

3.3.3 Transmitter

Set now the victim link transmitter by selecting the transmitter tab:

- the Interfering link transmitter uses a Power of 33 dBm; (#1 of Figure 86)
- the Interfering link transmitter uses an omni-directional antenna of 11 dBi gain; (#2)
- the Interfering link transmitter uses an antenna height of 30m; (#3)
- the Interfering link transmitter uses an emission bandwidth of 200 kHz and a reference bandwidth $B_{ref} = 200$ kHz. (#4)

The emission bandwidth of 200 kHz is defined through the emission mask (see Figure 86). This interfering link transmitter emission mask is defined in dBc. Then, enter an attenuation given in a reference bandwidth, the corresponding power is derived using the following equation:

$$P(\text{dBm}/B_{ref}) = P_e(\text{dBm}) + Att(\text{dBc}/B_{ref}) \quad (\text{Eq.18})$$

Where P_e is the power of the Interfering link transmitter within the emission bandwidth (also known as the in-band power). The sign of $Att(\text{dBc}/B_{ref})$ is explained in section A7.5. Then, in this example, within the emission bandwidth (200kHz- offset between -0.1 MHz and 0.1 MHz), the power is 33 dBm, if the reference bandwidth is supposed to be equal to the emission bandwidth then $Att = 0$ dBc/ B_{ref} , this gives:

$$33 \text{ (dBm/200kHz)} = 33 + 0(\text{dBc}/B_{ref})$$

The attenuation in dBc should be taken equal to 0 dBc/200 kHz (the link between the mask given in a reference bandwidth and the mask defined in 1 MHz is explained in ANNEX 6:).

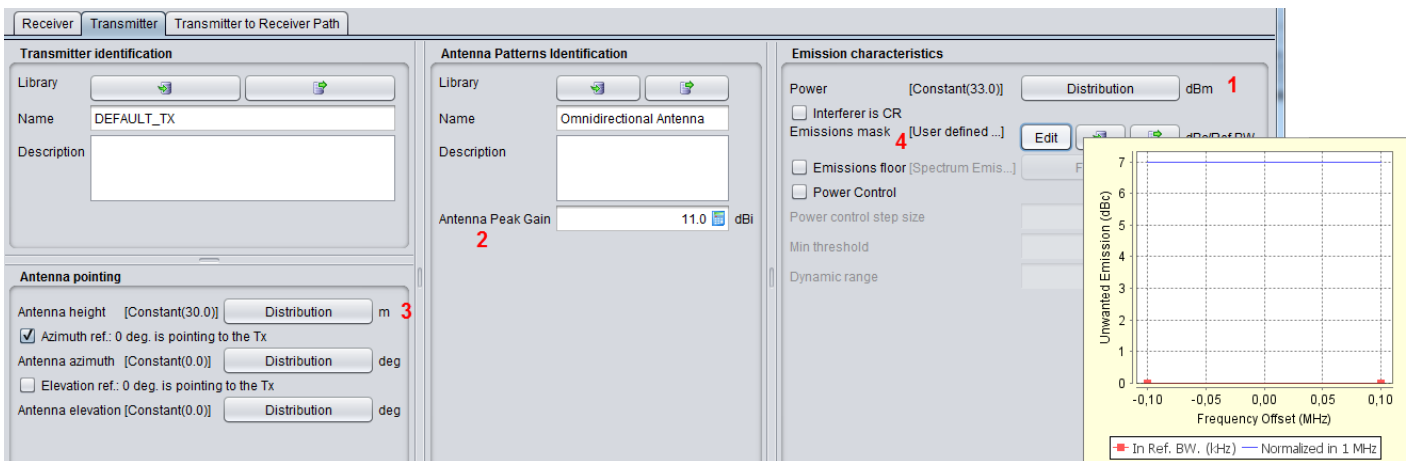


Figure 86: Setting up the interfering link transmitter

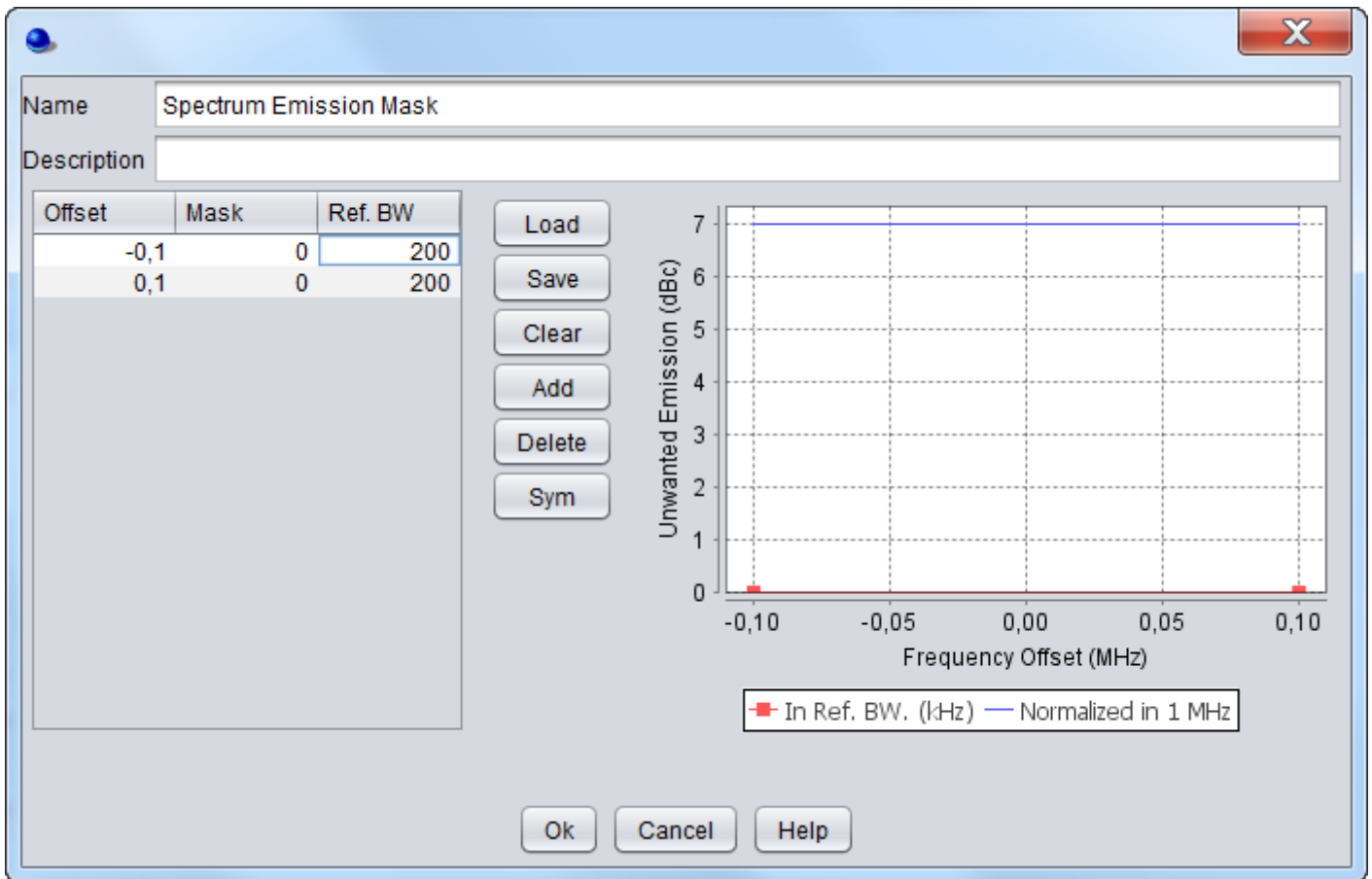


Figure 87: Spectrum emission mask settings

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