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TECHNICAL SPECIFICATION

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LTE;
Telecommunication management;
Radio Planning Tool Access (RPTA)
Integration Reference Point (IRP);
Solution Set (SS) definitions
(3GPP TS 28.669 version 13.0.0 Release 13)

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650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00   Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
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Contents

Foreword

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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 V12.0.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" (https://www.ietf.org/rfc/rfc7230.txt)

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

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

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

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

[16]   IETF RFC 7235: "HTTP/1.1: Authentication" (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
<?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"/>
```

```xml
      </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>
            </element>
            <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
<?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.

```json
{
  "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

<table>
<tr><th colspan="8">Change history</th></tr>
<tr><th>Date</th><th>TSG #</th><th>TSG Doc.</th><th>CR</th><th>Rev</th><th>Subject/Comment</th><th>Old</th><th>New</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td>Version after approval</td><td>1.0.0</td><td>12.0.0</td></tr>
<tr><td>01-2016</td><td>SA#70</td><td></td><td></td><td></td><td>Upgrade to Rel-13 (MCC)</td><td>12.0.0</td><td>13.0.0</td></tr>
</table>

History

Document history		
V13.0.0	January 2016	Publication