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Technical Specification

**Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
LTE;
Telecommunication management;
Generic Integration Reference Point (IRP) management;
SOAP Solution Set (SS)
(3GPP TS 32.317 version 8.0.0 Release 8)**



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Contents

Intellectual Property Rights	2
Foreword.....	2
Foreword.....	4
Introduction	4
1 Scope	5
2 References	5
3 Definitions and abbreviations.....	5
3.1 Definitions.....	5
3.2 Abbreviations	6
4 Architectural Features	6
5 Mapping	7
5.1 Operation mapping	7
5.2 Operation parameter mapping	7
5.2.1 Operation getIRPVersion.....	7
5.2.1.1 Input parameters.....	7
5.2.1.2 Output parameters	7
5.2.1.3 Fault definition.....	7
5.2.2 Operation getOperationProfile.....	8
5.2.2.1 Input parameters.....	8
5.2.2.2 Output parameters	8
5.2.2.3 Fault definition	8
5.2.3 Operation getNotificationProfile	8
5.2.3.1 Input parameters.....	8
5.2.3.2 Output parameters	9
5.2.3.3 Fault definition	9
Annex A (normative): WSDL specifications	10
Annex B (informative): Generic IRP WSDL/XML schema electronic files.....	12
Annex C (informative): Change history	13
History	14

Foreword

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- 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:

- 32.311: Generic Integration Reference Point (IRP) management; Requirements
- 32.312: Generic Integration Reference Point (IRP) management; Information Service (IS)
- 32.313: Generic Integration Reference Point (IRP) management; Common Object Request Broker Architecture (CORBA) Solution Set (SS)
- 32.317: Generic Integration Reference Point (IRP) management; SOAP Solution Set (SS)**

1 Scope

The present document specifies the SOAP Solution Set for Generic IRP management whose capabilities are specified in Generic IRP management: Information Service (3GPP TS 32.312 [1]).

This Solution Set specification is related to TS 32.312 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.) 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 TS 32.312: "Telecommunication management; Generic Integration Reference Point (IRP) management: Information Service (IS)".
- [2] 3GPP TS 32.311: "Telecommunication management; Generic Integration Reference Point (IRP) management; Requirements".
- [3] 3GPP TS 32.111-2: "Telecommunication management; Alarm Integration Reference Point (IRP); Information Service (IS)".
- [4] 3GPP TS 32.302: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP); Information Service (IS)".
- [5] W3C WSDL 1.1 specification (<http://www.w3.org/TR/2001/NOTE-wsdl-20010315>)
- [6] Thompson, H.S., Beech, D., Maloney, M., Mendleshon, N., eds. (May 2002). "XML Schema Part 1: Structures," Recommendation, World Wide Web Consortium <http://www.w3.org/TR/xmlschema-1/>
- [7] Biron, P.V., Malhotra, A., eds. (May 2002). "XML Schema Part 2: Datatypes," Recommendation, World Wide Web Consortium <http://www.w3.org/TR/xmlschema-2/>
- [8] W3C SOAP 1.1 specification (<http://www.w3.org/TR/2000/NOTE-SOAP-20000508/>)
- [9] RFC 2616 (June 1999): "Hypertext Transfer Protocol – HTTP/1.1"
- [10] W3C WSDL 1.1 specification (<http://www.w3.org/TR/2001/NOTE-wsdl-20010315>)
- [11] 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 32.312 [1] apply.

IRP document version number string (or "IRPVersion"): See 3GPP TS 32.311 [2] subclause 3.1.

3.2 Abbreviations

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

HTTP	HyperText Transfer Protocol
IRP	Integration Reference Point
IOC	Information Object Class
SS	Solution Set
WSDL	Web Services Description Language
XML	eXtensible Markup Language
WSDL	Web Service Description Language
WS-I	Web Services Interoperability Organization

4 Architectural Features

The overall architectural feature of this IRP is specified in 3G TS 32.312 [1]. This clause specifies features that are specific to the SOAP SS.

This clause specifies features that are specific to the SOAP SS.

The SOAP 1.1 specification [8] and WSDL 1.1 specification [5] are supported.

The SOAP 1.2 specification [11] is optionally supported.

This specification uses "document" style in the WSDL description.

This specification uses "literal" encoding style in the WSDL description.

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
http	http://schemas.xmlsoap.org/wsdl/http/
soap	http://schemas.xmlsoap.org/wsdl/soap/
SOAP-ENV	http://schemas.xmlsoap.org/soap/envelope/
SOAP-ENC or soapenc	http://schemas.xmlsoap.org/soap/encoding/
xs or xsd	http://www.w3.org/2001/XMLSchema
xsi	http://www.w3.org/2001/XMLSchema-instance
genericIRPData	http://www.3gpp.org/ftp/Specs/archive/32_series/32317/schema/32317-800/GenericIRPData

5 Mapping

5.1 Operation mapping

Generic IRP management: IS [1] defines semantics of operation visible across the If-N. Table 5.1 indicates mapping of these operations to their equivalents defined in this SS.

Table 5.1: Mapping from IS Notification/Operation to SS equivalents

IS Operation TS 32.312 [1]	SS Operation	Qualifier
getIRPVersion	getIRPVersion	M
getOperationProfile	getOperationProfile	O
getNotificationProfile	getNotificationProfile	O

5.2 Operation parameter mapping

5.2.1 Operation getIRPVersion

5.2.1.1 Input parameters

None.

Here is the XML schema fragment of the getIRPVersion request:

```
<!-- getIRPVersion Request -->
<element name="getIRPVersion">
</element>
```

5.2.1.2 Output parameters

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

IS Operation parameter	SS Operation parameter	Qualifier
versionNumberSet	genericIRPData:VersionNumberSetType versionNumberSet	M
status	genericIRPData:getIRPVersionFault	M

Here is the XML schema fragment of the getIRPVersion response:

```
<!-- getIRPVersion Response -->
<element name="getIRPVersionResponse">
  <complexType>
    <sequence>
      <element name="versionNumberSet" type="genericIRPData:VersionNumberSetType"/>
    </sequence>
  </complexType>
</element>
```

5.2.1.3 Fault definition

```
<!-- getIRPVersion Fault -->
<element name="getIRPVersionFault">
  <complexType>
    <choice>
      <element name="getIRPVersionFault" type="string" default="getIRPVersionFault"/>
    </choice>
  </complexType>
</element>
```

5.2.2 Operation getOperationProfile

5.2.2.1 Input parameters

Table 5.2.2.1: Mapping from IS getOperationProfile input parameters to SS equivalents

IS Operation parameter	SS Operation parameter	Qualifier
iRPVersion	genericIRPData:VersionNumberType iRPVersion	M

Here is the XML schema fragment of the getOperationProfile request:

```
<!-- getOperationProfile Request -->
<element name="getOperationProfile">
  <complexType>
    <sequence>
      <element name="iRPVersion" type="genericIRPData:VersionNumberType"/>
    </sequence>
  </complexType>
</element>
```

5.2.2.2 Output parameters

Table 5.2.2.2: Mapping from IS getOperationProfile output parameters to SS equivalents

IS Operation parameter	SS Operation parameter	Qualifier
operationNameProfile,operationParameterProfile	genericIRPData:OperationSetType operationSet	M
status	genericIRPData:getOperationProfileFault	M

Here is the XML schema fragment of the getOperationProfile response:

```
<!-- getOperationProfile Response -->
<element name="getOperationProfileResponse">
  <complexType>
    <sequence>
      <element name="operationSet" type="genericIRPData:OperationSetType"/>
    </sequence>
  </complexType>
</element>
```

5.2.2.3 Fault definition

```
<!-- getOperationProfile Fault -->

<element name="getOperationProfileFault">
  <complexType>
    <choice>
      <element name="getOperationProfileFault" type="string"/>
      <element ref="genericIRPData:OperationNotSupportedFault"/>
      <element ref="genericIRPData:InvalidParameterFault"/>
    </choice>
  </complexType>
</element>
```

5.2.3 Operation getNotificationProfile

5.2.3.1 Input parameters

Table 5.2.3.1: Mapping from IS getNotificationProfile input parameters to SS equivalents

IS Operation parameter	SS Operation parameter	Qualifier
iRPVersion	genericIRPData:VersionNumberType iRPVersion	M

Here is the XML schema fragment of the getNotificationProfile request:

```
<!-- getNotificationProfile Request -->
<element name="getNotificationProfile">
  <complexType>
    <sequence>
      <element name="iRPVersion" type="genericIRPData:VersionNumberType"/>
    </sequence>
  </complexType>
</element>
```

5.2.3.2 Output parameters

Table 5.2.3.2: Mapping from IS getNotificationProfile output parameters to SS equivalents

IS Operation parameter	SS Operation parameter	Qualifier
notificationNameProfile,notificationParameterProfile	genericIRPData:NotificationSetType notificationSet	M
Status	genericIRPData:getNotificationProfileFault	M

Here is the XML schema fragment of the getNotificationProfile response:

```
<!-- getNotificationProfile Response -->
<element name="getNotificationProfileResponse">
  <complexType>
    <sequence>
      <element name="notificationSet" type="genericIRPData:NotificationSetType"/>
    </sequence>
  </complexType>
</element>
```

5.2.3.3 Fault definition

```
<!-- getNotificationProfile Fault -->
<element name="getNotificationProfileFault">
  <complexType>
    <choice>
      <element name="getNotificationProfileFault" type="string"
default="getNotificationProfileFault"/>
        <element ref="genericIRPData:OperationNotSupportedFault"/>
        <element ref="genericIRPData:InvalidParameterFault"/>
    </choice>
  </complexType>
</element>
```

Annex A (normative): WSDL specifications

```

<?xml version="1.0" encoding="UTF-8"?>
<definitions xmlns="http://schemas.xmlsoap.org/wsdl/" xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns:genericIRPData="http://www.3gpp.org/ftp/Specs/archive/32_series/32317/schema/32317-
  800/GenericIRPData"
  targetNamespace="http://www.3gpp.org/ftp/Specs/archive/32_series/32317/schema/32317-
  800/GenericIRPSystem">
  <types>
    <schema targetNamespace="http://www.3gpp.org/ftp/Specs/archive/32_series/32317/schema/32317-
    800/GenericIRPData" xmlns="http://www.w3.org/2001/XMLSchema">
      <element name="OperationNotSupportedFault" type="string"/>
      <element name="InvalidParameterFault" type="string"/>
      <simpleType name="VersionNumberType">
        <restriction base="string"/>
      </simpleType>
      <complexType name="VersionNumberSetType">
        <sequence>
          <element name="versionNumber" type="genericIRPData:VersionNumberType"
maxOccurs="unbounded"/>
        </sequence>
      </complexType>
      <complexType name="ParameterSetType">
        <sequence>
          <element name="parameterName" type="string" maxOccurs="unbounded"/>
        </sequence>
      </complexType>
      <complexType name="OperationType">
        <sequence>
          <element name="operationName" type="string"/>
          <element name="parameterSet" type="genericIRPData:ParameterSetType"/>
        </sequence>
      </complexType>
      <complexType name="OperationSetType">
        <sequence>
          <element name="operation" type="genericIRPData:OperationType"
maxOccurs="unbounded"/>
        </sequence>
      </complexType>
      <complexType name="NotificationType">
        <sequence>
          <element name="notificationName" type="string"/>
          <element name="parameterSet" type="genericIRPData:ParameterSetType"/>
        </sequence>
      </complexType>
      <complexType name="NotificationSetType">
        <sequence>
          <element name="notification" type="genericIRPData:NotificationType"
maxOccurs="unbounded"/>
        </sequence>
      </complexType>
    <!-- getIRPVersion Request -->
    <element name="getIRPVersion">
    </element>
    <!-- getIRPVersion Response -->
    <element name="getIRPVersionResponse">
      <complexType>
        <sequence>
          <element name="versionNumberSet" type="genericIRPData:VersionNumberSetType"/>
        </sequence>
      </complexType>
    </element>
    <!-- getIRPVersion Fault -->
    <element name="getIRPVersionFault">
      <complexType>
        <choice>
          <element name="getIRPVersionFault" type="string"/>
        </choice>
      </complexType>
    </element>
    <!-- getOperationProfile Request -->
    <element name="getOperationProfile">
      <complexType>

```

```

<sequence>
    <element name="iRPVersion" type="genericIRPData:VersionNumberType"/>
</sequence>
</complexType>
</element>
<!-- getOperationProfile Response --&gt;
&lt;element name="getOperationProfileResponse"&gt;
    &lt;complexType&gt;
        &lt;sequence&gt;
            &lt;element name="operationSet" type="genericIRPData:OperationSetType"/&gt;
        &lt;/sequence&gt;
    &lt;/complexType&gt;
&lt;/element&gt;
<!-- getOperationProfile Fault --&gt;
&lt;element name="getOperationProfileFault"&gt;
    &lt;complexType&gt;
        &lt;choice&gt;
            &lt;element name="getOperationProfileFault" type="string"/&gt;
            &lt;element ref="genericIRPData:OperationNotSupportedFault"/&gt;
            &lt;element ref="genericIRPData:InvalidParameterFault"/&gt;
        &lt;/choice&gt;
    &lt;/complexType&gt;
&lt;/element&gt;
<!-- getNotificationProfile Request --&gt;
&lt;element name="getNotificationProfile"&gt;
    &lt;complexType&gt;
        &lt;sequence&gt;
            &lt;element name="iRPVersion" type="genericIRPData:VersionNumberType"/&gt;
        &lt;/sequence&gt;
    &lt;/complexType&gt;
&lt;/element&gt;
<!-- getNotificationProfile Response --&gt;
&lt;element name="getNotificationProfileResponse"&gt;
    &lt;complexType&gt;
        &lt;sequence&gt;
            &lt;element name="notificationSet" type="genericIRPData:NotificationSetType"/&gt;
        &lt;/sequence&gt;
    &lt;/complexType&gt;
&lt;/element&gt;
<!-- getNotificationProfile Fault --&gt;
&lt;element name="getNotificationProfileFault"&gt;
    &lt;complexType&gt;
        &lt;choice&gt;
            &lt;element name="getNotificationProfileFault" type="string"/&gt;
            &lt;element ref="genericIRPData:OperationNotSupportedFault"/&gt;
            &lt;element ref="genericIRPData:InvalidParameterFault"/&gt;
        &lt;/choice&gt;
    &lt;/complexType&gt;
&lt;/element&gt;
&lt;/schema&gt;
&lt;/types&gt;
&lt;message name="getIRPVersionRequest"&gt;
    &lt;part name="parameter" element="genericIRPData:getIRPVersion"/&gt;
&lt;/message&gt;
&lt;message name="getIRPVersionResponse"&gt;
    &lt;part name="parameter" element="genericIRPData:getIRPVersionResponse"/&gt;
&lt;/message&gt;
&lt;message name="getIRPVersionFault"&gt;
    &lt;part name="parameter" element="genericIRPData:getIRPVersionFault"/&gt;
&lt;/message&gt;
&lt;message name="getOperationProfileRequest"&gt;
    &lt;part name="parameter" element="genericIRPData:getOperationProfile"/&gt;
&lt;/message&gt;
&lt;message name="getOperationProfileResponse"&gt;
    &lt;part name="parameter" element="genericIRPData:getOperationProfileResponse"/&gt;
&lt;/message&gt;
&lt;message name="getOperationProfileFault"&gt;
    &lt;part name="parameter" element="genericIRPData:getOperationProfileFault"/&gt;
&lt;/message&gt;
&lt;message name="getNotificationProfileRequest"&gt;
    &lt;part name="parameter" element="genericIRPData:getNotificationProfile"/&gt;
&lt;/message&gt;
&lt;message name="getNotificationProfileResponse"&gt;
    &lt;part name="parameter" element="genericIRPData:getNotificationProfileResponse"/&gt;
&lt;/message&gt;
&lt;message name="getNotificationProfileFault"&gt;
    &lt;part name="parameter" element="genericIRPData:getNotificationProfileFault"/&gt;
&lt;/message&gt;
</pre>

```

```
</definitions>
```

Annex B (informative): Generic IRP WSDL/XML schema electronic files

The electronic files corresponding to the normative WSDL/XML schema defined in the present document are available in native form in the following archive:

http://www.3gpp.org/ftp/Specs/archive/32_series/32317/schema/32317-800-wsdl.zip

Annex C (informative): Change history

Change history								Cat	Old	New
Date	TSG #	TSG Doc.	CR	R	Subject/Comment					
Sep 2006	SA_33	SP-060555	--	--	Submitted to TSG SA #33 for Information			--	--	1.0.0
Dec 2006	SA_34	SP-060741	--	--	Submitted to TSG SA #34 for Approval			--	2.0.0	7.0.0
Mar 2007	--	--	--	--	Delete reference to the 32.314 CMIP SS. Reason: SA#35 endorsed the SA5 decision to not propagate the CMIP Solution Sets to Rel-7 (TS 32.3x4, TS 32.4x4, TS 32.6x4)			--	7.0.0	7.0.1
Jun 2007	--	--	--	--	Changed TS Title. Reason: SOAP does not stand anymore for "Simple Object Access Protocol"			--	7.0.1	7.0.2
Dec 2008	SA_42	SP-080845	0001	--	Incorrect URI specified in TS 32.317 (both word document and corresponding wsdl file)			F	7.0.2	7.1.0
Dec 2008	SA_42	--	--	--	Upgrade to Release 8			--	7.1.0	8.0.0

History

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