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Technical Specification

3rd Generation Partnership Project;

Technical Specification Group Services and System Aspects;

Telecommunication management;

GSM/EDGE Radio Access Network (GERAN)

Network Resource Model (NRM)

Integration Reference Point (IRP);

Requirements

(Release 16)

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Contents

Foreword [4](#__RefHeading___Toc349741073)

Introduction [4](#__RefHeading___Toc349741074)

1 Scope [5](#__RefHeading___Toc349741075)

2 References [5](#__RefHeading___Toc349741076)

3 Definitions and abbreviations [5](#__RefHeading___Toc349741077)

3.1 Definitions [5](#__RefHeading___Toc349741078)

3.2 Abbreviations [5](#__RefHeading___Toc349741079)

4 Requirements [6](#__RefHeading___Toc349741080)

Annex A (informative): Change history [7](#__RefHeading___Toc349741081)

# Foreword

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

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Version x.y.z

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.

# 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:

**28.654: GSM/EDGE Radio Access Network (GERAN) Network Resource Model (NRM) Integration Reference Point (IRP); Requirements**

28.655: GSM/EDGE Radio Access Network (GERAN) Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)

28.656: GSM/EDGE Radio Access Network (GERAN) Network Resource Model (NRM) Integration Reference Point (IRP); Solution Set (SS) definitions

# 1 Scope

The present document defines, in addition to the requirements defined in [1], [2] and [3], the requirements for the present IRP: GERAN Network Resource Model (NRM) Integration Reference Point (IRP).

# 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 TS 32.101: "Telecommunication management; Principles and high level requirements".

[2] 3GPP TS 32.102: "Telecommunication management; Architecture".

[3] 3GPP TS 32.600: "Telecommunication management; Configuration Management (CM); Concept and high-level requirements".

[4] 3GPP TS 32.107: "Telecommunication management; Fixed Mobile Convergence (FMC) Federated Network Information Model (FNIM)".

[5] 3GPP TS 28.620: "Telecommunication management; Fixed Mobile Convergence (FMC) Federated Network Information Model (FNIM) Umbrella Information Model (UIM)".

[6] 3GPP TS.28.622: “Telecommunication management; Generic Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)”.

# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the following terms and definitions apply.

**IRP:** See 3GPP TS 32.101 [1].

**Network Resource Model (NRM)**: See definition in TS 32.622 [6].

## 3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

GERAN GSM/EDGE Radio Access Network

GSM Global System for Mobile communication

IRP Integration Reference Point

IS Information Service (see [1])

NRM Network Resource Model

UMTS Universal Mobile Telecommunications System

# 4 Requirements

The following general and high-level requirements apply for the present IRP:

a) IRP-related requirements in 3GPP TS 32.101 [1].

b) IRP-related requirements in 3GPP TS 32.102 [2].

c) IRP-related requirements in 3GPP TS 32.600 [3].

The NRM defined by this IRP:

a) Shall support communications for telecommunication network management purposes, including management of converged networks.

b) Is a member of the Federated Network Information Model (FNIM) [4] and its information is derived from FNIM Umbrella Information Model (UIM) [5].

In addition to the above, the following more specific requirements apply:

**REQ-GERAN\_NRM-CON-001:** The Network Resource Model defined by this IRP shall contain GERAN specific classes and related definitions, supporting the management of GERAN Network entities.

**REQ-GERAN\_NRM-CON-002:** The Network Resource Model defined by this IRP shall support management of UMTS-GSM Inter-system handover.

Annex A (informative):  
Change history

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Change history | | | | | | | | |
| Date | TSG # | TSG Doc. | CR | Rev | Subject/Comment | Cat | Old | New |
| 2014-06 | SA#64 | SP-140359 | 001 | - | remove the feature support statements | F | 11.0.0 | 11.1.0 |
| 2014-10 | - | - | - | - | Update to Rel-12 version (MCC) |  | 11.1.0 | **12.0.0** |
| 2016-01 | - | - | - | - | Update to Rel-13 version (MCC) |  | 12.0.0 | **13.0.0** |
| 2017-03 | SA#75 | - | - | - | Promotion to Release 14 without technical change |  | 13.0.0 | **14.0.0** |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Change history** | | | | | | | |
| **Date** | **Meeting** | **TDoc** | **CR** | **Rev** | **Cat** | **Subject/Comment** | **New version** |
| 2018-06 | - | - | - | - | - | Update to Rel-15 version (MCC) | **15.0.0** |
| 2020-07 | - | - | - | - | - | Update to Rel-16 version (MCC) | **16.0.0** |