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1 Scope

The present document specifies the service requirements for Network Improvements for Machine Type Communications. In particular it will:

- identify and specify general requirements for machine type communications;
- identify service aspects where network improvements (compared to the current human-to-human oriented services) are needed to cater for the specific nature of machine-type communications;
- specify machine type communication requirements for these service aspects where network improvements are needed for machine type communication.

2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
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- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 22.011: " Service accessibility".
- [3] 3GPP TS 23.682: "Architecture enhancements to facilitate communications with packet data networks and applications".
- [4] ETSI TS 102 690: "Machine-to-Machine communications (M2M); functional architecture".
- [5] ETSI TS 102 921: " Machine-to-Machine communications (M2M); mla, dla, and mld interfaces".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [1].

MTC Device: A MTC Device is a UE equipped for Machine Type Communication, which communicates through a PLMN with MTC Server(s) and/or other MTC Device(s).

Note 1: A MTC Device might also communicate locally (wirelessly, possibly through a Personal Area Network, or hardwired) with other entities which provide the MTC Device "raw data" for processing and communication to the MTC Server(s) and/or other MTC Device(s). Local communication between MTC Device(s) and other entities is out of scope of the present document.

MTC Feature: MTC Features are network functions to optimize the network for use by M2M applications.

MTC Group: A MTC Group is a group of MTC Devices that share one or more MTC Features and that belong to the same MTC Subscriber.