ETSI TR 138 913 V14.2.0 (2017-05)

5G;
Study on Scenarios and Requirements for Next Generation Access Technologies (3GPP TR 38.913 version 14.2.0 Release 14)

Reference
DTR/TSGR-0038913ve20

Keywords
NR

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Contents

Foreword

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1 Scope

This document is related to the technical report for this study item "Scenarios and Requirements for Next Generation Access Technologies" [1]. The objective of the study item is to identify the typical deployment scenarios associated with attributes such as carrier frequency, inter-site distance, user density, maximum mobility speed, etc, and to develop requirements for next generation access technologies for the identified deployment scenarios taking into account, but not limited to, the ITU-R discussion on IMT-2020 requirements.

This document contains scenarios and requirements for next generation access technologies, which can be used as not only guidance to the technical work to be performed in 3GPP RAN WGs, but also input for ITU-R to take into account when developing IMT-2020 technical performance requirements.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

[1] 3GPP SID FS_NG_SReq: "Scenarios and Requirements for Next Generation Access Technologies" RP-152257, “New Study Item Proposal - Study on Scenarios and Requirements for Next Generation Access Technologies”, CMCC, RAN#70, Sitges, Spain, Dec. 7 - 11, 2015.

[2] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[3] 3GPP TR 22.891: "Feasibility Study on New Services and Markets Technology Enablers".

[4] Recommendation ITU-R M.2083: IMT Vision - "Framework and overall objectives of the future development of IMT for 2020 and beyond" (September 2015).

[5] ITU-R report M.2135, Guidelines for evaluation of radio interface technologies for IMT-Advanced.

[6] 3GPP TR 36.878: "Study on performance enhancements for high speed scenario in LTE".

[7] 3GPP TR 23.799: " Study on Architecture for Next Generation System".

[8] 3GPP TS 23.303: " Proximity-based services (ProSe); Stage 2".

[9] 3GPP TS 22.179: "Mission Critical Push To Talk (MCPTT) over LTE; Stage 1".

[10] 3GPP TS 22.468: "Group Communication System Enablers for LTE (GCSE_LTE)".

[11] 3GPP TR 36.890: "Evolved Universal Terrestrial Radio Access (E-UTRA); Study on single-cell point-to-multipoint transmission for E-UTRA".

[12] 3GPP TS 22.101: "Service aspects; Service principles".

[13] 3GPP TS 22.071 "Location Services (LCS); Service description; Stage 1".

[14] 3GPP TS 22.153: "Multimedia priority service".

[15] 3GPP TS 22.268: "Public Warning System (PWS) requirements".

[16] 3GPP TS 33.106: "3G security; Lawful interception requirements".

[17] 3GPP TS 22.185: "Service requirements for V2X services".

[18] 3GPP TS 22.886: "Study on enhancement of 3GPP Support for 5G V2X Services".

[19] 3GPP TR 33.899: "Study on the security aspects of the next generation system".

[20] 3GPP TS 22.280: "Mission Critical Services Common Requirements (MCCoRe); Stage 1".

[21] 3GPP TS 22.281: "Mission Critical Video services over LTE".