

ETSI TS 132 500 V14.0.0 (2017-04)



**Universal Mobile Telecommunications System (UMTS);
LTE;
Telecommunication management;
Self-Organizing Networks (SON);
Concepts and requirements
(3GPP TS 32.500 version 14.0.0 Release 14)**



Reference

RTS/TSGS-0532500ve00

Keywords

LTE,UMTS

ETSI

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1 Scope

The present document describes the requirements and architecture for the Self Organizing Network (SON) functions within the OAM system. SON includes:

Provision of infrastructure for SON, in the OAM system

- Enabling SON operations;
- Provide SON capabilities (each of which can either be distributed or centralised) within the OAM infrastructure, including their management;
- Access to SON relevant attributes;
- Identification of SON relevant Measurements;
- Access to and transfer of SON relevant measurements;
- Transfer of SON relevant alarms.

Define necessary Interface IRPs

the automation of neighbour relation lists in E-UTRAN, UTRAN and between different 3GPP Radio Access Technologies,

self establishment of a new eNodeB in the network,

self-configuration and self-healing of eNodeBs,

automated coverage and capacity optimisation,

optimisation of parameters due to troubleshooting,

continuous optimisation due to dynamic changes in the network,

automated handover optimisation,

optimisation of QoS related radio parameters.

The SON concept and architecture are described in clause 4.

The high-level requirements for SON are defined in clause 5.

Use cases for SON are described in clause 5.

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 32.501: "Telecommunication management; Self-Configuration of Network Elements; Concepts and Integration Reference Point (IRP) Requirements".
- [3] 3GPP TS 32.511: "Telecommunication management; Automatic Neighbour Relation (ANR) management; Concepts and requirements".