A red and white logo

Description automatically generated with low confidence

Generic eUICC Test Profile for Device Testing

Version 7.0

01 July 2025

Security Classification: Non-confidential

Access to and distribution of this document is restricted to the persons permitted by the security classification. This document is subject to copyright protection. This document is to be used only for the purposes for which it has been supplied and information contained in it must not be disclosed or in any other way made available, in whole or in part, to persons other than those permitted under the security classification without the prior written approval of the Association.

Copyright Notice

Copyright © 2025 GSM Association

Disclaimer

The GSMA makes no representation, warranty or undertaking (express or implied) with respect to and does not accept any responsibility for, and hereby disclaims liability for the accuracy or completeness or timeliness of the information contained in this document. The information contained in this document may be subject to change without prior notice.

Compliance Notice

The information contain herein is in full compliance with the GSMA Antitrust Compliance Policy.

This Permanent Reference Document is classified by GSMA as an Industry Specification, as such it has been developed and is maintained by GSMA in accordance with the provisions set out GSMA AA.35 - Procedures for Industry Specifications.

Table of Contents

[1 Introduction 3](#_Toc201042157)

[1.1 Overview 3](#_Toc201042158)

[1.2 Scope 3](#_Toc201042159)

[1.3 Definitions 4](#_Toc201042160)

[1.4 Abbreviations 5](#_Toc201042161)

[1.5 References 5](#_Toc201042162)

[1.6 Conventions 6](#_Toc201042163)

[2 Use Cases 7](#_Toc201042164)

[3 Testing Approach and Overall Process 7](#_Toc201042165)

[3.1 Generic Test Profile Concept 7](#_Toc201042166)

[3.2 Testing Preparation 7](#_Toc201042167)

[3.3 Enabling and Disabling of the Generic Test Profile 8](#_Toc201042168)

[4 Test Profile Modification 8](#_Toc201042169)

[4.1 RFM/RAM 8](#_Toc201042170)

[4.2 AT Commands 8](#_Toc201042171)

[4.3 Test Applet 9](#_Toc201042172)

[4.4 Proprietary Approach 9](#_Toc201042173)

[5 Requirements 9](#_Toc201042174)

[5.1 Common Part of the Generic Test Profile 9](#_Toc201042175)

[5.1.1 Secure Element related parts of the Generic Test Profile 10](#_Toc201042176)

[5.1.2 Recommended optional configuration. 10](#_Toc201042177)

[5.2 Consumer Devices Profile Metadata 10](#_Toc201042178)

[Annex A Generic eUICC Test Profile Structure (Normative) 12](#_Toc201042179)

[A.1 Generic eUICC Test Profile package 12](#_Toc201042180)

[A.2 Void 12](#_Toc201042181)

[Annex B Void 13](#_Toc201042182)

[Annex C Test EF and Test Applet (Normative) 14](#_Toc201042183)

[Annex D Void 16](#_Toc201042184)

[Annex E Specification List to which the Generic Test Profile is Compliant (Informative) 17](#_Toc201042185)

[Annex F TS.48 ASN.1 definition (Normative) 18](#_Toc201042186)

[Annex G Document Management 18](#_Toc201042187)

[G.1 Document History 18](#_Toc201042188)

[G.2 Other Information 19](#_Toc201042189)

# Introduction

## Overview

The introduction of Devices with non-removable UICCs presents a need to review best practice for testing. System simulator-based Device testing for industry certification schemes such as GCF and PTCRB has traditionally expected the necessary Test Profiles to be made available via removable test UICCs.

As the industry moves towards widespread usage of eUICCs, testing of Devices fitted with eUICCs becomes less clear. The opportunity therefore exists to normalise the way in which Test Profiles for eUICCs will be available, and configurable, for industry standardised testing.

The Generic Test Profile described in this document is the result of an interest group of the test industry, Device manufacturers and network operators.

* It is designed to work only on defined test networks, aligned to specific technologies and their associated test specifications, as referenced by global industry certification schemes;
* It has been developed with the intention that it be an included Test Profile in eUICCs.

Whilst the Generic Test Profile is expected to be the default Test Profile on eUICCs, it does not preclude the existence of other Test Profiles for purposes outside the scope of this document.

The persistent inclusion of the Test Profile in eUICCs removes the need for:

* specific test hardware or test eUICCs,
* specific test platforms with proprietary virtual server,
* bypassing the eUICC, or modifying device hardware to enable conformance testing.

## Scope

This document addresses the necessary definitions, preconditions and processes around the Generic Test Profile in the scope of testing and certification of a Device, for example preconditions for radio frequency and protocol testing defined by 3GPP specifications. This document is compliant to 3GPP 31.102 [16].

This document addresses testing of Devices incorporating eUICCs that support remote SIM provisioning as specified by the GSMA for M2M [2], Consumer Devices [5], and IoT Devices [18]. However, functional testing of the eUICC and remote SIM provisioning is out of scope of this document.

Note 1: This specification requires v2.1 or higher of [11]. This specification (since v2.0) supports 5G SA and V2X configurations for the eSIM based on v2.3 of [11]. Support of other configurations based on later versions of [11] (e.g., IoT Minimal Profile Package defined in v3.3.1 of [11]) is FFS.

Note 2: See Test specifications in SGP.23 [6] or SGP.33-1 [20] for the functional testing of the Consumer eUICC or IoT eUICC.

This document is intended for:

* parties that develop test tools and platforms;
* manufacturers (Device and eUICC);
* Mobile Network operators.

The different testing use cases are described in section 2 of this document. In addition:

* Section 3 – provides a general description of the whole testing process
* Section 4 – details modifications required for the actual testing
* Section 5 – describes the Generic Test Profile content

## Definitions

| Term | Description |
| --- | --- |
| Consumer Device | A Device embedding an eUICC as defined in RSP specifications for Consumer Devices SGP.21 [4] and SGP.22 [5]. |
| Certified eUICC | An eUICC meeting the GSMA requirements for Remote SIM Provisioning and certified according to the GSMA compliance programme defined in SGP.24 [21].  NOTE: This is defined by SGP.21 [4]. |
| Device | User equipment used in conjunction with an eUICC to connect to a mobile network. E.g. a tablet, wearable, smartphone or handset. |
| eUICC | A removable or non-removable UICC which enables the remote and/or local management of Profiles in a secure way.  NOTE: The term originates from "embedded UICC". |
| Generic Test Profile | An eUICC Profile to enable Device testing as defined in 3GPP and other standards as listed in Annex E of this document. |
| IoT Device | As defined in TS.34 [19]. |
| IPAe | IoT Profile Assistant located in the eUICC as defined in SGP.31[17] and SGP.32[18] |
| M2M Device | A Device embedding an M2M eUICC as defined in SGP.01 [1] and SGP.02 [2]. |
| Operational Profile | A combination of Operator data and applications to be provisioned on an eUICC for the purposes of providing services by the Operator. The Profile SHALL be in support of a Subscription with the relevant Operator and allow connectivity to a mobile network. Applications MAY be included to provide non-telecommunication services. |
| Profile | A combination of data and applications to be provisioned on an eUICC for the purpose of providing services. |
| Profile Metadata | Information pertaining to a Profile used for the purpose of Local Profile Management. |
| Remote SIM Provisioning | The downloading, installing, enabling, disabling, and deleting of a Profile on an eUICC as defined in GSMA specifications SGP.01 [1], SGP.02 [2], SGP.21 [4], SGP.22 [5], SGP.31 [17], SGP.32 [18]. |
| Test Applet | An Applet used for conformity testing as defined in relevant test specifications and in this document. |
| Test eUICC | An eUICC configured following the eUICC test specifications (SGP.23[6], SGP.33 [20]) and using test PKI certificates and test EID defined in SGP.26 [10]. |
| Test Profile | A combination of data and applications to be provisioned on an eUICC to provide connectivity to test equipment for the purpose of testing the Device with the eUICC. A test profile is not intended to store any Operator Credentials. |
| Test System | A system (e.g. Test Tool) communicating with a device equipped with an eUICC containing a Test Profile. |

## Abbreviations

| Term | Description |
| --- | --- |
| AID | Application Identifier |
| APDU | Application Protocol Data Unit |
| AT | ATtention; this two-character abbreviation is used to start a command line to be sent from Terminal Equipment to Terminal Adaptor |
| CCID | Chip Card Interface Device |
| CSIM | CDMA Subscriber Identity Module |
| DUT | Device Under Test |
| EF | Elementary File |
| ETSI | European Telecommunications Standards Institute |
| FFS | For Future Study |
| GCF | Global Certification Forum |
| ISIM | IMS Subscriber Identity Module |
| M2M | Machine to Machine |
| NAA | Network Access Application |
| NIST | National Institute of Standards and Technology |
| OTA | Over The Air |
| PRD | Permanent Reference Document |
| PTCRB | Operator Certification Group in the USA |
| RAM | Remote Application Management |
| RFM | Remote File Management |
| RSP | Remote SIM Provisioning |
| SIM | Subscriber Identity Module |
| USAT | USIM Application Toolkit |
| USIM | Universal Subscriber Identity Module |

## References

| Ref | Doc Number | Title |
| --- | --- | --- |
|  | SGP.01 | GSMA “Embedded SIM Remote Provisioning Architecture” V4.0 or later |
|  | SGP.02 | GSMA "Remote Provisioning of Embedded UICC Technical specification" V4.0 or later |
|  | SGP.11 | GSMA Remote Provisioning Architecture for Embedded UICC Test Specification v3.1 or later |
|  | SGP.21 | GSMA RSP Architecture v2.1 or later |
|  | SGP.22 | RSP Technical Specification v2.1 or later |
|  | SGP.23 | RSP Test Specification v1.4 or later |
|  | GPC Amd. B | GlobalPlatform Card Specification v2.2 Amendment B: Remote Application Management over HTTP v1.1.3 |
|  | 3GPP 27.007 | Technical Specification Group Core Network and Terminals;  AT command set for User Equipment (UE); Release 9 |
|  | TS.11 | Device Field and Lab Test Guidelines v30.0 or later |
|  | SGP.26 | RSP Test Certificate Description v 1.2 or later |
|  | TCA-PP-IF | eUICC Profile Package: Interoperable Format Technical Specification v2.1 or higher |
|  | Void | Void |
|  | Void | Void |
|  | ETSI TS 102 225 | Secured packet structure for UICC based applications; Release 12 |
|  | ETSI TS 102 226 | Remote APDU structure for UICC based applications; Release 9 |
|  | 3GPP 31.102 | Characteristics of the Universal Subscriber Identity Module (USIM) application Release 16 |
|  | SGP.31 | eSIM IoT Architecture and Requirements v1.2 or later |
|  | SGP.32 | eSIM IoT Technical Specification v1.2 or later |
|  | TS.34 | IoT Device Connection Efficiency Guidelines |
|  | SGP.33-1 | eSIM IoT Test Specification for the eUICC |
|  | SGP.24 | RSP Compliance Process |

## Conventions

Throughout this document, normative requirements are highlighted by use of key words as described below.

The key words "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "MAY" in this document are to be interpreted as follows:

SHALL - This word, or the term "REQUIRED", mean that the definition is a mandatory requirement of the specification.

SHALL NOT - This phrase means that the definition is a mandatory prohibition of the specification.

SHOULD - This word, or the adjective “RECOMMENDED”, means that there may exist valid reasons in particular circumstances to ignore a particular item, but the full implications must be understood and carefully weighed before choosing a different course.

SHOULD NOT - This phrase, or the phrase “NOT RECOMMENDED”, means that there may exist valid reasons in particular circumstances when the particular behaviour is acceptable or even useful, but the full implications should be understood and the case carefully weighed before implementing any behaviour described with this label.

MAY - This word mean that an item is truly optional. One supplier may choose to include the item because a particular marketplace requires it or because the supplier feels that it enhances the product while another supplier may omit the same item.

# Use Cases

The following use cases have been identified for the Generic Test Profile. It is assumed that in all cases a Certified eUICC is used:

* 1. Product Development Conformance Testing, including Device Certification.
  2. Production line sampling and testing.
  3. After sales testing.

# Testing Approach and Overall Process

This Generic Test Profile has been specified to be fully compatible with the GSMA eSIM specification for M2M Consumer and IoT Devices as defined in GSMA PRDs SGP.01 [1] and SGP.02 [2] for M2M, SGP.21 [4] and SGP.22 [5] for Consumer Devices, and SGP.31 [17] and SGP.32 [18] for IoT Devices.

## Generic Test Profile Concept

The Generic Test Profile has been developed to fulfil requirements for the execution of Device tests defined by standardization organizations and included in industry certification schemes GCF and PTCRB, as per Use Case a) in section 2

In order to facilitate an efficient and cost-effective testability solution for use cases defined in section 2, the following requirements apply:

* the Generic Test Profile is pre-loaded on a Certified eUICCs during the eUICC manufacturing process or downloaded from a certified SM-DP+.
* the Generic Test Profile SHALL contain confidential keys for RFM/RAM.
* the Generic Test Profile SHALL NOT contain publicly known ADM codes.
* the pre-loaded Test Profile or downloaded Test Profile MAY contain Applets. Any Applet within the Test Profile SHALL be bytecode verified.

The (modified) Generic Test Profile MAY have more than one configuration based on testing requirements covered in section 2. These MAY be loaded onto an eUICC for different test scenarios as defined in the corresponding test specification (see Annex E) before the testing. In such a case a particular Generic Test Profile can be enabled or disabled when deemed necessary as defined in section 3.3 for test purposes.

## Testing Preparation

For the execution of the tests in scope of this work, the following approach has been considered:

Before a Device test starts, the Generic Test Profile SHALL be present on the DUT.

The Tester/Test equipment SHALL activate (enable) the Generic Test Profile (see section 3.3) before executing the test case and, if necessary, configure the Generic Test Profile using one or a combination of the methods defined in section 4.

It SHALL be possible to switch back to the Operational Profile after test case execution, see section 3.3. The Generic Test Profile SHALL remain active until specifically reset back to original Profile. A power cycle of the DUT SHALL keep the Generic Test Profile active.

If a Test Applet is used for Test Profile Modification (see also section 4.3), it SHALL be loaded with the Test Profile installation. The additional capabilities necessary for USIM and USAT conformance testing may be provided by a Test Applet.

## Enabling and Disabling of the Generic Test Profile

Refer to GSMA PRD specifications SGP.02 [2] for M2M, SGP.22 [5] for Consumer Devices, and SGP.32 [18] for IoT Devices for details on enabling and disabling test profiles, also applicable to the Generic Test Profile.

If the enabling and disabling of the Generic Test Profile is not supported as defined in the above specifications, it is the responsibility of the manufacturer to provide an alternative method for performing 3GPP Device testing when connected to a system simulator.

Standard AT commands in 3GPP TS 27.007 [8] can also be used to enable or disable a test profile.

# Test Profile Modification

Where required by a Device test specification, one of the following methods or combinations SHOULD be used to modify the Generic Test Profile. Each method for Profile modification SHALL provide a way to return to original (default) status.

## RFM/RAM

The DUT with Certified eUICC MAY support RFM commands to modify Generic Test Profile content for Use Case A, B and C as defined in section 2 of this document. SCP80 keys SHALL be Profile-specific and SHALL NOT use publicly known keys.

RAM SHALL NOT be allowed for Generic Test Profile which is used to support testing in Use case B and Use case C as defined in section 2 of this document.

Any devices for conformance testing, with RAM enabled SHALL not be distributed to the public.

## AT Commands

AT commands MAY be sent over a USB interface to update the Generic Test Profile.

AT+CSIM command defined in 3GPP 27.007 [8] section 8.17 and AT+CRSM commands defined in section 8.18 can be used for selecting EFs and updating the files with given data.

Note: Currently the usage of AT commands is not standardized and mandated in 3GPP specifications.

## Test Applet

A Test Applet could be defined and used in combination with any Profile modification methods to update the Generic Test Profile.

Use of the Test Applet along with EF-TEST can simplify the method of updating the Generic Test Profile for executing any Test Suite.

Refer to Annex C for the requirements of EF-TEST (Table C.1) and Test Applet (Table C.2)

EF-TEST can be pre-loaded with EF deltas required for each Test Suite and this file should be included in the Generic Test Profile (in Annex A). Different records in EF-TEST can hold the EF delta (compared to the Generic Test Profile) for different Test Suites. Refer to Table C.2 for the format of data in each record in EF-TEST.

Test Case level delta can also be saved in different records in EF-TEST if preferred.

Test Applet can read data from the required record and update EFs in the Generic Test Profile. The EF update in the Generic Test Profile can be triggered by updating the record numbers to be read from EF-TEST in the first record of this file. This trigger data in record 1 can be updated in EF-TEST by using AT command or any other file update method when required. Refer to Table C.3 for the format of trigger data.

The Second record in EF-TEST can hold the EF delta required to reset the Profile back to the original Generic Test Profile at any time.

For use cases B and C it SHALL NOT be possible to download or modify the Test Applet after installing the Test Profile in the Certified eUICC to avoid installation of malicious applets. Refer to section 3.1 for additional details.

Test applets SHALL support only the following capabilities required for device testing.

* FileView operations SELECT, READ BINARY, READ RECORD, UPDATE BINARY, UPDATE RECORD.
* BER TLV FileView operations RETRIEVE DATA, SET DATA
* Send Proactive commands.
* Handling EVENTS defined in ETSI 102 241 and 3GPP 31.130.
* Handling Proactive Response (TERMINAL RESPONSE)
* Setting/resetting the EF/profile content
* Handling Envelops

## Proprietary Approach

Devices supporting CCID interface MAY execute tests by sending APDU commands through this interface.

Other interfaces MAY be available for testing purposes.

# Requirements

## Common Part of the Generic Test Profile

The Profile Header SHALL contain

* major-version,
* minor-version,
* profileType,
* eUICC-Mandatory-services,
* eUICC-Mandatory-GFSTEList and
* eUICC-Mandatory-AIDs

as defined in the Generic eUICC Test Profile package in the Annex A.1

The connectivityParameters SHALL be set to:

* For M2M Devices: The eUICC manufacturer defines connectivityParameters in accordance with SGP.02[2]
* For Consumer Devices: Field Not Present
* For IoT Devices: The eUICC manufacturer defines connectivityParameters in accordance with SGP.32[18]. This is needed for eUICCs using an IPAe.

All files defined in Annex A of this document SHALL be present according to the eUICC type.

As per section 4.3, EF-TEST with pre-loaded profile deltas SHALL be included in the Generic Test Profile if the Test Applet is used for delta updates for different test suites.

The USIM and ISIM NAAs algorithm and keys SHALL be used as defined in Annex A for USIM and ISIM.

* The CSIM NAA algorithm and keys SHALL be used as defined in Annex A for CSIM.

The RAM/RFM parameters SHALL be used as defined in the Annex A.

The Token Verification and the Receipt Generation keys SHALL not be set in the PE-MNO-SD

PIN/PUK parameters and values SHALL be used as defined in Annex A.

Access conditions (EF) SHALL be used as defined in Annex A.

### Secure Element related parts of the Generic Test Profile

**This section is For Further Study (FFS).**

It will define requirements for the eSIM Test Profile which are needed for testing Secure Element based services (For example support of GSMA PRD TS.27 NFC Handset Test Book).

* Test applets and additional services will be required (For example. ARA Test Applet as defined in GlobalPlatform SEAC Device Test Suite).

### Recommended optional configuration.

Extended logical channel supported by the eSIM

* Minimum 8 channels should be supported.

## Consumer Devices Profile Metadata

The Profile Metadata (see section 4.4 of SGP.22 [2]) of the Generic Test Profile SHALL contain:

* iccid as defined in Annex A,
* serviceProviderName set to 'GSMA\_TEST',
* profileName set to 'GSMA\_TEST\_PROFILE',
* profileClass set to ‘test’

1. Generic eUICC Test Profile Structure (Normative)

The Generic Test Profile contains the file tree and configuration as specified in the GSMA\_TS48\_eSIM\_GTP\_Profile\_Structure\_v7.xlsx

* 1. Generic eUICC Test Profile package

The Generic Test Profile package can be downloaded from:

https://github.com/GSMATerminals/Generic-eUICC-Test-Profile-for-Device-Testing-Public as GSMA\_TS48\_eSIM\_GTP\_Profile\_Package\_v7.zip

There are 4 Test Profile files within the zip pack:

TCA 2.3 with BER-TLV

TCA 2.3 without BER-TLV

TCA 2.3 with BER-TLV and without RAM and RFM

TCA 2.3 without BER-TLV and without RAM and RFM

(TCA = Trusted Connectivity Alliance eUICC Profile Package: Interoperable Format [11])

Note1: The current version of the profile package is only applicable for the Consumer eUICC and IoT eUICC.

Note2: Explanation of the different profiles is contained within the zip pack on GitHub

* 1. Void

1. Void
2. Test EF and Test Applet (Normative)

**Table C.1 EF-TEST Requirements**

|  |  |  |  |
| --- | --- | --- | --- |
| **Identifier: '2FFB'**  **File Path: 3F00/2FFB** | **Structure: linear fixed** | | **Optional** |
| **Record length: TBD bytes** | | **No of Records : TBD** | |
| Access Conditions:  READ ALWAYS  UPDATE ALWAYS  DEACTIVATE ADM  ACTIVATE ADM | | | |

|  |  |  |
| --- | --- | --- |
| **No** | **Requirement** | **Additional details** |
| REQ\_EF1 | Record 1 of the file SHALL be used for triggering the EF update when required | Either Test system or tester can use this trigger when EF update in Generic Test Profile is required. |
| REQ\_EF2 | Data in records > 1 SHALL be used for EF delta and follow the format specified in Table C.3 |  |
| REQ\_EF3 | Some records >1 SHALL be used to save the delta needed for resetting the profile back to original Generic Test Profile | This can be used at any time when it is not sure of the EF update status of the Test Profile. |

**Table C.2 Test Applet Requirements**

|  |  |  |
| --- | --- | --- |
| **No** | **Requirement** | **Additional details** |
| REQ\_TA1 | Test Applet SHALL use data in EF-TEST to update EFs required for test suites |  |
| REQ\_TA2 | Test Applet SHALL register for the event EVENT\_EXTERNAL\_FILE\_UPDATE (ETSI 102 241) of EF-TEST. |  |
| REQ\_TA3 | Trigger command used in record 1 SHALL be a list of record numbers followed by the optional REFRESH required flag. | See the format and examples in the Table C.4. |
| REQ\_TA4 | Upon receiving the event EVENT\_EXTERNAL\_FILE\_UPDATE Test Applet SHALL verify File Id and record # in the file update event and update necessary EFs. |  |
| REQ\_TA5 | Test Applet SHALL decode the data read from a record in EF-TEST according to the Table C.3. |  |
| REQ\_TA6 | If REFRESH required flag is set in the trigger command Test Applet SHALL trigger REFRESH | For example the command '2,4,0' shall trigger REFRESH after updating the files specified in records 2 and 4. |

**Table C.3 Format of EF update data**

This data SHALL be saved in EF-TEST records with numbers > 1

|  |  |  |
| --- | --- | --- |
|  | **Format** | **Additional details** |
| Record > 1 data format | <File Id>,<record #m>,<data to be updated>;<File Id>,<record #n>,<data to be updated>;….. | <record #> for Transparent files shall be 0 and it shall be > 0 for Linear files |

**Table C.4 Format for the delta update triggers and examples**

This data SHALL be updated in EF-TEST record number 1

|  |  |  |
| --- | --- | --- |
|  | **Delta update trigger** | **Additional details** |
| Trigger format | <record #n1>, <record #n2>,….,<Refresh flag> | record #n1, n2…are the record numbers in EF-TEST and it SHALL be >1. |

1. Void
2. Specification List to which the Generic Test Profile is Compliant (Informative)

As a minimum, the Generic eSIM Test Profile defined in this PRD, supports the UICC configurations required by the test specifications listed in this Annex.

Representative testing referencing these specifications has been performed to ensure the necessary eUICC operations are in place to support the 3GPP Radio Access Technologies 5G, LTE, 3G, 2G and IMS. There may be test cases within the listed test specifications which require adaptation on the test platforms, but this is considered out of scope for this PRD.

Specifications list to which the Generic Test Profile is compliant:

|  |  |
| --- | --- |
| **Reference** | **Specification Name** |
| 3GPP TS 34.123-1 | User Equipment (UE) conformance specification; Part 1: Protocol conformance specification |
| 3GPP TS 34.229-1 | User Equipment (UE) conformance specification; Part 1: Protocol conformance specification |
| 3GPP TS 51.010-1 | Mobile Station (MS) conformance specification; Part 1: Conformance specification |
| 3GPP TS 36.523-1 | User Equipment (UE) conformance specification; Part 1: Protocol conformance specification |
| 3GPP TS 38.523-1 | 5GS; User Equipment (UE) conformance specification; Part 1: Protocol |
| 3GPP TS 31.121 | Universal Subscriber Identity Module (USIM) application test specification |
| 3GPP TS 31.117 | Universal Subscriber Identity Module Application Toolkit (USAT) conformance test specification for non-removable Universal Subscriber Identity Module (nrUSIM) |
| 3GPP TS 31.124 | Universal Subscriber Identity Module Application Toolkit (USAT) conformance test specification |
| 3GPP TS 31.127 | UICC-terminal interaction; non-removable Universal Subscriber Identity Module (nrUSIM) application behavioural test specification |

Note 1: Referencing the common test environments defined by 3GPP TS 34.108 and 3GPP TS 36.508

Note 2: This is not an exhaustive list of specifications.

1. TS.48 ASN.1 definition (Normative)

The ASN.1 definition below will define the configuration of the services:

* Content of the TS.48 reference version EF (6FAB under DF GSMA 7F26)

TS48Definitions {joint-iso-itu-t(2) international-organizations(23) gsma(146) rsp(1) ts48(4) spec-version(1) version-six(6) }

DEFINITIONS

AUTOMATIC TAGS

EXTENSIBILITY IMPLIED ::=

BEGIN

IMPORTS VersionType, VendorSpecificExtension FROM RSPDefinitions {joint-iso-itu-t(2) international-organizations(23) gsma(146) rsp(1) asn1modules(1) sgp22v3(3)}

id-rsp-ts48 OBJECT IDENTIFIER ::= {joint-iso-itu-t(2) international-organizations(23) gsma(146) rsp(1) ts48(4)}

id-rsp-ts48-spec-version OBJECT IDENTIFIER ::= { id-rsp-ts48 spec-version (1)}

TS48-version-content ::= [0] SEQUENCE {

ts48VersionOid [0] OBJECT IDENTIFIER, -- value of id-ts48-spec-version

ts48Version [1] VersionType, -- TS.48 implemented version

specificVendorVersion [2] VendorSpecificExtension OPTIONAL -- List of specific vendor version to manage alteration of TS.48 profile

}

1. Document Management
   1. Document History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | Date | Brief Description of Change | Approval Authority | Editor / Company |
| 1.0 | 1st May 2019 | New PRD TS.48 | TSG#35  TG#15 | Olga Kaethler / Comprion |
| 2.0 | April 2020 | Adding Requirements for 5GC and V2X | TSG via email | Olga Kaethler / Comprion |
| 3.0 | August 2020 | Updating the scope, adding section 5.1.2 and updating the test files to be compliant with the latest 3GPP Specification | TSG via email | Paul Gosden GSMA |
| 4.0 | June 2021 | Updated with changes approved in CR1004 | TSG via email  ISAG email June | Paul Gosden GSMA |
| 5.0 | June 2023 | Updated with changes approved in CR1005  Including changes for Rel 16 | TSG#49  ISAG# | Paul Gosden GSMA |
| 6.0 | Jan 2025 | Updated with changes approved in CR1006 v1 to MS Word Doc | TSG#56  ISAG#43 | Hyewon Lee  Apple Inc. |
| CR1007 v1 Corrections to the Excel file | TSG#57 | Paul Gosden GSMA |
| 7.0 | July 2025 | Updated with changes approved in CR1010 v13   * Introduce concept of Certified and Test eUICCs. * Forbid RAM in Test Profiles used within Certified eUICCs for use cases B and C. * Restrict publicly known ADM codes for Certified eUICCs. * Provide guidelines for test Applet capabilities. | TSG#60  ISAG# | Apple, Comprion, Dell, Kigen, Qualcomm, Thales,  GSMA |

* 1. Other Information

|  |  |
| --- | --- |
| Type | Description |
| Document Owner | Terminal Steering Group |
| Editor / Company | Paul Gosden GSMA |

It is our intention to provide a quality product for your use. If you find any errors or omissions, please contact us with your comments. You may notify us at [prd@gsma.com](mailto:prd@gsma.com)

Your comments or suggestions & questions are always welcome.

Suggestions & questions are always welcome.