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Technical Specification

**3rd Generation Partnership Project;
Technical Specification Group Services and System Aspects;
Telecommunication management;
Performance Management (PM)
Integration Reference Point (IRP):
SOAP Solution Set (SS)
(Release 9)**



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Foreword

This Technical Specification (TS) has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

Introduction

The present document is part of a TS-family covering the 3rd Generation Partnership Project: Technical Specification Group Services and System Aspects; Telecommunication management, as identified below:

- 32.411: "Performance Management (PM) Integration Reference Point (IRP): Requirements"
- 32.412: "Performance Management (PM) Integration Reference Point (IRP): Information Service (IS)"
- 32.413: "Performance Management (PM) Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set (SS)"
- 32.415 "Performance Management (PM) Integration Reference Point (IRP): eXtensible Markup Language (XML) definitions"
- 32.417 "Performance Management (PM) Integration Reference Point (IRP): SOAP Solution Set (SS)"**

1 Scope

The present document specifies the SOAP Solution Set for the IRP whose semantics are specified in Performance Management IRP: Information Service (3GPP TS 32.412 [4]).

This Solution Set specification is related to 3GPP TS 32.412 V8.0.X.

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.) 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*.

- [1] 3GPP TS 32.101: "Telecommunication management; Principles and high level requirements".
- [2] 3GPP TS 32.102: "Telecommunication management; Architecture".
- [3] 3GPP TS 32.411: " Technical Specification Group Services and System Aspects; Telecommunication management; Performance Management (PM) Integration Reference Point (IRP): Requirements ".
- [4] 3GPP TS 32.412: " Technical Specification Group Services and System Aspects; Telecommunication management; Performance Management (PM) Integration Reference Point (IRP): Information Service (IS)".
- [5] 3GPP TS 32.415: " Telecommunication management; Performance Management (PM) Integration Reference Point (IRP): eXtensible Markup Language (XML) definitions ".
- [6] 3GPP TS 32.311: "Telecommunication management; Generic Integration Reference Point (IRP) management; Requirements".
- [7] 3GPP TS 32.312: "Telecommunication management; Generic Integration Reference Point (IRP) management; Information Service (IS)".
- [8] 3GPP TS 32.317: "Telecommunication management; Generic Integration Reference Point (IRP) management; SOAP solution set".
- [9] 3GPP TS 32.150: "Telecommunication management; Integration Reference Point (IRP) Concept and definitions".
- [10] 3GPP TS 32.307: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): SOAP solution set".
- [11] W3C SOAP 1.1 specification (<http://www.w3.org/TR/2000/NOTE-SOAP-20000508/>)
- [12] W3C XPath 1.0 specification (<http://www.w3.org/TR/1999/REC-xpath-19991116>)
- [13] W3C WSDL 1.1 specification (<http://www.w3.org/TR/2001/NOTE-wsdl-20010315>)
- [14] W3C SOAP 1.2 specification (<http://www.w3.org/TR/soap12-part1/>)

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TS 32.101 [1], 3GPP TS 32.102 [2], 3GPP TS 32.150 [9] and 3GPP TS 32.411 [3] and the following apply:

IRP document version number string (or "IRPVersion"): See 3GPP TS 32.311 [6].

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

| | |
|------|----------------------------------|
| IS | Information Service |
| SS | Solution Set |
| WSDL | Web Service Description Language |

4 Architectural features

4.1 General

The overall architectural feature of the Performance Management (PM) IRP is specified in 3GPP TS 32.412 [4]. This clause specifies features that are specific to the SOAP solution set.

The SOAP 1.1 specification [11] and WSDL 1.1 specification [13] are supported.

The SOAP 1.2 specification [14] is supported optionally.

This specification uses "document" style in WSDL file.

This specification uses "literal" encoding style in WSDL file.

The filter language used in the SS is the XPath Language (see W3C XPath 1.0 specification [12]). IRPAgents may throw a FilterComplexityLimit fault when a given filter is too complex.

The PM IRP SOAP SS uses the Notification IRP SOAP SS of 3GPP TS 32.307 [10]. The IRPAgent shall support the push interface model, which means that the IRPAgent sends PM notifications to the IRPManager as soon as new events occur. The IRPManager does not need to check ("pull") for events.

Relevant definitions are imported from the PM IRP XML definitions of 3GPP TS 32.415 [5].

This specification uses a number of namespace prefixes throughout that are listed in Table 4.1.

Table 4.1: Prefixes and Namespaces used in this specification

| PREFIX | NAMESPACE |
|------------------|---|
| (no prefix) | http://schemas.xmlsoap.org/wsdl/ |
| soap | http://schemas.xmlsoap.org/wsdl/soap/ |
| pMIRPSystem | http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#PMIRPSystem |
| pMIRPData | http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#PMIRPData |
| xpi | http://www.3gpp.org/ftp/specs/archive/32_series/32.415#pMIRPIOCs |
| xn | http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNm |
| genericIRPSystem | http://www.3gpp.org/ftp/Specs/archive/32_series/32.317/schema/32317-810/GenericIRPSystem |
| ntfIRPntfSystem | http://www.3gpp.org/ftp/Specs/archive/32_series/32.307/schema/32307-810/notification/NotificationIRPntfSystem |

The WSDL structure is depicted in Figure 4.1 below, depicting port type, binding and service. The port type contains port type operations, which again contains input, output and fault messages. The binding contains binding operations, which have the same name as the port type operations. The binding connects to a port inside the service.

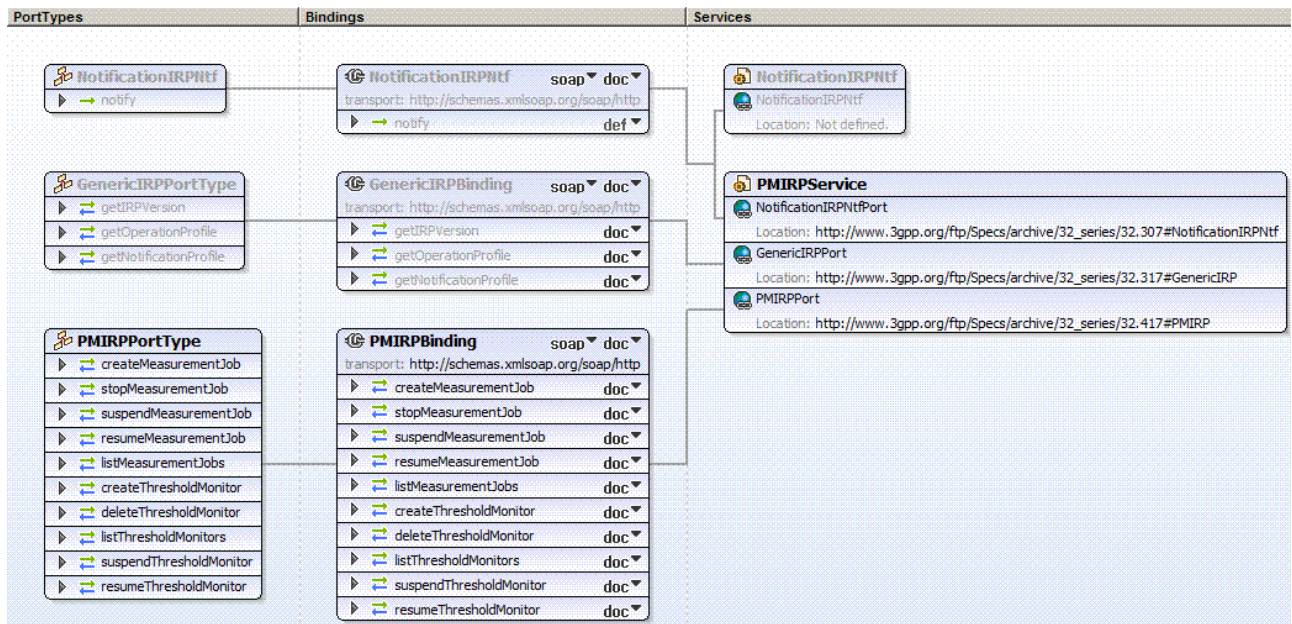


Figure 4.1: Performance Management IRP SOAP Solution Set WSDL structure

5 Mapping

5.1 Operation and notification mapping

The PM IRP IS (3GPP TS 32.412 [4]) defines the operations and their semantics.

Table 5.1 maps the operations defined in the PM IRP IS to their equivalent port type and binding operations in this Solution Set (SS).

Table 5.1 also maps the notifications of the PM IRP IS, as well as inherited operations.

Table 5.1 also qualifies if an operation is Mandatory (M) or Optional (O).

Table 5.1: Mapping from IS Operation to SS Equivalents

| IS Operation in 3GPP TS 32.412 [4] | SS: Operation for WSDL port type and WSDL binding | SS: Port of PMIRPService | Qualifier |
|--|---|--------------------------|--------------|
| createMeasurementJob | createMeasurementJob (note 1) | PMIRPPort | M |
| stopMeasurementJob | stopMeasurementJob (note 1) | PMIRPPort | M |
| suspendMeasurementJob | suspendMeasurementJob (note 1) | PMIRPPort | O |
| resumeMeasurementJob | resumeMeasurementJob (note 1) | PMIRPPort | O |
| listMeasurementJobs | listMeasurementJobs (note 1) | PMIRPPort | M |
| createThresholdMonitor | createThresholdMonitor (note 1) | PMIRPPort | M (note 4 a) |
| deleteThresholdMonitor | deleteThresholdMonitor (note 1) | PMIRPPort | M (note 4 a) |
| listThresholdMonitors | listThresholdMonitors (note 1) | PMIRPPort | M (note 4 a) |
| suspendThresholdMonitor | suspendThresholdMonitor (note 1) | PMIRPPort | M (note 4 b) |
| resumeThresholdMonitor | resumeThresholdMonitor (note 1) | PMIRPPort | M (note 4 b) |
| notifyMeasurementJobStatusChanged | notify (note 2) | NotificationIRPNtfPort | M |
| notifyThresholdMonitorObjectCreation | notify (note 2) | NotificationIRPNtfPort | M (note 4 c) |
| notifyThresholdMonitorObjectDeletion | notify (note 2) | NotificationIRPNtfPort | M (note 4 c) |
| notifyThresholdMonitorStatusChanged | notify (note 2) | NotificationIRPNtfPort | O |
| getIRPVersion (note 3) | See TS 32.317 [8] | GenericIRPPort | M |
| getOperationProfile (note 3) | See TS 32.317 [8] | GenericIRPPort | O |
| getNotificationProfile (note 3) | See TS 32.317 [8] | GenericIRPPort | O |
| NOTE 1: The operation is under the port type pMIRPSystem:PMIRPPortType and under the binding pMIRPSystem:PMIRPBinding. | | | |
| NOTE 2: The IS equivalent maps to an XML definition specified in 3GPP TS 32.415 [5], and this being an input parameter to the operation notify under the port type ntfIRPNtfSystem:NotificationIRPNtf and under the binding ntfIRPNtfSystem:NotificationIRPNtf of 3GPP TS 32.307 [10]. This binding is linked to a port of the PMIRPService as indicated in the table above. | | | |
| NOTE 3: The IS operation is inherited from the ManagedGenericIRP IOC specified in 3GPP TS 32.312 [7]. This inheritance is by the PMIRP IOC of 3GPP TS 32.412 [4] inheriting from the ManagedGenericIRP IOC. The corresponding binding is linked to a port of the PMIRPService as indicated in the table above. | | | |
| NOTE 4: a) Mandatory if the optional PMIRPOperations_2 interface (see the PM IRP IS clause 7.4) is supported. b) Mandatory if the optional PMIRPOperations_3 interface (see the PM IRP IS clause 7.5) is supported. c) Mandatory if the optional PMIRPNotification_2 interface (see the PM IRP IS clause 7.7) is supported. | | | |

5.2 Operation parameter mapping

The PM IRP IS (3GPP TS 32.412 [4]) defines semantics of parameters carried in the operations. The tables below show the mapping of these parameters, as per operation, to their equivalents defined in this SS.

5.2.1 Operation createMeasurementJob

5.2.1.1 Input parameters

Table 5.2.1.1: Mapping from IS createMeasurementJob input parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding input message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|-------------------------|--|-----------|
| iOCName | iOCName | M |
| iOCInstanceList | iOCInstanceList | M |
| measurementCategoryList | measurementCategoryList | M |
| granularityPeriod | granularityPeriod | M |
| reportingPeriod | reportingPeriod | M |
| startTime | startTime | O |
| stopTime | stopTime | O |
| schedule | schedule | O |
| priority | priority | O |

5.2.1.2 Output parameters

Table 5.2.1.2: Mapping from IS createMeasurementJob output parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding output message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|---|-----------|
| jobId | jobId | M |
| unsupportedList | unsupportedList | M |
| status | status | M |

5.2.1.3 Fault definition

Table 5.2.1.3: Mapping from IS createMeasurementJob exceptions to SS equivalents

| Assertion name | SS WSDL type enumeration value used in corresponding fault message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|--------------------------|--|-----------|
| invalidStartTime | InvalidStartTime | M |
| invalidStopTime | InvalidStopTime | M |
| invalidSchedule | InvalidSchedule | M |
| invalidGranularityPeriod | InvalidGranularityPeriod | M |
| invalidReportingPeriod | InvalidReportingPeriod | M |
| highWorkLoad | HighWorkLoad | M |
| invalidPriority | InvalidPriority | M |

5.2.2 Operation `stopMeasurementJob`

5.2.2.1 Input parameters

Table 5.2.2.1: Mapping from IS `stopMeasurementJob` input parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding input message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|--|-----------|
| JobId | jobId | M |

5.2.2.2 Output parameters

Table 5.2.2.2: Mapping from IS `stopMeasurementJob` output parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding output message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|---|-----------|
| Status | status | M |

5.2.2.3 Fault definition

Table 5.2.2.3: Mapping from IS `stopMeasurementJob` exceptions to SS equivalents

| Assertion name | SS WSDL type enumeration value used in corresponding fault message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|--------------------|--|-----------|
| unknownJob | UnknownJob | M |
| jobCannotBeStopped | JobCannotBeStopped | M |

5.2.3 Operation `suspendMeasurementJob`

5.2.3.1 Input parameters

Table 5.2.3.1: Mapping from IS `suspendMeasurementJob` input parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding input message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|--|-----------|
| jobId | jobId | M |

5.2.3.2 Output parameters

Table 5.2.3.2: Mapping from IS `suspendMeasurementJob` output parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding output message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|---|-----------|
| status | status | M |

5.2.3.3 Fault definition

Table 5.2.3.3: Mapping from IS `suspendMeasurementJob` exceptions to SS equivalents

| Assertion name | SS WSDL type enumeration value used in corresponding fault message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|----------------------------------|--|-----------|
| <code>unknownJob</code> | <code>UnknownJob</code> | M |
| <code>jobAlreadySuspended</code> | <code>JobAlreadySuspended</code> | M |

5.2.4 Operation `resumeMeasurementJob`

5.2.4.1 Input parameters

Table 5.2.4.1: Mapping from IS `resumeMeasurementJob` input parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding input message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|--|-----------|
| <code>jobId</code> | <code>jobId</code> | M |

5.2.4.2 Output parameters

Table 5.2.4.2: Mapping from IS `resumeMeasurementJob` output parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding output message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|---|-----------|
| <code>status</code> | <code>status</code> | M |

5.2.4.3 Fault definition

Table 5.2.4.3: Mapping from IS `resumeMeasurementJob` exceptions to SS equivalents

| Assertion name | SS WSDL type enumeration value used in corresponding fault message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|--------------------------------|--|-----------|
| <code>unknownJob</code> | <code>UnknownJob</code> | M |
| <code>jobIsNotSuspended</code> | <code>JobIsNotSuspended</code> | M |
| <code>highWorkLoad</code> | <code>HighWorkLoad</code> | M |

5.2.5 Operation `listMeasurementJobs`

5.2.5.1 Input parameters

Table 5.2.5.1: Mapping from IS `listMeasurementJobs` input parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding input message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|--|-----------|
| <code>jobIdList</code> | <code>jobIdList</code> | M |

5.2.5.2 Output parameters

Table 5.2.5.2: Mapping from IS `listMeasurementJobs` output parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding output message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|--------------------------|---|-----------|
| <code>jobInfoList</code> | <code>jobInfoList</code> | M |
| <code>status</code> | <code>status</code> | M |

5.2.5.3 Fault definition

Table 5.2.5.3: Mapping from IS `listMeasurementJobs` exceptions to SS equivalents

| Assertion name | SS WSDL type enumeration value used in corresponding fault message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|-------------------------------|--|-----------|
| <code>invalidJobIdList</code> | <code>InvalidJobIdList</code> | M |

5.2.6 Operation `createThresholdMonitor`

5.2.6.1 Input parameters

Table 5.2.6.1: Mapping from IS `createThresholdMonitor` input parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding input message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|---------------------------------------|--|-----------|
| <code>iocName</code> | <code>iocName</code> | M |
| <code>iocInstanceList</code> | <code>iocInstanceList</code> | M |
| <code>thresholdInfoList</code> | <code>thresholdInfoList</code> | M |
| <code>monitorGranularityPeriod</code> | <code>monitorGranularityPeriod</code> | M |

5.2.6.2 Output parameters

Table 5.2.6.2: Mapping from IS `createThresholdMonitor` output parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding output message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|---|-----------|
| monitorId | monitorId | M |
| unsupportedList | unsupportedList | M |
| status | status | M |

5.2.6.3 Fault definition

Table 5.2.6.3: Mapping from IS `createThresholdMonitor` exceptions to SS equivalents

| Assertion name | SS WSDL type enumeration value used in corresponding fault message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|--------------------------------------|--|-----------|
| invalidClassOrInstances | InvalidClassOrInstances | M |
| invalidGranularityPeriod | InvalidGranularityPeriod | M |
| noValidMeasurementType | NoValidMeasurementType | M |
| invalidNumberOfThresholdPackElements | InvalidNumberOfThresholdPackElements | M |
| invalidOrderOfThresholdPackElements | InvalidOrderOfThresholdPackElements | M |
| invalidDirection | InvalidDirection | M |

5.2.7 Operation `deleteThresholdMonitor`

5.2.7.1 Input parameters

Table 5.2.7.1: Mapping from IS `deleteThresholdMonitor` input parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding input message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|--|-----------|
| monitorId | monitorId | M |

5.2.7.2 Output parameters

Table 5.2.7.2: Mapping from IS `deleteThresholdMonitor` output parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding output message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|---|-----------|
| status | status | M |

5.2.7.3 Fault definition

Table 5.2.7.3: Mapping from IS `deleteThresholdMonitor` exceptions to SS equivalents

| Assertion name | SS WSDL type enumeration value used in corresponding fault message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|--------------------------------------|--|-----------|
| <code>unknownThresholdMonitor</code> | <code>UnknownThresholdMonitor</code> | M |

5.2.8 Operation `listThresholdMonitors`

5.2.8.1 Input parameters

Table 5.2.8.1: Mapping from IS `listThresholdMonitors` input parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding input message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|----------------------------|--|-----------|
| <code>monitorIdList</code> | <code>monitorIdList</code> | M |

5.2.8.2 Output parameters

Table 5.2.8.2: Mapping from IS `listThresholdMonitors` output parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding output message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|---|-----------|
| <code>status</code> | <code>status</code> | M |

5.2.8.3 Fault definition

Table 5.2.8.3: Mapping from IS `listThresholdMonitors` exceptions to SS equivalents

| Assertion name | SS WSDL type enumeration value used in corresponding fault message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|-----------------------------------|--|-----------|
| <code>invalidMonitorIdList</code> | <code>InvalidMonitorIdList</code> | M |

5.2.9 Operation `suspendThresholdMonitor`

5.2.9.1 Input parameters

Table 5.2.9.1: Mapping from IS `suspendThresholdMonitor` input parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding input message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|----------------------------|--|-----------|
| <code>monitorIdList</code> | <code>monitorIdList</code> | M |

5.2.9.2 Output parameters

Table 5.2.9.2: Mapping from IS `suspendThresholdMonitor` output parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding output message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|---|-----------|
| status | status | M |

5.2.9.3 Fault definition

Table 5.2.9.3: Mapping from IS `suspendThresholdMonitor` exceptions to SS equivalents

| Assertion name | SS WSDL type enumeration value used in corresponding fault message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|----------------------------------|--|-----------|
| unknownThresholdMonitor | UnknownThresholdMonitor | M |
| thresholdMonitorAlreadySuspended | ThresholdMonitorAlreadySuspended | M |

5.2.9 Operation `resumeThresholdMonitor`

5.2.9.1 Input parameters

Table 5.2.9.1: Mapping from IS `resumeThresholdMonitor` input parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding input message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|--|-----------|
| monitorId | monitorId | M |

5.2.9.2 Output parameters

Table 5.2.9.2: Mapping from IS `resumeThresholdMonitor` output parameters to SS equivalents

| IS Operation parameter | SS WSDL type sub-element used in corresponding output message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|------------------------|---|-----------|
| status | status | M |

5.2.9.3 Fault definition

Table 5.2.9.3: Mapping from IS `resumeThresholdMonitor` exceptions to SS equivalents

| Assertion name | SS WSDL type enumeration value used in corresponding fault message under corresponding port type operation as indicated in Table 5.1 | Qualifier |
|--------------------------------|--|-----------|
| unknownThresholdMonitor | UnknownThresholdMonitor | M |
| thresholdMonitorIsNotSuspended | ThresholdMonitorIsNotSuspended | M |

Annex A (normative): WSDL specifications

```

<?xml version="1.0" encoding="UTF-8"?>
<!--
  3GPP TS 32.417 Performance Management (PM) IRP SOAP Solution Set
-->
<definitions xmlns="http://schemas.xmlsoap.org/wsdl/"
  xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"
  xmlns:pMIRPSystem="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#PMIRPSystem"
  xmlns:pMIRPData="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#PMIRPData"
  xmlns:xpi="http://www.3gpp.org/ftp/specs/archive/32_series/32.415#pMIRPIOCs"
  xmlns:xn="http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNrm"
  xmlns:genericIRPSystem="http://www.3gpp.org/ftp/Specs/archive/32_series/32.317/schema/32317-810/GenericIRPSystem"
  xmlns:ntfIRPntfSystem="http://www.3gpp.org/ftp/Specs/archive/32_series/32.307/schema/32307-810/notification/NotificationIRPntfSystem"
  targetNamespace="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#PMIRPSystem">
  <import namespace="http://www.3gpp.org/ftp/Specs/archive/32_series/32.307/schema/32307-810/notification/NotificationIRPntfSystem"
  location="http://www.3gpp.org/ftp/Specs/archive/32_series/32.307/schema/32307-810-wsdl.zip"/>
  <import namespace="http://www.3gpp.org/ftp/Specs/archive/32_series/32.317/schema/32317-810/GenericIRPSystem" location="http://www.3gpp.org/ftp/Specs/archive/32_series/32.317/schema/32317-810-wsdl.zip"/>
  <types>
    <schema targetNamespace="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#PMIRPData"
  xmlns="http://www.w3.org/2001/XMLSchema">
    <import namespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.415#pMIRPIOCs"/>
    <import namespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.625#genericNrm"/>
    <!-- The following types are defined for the PM IRP operations -->
    <simpleType name="OperationStatusTwo">
      <restriction base="string">
        <enumeration value="Success"/>
        <enumeration value="Failure"/>
      </restriction>
    </simpleType>
    <simpleType name="OperationStatusThree">
      <restriction base="string">
        <enumeration value="Success"/>
        <enumeration value="Failure"/>
        <enumeration value="PartialSuccess"/>
      </restriction>
    </simpleType>
    <complexType name="JobIdList">
      <sequence>
        <element ref="xpi:jobId" minOccurs="0" maxOccurs="unbounded"/>
      </sequence>
    </complexType>
    <complexType name="JobInfoElement">
      <sequence>
        <element ref="xpi:jobId"/>
        <element ref="xpi:jobGranularityPeriod"/>
        <element ref="xpi:jobReportingPeriod"/>
        <element ref="xpi:jobStatus"/>
        <element ref="xpi:jobPriority"/>
        <element ref="xpi:jobStartTime"/>
        <element ref="xpi:jobStopTime"/>
        <element ref="xpi:jobSchedule"/>
        <element name="iOCName" type="string"/>
        <element name="iOCInstanceList" type="xn:dnList"/>
        <element name="measurementCategoryList"
  type="pMIRPData:MeasurementCategoryList"/>
      </sequence>
    </complexType>
    <complexType name="JobInfoList">
      <sequence>
        <element name="jobInfoElement" type="pMIRPData:JobInfoElement" minOccurs="0"
  maxOccurs="unbounded"/>
      </sequence>
    </complexType>
    <complexType name="MeasurementCategoryList">
      <sequence>
        <element ref="xpi:measurementTypeName" minOccurs="1" maxOccurs="unbounded"/>
      </sequence>
    </complexType>
  </schema>
  </types>

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</complexType>
<complexType name="MonitorIdList">
  <sequence>
    <element ref="xpi:monitorId" minOccurs="0" maxOccurs="unbounded"/>
  </sequence>
</complexType>
<complexType name="MonitorInfoElement">
  <sequence>
    <element ref="xpi:monitorId"/>
    <element ref="xpi:monitorGranularityPeriod"/>
    <element ref="xpi:thresholdMonitorStatus"/>
    <element name="iOCName" type="string"/>
    <element name="iOCInstanceList" type="xn:dnList"/>
    <element name="thresholdInfoList" type="pMIRPData:ThresholdInfoList"/>
  </sequence>
</complexType>
<complexType name="MonitorInfoList">
  <sequence>
    <element name="monitorInfoElement" type="pMIRPData:MonitorInfoElement"
minOccurs="0" maxOccurs="unbounded"/>
  </sequence>
</complexType>
<complexType name="ThresholdLevel">
  <sequence>
    <element ref="xpi:thresholdValue"/>
    <element ref="xpi:thresholdSeverity"/>
    <element ref="xpi:hysteresis"/>
  </sequence>
</complexType>
<complexType name="ThresholdLevelList">
  <sequence>
    <element name="thresholdPackElement" type="pMIRPData:ThresholdLevel"
minOccurs="1" maxOccurs="4"/>
  </sequence>
</complexType>
<complexType name="ThresholdInfoElement">
  <sequence>
    <element ref="xpi:measurementTypeName"/>
    <element ref="xpi:probableCause"/>
    <element ref="xpi:specificProblem"/>
    <element ref="xpi:direction"/>
    <element name="thresholdPack" type="pMIRPData:ThresholdLevelList"/>
  </sequence>
</complexType>
<complexType name="ThresholdInfoList">
  <sequence>
    <element name="ThresholdInfoElement" minOccurs="0" maxOccurs="unbounded"/>
  </sequence>
</complexType>
<complexType name="UnsupportedMeasurement1">
  <sequence>
    <element name="objectInstance" type="xn:dn"/>
    <element ref="xpi:measurementTypeName"/>
    <element name="reason" type="string"/>
  </sequence>
</complexType>
<complexType name="UnsupportedList1">
  <sequence>
    <element name="unsupportedMeasurement" type="pMIRPData:UnsupportedMeasurement1"
minOccurs="0" maxOccurs="unbounded"/>
  </sequence>
</complexType>
<complexType name="UnsupportedMeasurement2">
  <sequence>
    <element name="objectClass" type="string"/>
    <element name="objectInstance" type="xn:dn"/>
    <element ref="xpi:measurementTypeName"/>
    <element name="reason" type="string"/>
  </sequence>
</complexType>
<complexType name="UnsupportedList2">
  <sequence>
    <element name="unsupportedMeasurement" type="pMIRPData:UnsupportedMeasurement2"
minOccurs="0" maxOccurs="unbounded"/>
  </sequence>
</complexType>
<!-- createMeasurementJob Request -->
<element name="createMeasurementJob">

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    <complexType>
      <sequence>
        <element name="iocName" type="xn:dn"/>
        <element name="iocInstanceList" type="xn:dnList"/>
        <element name="measurementCategoryList"
type="pMIRPData:MeasurementCategoryList"/>
        <element name="granularityPeriod" type="xpi:JobGranularityPeriod"/>
        <element name="reportingPeriod" type="xpi:JobReportingPeriod"/>
        <element name="startTime" type="xpi:JobStartTime" minOccurs="0"/>
        <element name="stopTime" type="xpi:JobStopTime" minOccurs="0"/>
        <element name="schedule" type="xpi:JobSchedule" minOccurs="0"/>
        <element name="priority" type="xpi:JobPriority" minOccurs="0"/>
      </sequence>
    </complexType>
  </element>
  <!-- createMeasurementJob Response -->
  <element name="createMeasurementJobResponse">
    <complexType>
      <sequence>
        <element ref="xpi:jobId"/>
        <element name="unsupportedList" type="pMIRPData:UnsupportedList1"/>
        <element name="status" type="pMIRPData:OperationStatusThree"/>
      </sequence>
    </complexType>
  </element>
  <!-- createMeasurementJob Fault -->
  <element name="createMeasurementJobFault">
    <simpleType>
      <restriction base="string">
        <enumeration value="InvalidStartTime"/>
        <enumeration value="InvalidStopTime"/>
        <enumeration value="InvalidSchedule"/>
        <enumeration value="InvalidGranularityPeriod"/>
        <enumeration value="InvalidReportingPeriod"/>
        <enumeration value="HighWorkLoad"/>
        <enumeration value="InvalidPriority"/>
      </restriction>
    </simpleType>
  </element>
  <!-- stopMeasurementJob Request -->
  <element name="stopMeasurementJob">
    <complexType>
      <sequence>
        <element ref="xpi:jobId"/>
      </sequence>
    </complexType>
  </element>
  <!-- stopMeasurementJob Response -->
  <element name="stopMeasurementJobResponse">
    <complexType>
      <sequence>
        <element name="status" type="pMIRPData:OperationStatusTwo"/>
      </sequence>
    </complexType>
  </element>
  <!-- stopMeasurementJob Fault -->
  <element name="stopMeasurementJobFault">
    <simpleType>
      <restriction base="string">
        <enumeration value="UnknownJob"/>
        <enumeration value="JobCannotBeStopped"/>
      </restriction>
    </simpleType>
  </element>
  <!-- suspendMeasurementJob Request -->
  <element name="suspendMeasurementJob">
    <complexType>
      <sequence>
        <element ref="xpi:jobId"/>
      </sequence>
    </complexType>
  </element>
  <!-- suspendMeasurementJob Response -->
  <element name="suspendMeasurementJobResponse">
    <complexType>
      <sequence>
        <element name="status" type="pMIRPData:OperationStatusTwo"/>
      </sequence>
    </complexType>
  </element>

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    </complexType>
  </element>
  <!-- suspendMeasurementJob Fault -->
  <element name="suspendMeasurementJobFault">
    <simpleType>
      <restriction base="string">
        <enumeration value="UnknownJob"/>
        <enumeration value="JobAlreadySuspended"/>
      </restriction>
    </simpleType>
  </element>
  <!-- resumeMeasurementJob Request -->
  <element name="resumeMeasurementJob">
    <complexType>
      <sequence>
        <element ref="xpi:jobId"/>
      </sequence>
    </complexType>
  </element>
  <!-- resumeMeasurementJob Response -->
  <element name="resumeMeasurementJobResponse">
    <complexType>
      <sequence>
        <element name="status" type="pMIRPData:OperationStatusTwo"/>
      </sequence>
    </complexType>
  </element>
  <!-- resumeMeasurementJob Fault -->
  <element name="resumeMeasurementJobFault">
    <simpleType>
      <restriction base="string">
        <enumeration value="UnknownJob"/>
        <enumeration value="JobIsNotSuspended"/>
        <enumeration value="HighWorkLoad"/>
      </restriction>
    </simpleType>
  </element>
  <!-- listMeasurementJobs Request -->
  <element name="listMeasurementJobs">
    <complexType>
      <sequence>
        <element name="jobIdList" type="pMIRPData:JobIdList"/>
      </sequence>
    </complexType>
  </element>
  <!-- listMeasurementJobs Response -->
  <element name="listMeasurementJobsResponse">
    <complexType>
      <sequence>
        <element name="jobInfoList" type="pMIRPData:JobInfoList"/>
        <element name="status" type="pMIRPData:OperationStatusTwo"/>
      </sequence>
    </complexType>
  </element>
  <!-- listMeasurementJobs Fault -->
  <element name="listMeasurementJobsFault">
    <simpleType>
      <restriction base="string">
        <enumeration value="InvalidJobIdList"/>
      </restriction>
    </simpleType>
  </element>
  <!-- createThresholdMonitor Request -->
  <element name="createThresholdMonitor">
    <complexType>
      <sequence>
        <element name="iocName" type="string"/>
        <element name="iocInstanceList" type="xn:dnList"/>
        <element name="thresholdInfoList" type="pMIRPData:ThresholdInfoList"/>
        <element ref="xpi:monitorGranularityPeriod"/>
      </sequence>
    </complexType>
  </element>
  <!-- createThresholdMonitor Response -->
  <element name="createThresholdMonitorResponse">
    <complexType>
      <sequence>
        <element ref="xpi:monitorId"/>
      </sequence>
    </complexType>
  </element>

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        <element name="unsupportedList" type="pMIRPData:UnsupportedList2"/>
        <element name="status" type="pMIRPData:OperationStatusThree"/>
    </sequence>
</complexType>
</element>
<!-- createThresholdMonitor Fault -->
<element name="createThresholdMonitorFault">
    <simpleType>
        <restriction base="string">
            <enumeration value="InvalidClassOrInstances"/>
            <enumeration value="InvalidGranularityPeriod"/>
            <enumeration value="NoValidMeasurementType"/>
            <enumeration value="InvalidNumberOfThresholdPackElements"/>
            <enumeration value="InvalidOrderOfThresholdPackElements"/>
            <enumeration value="InvalidDirection"/>
        </restriction>
    </simpleType>
</element>
<!-- deleteThresholdMonitor Request -->
<element name="deleteThresholdMonitor">
    <complexType>
        <sequence>
            <element ref="xpi:monitorId"/>
        </sequence>
    </complexType>
</element>
<!-- deleteThresholdMonitor Response -->
<element name="deleteThresholdMonitorResponse">
    <complexType>
        <sequence>
            <element name="status" type="pMIRPData:OperationStatusTwo"/>
        </sequence>
    </complexType>
</element>
<!-- deleteThresholdMonitor Fault -->
<element name="deleteThresholdMonitorFault">
    <simpleType>
        <restriction base="string">
            <enumeration value="UnknownThresholdMonitor"/>
        </restriction>
    </simpleType>
</element>
<!-- listThresholdMonitors Request -->
<element name="listThresholdMonitors">
    <complexType>
        <sequence>
            <element name="monitorIdList" type="pMIRPData:MonitorIdList"/>
        </sequence>
    </complexType>
</element>
<!-- listThresholdMonitors Response -->
<element name="listThresholdMonitorsResponse">
    <complexType>
        <sequence>
            <element name="monitorInfoList" type="pMIRPData:MonitorInfoList"/>
            <element name="status" type="pMIRPData:OperationStatusTwo"/>
        </sequence>
    </complexType>
</element>
<!-- listThresholdMonitors Fault -->
<element name="listThresholdMonitorsFault">
    <simpleType>
        <restriction base="string">
            <enumeration value="InvalidMonitorIdList"/>
        </restriction>
    </simpleType>
</element>
<!-- suspendThresholdMonitor Request -->
<element name="suspendThresholdMonitor">
    <complexType>
        <sequence>
            <element ref="xpi:monitorId"/>
        </sequence>
    </complexType>
</element>
<!-- suspendThresholdMonitor Response -->
<element name="suspendThresholdMonitorResponse">
    <complexType>

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        <sequence>
            <element name="status" type="pMIRPData:OperationStatusTwo"/>
        </sequence>
    </complexType>
</element>
<!-- suspendThresholdMonitor Fault -->
<element name="suspendThresholdMonitorFault">
    <simpleType>
        <restriction base="string">
            <enumeration value="UnknownThresholdMonitor"/>
            <enumeration value="ThresholdMonitorAlreadySuspended"/>
        </restriction>
    </simpleType>
</element>
<!-- resumeThresholdMonitor Request -->
<element name="resumeThresholdMonitor">
    <complexType>
        <sequence>
            <element ref="xpi:monitorId"/>
        </sequence>
    </complexType>
</element>
<!-- resumeThresholdMonitor Response -->
<element name="resumeThresholdMonitorResponse">
    <complexType>
        <sequence>
            <element name="status" type="pMIRPData:OperationStatusTwo"/>
        </sequence>
    </complexType>
</element>
<!-- resumeThresholdMonitor Fault -->
<element name="resumeThresholdMonitorFault">
    <simpleType>
        <restriction base="string">
            <enumeration value="UnknownThresholdMonitor"/>
            <enumeration value="ThresholdMonitorIsNotSuspended"/>
        </restriction>
    </simpleType>
</element>
</schema>
</types>
<message name="createMeasurementJob">
    <part name="parameter" element="pMIRPData:createMeasurementJob"/>
</message>
<message name="createMeasurementJobResponse">
    <part name="parameter" element="pMIRPData:createMeasurementJobResponse"/>
</message>
<message name="createMeasurementJobFault">
    <part name="parameter" element="pMIRPData:createMeasurementJobFault"/>
</message>
<message name="stopMeasurementJob">
    <part name="parameter" element="pMIRPData:stopMeasurementJob"/>
</message>
<message name="stopMeasurementJobResponse">
    <part name="parameter" element="pMIRPData:stopMeasurementJobResponse"/>
</message>
<message name="stopMeasurementJobFault">
    <part name="parameter" element="pMIRPData:stopMeasurementJobFault"/>
</message>
<message name="suspendMeasurementJob">
    <part name="parameter" element="pMIRPData:suspendMeasurementJob"/>
</message>
<message name="suspendMeasurementJobResponse">
    <part name="parameter" element="pMIRPData:suspendMeasurementJobResponse"/>
</message>
<message name="suspendMeasurementJobFault">
    <part name="parameter" element="pMIRPData:suspendMeasurementJobFault"/>
</message>
<message name="resumeMeasurementJob">
    <part name="parameter" element="pMIRPData:resumeMeasurementJob"/>
</message>
<message name="resumeMeasurementJobResponse">
    <part name="parameter" element="pMIRPData:resumeMeasurementJobResponse"/>
</message>
<message name="resumeMeasurementJobFault">
    <part name="parameter" element="pMIRPData:resumeMeasurementJobFault"/>
</message>
<message name="listMeasurementJobs">

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    <part name="parameter" element="pMIRPData:listMeasurementJobs"/>
</message>
<message name="listMeasurementJobsResponse">
    <part name="parameter" element="pMIRPData:listMeasurementJobsResponse"/>
</message>
<message name="listMeasurementJobsFault">
    <part name="parameter" element="pMIRPData:listMeasurementJobsFault"/>
</message>
<message name="createThresholdMonitor">
    <part name="parameter" element="pMIRPData:createThresholdMonitor"/>
</message>
<message name="createThresholdMonitorResponse">
    <part name="parameter" element="pMIRPData:createThresholdMonitorResponse"/>
</message>
<message name="createThresholdMonitorFault">
    <part name="parameter" element="pMIRPData:createThresholdMonitorFault"/>
</message>
<message name="deleteThresholdMonitor">
    <part name="parameter" element="pMIRPData:createThresholdMonitorFault"/>
</message>
<message name="deleteThresholdMonitorResponse">
    <part name="parameter" element="pMIRPData:deleteThresholdMonitorResponse"/>
</message>
<message name="deleteThresholdMonitorFault">
    <part name="parameter" element="pMIRPData:deleteThresholdMonitorFault"/>
</message>
<message name="listThresholdMonitors">
    <part name="parameter" element="pMIRPData:listThresholdMonitors"/>
</message>
<message name="listThresholdMonitorsResponse">
    <part name="parameter" element="pMIRPData:listThresholdMonitorsResponse"/>
</message>
<message name="listThresholdMonitorsFault">
    <part name="parameter" element="pMIRPData:listThresholdMonitorsFault"/>
</message>
<message name="suspendThresholdMonitor">
    <part name="parameter" element="pMIRPData:suspendThresholdMonitor"/>
</message>
<message name="suspendThresholdMonitorResponse">
    <part name="parameter" element="pMIRPData:suspendThresholdMonitorResponse"/>
</message>
<message name="suspendThresholdMonitorFault">
    <part name="parameter" element="pMIRPData:suspendThresholdMonitorFault"/>
</message>
<message name="resumeThresholdMonitor">
    <part name="parameter" element="pMIRPData:resumeThresholdMonitor"/>
</message>
<message name="resumeThresholdMonitorResponse">
    <part name="parameter" element="pMIRPData:resumeThresholdMonitorResponse"/>
</message>
<message name="resumeThresholdMonitorFault">
    <part name="parameter" element="pMIRPData:resumeThresholdMonitorFault"/>
</message>
<portType name="PMIRPPortType">
    <operation name="createMeasurementJob">
        <input message="pMIRPSystem:createMeasurementJob"/>
        <output message="pMIRPSystem:createMeasurementJobResponse"/>
        <fault name="createMeasurementJobFault"/>
message="pMIRPSystem:createMeasurementJobFault"/>
    </operation>
    <operation name="stopMeasurementJob">
        <input message="pMIRPSystem:stopMeasurementJob"/>
        <output message="pMIRPSystem:stopMeasurementJobResponse"/>
        <fault name="stopMeasurementJobFault" message="pMIRPSystem:stopMeasurementJobFault"/>
    </operation>
    <operation name="suspendMeasurementJob">
        <input message="pMIRPSystem:suspendMeasurementJob"/>
        <output message="pMIRPSystem:suspendMeasurementJobResponse"/>
        <fault name="suspendMeasurementJobFault"
message="pMIRPSystem:suspendMeasurementJobFault"/>
    </operation>
    <operation name="resumeMeasurementJob">
        <input message="pMIRPSystem:resumeMeasurementJob"/>
        <output message="pMIRPSystem:resumeMeasurementJobResponse"/>
        <fault name="resumeMeasurementJobFault"
message="pMIRPSystem:resumeMeasurementJobFault"/>
    </operation>
    <operation name="listMeasurementJobs">

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        <input message="pMIRPSystem:listMeasurementJobs"/>
        <output message="pMIRPSystem:listMeasurementJobsResponse"/>
        <fault name="listMeasurementJobsFault" message="pMIRPSystem:listMeasurementJobsFault"/>
    </operation>
    <operation name="createThresholdMonitor">
        <input message="pMIRPSystem:createThresholdMonitor"/>
        <output message="pMIRPSystem:createThresholdMonitorResponse"/>
        <fault name="createThresholdMonitorFault"
message="pMIRPSystem:createThresholdMonitorFault"/>
    </operation>
    <operation name="deleteThresholdMonitor">
        <input message="pMIRPSystem:deleteThresholdMonitor"/>
        <output message="pMIRPSystem:deleteThresholdMonitorResponse"/>
        <fault name="deleteThresholdMonitorFault"
message="pMIRPSystem:deleteThresholdMonitorFault"/>
    </operation>
    <operation name="listThresholdMonitors">
        <input message="pMIRPSystem:listThresholdMonitors"/>
        <output message="pMIRPSystem:listThresholdMonitorsResponse"/>
        <fault name="listThresholdMonitorsFault"
message="pMIRPSystem:listThresholdMonitorsFault"/>
    </operation>
    <operation name="suspendThresholdMonitor">
        <input message="pMIRPSystem:suspendThresholdMonitor"/>
        <output message="pMIRPSystem:suspendThresholdMonitorResponse"/>
        <fault name="suspendThresholdMonitorFault"
message="pMIRPSystem:suspendThresholdMonitorFault"/>
    </operation>
    <operation name="resumeThresholdMonitor">
        <input message="pMIRPSystem:resumeThresholdMonitor"/>
        <output message="pMIRPSystem:resumeThresholdMonitorResponse"/>
        <fault name="resumeThresholdMonitorFault"
message="pMIRPSystem:resumeThresholdMonitorFault"/>
    </operation>
</portType>
<binding name="PMIRPBinding" type="pMIRPSystem:PMIRPPortType">
    <soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
    <operation name="createMeasurementJob">
        <soap:operation
soapAction="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#createMeasurementJob"
style="document"/>
        <input>
            <soap:body use="literal"/>
        </input>
        <output>
            <soap:body use="literal"/>
        </output>
        <fault name="createMeasurementJobFault">
            <soap:fault name="createMeasurementJobFault" use="literal"/>
        </fault>
    </operation>
    <operation name="stopMeasurementJob">
        <soap:operation
soapAction="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#stopMeasurementJob"
style="document"/>
        <input>
            <soap:body use="literal"/>
        </input>
        <output>
            <soap:body use="literal"/>
        </output>
        <fault name="stopMeasurementJobFault">
            <soap:fault name="stopMeasurementJobFault" use="literal"/>
        </fault>
    </operation>
    <operation name="suspendMeasurementJob">
        <soap:operation
soapAction="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#suspendMeasurementJob"
style="document"/>
        <input>
            <soap:body use="literal"/>
        </input>
        <output>
            <soap:body use="literal"/>
        </output>
        <fault name="suspendMeasurementJobFault">
            <soap:fault name="suspendMeasurementJobFault" use="literal"/>
        </fault>
    </operation>

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    </operation>
    <operation name="resumeMeasurementJob">
      <soap:operation
soapAction="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#resumeMeasurementJob"
style="document"/>
      <input>
        <soap:body use="literal"/>
      </input>
      <output>
        <soap:body use="literal"/>
      </output>
      <fault name="resumeMeasurementJobFault">
        <soap:fault name="resumeMeasurementJobFault" use="literal"/>
      </fault>
    </operation>
    <operation name="listMeasurementJobs">
      <soap:operation
soapAction="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#listMeasurementJobs"
style="document"/>
      <input>
        <soap:body use="literal"/>
      </input>
      <output>
        <soap:body use="literal"/>
      </output>
      <fault name="listMeasurementJobsFault">
        <soap:fault name="listMeasurementJobsFault" use="literal"/>
      </fault>
    </operation>
    <operation name="createThresholdMonitor">
      <soap:operation
soapAction="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#createThresholdMonitor"
style="document"/>
      <input>
        <soap:body use="literal"/>
      </input>
      <output>
        <soap:body use="literal"/>
      </output>
      <fault name="createThresholdMonitorFault">
        <soap:fault name="createThresholdMonitorFault" use="literal"/>
      </fault>
    </operation>
    <operation name="deleteThresholdMonitor">
      <soap:operation
soapAction="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#deleteThresholdMonitor"
style="document"/>
      <input>
        <soap:body use="literal"/>
      </input>
      <output>
        <soap:body use="literal"/>
      </output>
      <fault name="deleteThresholdMonitorFault">
        <soap:fault name="deleteThresholdMonitorFault" use="literal"/>
      </fault>
    </operation>
    <operation name="listThresholdMonitors">
      <soap:operation
soapAction="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#listThresholdMonitors"
style="document"/>
      <input>
        <soap:body use="literal"/>
      </input>
      <output>
        <soap:body use="literal"/>
      </output>
      <fault name="listThresholdMonitorsFault">
        <soap:fault name="listThresholdMonitorsFault" use="literal"/>
      </fault>
    </operation>
    <operation name="suspendThresholdMonitor">
      <soap:operation
soapAction="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#suspendThresholdMonitor"
style="document"/>
      <input>
        <soap:body use="literal"/>
      </input>

```

```

    <output>
      <soap:body use="literal"/>
    </output>
    <fault name="suspendThresholdMonitorFault">
      <soap:fault name="suspendThresholdMonitorFault" use="literal"/>
    </fault>
  </operation>
  <operation name="resumeThresholdMonitor">
    <soap:operation
soapAction="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#resumeThresholdMonitor"
style="document"/>
    <input>
      <soap:body use="literal"/>
    </input>
    <output>
      <soap:body use="literal"/>
    </output>
    <fault name="resumeThresholdMonitorFault">
      <soap:fault name="resumeThresholdMonitorFault" use="literal"/>
    </fault>
  </operation>
</binding>
<service name="PMIRPService">
  <port name="PMIRPPort" binding="pMIRPSsystem:PMIRPBinding">
    <soap:address location="http://www.3gpp.org/ftp/Specs/archive/32_series/32.417#PMIRP"/>
  </port>
  <port name="GenericIRPPort" binding="genericIRPSystem:GenericIRPBinding">
    <soap:address
location="http://www.3gpp.org/ftp/Specs/archive/32_series/32.317#GenericIRP"/>
  </port>
  <port name="NotificationIRPNtfPort" binding="ntfIRPNtfSystem:NotificationIRPNtf">
    <soap:address
location="http://www.3gpp.org/ftp/Specs/archive/32_series/32.307#NotificationIRPNtf"/>
  </port>
</service>
</definitions>

```

Annex B (informative):
Void

Annex C (informative): Change history

| Change history | | | | | | | | |
|----------------|-------|-----------|------|----|---|-----|-------|-------|
| Date | TSG # | TSG Doc. | CR | R | Subject/Comment | Cat | Old | New |
| March 2009 | SA-43 | SP-090063 | -- | -- | Presentation to SA for information and approval | -- | 1.0.0 | 8.0.0 |
| Dec 2009 | SA_46 | SP-090719 | 0001 | -- | Discontinuation of the maintenance of WSDL/XML schema folders | F | 8.0.0 | 9.0.0 |
| | | | | | | | | |
| | | | | | | | | |