TSGS#17(02)0487

Technical Specification Group Services and System Aspects Meeting #17, Biarritz, France, 9-12 September 2002

Source: SA5 (Telecom Management)

Title: Rel-5 CR 32.621 (Generic network resources Integration

Reference Point (IRP): Requirements) - Upgrade to Rel-5

Document for: Approval

Agenda Item: 7.5.3

| Doc-1st- | Spec | CR | Rev | Phase | Subject | Cat | Version- | Doc-2nd- | Workitem |
|-----------|--------|-----|-----|-------|------------------|-----|----------|---------------|----------|
| SP-020487 | 32.621 | 001 | - | Rel-5 | Upgrade to Rel-5 | F | 4.0.0 | S5- 026449 | OAM-NIM |

| wiceting #23, De | -ijiiig, | CHIIIV | 7, 24 - 20 | Julie 20 | 02 | | | | CR-Form-v5 |
|--|-----------------------------|--|---|---|--------|------------|------------------|--|----------------------|
| CHANGE REQUEST | | | | | | | | | |
| * | 32.0 | 6 <mark>21</mark> C | R <mark>001</mark> | ≋ r € | ev . | - # | Current ver | rsion: 4.0.0 |) [#] |
| For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the % symbols. | | | | | | | | | |
| Proposed change affects: # (U)SIM | | | | | | | | | |
| Title: | l Upg | rade to F | Rel-5 | | | | | | |
| Source: # | S5 | | | | | | | | |
| Work item code: ₩ | NAO B | 1-NIM | | | | | Date: 3 | £ 28/06/2002 | |
| Category: अ | F A E C Detaile | (correct (corresponding) (addition) (function) (editorial) (ed explar | following cate tion) ponds to a co on of feature), onal modification ations of the PP TR 21.900 | rrection in ail on of feature n) above categ | e) | | 2 | of the following r (GSM Phase 2 (Release 1990 (Release 1990 (Release 1990 (Release 1990 | 2) 6) 7) 8) |
| Reason for chang | e: # | The spe | ecification co | ntains info | mation | that is | s only releva | nt to REL-4. | |
| Summary of chan | ge: # | The RE | L-4 specific | information | is rem | oved. | | | |
| Consequences if not approved: | H | REL-5 s | specification | will contain | REL-4 | 1 speci | ific information | on. | |
| | | | | | | | | | |
| Clauses affected: | * | Introduc | ction and Ab | breviations | | | | | |
| Other specs affected: | ж | Test | r core specil specification Specification | ns | × | | | | |
| Other comments: | ж | | | | | | | | |

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: http://www.3gpp.org/3G_Specs/CRs.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked # contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

Introduction

Configuration Management (CM), in general, provides the operator with the ability to assure correct and effective operation of the 3G network as it evolves. CM actions have the objective to control and monitor the actual configuration on the Network Elements (NEs) and Network Resources (NRs), and they may be initiated by the operator or by functions in the Operations Systems (OSs) or NEs.

CM actions may be requested as part of an implementation programme (e.g. additions and deletions), as part of an optimisation programme (e.g. modifications), and to maintain the overall Quality of Service (QOS). The CM actions are initiated either as single actions on single NEs of the 3G network, or as part of a complex procedure involving actions on many resources/objects in one or several NEs.

Due to the growing number of specifications to model new services and Resource Models for Configuration Management (CM), as well as the expected growth in size of each of them from 3GPP Release 4 onwards, a new structure of the specifications is already needed in Release 4. This structure is needed for several reasons, but mainly to enable more independent development and release for each part, as well as a simpler document identification and version handling. Another benefit would be that it becomes easier for bodies outside 3GPP, such as the ITU-T, to refer to telecom management specifications from 3GPP. The new structure of the specifications does not lose any information or functionality supported by the Release 1999. The restructuring also includes defining new IRPs for the Network Resource Model (NRM) parts of R99 Basic CM IRP (Generic, Core Network and UTRAN NRM). These IRPs are named "Network Resources IRP".

Further, the Notification IRP (in Release 1999: 32.106-1 to -4) and the Name convention for Managed Objects (in Release 1999: 32.106-8) have been moved to a separate number series used for specifications common between several management areas (e.g. CM, FM, PM).

Finally, in addition to the restructuring mentioned above, the need to define some new functionality and IRPs for CM compared to Release 1999, has also been identified. Firstly, a new Bulk CM IRP, and secondly an a GERAN Network Resources IRP, have been created. Thirdly, the Generic, UTRAN and GERAN Network Resources IRPs have been extended with support for GSM UMTS Inter system handover (ISH), and the 32.600 (Concept and High level Requirements) has been modified to cover the high-level Bulk CM and ISH requirements.

Table: Mapping between Release '99 and the new specification numbering scheme

| R99 Old no. | Old (R99) specification title | Rel-4 New no. | New (Rel-4) specification title |
|---------------------|---|-------------------|--|
| 32.106-1 | 3G Configuration Management: Concept and Requirements | 32.600 | 3G Configuration Management: Concept and High-level Requirements |
| 32.106-1 | <notification 32.106-1="" 32.106-2="" and="" from="" irp="" requirements=""></notification> | 32.301 | Notification IRP: Requirements |
| 32.106-2 | Notification IRP: IS | 32.302 | Notification IRP: Information Service |
| 32.106-3 | Notification IRP: CORBA SS | 32.303 | Notification IRP: CORBA SS |
| 32.106-4 | Notification IRP: CMIP SS | 32.304 | Notification IRP: CMIP-SS |
| 32.106-8 | Name convention for Managed Objects | 32.300 | Name Convention for Managed Objects |
| 32.106-1 | <basic 32.106-1="" 32.106-5="" and="" cm="" from="" irp="" is="" requirements=""></basic> | 32.601 | Basic CM IRP: Requirements |
| 32.106-5 | Basic CM IRP IM (Intro & IS part) | 32.602 | Basic CM IRP: Information Service |
| 32.106-6 | Basic CM IRP CORBA SS (IS related part) | 32.603 | Basic CM IRP: CORBA SS |
| 32.106-7 | Basic CM IRP CMIP SS (IS related part) | 32.604 | Basic CM IRP: CMIP SS |
| 32.106-8 | Name convention for Managed Objects | 32.300 | Name Convention for Managed Objects |
| _ | - | 32.611 | Bulk CM IRP: Requirements |

| - | - | 32.612 | Bulk CM IRP: Information Service |
|----------|---|-------------------|---|
| - | - | 32.613 | Bulk CM IRP: CORBA SS |
| - | - | 32.614 | Bulk CM-IRP: CMIP-SS |
| | | 32.615 | Bulk CM IRP: XML file format definition |
| 32.106-1 | <basic 32.106-1="" 32.106-5="" and="" cm="" from="" generic="" irp="" nrm="" requirements=""></basic> | 32.621 | Generic Network Resources IRP: Requirements |
| 32.106-5 | Basic CM IRP IM (Generic NRM part) | 32.622 | Generic Network Resources IRP: NRM |
| 32.106-6 | Basic CM IRP CORBA SS (Generic NRM related part) | 32.623 | Generic Network Resources IRP: CORBA SS |
| 32.106-7 | Basic CM IRP CMIP SS (Generic NRM related part) | 32.624 | Generic Network Resources IRP: CMIP-SS |
| 32.106-1 | <basic 32.106-1="" 32.106-5="" and="" cm="" cn="" from="" irp="" nrm="" requirements=""></basic> | 32.631 | Core Network Resources IRP: Requirements |
| 32.106-5 | Basic CM IRP IM (CN NRM part) | 32.632 | Core Network Resources IRP: NRM |
| 32.106-6 | Basic CM IRP CORBA SS (CN NRM related part) | 32.633 | Core Network Resources IRP: CORBA SS |
| 32.106-7 | Basic CM IRP CMIP SS (CN NRM related part) | 32.634 | Core Network Resources IRP: CMIP SS |
| 32.106-1 | <basic 32.106-1="" 32.106-5="" and="" cm="" from="" irp="" nrm="" requirements="" utran=""></basic> | 32.641 | UTRAN Network Resources IRP: Requirements |
| 32.106-5 | Basic CM IRP IM (UTRAN NRM part) | 32.642 | UTRAN Network Resources IRP: NRM |
| 32.106-6 | Basic CM IRP CORBA SS (UTRAN NRM related part) | 32.643 | UTRAN Network Resources IRP: CORBA SS |
| 32.106-7 | Basic CM IRP CMIP SS (UTRAN NRM related part) | 32.644 | UTRAN Network Resources IRP: CMIP SS |
| | | 32.651 | GERAN Network Resources IRP: Requirements |
| | | 32.652 | GERAN Network Resources IRP: NRM |
| | | 32.653 | GERAN Network Resources IRP: CORBA SS |
| | | 32.654 | GERAN Network Resources IRP: CMIP SS |

3.<mark>23 Abbreviations</mark>

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

CM Configuration Management

CMIP Common Management Information Protocol
CORBA Common Object Request Broker Architecture

EM Element Manager FM Fault Management

GSM Global System for Mobile communication

IRP Integration Reference Point
IS Information Service (see [1])

ITU-T International Telecommunication Union, Telecommunication Standardisation Sector

MIB Management Information Base
MIM Management Information Model

MOC Managed Object Class
MOI Managed Object Instance
NE Network Element
NM Network Manager

NR Network Resource
NRM Network Resource Model
OMG Object Management Group

OS Operations System
PM Performance Management
TM Telecom Management

UML Unified Modelling Language (OMG)

UMTS Universal Mobile Telecommunications System