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SERIES G: TRANSMISSION SYSTEMS AND MEDIA,
DIGITAL SYSTEMS AND NETWORKS

Digital transmission systems – Digital networks –
Telecommunications management network

**Subnetwork connection management
information viewpoint**

ITU-T Recommendation G.853.2

(Previously CCITT Recommendation)

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For further details, please refer to ITU-T List of Recommendations.

ITU-T RECOMMENDATION G.853.2

SUBNETWORK CONNECTION MANAGEMENT INFORMATION VIEWPOINT

Summary

This Recommendation provides the information viewpoint of all the already defined management services relevant to subnetwork connections established across a subnetwork.

Source

ITU-T Recommendation G.853.2 was prepared by ITU-T Study Group 15 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 8th of November 1996.

FOREWORD

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Recommendation G.853.2

SUBNETWORK CONNECTION MANAGEMENT INFORMATION VIEWPOINT

(Geneva, 1996)

1 Scope

This Recommendation provides the information viewpoint of all the already defined management services relevant to subnetwork connections established across a subnetwork.

2 References

The following ITU-T Recommendations contain provisions which through reference in this text constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations are subject to revision; all users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations. A list of the currently valid ITU-T Recommendations is regularly published.

ITU-T Recommendation G.851.1 (1996), *Management of the transport network – Application of the RM-ODP framework*.

ITU-T Recommendation G.852.1 (1996), *Management of the transport network – Enterprise viewpoint for simple subnetwork connection management*.

ITU-T Recommendation G.853.1 (1996), *Common elements of the information viewpoint for the management of a transport network*.

3 Definitions

To be extended if needed.

4 Abbreviations

To be extended if needed.

5 Subnetwork connection management information viewpoint

This Recommendation provides the information viewpoint of all the already defined management services relevant to subnetwork connections established across a subnetwork.

Each management service information viewpoint is presented in an annex.

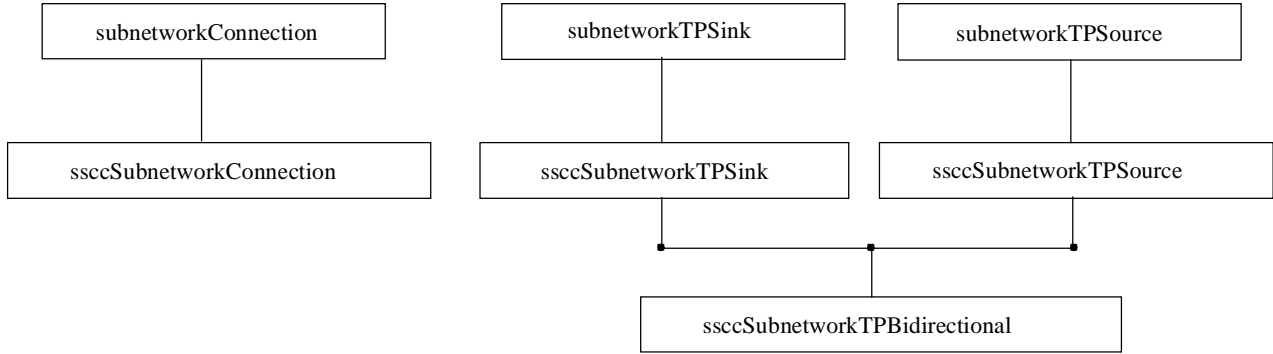
This Recommendation presents in:

- Annex A: the information viewpoint for the simple subnetwork connection management;
- Annex B: the information viewpoint of the simple failure monitoring service;
- Annex C: the information viewpoint for the simple monitored subnetwork connection management.

ANNEX A

Information viewpoint for the simple subnetwork connection management

A.1 Diagrams of information object and relationship classes



Inheritance diagram

A.2 Label references

Full label reference	Local label reference
<"Rec. G.853.1",INFORMATION_OBJECT: subnetwork>	<subnetwork>
<"Rec. G.853.1",INFORMATION_OBJECT: subnetworkConnection>	<subnetworkConnection>
<"Rec. G.853.1",INFORMATION_OBJECT: subnetworkTPSink>	<subnetworkTPSink>
<"Rec. G.853.1",INFORMATION_OBJECT: subnetworkTPSource>	<subnetworkTPSource>

A.3 Import

<"Rec. G.853.1",INFORMATION_RELATIONSHIP:subnetworkIsDelimitedBy>

This information concept is related to the following enterprise entities:

<"Rec. G.852.1",COMMUNITY:sscc,PURPOSE>

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:OBLG_1>

<"Rec. G.853.1",INFORMATION_RELATIONSHIP:
subnetworkConnectionIsTerminatedByPointToPoint>

This information concept is related to the following enterprise entities:

<"Rec. G.852.1",COMMUNITY:sscc,PURPOSE>

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:OBLG_2>

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:PROH_1>

<"Rec. G.853.1",INFORMATION_RELATIONSHIP:subnetworkHasSubnetworkConnections>

This information concept is related to the following enterprise entities:

<"Rec. G.852.1",COMMUNITY:sscc,PURPOSE>
<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:OBLG_3>
<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:OBLG_4>

<"Rec. G.853.1",ATTRIBUTE:userLabel>

This information concept is related to the following enterprise entities:

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:OBLG_3>
<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:PERM_1>
<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:OBLG_4>
<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc2,OBLIGATION:OBLG_2>

A.4 Information object class definitions

A.4.1 sscSubnetwork

This information concept is related to the following enterprise entity:

<"Rec. G.852.1",COMMUNITY:sscc,ROLE:sn>.

A.4.1.1 Informal description

DEFINITION

"This object class is derived from subnetwork."

RELATIONSHIP

"<subnetworkIsDelimitedBy>,
<subnetworkHasSubnetworkConnections>"

A.4.1.2 Semi-formal description

sscSubnetwork INFORMATION OBJECT CLASS

DERIVED FROM G.853-1: subnetwork;

CHARACTERIZED BY

sscSubnetworkPackage PACKAGE

BEHAVIOUR

sscsubnetworkBehaviour BEHAVIOUR

DEFINED AS

"<DEFINITION>,
<subnetworkIsDelimitedBy>
<subnetworkHasSubnetworkConnections>"

::

A.4.1.3 Formal description

sscSubNetwork_Static

sscSubNetwork : F OBJECT
subNetwork_Static

sscSubNetwork \subseteq *subNetwork*

sscSubNetwork_Dynamic

Δ *sscSubNetwork_Static*
subNetwork_Dynamic

A.4.2 sscSubnetworkConnection

This information concept is related to the following enterprise entity:
<"Rec. G.852.1",COMMUNITY:sscc,ROLE:snc>.

A.4.2.1 Informal description

DEFINITION

"This object class is derived from subnetworkConnection."

ATTRIBUTE

userLabel

"This attribute value is used to identify the sscSubnetworkConnection."

RELATIONSHIP

"<subnetworkIsDelimitedBy>,
<subnetworkConnectionIsTerminatedByPointToPoint>,
<subnetworkConnectionHasTSC>,
<subnetworkHasSubnetworkConnections>"

A.4.2.2 Semi-formal description

sscSubnetworkConnection INFORMATION OBJECT CLASS

DERIVED FROM G.853-1: subnetworkConnection;

CHARACTERIZED BY

sscSubnetworkConnectionPackagePACKAGE

BEHAVIOUR

sscSubnetworkConnectionBehaviour BEHAVIOUR

DEFINED AS

"DEFINITION,
<subnetworkIsDelimitedBy>,
<subnetworkConnectionIsTerminatedByPointToPoint>,
<subnetworkConnectionHasTSC>,
<subnetworkHasSubnetworkConnections>"

ATTRIBUTES

userLabel;

::

A.4.2.3 Formal description

sscSubNetworkConnection_Static

sscSubNetworkConnection : **F** OBJECT
subNetworkConnection_Static
userLabel_Static

sscSubNetworkConnection \subseteq *subNetworkConnection*

sscSubNetworkConnection \subseteq **dom** *userLabel*

sscSubNetworkConnection_Dynamic

Δ *sscSubNetworkConnection_Static*
subNetworkConnection_Dynamic
userLabel_Dynamic

A.4.3 sscSubnetworkTPBidirectional

This information concept is related to the following enterprise entity:
<"Rec. G.852.1",COMMUNITY:sscc,ROLE:port>.

A.4.3.1 Informal description

DEFINITION

"This object class is derived from `ssccSubnetworkTPSink` and `ssccSubnetworkTPSource`."

A.4.3.2 Semi-formal description

```
ssccSubnetworkTPBidirectional INFORMATION OBJECT CLASS
  DERIVED FROM ssccSubnetworkTPSink, ssccSubnetworkTPSource;
  CHARACTERIZED BY
    ssccSubnetworkTPBidirectional PackagePACKAGE
    BEHAVIOUR
    ssccSubnetworkTPBidirectional Behaviour BEHAVIOUR
  DEFINED AS
    "DEFINITION"
;;
```

A.4.3.3 Formal description

<p><code>ssccSubNetworkTpBidirectional_Static</code> _____</p> <p><i>ssccSubNetworkTpBidirectional</i> : F OBJECT</p> <p><i>ssccSubNetworkTpSink_Static</i></p> <p><i>ssccSubNetworkTpSource_Static</i></p>
<p>_____</p> <p>$ssccSubNetworkTpBidirectional \subseteq ssccSubNetworkTpSink \cup ssccSubNetworkTpSource$</p>

<p>_____ <code>ssccSubNetworkTpBidirectional_Dynamic</code> _____</p> <p>Δ <i>ssccSubNetworkTpBidirectional_Static</i></p> <p><i>ssccSubNetworkTpSink_Dynamic</i></p> <p><i>ssccSubNetworkTpSource_Dynamic</i></p>
--

A.4.4 `ssccSubnetworkTPSink`

This information concept is related to the following enterprise entity:
<"Rec. G.852.1",COMMUNITY:`sscc,ROLE:port`>.

A.4.4.1 Informal description

DEFINITION

"This object class reflects is derived from `subnetworkTPSink`."

RELATIONSHIP

"<`subnetworkIsDelimitedBy`>,
<`subnetworkConnectionIsTerminatedByPointToPoint`>"

A.4.4.2 Semi-formal description

```
ssccSubnetworkTPSink INFORMATION OBJECT CLASS
  DERIVED FROM G.853-1: subnetworkTPSink;
  CHARACTERIZED BY
    ssccSubnetworkTPSinkPackagePACKAGE
    BEHAVIOUR
    ssccSubnetworkTPSinkBehaviour BEHAVIOUR
  DEFINED AS
    "DEFINITION,
    <subnetworkIsDelimitedBy>,
    <subnetworkConnectionIsTerminatedByPointToPoint>."
;;
```

A.4.4.3 Formal description

<i>ssccSubNetworkTpSink_Static</i>
<i>ssccSubNetworkTpSink</i> : F OBJECT <i>subNetworkTpSink_Static</i>
<i>ssccSubNetworkTpSink</i> \subseteq <i>subNetworkTpSink</i>

<i>ssccSubNetworkTpSink_Dynamic</i>
Δ <i>ssccSubNetworkTpSink_Static</i> <i>subNetworkTpSink_Dynamic</i>

A.4.5 sccSubnetworkTPSource

This information concept is related to the following enterprise entity:
<"Rec. G.852.1",COMMUNITY:sscc,ROLE:port>.

A.4.5.1 Informal description

DEFINITION

"This object class reflects is derived from subnetworkTPSource."

RELATIONSHIP

"<subnetworkIsDelimitedBy>,
<subnetworkConnectionIsTerminatedByPointToPoint>"

A.4.5.2 Semi-formal description

ssccSubnetworkTPSource INFORMATION OBJECT CLASS
DERIVED FROM G.853-1: subnetworkTPSource;
CHARACTERIZED BY
 ssccSubnetworkTPSourcePackagePACKAGE
 BEHAVIOUR
 ssccSubnetworkTPSourceBehaviour BEHAVIOUR
 DEFINED AS
 "DEFINITION,
 <subnetworkIsDelimitedBy>,
 <subnetworkConnectionIsTerminatedByPointToPoint>"
;;

A.4.5.3 Formal description

<i>ssccSubNetworkTpSource_Static</i>
<i>ssccSubNetworkTpSource</i> : F OBJECT <i>subNetworkTpSource_Static</i>
<i>ssccSubNetworkTpSource</i> \subseteq <i>subNetworkTpSource</i>

<i>ssccSubNetworkTpSource_Dynamic</i>
Δ <i>ssccSubNetworkTpSource_Static</i> <i>subNetworkTpSource_Dynamic</i>

A.4.6 serviceCharacteristics

This information concept is related to the following enterprise entity:
<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,PERMISSION:PERM_3>.

A.4.6.1 Informal description

DEFINITION

"This object class reflects all the characteristics associated with the requested quality of the transport service relevant to the subnetwork connection establishment.

This object class will be refined due to the technological dependent characteristics. "

RELATIONSHIP

"<subnetworkConnectionHasTSC>."

A.4.6.2 Semi-formal description

serviceCharacteristics INFORMATION OBJECT CLASS

DERIVED FROM networkInformationTop;

CHARACTERIZED BY

serviceCharacteristicsPACKAGE

BEHAVIOUR

serviceCharacteristicsBehaviour BEHAVIOUR

DEFINED AS

"DEFINITION,

<subnetworkConnectionHasTSC>.";

A.4.6.3 Formal description

serviceCharacteristics_Static

serviceCharacteristics : F OBJECT

networkInformationTop_Static

serviceCharacteristics \subseteq *networkInformationTop*

serviceCharacteristics_Dynamic

Δ *serviceCharacteristics_Static*

networkInformationTop_Dynamic

A.5 Information relationship definitions

A.5.1 subnetworkConnectionHasTSC

This information concept is related to the following enterprise entity:

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,PERMISSION:PERM_3>.

A.5.1.1 Informal description

DEFINITION

"The subnetworkConnectionHasTSC relationship type describes the association between a subnetwork connection and the related quality of transport service characteristics."

ROLE

transportQualified

"Played by instances of the sscSubnetworkConnection information object class and subclasses."

transportQualifier

"Played by an instance of the serviceCharacteristics object class."

INVARIANT

inv_1

"Several objects playing the transportQualified role may be involved in the relationship."

inv_2

"Only one object playing the transportQualifier role may be involved in the relationship."

A.5.1.2 Semi-formal description

subnetworkConnectionHasTSC RELATIONSHIP CLASS

BEHAVIOUR

subnetworkConnectionHasTSC Behaviour BEHAVIOUR

DEFINED AS

"DEFINITION";;

ROLE transportQualified

PERMITTED-ROLE-CARDINALITY-CONSTRAINT (1..N)

COMPATIBLE WITH sscSubNetworkConnection and SUBCLASSES;

ROLE transportQualifier

PERMITTED-ROLE-CARDINALITY-CONSTRAINT (1..1)

COMPATIBLE WITH serviceCharacteristics;

A.5.1.3 Formal description

subnetworkConnectionHasTSC_Static

subnetworkConnectionHasTSC : **F** RELATIONSHIP

transportQualified : RELATIONSHIP → **F** OBJECT

transportQualifier : RELATIONSHIP → **F** OBJECT

sscSubNetworkConnection_Static

serviceCharacteristics_Static

subnetworkConnectionHasTSC ⊆ **dom** *transportQualified*

subnetworkConnectionHasTSC ⊆ **dom** *transportQualifier*

∀ *R* : *subnetworkConnectionHasTSC* •

transportQualified(*R*) ⊆ *sscSubNetworkConnection* ∧

transportQualifier(*R*) ⊆ *serviceCharacteristics*

∀ *R* : *subnetworkConnectionHasTSC* • #(*transportQualified*(*R*)) ≤ 1

subnetworkConnectionHasTSC_Dynamic

Δ *subnetworkConnectionHasTSC_Static*

sscSubNetworkConnection_Dynamic

serviceCharacteristics_Dynamic

∀ *R* : RELATIONSHIP | *R* ∈ *subnetworkConnectionHasTSC* ∪ *subnetworkConnectionHasTSC'* •

transportQualified'(*R*) = *transportQualified*(*R*) ∧

transportQualifier'(*R*) = *transportQualifier*(*R*)

A.6 Static schemas

A.6.1 sscNotConnected

This information concept is related to the following enterprise entities:

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:OBLG_2>

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:PROH_1>

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc2,OBLIGATION:OBLG_2>

A.6.1.1 Informal description

DEFINITION

"The sscNotConnected schema defines a schema type with two non-connected subnetworkTPinformation objects subtypes candidates to the point to point connection management service."

ROLE

involvedSubnetwork

"Played by an instance of the sscSubnetwork information object type or subtype."

potentialAEnd

"Played by an instance of the sscSubnetworkTPSink, sscSubnetworkTPSource or sscSubnetworkTTPBidirectional object types or subtypes."

potentialZEnd

"Played by an instance of the sscSubnetworkTPSink, sscSubnetworkTPSource or sscSubnetworkTTPBidirectional object types or subtypes."

INVARIANT

inv_1

"The objects playing the potentialAEnd and potentialZEnd roles are involved in an instance of the subnetworkIsDelimitedBy relationship type with the object playing the role involvedSubnetwork."

inv_2

"The object playing the potentialAEnd role is not involved in any instance of the subnetworkConnectionIsTerminatedByPointToPoint relationship type and subtypes."

inv_3

"The object playing the potentialZEnd role is not involved in any instance of the subnetworkConnectionIsTerminatedByPointToPoint relationship type and subtypes."

A.6.2 sscConnected

This information concept is related to the following enterprise entities:

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,PERMISSION:PERM_3>

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,PERMISSION:PERM_1>

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:OBLG_3>

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1,OBLIGATION:OBLG_4>

A.6.2.1 Informal description

DEFINITION

"The sscConnected schema defines the schema type of two connected sscSubnetworkTPinformation objects candidates to the point to point connection management service."

ROLE

involvedPointToPointSubnetworkConnection

"Played by an instance of the sscSubnetworkConnection object type or subtype."

connectedAEnd

"Played by an instance of the sscSubnetworkTPSink, sscSubnetworkTPSource or sscSubnetworkTTPBidirectional object types or subtypes"

connectedZEnd

"Played by an instance of the sscSubnetworkTPSink, sscSubnetworkTPSource or sscSubnetworkTTPBidirectional object types or subtypes"

involvedServiceCharacteristics

"Played by an instance of the serviceCharacteristics object type or subtype"

involvedSubnetwork

"Played by an instance of the sscSubnetwork object type or subtype"

INVARIANT

inv_1

"The information objects playing respectively the roles involvedSubnetworkConnection, connectedAEnd and connectedZEnd in a given instance of this relationship must simultaneously play respectively the roles transportEntity, A_end and Z_end in an instance of the relationship subnetworkConnectionIsTerminatedByPointToPoint."

inv_2

"The information object playing the role involvedSubnetworkConnection in a given instance of this relationship must simultaneously play the role transportQualified in an instance of the relationship subnetworkConnectionHasTSC."

inv_3

"The information objects playing respectively the roles involvedSubnetworkConnection and involvedSubnetwork and in a given instance of this relationship must simultaneously play respectively the roles element and container in an instance of the relationship subnetworkHasSubnetworkConnections."

inv_4

"The value of the userLabel of the information object playing the role involvedPointToPointSubnetworkConnection shall be unique and greater than zero in the context of the information object playing the role involvedSubnetwork."

A.7 Dynamic schemas

A.7.1 sscNotConnected_sscConnected

This information concept is related to the following enterprise entity:

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc1>.

A.7.1.1 Informal description

DEFINITION

"This dynamic schema expresses the transition of two non-connected extremities towards two connected extremities."

PRE-CONDITIONS <ssccNotConnected>;

POST-CONDITIONS <ssccConnected>;

A.7.2 sscConnected_sscNotConnected

This information concept is related to the following enterprise entity.

<"Rec. G.852.1",COMMUNITY:sscc,ACTION:sscc2>.

A.7.2.1 Informal description

DEFINITION

"This dynamic schema expresses the transition of two connected extremities towards two non connected extremities."

PRE-CONDITIONS <ssccConnected>;

POST-CONDITIONS <ssccNotConnected>;

ANNEX B

Information viewpoint for the simple failure monitoring

B.1 Diagrams of information object and relationship classes

None.

B.2 Label references

Full label reference	Local label reference
<"Rec. G.853.1",INFORMATION_OBJECT:networkInformationTop>	<networkInformationTop>

B.3 Import

<"Rec. G.853.1",ATTRIBUTE: operationalState>

This information concept is related to the following enterprise entities:

<"Rec. G.852.1",COMMUNITY:sfm,PURPOSE>

<"Rec. G.852.1",COMMUNITY:sfm,ACTION,sfm1>

<"Rec. G.852.1",COMMUNITY:sfm,ACTION,sfm2>

B.4 Information object classes definition

B.4.1 monitoredEntity

This information concept is related to the following enterprise entity:

<"Rec. G.852.1",COMMUNITY:sfm,ROLE:monitored_entity>.

B.4.1.1 Informal description

DEFINITION

"This object class reflects the resource for which a monitoring service is defined."

ATTRIBUTE

operationalState

"This attribute reflects the operability of the monitored resource in terms of transport aspects."

reportFailureStatus

"This attribute reflects the reporting failure status of the monitored resource."

INVARIANT

inv_1

"The value enabled of the operationalState attribute means that the resource is able to perform partially or fully its transport function."

inv_2

"The value disabled of the operationalState attribute means that the resource is totally unable to perform its transport function."

B.4.1.2 Semi-formal description

monitoredEntity INFORMATION OBJECT CLASS

DERIVED FROM networkInformationTop

CHARACTERIZED BY

ms_monitoredEntityPACKAGE

BEHAVIOUR

monitoredEntityPackageBehaviour BEHAVIOUR

DEFINED AS

"DEFINITION";;

ATTRIBUTES

operationalState,

reportFailureStatus;;;

B.4.1.3 Formal description

monitoredEntity_Static

monitoredEntity : **F** OBJECT
networkInformationTop_Static
operationalState_Static
reportFailureStatus_Static

monitoredEntity \subseteq *networkInformationTop*

monitoredEntity \subseteq **dom** *operationalState*

monitoredEntity \subseteq **dom** *reportFailureStatus*

monitoredEntity_Dynamic

Δ *monitoredEntity_Static*
networkInformationTop_Dynamic
operationalState_Dynamic
reportFailureStatus_Dynamic

B.5 Information relationships definition

None.

B.6 Static schemas

B.6.1 inReportFailureOff

This information concept is related to the following enterprise entity:
<"Rec. G.852.1",COMMUNITY:sfm,ACTION:sfm3, OBLIGATION:OBLG_3>.

B.6.1.1 Informal description

DEFINITION

"The inReportFailureOff schema defines the schema type which reflects that a monitoredEntity has the value reportFailureOff."

INVARIANT

inv_1

"The value of the reportFailureStatus attribute is reportFailureOff."

B.6.2 reportFailureOnEnabled

This information concept is related to the following enterprise entities:
<"Rec. G.852.1",COMMUNITY:sfm,ACTION,sfm3>,
<"Rec. G.852.1",COMMUNITY:sfm,ACTION,sfm4>.

B.6.2.1 Informal description

DEFINITION

"The reportFailureOnEnabled schema defines the schema type which reflects that a monitoredEntity is under reportFailureOn and enabled conditions."

INVARIANT

inv_1

"The value of the reportFailureStatus attribute is reportFailureOff"

inv_2

"The value of the operationalState attribute is enabled"

B.6.3 reportFailureOnDisabled

This information concept is related to the following enterprise entities:
<"Rec. G.852.1",COMMUNITY:sfm,ACTION,sfm3>,
<"Rec. G.852.1",COMMUNITY:sfm,ACTION,sfm4>.

B.6.3.1 Informal description

DEFINITION

"The reportFailureOnDisabled schema defines the schema type which reflects that a monitoredEntity is under reportFailureOn and disabled conditions."

INVARIANT

inv_1

"The value of the reportFailureStatus attribute is reportFailureOff."

inv_2

"The value of the operationalState attribute is enabled."

B.6.3.2 Dynamic schemas

B.6.4 reportFailureOnEnabledToDisabled:

This information concept is related to the following enterprise entity:
<"Rec. G.852.1",COMMUNITY:sfm,ACTION,sfm1>.

B.6.4.1 Informal description

DEFINITION

"This dynamic schema expresses the transition of the monitored entity from an enabled state to a disabled state under a report failure status condition"

PRE-CONDITIONS <reportFailureOnEnabled>;

POST-CONDITIONS <reportFailureOnDisabled>;;

B.6.5 reportFailureOnDisabledToEnabled:

This information concept is related to the following enterprise entity:

<"Rec. G.852.1",COMMUNITY:sfm,ACTION:sfm2>.

B.6.5.1 Informal description

DEFINITION

"This dynamic schema expresses the transition of the monitored entity from an disabled state to a enabled state under a report failure status condition."

PRE-CONDITIONS <reportFailureOnDisabled>;

POST-CONDITIONS <reportFailureOnEnabled>;;

B.7 Attributes

B.7.1 reportFailureStatus

This information concept is related to the following enterprise entities:

<"Rec. G.852.1",COMMUNITY:sfm,ACTION:sfm3>,

<"Rec. G.852.1",COMMUNITY:sfm,ACTION:sfm4>.

B.7.1.1 Informal description

DEFINITION:

"The reportFailureStatus attribute reflects the state concerning the report of failure."

STATE

reportFailureOn

"Any change in the failure status of the ressource shall be reported."

reportFailureOff

"No change in the failure status of the ressource shall be reported."

TRANSITION

reportFailureOnToReportFailureOff

"The value of the reportFailureStatus changes from reportFailureOn to reportFailureOff".

reportFailureOffToReportFailureOn

"The value of the reportFailureStatus changes from reportFailureOff to reportFailureOn".

B.7.1.2 Semi formal description

reportFailure ATTRIBUTE

BEHAVIOUR

DEFINED AS

"DEFINITION

STATE

<reportFailureOn>,

<reportFailureOff>

TRANSITION

```
<reportFailureOnToReportFailureOff>  
<reportFailureOffToReportFailureOn>";;
```

B.7.1.3 Formal description

ReportFailureStatus ::= reportFailureOn | reportFailureOff

reportFailureStatus_Static

reportFailureStatus : OBJECT → ReportFailureStatus

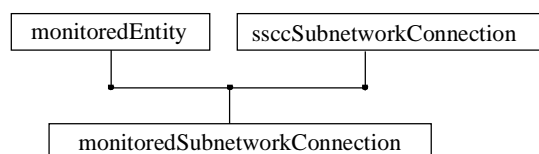
reportFailureStatus_Transition

Δ reportFailureStatus_Static

ANNEX C

Information viewpoint for the simple monitored subnetwork connection

C.1 Diagrams of information object and relationship classes



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Inheritance diagram

C.2 Import

```
<"Rec. G.853.1",INFORMATION_RELATIONSHIP:subnetworkIsDelimitedBy>  
<"Rec. G.853.1",  
INFORMATION_RELATIONSHIP:subnetworkConnectionIsTerminatedByPointToPoint>  
<"Rec. G.853.1",INFORMATION_RELATIONSHIP:subnetworkHasSubnetworkConnections>  
<INFORMATION_OBJECT:ssccSubNetworkTPSink>  
<INFORMATION_OBJECT:ssccSubNetworkTPSource>  
<INFORMATION_OBJECT:ssccSubNetworkTPBidirectional>  
<INFORMATION_OBJECT:ssccSubNetwork>  
<STATIC_SCHEMA:ssccConnected>  
<STATIC_SCHEMA:ssccNotConnected>  
<DYNAMIC_SCHEMA:ssccConnected_ssccNotConnected>  
<DYNAMIC_SCHEMA:ssccNotConnected_ssccConnected>  
<STATIC_SCHEMA:inReportFailureOff>  
<DYNAMIC_SCHEMA:reportFailureOnEnabledToDisabled :>  
<DYNAMIC_SCHEMA:reportFailureOnDisabledToEnabled :>
```

Those information concepts have to be related with the following enterprise concern:

```
<"Rec. G.852.1",COMMUNITY:smscc,PURPOSE>
```

C.3 Information object classes definition

C.3.1 monitoredSubnetworkConnection

This information concept is related to the following enterprise entity:

<"Rec. G.852.1",COMMUNITY:smscc, ROLE:monitored_snc >.

C.3.1.1 Informal description

DEFINITION

"This object class inherits from sscSubnetworkConnection and monitoredEntity object classes."

C.3.1.2 Semi-formal description

monitoredSubnetworkConnection INFORMATION OBJECT CLASS
DERIVED FROM sscSubnetworkConnection, monitoredEntity
CHARACTERIZED BY
 monitoredSubnetworkConnectionPackage PACKAGE
 BEHAVIOUR
 monitoredSubnetworkConnectionBehaviour BEHAVIOUR
 DEFINED AS
 "DEFINITION";;

C.3.1.3 Formal description

<p>_____ monitoredSubnetworkConnection_Static _____ <i>monitoredSubnetworkConnection</i> : F OBJECT <i>sscSubNetworkConnection_Static</i> <i>monitoredEntity_Static</i></p> <hr/> <p><i>monitoredSubnetworkConnection</i> \subseteq <i>sscSubNetworkConnection</i></p> <p><i>monitoredSubnetworkConnection</i> \subseteq <i>monitoredEntity</i></p>
--

<p>_____ monitoredSubnetworkConnection_Dynamic _____ Δ <i>monitoredSubnetworkConnection_Static</i> <i>sscSubNetworkConnection_Dynamic</i> <i>monitoredEntity_Dynamic</i></p>
--

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