



TECHNICAL SPECIFICATION

LTE;
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Fault Management (FM) for mobile networks
that include virtualized network functions;
Stage 2
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Foreword

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Introduction

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

TS 28.515 "Fault Management (FM) for mobile networks that include virtualized network functions; Requirements".

TS 28.516 "Fault Management (FM) for mobile networks that include virtualized network functions; Procedures".

TS 28.517 "Fault Management (FM) for mobile networks that include virtualized network functions; stage 2".

TS 28.518 "Fault Management (FM) for mobile networks that include virtualized network functions; Stage 3".

1 Scope

The present document is Fault Management stage 2 specification for mobile networks that include virtualized network functions which can be part of EPC or IMS.

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.
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- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 32.111-2: "Telecommunication management; Fault Management; Part 2: Alarm Integration Reference Point (IRP); Information Service (IS)".
- [3] 3GPP TS 32.302: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP); Information Service (IS)".
- [4] 3GPP TS 28.515: "Telecommunication management; Fault Management (FM) for mobile networks that include virtualized network functions; Requirements".
- [5] ETSI GS NFV-IFA 008 (V2.1.1): "Network Functions Virtualisation (NFV); Management and Orchestration; Ve-Vnfm reference point – Interface and Information Model Specification".
- [6] 3GPP TS 28.500: "Telecommunication management; Management concept, architecture and requirements for mobile networks that include virtualized network functions".

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 [6] 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 [6].

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 [6] 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 [6].

4 General descriptions

For VNF Fault Management stage 2 solution over Itf-N, the Alarm IRP IS is applicable. The overall architectural feature of Alarm IRP is specified in TS 32.111-2 [2]. The Alarm IRP IS defines the semantics of alarms and the interactions visible across the reference point in a protocol neutral way. It defines the semantics of the operations and