

ETSI TS 128 512 V17.0.0 (2022-04)



**LTE;  
Telecommunication management;  
Configuration Management (CM)  
for mobile networks that include virtualized network functions;  
Stage 2  
(3GPP TS 28.512 version 17.0.0 Release 17)**



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Reference

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# Foreword

This Technical Specification has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

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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

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# 1 Scope

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

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# 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 (IS)".
- [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)".

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# 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].

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## 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.

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## 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.

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## 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	B	Scope extension to cover RAN	15.0.0
2020-07	-	-	-	-	-	Update to Rel-16 version (MCC)	<b>16.0.0</b>
2022-03	-	-	-	-	-	Update to Rel-17 version (MCC)	<b>17.0.0</b>



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# History

<b>Document history</b>		
V17.0.0	April 2022	Publication