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**Source:** SA5 (Telecom Management)  
**Title:** Rel-4 CR 32.111-3 (Fault Management; Part 3: Alarm Integration  
Reference Point: CORBA SS) Addition of 'indeterminate' probable  
cause in IDL definition  
**Document for:** Approval  
**Agenda Item:** 7.5.3

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Doc-1 <sup>st</sup> -Level	Spec	CR	R	Phase	Subject	Cat	Ver Cur	Ver New	Doc-2 <sup>nd</sup> -Level	Workitem
SP-020282	32.111-3	016	-	Rel-4	Addition of 'indeterminate' probable cause in IDL definition	F	4.2.0	4.3.0	S5-026239	OAM-FM

## CHANGE REQUEST

⌘ **32.111-3 CR 016** ⌘ rev **-** ⌘ Current version: **4.2.0** ⌘

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>	⌘ Addition of 'indeterminate' probable cause in IDL definition		
<b>Source:</b>	⌘ SA5		
<b>Work item code:</b>	⌘ OAM-FM	<b>Date:</b>	⌘ 24/05/2002
<b>Category:</b>	⌘ <b>F</b>	<b>Release:</b>	⌘ REL-4
Use <u>one</u> of the following categories:		Use <u>one</u> of the following releases:	
F (correction)		2 (GSM Phase 2)	
A (corresponds to a correction in an earlier release)		R96 (Release 1996)	
B (addition of feature),		R97 (Release 1997)	
C (functional modification of feature)		R98 (Release 1998)	
D (editorial modification)		R99 (Release 1999)	
Detailed explanations of the above categories can be found in 3GPP <a href="#">TR 21.900</a> .		REL-4 (Release 4)	
		REL-5 (Release 5)	


<b>Reason for change:</b>	⌘ The 'indeterminate' probable cause is missing.
<b>Summary of change:</b>	⌘ Add missing probable cause INDETERMINATE in ProbableCause interface, in IDL definition.
<b>Consequences if not approved:</b>	⌘ It would exist an inconsistency between CORBA Solution Set (32.111-3) and Information Service (32.111-2). See "Other comments" below.

<b>Clauses affected:</b>	⌘ Annex A
<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>	⌘ The 'indeterminate ' probable cause is present in: <ul style="list-style-type: none"><li>• R99 Alarm IRP Information Service: 32.111-2 V3.3.0 (2001-12)</li><li>• R99 Alarm IRP CORBA Solution Set: 32.111-3 V3.6.0 (2001-12)</li><li>• R4 Alarm IRP Information Service: 32.111-2 V4.3.0 (2002-03)</li></ul> It also needs to be added to R4 Alarm IRP CORBA Solution Set 32.111-3 V4.x.y.

## Annex A (normative): IDL specification (file name "AlarmIRPConstDefs.idl")



```

module AlarmIRPConstDefs
{


    /*
    This block identifies the probable cause of a reported alarm.
    */
    interface ProbableCause
    {
        const short INDETERMINATE = 0;
        const short ALARM_INDICATION_SIGNAL = 1;
        const short CALL_SETUP_FAILURE = 2;
        const short DEGRADED_SIGNAL_M3100 = 3;
        const short FAR_END_RECEIVER_FAILURE = 4;
        const short FRAMING_ERROR_M3100 = 5;
        const short LOSS_OF_FRAME = 6;
        const short LOSS_OF_POINTER = 7;
        const short LOSS_OF_SIGNAL = 8;
        const short PAYLOAD_TYPE_MISMATCH = 9;
        const short TRANSMISSION_ERROR = 10;
        const short REMOTE_ALARM_INTERFACE = 11;
        const short EXCESSIVE_BIT_ERROR_RATE = 12;
        const short PATH_TRACE_MISMATCH = 13;
        const short UNAVAILABLE = 14;
        const short SIGNAL_LABEL_MISMATCH = 15;
        const short LOSS_OF_MULTI_FRAME = 16;
        const short BACK_PLANE_FAILURE = 51;
        const short DATA_SET_PROBLEM = 52;
        const short EQUIPMENT_IDENTIFIER_DUPLICATION = 53;
        const short EXTERNAL_DEVICE_PROBLEM = 54;
        const short LINE_CARD_PROBLEM = 55;
        const short MULTIPLEXER_PROBLEM_M3100 = 56;
        const short NE_IDENTIFIER_DUPLICATION = 57;
        const short POWER_PROBLEM_M3100 = 58;
        const short PROCESSOR_PROBLEM_M3100 = 59;
        const short PROTECTION_PATH_FAILURE = 60;
        const short RECEIVER_FAILURE_M3100 = 61;
        const short REPLACEABLE_UNIT_MISSING = 62;
        const short REPLACEABLE_UNIT_TYPE_MISMATCH = 63;
        const short SYNCHRONISATION_SOURCE_MISMATCH = 64;
        const short TERMINAL_PROBLEM = 65;
        const short TIMING_PROBLEM_M3100 = 66;
        const short TRANSMITTER_FAILURE_M3100 = 67;
        const short TRUNK_CARD_PROBLEM = 68;
        const short REPLACEABLE_UNIT_PROBLEM = 69;
        const short AIR_COMPRESSOR_FAILURE = 101;
        const short AIR_CONDITIONING_FAILURE = 102;
        const short AIR_DRYER_FAILURE = 103;
        const short BATTERY_DISCHARGING = 104;
        const short BATTERY_FAILURE = 105;
        const short COMMERCIAL_POWER_FAILURE = 106;
        const short COOLING_FAN_FAILURE = 107;
        const short ENGINE_FAILURE = 108;
    }
}

```

```
const short FIRE_DETECTOR_FAILURE = 109;
const short FUSE_FAILURE = 110;
const short GENERATOR_FAILURE = 111;
const short LOW_BATTERY_THRESHOLD = 112;
const short PUMP_FAILURE_M3100 = 113;
const short RECTIFIER_FAILURE = 114;
const short RECTIFIER_HIGH_VOLTAGE = 115;
const short RECTIFIER_LOW_F_VOLTAGE = 116;
const short VENTILATION_SYSTEM_FAILURE = 117;
const short ENCLOSURE_DOOR_OPEN_M3100 = 118;
const short EXPLOSIVE_GAS = 119;
const short FIRE = 120;
const short FLOOD = 121;
const short HIGH_HUMIDITY = 122;
const short HIGH_TEMPERATURE = 123;
const short HIGH_WIND = 124;
const short ICE_BUILD_UP = 125;
const short INTRUSION_DETECTION = 126;
const short LOW_FUEL = 127;
const short LOW_HUMIDITY = 128;
const short LOW_CABLE_PRESSURE = 129;
const short LOW_TEMPERATURE = 130;
const short LOW_WATER = 131;
const short SMOKE = 132;
const short TOXIC_GAS = 133;
const short STORAGE_CAPACITY_PROBLEM_M3100 = 151;
const short MEMORY_MISMATCH = 152;
const short CORRUPT_DATA_M3100 = 153;
const short OUT_OF_CPU_CYCLES = 154;
const short SOFTWARE_ENVIRONMENT_PROBLEM = 155;
const short SOFTWARE_DOWNLOAD_FAILURE = 156;
const short ADAPTER_ERROR = 301;
const short APPLICATION_SUBSYSTEM_FAILURE = 302;
const short BANDWIDTH_REDUCTION = 303;
const short COMMUNICATION_PROTOCOL_ERROR = 305;
const short COMMUNICATION_SUBSYSTEM_FAILURE = 306;
const short CONFIGURATION_OR_CUSTOMIZING_ERROR = 307;
const short CONGESTION = 308;
const short CPU_CYCLES_LIMIT_EXCEEDED = 310;
const short DATA_SET_OR_MODEM_ERROR = 311;
const short DTE_DCE_INTERFACE_ERROR = 313;
const short EQUIPMENT_MALFUNCTION = 315;
const short EXCESSIVE_VIBRATION = 316;
const short FILE_ERROR = 317;
const short HEATING_OR_VENTILATION_OR_COOLING_SYSTEM_PROBLEM = 321;
const short HUMIDITY_UNACCEPTABLE = 322;
const short INPUT_OUTPUT_DEVICE_ERROR = 323;
const short INPUT_DEVICE_ERROR = 324;
const short LAN_ERROR = 325;
const short LEAK_DETECTION = 326;
const short LOCAL_NODE_TRANSMISSION_ERROR = 327;
const short MATERIAL_SUPPLY_EXHAUSTED = 330;
const short OUT_OF_MEMORY = 332;
const short OUTPUT_DEVICE_ERROR = 333;
const short PERFORMANCE_DEGRADED = 334;
const short PRESSURE_UNACCEPTABLE = 336;
const short QUEUE_SIZE_EXCEEDED = 339;
const short RECEIVE_FAILURE = 340;
const short REMOTE_NODE_TRANSMISSION_ERROR = 342;
const short RESOURCE_AT_OR_NEARING_CAPACITY = 343;
const short RESPONSE_TIME_EXCESSIVE = 344;
const short RETRANSMISSION_RATE_EXCESSIVE = 345;
const short SOFTWARE_ERROR = 346;
```

```
const short SOFTWARE_PROGRAM_ABNORMALLY_TERMINATED = 347;
const short SOFTWARE_PROGRAM_ERROR = 348;
const short TEMPERATURE_UNACCEPTABLE = 350;
const short THRESHOLD_CROSSED = 351;
const short TOXIC_LEAK_DETECTED = 353;
const short TRANSMIT_FAILURE = 354;
const short UNDERLYING_RESOURCE_UNAVAILABLE = 356;
const short VERSION_MISMATCH = 357;
const short A_BIS_TO_BTS_INTERFACE_FAILURE = 501;
const short A_BIS_TO_TRX_INTERFACE_FAILURE = 502;
const short ANTENNA_PROBLEM = 503;
const short BATTERY_BREAKDOWN = 504;
const short BATTERY_CHARGING_FAULT = 505;
const short CLOCK_SYNCHRONISATION_PROBLEM = 506;
const short COMBINER_PROBLEM = 507;
const short DISK_PROBLEM = 508;
const short EXCESSIVE_RECEIVER_TEMPERATURE = 510;
const short EXCESSIVE_TRANSMITTER_OUTPUT_POWER = 511;
const short EXCESSIVE_TRANSMITTER_TEMPERATURE = 512;
const short FREQUENCY_HOPPING_DEGRADED = 513;
const short FREQUENCY_HOPPING_FAILURE = 514;
const short FREQUENCY_REDEFINITION_FAILED = 515;
const short LINE_INTERFACE_FAILURE = 516;
const short LINK_FAILURE = 517;
const short LOSS_OF_SYNCHRONISATION = 518;
const short LOST_REDUNDANCY = 519;
const short MAINS_BREAKDOWN_WITH_BATTERY_BACKUP = 520;
const short MAINS_BREAKDOWN_WITHOUT_BATTERY_BACKUP = 521;
const short POWER_SUPPLY_FAILURE = 522;
const short RECEIVER_ANTENNA_FAULT = 523;
const short RECEIVER_MULTICOUPLER_FAILURE = 525;
const short REDUCED_TRANSMITTER_OUTPUT_POWER = 526;
const short SIGNAL_QUALITY_EVALUATION_FAULT = 527;
const short TIMESLOT_HARDWARE_FAILURE = 528;
const short TRANSCEIVER_PROBLEM = 529;
const short TRANSCODER_PROBLEM = 530;
const short TRANSCODER_OR_RATE_ADAPTER_PROBLEM = 531;
const short TRANSMITTER_ANTENNA_FAILURE = 532;
const short TRANSMITTER_ANTENNA_NOT_ADJUSTED = 533;
const short TRANSMITTER_LOW_VOLTAGE_OR_CURRENT = 535;
const short TRANSMITTER_OFF_FREQUENCY = 536;
const short DATABASE_INCONSISTENCY = 537;
const short FILE_SYSTEM_CALL_UNSUCCESSFUL = 538;
const short INPUT_PARAMETER_OUT_OF_RANGE = 539;
const short INVALID_PARAMETER = 540;
const short INVALID_POINTER = 541;
const short MESSAGE_NOT_EXPECTED = 542;
const short MESSAGE_NOT_INITIALISED = 543;
const short MESSAGE_OUT_OF_SEQUENCE = 544;
const short SYSTEM_CALL_UNSUCCESSFUL = 545;
const short TIMEOUT_EXPIRED = 546;
const short VARIABLE_OUT_OF_RANGE = 547;
const short WATCH_DOG_TIMER_EXPIRED = 548;
const short COOLING_SYSTEM_FAILURE = 549;
const short EXTERNAL_EQUIPMENT_FAILURE = 550;
const short EXTERNAL_POWER_SUPPLY_FAILURE = 551;
const short EXTERNAL_TRANSMISSION_DEVICE_FAILURE = 552;
const short REDUCED_ALARM_REPORTING = 561;
const short REDUCED_EVENT_REPORTING = 562;
const short RECUCED_LOGGING_CAPABILITY = 563;
const short SYSTEM_RESOURCES_OVERLOAD = 564;
const short BROADCAST_CHANNEL_FAILURE = 565;
const short CALL_ESTABLISHMENT_ERROR = 566;
```

```
const short INVALID_MESSAGE_RECEIVED = 567;  
const short INVALID_MSU_RECEIVED = 568;  
const short LAPD_LINK_PROTOCOL_FAILURE = 569;  
const short LOCAL_ALARM_INDICATION = 570;  
const short REMOTE_ALARM_INDICATION = 571;  
const short ROUTING_FAILURE = 572;  
const short SS7_PROTOCOL_FAILURE = 573;  
const short TRANSMISSION_FAILURE = 574;  
};
```

