | |
| 5.342 | WRC-2015 | Additional Allocation - Limitation | | In force | |
| 5.359 | WRC-2015 | Additional Allocation - Guidance | | In force | |
| 5.382 | WRC-2015 | Different Category of Service - Limitation | | In force | |
| 5.398A | WRC-2012 | Different Category of Service - Limitation | | In force | |
| 5.454 | WRC-2012 | Different Category of Service | SPACE ONLY | In force | |
| 5.459 | WRC-2015 | Additional Allocation | SPACE ONLY | In force | |
| 5.469 | WRC-2012 | Additional Allocation | | In force | |
| 5.546 | WRC-2012 | Different Category of Service - Limitation | | In force | |
| 5.550 | WRC-2012 | Different Category of Service | SPACE ONLY | In force | |

Footnote text

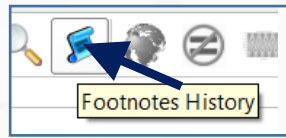
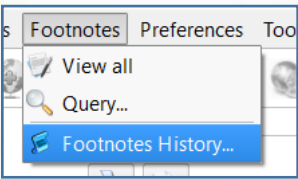
5.54B [View History](#) [Print](#) [View Main Table Related Allocations](#)

Additional allocation: in [Algeria](#), [Saudi Arabia](#), [Bahrain](#), [Egypt](#), [United Arab Emirates](#), [Russian Federation](#), [Iran \(Islamic Republic of\)](#), [Iraq](#), [Kuwait](#), [Lebanon](#), [Morocco](#), [Qatar](#), [Syrian Arab Republic](#), [Sudan](#), [Tunisia](#), the frequency band 8.3-9 kHz is also allocated to the radionavigation, fixed and mobile services on a primary basis. (WRC-15)

Once the “matching footnotes” are displayed, you may “navigate” them in the standard “Footnotes View” way described previously and check their text, “allocation boxes”, cross references, history, etc.

The Footnotes History View

The **Footnotes History** utility can be invoked by using the menu item “**Footnotes – Footnotes History...**” or, alternatively, by clicking on the corresponding icon on the main toolbar as shown here. The Footnotes History View is a utility which enables “tracing” and examining the “lifetime” and evolution of the provisions specified by individual footnotes, **back to WRC-2000 (RR Edition of 2001) onward**.



The screenshot shows the 'Article 5 Footnotes History' window. The left pane lists footnote numbers from 5.127 to 5.155A. The right pane shows the text of footnote 5.142 for four different WRC editions: WRC-15, WRC-12, WRC-07, and WRC-03. A red circle highlights the text 'Last updated by: WRC-2012' at the top right. Red arrows point from this text to the right-hand text. Blue arrows point from the WRC-07 and WRC-2000 entries in the list to the right-hand text. A red vertical line on the right side of the window indicates the current WRC edition for each footnote.

When a footnote number is selected from the list of footnotes, the software

- indicates the last WRC which updated the relevant footnote,
- and (depending on its availability) displays its text as it has evolved through the successive WRCs and in the successive resulting RR Editions,
- displays (when appropriate) the corresponding indicators of the “next WRCs” which modified the previous footnote text. The absence of such an indicator means that the “Next WRC” left the relevant footnote unchanged.

Thus, the example shown here clearly indicates that No. 5.142 for instance, as it was standing in the RR 2001 Edition, was subsequently modified by WRC-03. It then remained unchanged by WRC-07 and was last modified by WRC-12.

The Footnotes History View

You may directly jump to the history of a given footnote by typing its number in this box.

Article 5 Footnotes History

RR 2016 (Active Edition) Footnotes All (794)

Find footnote RR5. Last updated by: WRC-2015 Close Print

5.270
5.271
5.272
5.273
5.274
5.275
5.276
5.277
5.278
5.279
5.279A
5.280
5.281
5.282
5.283
5.284
5.285
5.286
5.286A
5.286AA
5.286B
5.286C
5.286D
5.286E
5.287
5.288
5.289
5.290
5.291
5.291A
5.292
5.293
5.294
5.295
5.296
5.296A
5.297
5.298
5.299
5.300
5.301
5.302
5.303
5.304
5.305
5.306

Filter for geographic area

RR 2016 Edition (WRC-15)

5.297

Additional allocation: in **Canada, Costa Rica, Cuba, El Salvador, United States, Guatemala, Guyana, Jamaica**, the frequency band 512-608 MHz is also allocated to the fixed and mobile services on a primary basis, subject to agreement obtained under No. **9.21**. In **Bahamas, Barbados, Mexico**, the frequency band 512-608 MHz is also allocated to the mobile service on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-15)

RR 2012 Edition (WRC-12)

5.297

Additional allocation: in **Canada, Costa Rica, Cuba, El Salvador, United States, Guatemala, Guyana, Honduras, Jamaica, Mexico**, the band 512-608 MHz is also allocated to the fixed and mobile services on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-07)

RR 2008 Edition (WRC-07)

5.297

Additional allocation: in **Canada, Costa Rica, Cuba, El Salvador, United States, Guatemala, Guyana, Honduras, Jamaica, Mexico**, the band 512-608 MHz is also allocated to the fixed and mobile services on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-07)

RR 2004 Edition (WRC-03)

5.297

Additional allocation: in **Costa Rica, Cuba, El Salvador, United States, Guatemala, Guyana, Honduras, Jamaica, Mexico**, the band 512-608 MHz is also allocated to the fixed and mobile services on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-2000)

RR 2001 Edition (WRC-2000)

5.297

Additional allocation: in **Costa Rica, Cuba, El Salvador, United States, Guatemala, Guyana, Honduras, Jamaica, Mexico**, the band 512-608 MHz is also allocated to the fixed and mobile services on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-2000)

When applicable, footnotes involving **list of countries** (typically Additional Allocations, Alternative Allocations and Different Categories of Services provisions) are **further highlighted** so as to mark the list of countries “joining or leaving” the provisions of the relevant footnote through the successive WRCs:

Canada **Bahamas, Barbados**

- Countries (or geographic areas) highlighted in **blue** are those who “joined” (added their names to) the relevant footnote **in the relevant WRC**.

Honduras

- Countries (or geographic areas) highlighted in **red** are those who “left” (removed their names from) the relevant footnote **at the next WRC**.

Thus, the example shown here clearly indicates that No. 5.297 for instance, as it was standing in the RR 2001 Edition, was subsequently modified by WRC-07 where **Canada** “joined” the footnote at that WRC. It remained unchanged by WRC-12 and was last modified by WRC-15, where (in addition to other changes in the provisions) **Honduras** “left” and both **Bahamas** and **Barbados** “joined”.

The Footnotes History View

When working with the Footnotes History View, an additional utility consists in “filtering” the displayed footnotes list for a given geographic area (country). This may be achieved by checking the corresponding box, as shown here.

Consequently, upon selecting a given country, only the list of appropriate footnotes where the name of that country appears is displayed, together with their history. The displayed footnotes list includes not only the relevant footnotes from the current RR Edition, but also those from previous RR Editions where the specified country “used” to appear.

This is very useful to examine when a particular country has joined/left a particular footnote.

As soon as the “Filter for geographic area” box is unchecked, the software displays back again the complete list of footnotes.

The screenshot shows the 'Article 5 Footnotes History' window. At the top, it indicates 'RR 2016 (Active Edition) Footnotes Brazil (23)'. A search bar contains 'RR5.'. On the left, a list of footnotes is shown, with '5.446C' selected. On the right, the details for '5.446C' are displayed for three different editions: WRC-2007, WRC-15, WRC-12, and WRC-07. A callout box with a red border and a blue arrow points to the 'Filter for geographic area' checkbox, which is checked. Another callout box with a blue border and a blue arrow points to the 'B - Brazil' option in the dropdown menu. The main window also includes 'Close' and 'Print' buttons in the top right corner.

The Footnotes History View

In addition to the last updating WRC, the software also displays the “first” source of the footnote (the WRC which first introduced the footnote), when it can determine it.

Thus, in the Footnotes History View, the list of footnotes is displayed using the following color schema:

Dark Yellow is used for the footnotes first introduced by WRC-2003.

Blue is used for the footnotes first introduced by WRC-2007.

Dark Green is used for the footnotes first introduced by WRC-2012.

Brown is used for the footnotes first introduced by WRC-2015.

Dark Red is used for the footnotes first introduced by WRC-2019.

Dark Gray is used for the footnotes suppressed by any WRC. In this case, the software indicates the WRC which suppressed the footnote, if it is able to determine it. The history displays the “last know text” of the footnote before its suppression, if available.

Black is used in all other cases where the software is not able to determine the suitable information. (This is usually the case for footnotes first introduced or suppressed by or prior to WRC-97 or WRC-2000).

| | | |
|---------|-------------------------------|---------------------------|
| 5.208B | First introduced by: WRC-2007 | Last updated by: WRC-2019 |
| 5.228AA | First introduced by: WRC-2015 | Last updated by: WRC-2015 |

| | | |
|--------|-------------------------------|---------------------------|
| 5.197A | First introduced by: WRC-2003 | Last updated by: WRC-2007 |
|--------|-------------------------------|---------------------------|

| | | |
|--------|-------------------------------|---------------------------|
| 5.208B | First introduced by: WRC-2007 | Last updated by: WRC-2015 |
|--------|-------------------------------|---------------------------|


| | | |
|--------|-------------------------------|---------------------------|
| 5.228A | First introduced by: WRC-2012 | Last updated by: WRC-2012 |
|--------|-------------------------------|---------------------------|

| | | |
|--------|-------------------------------|---------------------------|
| 5.527A | First introduced by: WRC-2015 | Last updated by: WRC-2015 |
|--------|-------------------------------|---------------------------|

| | | |
|---------|-------------------------------|---------------------------|
| 5.532AA | First introduced by: WRC-2019 | Last updated by: WRC-2019 |
|---------|-------------------------------|---------------------------|

| | | |
|--------|-------------------------------|-------------------------|
| 5.530D | First introduced by: WRC-2012 | Suppressed by: WRC-2019 |
|--------|-------------------------------|-------------------------|

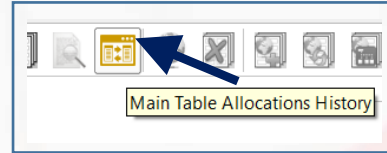
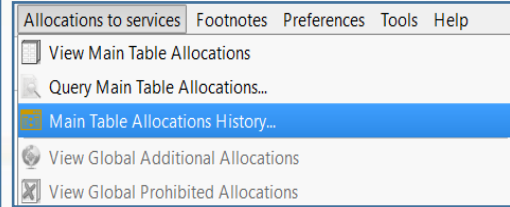
| |
|---|
| <input checked="" type="checkbox"/> RR 2020 Edition (WRC-19) 5.530D (SUP - WRC-19) |
|---|

| |
|--|
| <input checked="" type="checkbox"/> RR 2016 Edition (WRC-15)  5.530D See Res. 555 (WRC-12). (WRC-12) |
|--|

| |
|--|
| <input checked="" type="checkbox"/> RR 2012 Edition (WRC-12) 5.530D See Res. 555 (WRC-12). (WRC-12) |
|--|

| |
|---------|
| 5.527 |
| 5.527A |
| 5.528 |
| 5.529 |
| 5.530 |
| 5.530A |
| 5.530B |
| 5.530C |
| 5.530D |
| 5.530E |
| 5.531 |
| 5.532 |
| 5.532A |
| 5.532AA |
| 5.532AB |
| 5.532B |
| 5.533 |
| 5.534 |
| 5.534A |
| 5.535 |
| 5.535A |
| 5.536 |
| 5.536A |
| 5.536B |
| 5.536C |
| 5.537 |
| 5.537A |
| 5.538 |
| 5.539 |
| 5.540 |
| 5.541 |
| 5.541A |
| 5.542 |
| 5.543 |
| 5.543A |
| 5.543B |
| 5.544 |
| 5.545 |
| 5.546 |
| 5.547 |
| 5.547A |
| 5.547B |
| 5.547C |
| 5.547D |
| 5.547E |
| 5.548 |
| 5.549 |
| 5.549A |
| 5.550 |
| 5.550A |
| 5.550B |

The Main Table History View



The **Main Table History View** can be invoked by using the menu item “**Allocations to services – Main Table Allocations History...**” or, alternatively, by clicking on the corresponding icon on the main toolbar as shown here. This utility enables “tracing”, comparing and examining the “lifetime” and evolution of the Main Table Allocations, **back to WRC-2000 (RR Edition of 2001) onward**.

Article 5 Main Table Allocations History

History mode | Custom mode

RR 2012 Edition (WRC-12) | Comparing with | RR 2016 Edition (Active Edition) (WRC-15)

Use frequency bands main partition from RR 2016

Frequency Band 460 - 890 MHz

View Footnotes Comparison

| RR 2012 Edition (WRC-12) | | | RR 2016 Edition (Active Edition) (WRC-15) | | |
|---|--|--------------------------------------|---|--|--------------------------------------|
| Region 1 | Region 2 | Region 3 | Region 1 | Region 2 | Region 3 |
| 460 - 470 MHz FIXED MOBILE 5.286AA Meteorological-satellite (space-to-Earth) | | | 460 - 470 MHz FIXED MOBILE 5.286AA Meteorological-satellite (space-to-Earth) | | |
| 5.287 5.288 5.289 5.290 | | | 5.287 5.288 5.289 5.290 | | |
| 470 - 790 MHz BROADCASTING | 470 - 512 MHz BROADCASTING | 470 - 585 MHz BROADCASTING | 470 - 694 MHz BROADCASTING | 470 - 512 MHz BROADCASTING | 470 - 585 MHz BROADCASTING |
| Fixed 5.149 5.291A 5.294 5.296 5.300 5.304 5.306 5.311A 5.312 5.312A | Fixed 5.292 5.293 | Fixed 5.291 5.298 | Fixed 5.149 5.291A 5.294 5.296 5.300 5.304 5.306 5.311A 5.312 | Fixed 5.292 5.293 5.295 | Fixed 5.291 5.298 |
| MOBILE | MOBILE | MOBILE | MOBILE | MOBILE 5.296A | MOBILE |
| 512 - 608 MHz BROADCASTING | 512 - 608 MHz BROADCASTING | 585 - 610 MHz BROADCASTING | 512 - 608 MHz BROADCASTING | 512 - 608 MHz BROADCASTING | 585 - 610 MHz BROADCASTING |
| 5.292 | 5.292 | FIXED MOBILE | 5.295 5.297 | FIXED MOBILE 5.296A | FIXED RADIO NAVIGATION |
| 608 - 614 MHz RADIO ASTRONOMY | 608 - 614 MHz RADIO ASTRONOMY | 610 - 890 MHz BROADCASTING | 608 - 614 MHz RADIO ASTRONOMY | 608 - 614 MHz RADIO ASTRONOMY | 610 - 890 MHz BROADCASTING |
| Mobile-satellite except aeronautical mobile-satellite (Earth-to-space) | Mobile-satellite except aeronautical mobile-satellite (Earth-to-space) | 5.149 5.305 5.306 5.307 | Mobile-satellite except aeronautical mobile-satellite (Earth-to-space) | Mobile-satellite except aeronautical mobile-satellite (Earth-to-space) | 5.149 5.305 5.306 5.307 |
| 614 - 698 MHz BROADCASTING | 614 - 698 MHz BROADCASTING | 5.149 5.305 5.306 5.307 5.311A 5.320 | 694 - 790 MHz BROADCASTING | 614 - 698 MHz BROADCASTING | 5.149 5.305 5.306 5.307 5.311A 5.320 |
| Fixed MOBILE | Fixed MOBILE 5.313A 5.317A | | MOBILE except aeronautical mobile 5.312A 5.317A | Fixed MOBILE 5.296A 5.313A 5.317A | |
| 5.293 5.309 5.311A | 5.293 5.309 5.311A | | 5.300 5.311A 5.312 | MOBILE 5.296A 5.313A 5.317A | |
| 790 - 862 MHz BROADCASTING | 698 - 806 MHz BROADCASTING | | 5.300 5.311A 5.312 | MOBILE 5.296A 5.313A 5.317A | |
| FIXED MOBILE except aeronautical mobile 5.316B 5.317A | Fixed MOBILE 5.312B 5.317A | | 5.293 5.308 5.308A 5.309 5.311A | MOBILE 5.296A 5.313A 5.317A | |
| 5.312 5.314 5.315 5.316 5.316A 5.319 | 5.293 5.309 5.311A | | 790 - 862 MHz BROADCASTING | MOBILE 5.317A | |
| 862 - 890 MHz BROADCASTING 5.322 | 806 - 890 MHz BROADCASTING | | FIXED MOBILE except aeronautical mobile 5.316B 5.317A | Fixed MOBILE 5.317A | |
| FIXED MOBILE except aeronautical mobile 5.317A | FIXED MOBILE 5.317A | | 5.312 5.319 | 5.293 5.309 5.311A | |
| 5.319 5.323 | 5.317 5.318 | | 862 - 890 MHz BROADCASTING 5.322 | 5.293 5.309 5.311A | |
| | | | FIXED MOBILE except aeronautical mobile 5.317A | 806 - 890 MHz BROADCASTING | |
| | | | 5.319 5.323 | FIXED MOBILE 5.317A | |
| | | | | MOBILE 5.317A | |
| | | | | 5.317 5.318 | |

When first invoked, the Main Table History View is presented by default in its so called “History Mode”: it displays a side-by-side comparison of the Main Table allocations between the active RR Edition (RR 2020) and the previous RR Edition (RR 2016), aligned to frequency bands partition.

When applicable, the comparison is done on a “box-by-box” basis and the software tentatively marks and highlights the various differences, including box frequency bands, services and associated footnotes.

Navigation tools are available on an “RR Edition – Frequency band” combination basis, and various comparison and customization tools are provided, including footnotes.

The navigation and comparison of the Main Table are straightforward and follow the consecutive RR Editions (consecutive WRCs) schema as shown here:

2001↔2004↔2008↔2012↔2016 ↔2020.

The Main Table History View

History Mode: Navigating through consecutive RR Editions

History mode Custom mode

Begin: RR 2001 Edition → RR 2001 Edition (WRC-2000) Comparing with RR 2004 Edition (WRC-03) → End: RR 2016 Edition (Active Edition)

RR 2004 Edition (WRC-03) Comparing with RR 2008 Edition (WRC-07)

RR 2008 Edition (WRC-07) Comparing with RR 2012 Edition (WRC-12)

RR 2012 Edition (WRC-12) Comparing with RR 2016 Edition (WRC-15)

RR 2016 Edition (WRC-15) Comparing with RR 2020 Edition (Active Edition) (WRC-19)

Frequency Band: Below 110 kHz

| Region | Allocation |
|----------|-----------------------------|
| Region 1 | Below 9 kHz (Not allocated) |
| Region 2 | 5.53 5.54 |
| Region 3 | 9 - 14 kHz RADIONAVIGATION |

| Region | Allocation |
|----------|---|
| Region 1 | Below 8.3 kHz (Not allocated) |
| Region 2 | 5.53 5.54 |
| Region 3 | 8.3 - 9 kHz METEOROLOGICAL AIDS 5.54A 5.54B |

| Region | Allocation |
|----------|---------------------------------------|
| Region 1 | 47 - 50 MHz FIXED MOBILE |
| Region 2 | 47 - 50 MHz BROADCASTING FIXED MOBILE |
| Region 3 | 47 - 50 MHz BROADCASTING FIXED MOBILE |

| Region | Allocation |
|----------|--------------------------|
| Region 1 | 47 - 50 MHz BROADCASTING |
| Region 2 | 47 - 50 MHz FIXED MOBILE |

The Main Table History View

Custom Mode: comparing the Main Table allocations from non-consecutive RR Editions

The Main Table History View also provides for a “Custom Mode” comparison, when you are interested in comparing the allocations from two non-consecutive RR Editions (two non-consecutive WRCs). This is accessible via the box shown here.

You may then specify the two RR Editions from which you would like to compare the Main Table allocations, then click Go to perform the comparison.

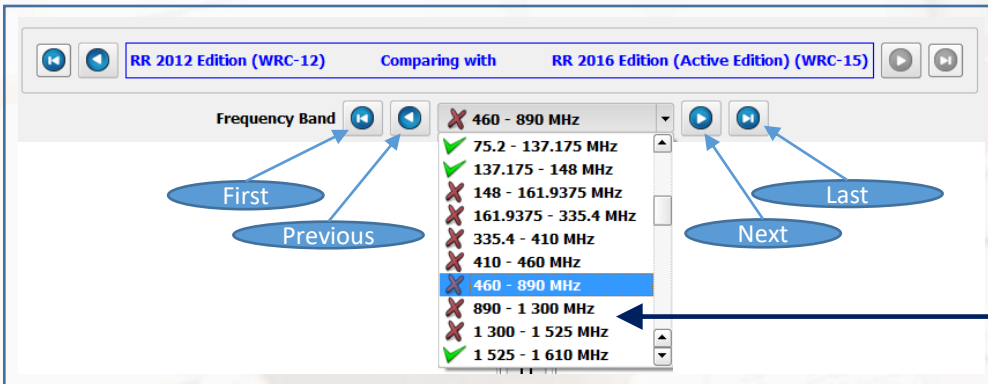
The example shown here for instance leads to comparing the Main Table allocations from RR 2004 Edition (WRC-03) with the Main Table allocations from RR 2012 Edition (WRC-12).

| RR 2004 Edition (WRC-03) | | | RR 2012 Edition (WRC-12) | | |
|-------------------------------------|---|--|--------------------------|--|--------------------------|
| Region 1 | Region 2 | Region 3 | Region 1 | Region 2 | Region 3 |
| | Below 9 kHz (Not allocated) | RR 2004 Edition (WRC-03) | | Below 8.3 kHz (Not allocated) | RR 2012 Edition (WRC-12) |
| | 5.53 5.54 | | | 5.53 5.54 | |
| | 9 - 14 kHz RADIONAVIGATION | | | 8.3 - 9 kHz METEOROLOGICAL AIDS 5.54A 5.54B 5.54C | |
| | 14 - 19.95 kHz FIXED MARITIME MOBILE 5.57 | | | 9 - 11.3 kHz METEOROLOGICAL AIDS 5.54A RADIONAVIGATION | |
| | 5.55 5.56 | | | 11.3 - 14 kHz RADIONAVIGATION | |
| | 19.95 - 20.05 kHz STANDARD FREQUENCY AND TIME SIGNAL (20 kHz) | | | 14 - 19.95 kHz FIXED MARITIME MOBILE 5.57 | |
| | 20.05 - 70 kHz FIXED MARITIME MOBILE 5.57 | | | 5.55 5.56 | |
| | 5.56 5.58 | | | 19.95 - 20.05 kHz STANDARD FREQUENCY AND TIME SIGNAL (20 kHz) | |
| 70 - 72 kHz RADIONAVIGATION 5.60 | 70 - 90 kHz FIXED MARITIME MOBILE 5.57 MARITIME RADIONAVIGATION 5.60 | 70 - 72 kHz RADIONAVIGATION 5.60 Fixed Maritime mobile 5.57 | | 20.05 - 70 kHz FIXED MARITIME MOBILE 5.57 | |

The Main Table History View

Navigating frequency bands and checking differences

When the comparison of the Main Table allocations from two RR Editions is completed, you may then navigate the specified partition of the frequency bands using the usual “first-previous-next-last” layout. **In addition**, however, if you drop-down the list of the frequency bands, you may notice that the **various bands are marked as follows**:

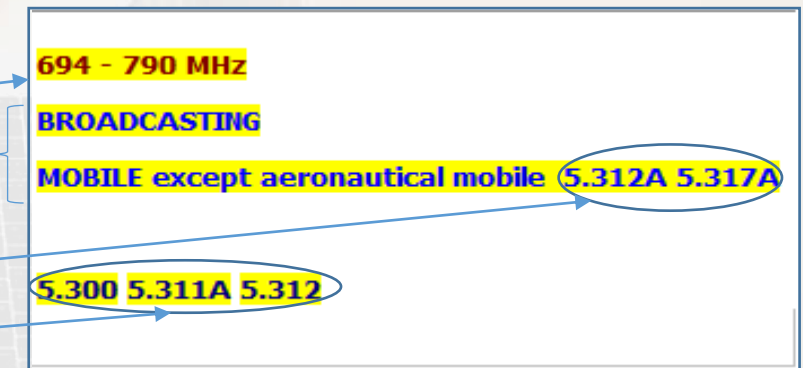


✓ The green mark next to a frequency band indicates that **no differences** were found in the allocation boxes in that band, between the two compared Main Tables.

✗ The red mark next to a frequency band indicates that **differences** were found in the allocation boxes in that band, between the two compared Main Tables.

The software tentatively performs the comparison of the Main Table allocations from two RR Editions on a “**Region-by-Region/box-by-box**” basis, trying (in addition to Region applicability) for every allocation box to match the following data:

- The frequency band,
- The list of radiocommunication services, and then for every service, the list of associated “service footnotes” (if any),
- The list of “box footnotes” applying to the box as a whole.



When differences are found, they are marked accordingly in both Tables, inviting checking, as explained below.

The Main Table History View

Navigating frequency bands and checking differences

| RR 2012 Edition (WRC-12) | | | RR 2016 Edition (Active Edition) (WRC-15) | | |
|--|---|---|---|--|--|
| Region 1 | Region 2 | Region 3 | Region 1 | Region 2 | Region 3 |
| | 460 - 470 MHz FIXED MOBILE 5.286AA Meteorological-satellite (space-to-Earth) 5.287 5.288 5.289 5.290 | | | 460 - 470 MHz FIXED MOBILE 5.286AA Meteorological-satellite (space-to-Earth) 5.287 5.288 5.289 5.290 | |
| 470 - 790 MHz BROADCASTING 5.149 5.291A 5.294 5.296 5.300 5.304 5.306 5.311A 5.312 5.312A 470 - 790 MHz | 470 - 512 MHz BROADCASTING Fixed Mobile 5.292 5.293 512 - 608 MHz BROADCASTING 5.297 608 - 614 MHz RADIO ASTRONOMY Mobile-satellite except aeronautical mobile-satellite (Earth-to-space) 614 - 698 MHz BROADCASTING Fixed Mobile 5.293 5.309 5.311A | 470 - 585 MHz BROADCASTING FIXED MOBILE 5.291 5.298 585 - 610 MHz BROADCASTING FIXED MOBILE RADIONAVIGATION 5.149 5.305 5.306 5.307 610 - 890 MHz BROADCASTING FIXED MOBILE 5.313A 5.317A 5.149 5.305 5.306 5.307 5.311A 5.320 | 470 - 694 MHz BROADCASTING 5.149 5.291A 5.294 5.296 5.300 5.304 5.306 5.311A 5.312 470 - 694 MHz | 470 - 512 MHz BROADCASTING Fixed Mobile 5.292 5.293 5.295 512 - 608 MHz BROADCASTING 5.295 5.297 608 - 614 MHz RADIO ASTRONOMY Mobile-satellite except aeronautical mobile-satellite (Earth-to-space) 614 - 698 MHz BROADCASTING Fixed Mobile 5.293 5.308A 5.309 5.311A | 470 - 585 MHz BROADCASTING FIXED MOBILE 5.296A 5.291 5.298 585 - 610 MHz BROADCASTING FIXED MOBILE 5.296A RADIONAVIGATION 5.149 5.305 5.306 5.307 610 - 890 MHz BROADCASTING FIXED MOBILE 5.296A 5.313A 5.317A 5.149 5.305 5.306 5.307 5.311A 5.320 |

Exact matching boxes are not highlighted in any way.

Box frequency bands are only highlighted when “no matching boxes” with for the same Region/bands combination are found. This usually is the result of the “split” operated by a given WRC of the box from the “previous” edition into two (or more) boxes, introducing allocations to “new” services:

In such cases, the boxes are considered “totally mismatching” and all their content is highlighted.

The Main Table History View

Navigating frequency bands and checking differences

| RR 2012 Edition (WRC-12) | | | RR 2016 Edition (Active Edition) (WRC-15) | | |
|---|---|----------|---|--|----------|
| Region 1 | Region 2 | Region 3 | Region 1 | Region 2 | Region 3 |
| 161.9375 - 161.9625 MHz FIXED MOBILE except aeronautical mobile | 161.9375 - 161.9625 MHz FIXED MOBILE | | 161.9375 - 161.9625 MHz FIXED MOBILE except aeronautical mobile Maritime mobile-satellite (Earth-to-space) 5.228AA | 161.9375 - 161.9625 MHz FIXED MOBILE Maritime mobile-satellite (Earth-to-space) 5.228AA | |
| 5.226 | 5.226 | | 5.226 | 5.226 | |
| 161.9375 - 161.9625 MHz FIXED MOBILE except aeronautical mobile | 161.9625 - 161.9875 MHz (OR) MARITIME MOBILE Aeronautical mobile (OR) 5.228E Mobile-satellite (Earth-to-space) 5.228F | | 161.9375 - 161.9625 MHz FIXED MOBILE except aeronautical mobile Maritime mobile-satellite (Earth-to-space) 5.228AA | 161.9625 - 161.9875 MHz (OR) MARITIME MOBILE | |
| 5.226 | 5.226 | | 5.226 | 5.226 | |
| 162.0125 - 162.0375 MHz FIXED MOBILE except aeronautical mobile | 162.0125 - 162.0375 MHz AERONAUTICAL MOBILE (OR) MARITIME MOBILE | | 162.0125 - 162.0375 MHz FIXED MOBILE except aeronautical mobile | 162.0125 - 162.0375 MHz AERONAUTICAL MOBILE (OR) MARITIME MOBILE | |
| 5.226 5.229 | 5.226 | | 5.226 5.229 | 5.226 | |

When the list of services in a given box is highlighted, this indicates either :

- A difference in the list of services (a service is present on one side and absent on the other), as shown above,
- Or a difference in the list of “service footnotes”, associated with any of the services in the list (a footnote is present on one side and absent on the other), as shown here.

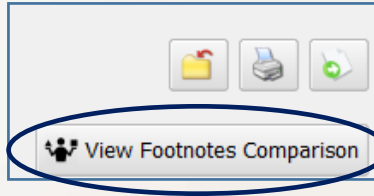
Please note that the software marks the complete list of services in both cases, inviting further checking to determine the differences.

Similarly, the list of “box footnotes” associated with the box as a whole is also highlighted so as to indicate the corresponding difference, as shown here.

| | |
|---|---|
| <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>610 - 890 MHz</p> <p>BROADCASTING</p> <p>FIXED</p> <p>MOBILE 5.313A 5.317A</p> <p>5.149 5.305 5.306 5.307 5.311A 5.320</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>790 - 862 MHz</p> <p>BROADCASTING</p> <p>FIXED</p> <p>MOBILE except aeronautical mobile 5.316B 5.317A</p> <p>5.312 5.314 5.315 5.316 5.316A 5.319</p> </div> | <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>610 - 890 MHz</p> <p>BROADCASTING</p> <p>FIXED</p> <p>MOBILE 5.296A 5.313A 5.317A</p> <p>5.149 5.305 5.306 5.307 5.311A 5.320</p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>790 - 862 MHz</p> <p>BROADCASTING</p> <p>FIXED</p> <p>MOBILE except aeronautical mobile 5.316B 5.317A</p> <p>5.312 5.319</p> </div> |
|---|---|

The Main Table History View

Comparing footnotes from two consecutive RR Editions



When comparing the Main Table allocations from two consecutive RR Editions (typically in the History Mode), the software provides for comparing the corresponding Article 5 footnotes. This is available by clicking the button shown here.

The footnotes from the two editions are then displayed, organized and split in three main columns: the newly added footnotes in the more recent edition, the modified footnotes in the more recent edition and the suppressed footnotes in the more recent edition (the example here applies to RR 2020 versus RR 2016).

Selecting any footnote from any list causes the software to display its text in the two editions (when applicable), so that it makes it easy to check the changes in the modified footnotes text, review the text of the suppressed footnotes in the recent edition and the examine the provisions which are added in the recent edition.

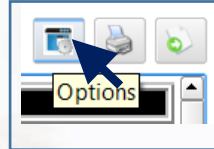
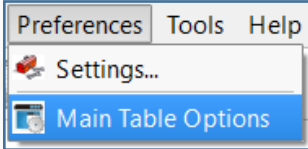
| Suppressed footnotes in RR 2020 (7) | Modified footnotes in RR 2020 (127) | Added footnotes in RR 2020 (35) |
|-------------------------------------|-------------------------------------|---------------------------------|
| 5.71 | 5.67 | 5.82C |
| 5.311A | 5.67B | 5.166A |
| 5.396 | 5.70 | 5.166B |
| 5.530D | 5.77 | 5.166C |
| 5.543A | 5.79 | 5.166D |
| 5.562F | 5.87 | 5.166E |
| 5.562G | 5.107 | 5.169A |
| | 5.712 | 5.169B |
| | 5.114 | 5.203C |
| | 5.117 | 5.209A |
| | 5.118 | 5.218A |
| | 5.123 | 5.228AB |
| | 5.128 | 5.228AC |
| | 5.132B | 5.260A |

| RR 2016 footnote | RR 2020 footnote |
|---|---------------------------------|
| 5.311A For the frequency band 620-790 MHz, see also Res. 549 (WRC-07) . (WRC-07) | 5.311A (SUP - WRC-19) |

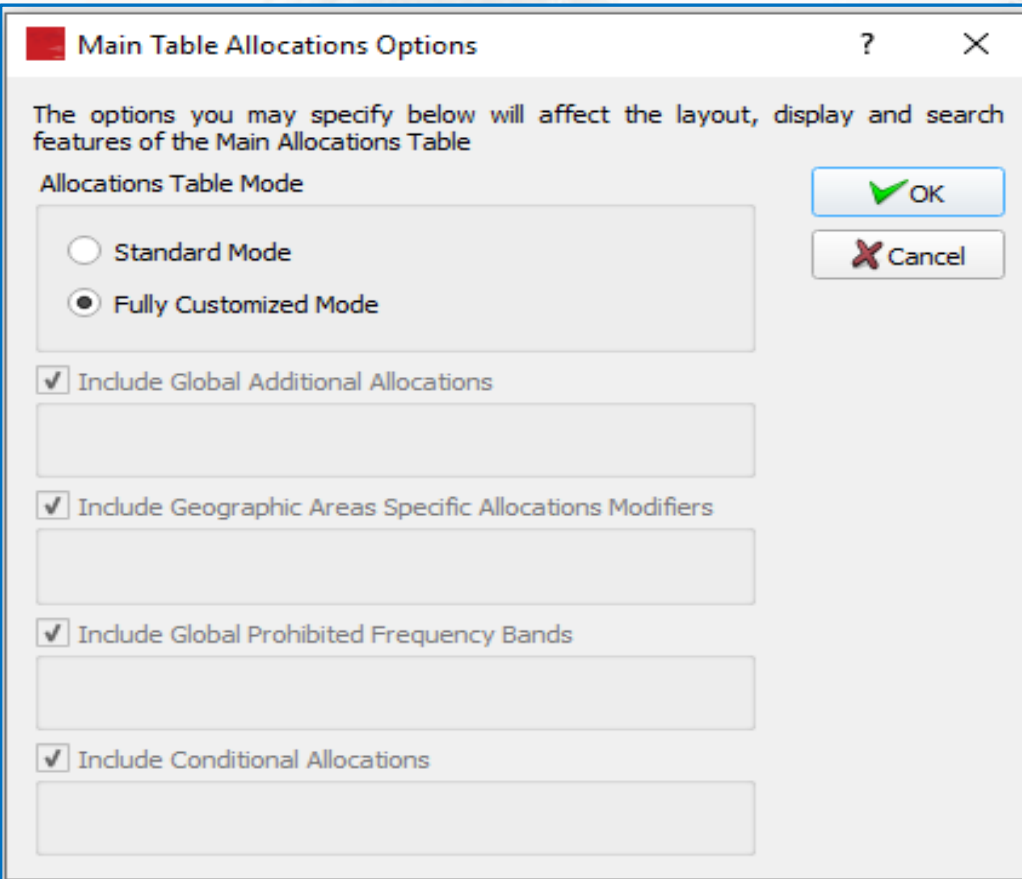
| RR 2020 footnote |
|--|
| 5.166B In Region 1 , stations in the amateur service operating on a secondary basis shall not cause interference to, or claim protection from, stations of the broadcasting service. The length generated by an amateur station in Region 1 in the frequency band 50-52 MHz not exceed a calculated value of +6 dB(µV/m) at a height of 10 m above ground for more than 10% of time along the border of a country with operational analogue broadcasting stations in Region 1 and of neighbouring countries with broadcasting stations in Region 3 Nos. 5.167 and 5.168 . (WRC-19) |

| RR 2016 footnote | RR 2020 footnote |
|--|---|
| 5.161A Additional allocation: in Korea (Rep. of), United States , the frequency bands 41.015-41.665 MHz and 43.35-44 MHz are also allocated to the radiolocation service on a primary basis. Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed or mobile services. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Res. 612(Rev.WRC-12) . (WRC-12) | 5.161A Additional allocation: in Korea (Rep. of), United States, Mexico , the frequency bands 41.015-41.665 MHz and 43.35-44 MHz are also allocated to the radiolocation service on a primary basis. Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed or mobile services. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Res. 612 (Rev.WRC-12) . (WRC-19) |

Customizing the Main Table Display – Main Table Options



Working with the Main Table View, you may customize the display of the allocation boxes so as to include and properly embed in the Main Table the various allocations components, derived from the appropriate footnotes and other Article 5 provisions. This is accessible via the menu item “**Preferences – Main Table Options**” or, alternatively, by clicking on the corresponding icon.



In the Main Table Allocations Options dialog, in addition to the “Standard mode” described so far, you may specify the use of a **Fully Customized Mode** in which the following components are embedded in the display of the Main Table View:

- The Global Additional Allocations, applicable to one or more whole Region(s).
- The Allocations Modifiers applicable to specific geographic areas or countries (i.e., specific additional allocations, alternative allocations, different categories of services).
- The Global Prohibited Emissions (resulting for instance form No. 5.340).
- The Conditional Allocations (allocations with dates or service limitations, declensions or applications).

In its **Fully Customized Mode**, the software offers various additional possibilities and features become available when viewing the allocation boxes and the associated services and footnotes, as explained with some details in the following examples.

The Main Table View – Fully Customized Mode

The screenshot displays a software interface for radio frequency allocation, organized into three columns labeled Region 1, Region 2, and Region 3. Each region contains a table of frequency bands and their associated services. A red box on the left highlights the 'Main Table Original Allocation Box' for the 420-430 MHz band. Below this, several sub-boxes are shown, each representing a different allocation scenario for the same frequency band. These sub-boxes are color-coded and labeled with their respective frequency bands and service categories. Arrows point from the original box to these sub-boxes, indicating their relationship. The sub-boxes include: 'Additional: 420 - 430 MHz' (dark red), 'Alternative: 430 - 432 MHz' (dark blue), and 'Different Category of Service: 420 - 430 MHz' (green). Each sub-box lists specific countries and frequencies (e.g., 5.271, 5.269, 5.270) and provides a footnote number (e.g., 5.33) for further information. The interface also shows other frequency bands like 410-420 MHz and 430-432 MHz, each with their own allocation details.

In its Fully Customized Mode, in addition to the “basic allocation boxes” from the main partition, the Main Table View displays the various allocations resulting from the appropriate footnotes, by properly embedding them in the Main Table allocation boxes, based on “frequency bands” and “Region” applicability. When a “Table Modifier” footnote applies to a list of countries, the software “splits and places” the countries according to the Region to which they belong.

As the example shown here indicates, every allocation box from the Main Table is then “enlarged” to include “sub-boxes”, representing the appropriate allocation information, according to the following “terminology” and color schema:

Table: 420 - 430 MHz Original frequency band from the original Main Table Partition.

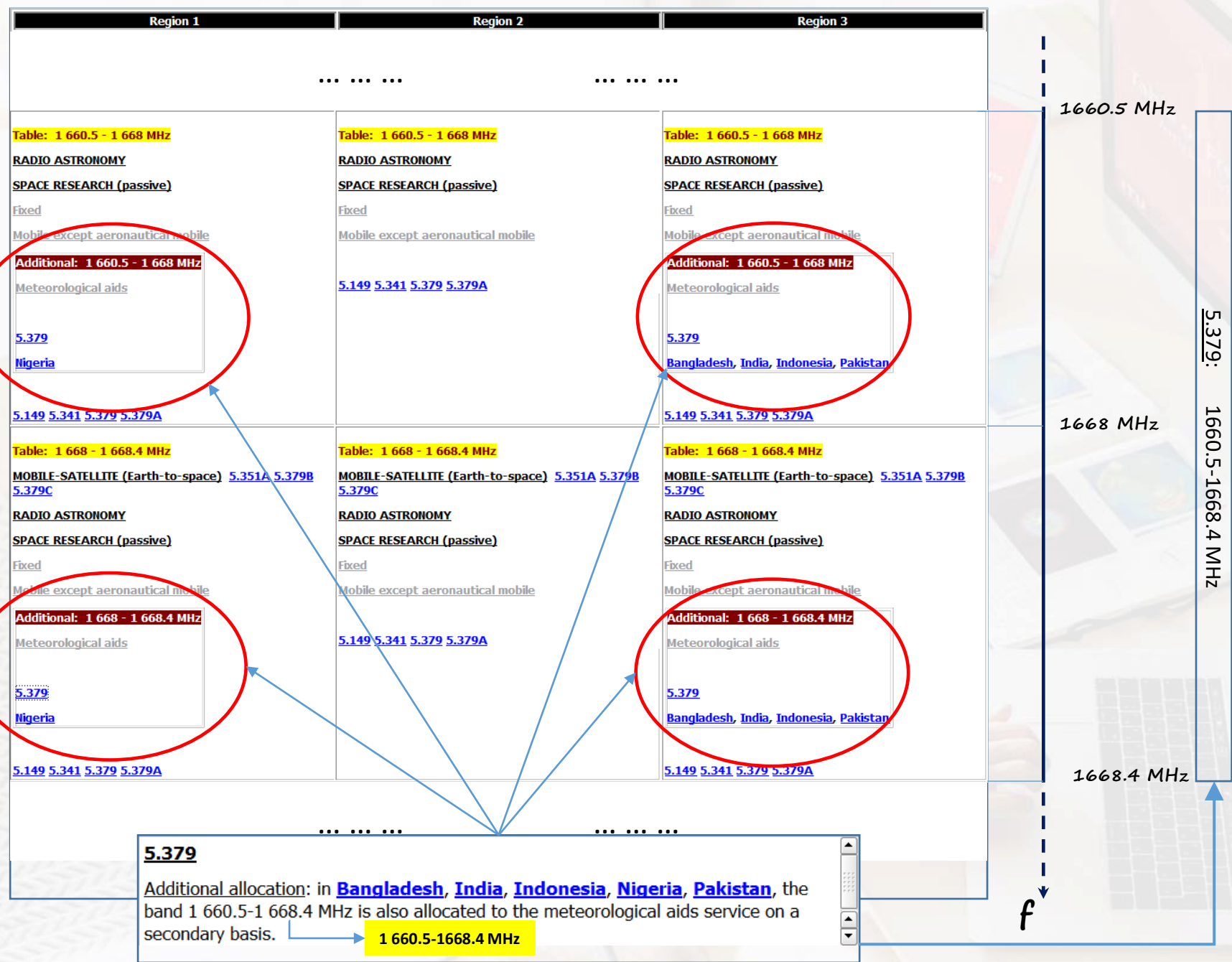
Additional: 420 - 430 MHz Allocation sub-box for an additional allocation.

Alternative: 430 - 432 MHz Allocation sub-box for an alternative allocation.

Different Category of Service: 420 - 430 MHz Allocation sub-box where a change in service category applies.

When appropriate, in every allocation sub-box, the software also indicates the footnote number which “induces” the corresponding information.

The Main Table View – Fully Customized Mode



It should be noted that, in the Fully Customized Mode, when the provisions of a given Article 5 footnote cover (or overlap with) more than one Main Table original allocation box, the software “creates” the appropriate “new sub-boxes” accordingly, so that the resulting allocation modifiers fit appropriately within the boundaries of every original allocation box.

The simple case example of the additional allocation resulting from No. 5.379, illustrated here, clarifies the idea.

When working with the software, other more complex cases can be found, applying to “overlapping” box frequency bands, as well as radiocommunication services (this typically occurs when a given footnote concerns more than one service).

In this context, the following example illustrates how the data model and the software handles the (complex) case resulting from No. 5.276.

The Main Table View – Fully Customized Mode

| | | |
|---|---|--|
| <p>Table: 430 - 432 MHz</p> <p>AMATEUR</p> <p>RADIOLOCATION</p> <p>Additional: 430 - 432 MHz</p> <p>FIXED</p> <p>5.276</p> <p>Algeria, Saudi Arabia, Bahrain, Burkina Faso, Djibouti, Egypt, United Arab Emirates, Eritrea, Ethiopia, Greece, Guinea, Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Libya, Niger, Nigeria, Oman, Qatar, Syrian Arab Republic, Somalia, Sudan, Switzerland, Togo, Turkey, Yemen</p> <p>Additional: 430 - 432 MHz</p> <p>MOBILE except aeronautical mobile</p> <p>5.276</p> <p>Algeria, Saudi Arabia, Bahrain, Burkina Faso, Djibouti, Egypt, United Arab Emirates, Eritrea, Ethiopia, Greece, Guinea, Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Libya, Niger, Nigeria, Oman, Qatar, Syrian Arab Republic, Somalia, Sudan, Switzerland, Togo, Turkey, Yemen</p> | <p>Table: 430 - 432 MHz</p> <p>RADIOLOCATION</p> <p>Amateur</p> <p>Additional: 430 - 432 MHz</p> <p>FIXED</p> <p>5.276</p> <p>Ecuador</p> | <p>Table: 430 - 432 MHz</p> <p>RADIOLOCATION</p> <p>Amateur</p> <p>Additional: 430 - 432 MHz</p> <p>FIXED</p> <p>5.276</p> <p>Afghanistan, Bangladesh, Brunei Darussalam, India, Indonesia, Iran (Islamic Republic of), Malaysia, Pakistan, Philippines, Dem. People's Rep. of Korea, Singapore, Thailand</p> <p>Additional: 430 - 432 MHz</p> <p>MOBILE except aeronautical mobile</p> <p>5.276</p> <p>Afghanistan, Bangladesh, Brunei Darussalam, India, Indonesia, Iran (Islamic Republic of), Malaysia, Pakistan, Philippines, Dem. People's Rep. of Korea, Singapore, Thailand</p> |
| <p>Table: 432 - 438 MHz</p> <p>AMATEUR</p> <p>RADIOLOCATION</p> <p>Earth exploration-satellite (active) 5.279A</p> <p>Additional: 432 - 438 MHz</p> <p>FIXED</p> <p>5.276</p> <p>Algeria, Saudi Arabia, Bahrain, Burkina Faso, Djibouti, Egypt, United Arab Emirates, Eritrea, Ethiopia, Greece, Guinea, Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Libya, Niger, Nigeria, Oman, Qatar, Syrian Arab Republic, Somalia, Sudan, Switzerland, Togo, Turkey, Yemen</p> <p>Additional: 432 - 435 MHz</p> <p>MOBILE except aeronautical mobile</p> <p>5.276</p> <p>Algeria, Saudi Arabia, Bahrain, Burkina Faso, Djibouti, Egypt, United Arab Emirates, Eritrea, Ethiopia, Greece, Guinea, Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Libya, Niger, Nigeria, Oman, Qatar, Syrian Arab Republic, Somalia, Sudan, Switzerland, Togo, Turkey, Yemen</p> | <p>Table: 432 - 438 MHz</p> <p>RADIOLOCATION</p> <p>Amateur</p> <p>Earth exploration-satellite (active) 5.279A</p> <p>Additional: 432 - 438 MHz</p> <p>FIXED</p> <p>5.276</p> <p>Ecuador</p> | <p>Table: 432 - 438 MHz</p> <p>RADIOLOCATION</p> <p>Amateur</p> <p>Earth exploration-satellite (active) 5.279A</p> <p>Additional: 432 - 438 MHz</p> <p>FIXED</p> <p>5.276</p> <p>Afghanistan, Bangladesh, Brunei Darussalam, India, Indonesia, Iran (Islamic Republic of), Malaysia, Pakistan, Philippines, Dem. People's Rep. of Korea, Singapore, Thailand</p> <p>Additional: 432 - 435 MHz</p> <p>MOBILE except aeronautical mobile</p> <p>5.276</p> <p>Afghanistan, Bangladesh, Brunei Darussalam, India, Indonesia, Iran (Islamic Republic of), Malaysia, Pakistan, Philippines, Dem. People's Rep. of Korea, Singapore, Thailand</p> |
| <p>Table: 438 - 440 MHz</p> <p>AMATEUR</p> <p>RADIOLOCATION</p> <p>Additional: 438 - 440 MHz</p> <p>FIXED</p> <p>5.276</p> <p>Algeria, Saudi Arabia, Bahrain, Burkina Faso, Djibouti, Egypt, United Arab Emirates, Eritrea, Ethiopia, Greece, Guinea, Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Libya, Niger, Nigeria, Oman, Qatar, Syrian Arab Republic, Somalia, Sudan, Switzerland, Togo, Turkey, Yemen</p> <p>Additional: 438 - 440 MHz</p> <p>MOBILE except aeronautical mobile</p> <p>5.276</p> <p>Algeria, Saudi Arabia, Bahrain, Burkina Faso, Djibouti, Egypt, United Arab Emirates, Eritrea, Ethiopia, Greece, Guinea, Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Libya, Niger, Nigeria, Oman, Qatar, Syrian Arab Republic, Somalia, Sudan, Switzerland, Togo, Turkey, Yemen</p> | <p>Table: 438 - 440 MHz</p> <p>RADIOLOCATION</p> <p>Amateur</p> <p>Additional: 438 - 440 MHz</p> <p>FIXED</p> <p>5.276</p> <p>Ecuador</p> | <p>Table: 438 - 440 MHz</p> <p>RADIOLOCATION</p> <p>Amateur</p> <p>Additional: 438 - 440 MHz</p> <p>FIXED</p> <p>5.276</p> <p>Afghanistan, Bangladesh, Brunei Darussalam, India, Indonesia, Iran (Islamic Republic of), Malaysia, Pakistan, Philippines, Dem. People's Rep. of Korea, Singapore, Thailand</p> <p>Additional: 438 - 440 MHz</p> <p>MOBILE except aeronautical mobile</p> <p>5.276</p> <p>Afghanistan, Bangladesh, Brunei Darussalam, India, Indonesia, Iran (Islamic Republic of), Malaysia, Pakistan, Philippines, Dem. People's Rep. of Korea, Singapore, Thailand</p> |

5.276

Additional allocation: in [Afghanistan](#), [Algeria](#), [Saudi Arabia](#), [Bahrain](#), [Bangladesh](#), [Brunei Darussalam](#), [Burkina Faso](#), [Djibouti](#), [Egypt](#), [United Arab Emirates](#), [Ecuador](#), [Eritrea](#), [Ethiopia](#), [Greece](#), [Guinea](#), [India](#), [Indonesia](#), [Iran \(Islamic Republic of\)](#), [Iraq](#), [Israel](#), [Italy](#), [Jordan](#), [Kenya](#), [Kuwait](#), [Libya](#), [Malaysia](#), [Niger](#), [Nigeria](#), [Oman](#), [Pakistan](#), [Philippines](#), [Qatar](#), [Syrian Arab Republic](#), [Dem. People's Rep. of Korea](#), [Singapore](#), [Somalia](#), [Sudan](#), [Switzerland](#), [Thailand](#), [Togo](#), [Turkey](#), [Yemen](#), the frequency band 430-440 MHz is also allocated to the fixed service on a primary basis and the frequency bands 430-435 MHz and 438-440 MHz are also allocated, except in [Ecuador](#), to the mobile, except aeronautical mobile, service on a primary basis. (WRC-15)

The Main Table View – Fully Customized Mode

In the Fully Customized Mode, when the provisions of a given Article 5 footnote introduce a limitation, condition or expiry date, the Main Table View takes into account these various “conditional footnotes” and accordingly displays “service declensions”, limitations and expiry dates, to the extent feasible. This applies to the Main Table allocation boxes, as well as to any derived “sub-box” as shown in the examples here.

| | | |
|---|---|---|
| Table: 8.3 - 9 kHz METEOROLOGICAL AIDS (passive) 5.54A 5.54B 5.54C | Table: 8.3 - 9 kHz METEOROLOGICAL AIDS (passive) 5.54A 5.54B 5.54C | Table: 8.3 - 9 kHz METEOROLOGICAL AIDS (passive) 5.54A 5.54B 5.54C |
|---|---|---|

5.54A
Use of the 8.3-11.3 kHz frequency band by stations in the meteorological aids service is limited to passive use only.

| | |
|--|--|
| Table: 14 - 19.95 kHz FIXED MARITIME MOBILE (coast radiotelegraph stations) 5.57 | Table: 14 - 19.95 kHz FIXED MARITIME MOBILE (coast radiotelegraph stations) 5.57 |
|--|--|

5.57
The use of the bands 14-19.95 kHz, 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).

5.318
Additional allocation: in **Canada, United States, Mexico**, the bands 849-851 MHz and 894-896 MHz are also allocated to the aeronautical mobile service on a primary basis, for public correspondence with aircraft. The use of the band 849-851 MHz is limited to transmissions from aeronautical stations and the use of the band 894-896 MHz is limited to transmissions from aircraft stations.

| |
|--|
| Table: 806 - 890 MHz BROADCASTING FIXED MOBILE 5.317A Additional: 849 - 851 MHz AERONAUTICAL MOBILE (public correspondence with aircraft) (ground to air) 5.318 Canada, United States, Mexico |
|--|

| |
|--|
| Table: 890 - 902 MHz FIXED MOBILE except aeronautical mobile 5.317A Radiolocation Additional: 894 - 896 MHz AERONAUTICAL MOBILE (public correspondence with aircraft) (air to ground) 5.318 Canada, United States, Mexico |
|--|

| |
|--|
| Region 2 Table: 161.9375 - 161.9625 MHz FIXED MOBILE Maritime mobile-satellite (Earth-to-space) 5.228AA 5.226 Table: 161.9625 - 161.9875 MHz AERONAUTICAL MOBILE (OR) (air to ground) (AIS) (emissions from search and rescue operations) MARITIME MOBILE (AIS) MOBILE-SATELLITE (Earth-to-space) (AIS) Additional (Region 2): 161.9625 - 161.9875 MHz Until 31/12/2024 FIXED MOBILE 5.228D 5.228C 5.228D |
|--|

5.228D
The frequency bands 161.9625-161.9875 MHz (AIS 1) and 162.0125-162.0375 MHz (AIS 2) may continue to be used by the fixed and mobile services on a primary basis until 1 January 2025, at which time this allocation shall no longer be valid. Administrations are encouraged to make all practicable efforts to discontinue the use of these bands by the fixed and mobile services prior to the transition date. During this transition period, the maritime mobile service in these frequency bands has priority over the fixed, land mobile and aeronautical mobile services. (WRC-12)

The Main Table View – Fully Customized Mode

Radiocommunication services “applications”

When applicable, in the Fully Customized Mode, the software tentatively embeds specific-boxes in the Main Table original boxes, showing “particular” radiocommunication services applications identifications specified in the provisions of Article 5 footnotes.

“Applications” sub-boxes are marked with a specific color, with an indication of the frequency band, the application label and the footnote inducing the identification.

| | | |
|---|--|---|
| <p>Table: 1 427 - 1 429 MHz</p> <p>FIXED</p> <p>MOBILE except aeronautical mobile 5.341A 5.341B 5.341C</p> <p>SPACE OPERATION (Earth-to-space)</p> <p>Application (Region 1): 1 427 - 1 429 MHz</p> <p>[INTERNATIONAL MOBILE TELECOMMUNICATIONS (IMT)]</p> <p>5.341A</p> <p>5.338A 5.341</p> | <p>Table: 1 427 - 1 429 MHz</p> <p>FIXED</p> <p>MOBILE except aeronautical mobile 5.341A 5.341B 5.341C</p> <p>SPACE OPERATION (Earth-to-space)</p> <p>Application (Region 2): 1 427 - 1 429 MHz</p> <p>[INTERNATIONAL MOBILE TELECOMMUNICATIONS (IMT)]</p> <p>5.341B</p> <p>5.338A 5.341</p> | <p>Table: 1 427 - 1 429 MHz</p> <p>FIXED</p> <p>MOBILE except aeronautical mobile 5.341A 5.341B 5.341C</p> <p>SPACE OPERATION (Earth-to-space)</p> <p>Application (Region 3): 1 427 - 1 429 MHz</p> <p>[INTERNATIONAL MOBILE TELECOMMUNICATIONS (IMT)]</p> <p>5.341C</p> <p>5.338A 5.341</p> |
| <p>Table: 1 429 - 1 452 MHz</p> <p>FIXED</p> <p>MOBILE except aeronautical mobile 5.341A</p> <p>Application (Region 1): 1 429 - 1 452 MHz</p> <p>[INTERNATIONAL MOBILE TELECOMMUNICATIONS (IMT)]</p> <p>5.341A</p> <p>Additional: 1 429 - 1 452 MHz</p> <p>AERONAUTICAL MOBILE (telemetry)</p> <p>5.342</p> <p>Armenia, Azerbaijan, Belarus, Russian Federation, Uzbekistan, Kyrgyzstan, Ukraine</p> <p>5.338A 5.341 5.342</p> | <p>Table: 1 429 - 1 452 MHz</p> <p>FIXED</p> <p>MOBILE 5.341B 5.341C 5.343</p> <p>Application (Region 2): 1 429 - 1 452 MHz</p> <p>[INTERNATIONAL MOBILE TELECOMMUNICATIONS (IMT)]</p> <p>5.341B</p> <p>5.338A 5.341</p> | <p>Table: 1 429 - 1 452 MHz</p> <p>FIXED</p> <p>MOBILE 5.341B 5.341C 5.343</p> <p>Application (Region 3): 1 429 - 1 452 MHz</p> <p>[INTERNATIONAL MOBILE TELECOMMUNICATIONS (IMT)]</p> <p>5.341C</p> <p>5.338A 5.341</p> |
| <p>5.341A View History Print View Main Table Related Allocations</p> <p>In Region 1, the frequency bands 1 427-1 452 MHz and 1 492-1 518 MHz are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Res. 223 (Rev.WRC-15)*. This identification does not preclude the use of these frequency bands by any other application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of IMT stations is subject to agreement obtained under No. 9.21 with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. 5.342. (WRC-15)</p> <p>-----</p> <p>* Note by the Secretariat: This Resolution was revised by WRC-19.</p> | <p>5.341B View History Print View Main Table Related Allocations</p> <p>In Region 2, the frequency band 1 427-1 518 MHz is identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Res. 223 (Rev.WRC-15)*. This identification does not preclude the use of this frequency band by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-15)</p> <p>-----</p> <p>* Note by the Secretariat: This Resolution was revised by WRC-19.</p> | <p>5.341C View History Print View Main Table Related Allocations</p> <p>The frequency bands 1 427-1 452 MHz and 1 492-1 518 MHz are identified for use by administrations in Region 3 wishing to implement International Mobile Telecommunications (IMT) in accordance with Res. 223 (Rev.WRC-15)*. The use of these frequency bands by the above administrations for the implementation of IMT in the frequency bands 1 429-1 452 MHz and 1 492-1 518 MHz is subject to agreement obtained under No. 9.21 from countries using stations of the aeronautical mobile service. This identification does not preclude the use of these frequency bands by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-15)</p> <p>-----</p> <p>* Note by the Secretariat: This Resolution was revised by WRC-19.</p> |

The above shown example applies to the identification to **International Mobile Telecommunications**, resulting (for instance) in the appropriate Regions from the provisions of Nos. 5.314A, 5.314B and 5.314C.

When appropriate, similar sub-boxes corresponding to other applications, such as **HAPS**, are also displayed. In abstract, the applications are surrounded with square brackets ([]) to distinguish them from the radiocommunication services, but they are also made clickable so as to retrieve “all” the corresponding frequency bands where an identification to the concerned application appears in the Article 5.

The Main Table View – Fully Customized Mode

Effects on the Main Table search utilities

The Fully Customized Mode of the Main Table also affects the ways the software uses to perform the “search and walk” through the Main Table boxes. In particular, when clicking on a given service label, the software then performs the corresponding search taking into account “all” customized sub-boxes which were embedded in the Main Table original allocation boxes.

Table: 14 - 19.95 kHz

FIXED

MARITIME MOBILE (coast radiotelegraph stations) 5.57

Additional (Regions 1, 2, 3): 14 - 19.95 kHz

STANDARD FREQUENCY AND TIME SIGNAL

5.56

Additional: 14 - 17 kHz

RADIONAVIGATION

5.55

Armenia, Russian Federation, Georgia, Kyrgyzstan, Tajikistan, Turkmenistan

5.55 5.56

PRIMARY Allocations to FIXED

Region 1 Region 2 Region 3 Page 1/37

| Region 1 | Region 2 | Region 3 |
|---|---|---|
| <p>Table: 8.3 - 9 kHz</p> <p>METEOROLOGICAL AIDS (passive) 5.54A 5.54B 5.54C</p> <p>Additional: 8.3 - 9 kHz</p> <p>FIXED</p> <p>MOBILE</p> <p>RADIONAVIGATION</p> <p>5.54B</p> <p>Algeria, Saudi Arabia, Bahrain, Egypt, United Arab Emirates, Russian Federation, Iraq, Kuwait, Lebanon, Morocco, Qatar, Syrian Arab Republic, Sudan, Tunisia</p> | <p>Table: 14 - 19.95 kHz</p> <p>FIXED</p> <p>MARITIME MOBILE (coast radiotelegraph stations) 5.57</p> <p>Additional (Regions 1, 2, 3): 14 - 19.95 kHz</p> <p>STANDARD FREQUENCY AND TIME SIGNAL</p> <p>5.56</p> <p>5.55 5.56</p> | <p>Table: 8.3 - 9 kHz</p> <p>METEOROLOGICAL AIDS (passive) 5.54A 5.54B 5.54C</p> <p>Additional: 8.3 - 9 kHz</p> <p>FIXED</p> <p>MOBILE</p> <p>RADIONAVIGATION</p> <p>5.54B</p> <p>Iran (Islamic Republic of)</p> <p>Additional: 8.3 - 9 kHz</p> <p>MARITIME MOBILE</p> <p>MARITIME RADIONAVIGATION</p> <p>5.54C</p> <p>China</p> |
| <p>Table: 14 - 19.95 kHz</p> <p>FIXED</p> <p>MARITIME MOBILE (coast radiotelegraph stations) 5.57</p> <p>Additional (Regions 1, 2, 3): 14 - 19.95 kHz</p> <p>STANDARD FREQUENCY AND TIME SIGNAL</p> <p>5.56</p> <p>Additional: 14 - 17 kHz</p> <p>RADIONAVIGATION</p> <p>5.55</p> <p>Armenia, Russian Federation, Georgia, Kyrgyzstan, Tajikistan, Turkmenistan</p> <p>5.55 5.56</p> | <p>Table: 20.05 - 70 kHz</p> <p>FIXED</p> <p>MARITIME MOBILE (coast radiotelegraph stations) 5.57</p> <p>Additional (Regions 1, 2, 3): 20.05 - 70 kHz</p> <p>STANDARD FREQUENCY AND TIME SIGNAL</p> <p>5.56</p> <p>5.56 5.58</p> | <p>Table: 70 - 72 kHz</p> <p>RADIONAVIGATION 5.60</p> <p>Fixed</p> <p>Maritime mobile (coast radiotelegraph stations) 5.57</p> <p>Different Category of Service: 70 - 72 kHz</p> <p>FIXED</p> <p>MARITIME MOBILE (coast radiotelegraph stations)</p> <p>5.59</p> <p>Bangladesh, Pakistan</p> <p>5.59</p> |
| | <p>Table: 70 - 90 kHz</p> <p>FIXED</p> <p>MARITIME MOBILE (coast radiotelegraph stations) 5.57</p> <p>MARITIME RADIONAVIGATION 5.60</p> <p>Radiolocation</p> | |

As the example shown here illustrates, when you click on **FIXED**, the software retrieves **all allocation boxes with a matching primary allocation to FIXED**, be it from the Main Table original boxes or from the sub-boxes resulting from the Main Table customization.

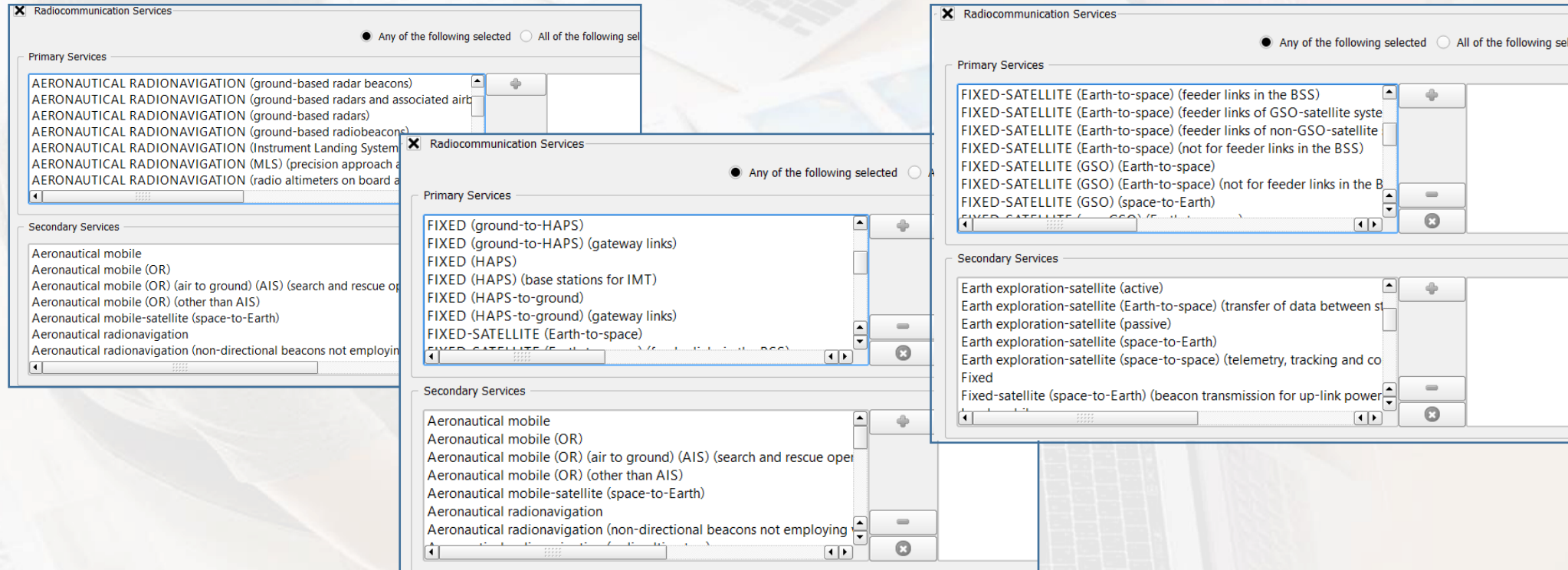
Typically, this means that when determining the matching “service-category” combinations, the search is also operated on additional allocations, alternative allocations and different categories of services provisions.

The Main Table View – Fully Customized Mode

Effects on the Main Table search utilities

The Fully Customized Mode of the Main Table similarly affects the search options in the “[Query Main Table Allocations](#)” dialog.

More precisely, the lists of radiocommunication services, available for search and selection, are “updated” as consequence of the full customization. As shown here, all the used declensions of services, derived from the appropriate conditional footnotes and Main Table modifiers are then available, including “radiocommunication services applications”.



The following example shows the effect of this “full customization”, when performing for instance a “smart downward search” on all derived “declensions” from the AERONAUTICAL MOBILE service.

The Main Table View – Fully Customized Mode

Effects on the Main Table search utilities

Query Main Table Allocations

Region 1 Region 2 Region 3

Search

Frequency Bands

From [] MH To [] MH

Automatically merge overlapping bands

Enlarge to bands union

Reduce to bands intersection

Radiocommunication Services

Any of the following selected All of the following selected

Primary Services

- AERONAUTICAL MOBILE (ground to air)
- AERONAUTICAL MOBILE (OR)
- AERONAUTICAL MOBILE (OR) (air to ground) (A)
- AERONAUTICAL MOBILE (public correspondence)
- AERONAUTICAL MOBILE (public correspondence)
- AERONAUTICAL MOBILE (R)
- AERONAUTICAL MOBILE (R) (air to air)

Secondary Services

- Earth exploration-satellite (active)
- Earth exploration-satellite (Earth-to-space) (transf)
- Earth exploration-satellite (passive)
- Earth exploration-satellite (space-to-Earth)
- Earth exploration-satellite (space-to-space) (telem)
- Fixed
- Fixed-satellite (space-to-Earth) (beacon transmissi

Apply deep smart upward search on Radiocommunication Services

Apply deep smart downward search on Radiocommunication Services

| Region 1 | Region 2 | Region 3 |
|---|---|--|
| Table: 15 010 - 15 100 kHz AERONAUTICAL MOBILE (OR) | Table: 21 924 - 22 000 kHz AERONAUTICAL MOBILE (R) | Table: 17 970 - 18 030 kHz AERONAUTICAL MOBILE (OR) |
| Table: 17 900 - 17 970 kHz AERONAUTICAL MOBILE (R) | Table: 23 200 - 23 350 kHz AERONAUTICAL MOBILE (OR) | Table: 21 924 - 22 000 kHz AERONAUTICAL MOBILE (R) |
| Table: 17 970 - 18 030 kHz AERONAUTICAL MOBILE (OR) | FIXED (aircraft flight safety) 5.156A | Table: 23 200 - 23 350 kHz AERONAUTICAL MOBILE (OR) |
| Table: 21 850 - 21 870 kHz FIXED 5.155A | Table: 108 - 117.975 MHz AERONAUTICAL RADIONAVIGATION | FIXED (aircraft flight safety) 5.156A |
| Alternative: 21 850 - 21 870 kHz AERONAUTICAL MOBILE (R) | Additional (Regions 1, 2, 3): 108 - 112 MHz AERONAUTICAL MOBILE (R) (ground to air) (ground-based TX and associated RX for navigational information for navigation functions) | Table: 108 - 117.975 MHz AERONAUTICAL RADIONAVIGATION |
| FIXED (aircraft flight safety) 5.155A | 5.197A | Additional (Regions 1, 2, 3): 108 - 112 MHz AERONAUTICAL MOBILE (R) (ground to air) (ground-based TX and associated RX for navigational information for navigation functions) |
| 5.155 Armenia, Azerbaijan, Belarus, Russian Federation, Georgia, Kazakhstan, Moldova, Mongolia, Uzbekistan, Kyrgyzstan, Slovakia, Tajikistan, Turkmenistan, Ukraine | Additional (Regions 1, 2, 3): 112 - 117.975 MHz AERONAUTICAL MOBILE (R) | 5.197A |
| 5.155 | 5.197A | Additional (Regions 1, 2, 3): 112 - 117.975 MHz AERONAUTICAL MOBILE (R) |
| Table: 21 924 - 22 000 kHz AERONAUTICAL MOBILE (R) | 5.197A 5.197A | 5.197A |
| Table: 23 200 - 23 350 kHz AERONAUTICAL MOBILE (OR) | Table: 117.975 - 137 MHz AERONAUTICAL MOBILE (R) | 5.197 5.197A |
| FIXED (aircraft flight safety) 5.156A | 5.111 5.200 5.201 5.202 | Table: 117.975 - 137 MHz AERONAUTICAL MOBILE (R) |
| Table: 108 - 117.975 MHz AERONAUTICAL RADIONAVIGATION | Table: 161.9625 - 161.9875 MHz AERONAUTICAL MOBILE (OR) (air to ground) (AIS) (emissions from search and rescue operations) | Additional: 132 - 136 MHz AERONAUTICAL MOBILE (OR) |
| Additional (Regions 1, 2, 3): 112 - 117.975 MHz AERONAUTICAL MOBILE (R) | MARITIME MOBILE (AIS) | 5.201 |
| 5.197A | MOBILE-SATELLITE (Earth-to-space) (AIS) | Iran (Islamic Republic of), Japan, Papua New Guinea |
| Additional (Regions 1, 2, 3): 108 - 112 MHz AERONAUTICAL MOBILE (R) (ground to air) (ground-based TX and associated RX for navigational information for navigation functions) | Additional (Region 2): 161.9625 - 161.9875 MHz Until 31/12/2024 | Additional: 136 - 137 MHz AERONAUTICAL MOBILE (OR) |
| 5.197A | FIXED | 5.202 |
| | MOBILE | Iran (Islamic Republic of) |
| | 5.228D | 5.111 5.200 5.201 5.202 |
| | 5.228C 5.228D | |

The Main Table View – Fully Customized Mode

Effects on the Footnotes View

The Fully Customized Mode of the Main Table also induces a modification in the display of footnotes when working with the Footnotes View. Indeed, when browsing footnotes specifying additional or alternative allocations, or different categories of services provisions, the **footnote text area** contains an additional link which leads to displaying the “resulting sub-box” which is embedded in the Main Table.

List of footnotes in the Table of Frequency Allocations

Displayed 794/794 footnotes.

Find footnote 5.

Show all

| Number | Source | Description | Scope | Entry into force | Applicable until |
|--------|----------|--|-------|------------------|------------------|
| 5.133 | WRC-2012 | Different Category of Service - Limitation | | In force | |
| 5.133A | WRC-2015 | Alternative Allocation - Limitation | | In force | |
| 5.133B | WRC-2015 | Limitation | | In force | |
| 5.134 | WRC-2007 | Guidance | | In force | |
| 5.135 | WRC-1997 | Suppress | | | |
| 5.136 | WRC-2007 | Additional Allocation - Limitation | | In force | |
| 5.137 | WRC-1997 | Limitation | | In force | |
| 5.138 | WRC-1997 | Guidance - Limitation | | In force | |
| 5.138A | WRC-2012 | Suppress | | | |
| 5.139 | WRC-2012 | Suppress | | | |
| 5.140 | WRC-2015 | Additional Allocation | | In force | |
| 5.141 | WRC-2012 | Alternative Allocation | | In force | |
| 5.141A | WRC-2003 | Additional Allocation | | In force | |
| 5.141B | WRC-2015 | Additional Allocation - Limitation | | In force | |
| 5.141C | WRC-2012 | Suppress | | | |

| Region 1 | Region 2 | Region 3 |
|--|----------|----------|
| <p>Different Category of Service: 5 130 - 5 250 kHz</p> <p>MOBILE except aeronautical mobile</p> <p>5.133</p> <p>Armenia, Azerbaijan, Belarus, Russian Federation, Georgia, Kazakhstan, Latvia, Lithuania, Niger, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, Ukraine</p> | | |

| Region 1 | Region 2 | Region 3 |
|--|----------|----------|
| <p>Additional: 7 000 - 7 050 kHz</p> <p>FIXED</p> <p>5.140</p> <p>Angola, Iraq, Somalia, Togo</p> | | |

| Region 1 | Region 2 | Region 3 |
|--|----------|----------|
| <p>Alternative: 7 000 - 7 050 kHz</p> <p>FIXED</p> <p>5.141</p> <p>Egypt, Eritrea, Ethiopia, Guinea, Libya, Madagascar, Niger</p> | | |

Footnote text

5.133 [View History](#) [Print](#) [View Main Table Related Allocations](#) [View Related Different Categories of Services](#)

Different category of service: in [Armenia, Azerbaijan, Belarus, Russian Federation, Georgia, Kazakhstan, Latvia, Lithuania, Niger, Uzbekistan, Kyrgyzstan, Tajikistan, Turkmenistan, Ukraine](#), the allocation of the band 5 130-5 250 kHz to the mobile, except aeronautical mobile, service is

Footnote text

5.140 [View History](#) [Print](#) [View Main Table Related Allocations](#) [View Related Additional Allocations](#)

Additional allocation: in [Angola, Iraq, Somalia, Togo](#), the frequency band 7 000-7 050 kHz is also allocated to the fixed service on a primary basis. (WRC-15)

Footnote text

5.141 [View History](#) [Print](#) [View Main Table Related Allocations](#) [View Related Alternative Allocations](#)

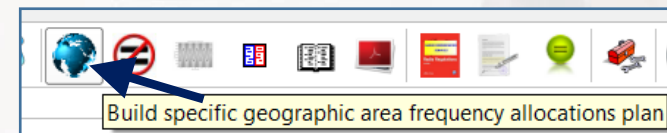
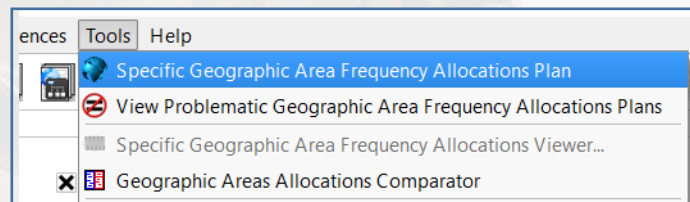
Alternative allocation: in [Egypt, Eritrea, Ethiopia, Guinea, Libya, Madagascar, Niger](#), the band 7 000-7 050 kHz is allocated to the fixed service on a primary basis. (WRC-12)

Fully Customized Mode – Advanced Features

Derived “International” allocations table for specific geographic area

When in its Fully Customized Mode, the software provides for viewing the international allocations table applicable to a given geographic area (country) by using an algorithm* for combining all of the following:

- The Original Main Table allocation boxes
- The Global additional allocations applicable to the Region to which that country belongs
- All of the Table Modifiers (additional allocations, alternative allocations, different categories of services) induced by footnotes which apply to that specific country (generally because the country name directly appears in the footnote, but also in some cases because it may be induced that the provisions of the footnote apply to that country).
- All of the conditional footnotes (specifying exceptions, prohibited emissions, service limitations, expiry dates, entry into force dates, etc.).



This is accessible via the menu item **“Tools – Specific Geographic Area Frequency Allocations Plan”** or, alternatively, by clicking on the corresponding icon on the main toolbar, as shown here.

**Note: detailed description of the used algorithm is under preparation for this guide.*

Fully Customized Mode – Advanced Features

Derived “International” allocations table for specific geographic area

Specific Geographic Area Frequency Allocations Plan Builder

Please specify one (or more) geographic area(s)

Region 1

Region 2

Region 3

When invoked, as shown here, this utility allows the user to specify one or more geographic area(s) (country(ies)), in order to obtain its (their) resulting combined international allocations table.

Region 2

Table: 3 230 - 3 400 kHz

BROADCASTING 5.113

FIXED

MOBILE except aeronautical mobile

Additional: 3 230 - 3 400 kHz

Radiolocation

5.118

United States, Mexico, Peru, Uruguay

5.116 5.118

When working with the fully customized Main Table view, the same functionality can be obtained by clicking on the country name when it appears in any allocation sub-box embedded into the original allocation box, as show here.

It should therefore be noted that the effect of clicking on a given country name is “context dependent” :

- When working with the Fully Customized Main Table View, it leads to building and displaying the derived country specific international allocations table;
- When working with the Footnotes View, it leads to displaying the list of Article 5 footnotes where the name of that country appears.

Fully Customized Mode – Advanced Features

Derived “International” allocations table for specific geographic area

Use these buttons to print or export to various formats

The allocations table derived for a specific geographic or country is organized mainly in three columns:

Frequency Allocations for MEX - Mexico - As of 15/11/2020

| Frequency Band | Services | References |
|-------------------|---|---|
| Below 8.3 kHz | (Not allocated) | 5.53 5.54 |
| 8.3 - 9 kHz | METEOROLOGICAL AIDS (passive) | 5.54A |
| 9 - 11.3 kHz | METEOROLOGICAL AIDS (passive) RADIONAVIGATION | 5.54 References Rec. ITU-R RS.1881 |
| 11.3 - 14 kHz | RADIONAVIGATION | |
| 14 - 19.5 kHz | FIXED MARITIME MOBILE (coast radiotelegraph stations) STANDARD FREQUENCY AND TIME SIGNAL | 5.56 5.57 |
| 19.95 - 20.05 kHz | STANDARD FREQUENCY AND TIME SIGNAL (20 kHz) | |
| 20.05 - 70 kHz | FIXED MARITIME MOBILE (coast radiotelegraph stations) STANDARD FREQUENCY AND TIME SIGNAL | 5.56 5.57 |
| 70 - 90 kHz | FIXED MARITIME MOBILE (coast radiotelegraph stations) MARITIME RADIONAVIGATION Radiolocation | 5.57 5.60 5.61 References 9.21 |
| 90 - 110 kHz | RADIONAVIGATION Fixed | 5.62 5.64 |

- The frequency bands, as they result from the “merge/split” process of combining the various Article 5 components (original Table and footnotes table modifiers).
- The radiocommunication services to which the frequency band is allocated in that country. Service declensions and categories are those resulting from the “merge/split” process of combining the various Article 5 components. When appropriate, indications of radiocommunication applications are also given.
- The list of references (footnotes) applicable to the concerned allocation box. Footnotes marked in red indicate that they are further referencing other RR provisions.

Frequency bands may be “navigated” as usual.

Fully Customized Mode – Advanced Features

Derived “International” allocations table for specific geographic area

When displaying the allocations table derived for a specific geographic area or country, the software provides for the adjacent display of the Main Table allocations for the appropriate Region, either in its standard or customized form. This is accessible by checking the box shown here.

This allows to check the details of the way in which the various components were combined all together to derive the allocations table for a specific geographic or country (the example shown here illustrates the case of the frequency band 430-432 MHz for Mexico).

Geographic Area **MEX - Mexico** Frequency Band **410 - 460 MHz** View Main Table Allocations Use Standard Main Table Use Customized Main Table View analysis report

Modified Main Table Allocations - Region 2 Frequency Allocations for MEX - Mexico - As of 15/11/2020

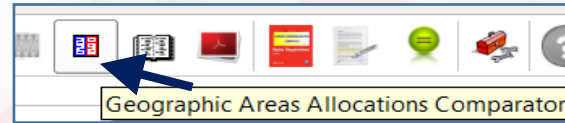
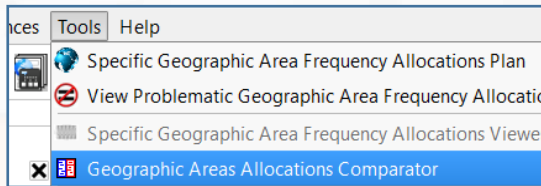
| Frequency Band | Services | References |
|------------------|--|--|
| 410 - 420 MHz | FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space) (communication links with an orbiting, manned space vehicle) | 5.268 |
| 420 - 430 MHz | FIXED MOBILE except aeronautical mobile Radiolocation | |
| 430 - 432 MHz | MOBILE except aeronautical mobile RADIOLOCATION Amateur Fixed | 5.279 |
| 432 - 435 MHz | MOBILE except aeronautical mobile RADIOLOCATION Amateur Earth exploration-satellite (active) Fixed | 5.279 5.279A 5.282 |
| 435 - 438 MHz | RADIOLOCATION Amateur Amateur-satellite Earth exploration-satellite (active) | 5.279 5.279A 5.282 |
| 438 - 440 MHz | MOBILE except aeronautical mobile RADIOLOCATION Amateur Fixed | 5.279 |
| 440 - 449.75 MHz | FIXED MOBILE except aeronautical mobile Radiolocation | 5.286 |

United States
5.269 5.270 5.271
Table: 430 - 432 MHz
RADIOLOCATION
Amateur
Additional: 430 - 432 MHz
FIXED
5.276
Ecuador
Additional: 430 - 432 MHz
MOBILE except aeronautical mobile
Fixed
5.279
Mexico
Different Category of Service: 430 - 432 MHz
AMATEUR
5.278
Argentina, Brazil, Colombia, Costa Rica, Cuba, Guyana, Honduras, Panama, Paraguay, Uruguay, Venezuela
5.271 5.276 5.278 5.279

View continuous spectrum graph

Fully Customized Mode – Advanced Features

Comparing “International” allocations tables for specific geographic areas



With the Fully Customized Main Table Mode, the software provides a utility for comparing the specific derived allocations table for two (usually neighboring) countries). This is accessible via the menu item and the corresponding icon as shown here.

Use these two lists to specify the countries (geographic areas) for which the software compares the specific allocation tables.

Upon comparison, the frequency bands from the Main Table partition are then marked to indicate the presence or absence of “differences” between the two compared specific tables, as shown here.

The software appropriately highlights the frequency bands where differences are found. This may result from either:

- A difference in the frequency bands boundaries (usually resulting from a split due to a specific footnotes inducing a Main Table Modifier for one of the two countries).
- A difference in the radiocommunication services or in their categories.
- A difference in the list of references (footnotes provisions) applicable to one of the tow countries in the relevant frequency band.

Geographic Areas Allocations Comparator

Frequency Band: 8 500 - 10 000 MHz

Left Geographic Area: F - France

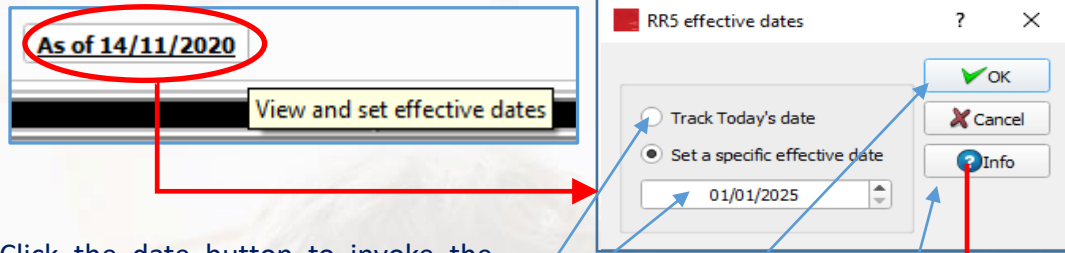
Right Geographic Area: G - United Kingdom

| Frequency Band | Left Geographic Area (F - France) | Right Geographic Area (G - United Kingdom) |
|-------------------|---|---|
| 8 500 - 8 550 MHz | RADIOLOCATION | RADIOLOCATION |
| 8 550 - 8 650 MHz | RADIOLOCATION | RADIOLOCATION |
| 8 650 - 8 750 MHz | AERONAUTICAL RADIONAVIGATION (airborne Doppler navigation aids (8 800 MHz)) | AERONAUTICAL RADIONAVIGATION (airborne Doppler navigation aids (8 800 MHz)) |
| 8 750 - 8 825 MHz | RADIOLOCATION | RADIOLOCATION |
| 8 825 - 8 850 MHz | AERONAUTICAL RADIONAVIGATION (airborne Doppler navigation aids (8 800 MHz)) | AERONAUTICAL RADIONAVIGATION (airborne Doppler navigation aids (8 800 MHz)) |
| 8 850 - 9 000 MHz | MARITIME RADIONAVIGATION (shore-based radars) | MARITIME RADIONAVIGATION (shore-based radars) |
| 9 000 - 9 200 MHz | RADIOLOCATION | RADIOLOCATION |
| 9 200 - 9 225 MHz | EARTH EXPLORATION-SATELLITE (active) | EARTH EXPLORATION-SATELLITE (active) |
| 9 225 - 9 300 MHz | MARITIME RADIONAVIGATION (shore-based radars) | MARITIME RADIONAVIGATION (shore-based radars) |
| 9 300 - 9 320 MHz | RADIOLOCATION | RADIOLOCATION |
| 9 320 - 9 500 MHz | AERONAUTICAL RADIONAVIGATION (airborne weather radars) | AERONAUTICAL RADIONAVIGATION (airborne weather radars) |

View continuous spectrum graph View map

Fully Customized Mode – Advanced Features

RR5 important allocations expiry/entry into force dates

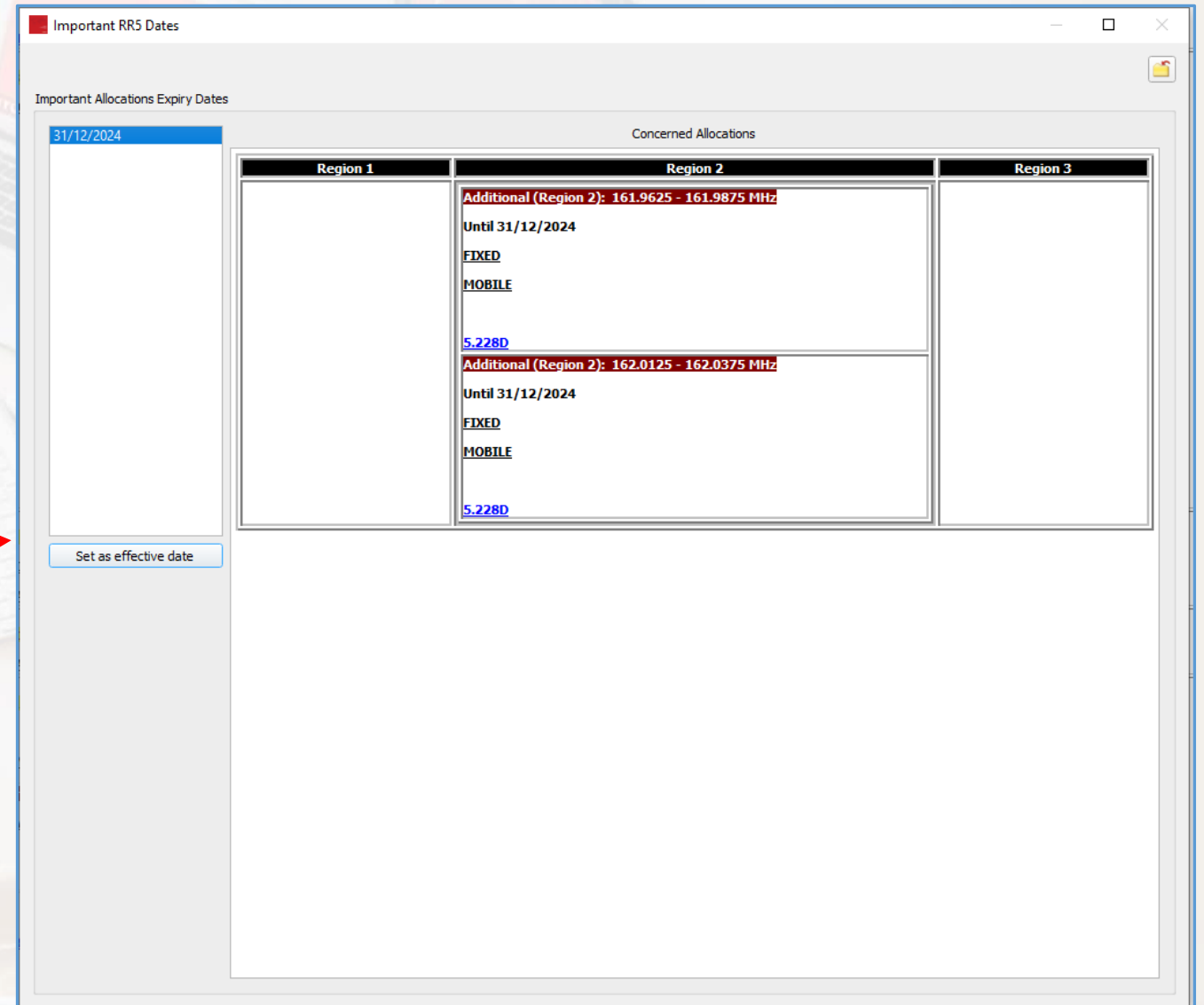


Click the date button to invoke the important dates dialog.

By default, the software is set to “Track Today’s date”: the Table is presented as it looks on the date of the active software session. However, you may set a different desired date may here.

Then click here to “re-create” the Fully Customized Main Table as it would look like at that date: the software recombines the Main Table, considering all effective dates for expiry and entry into force of the relevant allocations, as it derives from the various Article 5 conditional footnotes.

Click the “Info” button to see the important dates detected by the software and the data model, and to check the corresponding “before/after” effects on the relevant allocations.

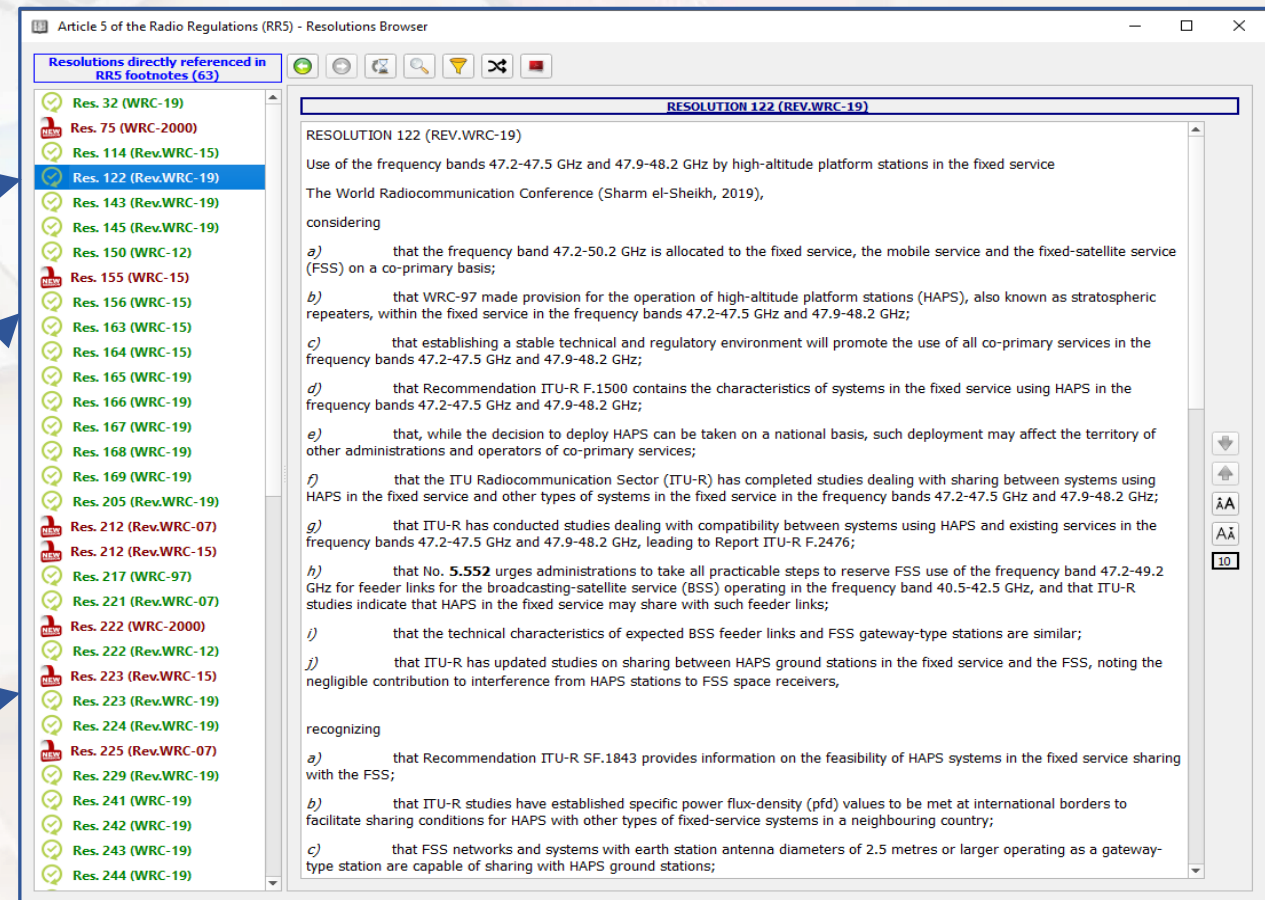
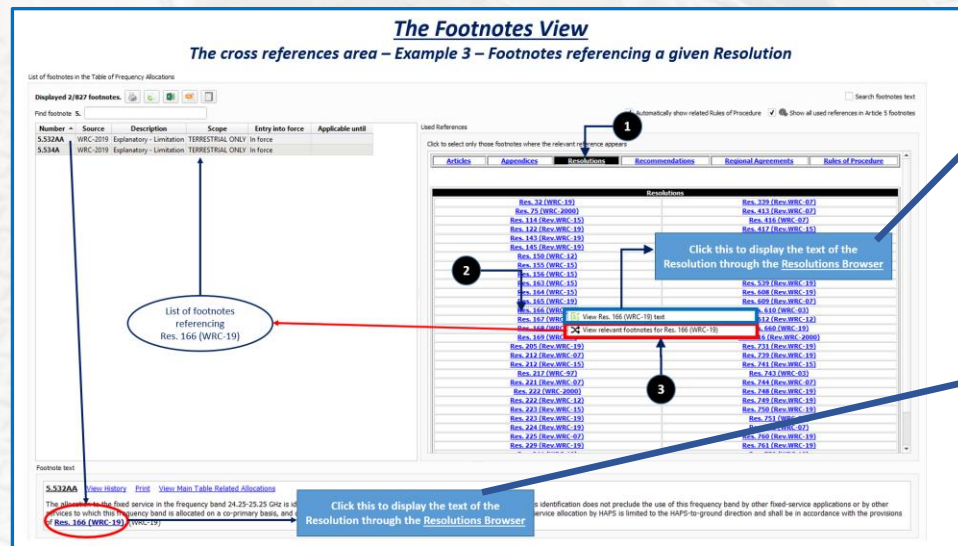
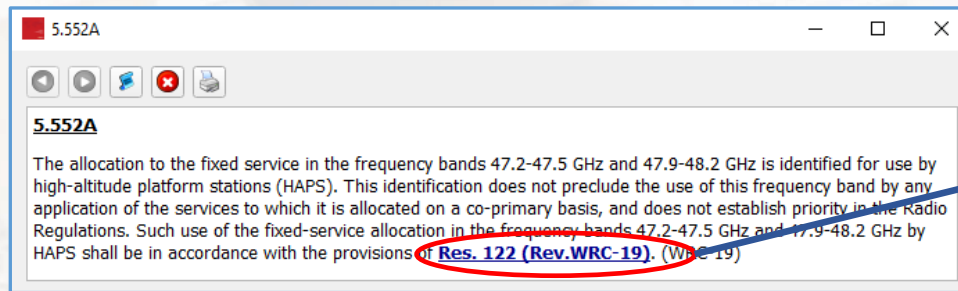
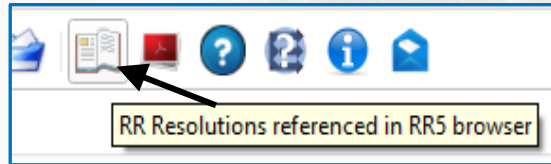
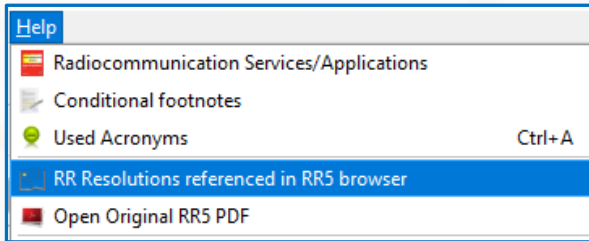


In the current RR2020 edition, the software detects that only footnote No. 5.228D induces an expiry date condition. Hence, the software considers two date intervals, when customizing the Main Table: before 31/12/2024 and after 01/01/2025. This has effect on the extraction and display of Country Specific Frequency Allocations Tables.

The Resolutions Browser

The **Resolutions Browser** can be invoked by using the menu item “**Help – RR Resolutions referenced in RR5 browser**” or, alternatively, by clicking on the corresponding icon on the main toolbar.

The **Resolutions Browser** is also automatically directly invoked when clicking on a Resolution name referenced in the text of a RR5 footnote, but also when examining the cross-references from RR5 footnotes to RR Resolutions as described in corresponding **Footnotes View** section.



The Resolutions Browser

When invoked, the Resolutions Browser displays the list of all Resolutions **directly referenced in RR5 footnotes**.

In this list, Resolutions appear in two different colors:

- **Resolutions appearing in green** are the “**up-to-date**” Resolutions referenced in RR5 footnotes, according to their last version, that is, according to the last WRC that updated (or first adopted) the subject Resolution.
- **Resolutions appearing in red** are the “**out-of-date**” Resolutions still referenced in RR5 footnotes but not in their latest version, that is, they were subject to a revision by a subsequent WRC, though they are still referenced in RR5 footnotes with (one of) their previous version(s)*.

* It should be noted that when an “out-of-date” Resolution is referenced in RR5 footnotes, the corresponding footnote holds an editorial note by the Secretariat, clarifying the situation, as shown in the example below for No. 5.341A.

RR5-67

5.341A In Region 1, the frequency bands 1 427-1 452 MHz and 1 492-1 518 MHz are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution 223 (Rev.WRC-15)*. This identification does not preclude the use of these frequency bands by any other application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of IMT stations is subject to agreement obtained under No. 9.21 with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. 5.342. (WRC-15)

* Note by the Secretariat: This Resolution was revised by WRC-19.

5.341A [View History](#) [Print](#) [View Main Table Related Allocations](#)

In **Region 1**, the frequency bands 1 427-1 452 MHz and 1 492-1 518 MHz are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with [Res. 223 \(Rev.WRC-15\)](#)*. This identification does not preclude the use of these frequency bands by any other application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of IMT stations is subject to agreement obtained under No. 9.21 with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. [5.342](#). (WRC-15)

* Note by the Secretariat: This Resolution was revised by WRC-19.

Article 5 of the Radio Regulations (RR5) - Resolutions Browser

Resolutions directly referenced in RR5 footnotes (63)

- Res. 32 (WRC-19)
- Res. 75 (WRC-2000)
- Res. 114 (Rev.WRC-15)
- Res. 122 (Rev.WRC-19)
- Res. 143 (Rev.WRC-19)
- Res. 145 (Rev.WRC-19)
- Res. 150 (WRC-12)
- Res. 155 (WRC-15)
- Res. 156 (WRC-15)
- Res. 163 (WRC-15)
- Res. 164 (WRC-15)
- Res. 165 (WRC-19)
- Res. 166 (WRC-19)
- Res. 167 (WRC-19)
- Res. 168 (WRC-19)
- Res. 169 (WRC-19)
- Res. 205 (Rev.WRC-19)
- Res. 212 (Rev.WRC-07)
- Res. 212 (Rev.WRC-15)
- Res. 217 (WRC-97)
- Res. 221 (Rev.WRC-07)
- Res. 222 (WRC-2000)
- Res. 222 (Rev.WRC-12)
- Res. 223 (Rev.WRC-15)
- Res. 223 (Rev.WRC-19)
- Res. 224 (Rev.WRC-19)
- Res. 225 (Rev.WRC-07)
- Res. 229 (Rev.WRC-19)
- Res. 241 (WRC-19)
- Res. 242 (WRC-19)
- Res. 243 (WRC-19)
- Res. 244 (WRC-19)

RESOLUTION 32 (WRC-19)

RESOLUTION 32 (WRC-19)

Regulatory procedures for frequency assignments to non-geostationary-satellite networks or systems identified as short-duration mission not subject to the application of Section II of Article 9

The World Radiocommunication Conference (Sharm el-Sheikh, 2019), considering

a) that some non-geostationary (non-GSO) satellites with short-duration without being notified or recorded;

b) that successful and timely development and operation of non-geostationary (non-GSO) satellites with short-duration mission requires regulatory procedures which take account of the short development cycle, application of certain provisions of Articles 9 and 11 may need to be adapted;

c) that these satellites typically have a short (one to two years) development cycle;

d) that the operational lifetime of these satellites generally ranges from several weeks up to not more than three years;

e) that non-GSO satellites with short-duration missions utilize low-Earth orbits;

f) that non-GSO satellites with short-duration missions are being used for a wide variety of applications, including remote sensing, space weather research, upper atmosphere research, astronomy, communications, technology demonstration and education, and therefore may operate under various radiocommunication services;

g) that advances in the field of satellite technology have resulted in non-GSO satellites with short-duration missions becoming a means for developing countries to become involved in space activities,

considering further

a) that the application of provisions of Articles 9 and 11 to frequency assignments to non-GSO networks or systems identified as short-duration mission as prescribed in this Resolution should not adversely or otherwise affect the regulatory treatment of other systems;

b) that the application of any modified regulatory procedure should not change the sharing status with respect to networks and systems not applying the modified regulatory procedure, both terrestrial and space, in frequency bands which may be used by non-GSO systems with short-duration missions,

recognizing

a) that Resolution ITU-R 68 seeks to improve awareness and increase knowledge on existing regulatory procedures for small satellites;

b) that non-GSO networks or systems operating in frequency bands not subject to Section II of Article 9 are, irrespective of the period of validity of their associated frequency assignments, subject to Nos. 5.3 and 9.4;

c) that non-GSO systems with short-duration mission are not to be used for safety-of-life services,

noting

Search text tools (Ctrl+F)
View referencing RR5 footnotes (Ctrl+T)
View references contained in Resolution text (Ctrl+R)
Export to PDF
Back
Forward
Clear browsing history
Copy (Ctrl+C)

The text of the selected Resolution is displayed, and a set of tools (also accessible via a popup menu, using right mouse click) provides for further analysis, search and cross-referencing, as described in the following examples.

The Resolutions Browser

Article 5 of the Radio Regulations (RRS) - Resolutions Browser

Resolutions directly referenced in RRS footnotes (63)

- Res. 32 (WRC-19)
- Res. 75 (WRC-2000)
- Res. 114 (Rev.WRC-15)
- Res. 122 (Rev.WRC-19)
- Res. 143 (Rev.WRC-19)
- Res. 145 (Rev.WRC-19)
- Res. 150 (WRC-12)
- Res. 155 (WRC-15)
- Res. 156 (WRC-15)
- Res. 163 (WRC-15)
- Res. 164 (WRC-15)
- Res. 165 (WRC-19)
- Res. 166 (WRC-19)
- Res. 167 (WRC-19)
- Res. 168 (WRC-19)
- Res. 169 (WRC-19)
- Res. 205 (Rev.WRC-19)
- Res. 212 (Rev.WRC-07)
- Res. 212 (Rev.WRC-15)
- Res. 217 (WRC-97)
- Res. 221 (Rev.WRC-07)
- Res. 222 (WRC-2000)
- Res. 222 (Rev.WRC-12)
- Res. 223 (Rev.WRC-15)**
- Res. 223 (Rev.WRC-19)
- Res. 224 (Rev.WRC-19)
- Res. 225 (Rev.WRC-07)
- Res. 229 (Rev.WRC-19)
- Res. 241 (WRC-19)
- Res. 242 (WRC-19)
- Res. 243 (WRC-19)
- Res. 244 (WRC-19)

RESOLUTION 223 (REV.WRC-15) is not the most recent version of Resolution 223. The latest version is RESOLUTION 223 (REV.WRC-19) and is displayed below.

RESOLUTION 223 (REV.WRC-19)

Additional frequency bands identified for International Mobile Telecommunications

The World Radiocommunication Conference (Sharm el-Sheikh, 2019), considering

a) that International Mobile Telecommunications (IMT), including IMT-2000, IMT-Advanced and IMT-2020, is the ITU vision of global mobile access;

b) that IMT systems provide telecommunication services on a worldwide scale regardless of location, network or terminal used;

c) that IMT provides access to a wide range of telecommunication services supported by fixed telecommunication networks (e.g. public switched telephone network (PSTN)/integrated services digital network (ISDN), high bit rate Internet access), and to other services which are specific to mobile users;

d) that the technical characteristics of IMT are specified in ITU Radiocommunication Sector (ITU-R) and ITU Telecommunication Standardization Sector (ITU-T) Recommendations, including Recommendations ITU-R M.1457 and ITU-R M.2012, which contain the detailed specifications of the terrestrial radio interfaces of IMT;

e) that the evolution of IMT is being studied within ITU-R;

f) that the review of IMT-2000 spectrum requirements at WRC-2000 concentrated on the frequency bands below 3 GHz;

g) that at WARC-92, 230 MHz of spectrum was identified for IMT-2000 in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz, including the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz for the satellite component of IMT-2000, in No. 5.388 and under the provisions of Resolution 212 (Rev.WRC-19);

h) that since WARC-92 there has been a tremendous growth in mobile communications including an increasing demand for broadband multimedia capability;

i) that the frequency bands identified for IMT are currently used by mobile systems or applications of other radiocommunication services;

j) that Recommendation ITU-R M.1308 addresses the evolution of existing mobile communication systems to IMT-2000, and that Recommendation ITU-R M.1645 addresses the evolution of the IMT systems and maps out their future development;

k) that harmonized worldwide frequency bands for IMT are desirable in order to achieve global roaming and the benefits of economies of scale;

l) that the frequency bands 1 710-1 885 MHz, 2 500-2 690 MHz and 3 300-3 400 MHz are allocated to a variety of services in accordance with the relevant provisions of the Radio Regulations;

m) that the frequency band 2 300-2 400 MHz is allocated to the mobile service on a co-primary basis in the three ITU Regions;

n) that the frequency band 2 300-2 400 MHz, or portions thereof, is used extensively in a number of administrations by other services including the aeronautical mobile service (AMS) for telemetry in accordance with the relevant provisions in the Radio Regulations;

Show RESOLUTION 223 (REV.WRC-15) text and compare (Ctrl+M)

Article 5 of the Radio Regulations (RRS) - Resolutions History

Res. 223 (Rev.WRC-15)

RESOLUTION 223 (REV.WRC-15)

RESOLUTION 223 (Rev.WRC-15)

Additional frequency bands identified for International Mobile Telecommunications

The World Radiocommunication Conference (Geneva, 2015), considering

a) that International Mobile Telecommunications (IMT), including IMT-2000 and IMT-Advanced, is the ITU vision of global mobile access;

b) that IMT systems provide telecommunication services on a worldwide scale regardless of location, network or terminal used;

c) that IMT provides access to a wide range of telecommunication services supported by fixed telecommunication networks (e.g. PSTN/ISDN, high bit rate Internet access), and to other services which are specific to mobile users;

d) that the technical characteristics of IMT are specified in ITU Radiocommunication Sector (ITU-R) and ITU Telecommunication Standardization Sector (ITU-T) Recommendations, including Recommendations ITU-R M.1457 and ITU-R M.2012, which contain the detailed specifications of the terrestrial radio interfaces of IMT;

e) that the evolution of IMT is being studied within ITU-R;

f) that the review of IMT-2000 spectrum requirements at WRC-2000 concentrated on the bands below 3 GHz;

g) that at WARC-92, 230 MHz of spectrum was identified for IMT-2000 in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz, including the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz for the satellite component of IMT-2000, in No. 5.388 and under the provisions of Resolution 212 (Rev.WRC-15);

RESOLUTION 223 (REV.WRC-19) [In Force]

RESOLUTION 223 (REV.WRC-19)

Additional frequency bands identified for International Mobile Telecommunications

The World Radiocommunication Conference (Sharm el-Sheikh, 2019), considering

a) that International Mobile Telecommunications (IMT), including IMT-2000, IMT-Advanced and IMT-2020, is the ITU vision of global mobile access;

b) that IMT systems provide telecommunication services on a worldwide scale regardless of location, network or terminal used;

c) that IMT provides access to a wide range of telecommunication services supported by fixed telecommunication networks (e.g. public switched telephone network (PSTN)/integrated services digital network (ISDN), high bit rate Internet access), and to other services which are specific to mobile users;

d) that the technical characteristics of IMT are specified in ITU Radiocommunication Sector (ITU-R) and ITU Telecommunication Standardization Sector (ITU-T) Recommendations, including Recommendations ITU-R M.1457 and ITU-R M.2012, which contain the detailed specifications of the terrestrial radio interfaces of IMT;

e) that the evolution of IMT is being studied within ITU-R;

f) that the review of IMT-2000 spectrum requirements at WRC-2000 concentrated on the frequency bands below 3 GHz;

g) that at WARC-92, 230 MHz of spectrum was identified for IMT-2000 in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz, including the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz for the satellite component of IMT-2000, in No. 5.388 and under the provisions of Resolution 212 (Rev.WRC-19);

When the selected Resolution is an “out-of-date” one, the **Resolutions Browser displays the text of the most recent “up-to-date” version by default.** A “warning” is displayed to indicate this, as shown here for Res. 223 (Rev. WRC-15).

If you still want to display the “out-of-date” version of the Resolution, you may use the corresponding tool to obtain a side-by-side display of the “out-of-date” and “up-to-date” versions of the concerned Resolution, thus allowing for comparing both texts.

The Resolutions Browser performs a quick analysis of the Resolution text, tentatively trying to extract the **cross-references to other provisions, contained in the Resolution text**. Click on the corresponding tool button to display the relevant items.

When appropriate, the depicted references may include:

RR5 footnotes

Other RR Resolutions

ITU-R Recommendations

Selecting one reference causes the software to highlight all occurrences of that reference in the Resolution text. The navigation arrows then allow to navigate the Resolution text from one occurrence of the reference to the next (or previous), as show here.

It is also possible to display the selected reference, either by double clicking it or by using the corresponding information button.

*References marked as "Indirect" are those references appearing in the Resolution text, but which are **not directly referenced in RR5 footnotes**.*

The screenshot displays the Resolutions Browser interface. At the top, a toolbar contains a magnifying glass icon (circled in red) and a button labeled "View references contained in Resolution text (Ctrl+R) (Auto)". Below this, the main text area shows "RESOLUTION 223 (REV.WRC-19)" with several paragraphs of text. A small window titled "5.388" is open over the text, showing the text of the referenced resolution. On the right side of the text area, there are navigation buttons: "Next text match (F3)", "Previous text match (Shift F3)", and font size controls. At the bottom, there are three panels: "RR5 Footnotes (double click to see footnote text)", "Other RR Resolutions (double click to see Resolution text)", and "Recommendations (double click to see Recommendation text)". The "RR5 Footnotes" panel has a list of footnotes, with "5.388" highlighted. The "Other RR Resolutions" panel shows "Res. 212 (Rev.WRC-19)", "Res. 224 (Rev.WRC-19)", and "Res. 225 (Rev.WRC-12)". The "Recommendations" panel shows a list of ITU-R M recommendations, all marked as "Indirect".

The Resolutions Browser

The Resolutions Browser also allows for finding the list of **RR5 footnotes** referencing the **displayed Resolution**. Click on the corresponding tool button to achieve this.

This behavior is very similar to the one obtained through the cross-references area in the [Footnotes View](#).

The screenshot shows the Resolutions Browser interface. At the top, a toolbar contains a funnel icon (circled in red) with a tooltip that reads "View referencing RR5 footnotes (Ctrl+T)". Below the toolbar, the main content area displays "RESOLUTION 223 (REV.WRC-19)" with its text. A blue arrow points from the funnel icon to a table of footnotes.

The table, titled "List of footnotes in the Table of Frequency Allocations", shows 7/827 footnotes displayed. The table has columns for Number, Source, Description, Scope, and Entry into force.

| Number | Source | Description | Scope | Entry into force |
|--------|----------|--------------------------|------------------|------------------|
| 5.346 | WRC-2019 | Explanatory | TERRESTRIAL ONLY | In force |
| 5.346A | WRC-2019 | Explanatory | TERRESTRIAL ONLY | In force |
| 5.429B | WRC-2019 | Explanatory - Limitation | TERRESTRIAL ONLY | In force |
| 5.429D | WRC-2019 | Explanatory - Limitation | TERRESTRIAL ONLY | In force |
| 5.429F | WRC-2019 | Explanatory - Limitation | TERRESTRIAL ONLY | In force |
| 5.441A | WRC-2019 | Explanatory - Limitation | TERRESTRIAL ONLY | In force |
| 5.441B | WRC-2019 | Explanatory - Limitation | TERRESTRIAL ONLY | In force |

A blue oval highlights the table with the text "List of RR5 footnotes referencing Res. 223 (Rev. WRC-19)".

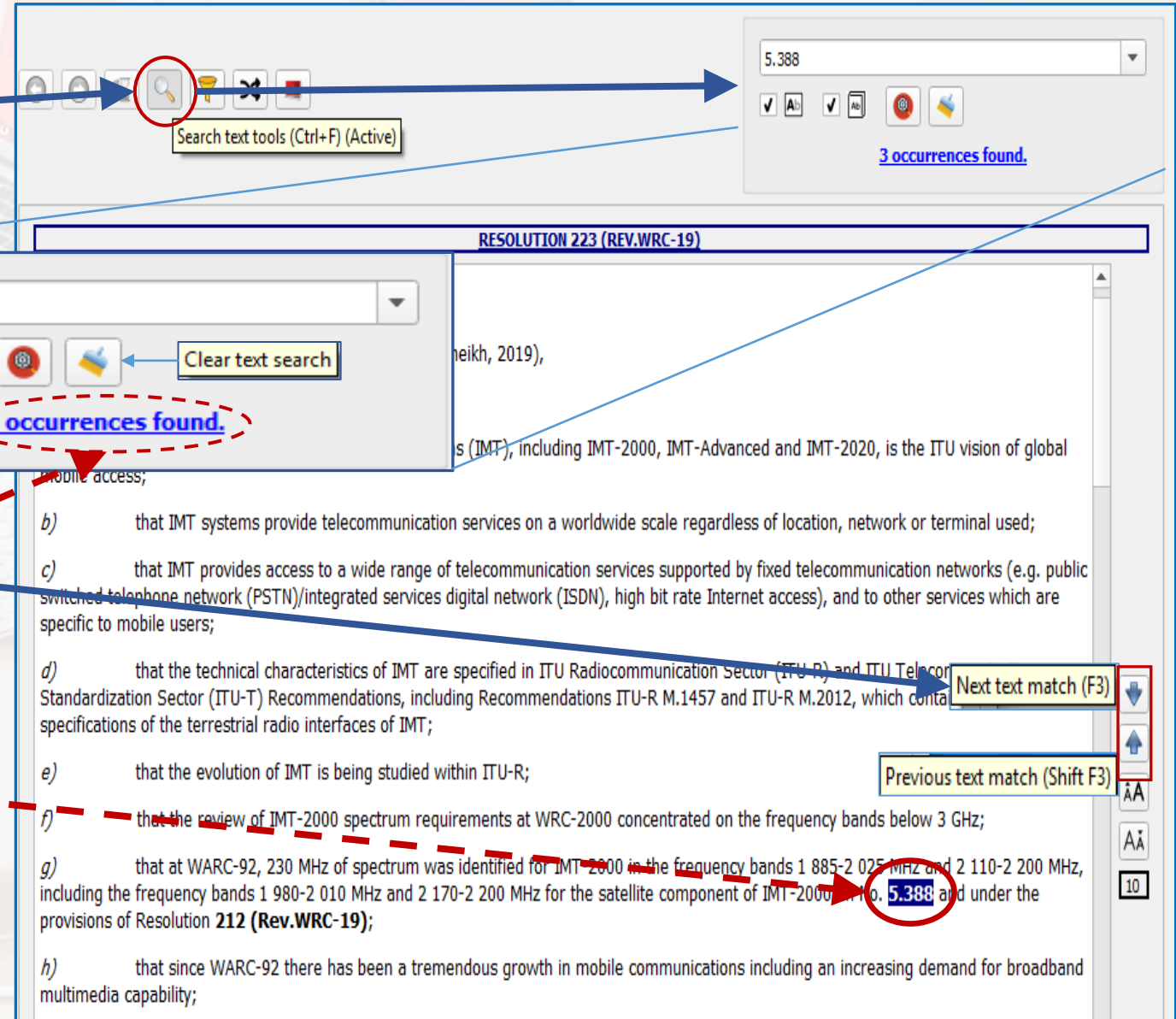
Below the table, there is a section for "Footnote text" showing the text of footnote 5.346A. The text includes a reference to "Res. 223 (Rev.WRC-19)" which is circled in red.

On the right side of the interface, there is a "Resolutions" browser showing a list of resolutions. The list includes:

| Resolutions | |
|---------------------------------------|---------------------------------------|
| Res. 32 (WRC-19) | Res. 339 (Rev.WRC-07) |
| Res. 75 (WRC-2000) | Res. 413 (Rev.WRC-07) |
| Res. 114 (Rev.WRC-15) | Res. 416 (WRC-07) |
| Res. 122 (Rev.WRC-19) | Res. 417 (Rev.WRC-15) |
| Res. 143 (Rev.WRC-19) | Res. 418 (Rev.WRC-19) |
| Res. 145 (Rev.WRC-19) | Res. 424 (WRC-15) |
| Res. 150 (WRC-12) | Res. 425 (Rev.WRC-19) |
| Res. 155 (WRC-15) | Res. 517 (Rev.WRC-19) |
| Res. 156 (WRC-15) | Res. 528 (Rev.WRC-19) |
| Res. 163 (WRC-15) | Res. 539 (Rev.WRC-19) |
| Res. 164 (WRC-15) | Res. 608 (Rev.WRC-19) |
| Res. 165 (WRC-19) | Res. 609 (Rev.WRC-07) |
| Res. 166 (WRC-19) | Res. 610 (WRC-03) |

The Resolutions Browser

The Resolutions Browser is also equipped with a **text search utility**, allowing for searching text matches in the currently displayed Resolution or in all available Resolutions.



1 Type in the text you would like to find in this box. (The software “remembers” your last 20 searches)

2 Specify any additional “criteria” for your text search:
Match case
Match whole word

3 Hit the “Enter” or “F3” key or click the “Next text match” tool button

The software then finds and highlights all matching occurrences of the text (if any), showing the matching count, and the navigation arrows then allow to navigate the Resolution text from one occurrence of the text to the next (or previous).

The example shown here indicates that there are three occurrences of the “5.3888” text in the text of Res. 223 (Rev.WRC-19)

The Resolutions Browser

Use the tool button shown here to perform the text search in all relevant Resolutions texts.

The software then shows the list of Resolutions with matching text. They can then be browsed by selection from the list. The text is displayed, and the matching occurrences are highlighted.

The example shown here applies to the search of "5.388" in all Resolutions and shows four Resolutions with matching occurrences.

The screenshot shows the Resolutions Browser interface. At the top, there is a search input field containing '5.388'. Below it, a toolbar contains several icons, with a gear icon circled in red. A yellow callout box points to this icon with the text 'Look in all Resolutions texts'. Below the search field, a list of results is shown under the heading 'Resolutions with matching text (4)'. The list includes:

- Res. 212 (Rev.WRC-15)
- Res. 221 (Rev.WRC-07)
- Res. 223 (Rev.WRC-19)
- Res. 225 (Rev.WRC-07)

 The 'Include indirect Resolutions' checkbox is checked. The background shows a document with text, where the number '5.388' is highlighted in blue in several places, corresponding to the search results.

This block shows three detailed views of resolution text, each with a title bar and a list of items. The search results are highlighted in blue and circled in red.

- RESOLUTION 212 (REV.WRC-15)**: The text includes 'that, in No. 5.388, WRC-92 identified frequency bands to accommodate certain mobile...'. The number '5.388' is circled in red.
- RESOLUTION 221 (REV.WRC-07)**: The text includes 'that the bands 1 885-2 025 MHz and 2 110-2 200 MHz are identified in No. 5.388 as intended for use on a...'. The number '5.388' is circled in red.
- RESOLUTION 223 (REV.WRC-19)**: The text includes 'that at WARC-92, 230 MHz of spectrum was identified for IMT-2000 in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz, including the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz for the satellite component of IMT-2000, in No. 5.388 and under the provisions of Resolution 212 (Rev.WRC-19)'. The number '5.388' is circled in red.

The Resolutions Browser

The example shown here applies to the search of "HAPS" in all Resolutions and shows 9 Resolutions with matching occurrences.

The screenshot shows the Resolutions Browser interface with a search for "HAPS". A red circle highlights the "Look in all Resolutions texts" button. A callout box points to this button with the text "Look in all Resolutions texts". Below, a list of "Resolutions with matching text (9)" is shown, including Res. 122 (Rev.WRC-19), Res. 145 (Rev.WRC-19), and Res. 150 (WRC-12). Arrows point from these results to the detailed view panels below.

RESOLUTION 122 (REV.WRC-19)

RESOLUTION 122 (REV.WRC-19)
 Use of the frequency bands 47.2-47.5 GHz and 47.9-48.2 GHz by high-altitude platform stations in the fixed service
 The World Radiocommunication Conference (Sharm el-Sheikh, 2019),
 considering
 a) that the frequency band 47.2-50.2 GHz is allocated to the fixed service, the mobile service and the fixed-satellite service on a co-primary basis;
 b) that WRC-97 made provision for the operation of high-altitude platform stations (HAPS), also known within the fixed service in the frequency bands 47.2-47.5 GHz and 47.9-48.2 GHz;
 c) that establishing a stable technical and regulatory environment will promote the use of all co-primary bands 47.2-47.5 GHz and 47.9-48.2 GHz;
 d) that Recommendation ITU-R F.1500 contains the characteristics of systems in the fixed service using 47.2-47.5 GHz and 47.9-48.2 GHz;
 e) that, while the decision to deploy HAPS can be taken on a national basis, such deployment may affect administrations and operators of co-primary services;

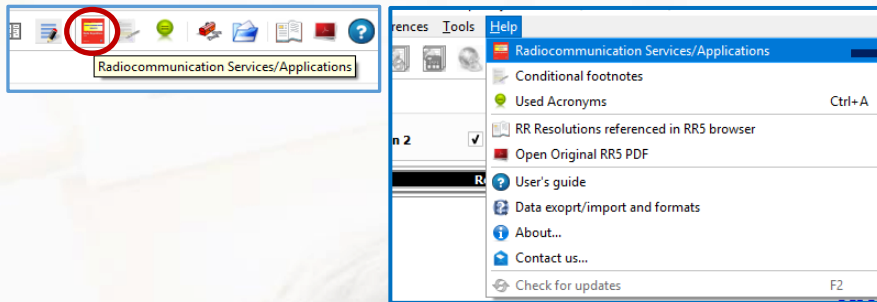
RESOLUTION 145 (REV.WRC-19)

RESOLUTION 145 (REV.WRC-19)
 Use of the frequency band 27.9-28.2 GHz by high-altitude platform stations in the fixed service
 The World Radiocommunication Conference (Sharm el-Sheikh, 2019),
 considering
 a) that WRC-97 made provision for the operation of high-altitude platform stations (HAPS), also known within a 2 x 300 MHz portion of the fixed-service allocation in the frequency bands 47.2-47.5 GHz and 47.9-48.2 GHz;
 b) that No. 4.23 specifies that transmissions to or from HAPS shall be limited to the frequency band 47.2-47.5 GHz and 47.9-48.2 GHz;
 c) that, at WRC-2000, several countries in Region 3 and one country in Region 1 expressed a need for HAPS due to the excessive rain attenuation that occurs at 47 GHz in these countries;
 d) that some countries in Region 2 have also expressed an interest in using a frequency range lower than 47 GHz;
 e) that, while the decision to deploy HAPS can be taken on a national basis, such deployment may affect administrations and operators of co-primary services;

RESOLUTION 150 (WRC-12)

RESOLUTION 150 (WRC-12)
 Use of the bands 6 440-6 520 MHz and 6 560-6 640 MHz by gateway links for high-altitude platform stations in the fixed service
 The World Radiocommunication Conference (Geneva, 2012),
 considering
 a) that ITU has among its purposes "to promote the extension of the benefit of the new telecommunication technologies to all the world's inhabitants" (No. 6 of the Constitution);
 b) that systems based on new technologies using high-altitude platform stations (HAPS) can potentially be used for various applications such as the provision of high-capacity services to urban and rural areas;
 c) that provision has been made in the Radio Regulations for the deployment of HAPS in specific bands, including as base stations to serve IMT networks;
 d) that at WRC-07, a need for provision for gateway links to serve HAPS operations was expressed;

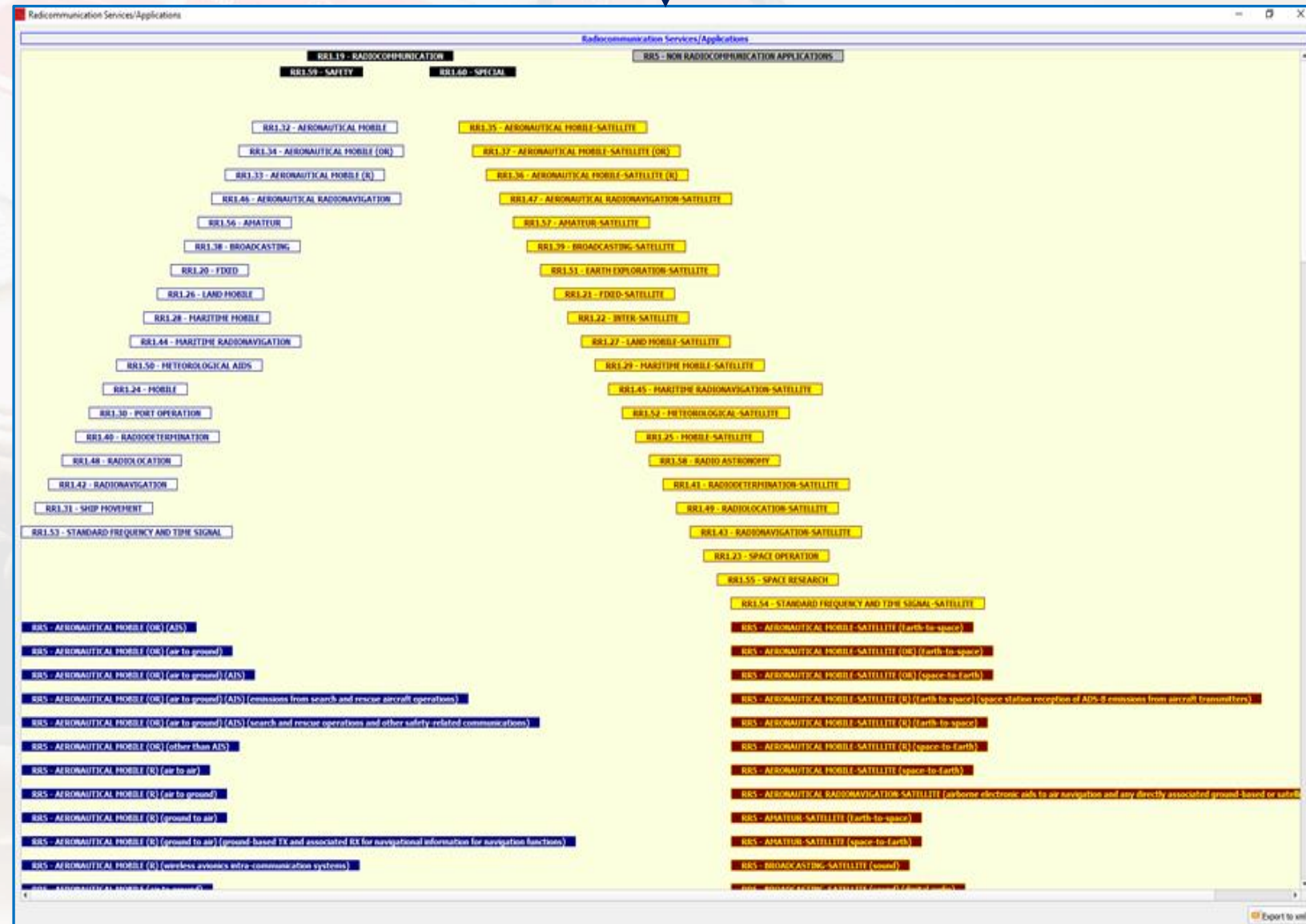
Used Radiocommunication Services and Applications Families



The software is equipped with a mechanism to graphically display the Radiocommunication services and applications, used in the context of RR5, as they are defined in Article 1 (RR1) as well as their declensions and relationships resulting from conditional RR5 footnotes with service or application limitations.

This is accessible using the menu item “**Help – Radiocommunication Services/Applications**” or, alternatively, by clicking on the corresponding icon on the main toolbar.

Terrestrial services, applications and declensions are arranged to the left-hand side and Space services, applications and declensions are arranged to the right-hand side.



Used Radiocommunication Services and Applications Families

Clicking on a given service label causes the software to display a menu for viewing the service relationships: a parent-child relationship diagrams describing the relevant service family is then displayed, describing the schema that is used when performing “smart” service queries on the Main Table.

When appropriate, the software also provides for direct links from this view to the matching allocations in the Main Table view, depending on the service category, similar to what happens when clicking on a service name in the Main Table view.

The screenshot displays a software interface for managing radiocommunication services. At the top, a list of service families is shown, including RR1.46 - AERONAUTICAL RADIONAVIGATION, RR1.56 - AMATEUR, RR1.38 - BROADCASTING, RR1.20 - FIXED (highlighted with a red box), RR1.26 - LAND MOBI, RR1.36 - MARITIME MOBI, and RR1.44 - MARITIME RADIONAVIGATION. A context menu is open over RR1.20 - FIXED, offering options: View service relationships, View matching primary allocations, and View matching secondary allocations. Below this, three tables are visible: 'PRIMARY Allocations to FIXED' (with three columns for Region 1, 2, and 3), 'SECONDARY Allocations to FIXED' (with two columns for Region 1 and 2), and a detailed view of a specific allocation table (Table: 84 - 86 kHz). The detailed view shows a grid of service categories and their associated frequencies. A parent-child relationship diagram is shown on the right, illustrating the hierarchy of services. A small diagram at the bottom right shows a rhombus-lattice model with nodes S1, S2, S3, and S4.

It should be noted that the services families model used by the software is not a fully-linear-tree model, but follows an orthogonal rhombus-lattice model in which a child service may be a parent of (one of) its parent service(s).

Data export/import – The FAT xml format

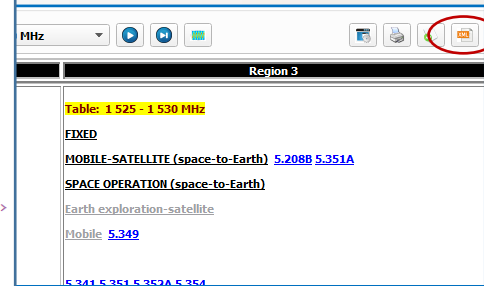
The **RR5FATViewer** software package is equipped with various data export/import utilities. This applies to RR5 footnotes lists, radiocommunication services and applications used in the package and frequency allocations tables.

In addition to data export to pdf and spreadsheets (MS Excel), the main used data format is a simple, easy and straightforward xml format, which allows for generating xml data that can then be used programmatically. It is currently in its first version, labeled the **“FAT_1”** format.

Data export tools are available through the main graphical user interface, depending on the context. Other export tools, as well as data import tools, are available through **The Custom Frequency Allocations Plans Studio**. Using the xml FAT_1 format, user’s defined and customized frequency allocation tables and references can be imported, edited and analyzed.

This section of the user’s guide describes the used xml FAT 1 format, as well as the various ways to access and generate/read xml data. It should be noted that, unless otherwise specified by the user when prompted for filenames, all exported data files are created by default in the **UserExports** folder of the **Application Working Folder**, which is accessible through the “Preferences” menu or the corresponding icon on the main toolbar.

```
<FATBox>
<FATBoxFreqBand minFreq="1525" maxFreq="1530"/>
<FATBoxServices>
  <FATBoxService name="FIXED" category="PRIMARY">
    <FATBoxServiceReferences/>
  </FATBoxService>
  <FATBoxService name="MOBILE-SATELLITE (space-to-Earth)" category="PRIMARY">
    <FATBoxServiceReferences>
      <FATReference name="5.2088" source="RR5_2020"/>
      <FATReference name="5.351A" source="RR5_2020"/>
    </FATBoxServiceReferences>
  </FATBoxService>
  <FATBoxService name="SPACE OPERATION (space-to-Earth)" category="PRIMARY">
    <FATBoxServiceReferences/>
  </FATBoxService>
  <FATBoxService name="Earth exploration-satellite" category="SECONDARY">
    <FATBoxServiceReferences/>
  </FATBoxService>
  <FATBoxService name="Mobile except aeronautical mobile" category="SECONDARY">
    <FATBoxServiceReferences>
      <FATReference name="5.349" source="RR5_2020"/>
    </FATBoxServiceReferences>
  </FATBoxService>
</FATBoxServices>
</FATBoxReferences>
</FATBox>
```



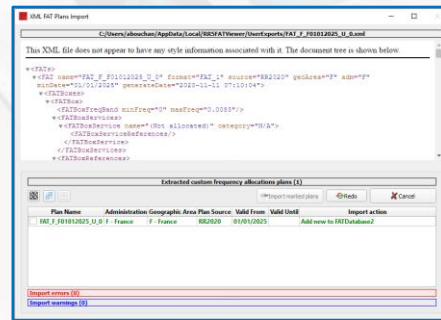
List of footnotes in the Table of Frequency Allocations

Displayed 77/827 footnotes.

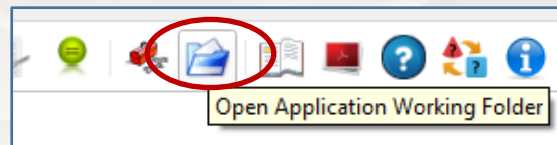
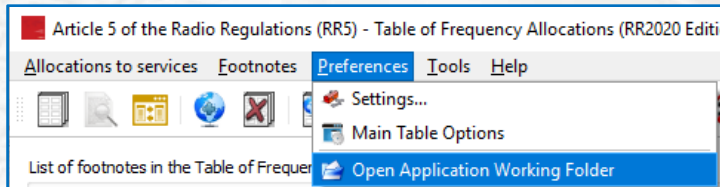
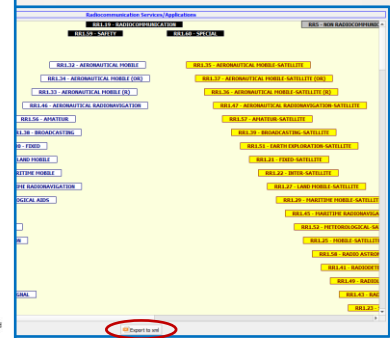
Find footnote 5.

| Number | Source | Description | |
|--------|----------|------------------------------------|--------|
| 5.61 | WRC-1997 | Explanatory - Limitation | TERRES |
| 5.87A | WRC-1997 | Additional Allocation - Limitation | TERRES |

```
<RR5FootnoteList name="RR5_921Footnotes" format="FAT_1" source="RR5_2020" generated="2020-11-11 06:38:20">
  <RR5Footnote>
    <Foot_IdId/>Foot_IdId
    <Foot_number>"9.81"/>Foot_number
    <Foot_src>"WRC-1997"/>Foot_src
    <Foot_scope>"TERRESTRIAL_ONLY"/>Foot_scope
    <Foot_desc>"EXPLANATORY LIMITATION"/>Foot_desc
  </Foot_text>
  <[DATA] In Region 2, the establishment and operation of stations in the maritime radionavigation service in the bands 70-90 kHz and 110-130 kHz shall be subject to agreement obtained under No. 9.21 with administrations whose services, operating in accordance with the Table, may be affected. However, stations of the fixed, maritime mobile and radiolocation services shall not cause harmful interference to stations in the maritime radionavigation service established under such agreements.
  </Foot_text>
  <Foot_ropp>""/>Foot_ropp
</RR5Footnote>
  <RR5Footnote>
    <Foot_IdId/>Foot_IdId
    <Foot_number>"9.87A"/>Foot_number
    <Foot_src>"WRC-1997"/>Foot_src
    <Foot_scope>"TERRESTRIAL_ONLY"/>Foot_scope
    <Foot_desc>"ADD_ALLOCATION LIMITATION"/>Foot_desc
  </Foot_text>
  <[DATA] Additional allocation : In Uzbekistan, the band 526.5-1 606.5 kHz is also allocated to the radionavigation service on a primary basis. Such use is subject to agreement obtained under No. 9.21 with administrations concerned and limited to ground-based radiobeacons in operation on 27 October 1997 until the end of their lifetime. (WRC-97)
  </Foot_text>
  <Foot_ropp>""/>Foot_ropp
</RR5Footnote>
  <RR5Footnote>
    <Foot_IdId/>Foot_IdId
    <Foot_number>"9.92"/>Foot_number
    <Foot_src>"WRC-1997"/>Foot_src
    <Foot_scope>"TERRESTRIAL_ONLY"/>Foot_scope
    <Foot_desc>"LIMITATION"/>Foot_desc
  </Foot_text>
  <[DATA] Some countries of Region 1 use radiodetermination systems in the bands 1 606.5-1 625 kHz, 1 635-1 800 kHz, 1 850-2 100 kHz, 2 184-2 300 kHz, 2 502-2 850 kHz, 3 500-3 800 kHz, subject to agreement obtained under No. 9.21. The radiated power shall not exceed 50 W.
  </Foot_text>
</RR5FootnoteList>
```



```
generated="2020-11-11 06:41:25">
```



The Custom Frequency Allocations Plans Studio

The **RR5FATViewer** software package provides an environment for creating, importing and editing Country Specific Frequency Allocations Tables (FATs) (also referred to here as Plans), thus allowing to customize the RR5 derived data according to national use. This however does by no way directly alter the content of the standard RR5 Table of Frequency Allocations, nor the derived customized table and country specific FTAs. Instead, it is based on creating specific user's customized databases and work on importing and editing data there. Customized user's references may also be added, edited and referenced (in addition to RR5 footnotes), thus providing a mechanism to possibly integrate national references while customizing the data.

This environment is called the **The Custom Frequency Allocations Plans Studio** (and simply referred to hereafter as the **"Studio"**); this section of the user's guide describes its features.

The screenshot displays the 'The Custom Frequency Allocations Plans Studio' interface. The main window shows the 'Active Administration: F - France' and 'Active Database FATDatabase1 - Content Overview (4 plan(s))'. Below this, there are several windows and panels:

- Available Custom Databases (1):** A table listing databases, with 'FATDatabase1' selected.
- Plan Properties:** Shows details for 'FAT_F_F_U31122024_0', including Plan Name, Administration (F - France), Geographic Area (F - France), and Frequency Bands (608 - 614 MHz).
- Custom user's references manager:** A window for managing custom references, showing a list of references and their details, such as 'MyTestRef' with a reference designation and source.
- Import From:** A window for importing data, currently set to 'Standard RRS 2020 Database for Administration'.
- Frequency Band / References / Allocated Services:** A table showing frequency bands and their associated services. For example, the 608 - 614 MHz band is used for BROADCASTING, LAND MOBILE (applications ancillary to broadcasting), and RADIO ASTRONOMY.
- Allocation Box Properties [292]:** A window showing the properties of a specific allocation box, including services and references.

The main window also displays a table of frequency allocations for the 608 - 614 MHz band, showing services like BROADCASTING, LAND MOBILE, and RADIO ASTRONOMY.

| Frequency Band | Service | Frequency Range |
|---------------------|---------------------------------------|------------------|
| 526.5 - 1 608.5 kHz | BROADCASTING | 5.90 5.92 |
| 1 606.5 - 1 625 kHz | FIXED | 5.90 5.92 |
| 1 625 - 1 635 kHz | LAND MOBILE | 5.90 5.92 5.96 |
| 1 635 - 1 800 kHz | RADIOLOCATION | 5.90 5.92 5.96 |
| 1 800 - 1 810 kHz | FIXED | 5.100 |
| 1 810 - 1 850 kHz | FIXED | 5.92 5.96 5.103 |
| 1 850 - 2 000 kHz | MOBILE except aeronautical mobile | UR_ThyTestRef1 |
| 2 000 - 2 025 kHz | FIXED | 5.92 5.103 |
| 2 025 - 2 045 kHz | MOBILE except aeronautical mobile (R) | 5.92 5.103 5.104 |
| 2 045 - 2 160 kHz | FIXED | 5.92 |

| Plan Name | Administration | Geographic Area | Aligned with main territory | Plan Source | Valid From | Valid Until | Updated |
|-----------|-----------------------|-----------------|---------------------------------|-------------|------------|-------------|--------------------------------|
| 1 | FAT_AMS_F_U31122024_0 | F - France | AMS - Saint Paul and Amsterdam | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 2 | FAT_BLM_F_U31122024_0 | F - France | BLM - Saint Barthélemy | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 3 | FAT_CPT_F_U31122024_0 | F - France | CPT - Clipperton | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 4 | FAT_CRO_F_U31122024_0 | F - France | CRO - Crozet Archipelago | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 5 | FAT_F_F_U31122024_0 | F - France | F - France | N/A | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 6 | FAT_GLP_F_U31122024_0 | F - France | GLP - Guadeloupe | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 7 | FAT_GUF_F_U31122024_0 | F - France | GUF - French Guiana | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 8 | FAT_KER_F_U31122024_0 | F - France | KER - Kerguelen | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 9 | FAT_MAF_F_U31122024_0 | F - France | MAF - Saint Martin | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 10 | FAT_MRT_F_U31122024_0 | F - France | MRT - Martinique | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 11 | FAT_MYT_F_U31122024_0 | F - France | MYT - Mayotte | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 12 | FAT_NCL_F_U31122024_0 | F - France | NCL - New Caledonia | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 13 | FAT_OCE_F_U31122024_0 | F - France | OCE - French Polynesia | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 14 | FAT_REU_F_U31122024_0 | F - France | REU - Reunion | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 15 | FAT_SPM_F_U31122024_0 | F - France | SPM - Saint Pierre and Miquelon | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |
| 16 | FAT_WAL_F_U31122024_0 | F - France | WAL - Wallis and Futuna | No | RR2020 | 31/12/2024 | abouchan - 16/11/2020 08:21:11 |

Package updates – Data and Software

Major releases of the package correspond to the new editions of Radio Regulations. The active major release is **RR 2020 (WRC-19)**. **A new license is required for every new major release** (usually following the holding of a WRC). The next major release is expected after WRC-23.

Between two major releases (~4 years), the package will be **subject to updates** concerning both data and software. These will be **released freely to subscribers holding licensed packages**. These updates may include:

- **Data updates** resulting from new or revised releases of the used texts. This will typically be the case concerning the release/updates of new Rules of Procedure editions after every RRB meeting.
- **Data updates** resulting from reported and fixed bugs concerning mismatches and errors noted between the data the package displays and the official RR5 content in the Radio Regulations.
- **Software updates** corresponding to newly added or enhanced features.
- **Software updates** resulting from reported and fixed bugs.
- **New or updated documentation**

Notifications will be sent to subscribers holding licensed packages. Please contact Sales@itu.int for more information.

Limitations and Future Enhancements

| Feature | Status |
|--|---------------------|
| Multilingual user interface and data display | Under development |
| BR IFIC interactions | In design phase |
| Application Programming interface (API) | Under development |
| Data model and algorithms description | Under development |
| Cross-link to the RR Navigation Tool | In design phase |
| Standardizing the install and setup utilities | Under development |
| Portability to platforms other than Windows | Under consideration |