

#### HTZ v.2023.9

We have introduced several exciting updates to HTZ Communications & HTZ Warfare v.2023.9 release to enhance the user experience. Here are the key improvements:

**HTZ Warfare: Jammer Uplink coverage** – Checks what can be received by the jammer while it's jamming a virtual transmitter located anywhere on the map.

# **SPECTRUM MANAGEMENT / PLANNING**

**Site Selection – Area/route planning** – min. distance inter-station rule was added to minimise the risk of adding stations that are too close to each other.

**Localisation** – addition of a new mode for DF localisation accuracy maps based on location and azimuth of the DF. The accuracy is only calculated if DFs are not aligned.

Wind turbine parameters – addition of RCS methodology from CAA CAP 670.

**Network Planning / Subscribers planning** – The existing feature selects stations to cover areas or points based on the coverage of stations. The new function selects stations to cover a maximum number of subscribers.

RS / RRSI – Option to consider RS/RSSI in Subscriber planning, Point planning, Area planning and Route planning.

**Subscriber/parenting/site optimising** – Simplified process enabling users to deactivate stations without connected subscribers.

**MLAT** – A new feature to select sensors added by removing stations not required to fulfil coverage objectives for precise localisation. It also offers a redundancy option.

### **BROADCAST – CCTV – PMSE**

**COFDM LP Map** - Added surface factor in the clutter settings to exclude some clutter codes during calculations.

**SFN Launch delay assignment** – Population filter added to assign delays to reduce interference at points with population.

### **PROPAGATION MODELS**

**Excluded frequencies** – Assignment perform option to exclude up to 10,000 frequencies via REST API. **NTIA Model** – Variable mode added and all parameters are now saved in the PRM. CFG files are no longer used for this model.

## **MOBILE**

**Coverage – Traffic – Erlang builder** – Modification of the calculator to compute the total number of lines (slots) required according to the total demand (in Erlang) and the GOS to achieve (in %). From there, the number of TRX required can be deduced (from the number of slots per TRX and the number of reserved slots).





**CO/I (C/I required N=0)** - Added to equipment library to specify the min. C/I is required for interference calculations or as required by ITU-P 530 recommendation.

**MW Link parameters** – Added FD/2+0 configuration to consider links that transmit two different frequencies with two different beams and not just frequency diversity.

**MW – Link path budget** – The polarization of the link and the rain attenuation have been added to the CSV report.

**Polygon list** – Addition of centroid report to identify the coordinates of the centroid of a polygon. **Add coverage to recorder** – Simplifies reloading of coverage/s.

TX parameters – Addition of power unit for W/dBW/dBm/kW

**Export to Google Earth** – Addition of labels for station callsigns and addresses.

**Filter Option** – Addition of an option to consider coverage inside a polygon and within a given distance outside of the polygon.

**Print legend dialog box** – Addition a small legend option to reduce the size of the legend.

**Map Convertor** – Addition of TIFF8 to IMG/RIM feature to support compressed and uncompressed TIFF files.

**Preferences: Update site** – Allows imported sites with a specified altitude to be optimised and saved in the parameter file.

**Reverse coverage dBm unit** – RSSI – considers stations where the reverse coverage has been calculated with stations having a different receiving gain.

#### **CARTOGRAPHY**

**Rectangle / Polygon tool** – function to convert clutter codes to the result layer. **Rectangle selection /Shift-Rotate current layer** - to relocate or move an area for layers imported with the wrong projection code.

