TSGS#27(05)0178~~038~~

Source: SA5 (Telecom Management)

Title: CR 32352-3 Communication Surveillance (CS) IRP

Document for: Approval

Agenda Item: 7.5.3

Doc-1st-Level	Spec	CR	R	Phase	Subject	Ca	VerCr	Doc-2nd-Level	Workitem
SP-050178	32.352	001	--	Rel-6	Apply Generic System Context – Align with TS 32.150	F	6.0.0	S5-056088	OAM-NIM
SP-050178	32.353	002	--	Rel-6	Apply Generic System Context – Align with TS 32.352	F	6.1.0	S5-056091	OAM-NIM
SP-050178	32.353	003	--	Rel-6	IDL incompliant to the style guide	F	6.1.0	S5-056067	OAM-NIM

3GPP TSG-SA5 (Telecom Management) **S5-056088**
Meeting #41, Lisbon, PORTUGAL, 24-28 January 2005

CR-Form-v7

CHANGE REQUEST

⌘ **32.352** **CR** **001** ⌘ **rev** **-** ⌘ Current version: **6.0.0** ⌘

*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:	⌘	Apply Generic System Context – Align with TS 32.150
Source:	⌘	**SA5** (clemens.suerbaum@siemens.com)
Work item code:	⌘	OAM-NIM
Date:	⌘	28/01/2005
Category:	⌘	**F**
Release:	⌘	Rel-6

Use one 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 one 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:	⌘	Today we have redundant, time-consuming and error prone duplication of the same text for the System Context in all Interface IRPs.
Summary of change:	⌘	Align the title of subclause 4.1 with other Interface IRPs and modify the text of 4.1 with a generic text, referring to the new common definition in 32.150 for the System Context for all Interface IRPs, but keep the diagrams for readability.
Consequences if not approved:	⌘	Redundant, time-consuming and error prone duplication of the same text for the System Context in all Interface IRPs.

Clauses affected:	⌘	2, 4.

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

Other comments:	⌘	

Change in Clause 2

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*.

…

[8] 3GPP TS 32.302: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): Information Service (IS)".

[9] 3GPP TS 32.150: "Telecommunication management; Integration Reference Point (IRP) Concept and definitions".

End of Change in Clause 2

Change in Clause 4

4 System Ooverview

4.1 System Ccontext

The general definition of the System Context for the present IRP is found in 3GPP TS 32.150 [9] subclause 4.7.

In addition, the set of related IRP(s) relevant to the present IRP is shown in the two diagrams below~~Figures 4.1 and 4.2 identify system contexts of the IRP defined by the present specification in terms of its implementation called IRPAgent and the user of the IRPAgent, called IRPManager. For a definition of IRPManager and IRPAgent, see 3GPP TS 32.102 [2].~~

~~The IRPAgent implements and supports this IRP. The IRPAgent can reside in an Element Manager (EM) (see figure 4.1) or a Network Element (NE) (see figure 4.2). In the former case, the interfaces (represented by a thick dotted line) between the EM and the NEs are not the subject of this IRP.~~

~~An IRPAgent supports one of the two System Contexts defined here. By observing the interaction across this Itf-N, an IRPManager cannot deduce if EM and NE are integrated in a single system or if they run in separate systems~~.

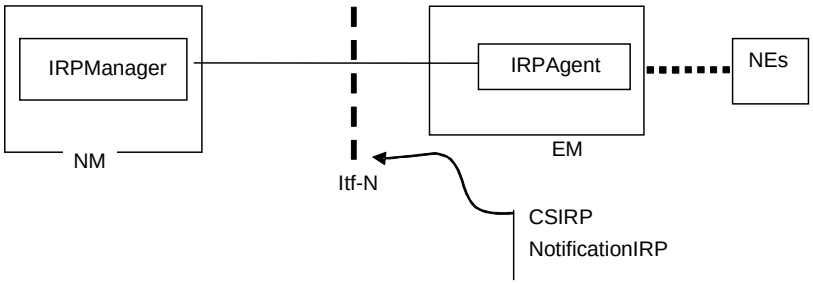

Figure 4.1: System Context A

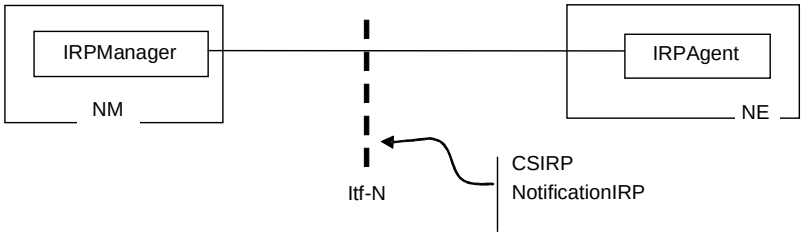

Figure 4.2: System Context B

4.2 Compliance rules

For general definitions of compliance rules related to qualifiers (Mandatory/Optional/Conditional) for *operations*, *notifications and parameters* (of operations and notifications) please refer to 3GPP TS 32.102 [2].

Change in Clause 4
End of document

Annex C (informative): Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Dec 2003	S_22	SP-030633	--	--	Submitted to TSG SA#22 for Information	1.0.0	
Jun 2004	S_24	SP-040245	--	--	Submitted to TSG SA#24 for Approval	2.0.0	6.0.0

3GPP TSG-SA5 (Telecom Management) **S5-056091**
Meeting #41, Lisbon, PORTUGAL, 24-28 January 2005

CR-Form-v7

CHANGE REQUEST

⌘ **32.353** **CR** **002** ⌘ **rev** **-** ⌘ Current version: **6.1.0** ⌘

*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:	⌘	Apply Generic System Context – Align with TS 32.352
Source:	⌘	**SA5** (clemens.suerbaum@siemens.com)
Work item code:	⌘	OAM-NIM
Date:	⌘	28/01/2005
Category:	⌘	**F**
Release:	⌘	Rel-6

Use one 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 one 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:	⌘	The Information Service (IS) for this IRP is being updated due to an approved CR (to introduce the Generic System Context).
Summary of change:	⌘	Update the reference in Scope to the new latest IS version.
Consequences if not approved:	⌘	Wrong reference in Scope to the IS version.

Clauses affected:	⌘	1

Other specs affected: ⌘

Y	N	
	X	Other core specifications
	X	Test specifications
	X	O&M Specifications

⌘

Other comments: ⌘ This CR should only be approved if the corresponding CR on the IS to introduce the Generic System Context is approved (see the related CR collection document for an overview of all involved CR Tdoc numbers).

Change in Clause Scope

1 Scope

The present document specifies the CORBA Solution Set for the IRP whose semantics are specified in TS 32.352 [6] Communication Surveillance IRP: Information Service.

This Solution Set specification is related to 3GPP TS 32.352 (V6.1~~0~~.x).

End of Change in Clause Scope
End of Document

Annex B (informative): Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Jun 2004	S_24	SP-040246	--	--	Submitted to TSG SA#24 for Approval	1.0.0	6.0.0
Dec 2004	S_26	SP-040802	001	--	Correct mapping of IS-defined non-filterable parameters to SS-defined non-filterable fields - Align IDL style in CS IRP CORBA SS with IDL Style Guide in TS 32.150	6.0.0	6.1.0

Tdoc ⌘S5-056067

CR-Form-v7.1

CHANGE REQUEST

⌘ 32.353 CR 002 ⌘rev - ⌘ Current version: 6.1.0 ⌘

*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:	⌘	IDL incompliant to the style guide
Source:	⌘	**SA5** (huangsq@zte.com.cn)
Work item code:	⌘	OAM-NIM
Date:	⌘	28/01/2005
Category:	⌘	**F**
Release:	⌘	Rel-6

Use one 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 one 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)*
Rel-7	*(Release 7)*

Reason for change:	⌘	The IDL does not reflect the format recommended by the style guide (TS 32.150).
Summary of change:	⌘	Add double slash between " #endif " and the macro.
Consequences if not approved:	⌘	The IDL won't conform to the styleguide, and will compile erros when using java compilers (e.g., idlj.exe).

Clauses affected:	⌘	Annex A

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

Other comments: ⌘

Change in Annex A

Annex A (normative): IDL specifications

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

```
// File: CSIRPConstDefs.idl

#ifndef _CSIRPCONSTDEFS_IDL_
#define _CSIRPCONSTDEFS_IDL_

// This statement must appear after all include statements
#pragma prefix "3gppsa5.org"

/* ## Module: CSIRPConstDefs
This module contains commonly used definitions for CSIRP.
=========================================================
*/
module CSIRPConstDefs
{

  typedef unsigned short HeartbeatPeriodType;

  /*
  If notifyHeartbeat is triggered by NM positively by invoking
  triggerHeartbeat operation, the value of this parameter shall be IRPManager,
  otherwise, it shall be IRPAgent.
  */
  enum TriggerFlagType {IRPManager, IRPAgent};

  typedef string ManagerIdentifierType;

  typedef string ChannelIdType;

  /*
  It specifies whether the operation is success or failed.
  */
  enum ResultType { Success, Failure };

   /**
   * This block identifies attributes which are included as part of the
   * CommunicationSurveillanceIRP. These attribute values should not
   * clash with those defined for the attributes of notification
   * header (see IDL of Notification IRP).
   */
   interface AttributeNameValue
   {
     const string HEARTBEAT_PERIOD = "HEARTBEAT_PERIOD";
     const string CHANNEL_ID = "CHANNEL_ID";
     const string TRIGGER_FLAG = "TRIGGER_FLAG";
     const string MANAGER_IDENTIFIER = "MANAGER_IDENTIFIER";

   };

};
#endif  // _CSIRPCONSTDEFS_IDL_
```

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

```
// File: CSIRPSystem.idl

#ifndef _CSIRPSYSYEM_IDL_
#define _CSIRPSYSYEM_IDL_

#include "ManagedGenericIRPSystem.idl"
#include "ManagedGenericIRPConstDefs.idl"
#include "CSIRPConstDefs.idl"

// This statement must appear after all include statements
#pragma prefix "3gppsa5.org"

/* ## Module: CSIRPSystem
This module implements capabilities of CSIRP.
==========================================
*/
module CSIRPSystem
{

  /**
  * The InvalidHeartbeatPeriod exception is used when the period
  * value to be set by IRPManager is not a reasonable in IRPAgent's
  * implementation. A very short period may cause IRPAgent to
  * send many heartbeat notification in a short time, which may
  * decrease the performance of IRPAgent. To prevent this,
  * IRPAgent may set the lower limit period in its system
  * implemntation. When the period to be set is shorter the
  * lower limit period, IRPAgent may throw this exception
  * and reject to set the period to new value.
  * Note: set the period to zero must be allowed. The behaviour of
  * setting period to zero pls see definition for Period.
  */
  exception InvalidHeartbeatPeriod
  {
    unsigned short periodLowerLimit;
    string reason;
  };



  exception InvalidManagerIdentifier { string reason; };
  exception ConflictingHeartbeatPeriod { string reason; };

  /*
   System fails to complete the operation.  System can provide reason
   to qualify the exception.  The semantics carried in reason
   is outside the scope of this IRP.
  */
  exception GetHeartbeatPeriod { string reason; };
  exception SetHeartbeatPeriod { string reason; };
  exception TriggerHeartbeat { string reason; };
  exception GetCSIRPVersions { string reason; };
  exception GetCSIRPOperationsProfile { string reason; };
  exception GetCSIRPNotificationProfile { string reason; };

   interface CSIRP
   {
     /**
     * IRPManager invokes this operation to obtain the current
     * heartbeat period.
     */
     CSIRPConstDefs::ResultType get_heartbeat_period(
       out CSIRPConstDefs::HeartbeatPeriodType heartbeatPeriod
     )
     raises (GetHeartbeatPeriod);

     /**
     * IRPManager invokes this operation to set the heartbeatPeriod.
     * If the heartbeatPeriod is modified by one IRPManager, a
     * notifyHeartbeat notification should be emitted
     * immediately to all the subscribed IRPManagers to indicate
     * the new heartbeatPeriod. If the heartbeatPeriod is set to
     * zero, one notifyHeartbeat notification will be
     * emitted immediately and no more
     * notifications unless the heartbeatPeriod is modified again.
```

```
        */
        CSIRPConstDefs::ResultType set_heartbeat_period(
          in CSIRPConstDefs::HeartbeatPeriodType heartbeatPeriod
        )
        raises (SetHeartbeatPeriod,
                ConflictingHeartbeatPeriod,
                InvalidHeartbeatPeriod,
                ManagedGenericIRPSystem::ValueNotSupported,
                ManagedGenericIRPSystem::OperationNotSupported);

        /*
        * IRPManager invoke this operation to trigger ET_HEARTBEAT
        * notification positively.
        */
        CSIRPConstDefs::ResultType trigger_heartbeat(
          in CSIRPConstDefs::ManagerIdentifierType managerIdentifier
        )
        raises (TriggerHeartbeat, InvalidManagerIdentifier);

        /**
        * Return the list of all supported CSIRP versions.
        */
        ManagedGenericIRPConstDefs::VersionNumberSet get_CS_IRP_versions (
        )
        raises (GetCSIRPVersions);

        /**
        * Return the list of all supported operations and their supported
        * parameters for a specific CSIRP version.
        */
        ManagedGenericIRPConstDefs::MethodList get_CS_IRP_operations_profile (
            in ManagedGenericIRPConstDefs::VersionNumber iRPVersion
        )
        raises (GetCSIRPOperationsProfile,
                ManagedGenericIRPSystem::OperationNotSupported,
                ManagedGenericIRPSystem::InvalidParameter);

        /**
        * Return the list of all supported notifications and their supported
        * parameters for a specific CSIRP version.
        */
        ManagedGenericIRPConstDefs::MethodList get_CS_IRP_notification_profile (
           in ManagedGenericIRPConstDefs::VersionNumber iRPVersion
        )
        raises (GetCSIRPNotificationProfile,
                ManagedGenericIRPSystem::OperationNotSupported,
                ManagedGenericIRPSystem::InvalidParameter);


    };

  };
  #endif // _CSIRPSYSTEM_IDL_
```

A.3 IDL specification (file name "CSIRPNotifications.idl")

```
// File: CSIRPNotifications.idl

#ifndef _CSIRPNOTIFICATIONS_IDL_
#define _CSIRPNOTIFICATIONS_IDL_

#include "CSIRPConstDefs.idl"
#include "NotificationIRPConstDefs.idl"
#include "NotificationIRPNotifications.idl"


// This statement must appear after all include statements
#pragma prefix "3gppsa5.org"

/* ## Module: CSIRPNotifDefs
This module contains the specification of all notifications of CS IRP Agent.
=============================================================================
*/
module CSIRPNotifications
{
   /**
   *  Constant definitions for the FileReady notification
   */
   interface notifyHeartbeat: NotificationIRPNotifications::Notify
   {
     const string EVENT_TYPE = "notifyHeartbeat";

     /**
     * This constant defines the name of the  period property,
     * which is transported in the filterable_body fields.
     * The data type for the value of this property
     * is CSIRPConstDefs::HeartbeatPeriodType.
     */
     const string HEARTBEAT_PERIOD = CSIRPConstDefs::AttributeNameValue::HEARTBEAT_PERIOD;

     /*
     * This constant defines the name of the
     * channelId property,
     * which is transported in the filterable_body
     * fields.
     * The data type for the value of this property
     * is CSIRPConstDefs::ChannelIdType.
     */
     const string CHANNEL_ID = CSIRPConstDefs::AttributeNameValue::CHANNEL_ID;

     /*
     * This constant defines the name of the
     * triggerFlag property,
     * which is transported in the filterable_body
     * fields.
     * The data type for the value of this property
     * is CSIRPConstDefs::TriggerFlagType.
     */
      const string TRIGGER_FLAG = CSIRPConstDefs::AttributeNameValue::TRIGGER_FLAG;

     /*
     * This constant defines the name of the
     * managerIdentifier property,
     * which is transported in the filterable_body
     * fields.
     * The data type for the value of this property
     * is CSIRPConstDefs::ManagerIdentifierType.
     */
     const string MANAGER_IDENTIFIER = CSIRPConstDefs::AttributeNameValue::MANAGER_IDENTIFIER;
   };

};

#endif // _CSIRPNOTIFICATIONS_IDL_
```

End of change in Annex A

Annex B (informative): Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
Jun 2004	S_24	SP-040246	--	--	Submitted to TSG SA#24 for Approval	1.0.0	6.0.0
Dec 2004	S_26	SP-040802	001	--	Correct mapping of IS-defined non-filterable parameters to SS-defined non-filterable fields - Align IDL style in CS IRP CORBA SS with IDL Style Guide in TS 32.150	6.0.0	6.1.0

TSGS#27(05)0038

Source: SA5 (Telecom Management)

Title: CR 32352-3 Communication Surveillance (CS) IRP

Document for: Approval

Agenda Item: 7.5.3

Doc-1st-Level	Spec	CR	R	Phase	Subject	Ca	VerCr	Doc-2nd-Level	Workitem
SP-050038	32.352	001	--	Rel-6	Apply Generic System Context – Align with TS 32.150	F	6.0.0	S5-056088	OAM-NIM
SP-050038	32.353	002	--	Rel-6	Apply Generic System Context – Align with TS 32.352	F	6.1.0	S5-056091	OAM-NIM
SP-050038	32.353	002	--	Rel-6	IDL incompliant to the style guide	F	6.1.0	S5-056067	OAM-NIM