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Technical Specification

3rd Generation Partnership Project;

Technical Specification Group Services and System Aspects;

Telecommunication management;

Radio Planning Tool Access (RPTA)

Integration Reference Point (IRP);

Solution Set (SS) definitions

(Release 16)

* *

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# Foreword

This Technical Specification 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:

Version x.y.z

where:

x the first digit:

1 presented to TSG for information;

2 presented to TSG for approval;

3 or greater indicates TSG approved document under change control.

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:

28.667: Radio Planning Tool Access (RPTA) Integration Reference Point (IRP); Requirements.

28.668: Radio Planning Tool Access (RPTA) Integration Reference Point (IRP): Information Service (IS).

**28.669: Radio Planning Tool Access (RPTA) Integration Reference Point (IRP); Solution Set (SS). definitions**

# 1 Scope

The present document specifies the Solution Set definitions (SS) of the Radio Planning Tool Access (RPTA) Integration Reference Point (IRP). This IRP allows the NM to read planned site and antenna data from the RPT.

This Solution Set specification is related to 3GPP TS 28.668 V14.0.X [4].

# 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*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 32.101: "Telecommunication management; Principles and high level requirements".

[3] 3GPP TS 32.102: "Telecommunication management; Architecture".

[4] 3GPP TS 28.668: "Telecommunication management; Radio Planning Tool Access (RPTA) Integration Reference Point (IRP); Information Service (IS)".

[5] IETF RFC 2616: "Hypertext Transfer Protocol -- HTTP/1.1" (<https://www.ietf.org/rfc/rfc2616.txt>)

[6] IETF RFC 7159: "The JavaScript Object Notation (JSON) Data Interchange Format" (https://www.ietf.org/rfc/rfc7159.txt)

[7] W3C SOAP 1.1 specification (<http://www.w3.org/TR/2000/NOTE-SOAP-20000508/>)

[8] W3C WSDL 1.1 specification (<http://www.w3.org/TR/2001/NOTE-wsdl-20010315>)

[9] W3C XPath 1.0 specification (<http://www.w3.org/TR/1999/REC-xpath-19991116>)

[10] W3C SOAP 1.2 specification (<http://www.w3.org/TR/soap12-part1/>)

[11] IETF RFC 7230: "[HTTP/1.1: Message Syntax and Routing](http://tools.ietf.org/html/rfc7230)" (<https://www.ietf.org/rfc/rfc7230.txt>)

[12] IETF RFC 7231: "[HTTP/1.1: Semantics and Content](http://tools.ietf.org/html/rfc7231)" (<https://www.ietf.org/rfc/rfc7231.txt>)

[13] IETF RFC 7232: "[HTTP/1.1: Conditional Requests](http://tools.ietf.org/html/rfc7232)" (<https://www.ietf.org/rfc/rfc7232.txt>)

[14] IETF RFC 7233: "[HTTP/1.1: Range Requests](http://tools.ietf.org/html/rfc7233)" (<https://www.ietf.org/rfc/rfc7233.txt>)

[15] IETF RFC 7234: "[HTTP/1.1: Caching](http://tools.ietf.org/html/rfc7234)" (<https://www.ietf.org/rfc/rfc7234.txt>)

[16] IETF RFC 7235: "[HTTP/1.1: Authentication](http://tools.ietf.org/html/rfc7235)" (<https://www.ietf.org/rfc/rfc7235.txt>

# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in TR 21.905 [1], 3GPP TS 32.101 [2], 3GPP TS 32.102 [3], 3GPP TS 28.668 [4] and the following apply.   
A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [1].

## 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 Solution Set Definitions

The present document defines the following RPTA IRP Solution Set Definitions:

Annex A provides the CORBA Solution Set.

Annex B provides the XML Definitions.

Annex C provides the HTTP Solution Set.

Annex D provides the SOAP Solution Set.

Annex A (normative):  
CORBA Solution Set

# A.0 Introduction

This annex specifies the CORBA Solution Set for the IRP whose semantics are specified in 3GPP TS 28.668 [4].

This annex is not provided in the current version of the present document.

Annex B (normative):   
XML definitions

# B.0 Introduction

This annex specifies the XML definitions for the IRP whose semantics are specified in 3GPP TS 28.668 [4].

# B.1 Architectural features

## B.1.1 General

The overall architectural feature of RPTA IRP is specified in 3GPP TS 28.668 [3]. This clause specifies features that are specific to the XML definitions.

## B.1.2 Description of the XML definitions

This annex specifies the XML definitions for the Support IOCs of the RPTA IRP in rptaIrpIOCs.xsd. It provides also the XML type definitions used for constructing the getPlannedData() response in rptaIRPOpR.xsd.

# B.2 Mapping

The mapping is not present in this version of the present document.

# B.3 Solution Set definitions

## B.3.1 XML Schema "rptaIrpIOCs.xsd"

<?xml version="1.1" encoding="UTF-8"?>

<!--

3GPP TS 28.669 Radio Planning Tool Access (RPTA) IRP

XML Schema definitions of the Support Object Classes

rptaIrpIOCs.xsd

-->

<schema

<!----------------------------------------------------------------------------------->

<!-- Name spaces -->

<!----------------------------------------------------------------------------------->

targetNamespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIrpIOCs"

xmlns="http://www.w3.org/2001/XMLSchema"

xmlns:xrpi="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIrpIOCs"

elementFormDefault="qualified">

<!----------------------------------------------------------------------------------->

<!-- RPTA IRP information model attribute type related XML types -->

<!----------------------------------------------------------------------------------->

<simpleType name="angleType">

<restriction base="short">

<minInclusive value="0"/>

<maxInclusive value="3600"/>

</restriction>

</simpleType>

<simpleType name="bearingType">

<restriction base="short">

<minInclusive value="0"/>

<maxInclusive value="360"/>

</restriction>

</simpleType>

<complexType name="idListType">

<sequence minOccurs="0" maxOccurs="unbounded">

<element name="id" type="string"/>

</sequence>

</complexType>

<simpleType name="longitudeType">

<restriction base="decimal">

<fractionDigits value="4"/>

<minInclusive value="-180.0000"/>

<maxInclusive value="+180.0000"/>

</restriction>

</simpleType>

<simpleType name="latitudeType">

<restriction base="decimal">

<fractionDigits value="4"/>

<minInclusive value="-90.0000"/>

<maxInclusive value="+90.0000"/>

</restriction>

</simpleType>

<!----------------------------------------------------------------------------------->

<!-- RPTA IRP information model class associated XML elements -->

<!----------------------------------------------------------------------------------->

<element name="Antenna">

<complexType>

<element name="attributes" minOccurs="0">

<complexType>

<sequence>

<element name="antennaId" type="string"/>

<element name="antennaName" type="string"/>

<element name="antennaPatternLabel" type="string"/>

<element name="antennaType" type="string"/>

<element name="antennaLongitude" type="xrpi:longitudeType"/>

<element name="antennaLatitude" type="xrpi:latitudeType"/>

<element name="antennaAltitude" type="short"/>

<element name="antennaBearing" type="xrpi:bearingType"/>

<element name="antennaMechanicalOffset" type="xrpi:angleType"/>

<element name="theSupportedCells" type="xrpi:idListType"/>

</sequence>

</complexType>

</element>

</complexType>

</element>

<element name="Cell" abstract="true">

<complexType>

<element name="attributes" minOccurs="0">

<complexType>

<sequence>

<element name="cellId" type="string"/>

<element name="theSupportingAntennas" type="xrpi:idListType"/>

</sequence>

</complexType>

</element>

</complexType>

</element>

<element

name="GSMCell"

substitutionGroup="Cell">

</element>

<element

name="UTRANCell"

substitutionGroup="Cell">

</element>

<element

name="EUTRANCell"

substitutionGroup="Cell">

</element>

<element name="Site">

<complexType>

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

<element name="siteId" type="string"/>

<element name="siteAddress" type="string"/>

<element name="siteName" type="string"/>

<element name="siteLongitude" type="xrpi:longitudeType"/>

<element name="siteLatitude" type="xrpi:latitudeType"/>

<element name="siteAltitude" type="short" use="optional"/>

</all>

</complexType>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xrpi:Antenna"/>

<element ref="xrpi:Cell"/>

</choice>

</sequence>

</complexType>

</element>

<element name="SiteList">

<complexType>

<sequence>

<element name="attributes" minOccurs="0">

<complexType>

<all>

</all>

</complexType>

</element>

<choice minOccurs="0" maxOccurs="unbounded">

<element ref="xrpi:Site"/>

</choice>

</sequence>

</complexType>

</element>

</schema>

## B.3.2 XML Schema "rptaIRPOpR.xsd"

<?xml version="1.1" encoding="UTF-8"?>

<!--

3GPP TS 28.669 Radio Planning Tool Access (RPTA) IRP

RPTA IRP XML Schema definitions for the operation response

rptaIRPOpR.xsd

-->

<schema

<!--------------------------------------------------------------------------->

<!-- Name spaces -->

<!--------------------------------------------------------------------------->

targetNamespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPOpR"

elementFormDefault="qualified">

xmlns="http://www.w3.org/2001/XMLSchema"

xmlns:xrpi="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPIOCs"

xmlns:xrpo="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPOpR"

<import namespace="http://www.3gpp.org/ftp/specs/archive/32\_series/28.669#rptaIRPIOCs"/>

<!--------------------------------------------------------------------------->

<!-- Type definitions -->

<!--------------------------------------------------------------------------->

<complexType name="plannedDataOutType">

<sequence>

<element name="header">

<complexType>

<attribute name="dataFormatVersion" type="string" use="required"/>

<attribute name="senderName" type="string" use="optional"/>

<attribute name="vendorName" type="string" use="optional"/>

</complexType>

</element>

<element name="plannedData" maxOccurs="unbounded">

<complexType>

<element ref="xrpi:SiteList"/>  
 </complexType>

</element>

<element name="footer">

<complexType>

<attribute name="dateTime" type="dateTime" use="required"/>

</complexType>

</element>

</sequence>

</complexType>

<simpleType name="operationStatusType">

<restriction base="string">

<enumeration value="operationSucceeded"/>

<enumeration value="operationFailed"/>

</restriction>

</simpleType>

</schema>

Annex C (normative): HTTP Solution Set

# C.0 Introduction

This annex specifies the HTTP Solution Set for the IRP whose semantics are specified in 3GPP TS 28.668 [4]. The HTTP Solution Set is specific for this IRP, and not applicable to any other IRP.

# C.1 Architectural features

## C.1.1 General

The overall architectural feature of RPTA IRP is specified in 3GPP TS 28.668 [4]. This clause specifies features that are specific to the HTTP SS.

## C.1.2 Supported Specifications

HTTP 1.1 [5] is supported.

JSON [6] is supported.

Note: IETF RFC 2616 [5] is superseded by RFC 7230 [11] RFC 7231 [12], RFC 7232 [13], RFC 7233 [14], RFC 7234 [15], and RFC 7235 [16]. These specifications are function wise identical to RFC 2616.

## C.1.3 Introduction to HTTP-GET

IETF RFC 2616 [5] specifies the Hypertext Transfer Protocol (HTTP) Version 1.1 (HTTP/1.1). Chapter 1.4 of this document describes the overall operation:

*“The HTTP protocol is a request/response protocol. A client sends a request to the server in the form of a request method, URI, and protocol version, followed by a MIME-like message containing request modifiers, client information, and possible body content over a connection with a server. The server responds with a status line, including the message’s protocol version and a success or error code, followed by a MIME-like message containing server information, entity metainformation, and possible entity-body content.”*

Chapter 5 of [5] specifies the HTTP request message and chapter 6 the HTTP response message. The definitions are repeated below for convenience:

Request = Request-Line ;

\*(( general-header ;

| request-header ;

| entity-header ) CRLF) ;

CRLF

[ message-body ] ;

Request-Line = Method SP Request-URI SP HTTP-Version CRLF

Response = Status-Line ;

\*(( general-header ;

| response-header ;

| entity-header ) CRLF) ;

CRLF

[ message-body ] ;

Status-Line = HTTP-Version SP Status-Code SP Reason-Phrase CRLF

## C.1.4 Usage of HTTP-GET

The operation getPlannedData is mapped to the HTTP method GET. The RPT data to be retrieved is identified by the Request-URI. The data is returned in the message-body of the Response message.

The message-body carries a:

- XML instance document (XML option);

or a

- JSON instance document (JSON option).

The syntax of the message body is described by:

- the XML Schema definition of rptaIRPHTTP.xsd given in Chapter C.3.1 (XML option);

- the JSON syntax provided in Chapter C.3.2 (JSON option).

## C.1.5 Request-URI

The Request-URI can be configured or can be discovered by means that are outside the scope of the present document.

## C.1.6 Headers

The present document does not make any recommendations on the use of headers.

# C.2 Mapping

# C.2.0 Introduction

The RPTA IRP: IS 3GPP TS 28.668 [4] defines semantics of operations and notifications visible across the Type-7 interface. Table C.2.1-1 indicates mapping of these operations and notifications to their equivalents defined in this SS.

## C.2.1 Operation and Notification mapping

Table C.2.1-1: Mapping from IS Operation to SS equivalents

| IS Operation  (3GPP TS 28.668 [4]) | SS Method | Qualifier |
| --- | --- | --- |
| getPlannedData | HTTP method GET | M |

## C.2.2 Operation parameter mapping

Reference 3GPP TS 28.668 [4] defines semantics of parameters carried in operations across the Type-7 interface. The following tables indicate the mapping of these parameters to their equivalents defined in this SS.

Table C.2.2-1: Mapping from IS getPlannedData parameters to SS equivalents (XML option)

| IS Operation parameter | SS Method parameter | Qualifier |
| --- | --- | --- |
| scope | Request-URI in the Request-Line (Request message) | M |
| plannedData | message-body (Response message): plannedDataOut | M |
| status | message-body (Response message): status | M |

Table C.2.2-2: Mapping from IS getPlannedData parameters to SS equivalents (JSON option)

| IS Operation parameter | SS Method parameter | Qualifier |
| --- | --- | --- |
| scope | Request-URI in the Request-Line (Request message) | M |
| plannedData | message-body (Response message): siteList | M |
| status | Status-Line (Response message) | M |

# C.3 Solution Set definitions

## C.3.1 XML Schema "rptaIRPHTTP.xsd"

<?xml version="1.1" encoding="UTF-8"?>

<!--

3GPP TS 28.669 Radio Planning Tool Access (RPTA) IRP

XML Schema for the HTTP Solution Set

rptaIRPHTTP.xsd

-->

<schema

targetNamespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPHTTP"

elementFormDefault="qualified">

xmlns="http://www.w3.org/2001/XMLSchema"

xmlns:xrph="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPHTTP"

xmlns:xrpi="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPIOCs"

xmlns:xrpo="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPOpR"

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPIOCs"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPOpR"/>

<element name="getPlannedDataResponse">

<complexType>

<sequence>

<element name="plannedDataOut" type="xrpo:plannedDataOutType"/>

<element name="status" type="xrpo:operationStatusType"/>

</sequence>

</complexType>

</element>

</schema>

## C.3.2 JSON definition structure

There is no schema language available for JSON. An example for a JSON instance document is provided below. This example provides the general structure and syntax of a standard compliant JSON instance. This example shall be extended only with additional site, antenna and cell elements. No other modifications are standard compliant.

{

"sitelist":

[

{"siteId": "123",

"siteAddess":"Xstreet",

"siteName":"bla",

"siteLongitude":"+148.3429",

"siteLatitude":"-37.4507",

"siteAltitude":"257",

"antenna":

[

{"antennaId":"12",

"antennaName":"Peter",

"antennaPatternLabel":"abc",

"antennaType":"abc",

"antennaLongitude":"+148.3429",

"antennaLatitude":"-37.4507",

"antennaAltitude":"257",

"antennaBearing":"309",

"antennaMechanicalOffset":"28",

"theSupportedCells":[5,6]},

{"antennaId":"23",

[...]

"theSupportedCells":[7]}

],

"cell":

[

{"cellId":"5",

"theSupportingAntennas":[12]},

{"cellId":"6",

"theSupportingAntennas":[12]},

{"cellId":"7",

"theSupportingAntennas":[23]}

]

},

{"siteId": "456",

[...]

"siteAltitude":"278",

"antenna":

[

{"antennaId":"45",

[...]

"theSupportedCells":[5,6]}

],

"cell":

[

{"cellId":"5", "theSupportingAntennas":[45]},

{"cellId":"6", "theSupportingAntennas":[45]}

]

}

]

}

Annex D (normative):  
SOAP Solution Set

# D.0 Introduction

This annex specifies the SOAP Solution Set for the IRP whose semantics are specified in 3GPP TS 28.668 [4].

# D.1 Architectural features

## D.1.1 General

The overall architectural feature of RPTA IRP is specified in 3GPP TS 28.668 [4]. This clause specifies features that are specific to the SOAP SS.

## D.1.2 Supported W3C specifications

The SOAP 1.1 specification [7] and WSDL 1.1 specification [8] are supported.

The SOAP 1.2 specification [10] is supported optionally.

The present document uses "document" style in the WSDL description.

The present document uses "literal" encoding style in the WSDL description.

## D.1.3 Filter language

The filter language used in the SS is the XPath Language (see W3C XPath 1.0 specification [9]). Service Provider may throw a FilterComplexityLimit fault when a given filter is too complex.

# D.2 Mapping

## D.2.1 Operation and Notification mapping

Table D.2.1-1: Mapping from IS Operation to SS equivalents

| IS Operation | SS Operation | Qualifier |
| --- | --- | --- |
| getPlannedData | getPlannedData | M |

## D.2.2 Operation parameter mapping

### D.2.2.1 Operation getPlannedData

#### D.2.2.1.1 Input parameters

Table D.2.2.1.1-1: Mapping from IS getPlannedData input parameters to SS equivalents

|  |  |  |
| --- | --- | --- |
| IS Operation parameter | SS Operation parameter | Qualifier |
| scope | queryXpathExp | M |

Here is the XML schema fragment of the getPlannedData request:

<element name="getPlannedDataRequest">

<complexType>

<sequence>

<element name="queryXpathExp" type="string"/>

</sequence>

</complexType>

</element>

Note: In Rel-12 only all planned data can be selected. The semantics of all is conveyed by an empty string.

#### D.2.2.1.2 Output parameters

Table D.2.2.1.2-1: Mapping from IS getPlannedData output parameters to SS equivalents

|  |  |  |
| --- | --- | --- |
| IS Operation parameter | SS Method parameter | Qualifier |
| plannedData | RPTAIRPData:plannedDataOut | M |
| status | RPTAIRPData:status | M |

Here is the XML schema fragment of the getPlannedData response:

<element name="getPlannedDataResponse">

<complexType>

<sequence>

<element name="plannedDataOut" type="xrpo:plannedDataOutType"/>

<element name="status" type="xrpo:operationStatusType"/>

</sequence>

</complexType>

</element>

#### D.2.2.1.3 Fault definition

<element name="getPlannedDataFault">

<simpleType>

<restriction base="string">

<enumeration value="operationFailed"/>

</restriction>

</simpleType>

</element>

# D.3 Solution Set definitions

## D.3.1 WSDL definition structure

Clause D.3.2 provides a graphical representation of the RPTA IRP service.

Clause D.3.3 defines the services which are supported the RPTA IRP client.

## D.3.2 Graphical Representation

A graphical representation is not provided in the current version of the present document.

## D.3.3 WSDL specification "RPTAIRPSystem.wsdl"

<?xml version="1.0" encoding="UTF-8"?>

<!--

3GPP TS 28.669 Radio Planning Tool Access (RPTA) IRP

wsdl definition of the RPTA IRP

rptaIRPSystem.wsdl

-->

<definitions

targetNamespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#RPTAIRPSystem">

xmlns="http://schemas.xmlsoap.org/wsdl/"

xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/"

xmlns:RPTAIRPSystem="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#RPTAIRPSystem"

xmlns:RPTAIRPData="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#RPTAIRPData"

<!--------------------------------------------------------------------------------------->

<!-- Type and element definitions -->

<!--------------------------------------------------------------------------------------->

<types>

<schema

<!------------------------------------------------------------>

<!-- Name spaces -->

<!------------------------------------------------------------>

targetNamespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#RPTAIRPData"

xmlns="http://www.w3.org/2001/XMLSchema">

xmlns:xrpi="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPIOCs"

xmlns:xrpo="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPOpR"

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPIOCs"/>

<import namespace="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#rptaIRPOpR"/>

<!------------------------------------------------------------>

<!-- Element definitions -->

<!------------------------------------------------------------>

<element name="getPlannedDataRequest">

<complexType>

<sequence>

<element name="queryXpathExp" type="string"/>

</sequence>

</complexType>

</element>

<element name="getPlannedDataResponse">

<complexType>

<sequence>

<element name="plannedDataOut" type="xrpo:plannedDataOutType"/>

<element name="status" type="xrpo:operationStatusType"/>

</sequence>

</complexType>

</element>

<element name="getPlannedDataFault">

<simpleType>

<restriction base="string">

<enumeration value="operationFailed"/>

</restriction>

</simpleType>

</element>

</schema>

</types>

<!--------------------------------------------------------------------------------------->

<!-- Operation data elements definition -->

<!--------------------------------------------------------------------------------------->

<message name="getPlannedDataRequest">

<part name="parameter" element="RPTAIRPData:getPlannedDataRequest"/>

</message>

<message name="getPlannedDataResponse">

<part name="parameter" element="RPTAIRPData:getPlannedDataResponse"/>

</message>

<message name="getPlannedDataFault">

<part name="parameter" element="RPTAIRPData:getPlannedDataFault"/>

</message>

<!--------------------------------------------------------------------------------------->

<!-- Operations definition -->

<!--------------------------------------------------------------------------------------->

<portType name="RptaOperations1PortType">

<operation name="getPlannedData">

<input message="RPTAIRPSystem:getPlannedDataRequest"/>

<output message="RPTAIRPSystem:getPlannedDataResponse"/>

<fault name="getPlannedDataFault" message="RPTAIRPSystem:getPlannedDataFault"/>

</operation>

</portType>

<!--------------------------------------------------------------------------------------->

<!-- Message format and protocol details -->

<!--------------------------------------------------------------------------------------->

<binding name="RptaOperations1Binding" type="RPTAIRPSystem:RptaOperations1PortType">

<soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>

<operation name="getPlannedData">

<soap:operation soapAction="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#getPlannedData"/>

<input>

<soap:body use="literal"/>

</input>

<output>

<soap:body use="literal"/>

</output>

<fault name="getPlannedDataFault">

<soap:fault name="getPlannedDataFault" use="literal"/>

</fault>

</operation>

</binding>

<!--------------------------------------------------------------------------------------->

<!-- Web Service definition -->

<!--------------------------------------------------------------------------------------->

<service name="RPTAIRPService">

<port name="RptaOperationa1Port" binding="RPTAIRPSystem:RptOperation1Binding">

<soap:address location="http://www.3gpp.org/ftp/specs/archive/28\_series/28.669#RPTAIRP"/>

</port>

</service>

</definitions>

Annex E (informative):  
Change history

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Change history** | | | | | | | |
| **Date** | **Meeting** | **TDoc** | **CR** | **Rev** | **Cat** | **Subject/Comment** | **New version** |
|  |  |  |  |  |  | Version after approval | 12.0.0 |
| 2016-01 | SA#70 |  |  |  |  | Upgrade to Rel-13 (MCC) | 13.0.0 |
| 2016-06 | SA#72 | SP-160407 | 0011 | - | F | Update the link from IRP Solution Set to IRP Information Service | 13.1.0 |
| 2017-03 | SA#75 | - | - | - |  | Promotion to Release 14 without technical change | 14.0.0 |
| 2017-06 | SA#76 | SP-170514 | 0012 | - | F | Update link from IRP SS to IS | 14.1.0 |
| 2018-06 | - | - | - | - | - | Update to Rel-15 version (MCC) | **15.0.0** |
| 2020-07 | - | - | - | - | - | Update to Rel-16 version (MCC) | **16.0.0** |