# ETSI TS 132 385 V7.2.0 (2008-07)

Technical Specification

Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Telecommunication management; Partial Suspension of Itf-N Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition (3GPP TS 32.385 version 7.2.0 Release 7)



1

Reference RTS/TSGS-0532385v720

> Keywords GSM, UMTS

#### ETSI

#### 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 Sous-Préfecture de Grasse (06) N° 7803/88

#### Important notice

Individual copies of the present document can be downloaded from: http://www.etsi.org

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at <a href="http://portal.etsi.org/tb/status/status.asp">http://portal.etsi.org/tb/status/status.asp</a>

If you find errors in the present document, please send your comment to one of the following services: <u>http://portal.etsi.org/chaircor/ETSI\_support.asp</u>

#### **Copyright Notification**

No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

> © European Telecommunications Standards Institute 2008. All rights reserved.

**DECT**<sup>TM</sup>, **PLUGTESTS**<sup>TM</sup>, **UMTS**<sup>TM</sup>, **TIPHON**<sup>TM</sup>, the TIPHON logo and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.

**3GPP**<sup>™</sup> is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

### Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://webapp.etsi.org/IPR/home.asp).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

#### Foreword

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

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under <u>http://webapp.etsi.org/key/queryform.asp</u>.

## Contents

Intelle	ectual Property Rights	
Forev	vord	
Forev	vord	
Intro	luction	
1	Scope	
2	References	
3 3.1 3.2	Definitions	iations
4 4.1		f configuration data XML files7
Anne	x A (normative):	Partial Suspension of Itf-N specific data file XML schemas
A.1		tf-N specific XML schemas SuspensionOfItfN.xsd")8
Anne	x B (informative):	XML schema electronic files9
Anne	x C (informative):	Change history
Histo	ry	

#### Foreword

This Technical Specification has been produced by the 3<sup>rd</sup> 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 3<sup>rd</sup> Generation Partnership Project; Technical Specification Group Services and System Aspects; Telecommunication management; as identified below:

32.385:	Partial Suspension of Itf-N Integration Reference Point (IRP): eXtensible Markup Langua
32.383:	Partial Suspension of Itf-N Integration Reference Point (IRP): Common Object Request Broker Architecture (CORBA) Solution Set
32.382:	Partial Suspension of Itf-N Integration Reference Point (IRP): Information Service (IS)
32.381:	Partial Suspension of Itf-N Integration Reference Point (IRP): Requirements

## 32.385: Partial Suspension of Itf-N Integration Reference Point (IRP): eXtensible Markup Language (XML) file format definition

The Itf-N interface is built up by a number of IRPs and a related Name Convention, which realise the functional capabilities over this interface. The basic structure of the IRPs is defined in TS 32.101 [1] and TS 32.102 [2].

Information of an event is carried in a notification. An IRPAgent (typically an EM or a NE) emits notifications (see TS 32.302 [3]. The IRPManager (typically a Network Management System) receives notifications. In certain scenarios floods of unwanted notifications including alarms would be sent to the IRP manager by network object instances. Thereby the interface and the management systems bear unnecessary load. Even worse: the Operator's awareness is drawn away from really urgent events.

#### 1 Scope

The purpose of Partial Suspension of Itf-N IRP is to define an interface through which an IRPManager can suspend the forwarding of notifications via Itf-N which were generated in parts of the managed systems.

The present document is the eXtensible Markup Language (XML) file format definition of Partial Suspension of Itf-N IRP for the IRP whose semantics is specified in Partial Suspension of Itf-N IRP: Information Service (TS 32.382 [9]).

This XML Definitions specification defines the XML syntax of the Partial Suspension of Itf-N IRP.

This XML Definitions specification is related to 3GPP TS 32.382 V7.0.X.

#### 2 References

The following documents contain provisions that, 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 32.101: "Telecommunication management; Principles and high level requirements".
- [2] 3GPP TS 32.102: "Telecommunication management; Architecture".
- [3] 3GPP TS 32.302: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): Information Service (IS)".
- [4] W3C REC-xml-20001006: "Extensible Markup Language (XML) 1.0 (Second Edition)".
- [5] W3C REC-xmlschema-0-20010502: "XML Schema Part 0: Primer".
- [6] W3C REC-xmlschema-1-20010502: "XML Schema Part 1: Structures".
- [7] W3C REC-xmlschema-2-20010502: "XML Schema Part 2: Datatypes".
- [8] 3GPP TS 32.381: "Configuration Management (CM); Partial Suspension of Itf-N Integration Reference Point (IRP): Requirements".
- [9] 3GPP TS 32.382: "Configuration Management (CM); Partial Suspension of Itf-N Integration Reference Point (IRP): Information Service (IS)".
- [10] 3GPP TS 32.305: "Telecommunication management; Configuration Management (CM); Notification Integration Reference Point (IRP): eXtensible Markup Language (XML) definitions".
- [11] 3GPP TS 32.615: "Telecommunication management; Configuration Management (CM); Bulk CM Integration Reference Point (IRP): eXtensible Markup Language (XML) definitions".

### 3 Definitions and abbreviations

#### 3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

6

Partial Suspension of Itf-N: See 3GPP TS 32.381 [8].

**IRP:** See 3GPP TS 32.101 [1].

**IRPAgent:** See 3GPP TS 32.102 [2].

IRPManager: See 3GPP TS 32.102 [2].

XML file: file containing an XML document.

XML document: composed of the succession of an optional XML declaration followed by a root XML element [4].

XML declaration: it specifies the version of XML being used, see [4].

**XML element:** has a type, is identified by a name, may have a set of XML attribute specifications and is either composed of the succession of an XML start-tag followed by the XML content of the XML element followed by an XML end-tag, or composed simply of an XML empty-element tag; each XML element may contain other XML elements, see [4].

**empty XML element:** having an empty XML content; an empty XML element still possibly has a set of XML attribute specifications; an empty XML element is either composed of the succession of an XML start-tag directly followed by an XML end-tag, or composed simply of an XML empty-element tag, see [4].

XML content (of an XML element): empty if the XML element is simply composed of an XML empty-element tag; otherwise the part, possibly empty, of the XML element between its XML start-tag and its XML end-tag, see [4].

**XML start-tag:** the beginning of a non-empty XML element is marked by an XML start-tag containing the name and the set of XML attribute specifications of the XML element, see [4].

**XML end-tag:** the end of a non-empty XML element is marked by an XML end-tag containing the name of the XML element, see [4].

**XML empty-element tag:** composed simply of an empty-element tag containing the name and the set of XML attribute specifications of the XML element, see [4].

XML attribute specification: has a name and a value, see [4].

**DTD:** defines structure and content constraints to be respected by an XML document to be valid with regard to this DTD, see [4].

**XML schema:** more powerful than a DTD, an XML schema defines structure and content constraints to be respected by an XML document to conform with this XML schema; through the use of XML namespaces several XML schemas can be used together by a single XML document; an XML schema is itself also an XML document that shall conform with the XML schema for XML schemas, see [5], [6] and [7].

**XML namespace:** enables qualifying element and attribute names used in XML documents by associating them with namespaces identified by different XML schemas, see [5], [6] and [7].

**XML complex type:** defined in an XML schema; cannot be directly used in an XML document; can be the concrete type or the derivation base type for an XML element type or for another XML complex type; ultimately defines constraints for an XML element on its XML attribute specifications and/or its XML content, see [5], [6] and [7].

**XML element type:** declared by an XML schema; can be directly used in an XML document; as the concrete type of an XML element, directly or indirectly defines constraints on its XML attribute specifications and/or its XML content; can also be the concrete type or the derivation base type for another XML element type, see [5], [6] and [7].

#### 3.2 Abbreviations

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

EM	Element Manager
IRP	Integration Reference Point
IS	Information Service (see 3GPP TS 32.101 [1])
Itf-N	Interface N
NE	Network Element

XML eXtensible Mark-up Language

### 4 Structure and content of configuration data XML files

Annex A of the present document defines the Partial Suspension of Itf-N-specific XML schema and element types in partialSuspensionOfItfN.xsd which shall be used for the notifyChangeOfPartialSuspensionOfItfN notification defined in 3GPP TS 32.382 [9].

#### 4.1 Global structure

See 3GPP TS 32.615 [11].

The following XML namespaces are potentially used in Partial Suspension of Itf-N XML files:

- Partial Suspension of Itf-N for CM data files are associated with XML schema partialSuspensionOfItfN.xsd (see Annex A.1);

### Annex A (normative): Partial Suspension of Itf-N specific data file XML schemas

### A.1 Partial Suspension of Itf-N specific XML schemas (file name "partialSuspensionOfItfN.xsd")

```
<?xml version="1.0" encoding="UTF-8"?>
<!--
    3GPP TS 32.385 Partial Suspension of Itf-N XML Schema
   partialSuspensionOfItfN.xsd
-->
<schema
xmlns:xps="http://www.3gpp.org/ftp/specs/archive/32_series/32.385#partialSuspensionOfItfN"
xmlns:xe="http://www.3qpp.org/ftp/specs/archive/32 series/32.305#notification"
xmlns:nk="http://www.3gpp.org/ftp/specs/archive/32_series/32.665#kernelNtf"
xmlns="http://www.w3.org/2001/XMLSchema"
targetNamespace="http://www.3gpp.org/ftp/specs/archive/32 series/32.385#partialSuspensionOfItfN"
elementFormDefault="qualified" attributeFormDefault="unqualified">
<import namespace="http://www.3gpp.org/ftp/specs/archive/32_series/32.305#notification"/>
<!-- XML types specific for partial suspension of Itf-N -->
<simpleType name="TypeOfChange">
  <restriction base="string":
    <enumeration value="OnsetOfPartialSuspension"/>
    <enumeration value="RemovalOfPartialSuspension"/>
  </restriction>
</simpleType>
<simpleType name="PartialSuspensionId">
  <restriction base="long"/>
</simpleType>
<complexType name="NotifyChangeOfPartialSuspensionOfItfN">
  <complexContent>
    <extension base="xe:Notification">
    <sequence>
      <element name="body">
        <complexType>
          <sequence>
            <element name="TypeOfChange" type="xps:TypeOfChange" use="required"</pre>
              minOccurs="1" maxOccurs="1"/>
            <element name="PartialSuspensionId" type="xps:PartialSuspensionId" use="required"</pre>
              minOccurs="1" maxOccurs="1"/>
            <element name="ManagerReference" type="string" use="required"</pre>
              minOccurs="1" maxOccurs="1"/>
            <element name="BaseMOInstance" type="string" use="optional"</pre>
              minOccurs="0" maxOccurs="1"/>
            <element name="Scope" type="nk:scopeType" use="optional"</pre>
              minOccurs="0" maxOccurs="1"/>
            <element name="ActivationTime" type="dateTime" use="optional"</pre>
              minOccurs="0" maxOccurs="1"/>
          </sequence>
        </complexType>
      </element>
    </sequence>
    </extension>
  </complexContent>
</complexType>
   <element name="NotifyChangeOfPartialSuspensionOfItfN"</pre>
     type="xps:NotifyChangeOfPartialSuspensionOfItfN"/>
```

</schema>

8

9

### Annex B (informative): XML schema electronic files

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

http://www.3gpp.org/ftp/specs/archive/32\_series/32.385/schema/32385-710-XMLSchema.zip

## Annex C (informative): Change history

	Change history							
Date	TSG #	TSG Doc.	CR	R	Subject/Comment	Cat	Old	New
May 2007	SA_36	SP-070284			Submitted to SA#36 for Approval		1.0.0	7.0.0
Dec 2007	SA_38	SP-070732	0001		R7 CR 32.385-700 correction of compilation errors in XML schema	F	7.0.0	7.1.0
Jun 2008	SA_40	SP-080328	0002	1	Remove duplicate use of XML name space reference xp	F	7.1.0	7.2.0

## History

Document history					
V7.0.0	June 2007	Publication			
V7.1.0	January 2008	Publication			
V7.2.0	July 2008	Publication			