

# ALGORITHM DESCRIPTION

The simulation algorithm is implemented according to the specification outlined in Rec. ITU-R M.2101 – section 3.4.1 for downlink and section 3.4.2 for uplink. This implementation addresses both cases of IMT-2020 as the interfering and victim system.

Flowcharts describing the specific SEAMCAT implementation are provided in [Annex 15](#).

Note that the number of UEs per BS  $K$  is not set explicitly in SEAMCAT but is derived from the user parameters 'Max. RBs per BS' (parameter  $M$  in M.2101) and 'Number of RBs per MS' (parameter  $n$  in M.2101), i.e.:

$$K = M/n$$

The  $K$  users are distributed randomly within the sector of each BS.

Power control is implemented similarly to OFDMA systems (see section [9.10](#)), as recommended in M.2101 section 4.1.

---

Revision #1

Created 2026-04-21 07:20:56 UTC by ECO TECH

Updated 2026-04-21 07:21:10 UTC by ECO TECH