Source: **SA WG5**

Title: **Fault Management; Part 3: Alarm Integration Reference Point: CORBA Solution Set Version 1:1 (32.111-3)**

Document for: **Approval**

Agenda Item: **7.5.3**

Doc-	Doc-	Spec	CR	R	Phas	Subject	Cat	Versi	Versi	Workite
SP-010032	S5-010141	32.111-3	004		R99	**Missing how "Notify Alarm List Rebuilt" reason attribute is located in Structured Event**	F	3.3.0	3.4.0	OAM-FM
SP-010032	S5-010142	32.111-3	005		R99	**Use alarmInformationBody in additionalInformation.ackTime**	F	3.3.0	3.4.0	OAM-FM

CR-Form-v3

CHANGE REQUEST

| ⌘ | **32.111-3** CR **004** | ⌘ rev | **-** | ⌘ Current version: | **3.3.0** | ⌘ |

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

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network **X** Core Network **X**

Title:	⌘	Missing how "Notify Alarm List Rebuilt" `reason` attribute is located in Structured Event
Source:	⌘	SA5

Work item code:	⌘	OAM-FM	***Date:*** ⌘	02/03/2001
Category:	⌘	**F**	***Release:*** ⌘	**R99**

Use one of the following categories:
  F *(essential 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)*

Reason for change:	⌘	The `reason` attribute is a mandatory attribute of the "Notify Alarm List Rebuilt" notification. However, it is not described how this attribute is inserted into a Structured Event, so that it could consistently be sent in notifications.
Summary of change:	⌘	Add a new row to the "Use of OMG Structured Event" table describing the `reason` attribute. Mention that 32.111-2 V3.3.0 stipulates that this field is mandatory.
Consequences if not approved:	⌘	Different IRPAgent vendors will use different rules for inserting the `reason` attribute into notifications

Clauses affected:	⌘	5.3 Table 8, 6

Other specs affected:	⌘	**X** Other core specifications	⌘	32.106-3 V3.2.0
		☐ Test specifications		
		☐ O&M Specifications		
Other comments:	⌘	

5.3   Notification parameter mapping

Table 8: Mapping from IS `notifyAlarmListRebuilt` parameters to SS equivalents

IS Notification parameter	SS equivalent	Comment
notification Header	structuredEvent	Attributes of `notificationHeader` are mapped to attributes of `structuredEvent`. See clause 5.4 for attributes related to `notificationHeader`. See Table 9 for qualifiers for the parameter-attributes. The `eventType` shall contain a zero-length string. The `extendedEventType` shall contain a string of `extendedEventTypeValue.NOTIFY_FM_ALARM_LIST_REBUILT`. The `managedObjectInstance` shall carries the DN of the IRPAgent whose Alarm List has been rebuilt. Syntax and semantics of this string conform to the Managed Object string representation specified in [8].
reason	reason	It is a string indicating the Alarm List rebuilt reason. See 3GPP TS 32.111-2 [13] for qualifiers for the parameter-attributes.

6 Use of OMG Structured Event

Table 11: Use of OMG Structured Event

SS Attribute	OMG CORBA Structured Event attribute	Comment
There is no corresponding SS attribute.	`domain_name`	It contains a string defined by `interface IRPNotificationCategoryValue.alarmIRPVersion_1_1`. It indicates the syntax and semantics of this Structured Event defined by Alarm IRP: CORBA SS 1:1.
`eventType`	`type_name`	Attribute eventType is an attribute of `notificationHeader`. It shall indicate one of the following ITU-T defined semantics: communications alarm, processing error alarm, environmental alarm, quality of service alarm and equipment alarm. It is a string. See block of const string definitions starting with "ET_" in the IDL.
`extendedEvent Type`	`event_name`	Attribute `extendedEventType` is an attribute of `notificationHeader`. It shall identify one of the following: - notify a new alarm - notify changes in alarm state - notify changes in alarm acknowledgement state - notify alarm cleared - notify Alarm List has been successfully rebuilt It is a string. See block of const string definitions starting with "`NOTIFY_FM_`" in the IDL.
There is no corresponding SS attribute.	`variable Header`	
`managedObject Class, managedObjectI nstance`	One NV pair of `filterable_ body_fields`	NV stands for name-value pair. Order arrangement of NV pairs is not significant. The name of NV-pair is always encoded in string. They are attributes of `notificationHeader`. Name of NV pair is a string, NV_MANAGED_OBJECT_INSTANCE defined in module NotificationIRPConstDefs. Value of NV pair is a string. See corresponding table in Notification IRP: CORBA SS (3GPP TS 32.106-3 [11]).
`notification Id`	One NV pair of `filterable_ body_fields`	It is an attribute of `notificationHeader`. Name of NV pair is a string, NV_NOTIFICATION_ID defined in module NotificationIRPConstDefs. Value of NV pair is a long. See corresponding table in Notification IRP: CORBA SS (3GPP TS 32.106-3 [11]).
`eventTime`	One NV pair of `filterable_ body_fields`	It is an attribute of `notificationHeader`. Name of NV pair is NV_EVENT_TIME `defined in module NotificationIRPConstDefs`. Value of NV pair is a IRPTime. See corresponding table in Notification IRP: CORBA SS (3GPP TS 32.106-3 [11]).
`systemDN`	One NV pair of `filterable_ body_fields`	It is an attribute of `notificationHeader`. Name of NV pair is a string, NV_SYSTEM_DN defined in module NotificationIRPConstDefs. Value of NV pair is a string. See corresponding table in Notification IRP: CORBA SS [11].
`probableCause`	One NV pair of `filterable_ body_fields`	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_PROBABLE_CAUSE defined in module NotificationIRPConstDefs. Value of NV pair is a short defined by PC_INDETERMINATE, PC_ALARM_INDICATION_SIGNAL, etc.
`perceived Severity`	One NV pair of `filterable_ body_fields`	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_PERCEIVED_SEVERITY defined in module NotificationIRPConstDefs. Value of NV pair is a short defined by PS_INDETERMINATE, PS_CRITICAL, etc.
`specific Problem`	One NV pair of `filterable_ body_fields`	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_SPECIFIC_PROBLEM defined in module NotificationIRPConstDefs. Value of NV pair is a string.

SS Attribute	OMG CORBA Structured Event attribute	Comment
correlated Notifications	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_CORRELATED_NOTIFICATIONS defined in module NotificationIRPConstDefs. Value of NV pair is a `CorrelatedNotificationSetType`.
backed UpStatus	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_BACKED_UP_STATUS defined in module NotificationIRPConstDefs. Value of NV pair is a `boolean BackedUpStatusType`.
backUpObject	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_BACK_UP_OBJECT defined in module NotificationIRPConstDefs. Value of NV pair is a string carrying of DN of the back-up object. See 3GPP TS 32.106-8 [8] for the DN string representation.
trend Indication	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_TREND_INDICATION defined in module NotificationIRPConstDefs. Value of NV pair is an `enum TrendIndicationType`.
thresholdInfo	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_THRESHOLD_INFO defined in module NotificationIRPConstDefs. Value of NV pair is an `enum ThresholdIndicationType`.
stateChange Definition	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_STATE_CHANGE_DEFINITION defined in module NotificationIRPConstDefs. Value of NV pair is an `AttributeChangeSetType`.
monitored Attributes	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_MONITORED_ATTRIBUTES defined in module NotificationIRPConstDefs. Value of NV pair is an `AttributeSetType`.
proposed RepairActions	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_PROPOSED_REPAIR_ACTIONS defined in module NotificationIRPConstDefs. Value of NV pair is a string.
additional Text	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_ADDITIONAL_TEXT defined in module NotificationIRPConstDefs. Value of NV pair is a string.
additional Information.al armId	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_ALARM_ID defined in module NotificationIRPConstDefs. Value of NV pair is a string. If the string is a zero-length string or if this NV pair is absent, the default semantics is that `alarmId` is a concatenation of `managedObjectInstance`, `eventType`, `probableCause` and `specificProblem`, if present, of this Structured Event. Since `probableCuase` is encoded as a short, it shall be converted into string before concatenation. The resultant string shall not contain spaces.
additional Information. ackTime	One NV pair of filterable_ body_fields	It is an attribute of `notificationHeader`. Name of NV pair is a string, NV_ACK_TIME defined in module NotificationIRPConstDefs. Value of NV pair is a `IRPTime`.
additional Information. ackUserId	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_ACK_USER_ID defined in module NotificationIRPConstDefs. Value of NV pair is a string.
additional Information. ackSystemId	One NV pair of filterable_ body_fields	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_ACK_SYSTEM_ID defined in module NotificationIRPConstDefs. Value of NV pair is a string.

SS Attribute	OMG CORBA Structured Event attribute	Comment
`additional Information. ackState`	One NV pair of `filterable_body_ fields`	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_ACK_STATE defined in module NotificationIRPConstDefs. Value of NV pair is a short defined by ACK_STATE_ACKNOWLEDGED and ACK_STATE_UNACKNOWLEDGED.
<u>reason</u>	<u>One NV pair of</u> <u>`filterable_body_`</u> <u>`fields`</u>	<u>It is an attribute of Notify Alarm List Rebuilt notification.</u> <u>Name of NV pair is a string, `NV_REASON`, defined in module</u> <u>`NotificationIRPConstDefs.`</u> <u>Value of NV pair is a `string`.</u>
There is no corresponding SS attribute.	`remaining_ body`	

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CHANGE REQUEST

⌘ **32.111-3 CR 005** ⌘ rev **-** ⌘ Current version: **3.3.0** ⌘

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Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network **X** Core Network **X**

Title: ⌘	Use `alarmInformationBody` in `additionalInformation.ackTime`	
Source: ⌘	SA5	
Work item code: ⌘	OAM-FM	***Date:*** ⌘ 02/03/2001
Category: ⌘	**F**	***Release:*** ⌘ **R99**

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

Reason for change: ⌘	`notificationHeader` is used in `additionalInformation.ackTime`. This is an error.
Summary of change: ⌘	Replace `notificationHeader` by `alarmInformationBody`.
Consequences if not approved: ⌘	Wrong specification of `additionalInformation.ackTime`

Clauses affected: ⌘	6, Table 11
Other specs affected: ⌘	☐ Other core specifications ⌘ ☐ Test specifications ☐ O&M Specifications
Other comments: ⌘	

6   Use of OMG Structured Event

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eventType	type_name	Attribute eventType is an attribute of notificationHeader. It shall indicate one of the following ITU-T defined semantics: communications alarm, processing error alarm, environmental alarm, quality of service alarm and equipment alarm. It is a string. See block of const string definitions starting with "ET_" in the IDL.
extendedEvent Type	event_name	Attribute extendedEventType is an attribute of notificationHeader. It shall identify one of the following: - notify a new alarm - notify changes in alarm state - notify changes in alarm acknowledgement state - notify alarm cleared - notify Alarm List has been successfully rebuilt It is a string. See block of const string definitions starting with "NOTIFY_FM_" in the IDL.
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eventTime	One NV pair of filterable_ body_fields	It is an attribute of notificationHeader. Name of NV pair is NV_EVENT_TIME defined in module NotificationIRPConstDefs. Value of NV pair is a IRPTime. See corresponding table in Notification IRP: CORBA SS (3GPP TS 32.106-3 [11]).
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additional Information. ackTime	One NV pair of `filterable_ body_fields`	It is an attribute of `alarmInformationBody`~~notificationHeader~~. Name of NV pair is a string, NV_ACK_TIME defined in module NotificationIRPConstDefs. Value of NV pair is a `IRPTime`.
additional Information. ackUserId	One NV pair of `filterable_ body_fields`	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_ACK_USER_ID defined in module NotificationIRPConstDefs. Value of NV pair is a string.
additional Information. ackSystemId	One NV pair of `filterable_ body_fields`	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_ACK_SYSTEM_ID defined in module NotificationIRPConstDefs. Value of NV pair is a string.

SS Attribute	OMG CORBA Structured Event attribute	Comment
`additional Information. ackState`	One NV pair of `filterable_body_ fields`	It is an attribute of `alarmInformationBody`. Name of NV pair is a string, NV_ACK_STATE defined in module NotificationIRPConstDefs. Value of NV pair is a short defined by ACK_STATE_ACKNOWLEDGED and ACK_STATE_UNACKNOWLEDGED.
There is no corresponding SS attribute.	`remaining_ body`	