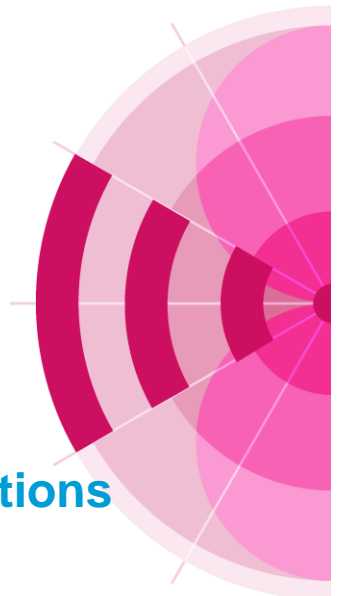30TH WORLD RADIOCOMMUNICATION SEMINAR

24 – 28 October 2022
Geneva, Switzerland

# Radio Regulations
## BR Software Tools

## 🚩 RR and Associated Texts Navigation

## 🚩 RR Article 5 Table of Frequency Allocations
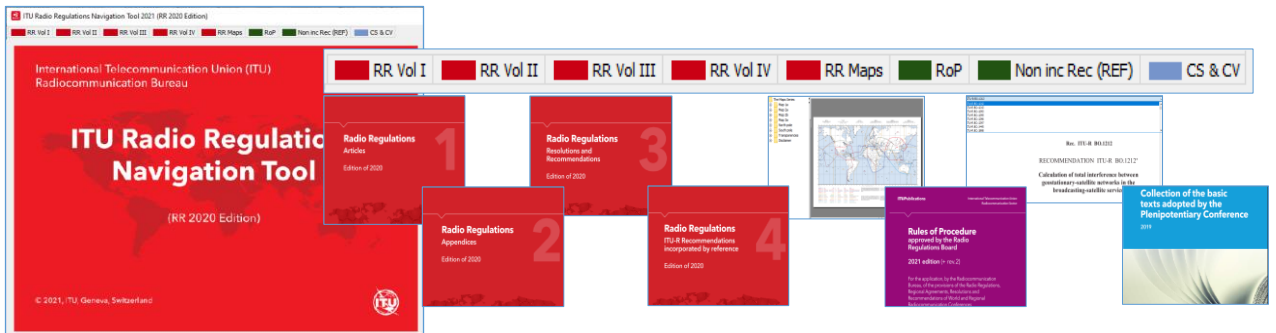
www.itu.int/go/wrs-22
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1

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## The RR Navigation Tool Software

The Radio Regulations is the international treaty governing the global use of radio-frequency spectrum and satellite orbits. It contains the complete texts as adopted by the World Radiocommunication Conference (Geneva, 1995) (WRC-95) and subsequently revised and adopted by World Radiocommunication Conferences, including all Appendices, Resolutions and ITU-R Recommendations incorporated by reference.

Developed by the Radiocommunication Bureau, the RR Navigation Tool (aka the RR Browser) software is designed to assist countries and industry navigate the **ITU Radio Regulations**. It also gives users a one-stop access to: the **Rules of Procedure**, which guide practical implementation, **ITU-R Recommendations** (international technical standards for efficient spectrum use by all radiocommunication services) and relevant articles of the **ITU Constitution and Convention**.



Introductory video at https://www.youtube.com/watch?v=9aZnTMcbLmA&t=13s

2

The Navigation Tool offers a pure PDF viewing solution (running on Windows©, Mac OS X© and Linux©) without requiring any further download. With its built-in **cross-referencing** mechanism, it helps navigating over 15,000 references (articles, provisions, annexes, appendices, etc.) and provides an easy access to the in-force versions of the ITU-R Recommendations cited but not incorporated by reference in the RR.



The tool remembers the **navigation history** and enables **powerful searches** over the four volumes of the RR, with a quick identification of the rule of procedure applicable to a specific provision.

3

Article 5 (Frequency Allocations) of the Radio Regulations and its acclaimed Table of Allocations ("RR5 TFA") is the heart of the Radio Regulations -- it establishes the technical requirements for the use of the radio spectrum by all radio services globally. Understanding how the radio spectrum is regulated and develop compliant radio systems, requires first understanding the RR5 TFA.



The RR5 TFA has evolved over time to reflect the outcome of the work of the various WRCs on the harmonized, equitable and rational global use of the limited natural resources of the frequency spectrum and satellite orbits and associated Radiocommunication services. Taking into account the flexibility provided through "country footnotes", it provides the technical and economical long-term views for introducing and accommodating new technologies and services, while maintaining and protecting existing ones. It is therefore important to follow the evolution of the Table and adapt the national use of these resources accordingly.

4

# What is the RR5 TFA Software?
## Why is it important?

Given the complexity and the volume of data contained in the Article 5 of the Radio Regulations, the software offers a consolidated view and an easy way to perform various search and queries, as well as some calculations and modelling algorithms. It is a stand-alone application that provides a mechanism to electronically use, query and analyse the RR5 TFA 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 software application runs on individual user's PC (currently on MS Windows© only) and requires neither network nor Internet connection. This software (which is limited to the scope and boundaries of the Article 5 of the Radio Regulations) is the perfect complement to the Radio Regulations (2020 Edition) that incorporates the decisions of the 2019 World Radiocommunication Conference.
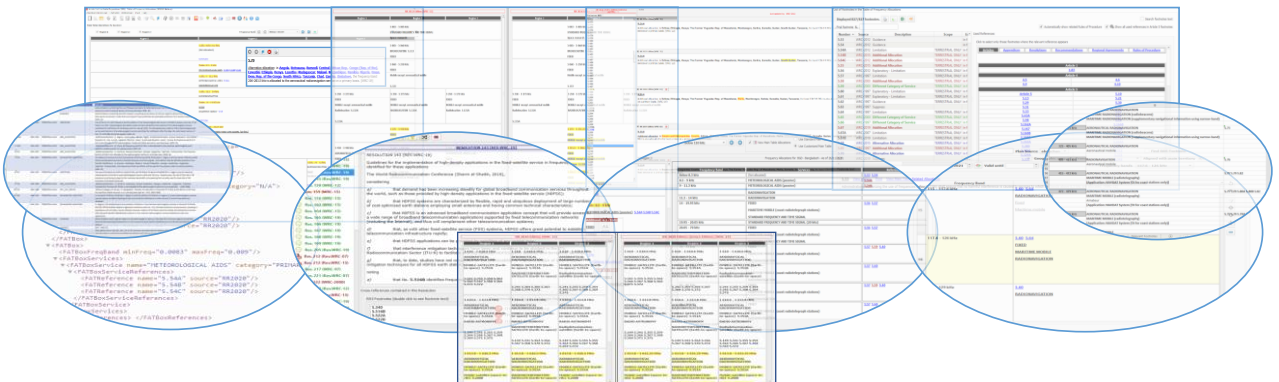
The RR5 TFA Software will be regularly updated and enhanced after the release of the new edition of the Radio Regulations following each WRC, reflecting the most recently adopted decisions. Further functionalities are planned to be incorporated, mainly introducing an Application Programming Interface (API) and direct interfaces with other electronic regulatory publications (such as the RR Navigation Tool). It is also planned to link the software to the locally installed Terrestrial and Space BR International Frequency Information Circulars (BR IFICs), which would allow cross-checking with the content of the Master International Frequency Register (MIFR).
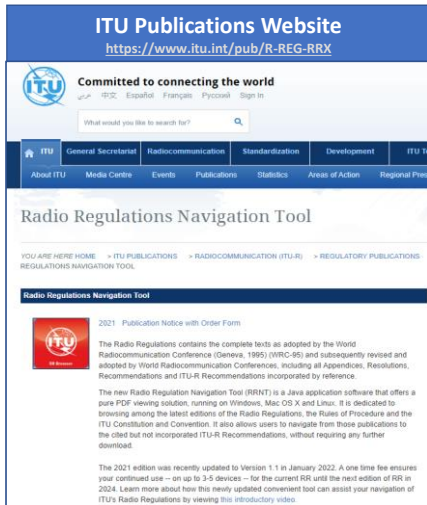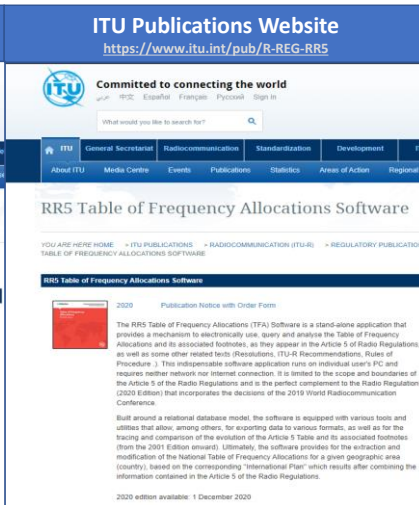
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# RR5 TFA Software Main Features and Characteristics

Built around a relational database model, the software is equipped with numerous 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 "International" National Table of Frequency Allocations for a given geographic area (country), which results after combining the information contained in the Article 5 of the Radio Regulations.



In this context, this analysis software package provides a helping and supporting electronic mechanism to check, analyse and investigate the content of the RR5 TFA, thus also possibly contributing to ease the preparatory work for future WRCs.

6

# Getting the Software Packages



| ITU Publications Website | ITU Publications Website |
|---|---|
| **https://www.itu.int/pub/R-REG-RRX** | **https://www.itu.int/pub/R-REG-RR5** |

| Contact **ITU Sales** |
|---|
| **sales@itu.int** |
| Where information on subscription, pricing and licensing models is also available. |

# Packages Updates – Data and Software

**Major releases** of the packages correspond to the new editions of Radio Regulations. The active major release is associated with the **RR 2020 (WRC-19)** edition. **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 packages 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 packages display and the RR content.
- **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.

# Radio Regulations – BR Software Tools

*Join us at the workshops for live demos and discussions*
*Terrestrial: Thursday 27/10/2022, 09:00 Room K*
*Space: Friday 28/10/2022, 14:00 Room Popov*

# Thank you!

ITU – Radiocommunication Bureau

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9