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**Source:** SA5 (Telecom Management)  
**Title:** Rel-4 CR 32.111-2 (Fault Management; Part 2: Alarm Integration  
Reference Point: Information Service)  
**Document for:** Approval  
**Agenda Item:** 7.5.3

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Doc-1st-	Spec	CR	Rev	Phase	Subject	Cat	Version-	Doc-2nd-	Workitem
SP-020474	32.111-2	016	-	Rel-4	<b>Remove functionality in the Rel-4 Information Service corresponding to Rel-5 Fault Management requirements</b>	F	4.3.0	S5-026485	OAM-CM

## CHANGE REQUEST

⌘ **32.111-2 CR 016** ⌘ rev **-** ⌘ Current version: **4.3.0** ⌘

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  Core Network

<b>Title:</b>	⌘ Remove functionality in the Rel-4 Information Service corresponding to Rel-5 Fault Management requirements
<b>Source:</b>	⌘ S5
<b>Work item code:</b>	⌘ OAM-CM <span style="float: right;"><b>Date:</b> ⌘ 28/06/2002</span>
<b>Category:</b>	⌘ <b>F</b> <span style="float: right;"><b>Release:</b> ⌘ <b>REL-4</b></span>
<p><i>Use <u>one</u> of the following categories:</i></p> <p><b>F</b> (correction)  <b>A</b> (corresponds to a correction in an earlier release)  <b>B</b> (addition of feature),  <b>C</b> (functional modification of feature)  <b>D</b> (editorial modification)</p> <p><i>Use <u>one</u> of the following releases:</i></p> <p><b>2</b> (GSM Phase 2)  <b>R96</b> (Release 1996)  <b>R97</b> (Release 1997)  <b>R98</b> (Release 1998)  <b>R99</b> (Release 1999)  <b>REL-4</b> (Release 4)  <b>REL-5</b> (Release 5)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>	

<b>Reason for change:</b>	⌘ Remove functionality in the Rel-4 Information Service (32.111-2) corresponding to Rel-5 Fault Management requirements (32.111-1)
<b>Summary of change:</b>	⌘ Removal of: <ul style="list-style-type: none"> <li>parameter in Alarm List Rebuilt notification</li> <li>notification notifyPotentialFaultyAlarmList</li> <li>trigger event for notifyAlarmListRebuilt</li> </ul>
<b>Consequences if not approved:</b>	⌘ Rel-4 Information Service (32.111-2) not aligned with Rel-4 Fault Management requirements (32.111-1)

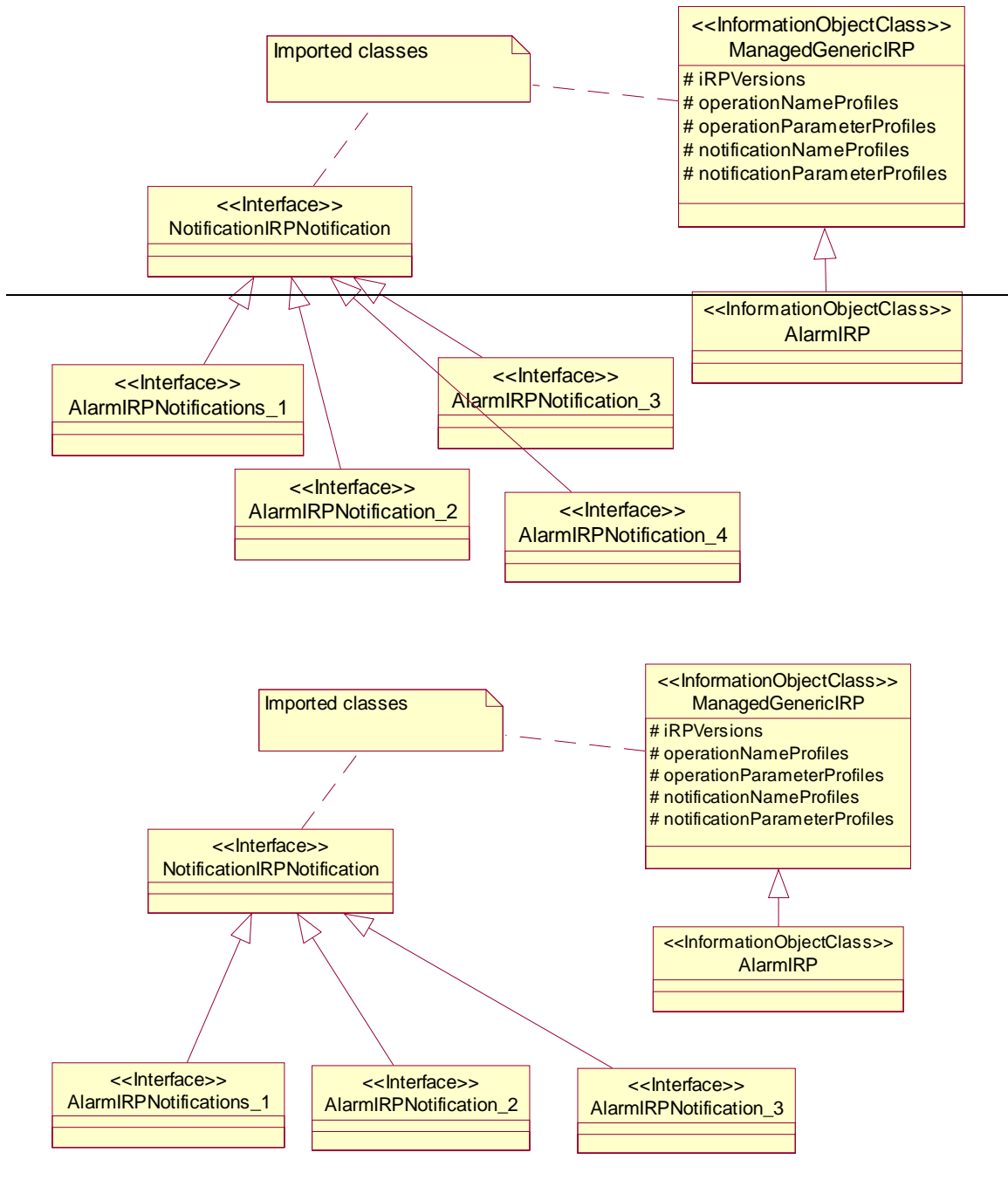
<b>Clauses affected:</b>	⌘ 6.7.4.2, 5.2.2, 6.1, 6.10, 6.7.4.3.1
<b>Other specs affected:</b>	⌘ <input type="checkbox"/> Other core specifications ⌘ <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications
<b>Other comments:</b>	⌘

### 6.7.4.2 Input Parameters

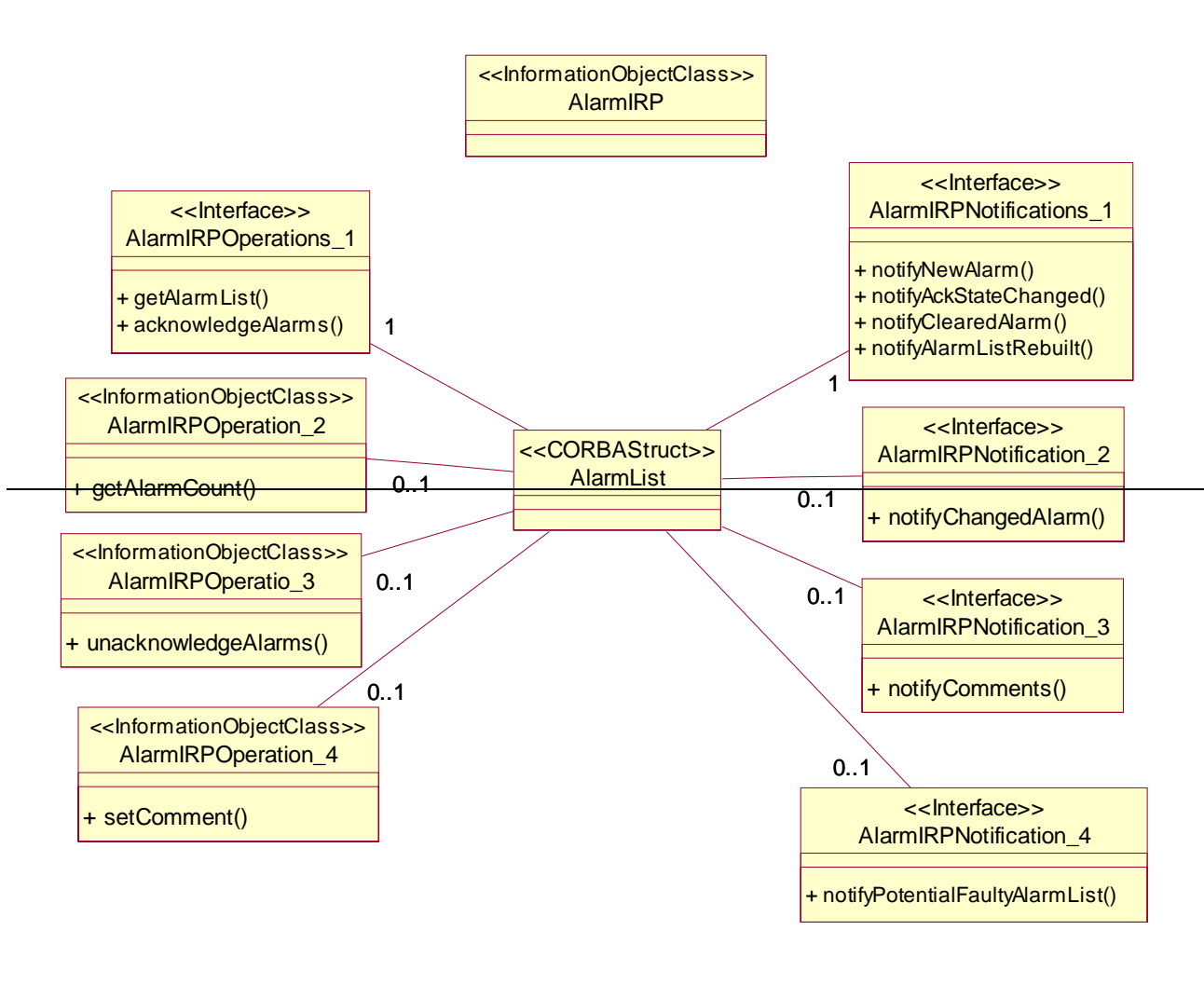
Parameter Name	Qualifier	Matching Information	Comment
objectClass	M,F	It carries the IRPAgent.objectClass or alternatively, the object class of another MO.	If it carries the IRPAgent.objectClass, then all AlarmInformation instances in the AlarmList may have been rebuilt. If it carries the object class of another MO, then all AlarmInformation instances <del>of the related to the MO identified by the parameter objectInstance</del> and its subordinate MOs may have been rebuilt. The AlarmInformation instances not related to the subject MO and its subordinate MOs are not subject to rebuilt.
●●●			
reason	M	"Agent-NE communication error", "Agent restarts", "indeterminate". Other values can be added.	It carries the reason why the IRPAgent has rebuilt the AlarmList. <del>This may carry different reasons than that carried by the immediate previous notifyPotentialFaultyAlarmList.</del>
alarmListAlignmentRequirement	0 (note)	ENUM (alignmentRequired, alignmentNotRequired)	It carries an enumeration of "alignmentRequired" and "alignmentNotRequired". IRPAgent uses alignmentRequired to indicate that IRPAgent current AL is not identical to the one that could have been built using (a) IRPAgent AL information at the time it emits the immediate previous notifyPotentialFaultyAlarmList() and (b) the notifications (carrying alarm information) emitted after the previously identified notification and before the subject notification. Otherwise, the IRPAgent uses alignmentNotRequired. When this parameter is absent, it implies alignmentRequired.

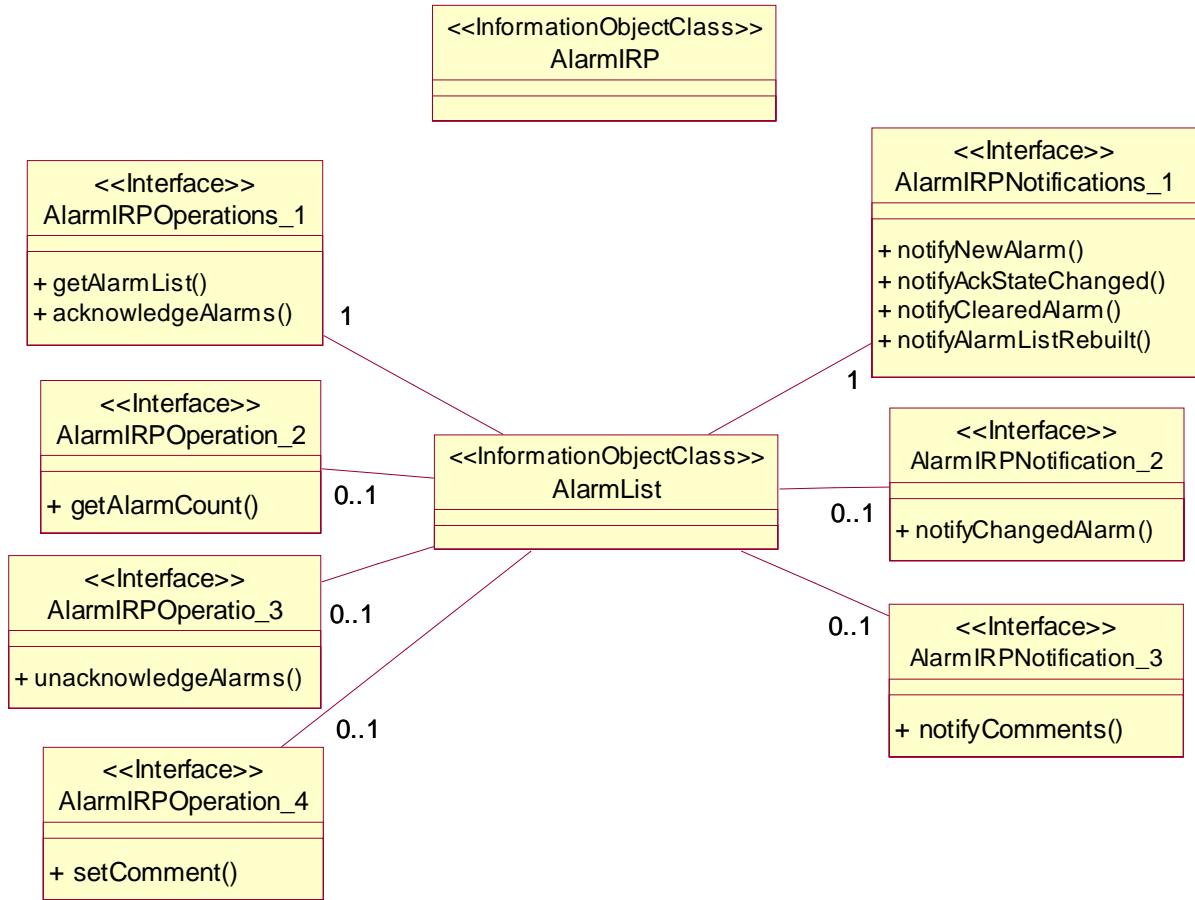
~~NOTE: If IRPAgent supports notifyPotentialFaultyAlarmList() notification, it shall support this parameter. If IRPAgent does not support notifyPotentialFaultyAlarmList() notification, it shall not support this parameter.~~

### 5.2.2 Inheritance



## 6.1 Class diagram





## 6.10 Interface AlarmIRPNotification\_4

### 6.10.1 notifyPotentialFaultyAlarmList (O)

#### 6.10.1.1 Definition

The IRPAgent or its related AlarmIRP maintains an AlarmList. They can lose confidence in the integrity of its AlarmList. Under this condition, IRPAgent or its related AlarmIRP or the related AlarmList shall invoke notifyPotentialFaultyAlarmList. They then can begin to rebuild the faulty AlarmList, if found necessary. After the successful rebuilt or the discovery that rebuilt is not necessary, they shall invoke notifyAlarmListRebuilt notification.

This notification can identify a set of AlarmInformation that is potentially faulty or unreliable. This identification is done in the following way. If the MOI of an AlarmInformation is the same or is a subordinate to the MOI carried in the notification, then the AlarmInformation may be faulty or unreliable.

This notification can identify all the AlarmInformation instances of the AlarmList that are potentially faulty or unreliable. In this case, the notification shall carry a MOI identifying the IRPAgent.

The IRPManager behavior, on reception of this notifyPotentialFaultyAlarmList notification, is not specified. The IRPManager behavior is considered not essential for the specification of the interface itself. However, the following are recommended actions the IRPManager should take, in case it receives this notification.

1. The IRPManager should not perform any task requiring the integrity of the AlarmInformation identified as faulty or unreliable by the subject notification.
2. The IRPManager should not invoke operations that require integrity of the AlarmList such as getAlarmList, acknowledgeAlarms operations.

#### 6.10.1.2 Input Parameters

Parameter Name	Qualifier	Matching Information	Comment
objectClass	M,F	It carries the class of the IRPAgent or alternatively, the class of another MO.	If it carries the IRPAgent.objectClass, then all AlarmInformation instances in the AlarmList may not be reliable. If it carries the object class of another MO, then all AlarmInformation instances of the MO identified by the parameter objectInstance and its subordinate MOs may not be reliable. The AlarmInformation instances not related to the subject MO and its subordinate MOs are reliable.
objectInstance	M,F	It carries the DN of the IRPAgent or alternatively, the DN of another MO.	If objectClass carries the IRPAgent.objectClass, then this parameter carries the DN of the IRPAgent. If objectClass carries the object class of another MO, then this parameter carries the DN of the MO instance.
notificationId	M	This carries the semantics of notification identifier.	
eventTime	M,F	It carries the time when the IRPAgent has lost confidence of its AlarmList content.	
systemDN	C,F	IRPAgent.systemDN where the IRPAgent is related to the AlarmIRP that is related to this AlarmList.	
notificationType	M,F	"notifyPotentialFaultyAlarmList".	
reason	M	"Agent-NE communication error", "Agent restarts", "indeterminate". Other values can be added.	It carries the reason why the IRPAgent has to rebuild its AlarmList.

## 6.10.1.3 — Triggering Event

## 6.10.1.3.1 — From-state

~~faultyAlarmListDetected.~~

Assertion Name	Definition
<del>faultyAlarmListDetected</del>	<del>IRPAgent detects faults in part or whole of its AlarmList.</del>

## 6.10.1.3.2 — To-state

~~faultyAlarmList~~

Assertion Name	Definition
<del>faultyAlarmList</del>	<del>IRPAgent initiates the AlarmList rebuild process.</del>



## 6.7.4.3 Triggering Event

## 6.7.4.3.1 From-state

~~alarmListRebuilt\_0 OR alarmListRebuilt\_1.~~

Assertion Name	Definition
<del>alarmListRebuilt_0</del>	<del>IRPAgent has cold started, initialised, re-initialised or rebooted and it has initiated procedure to rebuild its AlarmList.</del>
<del>alarmListRebuilt_1</del>	IRPAgent loses confidence in part or whole of its AlarmList. IRPAgent has initiated procedure to repair its AlarmList.