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#### LTE;

Telecommunication management;
Configuration Management (CM) for mobile networks that include virtualized network functions;
Stage 2

(3GPP TS 28.512 version 15.0.0 Release 15)



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#### Introduction

The present document is part of a TS-family covering the 3<sup>rd</sup> Generation Partnership Project Technical Specification Group Services and System Aspects, Telecommunication Management; as identified below:

- TS 28.510: Telecommunication management; Configuration Management (CM) for mobile networks that include virtualized network functions; Requirements
- TS 28.511: Telecommunication management; Configuration Management (CM) for mobile networks that include virtualized network functions; Procedures
- TS 28.512: Telecommunication management; Configuration Management (CM) for mobile networks that include virtualized network functions; Stage 2
- TS 28.513: Telecommunication management; Configuration Management (CM) for mobile networks that include virtualized network functions; Stage 3

#### 1 Scope

The present document is Configuration Management stage 2 specification for mobile networks that include virtualized network functions.

#### 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.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.
- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
   [2] 3GPP TS 32.602: "Telecommunication management; Configuration Management (CM); Basic CM Integration Reference Point (IRP); Information Service (IS)".
   [3] 3GPP TS 32.662: "Telecommunication management; Configuration Management (CM); Kernel CM Information Service (IS)".
- [4] 3GPP TS 28.622: "Telecommunication management; Generic Network Resource Model (NRM); Integration Reference Point (IRP); Information Service (IS)".
- [5] 3GPP TS 28.708: "Telecommunication management; Evolved Packet Core (EPC); Network Resource Model (NRM); Integration Reference Point (IRP); Information Service (IS)".
- [6] 3GPP TS 28.705: "Telecommunication management; IP Multimedia Subsystem (IMS); Network Resource Model (NRM); Integration Reference Point (IRP); Information Service (I S)".
- [7] 3GPP TS 28.500: "Telecommunication management; Management concept,, architecture and requirements for mobile networks that include virtualized network functions".
- [8] 3GPP TS 32.612: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): Information Service (IS) ".

#### 3 Definitions and abbreviations

#### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and in 3GPP TS 28.500 [7] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1] or in 3GPP TS 28.500 [7].

#### 3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and in 3GPP TS 28.500 [7] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1] or in 3GPP TS 28.500 [7].

#### 4 Information Model Definition

#### 4.1 Itf-N

For Itf-N configuration management of virtualized network functions which can be part of EPC or IMS, the IOCs defined in 3GPP TS 28.622 [4], 28.708[5] and 28.705[6] shall be reused.

In 3GPP TS 28.622 [4], a new attribute vnfParametersList is added in the IOC ManagedFunction (see clause 4.3.4 in [4]) to support the configuration management of virtualized network functions which can be part of EPC or IMS.

#### 5 Interface Definition

#### 5.1 Itf-N

For Itf-N configuration management of virtualized network functions which can be part of EPC or IMS, the operations defined in 3GPP TS 32.602 [2] and TS 32.612 [8] and notifications defined in 3GPP TS 32.662 [3] shall be reused.

5.2 CM interface over Os-Ma-nfvo

None.

5.3 CM interface over Ve-Vnfm-em

None.

5.4 CM interface over Ve-Vnfm-vnf

None.

# Annex A (informative): Change history

Change history										
Date	Meeting	TDoc	CR	Rev	Cat	Subject/Comment	New version			
2017-06	SA#76	SP-170474				Presented for information and approval	1.0.0			
2017-06	SA#76					Upgrade to change control version	14.0.0			
2018-06	SA#80	SP-180417	0001	1	В	Scope extension to cover RAN	15.0.0			

## History

Document history						
V15.0.0	June 2018	Publication				