

3GPP TSG RAN Meeting #102
Edinburgh, Scotland, Dec 11-15, 2023

Source: ZTE, Sanechips

Agenda: 9.1.4.4

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ZTE

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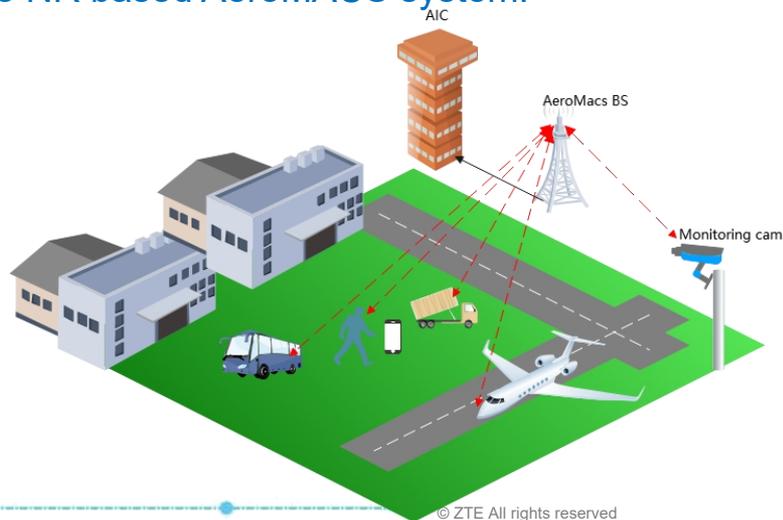
Views on Rel-19 candidate topics on cross area



NR based AeroMACS-Use case

Justification:

- AeroMACS is the aeronautical mobile airport communication system (AeroMACS) which is used to provide the wireless communication system for airport to help airlines, airport authorities and airport ground service etc.
- AeroMACS is still using the WiMAX standard (IEEE 802.16) at the aeronautical C-band (5 GHz) to provide the service till now.
- Based on the latest decision from CAAC (Civil Aviation Administration of China), it's planned to provide the NR based AeroMACS system.



NR based AeroMACS- Spectrum status

□ Spectrum status:

- ITU-R WRC-07 decided to assign the 5091-5150MHz for the spectrum of AeroMACS system;
- ITU-R WRC-12 decided to assign the 5030~5091MHz for the spectrum of AeroMACS system;
- NASA consider the use of the 5000-5030 MHz band to extend the tuning range for the the AeroMACS.

Proposal 1: to specify the band 5091~5150MHz for regional deployment and 5000~5150MHz for global deployment.

Proposal 2: to define RF requirement for BS and UE requirement;

Proposal 3: to define the RRM requirement for AeroMacs UE;

Proposal 4: to define the Demod requirement for AerMacs BS and UE;

ATG evolution in Rel-19

- ❑ CA based ATG system based on the deployment demand;
- ❑ ATG operation in mmWave frequency range;
- ❑ Potential new FR1 bands based on the operator's deployment request;
- ❑ ATG UE EMC;
 - The current Spec in 3GPP does not cover the EMC requirements of ATG UE. However by considering the use case of ATG equipment, the EMC requirement limits would be different with current spec. In order to fill the missing gap of ATG UE EMC requirements, we recommend to study ATG UE EMC requirements in Rel-19.
 - To cover the Core&Perf EMC requirements for ATG UE;

Thanks



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