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Technical Specification

Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
LTE;
IP Multimedia Services Identity Module (ISIM)
Application Programming Interface (API);
ISIM API for Java Card™
(3GPP TS 31.133 version 7.4.0 Release 7)





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## 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.

## 1 Scope

The present document defines the ISIM Application Programming Interface extending the "UICC API for Java Card<sup>TM</sup>" [2].

This API allows to develop an application running together with a ISIM application.

The present document includes information applicable to network operators, service providers, server -,-ISIM – and database  $\square$  anufactures.

### 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] ETSI TS 101 220 Release 7: "Smart Cards; ETSI numbering system for telecommunication application providers".
- [2] ETSI TS 102 241 V7.9.0: "Smart Cards; UICC Application Programming Interface (UICC API) for Java Card<sup>TM</sup>".
- [3] 3GPP TS 31.103: "Characteristics of the IP Multimedia Services Identity Module (ISIM) application".

## 3 Definitions and abbreviations

#### 3.1 Definitions

For the purposes of the present document, the terms and definitions defined in ETSI TS 102 241 [2] apply.

#### 3.2 Abbreviations

For the purposes of the present document, the abbreviations defined in ETSI TS 102 241 [2] apply.

## 4 Description

#### 4.0 Overview

This API is an extension to the ETSI TS 102 241 [2] "UICC API for Java Card<sup>TM</sup>" and requires the implementation of this specification.

The classes and interfaces described in this specification inherit functionality from the classes and interfaces specified in ETSI TS 102 141[2] "UICC API for Java Card<sup>TM</sup>".

## 4.1 ISIM Java Card™ architecture

The overall architecture of the ISIM API is based on the "UICC API for Java Card<sup>TM</sup>" defined in ETSI TS 102 2412].

## 5 File Access API

The ISIM file access API consists of the package *uicc.isim.access*. This package defines additional constants to those defined in the *uicc.access* package from ETSI TS 102 241 [2]. The access to the file system, defined in TS 31.103 [3] is the one specified in ETSI TS 102 241 [2] via the UICC *FileView* Interface.

# Annex A (normative): Java Card™ ISIM API

The attached files "31133\_Annex\_A\_Java.zip", and "31133\_Annex\_A\_HTML.zip" contain source files and html documentation for the Java  $Card^{TM}$  ISIM API.

# Annex B (normative): Java Card™ ISIM API identifiers

The attached file "31133\_Annex\_B\_Export\_files.zip" contains the export files for the uicc.isim.access package.

# Annex C (normative): ISIM API package version management

The following table describes the relationship between each TS 31.133 specification version and its packages AID and Major, Minor versions defined in the export files.

TS 31.133	uicc.isim.access package			
	AID	Major, Minor		
	A0 00 00 00 87 10 05 FF FF FF FF 89 14	1.1		
	10 00 00			

The package AID coding is defined in ETSI TS 101 220 [1]. The ISIM API packages AID are not modified by changes to Major or Minor Version.

The Major Version shall be incremented if a change to the specification introduces byte code incompatibility with the previous version.

The Minor Version shall be incremented if a change to the specification does not introduce byte code incompatibility with the previous version.

The package uicc.isim.access contains only constants, therefore it may not be loaded on the UICC.

# Annex D (normative): ISIM API jar files

The attached file "31133\_Annex\_D.jar" contains class files for the Java Card<sup>TM</sup> ISIM API.

# Annex E (informative): Change History

TSG /	TSG doc	WG doc	CR	R	Subject/Comment	New
Date				ev		
2005-08					Initial presentation during CT6#36 Plenary	0.1.0
2005-08					Presented during CT6#36 Plenary with editorial changes	0.2.0
2005-08					Agreed in CT6#36 Plenary to send for information to CT plenary	0.2.1
2006-05	CP-060246 (not presented at CT#32)				Agreed in CT6#39 Plenary to send for information to CT plenary	1.0.0
2006-11	<u> </u>				Presented during CT6#41 for approval	2.0.0
2006-11					Presented during CT6#41 for approval	2.1.0
2006-11					Agreed during CT6#41 to send for approval to CT	2.1.1
2006-12	CP-060703				Approved at CT#34	7.0.0
2007-06	CP-070303	C6-070262	0001	-	Correction of the reference to ETSI TS 102 241	7.1.0
CT-38	CP-070845	C6-070565	0002	1	Introduction of a new constant value for a file in the ISIM application	7.2.0
					[2008-08] Attachments for annexes A and B supplied	7.2.1
					[2008-10] History box previous entry supplied (!)	7.2.2
CT-46	CP-090988	C6-090496	0003	1	References update	7.3.0
CT-51	CP-110234	C6-110065	0006	1	uicc.isim.access package version update	7.4.0

# History

Document history						
V7.1.0	June 2007	Publication				
V7.2.0	January 2008	Publication				
V7.2.1	October 2008	Publication				
V7.2.2	November 2008	Publication				
V7.3.0	January 2010	Publication				
V7.4.0	May 2011	Publication				