Source: **SA5 (Telecom Management)**

Title: **2 Rel-4/5 CR 32.102 (Telecommunication management; Architecture) : Correction of subclause X.2.1 in Annex C**

Document for: **Approval**

Agenda Item: **7.5.3**

Doc-1st-Level	Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Doc-2nd-Level	Workitem
SP-030402	32.102	028	-	Rel-4	Correction of subclause X.2.1 in Annex C	F	4.3.0	S5-036611	OAM-AR
SP-030402	32.102	029	-	Rel-5	Correction of subclause X.2.1 in Annex C	A	5.3.0	S5-036613	OAM-AR

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CHANGE REQUEST

⌘ | **32.102** CR **028** | ⌘**rev** | **-** | ⌘ | Current version: | **4.3.0** | ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME ☐   Radio Access Network **X** Core Network **X**

Title: ⌘	Correction of subclause X.2.1 in Annex C	
Source: ⌘	SA5	
Work item code: ⌘	OAM-AR	***Date:*** ⌘ 05/09/2003

Category: ⌘ **F**		***Release:*** ⌘ Rel-4	

Use <u>one</u> of the following categories:
   F *(correction)*
   A *(corresponds to a correction in an earlier release)*
   B *(addition of feature),*
   C *(functional modification of feature)*
   D *(editorial modification)*
Detailed explanations of the above categories can
be found in 3GPP TR 21.900.

Use <u>one</u> of the following releases:
  2   *(GSM Phase 2)*
  R96 *(Release 1996)*
  R97 *(Release 1997)*
  R98 *(Release 1998)*
  R99 *(Release 1999)*
  Rel-4 *(Release 4)*
  Rel-5 *(Release 5)*
  Rel-6 *(Release 6)*

Reason for change: ⌘	Subclause X.2.1 in Annex C contains some "old" rules that have been replaced by other rules, are obsolete and/or wrong.
Summary of change: ⌘	1. In X.2.1, remove the sentence "*Names of information elements (class, attribute) defined in the IS and which scope is local to this IS must be prefixed by a 3 characters prefix uniquely identifying the IS.*". 2. In X.2.1, remove the sentence "*On the class diagram, each attribute in an information object class shall be qualified as "protected" by the addition of a symbol "#" before each attribute.*". 3. Some minor editorial changes.
Consequences if not approved: ⌘	The specification would contain unnecessary and unclear restrictions which are inconsistent with all the existing NRM IS class and attribute specifications.

Clauses affected: ⌘	Annex C X.1, X.2, X.3.

	Y	N		
Other specs affected: ⌘		X	Other core specifications ⌘	
		X	Test specifications	
	X		O&M Specifications	Rel-5 32.102

Other comments: ⌘	Rel-5 Mirror CR in S5-036613.

How to create CRs using this form:
Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.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.

Change in Annex C

Annex C (informative): Information Service template

This annex contains the template to be used for the ~~IRP~~ Information Service~~s documents~~ TSs produced within the 3GPP SA ~~WGTSG~~5. This template is based on the latest 3GPP template which **must** be used for any 3GPP Technical Specification.

The introductory clauses of the 3GPP template (from clause 1 to clause 3) are unchanged.

This template is numbered starting with "X", which, in general should correspond to clause 4 which is the beginning of the main text document. However, if there is a need for a specific IS to introduce additional clauses in the body. X may correspond to a number higher than 4. For an NRM only clause X shall be used.

The conclusive clauses/annexes of the 3GPP template are unchanged.

X Information Object Classes

-- 'X' represents a clause number in the actual Information Service TS.

X.1 Information entities imported and local labels

-- This clause identifies a list of information entities (e.g. information object class, information relationship, information attribute) that have been defined in other specifications and that are imported in this specification. This includes information entities from other specifications imported for inheritance purpose. Each element of this list is a pair (label reference, local label).The label reference contains the name of the specification where it is defined, the type of the information entity and its name. The local label of imported information entities can then be used throughout the specification instead of the label reference.

-- This information is provided in a table. An example of such a table is given here below:

Label reference	**Local label**
32.106-5 [10], information object class, Top	Top

X.2 Class diagram

X.2.1 Attributes and relationships

-- This first diagram represents all information object classes defined in this IS with all their relationships and all their attributes. This diagram shall contain relationship names, role name and role cardinality. This shall be a UML compliant class diagram.

-- Characteristics (attributes, relationships) of imported information object classes need not to be repeated in the diagram. ~~Names of information elements (class, attribute) defined in the IS and which scope is local to this IS must be prefixed by a 3 characters prefix uniquely identifying the IS.~~ Information object classes should be defined using the stereotype <<InformationObjectClass>>. ~~On the class diagram, each attribute in an information object class shall be qualified as "protected" by the addition of a symbol "#" before each attribute.~~

X.2.2   Inheritance

-- This second diagram represents the inheritance hierarchy of all information object classes defined in this IS. This diagram does not need to contain the complete inheritance hierarchy but shall at least contain the parent information object classes of all information object classes defined in this specification. By default, an information object class inherits from the information object class "top". This shall be a UML compliant class diagram.

-- Characteristics (attributes, relationships) of imported information object classes need not to be repeated in the diagram. Information object classes should be defined using the stereotype <<InformationObjectClass>>.

-- Note: some inheritance relationships presented in X.2.2 can be repeated in X.2.1 to enhance readability.

X.3   Information object classes definition

-- Each information object class is defined using the following structure:

X.3.a   InformationObjectClassName

-- InformationObjectClassName is the name of the information object class.

-- 'a' represents a number, starting at 1 and increasing by 1 with each new definition of an information object class.

X.3.a.1   Definition

-- The <definition> sub-clause is written in natural language. The <definition> sub-clause refers to the information object class itself. The characteristics related to the relationships that the object class can have with other object classes can't be found in the definition. The reader has to refer to relationships definition to find such kind of information. Information related to inheritance shall be precised here.

X.3.a.2   Attributes

-- The <attributes> sub-clause presents the list of attributes, which are the manageable properties of the object class. Each element is a pair (attributeName, supportQualifier). The supportQualifier indicates whether the attribute is Mandatory, Optional or Conditional (M, O, C).

-- This information is provided in a table. An example of such a table is given here below:

Attribute name	Support Qualifier
ntfSubscriptionId	M

End of Change in Annex C

Annex G (informative):
Change history

Change history								
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**	
Dec 1999	S_06	SP-99578	--	--	Approved at TSG SA #6 and placed under Change Control	-	3.0.0	
Mar 2000	S_07	SP-000015	001	--	resolving remaining R99 inconsistency between 32.101 & 32.102	3.0.0	3.1.0	
Mar 2000	S_07	SP-000015	002	--	Correction of IRP-related terminology	3.0.0	3.1.0	
Mar 2000	--	--	-	--	Cosmetic	3.1.0	3.1.1	
Jun 2000	S_08	SP-000227	003	--	Clarification of compliance conditions	3.1.1	3.2.0	
Jun 2000	S_08	SP-000228	004	--	Update ITU-T TMN related reference material	3.1.1	3.2.0	
Jun 2000	S_08	SP-000229	005	--	Definition of the Mandatory/Optional/Conditional qualifiers used in the IRPs	3.1.1	3.2.0	
Jun 2000	S_08	SP-000230	006	--	Correction of erroneous editing and usage of undefined term	3.1.1	3.2.0	
Mar 2001	S_11	SP-010026	007	--	Add UMTS TMN conformance	3.2.0	4.0.0	
Jun 2001	S_12	SP-010232	008	--	Correction of ITU-T TMN concerns	4.0.0	4.1.0	
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Sep 2001	S_13	SP-010466	016	--	Update and alignment of compliance conditions for UMTS Management Physical architectures	4.1.0	4.2.0	
Sep 2001	S_13	SP-010522	017	--	Specify the Rule for IDL file names	4.1.0	4.2.0	
Mar 2003	S_19	SP-030061	026	--	Add New Subclause to IS Template for Notification Related IOCs	4.2.0	4.3.0	

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CHANGE REQUEST

| ⌘ | **32.102** CR **029** | ⌘ **rev** | **-** | ⌘ | Current version: | **5.3.0** | ⌘ |

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐   ME ☐   Radio Access Network **X**   Core Network **X**

Title:	⌘	Correction of subclause X.2.1 in Annex C
Source:	⌘	SA5
Work item code: ⌘	OAM-AR	**Date:** ⌘ 05/09/2003

Category: ⌘ **A**	**Release:** ⌘ Rel-5

Use one of the following categories:
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Consequences if not approved:	⌘	The specification would contain unnecessary and unclear restrictions which are inconsistent with all the existing NRM IS class and attribute specifications. In addition, it would contain a rule which is inconsistent with Annex G of this TS.

Clauses affected:	⌘	Annex C X.1, X.2, X.3, Annex G.

		Y	**N**	
Other specs affected:	⌘		**X**	Other core specifications ⌘
			X	Test specifications
			X	O&M Specifications

Other comments:	⌘	Mirror of Rel-4 CR in S5-036611 (which in addition includes some editorial changes).

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Change in Annex C

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X.3.a.2   Attributes

The <attributes> sub-clause presents the list of attributes, which are the manageable properties of the object class . Each element is a tuple (attributeName, visibilityQualifier, supportQualifier, readQualifier, writeQualifier):

- *The visibilityQualifier indicates whether the attribute is public, private or IRPAgent Internal ("+","—", and "%" respectively). The semantics of public and private are as per the UML specification. The semantic of IRPAgent Internal is defined within the 3GPP UML Repertoire.*

- *The supportQualifier indicates whether the attribute is Mandatory, Optional, Conditional or not supported ("M"," O"," C", or "—", respectively).*

- *The readQualifier indicates whether the attribute shall be readable by the IRPManager. The semantics for readQualifier is identical to supportQualifier, for "M, "O", and "—".*

- *The writeQualifier indicates whether the attribute shall be writeable by the IRPManager. The semantics for writeQualifier is identical to supportQualifier, for "M", "O", and "—".*

End of Change in Annex C

Change in Annex G

G.3.3 Visibility

It specifies the accessibility of the operation and attribute. There are three types of visibility, i.e. private, public and IRPAgent Internal.

Table G.2: Private Visibility (notation "-")

Operation	NA
Attribute	It indicates that the attribute is not accessible by other entities, e.g. the IRPManager, or other entities not holding the subject attribute.

Table G.3: Public Visibility (notation "+")(default)

Operation	It indicates that the operation is visible across the itf-N, e.g. the IRPManager can invoke the operation across the itf-N interface.
Attribute	iIt indicates that the attribute is accessible across the itf-N, i.e. the IRPManager can invoke an operation to read the attribute and to write to this attribute if the attribute is so qualified. The read or write operation must be directly invoked against the entity holding the subject attribute or against the CM IRP Agent.

End of Change in Annex G

Annex H (informative): Change history

Change history								
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Dec 1999	S_06	SP-99578	--	--	Approved at TSG SA #6 and placed under Change Control	-	3.0.0
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Mar 2001	S_11	SP-010026	007	--	Add UMTS TMN conformance	3.2.0	4.0.0
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Sep 2001	S_13	SP-010466	016	--	Update and alignment of compliance conditions for UMTS Management Physical architectures	4.1.0	4.2.0
Sep 2001	S_13	SP-010522	017	--	Specify the Rule for IDL file names	4.1.0	4.2.0
Mar 2002	S_15	SP-020037	018	--	Add the rule on how all SA5 Solution Set specifications indicate a reference to a particular SA5 Information Service specification.	4.2.0	5.0.0
Mar 2002	S_15	SP-020037	019	--	Inclusion of the IMS in the 3G Telecom Management Architecture (32.102)	4.2.0	5.0.0
Sep 2002	S_17	SP-020450	020	--	Correction of diagrams describing entities of the mobile system to be managed	5.0.0	5.1.0
Sep 2002	S_17	SP-020450	021	--	IS Template Changes to support new UML Repertoire/Methodology	5.0.0	5.1.0
Sep 2002	S_17	SP-020450	022	--	Addition of 3GPP UML Repertoire for IRP: IS	5.0.0	5.1.0
Sep 2002	S_17	SP-020479	023	--	Add optional parameters in CORBA Solution Set IDLs	5.0.0	5.1.0
Dec 2002	S_18	SP-020726	024	--	Aligning IRP related terminology with SA5's SWGC IRP specifications (32.6xy)	5.1.0	5.2.0
Dec 2002	S_18	SP-020727	025	--	Updates and corrections to Integration Reference Points (IRPs) Introduction	5.1.0	5.2.0
Mar 2003	S_19	SP-030061	027	-	Add New Subclause to IS Template for Notification Related IOCs	5.2.0	5.3.0