

Specification handling of 3GPP-based access to unlicensed spectrum from Rel-15 onwards

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3GPP-Based Unlicensed Access

- 3GPP has always highlighted the primacy of licensed spectrum for providing QoS to cellular operators while support for 3GPP-based access to unlicensed spectrum was being specified in Rel-13/14 with LAA.
- This remains true in Rel-15 and going into 5G, irrespective of whether 3GPP will continue specifying licensed-assisted access to unlicensed spectrum and/or standalone access to unlicensed spectrum.
- **It is crucial that 3GPP highlights the primacy of licensed spectrum in its 5G development and in its submission for IMT-2020 to ITU-R.**
- It is also crucial that 3GPP demonstrates that the 5G system being developed meets both the IMT-2020 requirements and the cellular operators' requirements for QoS with sufficient amounts of licensed spectrum in existing and new frequency bands.

Guidance for 3GPP-Based Unlicensed Access

- For the 3GPP submission to ITU to avoid impact on licensed spectrum allocation at WRC-19, define 3GPP-based unlicensed access in a new spec series (e.g. TS39) decoupled from TS36/38 from Rel-15 onwards
 - TS39 series (joint NR/LTE spec) will not be submitted to ITU-R
 - TS39 series are the patch for unlicensed support on top of TS 36/38
 - Eventually this may support wide bandwidth (NR), medium-BW (LTE) and narrow-BW (NB-IoT)
 - Scope of TS39: coexistence mechanisms for unlicensed spectrum (LBT), specific configurations (for LBT, duty cycle, frequency hopping), unlicensed spectrum bands, test cases
 - Move legacy LAA spec impact from TS 36 to TS 39 series in Rel-15

Proposal

- From Rel-15 onwards, standard support specific to 3GPP-based access to unlicensed spectrum will be specified in a TS XX series (e.g. 39) different than 36 series and 38 series
 - This includes coexistence mechanisms specific to unlicensed spectrum (e.g. LBT for 5 GHz spectrum), specific configurations (e.g. duty cycle, frequency hopping), unlicensed spectrum bands, test cases, etc
- TS XX series will not be submitted to ITU-R as part of the IMT-2020 submission
- WGs will be tasked to produce Rel-15 LTE CRs for moving pre-Rel-15 LAA from 36 series to XX series