LS telcom
Smart Spectrum Solutions

ITU WRC19 is over - so what's next?

A country's national frequency allocation table (FAT) is a critical reference document which is an essential part of ensuring that the radio spectrum is managed effectively. It sets out how the spectrum is divided up between the various services, and provides regulatory certainty to those using the spectrum, and those seeking to use it, on which frequencies can be used for which applications. Whilst at their heart, each FAT is based on the ITU Radio Regulations, most countries have national variations which need to be taken account of, and as a result each nation's FAT is, to some extent, unique.

The 2019 World Radio Communication Conference (WRC-19) attracted over 3400 participants from 163 of ITU's 193 member states. The conference dealt with 568 documents and produced 52 new resolutions and 51 amendments for existing resolutions. These modifications to the Radio Regulations will lead the way to a variety of new wireless applications, such as:

- millimetre wave frequencies for high bandwidth 5G services
- high altitude platforms (HAPS) to deliver connectivity in remote areas
- usage of ESIM across the whole of the Ka-Band
- intelligent transport systems to connect vehicles, improve traffic management and assist in safer driving

ITUWRC
SHARM EL-SHEIKH2019

28 October – 22 November
Sharm El-Sheikh, Egypt

38th World Radio Communication Conference 2019 (WRC-19)

High attitude platform: Stratobus[1]
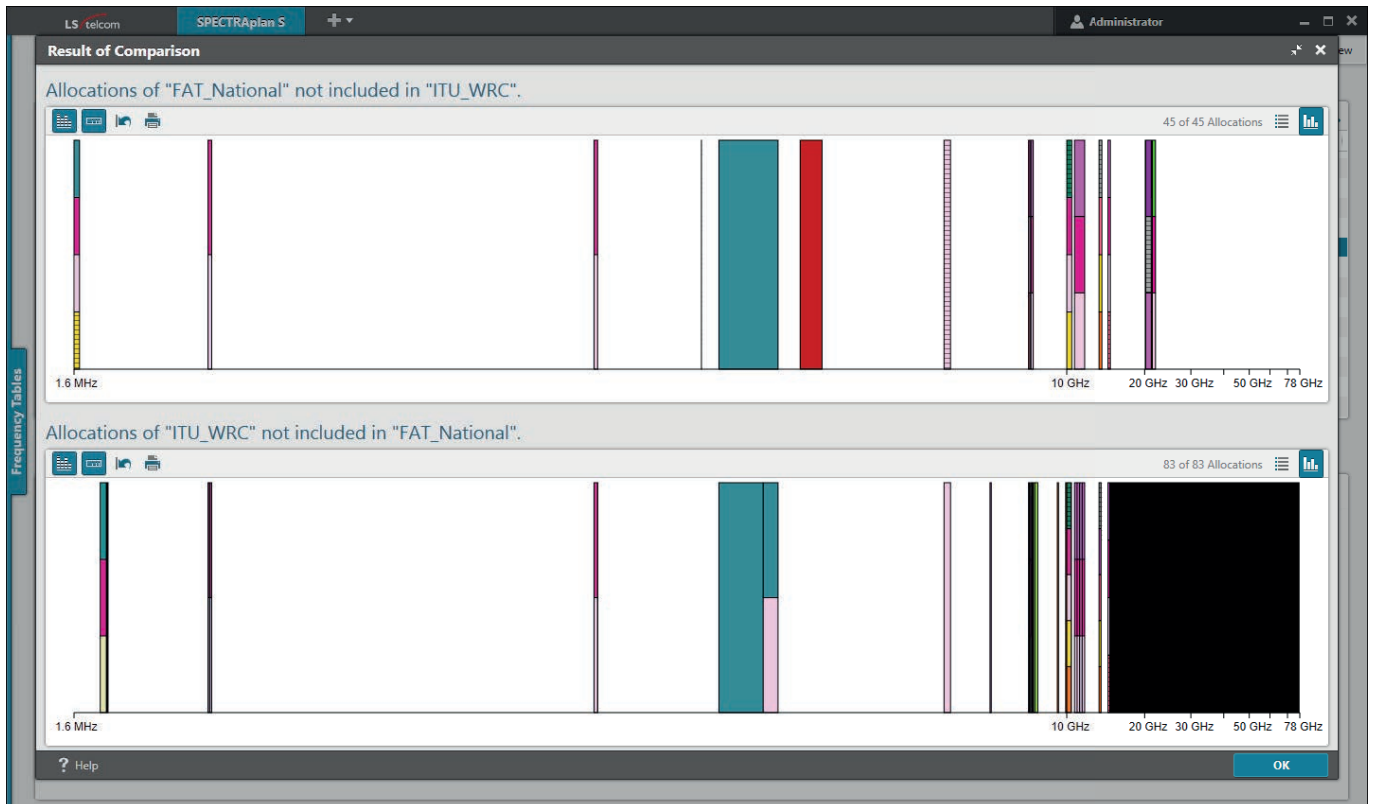
Comparison of national FAT with ITU WRC outcomes using SPECTRAplan S

However, in order that the benefits of these changes can be felt, national regulators and administrations now need to modify their FATs to incorporate the new allocations and identifications and this can be a complex and time-consuming process.

Updating the FAT almost always requires consultation with national stakeholders as the changes will impact spectrum currently in use to deliver existing services. Bringing new services into use may also require **compatibility studies**, to ensure that they will not cause harmful interference to existing services in the same or an adjacent band (e.g. Fixed Satellite Services vs. 5G).

This may lead to a **re-farming program** to clear these incumbent users from a band in order to make it available for a new service, such that some frequencies may not be available until a specified date. Restrictions such as this need to be included within the revised FAT, to ensure that it is truly the go-to source of national spectrum information.

LS telcom has both the experience and the tools to update and even modernize FATs to the highest international standards. We can:

- **Prepare a baseline FAT based on the relevant ITU Radio Regulations**
- **Compare the existing FAT with the ITU plan and identify any areas where changes may be necessary**
- **Prepare consultation documents, and support and host stakeholder workshops and meetings**
- **Examine international and regional norms regarding harmonized spectrum use**
- **Execute compatibility studies to avoid harmful interference with existing radio services**
- **Provide future studies to prepare for the upcoming WRC23**
- **Attend future WRC preparation meetings for support and contribution to follow developments for WRC 2023 and 2027**

Carefully consider the following topics:

- Which decisions have an impact on my country's FAT?
- How do I distill the 600 pages of the final acts into something useable?
- Which existing radio services are affected by the decisions?
- Do I need to switch-off old technologies (e.g. 2G, analogue PMR) to clear space for new services? How does this impact the FAT?
- How do I handle the introduction of new technologies (e.g. 5G, IoT, HAPS, ITS)?

Our consultants can help you to answer these questions and many more.

For further information, please visit our website www.LStelcom.com or contact Info@LStelcom.com.