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LTE;
Telecommunication management;
Signalling Transport Network (STN)
interface Network Resource Model (NRM)
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Information Service (IS)
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650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
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Contents

Foreword

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

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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; as identified below:

28.734: Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP); Requirements

28.735: Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)

28.736: Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP); Solution Set (SS) definitions

1 Scope

The present document is part of an Integration Reference Point (IRP) named "Signalling Transport Network (STN) interface NRM IRP", through which an "IRPAgent" (typically an Element Manager or Network Element) can communicate Configuration Management information to one or several "IRPManagers" (typically Network Managers) concerning Signalling Transport resources. This IRP comprises a set of specifications defining Requirements, a protocol neutral Network Resource Model (NRM) and corresponding Solution Set(s).

The present document specifies the protocol neutral STN interface NRM IRP. It reuses relevant parts of the generic NRM in TS 28.622 [6], either by direct reuse or sub-classing, and in addition to that defines Signalling Transport specific Managed Object Classes.

In order to access the information defined by this NRM, an IRP IS is needed, such as the Basic CM IRP: IS (TS 32.602 [7]) or the Bulk CM IRP: IS (TS 32.612 [8]). However, which IS is applicable is outside the scope of this document.

Finally, regarding the support of the State Management IRP: IS (TS 28.625 [3]), all NRMs of one release shall support the same State Management IRP version.

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 28.625: "Telecommunication management; State Management Integration Reference Point (IRP); Information Service (IS)".

[4] 3GPP TS 32.300: "Telecommunication management; Configuration Management (CM); Name convention for Managed Objects".

[5] 3GPP TS 32.600: "Telecommunication management; Configuration Management (CM); Concept and high-level requirements".

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

[7] 3GPP TS 32.602: "Telecommunication management; Configuration Management (CM); Basic CM Integration Reference Point (IRP); Information Service (IS)".

[8] 3GPP TS 32.612: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP); Information Service (IS)".

[9] ITU-T Recommendation Q.700 (03/93): "Introduction to CCITT Signalling System No.7".

[10] ITU-T Recommendation Q.751.1 (10/95): "Network Element Management Information Model for The Message Transfer Part (MTP)".

[11] ITU-T Recommendation Q.704 (07/96): "Signalling network functions and messages".

[12] 3GPP TS 32.111-2: "Telecommunication management; Fault Management (FM); Part 2: Alarm Integration Reference Point (IRP); Information Service (IS)".

[13] ITU-T Recommendation Q.702 (11/88): "Signalling Data Link".

[14] 3GPP TS 29.202: "Signalling System No. 7 (SS7) signalling transport in core network; Stage 3".

[15] 3GPP TS 25.410: "UTRAN Iu Interface: General Aspects and Principles".

[16] 3GPP TS 25.420: "UTRAN I_{ur} interface general aspects and principles".

[17] 3GPP TS 25.430: "UTRAN Iub interface: general aspects and principles".

[18] 3GPP TS 48.018: "Base Station System (BSS)-Serving GPRS Support Node (SGSN);BSS GPRS Protocol (BSSGP)".

[19] 3GPP TS 48.008: "Mobile Switching Centre-Base Station System (MSC-BSS) interface;Layer 3 specification".

[20] 3GPP TS 28.702: "Telecommunication management; Core Network Resources Integration Reference Point (IRP); Information Service (IS)".

[21] 3GPP TS 28.652: "Telecommunication management; UTRAN Network Resource Model (NRM) Integration Reference Point (IRP); Information Service (IS)".

[22] 3GPP TS 29.060: "GPRS Tunnelling Protocol (GTP) across the Gn and Gp interface".

[23] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".

[24] 3GPP TS 29.018: "Serving GPRS Support Node (SGSN)-Visitors Location Register (VLR) Gs interface layer 3 specification".

[25] 3GPP TS 28.734: "Telecommunication management; Signalling Transport Network (STN) interface Network Resource Model (NRM) Integration Reference Point (IRP); Requirements".

[26] 3GPP TS 32.150: "Telecommunication management; Integration Reference Point (IRP) Concept and definitions".

[27] ITU-T Recommendation E.600 (03/93): "Terms and Definitions of traffic engineering".

[28] IETF RFC 3332: "Signaling System 7 (SS7) Message Transfer Part 3 (MTP3) - User Adaptation Layer (M3UA)".

[29] IETF RFC 2960: "Stream Control Transmission Protocol (SCTP)".

[30] IETF RFC 3873: "Stream Control Transmission Protocol (SCTP); Management Information Base (MIB)".

[31] 3GPP TS 28.620: "Fixed Mobile Convergence (FMC) Federated Network Information Model (FNIM) Umbrella Information Model (UIM)".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions in 3GPP TS 32.101 [1], 32.102 [2], 32.600 [5], 28.734 [25] and the following apply:

Association: See definition in TS 28.622 [6].

Managed Element (ME): See definition in TS 28.622 [6].

Managed Object (MO): See definition in TS 28.622 [6].

Management Information Model (MIM): See definition in TS 28.622 [6].

Network Resource Model (NRM): See definition in TS 28.622 [6].

3.2 Abbreviations

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

CM	Configuration Management
DN	Distinguished Name
IOC	Information Object Class
IRP	Integration Reference Point
ITU-T	International Telecommunication Union, Telecommunication Standardisation Sector
ME	Managed Element
MIM	Management Information Model
MO	Managed Object
MTP	Message Transfer Part
NE	Network Element
NRM	Network Resource Model
RDN	Relative Distinguished Name
SLC	Signalling Link Code
SLS	Signalling Link Selection
SP	Signalling Point
STN	Signalling Transport Network
STP	Signalling Transfer Point
TP	Termination Point
UML	Unified Modelling Language

4 Model

4.1 Imported information entities and local labels

Label reference	Local label
TS 28.620 [31], information object class, *Top_*	*Top_*
TS 28.622 [6], information object class, ManagedElement	ManagedElement
TS 28.622 [6], information object class, *ManagedFunction*	*ManagedFunction*
TS 28.622 [6], information object class, VsDataContainer	VsDataContainer

4.2 Class diagram

4.2.1 Relationships

This clause depicts the set of classes (e.g. IOCs) that encapsulates the information relevant for this IRP. This clause provides the overview of the relationships of relevant classes in UML. Subsequent clauses provide more detailed specification of various aspects of these classes.

The figure below shows the name-containment relation and other types of relations of the STN NRM.

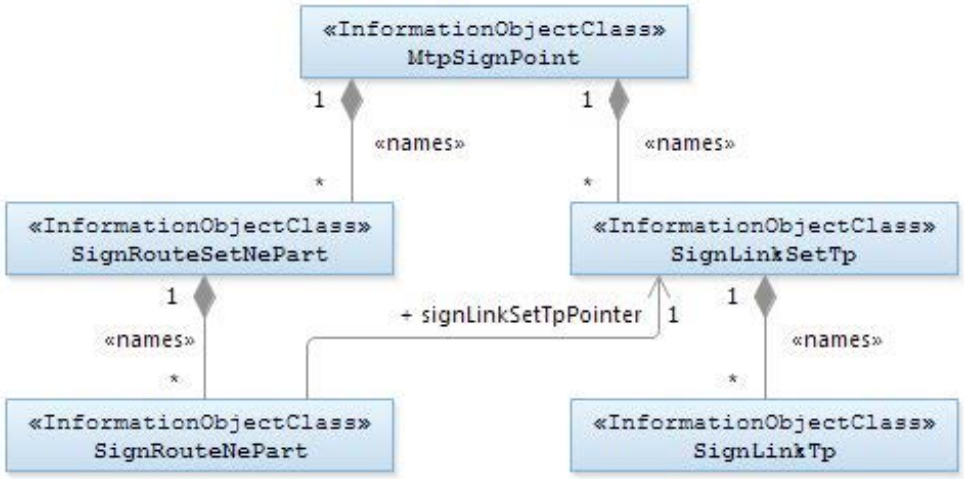

Figure 4.2.1-1 : Signalling Transport Network NRM Containment/Naming and Association diagram 1

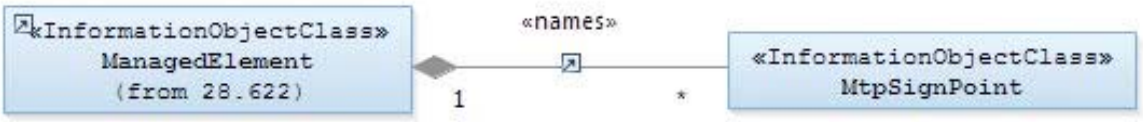

Figure 4.2.1-2 : Signalling Transport Network NRM Containment/Naming and Association diagram 2

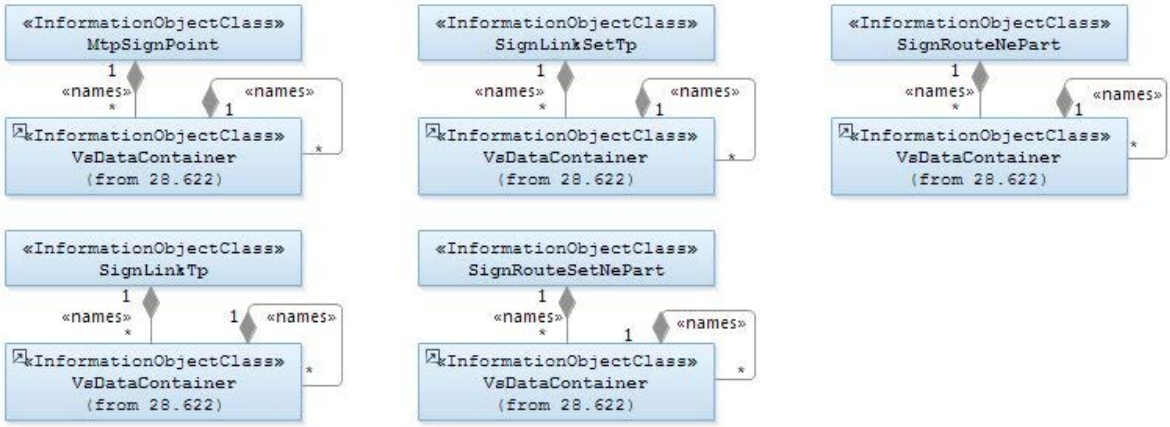

Figure 4.2.1-3 : VsDataContainer Containment/Naming and Association in STN NRM diagram

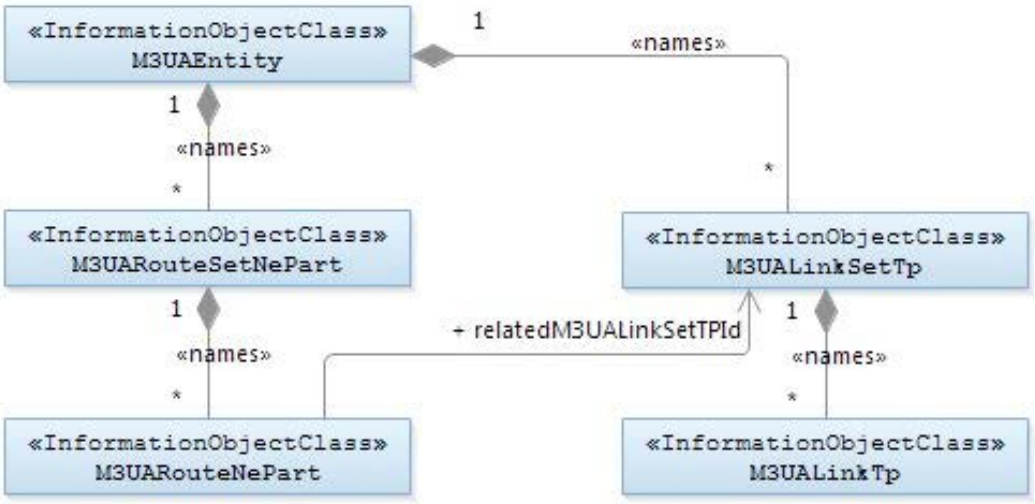

Figure 4.2.1-4: M3UA view of STN NRM Containment/Naming and Association diagram 1

Figure 4.2.1-5: M3UA view of STN NRM Containment/Naming and Association diagram 2

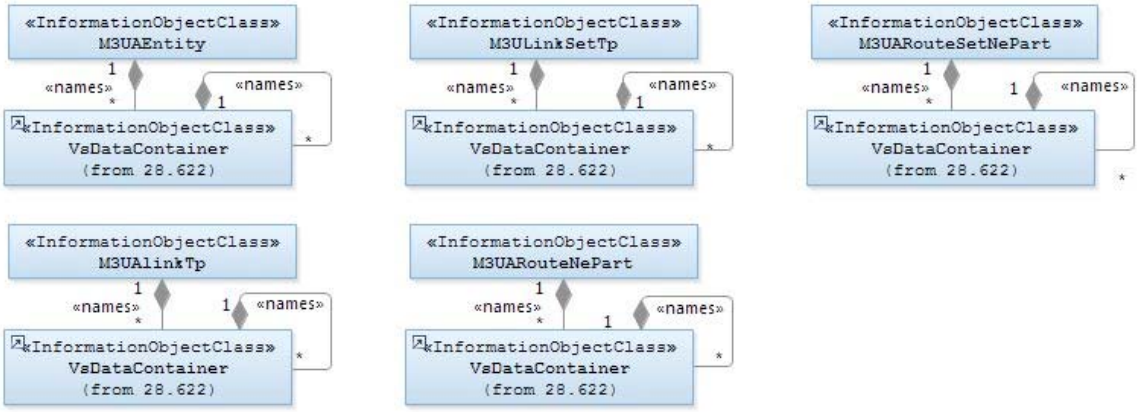

Figure 4.2.1-6: `VsDataContainer` Containment/Naming and Association in M3UA STN NRM diagram

4.2.2 Inheritance

This clause depicts the inheritance relationships that exist between IOCs.

The following figure shows the inheritance hierarchy for the STN NRM.

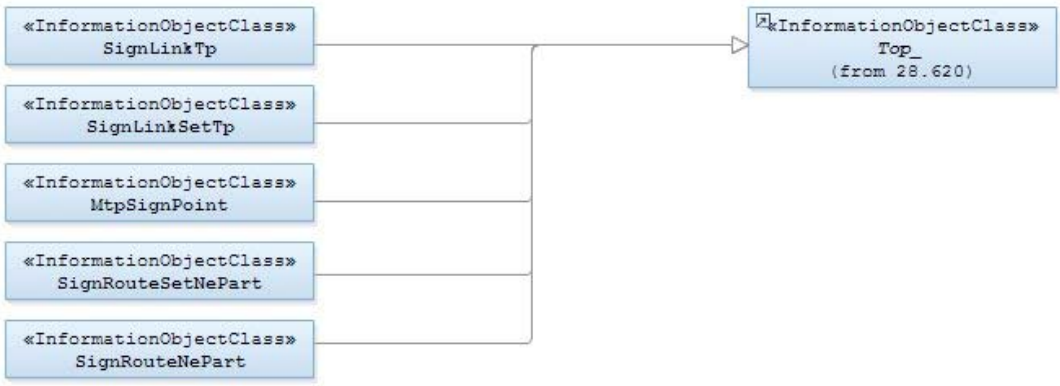

Figure 4.2.2-1 : Signalling Transport Network NRM Inheritance Hierarchy

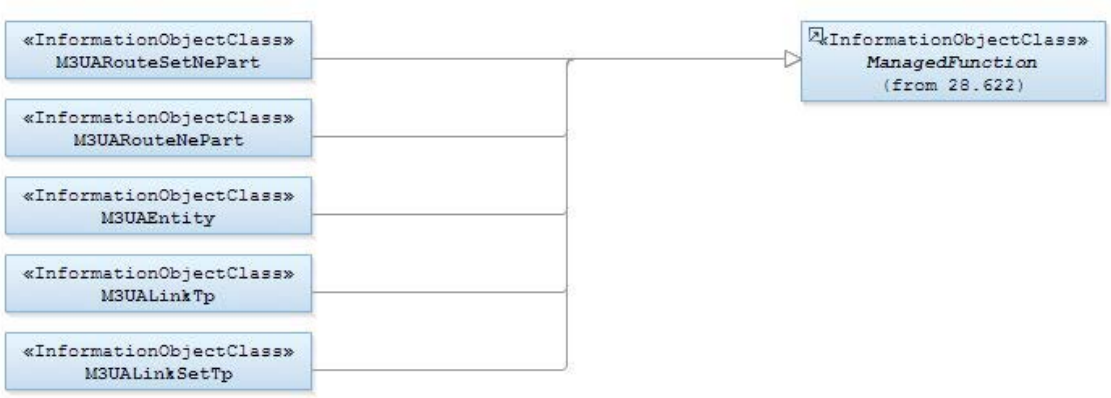

Figure 4.2.2-2: M3UA view of Signalling Transport Network Resource Model Inheritance Hierarchy

4.3 Class definitions

4.3.1 MtpSignPoint

4.3.1.1 Definition

This IOC represents the Signalling Point functionality. For more information about the Signalling Point, see ITU-T Q.700 [9] and ITU-T Q.751.1 [10].

4.3.1.2 Attributes

Attribute Name	Support Qualifier	isReadable	isWritable	isInvariant	isNotifyable
pointCode	M	M	-	-	M
networkIndicator	M	M	-	-	M
pointCodeLength	M	M	-	-	M
spType	M	M	-	-	M
userLabel	M	M	M	-	M

4.3.1.3 Attribute constraints

None.

4.3.1.4 Notifications

The common notifications defined in subclause 4.5 are valid for this IOC, without exceptions or additions.

4.3.2 SignLinkSetTp

4.3.2.1 Definition

This IOC represents a bi-directional Signalling Link Set Termination Point functionality.
For more information about the Signalling Link Set Termination Point, see ITU-T Q.700 [9] and ITU-T Q.751.1 [10].

4.3.2.2 Attributes

Attribute name	Support Qualifier	isReadable	isWritable	isInvariant	isNotifyable
adjPc	M	M	-	-	M
userLabel	M	M	M	-	M
maxCapacityLS	M	M	-	-	M

4.3.2.3 Attribute constraints

None.

4.3.2.4 Notifications

The common notifications defined in subclause 4.5 are valid for this IOC, without exceptions or additions.

4.3.3 SignLinkTp

4.3.3.1 Definition

This IOC represents a bi-directional Signalling Link Termination Point functionality.
For more information about the Signalling Link Termination Point, see ITU-T Q.700 [9] and ITU-T Q.751.1 [10].

4.3.3.2 Attributes

Attribute name	Support Qualifier	isReadable	isWritable	isInvariant	isNotifyable
slCode	M	M	-	-	M
slsCodeNormalList	O	M	-	-	M
slsCodeCurrentList	M	M	-	-	M
linkTpStatus	M	M	-	-	M
maxCapacitySL	M	M	-	-	M
userLabel	M	M	M	-	M
signLinkType	M	M	-	-	M

4.3.3.3 Attribute constraints

None.

4.3.3.4 Notifications

The common notifications defined in subclause 4.5 are valid for this IOC, without exceptions or additions.

4.3.4 SignRouteSetNePart

4.3.4.1 Definition

This IOC represents a Signalling Route Set functionality. For more information about the Signalling Route Set Network Element Part, see ITU-T Q.700 [9] and ITU-T Q.751.1 [10].

4.3.4.2 Attributes

Attribute name	Support Qualifier	isReadable	isWritable	isInvariant	isNotifyable
destinationPc	M	M	-	-	M
userLabel	M	M	M	-	M
loadsharingInformationRouteSetNePart	M	M	-	-	M

4.3.4.3 Attribute constraints

None.

4.3.4.4 Notifications

The common notifications defined in subclause 4.5 are valid for this IOC, without exceptions or additions.

4.3.5 SignRouteNePart

4.3.5.1 Definition

This IOC represents a Signalling Route functionality. For more information about the Signalling Route Network Element Part, see ITU-T Q.700 [9] and ITU-T Q.751.1 [10].

4.3.5.2 Attributes

Attribute name	Support Qualifier	isReadable	isWritable	isInvariant	isNotifyable
fixedPriority	M	M	-	-	M
userLabel	M	M	M	-	M
Attribute related to role					
signLinkSetTpPointer	M	M	-	-	M

4.3.5.3 Attribute constraints

None.

4.3.5.4 Notifications

The common notifications defined in subclause 4.5 are valid for this IOC, without exceptions or additions.

4.3.6 M3UAEntity

4.3.6.1 Definition

This IOC represents a functionality entity which processes M3UA signalling. For more information about M3UA, see [14] and [28].

4.3.6.2 Attributes

Attribute name	Support Qualifier	isReadable	isWritable	isInvariant	isNotifyable
m3UAEntityPointCode	M	M	-	-	M
m3UAEntityType	M	M	-	-	M
networkIndicator	M	M	-	-	M
pointCodeLength	M	M	-	-	M

4.3.6.3 Attribute constraints

None.

4.3.6.4 Notifications

The common notifications defined in subclause 4.5 are valid for this IOC, without exceptions or additions.

4.3.7 M3UALinkSetTp

4.3.7.1 Definition

This IOC represents a bi-directional termination point functionality of M3UA signalling link set which is the set of M3UA signalling links between M3UA_AS and SG or between M3UA_AS and M3UA_AS. For more information about M3UA_AS and SG, see [14] and [28].

4.3.7.2 Attributes

Attribute name	Support Qualifier	isReadable	isWritable	isInvariant	isNotifyable
adjPc	M	M	-	-	M
trafficMode	M	M	-	-	M

4.3.7.3 Attribute constraints

None.

4.3.7.4 Notifications

The common notifications defined in subclause 4.5 are valid for this IOC, without exceptions or additions.

4.3.8 M3UALinkTp

4.3.8.1 Definition

This IOC represents a termination point functionality of M3UA signalling link which is a bi-directional M3UA logical communication channel between the particular SCTP termination points of signalling gateway process (SGP) and application server process (ASP) or the logical communication channel between the particular SCTP termination points of two IP server processes (IPSPs).
For more information about M3UA and SCTP signalling information, see [14] and [28].

4.3.8.2 Attributes

Attribute name	Support Qualifier	isReadable	isWritable	isInvariant	isNotifyable
m3UALinkTPState	M	M	-	-	M
sCTPAssocLocalAddr	M	M	-	-	M
sCTPAssocRemoteAddr	O	M	-	-	M

4.3.8.3 Attribute constraints

None.

4.3.8.4 Notifications

The common notifications defined in subclause 4.5 are valid for this IOC, without exceptions or additions.

4.3.9 M3UARouteSetNePart

4.3.9.1 Definition

This IOC represents a set of the M3UA signalling route between M3UA local entity and M3UA destination entity. For M3UA signalling information, see [14] and [28].

4.3.9.2 Attributes

Attribute name	Support Qualifier	isReadable	isWritable	isInvariant	isNotifyable
destinationPc	M	M	-	-	M

4.3.9.3 Attribute constraints

None.

4.3.9.4 Notifications

The common notifications defined in subclause 4.5 are valid for this IOC, without exceptions or additions.

4.3.10 M3UARouteNePart

4.3.10.1 Definition

This IOC represents a path between local M3UA entity and destination M3UA entity. For more information about M3UA signalling, see [14] and [28].

4.3.10.2 Attributes

Attribute name	Support Qualifier	isReadable	isWritable	isInvariant	isNotifyable
fixedPriority	M	M	-	-	M
Attribute related to role					
relatedM3UALinkSetTPId	M	M	-	-	M

4.3.10.3 Attribute constraints

None.

4.3.10.4 Notifications

The common notifications defined in subclause 4.5 are valid for this IOC, without exceptions or additions.

4.4 Attribute definitions

4.4.1 Attribute properties

Attribute Name	Documentation and Allowed Values	Properties
adjPc	The signalling point code information of the signalling point adjacent to the signalling link set. (Ref ITU-T Q.704 [11], Ref ITU-T Q.751.1 [10]) allowedValues: N/A	type: Integer multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
destinationPc	The signalling point code information of the destination signalling point of the signalling route set. (Ref ITU-T Q.704 [11], Ref ITU-T Q.751.1 [10]) allowedValues: N/A	type: Integer multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
fixedPriority	This attribute determines, if the signallingRoute is used as current route. The signallingRoute instances contained in the same signallingRouteSet are chosen in ascending order as current routes (The lower the value, the higher the priority). The priority is defined by means of assigning priorities to all involved route segments. If from a particular SP two or more route segments are used with the same priority, loadsharing between Signalling Routes may occur (Ref ITU-T Q.751.1 [10]). allowedValues: 0…255, maximum value is implementation dependent	type: Integer multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
linkTpStatus	This is a set-valued attribute. It contains the functional statuses as described in ITU-T Q.704 [11]. (Ref ITU-T Q.704 [11], Ref ITU-T Q.751.1 [10]) allowedValues: • localBlocked, remoteBlocked, localInhibited, remoteInhibited, failed, deactivated • The absence of any value (i.e. Null) indicates a status of available.	type: <<enumeration>> multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: True
loadsharingInformation RouteSetNePart	This attribute contains specific information for target specific loadsharing via the current routes working on a routeset basis via the current routes. (Ref ITU-T Q.751.1 [10]) allowedValues: N/A	type: String multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
maxCapacityLS	The maximum capacity of a signalling linkset is the maximum load that should be placed on the linkset, when all links that could be active in the linkset are, and are working in service. Unit: Erlang (Ref ITU-T E.600 [27]) allowedValues: N/A	type: Real multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
maxCapacitySL	This attribute describes the maximum capacity for the signLinkTp. The maximum capacity of a signalling link is the maximum load that should be placed on the signalling link. Unit: Erlang (Ref ITU-T E.600 [27]) allowedValues: N/A	type: Real multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
m3UAEntityPointCode	The M3UA signalling point code information of the signalling point. (Ref ITU-T Q.704[11],Ref ITU-T Q.751.1[10]) allowedValues: N/A	type: Integer multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
m3UAEntityType	It identifies the M3UA entity Type. allowedValues: • M3UA Application Server (M3UA_AS), Signalling Gateway (SG) • Note: M3UA_AS is defined as AS in Ref.[28]	type: <<enumeration>> multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
m3UALinkTPState	This attribute represents the state of M3UA signalling link. allowedValues: Ref. [28], Ref. [29] • UNESTABLISH (0): SCTP association of the m3ua link is not established. • ESTABLISHED (1): SCTP association of the M3UA link is established, but the ASP state is down. • INACTIVE (2): ASP state is up. • ACTIVE (3): ASP state is active.	type: <<enumeration>> multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False

Attribute Name	Documentation and Allowed Values	Properties
networkIndicator	The network indicator information of the signalling point, (Ref ITU-T Q.704 [11], Ref ITU-T Q.751.1 [10]) allowedValues: International, Spare, National, NationalSpare	type: <<enumeration>> multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
pointCode	The signalling point code information of the signalling point. (Ref ITU-T Q.704 [11], Ref ITU-T Q.751.1 [10]) allowedValues: N/A	type: Integer multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
pointCodeLength	The signalling point code length information of the signalling point. (Ref ITU-T Q.704 [11]) allowedValues: 14, 24	type: <<enumeration>> multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
sCTPAssocLocalAddr	This attribute represents the SCTP association local port and IP address (Ref.[30]). portId:Unique identification of port (port number, integer); List of { AddrType(IPv4, IPv6), IPaddr (string)}. allowedValues: N/A	type: <<datatype>> multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
sCTPAssocRemoteAddr	This attribute represents the corresponding SCTP association port and IP address (Ref.[30]). portId:Unique identification of port (port number, integer); List of { AddrType(IPv4, IPv6), IPaddr (string)}. allowedValues: N/A	type: <<datatype>> multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
signLinkType	This attribute represents the type of signalling link. allowedValues: 64K, 2M	type: <<enumeration>> multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
slCode	The Signalling Link Code (SLC) is used to distinguish signalling link in the signalling link set. It is the same value (between 0 and 15) at each end of the link, and is different from that of any other link between the same two adjacent signalling points. (Ref ITU-T Q.704 [11]), Ref ITU-T Q.751.1 [10]) allowedValues: 0…15	type: Integer multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
slsCodeCurrentList	This attribute represents the SLS-Code which is currently used on the signallingLinkTp. It may be different from the slsNormalList, in case some fault has occurred. (Ref ITU-T Q.751.1 [10]) SET SIZE (0..16) OF Sls -- Each Sls value can occur at most once in a given SET allowedValues: 0…15	type: Integer multiplicity: 0..16 isOrdered: False isUnique: True defaultValue: None isNullable: False
slsCodeNormalList	This attribute indicates which SLS-Codes are initially administratively assigned to this signallingLinkTp for the normal operation. (Ref ITU-T Q.751.1 [10]) SET SIZE (0..16) OF Sls -- Each Sls value can occur at most once in a given SET allowedValues: 0…15	type: Integer multiplicity: 0..16 isOrdered: False isUnique: True defaultValue: None isNullable: False
spType	The type of the signalling point. (Ref ITU-T Q.700[9], Ref ITU-T Q.751.1 [10]) allowedValues: SEP, STP, STEP	type: <<enumeration>> multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False
trafficMode	It identifies the selected mode of M3UA signalling link (Ref. [28]). allowedValues: Override mode, Load share mode, Broadcast mode	type: <<enumeration>> multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False

Attribute Name	Documentation and Allowed Values	Properties
userLabel	A user-friendly name of this object. allowedValues: N/A	type: String multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: True
Attribute related to role		
relatedM3UALinkSetTPId	This role attribute represents a uni-directional relation between the M3UARouteNePart and M3UALinkSetTP. This role (when present) represents M3UARouteNePart capability to identify the connected M3UALinkSetTP. When the role is present, the attribute shall carry the M3UALinkSetTP DN. allowedValues: N/A	type: DN multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False passedById: True
signLinkSetTpPointer	It references the signallingLinkSetTp which is intended to be used as first segment of the succession of linksets, which form the signalling route on the network level. allowedValues: N/A	type: DN multiplicity: 1 isOrdered: N/A isUnique: N/A defaultValue: None isNullable: False passedById: True

4.4.2 Constraints

None.

4.5 Common notifications

4.5.1 Alarm notifications

This clause presents a list of notifications, defined in [5], that IRPManager can receive. The notification header attribute objectClass/objectInstance, defined in [14], would capture the DN of an instance of an IOC defined in this IRP specification.

Name	Qualifier	Notes
notifyAckStateChanged	See Alarm IRP (3GPP TS 32.111-2 [12])	
notifyChangedAlarm	See Alarm IRP (3GPP TS 32.111-2 [12])	
notifyClearedAlarm	See Alarm IRP (3GPP TS 32.111-2 [12])	
notifyNewAlarm	See Alarm IRP (3GPP TS 32.111-2 [12])	
notifyComments	See Alarm IRP (3GPP TS 32.111-2 [12])	
notifyAlarmListRebuilt	See Alarm IRP (3GPP TS 32.111-2 [12])	
notifyPotentialFaultyAlarmList	See Alarm IRP (3GPP TS 32.111-2 [12])	

4.5.2 Configuration notifications

This clause presents a list of notifications, defined in [3], that IRPManager can receive. The notification header attribute objectClass/objectInstance, defined in [14], would capture the DN of an instance of an IOC defined in this IRP specification.

Name	Qualifier	Notes
notifyAttributeValueChange	O	
notifyObjectCreation	O	
notifyObjectDeletion	O	

Annex A (informative): Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
2014-06	SA#64	SP-140358	001	-	remove the feature support statements	11.0.0	11.1.0

History

Document history		
V11.0.0	April 2013	Publication
V11.1.0	July 2014	Publication