



Technical Specification

**Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
LTE;
Telecommunication management;
Common Radio Access Technology (RAT)
Network Resource Model (NRM)
Integration Reference Point (IRP);
Requirements
(3GPP TS 32.791 version 11.0.0 Release 11)**



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Foreword

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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:

32.791	Common Radio Access Technology (RAT) Network Resource Model (NRM) Integration Reference Point (IRP): Requirements
32.792	Common Radio Access Technology (RAT) Network Resource Model (NRM) Integration Reference Point (IRP): Information Service (IS)
32.796	Common Radio Access Technology (RAT) 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 3GPP TS 32.101 [2], 3GPP TS 32.102 [3] and 3GPP TS 32.600 [4], the Requirements for the Common RAT NRM IRP for equipment that may be shared between BSS in GSM, UTRAN and E-UTRAN.

The present document can be used also for managing the equipment that can be shared by several RATs, even in the cases when it is not being shared.

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 32.101: "Telecommunication management; Principles and high level requirements".
- [3] 3GPP TS 32.102: "Telecommunication management; Architecture".
- [4] 3GPP TS 32.600: "Telecommunication management; Configuration Management (CM); Concept and high-level requirements".
- [5] 3GPP TS 32.150: "Telecommunication management; Integration Reference Point (IRP) Concept and definitions".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TS 32.150 [5], 3GPP TS 32.101 [2], 3GPP TS 32.102 [3] and 3GPP TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TS 32.150 [5], 3GPP TS 32.101 [2], 3GPP TS 32.102 [3] and 3GPP TR 21.905 [1], in this order.

3.2 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [1] 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].

BSS	Base Station Subsystem
CAPEX	Capital Expenditure
E-UTRAN	Evolved UTRAN
GSM	Global System for Mobile communications
IRP	Integration Reference Point
NRM	Network Resource Model

RAN	Radio Access Network
RAT	Radio Access Technology
UTRAN	Universal Terrestrial Radio Access Network

4 Concepts and background

It becomes more and more common that operators operate more than one RAT. To save CAPEX, some radio equipment can be shared between the different RATs. Radio equipment can also be shared within a RAT. This NRM makes it easy to operate such shared radio equipment and to understand the consequences in all affected RATs when a change is made in a shared equipment.

5 Requirements

The following general and high-level requirement applies for the present IRP:

- A. IRP-related requirements in 3GPP TS 32.101 [2].
- B. IRP-related requirements in 3GPP TS 32.102 [3].
- C. IRP-related requirements in 3GPP TS 32.600 [4].

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

REQ-GRAN_NRM-CON-001: The NRM defined by this IRP shall contain IOCs and related definitions, supporting equipment that may be shared between BSS, UTRAN and E-UTRAN networks.

REQ-GRAN_NRM-CON-002: The IRP Agent shall support a capability allowing the IRP Manager to know which RATs are served by each managed object.

Annex A (informative): Change history

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New
2010-12	SP-50	SP-100769			Submitted to SA#50 for Information	0.1.1	1.0.0
2011-03	SP-51	SP-110178	--	--	Presentation to SA for Approval	1.0.0	2.0.0
2011-03	--	--	--	--	Publication	2.0.0	10.0.0
2012-09	-	-	-	-	Update to Rel-11 version (MCC)	10.0.0	11.0.0

History

Document history		
V11.0.0	November 2012	Publication