# **EPFD** Package What's New

# March 2019 release

### **EPFDPrepare**

- Improvements in user interface
- Context help is added
- Additional SRS data import options relating to frequency assignments groups:
  - Manually select groups to import from Notice
  - Generate groups from Masks
  - o Generate groups from Notice

*First option* is a default method of selecting frequency assignments groups which can be imported from source database. Under this option, program looks for frequency assignments groups which are subject to Article 22 or No. 9.7B coordination provision and lets user to select which are the groups need to be imported from.

**Second option** is using information provided in the masks regarding minimum and maximum frequency of the frequency range to which particular PFD/EIRP mask is applicable. Provided that only single PFD or EIRP mask is applicable to specific frequency range only one new group will be generated. The advantage of this option is that user don't have to decide which exact frequency groups needs to be imported – program will generate new groups for the user.

**Third option**, like in the case of the first uses information on Article 22 EPFD limit applicable frequency band and frequency assignments used in the mask. But unlike first option, this option generates completely new groups, while avoiding having multiple groups operating in overlapping frequency band.

- Validation of input nbr\_sat\_td maximum number of co-frequency tracked non-geostationary satellites receiving simultaneously
- It is possible now to assign a mask to individual satellites
- Other fixes

#### **EPFDResultsView**

It is possible to add same type of results from different files to chart without generating an error

#### Agenium EPFD, Transfinite EPFD

- 9.7B station selection supports now new code for notification reason 'C' which is replacing older code 'D'

# November 2017 release

## **EPFDPrepare, EPFDResultsView**

- Improvements in user interface

#### <u>GIBC</u>

- Additional options to for time-step TS1 and selection of limits to calculate

### Agenium EPFD, Transfinite EPFD

Supports SNS v8 database format

- Timestep TS1 is introduced to improve calculation performance Alignment of WCG algorithm
- EPFDResults database may contain now PDF-table (probability distribution function) of EPFD in addition to complementary CDF

# June 2017 release

## **EPFDPrepare**

- Fixed **mask\_info** table frequency range calculation, now supports two digits after decimal point.
- Additional checks to avoid closing without saving data.

Improvements to Mask dialogs.

- If elevation angle is entered for single group, the program asks whether it should be automatically filled for the remaining groups.

# April 2017 release

#### **EPFDResultsView**

- Corrected display of EPFD limits curve.

#### **EPFDPrepare**

- Includes additional validation of nbr\_sat\_td and perig\_arg.
- Mask validation displays fatal error message in the case XML-data could not be parsed.

# November 2016 release

#### What's new

## <u>GIBC</u>

- Increased space for labels showing paths to input databases.

#### **EPFDResultsView**

- Labels added to X-axis and Y-axis

- Checking 'Show legend' will display graphs legend.
- Double clicking a result on chart legend displays color selection dialog which can be used to change the color of result graph.
- Double clicking on any horizontal or vertical grid line displays color selection dialog, which can be used to change the color of horizontal/vertical grid lines.
- If several results are plotted with the different reference bandwidths, the X-axis title will display all the references bandwidths, e.g. EPFD, dBW/m^2/40,1000 kHz.
- Data points can be viewed by hovering mouse along the result curve.

### **EPFDPrepare**

- Minor bug fixes
- Supports import of the notice from SNS v8 database into SNS v7 database
- Changed modality of validation. If there are validation errors present at any page, the program would allow to continue further with user confirmation

### Mask\_schema.xsd

- Increased pfd\_val and eirp\_val fraction digits to 6 to correspond to double precision

### <u>User guide</u>

- Updated to version 1.1

### Agenium EPFD

- Changes to the alpha calculation to improve alignment between Transfinite and Agenium software.
- Changes to the EPFD UP calculation to address an issue found in testing
- Fixes to the WCG Down calculation

## Transfinite EPFD

- Guest account issue fixed
- Changes to the alpha calculation to improve alignment between Transfinite and Agenium software.
- Changes to the EPFD UP calculation to address an issue found in testing
- Fixes to the WCG Down calculation
- Ability to select a subset of EPFD runs to perform
- Improve performance when number of runs < number of threads.