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Technical Specification

Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Telecommunication management;Configuration Management (CM); Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS) (3GPP TS 32.743 version 7.1.1 Release 7)

GLOBAL SYSTEM FOR MOBILE COMMUNICATIONS

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Foreword

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

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under http://webapp.etsi.org/key/queryform.asp.

Contents

Foreword

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

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

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  x   the first digit:

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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; Configuration Management (CM); as identified below:

  TS 32.741:   "Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP); Requirements".

  TS 32.742:   "Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".

  TS 32.743:   "Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP); Common Object Request Broker Architecture (CORBA) Solution Set (SS)".

  TS 32.745:   "Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP); eXtensible Markup Language (XML) file format definition".

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.

1 Scope

The present document maps the IRP information model in 32.742 [4] to the protocol specific details necessary for implementation of this IRP in a CORBA/IDL environment.

This Solution Set specification is related to 3GPP TS 32.742 V7.0.X.

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 32.742: "Telecommunication management; Configuration Management (CM); Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".

[5]   3GPP TS 32.300: "Telecommunication management; Configuration Management (CM); Name convention for Managed Objects".

[6]   3GPP TS 32.303: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS)".

3 Definitions and abbreviations

3.1 Definitions

For terms and definitions please refer to 3GPP TS 32.101 [1], 32.102 [2], 32.600 [3] and 32.742 [4].

3.2 Abbreviations

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

CORBA	Common Object Request Broker Architecture
DN	Distinguished Name
IS	Information Service
IDL	Interface Definition Language
IRP	Integration Reference Point
MO	Managed Object
MOC	Managed Object Class

NRM	Network Resource Model
OMG	Object Management Group
SS	Solution Set
STN	Signalling Transport Network

4 Architectural features

The overall architectural feature of STN Network Resources IRP is specified in 3GPP TS 32.742 [4].
This clause specifies features that are specific to the CORBA SS.

4.1 Notifications

Notifications are sent according to the Notification IRP: CORBA SS (see 3GPP TS 32.303 [6]).

4.2 Syntax for Distinguished Names and Versions

The format of a Distinguished Name is defined in 3GPP TS 32.300 [5].

5 Mapping

5.1 General mappings

Attributes modelling associations as defined in the NRM (here also called "reference attributes") are in this SS mapped to attributes.
The names of the reference attributes in the NRM are mapped to the corresponding attribute names in the MOC.
When the cardinality for an association is 0..1 or 1..1 the datatype for the reference attribute is defined as an MOReference. The value of an MO reference contains the distinguished name of the associated MO.
When the cardinality for an association allows more than one referred MO, the reference attribute will be of type MOReferenceSet, which contains a sequence of MO references.

5.2 STN NRM Information Object Class (IOC) mapping

This SS supports reference attributes for relations other than containment relations between objects. Reference attributes are therefore introduced in each MOC where needed.

5.2.1 IOC MtpSignPoint

Mapping from NRM IOC MtpSignPoint attributes to SS equivalent MOC MtpSignPoint attributes

NRM Attributes of IOC MtpSignPoint in 32.742 [4]	SS Attributes	SS Type	Qualifier
mtpSignPointId	mtpSignPointId	string	Read-Only, M
pointCode	pointCode	unsigned long	Read-Only, M
networkIndicator	networkIndicator	STNNetworkResourcesIRPSystem::AttributeTypes::NetworkIndicatorType	Read-Only, M
pointCodeLength	pointCodeLength	STNNetworkResourcesIRPSystem::AttributeTypes::PointCodeLengthType	Read-Only, M
spType	spType	STNNetworkResourcesIRPSystem::AttributeTypes::SPTypeType	Read-Only, M
userLabel	userLabel	string	Read-Write, M

5.2.2   IOC SignLinkSetTp

Mapping from NRM IOC SignLinkSetTp attributes to SS equivalent MOC SignLinkSetTp attributes

NRM Attributes of IOC SignLinkSetTp in 32.742 [4]	SS Attributes	SS Type	Qualifier
signLinkSetTpId	signLinkSetTpId	string	Read-Only, M
adjPc	adjPc	unsigned long	Read-Only, M
userLabel	userLabel	string	Read-Write, M
maxCapacityLS	maxCapacityLS	float	Read-Only, M

5.2.3   IOC SignLinkTp

Mapping from NRM IOC SignLinkTp attributes to SS equivalent MOC SignLinkTp attributes

NRM Attributes of IOC SignLinkTp in 32.742 [4]	SS Attributes	SS Type	Qualifier
signLinkTpId	signLinkTpId	string	Read-Only, M
slCode	slCode	unsigned long	Read-Only, M
slsCodeNormalList	slsCodeNormalList	STNNetworkResourcesIRPSystem::AttributeTypes::SLSListType	Read-Only, M
slsCodeCurrentList	slsCodeCurrentList	STNNetworkResourcesIRPSystem::AttributeTypes::SLSListType	Read-Only, M
linkTpStatus	linkTpStatus	STNNetworkResourcesIRPSystem::AttributeTypes::LinkStatusType	Read-Only, M
maxCapacitySL	maxCapacitySL	float	Read-Only, M
userLabel	userLabel	string	Read-Write, M
signLinkType	signLinkType	STNNetworkResourcesIRPSystem::AttributeTypes::SignLinkTypeType	Read-Only, M

5.2.5   IOC SignRouteSetNePart

Mapping from NRM IOC SignRouteSetNePart attributes to SS equivalent MOC SignRouteSetNePart attributes

NRM Attributes of IOC SignRouteSetNePart in 32.742 [4]	SS Attributes	SS Type	Qualifier
signRouteSetNePartId	signRouteSetNePartId	string	Read-Only, M
destinationPc	destinationPc	unsigned long	Read-Only, M
userLabel	userLabel	string	Read-Write, M
loadsharingInformationRouteSetNePart	loadsharingInformationRouteSetNePart	string	Read-Only, M

5.2.6   IOC SignRouteNePart

Mapping from NRM IOC SignRouteNePart attributes and association roles to SS equivalent MOC SignRouteNePart attributes

NRM Attributes/association roles of IOC SignRouteNePart in 32.742 [4]	SS Attributes	SS Type	Qualifier
signRouteNePartId	signRouteNePartId	string	Read-Only, M
signLinkSetTpPointer	signLinkSetTpPointer	GenericNetworkResourcesIRPSystem::AttributeTypes::MOReference	Read-Only, M
fixedPriority	fixedPriority	unsigned long	Read-Only, M
userLabel	userLabel	string	Read-Write, M

5.3 M3UA STN Signalling Information Object Class (IOC) Mapping

This SS supports reference attributes for relations other than containment relations between objects. Reference attributes are therefore introduced in each MOC where needed.

5.3.1 IOC M3UAEntity

Mapping from NRM IOC M3UAEntity attributes to SS equivalent MOC M3UAEntity attributes

NRM Attributes of IOC m3UAEntity in 32.742 [4]	SS Attributes	SS Type	Qualifier
m3UAEntityId	m3UAEntityId	string	Read-Only, M
m3UAEntityPointCode	m3UAEntityPointCode	unsigned long	Read-Only, M
m3UAEntityType	m3UAEntityType	STNNetworkResourcesIRPSystem::AttributeTypes:: m3UAEntityTypeType	Read-Only, M
networkIndicator	networkIndicator	STNNetworkResourcesIRPSystem::AttributeTypes::networkIndicatorType	Read-Only, M
pointCodeLength	pointCodeLength	STNNetworkResourcesIRPSystem::AttributeTypes:: PointCodeLengthType	Read-Only, M

5.3.2 IOC M3UALinkSetTp

Mapping from NRM IOC m3UALinkSetTp attributes to SS equivalent MOC m3UALinkSetTp attributes

NRM Attributes of IOC m3UALinkSetTp in 32.742 [4]	SS Attributes	SS Type	Qualifier
m3UALinkSetTPId	m3UALinkSetTPId	String	Read-Only, M
adjPc	adjPc	unsigned long	Read-Only, M
trafficMode	trafficMode	STNNetworkResourcesIRPSystem::AttributeTypes:: trafficModeType	Read-Only, M

5.3.3 IOC M3UALinkTp

Mapping from NRM IOC m3UALinkTp attributes to SS equivalent MOC m3UALinkTp attributes

NRM Attributes of IOC m3UALinkTp in 32.742 [4]	SS Attributes	SS Type	Qualifier
m3UALinkTpId	m3UALinkTpId	string	Read-Only, M
m3UALinkTPState	m3UALinkTPState	STNNetworkResourcesIRPSystem::AttributeTypes:: m3UALinkTPStateType	Read-Only, M
sCTPAssocLocalAddr	sCTPAssocLocalAddr	STNNetworkResourcesIRPSystem::AttributeTypes:: sCTPAssocAddrType	Read-Only, M
sCTPAssocRemoteAddr	sCTPAssocRemoteAddr	STNNetworkResourcesIRPSystem::AttributeTypes:: sCTPAssocAddrType	Read-Only, M

5.3.4 IOC M3UARouteSetNePart

Mapping from NRM IOC m3UARouteSetNePart attributes to SS equivalent MOC m3UARouteSetNePart attributes

NRM Attributes of IOC m3UARouteSetNePart in 32.742 [4]	SS Attributes	SS Type	Qualifier
m3UARouteSetNePartId	m3UARouteSetNePartId	string	Read-Only, M
destinationPc	destinationPc	unsigned long	Read-Only, M
m3UARouteNePartm3UALinkSetTP	m3UARouteNePart m3UALinkSetTP	string	Read-Only, M

5.3.5 IOC M3UARouteNePart

Mapping from NRM IOC m3UARouteNePart attributes to SS equivalent MOC m3UARouteNePart attributes

NRM Attributes of IOC m3UARouteNePart in 32.742 [4]	SS Attributes	SS Type	Qualifier
m3UARouteNePartId	m3UARouteNePartId	string	Read-Only, M
m3UALinkSetTPId	m3UALinkSetTPId	unsigned long	Read-Only, M
fixedPriority	fixedPriority	STNNetworkResourcesIRPSystem::Attr ibuteTypes:: fixedPriorityType	Read-Only, M
m3UARouteNePart-m3UALinkSetTP	m3UARouteNePart m3UALinkSetTP	string	Read-Only, M

5.3.6 Roles

Roles of the relation `ConnectedTo1`

Name	Definition
m3UARouteNePart-m3UALinkSetTP	This role (when present) represents M3UARouteNePart capability to identify the connected M3UALinkSetTP. When the role is present, the M3UARouteNePart-M3UALinkSetTP shall carry the M3UALinkSetTP DN.

6 Rules for NRM extensions

This clause discusses how the models and IDL definitions provided in the present document can be extended for a particular implementation while still remaining compliant with 3GPP SA5's specifications.

6.1 Allowed extensions

Vendor-specific MOCs may be supported. The vendor-specific MOCs may support new types of attributes. The 3GPP SA5-specified notifications may be issued referring to the vendor-specific MOCs and vendor-specific attributes. New MOCs shall be distinguishable from 3GPP SA5 MOCs by name. 3GPP SA5-specified and vendor-specific attributes may be used in vendor-specific MOCs. Vendor-specific attribute names shall be distinguishable from existing attribute names.

NRM MOCs may be subclassed. Subclassed MOCs shall maintain the specified behaviour of the 3GPP SA5's superior classes. They may add vendor-specific behaviour with vendor-specific attributes. When subclassing, the naming attributes cannot be changed. The subclassed MOC shall support all attributes of its superior class. Vendor-specific attributes cannot be added to 3GPP SA5 NRM MOCs without subclassing.

When subclassing, the 3GPP SA5-specified containment rules and their specified cardinality shall still be followed. As an example, ManagementNode (or its subclasses) shall be contained under SubNetwork (or its subclasses).

Managed Object Instances may be instantiated as CORBA objects. This requires that the MOCs be represented in IDL. 3GPP SA5's NRM MOCs are not currently specified in IDL, but may be specified in IDL for instantiation or subclassing purposes. However, management information models should not require that IRPManagers access the instantiated managed objects other than through supported methods in the present document.

Extension rules related to notifications (Notification categories, Event Types, Extended Event Types etc.) are FFS.

6.2 Extensions not allowed

The IDL specifications in the present document cannot be edited or altered. Any additional IDL specifications shall be specified in separate IDL files.

IDL interfaces (note: not MOCs) specified in the present document may not be subclassed or extended. New interfaces may be defined with vendor-specific methods.

Annex A (normative): IDL specifications

A.1 IDL specification (file name "STNNetworkResourcesIRPSystem.idl")

```
// File: STNNetworkResourcesIRPSystem.idl
#ifndef _STN_NETWORK_RESOURCES_IRP_SYSTEM_IDL_
#define _STN_NETWORK_RESOURCES_IRP_SYSTEM_IDL_
#pragma prefix "3gppsa5.org"
module STNNetworkResourcesIRPSystem
{
   /**
    *  This module adds datatype definitions for types
    *  used in the NRM which are not basic datatypes defined
    *  already in CORBA.
    */
   module AttributeTypes
   {
     enum NetworkIndicatorType
     {
       INTERNATIONAL,
       SPARE,
       NATIONAL,
       NATIONAL_SPARE
     };
     enum PointCodeLengthType
     {
       BITS_24,
       BITS_14
     };
     enum SPTypeType
     {
       SEP,
       STP,
       STEP
     };
     typedef unsigned long SLSType; // 0..15
     typedef sequence<SLSType,16> SLSListType;
     enum LinkStati
     {
       DEACTIVATED,
       FAILED,
       LOCAL_BLOCKED,
       REMOTE_BLOCKED,
       LOCAL_INHIBITED,
       REMOTE_INHIBITED
     };
     typedef sequence <LinkStati,6> LinkStatusType;
     enum SignLinkTypeType
     {
       ST_64K,
       ST_2M
     };
     enum m3UAEntityType
     {
       M3UA_AS,
       SG
     };
     enum m3UALinkTPStateType
     {
       UNESTABLISH,
       ESTABLISHED,
       INACTIVE,
       ACTIVE
     };
     enum AddrType
     {
       IPV4,
       IPV6
```

```
    };
    struct sCTPAssocAddrType
    {
      unsigned long portId,
      AddrType addrType,
      string IPaddr
    };
    enum trafficModeType
    {
      OVERRIDE,
      LOAD_SHARE,
      BROADCAST
    };
  };
};
#endif // _STN_NETWORK_RESOURCES_IRP_SYSTEM_IDL_
```

A.2 IDL specification (file name "STNNetworkResourcesIRPDefs.idl")

```
// File: STNNetworkResourcesIRPDefs.idl
#ifndef _STN_NETWORK_RESOURCES_IRP_DEFS_IDL_
#define _STN_NETWORK_RESOURCES_IRP_DEFS_IDL_

#include "GenericNetworkResourcesNRMDefs.idl"

#pragma prefix "3gppsa5.org"

/**
 * This module defines constants for each MO class name and
 * the attribute names for each defined MO class.
 */
module STNNetworkResourcesIRPDefs
{

 /**
        *  Definitions for MO class MtpSignPoint
        */
       interface MtpSignPoint: GenericNetworkResourcesNRMDefs::Top
       {
          const string CLASS = "MtpSignPoint";

          // Attribute Names
          //
          const string mtpSignPointId = "mtpSignPointId";
          const string pointCode = "pointCode";
          const string networkIndicator = "networkIndicator";
          const string pointCodeLength = "pointCodeLength";
          const string spType = "spType";
          const string userLabel = "userLabel";
       };

       /**
        *  Definitions for MO class SignLinkSetTp
        */
       interface SignLinkSetTp: GenericNetworkResourcesNRMDefs::Top
       {
          const string CLASS = "SignLinkSetTp";

          // Attribute Names
          //
               const string signLinkSetTpId = "signLinkSetTpId";
               const string adjPc = "adjPc";
               const string userLabel = "userLabel";
               const string maxCapacityLS = "maxCapacityLS";

       };


       /**
        *  Definitions for MO class SignLinkTp
        */
       interface SignLinkTp: GenericNetworkResourcesNRMDefs::Top
       {
          const string CLASS = "SignLinkTp";

          // Attribute Names
          //
          const string signLinkTpId = "signLinkTpId";
          const string slCode = "slCode";
          const string slsCodeNormalList = "slsCodeNormalList";
          const string slsCodeCurrentList = "slsCodeCurrentList";
          const string linkTpStatus = "linkTpStatus";
          const string maxCapacitySL = "maxCapacitySL";
          const string userLabel = "userLabel";
          const string signLinkType = "signLinkType";
       };

       /**
        *  Definitions for MO class SignRouteSetNePart
        */
```

```
        interface SignRouteSetNePart: GenericNetworkResourcesNRMDefs::Top
        {
            const string CLASS = "SignRouteSetNePart";

            // Attribute Names
            //
            const string signRouteSetNePartId = "signRouteSetNePartId";
            const string destinationPc = "destinationPc";
            const string userLabel = "userLabel";
            const string loadsharingInformationRouteSetNePart = "loadsharingInformationRouteSetNePart";
        };


        /**
         *  Definitions for abstract MO class SignRouteNePart
         *
         */
        interface SignRouteNePart: GenericNetworkResourcesNRMDefs::Top
        {
            const string CLASS = "SignRouteNePart";

            // Attribute Names
            //
            const string signRouteNePartId = "signRouteNePartId";
            const string signLinkSetTpPointer = "signLinkSetTpPointer";
            const string fixedPriority = "fixedPriority";
            const string userLabel = "userLabel";
        };
/**
         *  Definitions for MO class M3UAEntity
         *
         */
    interface M3UAEntity: GenericNetworkResourcesNRMDefs::ManagedFunction
        {
            const string CLASS = "M3UAEntity";
            // Attribute Names
            //
            const string m3UAEntityId = "m3UAEntityId";
            const string m3UAEntityPointCode = "m3UAEntityPointCode";
            const string m3UAEntityType = "m3UAEntityType";
            const string networkIndicator = "networkIndicator";
            const string pointCodeLength = "pointCodeLength";
        };

        /**
         *  Definitions for MO class M3UALinkSetTp
         */
        interface M3UALinkSetTp: GenericNetworkResourcesNRMDefs::ManagedFunction
        {
            const string CLASS = "M3UALinkSetTp";
            // Attribute Names
            //
             const string m3UALinkSetTPId = "m3UALinkSetTPId";
             const string adjPc = "adjPc";
             const string trafficMode = "trafficMode";
        };

        /**
         *  Definitions for MO class M3UALinkTp
         */
        interface M3UALinkTp: GenericNetworkResourcesNRMDefs::ManagedFunction
        {
            const string CLASS = "M3UALinkTp";
            // Attribute Names
            //
            const string m3UALinkTpId = "m3UALinkTpId";
            const string m3UALinkTPState = "m3UALinkTPState";
            const string sCTPAssocLocalAddr = " sCTPAssocLocalAddr";
            const string sCTPAssocRemoteAddr = " sCTPAssocRemoteAddr";
        };
        /**
         *  Definitions for MO class M3UARouteSetNePart
         */
        interface M3UARouteSetNePart: GenericNetworkResourcesNRMDefs::ManagedFunction
        {
            const string CLASS = "M3UARouteSetNePart";

            // Attribute Names
```

```
        const string m3UARouteSetNePartId = "m3UARouteSetNePartId";
        const string destinationPc = "destinationPc";
        const string m3UARouteNePartm3UALinkSetTP = "m3UARouteNePartm3UALinkSetTP";
    };


    /**
     *  Definitions for abstract MO class M3UARouteNePart
     *
     */
    interface M3UARouteNePart: GenericNetworkResourcesNRMDefs::ManagedFunction
    {
        const string CLASS = "M3UARouteNePart";
        // Attribute Names
        //
        const string m3UARouteNePartId = "m3UARouteNePartId";
        const string m3UALinkSetTPId = "m3UALinkSetTPId";
        const string fixedPriority = "fixedPriority";
    };
};
#endif // _STN_NETWORK_RESOURCES_IRP_DEFS_IDL_
```

Annex B (informative): Change history

<table>
<tr><th colspan="9">Change history</th></tr>
<tr><th>Date</th><th>TSG #</th><th>TSG Doc.</th><th>CR</th><th>Rev</th><th>Subject/Comment</th><th>Cat</th><th>Old</th><th>New</th></tr>
<tr><td>Sep 2004</td><td>SA_25</td><td>SP-040602</td><td>--</td><td>--</td><td>Submitted to TSG SA#25 for Approval</td><td>--</td><td>1.0.0</td><td>6.0.0</td></tr>
<tr><td>Dec 2005</td><td>SA_30</td><td>SP-050720</td><td>0001</td><td>--</td><td>Correct definition of LinkStatusType in IDL - Align with 32.742 (ITU-T Q.751.1)</td><td>F</td><td>6.0.0</td><td>6.1.0</td></tr>
<tr><td>Mar 2006</td><td>SA_31</td><td>SP-060104</td><td>0002</td><td>--</td><td>Correct the linkTpStatus definition in CORBA SS</td><td>F</td><td>6.1.0</td><td>6.2.0</td></tr>
<tr><td>Sep 2006</td><td>SA_33</td><td>SP-060538</td><td>0003</td><td>--</td><td>Deletion of relatedObjects attribute in MTPSignPoint - Align with 32.742 Signalling Transport Network interface NRM IRP Information Service</td><td>F</td><td>6.2.0</td><td>6.3.0</td></tr>
<tr><td>Sep 2006</td><td>SA_33</td><td>SP-060554</td><td>0005</td><td>--</td><td>Add M3UA related information - Align with 32.742</td><td>B</td><td>6.3.0</td><td>7.0.0</td></tr>
<tr><td>Dec 2006</td><td>SA_34</td><td>SP-060733</td><td>0004</td><td>--</td><td>Correct the compiling errors in IDL</td><td>F</td><td>7.0.0</td><td>7.1.0</td></tr>
<tr><td>Mar 2007</td><td>--</td><td>--</td><td>--</td><td>--</td><td>Delete reference to the 32.744 CMIP SS. Reason: SA#35 endorsed the SA5 decision to not propagate the CMIP Solution Sets to Rel-7 (TS 32.3x4, TS 32.4x4, TS 32.6x4)</td><td>--</td><td>7.1.0</td><td>7.1.1</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
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History

Document history		
V7.1.1	March 2007	Publication