# ETSI TS 101 595-2 V5.1.1 (2012-10)


**IMS Network Testing (INT);**
**Malicious Communication Identification (MCID) using**
**IP Multimedia (IM) Core Network (CN) subsystem;**
**Conformance Test Specification;**
**Part 2: Test Suite Structure and Test Purposes (TSS&TP)**

Reference
DTS/INT-00072-2

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# Contents

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# Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee IMS Network Testing (INT).

The present document is part 2 of a multi-part deliverable covering Malicious Communication Identification (MCID) using IP Multimedia (IM) Core Network (CN) subsystem; Conformance Test Specification, as identified below:

Part 1: "Protocol Implementation Conformance Statement (PICS)";

**Part 2: "Test Suite Structure and Test Purposes (TSS&TP)".**

# 1 Scope

The present document provides the Test Suite Structure an Test Purposes for the Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Malicious Communication Identification (MCID) using IP Multimedia (IM) Core Network (CN) subsystem; conformance test specification (based on 3GPP TS 24.616 Release 10).

# 2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at http://docbox.etsi.org/Reference.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

## 2.1 Normative references

The following referenced documents are necessary for the application of the present document.

[1] ETSI TS 124 616: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); LTE; Malicious Communication Identification (MCID) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification (3GPP TS 24.616 Release 10)".

[2] ETSI TS 101 595-1: "IMS Network Testing (INT); Malicious Communication Identification (MCID) using IP Multimedia (IM) Core Network (CN) subsystem; Conformance Test Specification (3GPP Release 10); Part 1: Protocol Implementation Conformance Statement (PICS)".

## 2.2 Informative references

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] IETF RFC 3966: "The tel URI for Telephone Numbers".

[i.2] IETF RFC 3986: "Uniform Resource Identifier (URI): Generic Syntax".

# 3 Definitions, symbols and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in [1] and the following apply:

**communication information:** information collected and registered by the MCID service

**identity information:** includes all the information identifying a user, including trusted (network generated) and/or untrusted (user generated) identities

NOTE: See RFC 3966 [i.1] / RFC 3986 [i.2].

**trusted identity:** network generated user address information

**untrusted identity:** user generated user address information

NOTE: This may contain additional information.

## 3.2 Symbols

For the purposes of the present document, the symbols given in [1] apply.

## 3.3 Abbreviations

For the purposes of the present document, the abbreviations given in [1] and the following apply:

| | |
|---|---|
| AS | Application Server |
| ID | user IDentification |
| IM | IP Multimedia |
| IMS | IP Multimedia Subsystem |
| IP | Internet Protocol |
| ISC | IP multimedia subsystem Service Control |
| MCID | Malicious Call Identification |
| MIME | Multipurpose Internet Mail Extensions |
| SIP | Session Initiation Protocol |
| TP | Test Purposes |
| TSS | Test Suite Structure |
| UE | User Equipment |
| URI | Uniform Resource Identifier |
| XML | eXtensible Markup Language |

# 4 Test Suite Structure (TSS)

**Table 4-1: Test Suite Structure (TSS)**

| | | | |
|---|---|---|---|
| MCID | | | |
| | terminating_AS | | MCID_N01_xxx |
| | destination_UE | | MCID_U01_xxx |
| | interaction | ECT | MCID_N02_xxx |

## 4.1 Configuration

The scope of the present document is to test the signalling and procedural aspects of the stage 3 requirements as described in TS 124 616 [1]. The stage 3 description describes the requirements for several network entities and also the requirements regarding for terminal devices. Therefore several interfaces (reference points) are addressed to satisfy the test of the different entities.

Therefore to test the appropriate entities the configurations below are applicable.

### 4.1.1 Testing of the AS

The AS entity is responsible for performing and managing services. The ISC interface is the appropriate access point for testing.

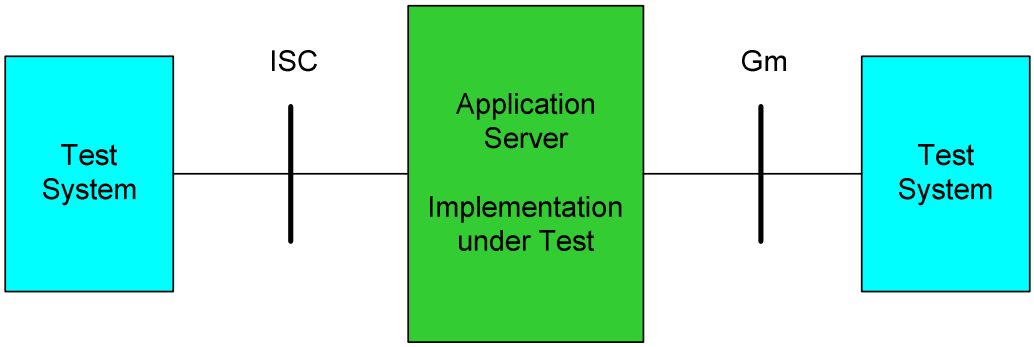


**Figure 4.1.1-1: Applicable interface to test AS functionalities**

If the ISC interface is not accessible it is also possible to perform the tests of the AS using any NNI (Mw, Mg, Mx) interface (see figure 4.1.1-2). In case only the Gm interface is accessible this interface can be used instead for testing, but the verification of all requirements may not be possible.

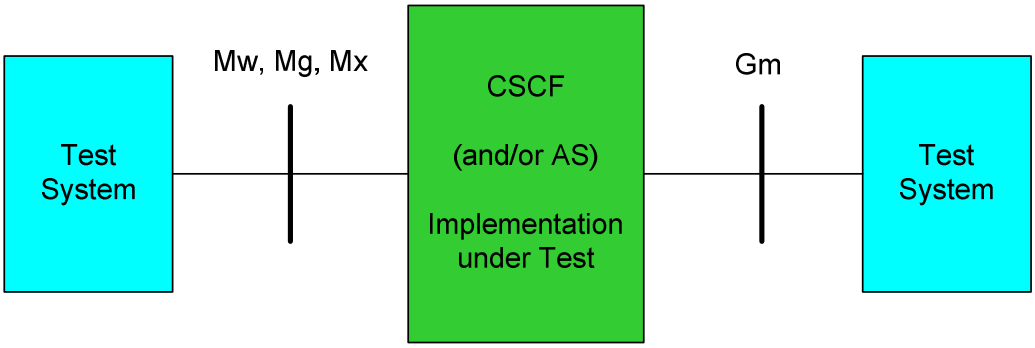


**Figure 4.1.1-2: Applicable interfaces for tests using a (generic) NNI interface**

## 4.1.2 Testing of the UE

There are special clauses in the protocol standard describing the procedures that apply at the originating and terminating user equipment. Therefore the test configuration below has been chosen.

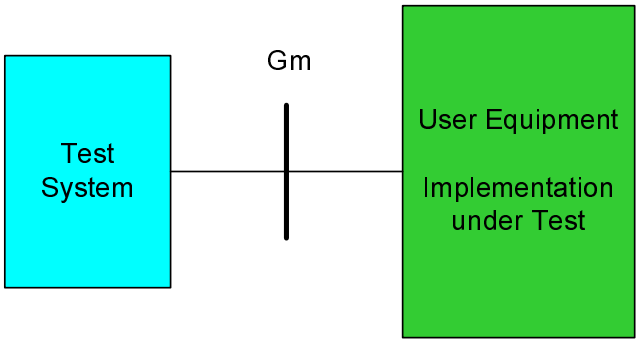


**Figure 4.1.2-1: Applicable configuration to test UE functionalities**

# 5 Test Purposes (TP)

## 5.1 Introduction

For each test requirement a TP is defined.

### 5.1.1 TP naming convention

TPs are numbered, starting at 001, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite and whether it applies to the network or the user (see table 5.1.1-1).

**Table 5.1.1-1: TP identifier naming convention scheme**

| | | | | |
|---|---|---|---|---|
| Identifier: **<ss>_<iut><group>_<nnn>** | | | | |
| <ss> | = | supplementary service: | e.g. "MCID" | |
| <iut> | = | type of IUT: | U | User equipment |
| | | | N | Network entity |
| <group> | = | group | 2 digit field representing group reference according to TSS | |
| <nnn> | = | sequential number | (001-999) | |

### 5.1.2 Test strategy

As the base standard TS 124 616 [1] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the PICS specification TS 101 595-1 [2]. The criteria applied include the following:

- whether or not a test case can be built from the TP is not considered.

# 5.2 TPs for Malicious Communication Identification (MCID)

## 5.2.1 Actions at the AS of the terminating user

| **TSS** | **TP** | **MCID reference** | **Selection expression** |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_001 | 4.5.2.5.2 | PICS 4.5.1/2 AND PICS 4.7.1/2 |

**Test purpose**
*The AS holds the call state after a BYE from the originating UE*
Ensure that the AS holds the confirmed call state while $T_{MCID-BYE}$ is running, if MCID is subscribed by the called user and a BYE was received from the originating user UE. When $T_{MCID-BYE}$ is expired, the BYE is forwarded to the terminating UE.

**Preconditions:** Called user has MCID subscription with Temporary Mode

**SIP header values:**

**Comments:**

| **Test equipment (ISC)** | | **AS** | | **Test equipment (Gm)** |
|---|---|---|---|---|
| INVITE | → | | → | INVITE |
| 100 Trying | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| 200 OK INVITE | ← | | ← | 200 OK INVITE |
| ACK | → | | → | ACK |
| | | | | |
| BYE | → | $T_{MCID-BYE}$ started | | |
| 200 OK BYE | ← | | | |
| | | | | |
| | | $T_{MCID-BYE}$ expires | | |
| | | | → | BYE |
| | | | ← | 200 OK BYE |

| **TSS** | **TP** | **MCID reference** | **Selection expression** |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_002 | 4.5.2.5.2 | PICS 4.5.1/2 AND PICS 4.7.1/2 |

**Test purpose**
*The AS holds the early dialogue state after a CANCEL from the originating UE*
Ensure that the AS holds the early dialogue state while $T_{MCID-BYE}$ is running, if MCID is subscribed by the called user and a CANCEL was received from the originating user UE. When $T_{MCID-BYE}$ is expired, the CANCEL is forwarded to the terminating UE.

**Preconditions:** Called user has MCID subscription with Temporary Mode

**SIP header values:**

**Comments:**

| **Test equipment (ISC)** | | **AS** | | **Test equipment (Gm)** |
|---|---|---|---|---|
| INVITE | → | | → | INVITE |
| 100 Trying | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| | | | | |
| CANCEL | → | $T_{MCID-BYE}$ started | | |
| 200 OK CANCEL | ← | | | |
| 487 Request Terminated | ← | | | |
| ACK | → | | | |
| | | $T_{MCID-BYE}$ expires | | |
| | | | → | CANCEL |
| | | | ← | 200 OK CANCEL |
| | | | ← | 487 Request Terminated |
| | | | → | ACK |

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_003 | 4.5.2.5.2 | PICS 4.5.1/2 AND PICS 4.7.1/2 |

**Test purpose**

*MCID request containing a mcid XML body. The AS holds the call state after a BYE from the originating UE in the confirmed dialogue*

MCID is subscribed by the called user and a BYE was received from the originating user UE in the confirmed dialogue. Ensure that the AS holds the call state while $T_{MCID-BYE}$ is running.

If a reINVITE and the 'mcid' XML body is present to invoke the MCID service was received while $T_{MCID-BYE}$ is running, ensure that the BYE is forwarded to the terminating UE when $T_{MCID-BYE}$ is expired.

**Preconditions:** Called user has MCID subscription with Temporary Mode

**SIP header values:**

reINVITE without session modification
XML mcid
request
McidRequestIndicator = 1

**Comments:**

| Test equipment (ISC) | | AS | | Test equipment (Gm) |
|---|---|---|---|---|
| INVITE | → | | → | INVITE |
| 100 Trying | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| 200 OK INVITE | ← | | ← | 200 OK INVITE |
| ACK | → | | → | ACK |
| BYE | → | $T_{MCID-BYE}$ started | | |
| 200 OK BYE | ← | | | |
| | | | ← | Re-INVITE requesting MCID |
| | | | → | 200 OK INVITE |
| | | | ← | ACK |
| | | $T_{MCID-BYE}$ expires | | |
| | | | → | BYE |
| | | | ← | 200 OK BYE |

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_004 | 4.5.2.5.2 | PICS 4.5.1/2 AND PICS 4.7.1/2 |

**Test purpose**

*MCID request a mcid XML body is not present. The AS holds the call state after a BYE from the originating UE in the confirmed dialogue*

MCID is subscribed in Temporary Mode by the called user and a BYE was received from the originating user UE in the confirmed dialogue. Ensure that the AS holds the call state while $T_{MCID-BYE}$ is running.

If a reINVITE and the 'mcid' XML body is not present to invoke the MCID service was received while $T_{MCID-BYE}$ is running, ensure that the BYE is forwarded to the terminating UE when $T_{MCID-BYE}$ is expired.

**Preconditions:** Called user has MCID subscription with Temporary Mode

**SIP header values:**

reINVITE without session modification

**Comments:**

| Test equipment (ISC) | | AS | | Test equipment (Gm) |
|---|---|---|---|---|
| INVITE | → | | → | INVITE |
| 100 Trying | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| 200 OK INVITE | ← | | ← | 200 OK INVITE |
| ACK | → | | → | ACK |
| BYE | → | $T_{MCID-BYE}$ started | | |
| 200 OK BYE | ← | | | |
| | | | ← | Re-INVITE requesting MCID |
| | | | → | 200 OK INVITE |
| | | | ← | ACK |
| | | $T_{MCID-BYE}$ expires | | |
| | | | → | BYE |
| | | | ← | 200 OK BYE |

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_005 | 4.5.2.5.2 | PICS 4.5.1/2 AND PICS 4.7.1/2 |

**Test purpose**
*MCID request containing a mcid XML body in the confirmed dialogue*
MCID is subscribed with Temporary Mode by the called user Ensure that a reINVITE and the 'mcid' XML body is present to invoke the MCID service was received in the confirmed state the reINVITE is not sent toward the originating UE.

**Preconditions:** Called user has MCID subscription with Temporary Mode

**SIP header values:**
reINVITE without session modification
XML mcid
request
McidRequestIndicator = 1

**Comments:**

| Test equipment (ISC) | | AS | | Test equipment (Gm) |
|---|---|---|---|---|
| INVITE | → | | → | INVITE |
| 100 Trying | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| 200 OK INVITE | ← | | ← | 200 OK INVITE |
| ACK | → | | → | ACK |
| | | | ← | Re-INVITE requesting MCID |
| | | | → | 200 OK INVITE |
| | | | ← | ACK |

**Apply post test routine**

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_006 | 4.5.2.5.2 | PICS 4.5.1/2 AND PICS 4.7.1/2 |

**Test purpose**
*MCID request a mcid XML body is not present in the confirmed dialogue*
MCID is subscribed with Temporary Mode by the called user A reINVITE and the 'mcid' XML body is not present to invoke the MCID service was received in the confirmed state the reINVITE is possible sent toward the originating UE.

**Preconditions:** Called user has MCID subscription with Temporary Mode

**SIP header values:**
reINVITE without session modification

**Comments:**

| Test equipment (ISC) | | AS | | Test equipment (Gm) |
|---|---|---|---|---|
| INVITE | → | | → | INVITE |
| 100 Trying | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| 200 OK INVITE | ← | | ← | 200 OK INVITE |
| ACK | → | | → | ACK |
| **CASE A** | | | | |
| | | | ← | Re-INVITE requesting MCID |
| | | | → | 200 OK INVITE |
| | | | ← | ACK |
| **CASE B** | | | | |
| Re-INVITE | ← | | ← | Re-INVITE requesting MCID |
| 200 OK INVITE | → | | → | 200 OK INVITE |
| ACK | ← | | ← | ACK |

**Apply post test routine**

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_007 | 4.5.2.5.2 | PICS 4.5.1/2 AND PICS 4.7.1/2 |

**Test purpose**

*MCID request containing a mcid XML body. The AS holds the call state after a CANCEL from the originating UE in the early dialogue*

MCID is subscribed with Temporary Mode by the called user and a CANCEL was received from the originating user UE in the early dialogue. Ensure that the AS holds the call state while $T_{MCID-BYE}$ is running.

If a reINVITE to invoke the MCID service was received and the 'mcid' XML body is present while $T_{MCID-BYE}$ is running, ensure that the CANCEL is forwarded to the terminating UE when timer $T_{MCID-BYE}$ is expired.

**Preconditions:** Called user has MCID subscription with Temporary Mode

**SIP header values:**

reINVITE without session modification
XML mcid
request
McidRequestIndicator = 1

**Comments:**

| Test equipment (ISC) | | AS | | Test equipment (Gm) |
|---|---|---|---|---|
| INVITE | → | | → | INVITE |
| 100 Trying | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| | | | | |
| CANCEL | → | $T_{MCID-BYE}$ started | | |
| 200 OK CANCEL | ← | | | |
| 487 Request Terminated | ← | | | |
| ACK | → | | | |
| | | | ← | Re-INVITE requesting MCID |
| | | | → | 200 OK INVITE |
| | | | ← | ACK |
| | | $T_{MCID-BYE}$ expires | | |
| | | | → | CANCEL |
| | | | ← | 200 OK CANCEL |
| | | | ← | 487 Request Terminated |
| | | | → | ACK |

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_008 | 4.5.2.5.2 | PICS 4.5.1/2 AND PICS 4.7.1/2 |

**Test purpose**

*MCID request a mcid XML body is not present. The AS holds the call state after a CANCEL from the originating UE in the early dialogue*

MCID is subscribed in Temporary Mode by the called user and a CANCEL was received from the originating user UE in the early dialogue. Ensure that the AS holds the call state while $T_{MCID-BYE}$ is running.

If a reINVITE to invoke the MCID service was received and the 'mcid' XML body is not present while $T_{MCID-BYE}$ is running, ensure that the CANCEL is forwarded to the terminating UE when timer $T_{MCID-BYE}$ is expired.

**Preconditions:** Called user has MCID subscription with Temporary Mode

**SIP header values:**

reINVITE without session modification

**Comments:**

| Test equipment (ISC) | | AS | | Test equipment (Gm) |
|---|---|---|---|---|
| INVITE | → | | → | INVITE |
| 100 Trying | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| | | | | |
| CANCEL | → | $T_{MCID-BYE}$ started | | |
| 200 OK CANCEL | ← | | | |
| 487 Request Terminated | ← | | | |
| ACK | → | | | |
| | | | ← | Re-INVITE requesting MCID |
| | | | → | 200 OK INVITE |
| | | | ← | ACK |
| | | $T_{MCID-BYE}$ expires | | |
| | | | → | CANCEL |
| | | | ← | 200 OK CANCEL |
| | | | ← | 487 Request Terminated |
| | | | → | ACK |

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_009 | 4.5.2.5.3 | PICS 4.5.1/2 AND PICS 4.7.1/3 |

**Test purpose**

*Requesting the originating identity not received in the initial INVITE; response received containing the requested Identity*

An INVITE request was received and a P-Asserted. Identity is not present. Ensure that the AS, having sent an INFO message containing a XML 'mcid' body with MCID XML Request schema requesting the originating ID, on receipt of an INFO message containing a XML 'mcid' body with MCID XML Response schema and the originating identity, passes on the 180 Ringing from the called user.

**Preconditions:** Called user has MCID subscription (Permanent Mode or Temporary Mode)

**SIP header values:**

INVITE: without P-Asserted-Identity
INFO1
    XML mcid
        request
            McidRequestIndicator = 1
INFO2
    XML mcid
        Response
            McidResponseIndicator = 1
            OrigPartyIdentity (otional)
            OrigPartyPresentationRestriction (otional)
            GenericNumber (otional)
            GenericNumberPresentationRestriction (otional)

**Comments:**

| Test equipment (ISC) | | AS | | Test equipment (Gm) |
|---|---|---|---|---|
| INVITE | → | | | |
| 100 Trying | ← | | | |
| **CASE A** | | | | |
| INFO1 (MIME body) | ← | $T_{O-ID}$ started | → | INVITE |
| 200 OK INFO | → | | ← | 100 Trying |
| | | | ← | 180 Ringing |
| INFO2 (MIME body) | → | $T_{O-ID}$ stopped | | |
| 200 OK INFO | ← | | | |
| 180 Ringing | ← | | | |
| **CASE B** | | | | |
| INFO1 (MIME body) | ← | $T_{O-ID}$ started | | |
| 200 OK INFO | → | | | |
| INFO2 (MIME body) | → | $T_{O-ID}$ stopped | → | INVITE |
| 200 OK INFO | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| | | **Apply post test routine** | | |

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_010 | 4.5.2.5.3 | PICS 4.5.1/2 AND PICS 4.7.1/3 |

**Test purpose**

*Requesting the originating identity not received in the initial INVITE; response received without originating Identity*

An INVITE request was received and a P-Asserted-Identity is not present.

Ensure that the AS, having sent an INFO message containing a XML 'mcid' body with MCID XML Request schema requesting the originating ID, on receipt of an INFO message not containing the originating identity, passes on the 180 Ringing from the called user.

**Preconditions:** Called user has MCID subscription (Permanent Mode or Temporary Mode)

**SIP header values:**

INVITE: without P-Asserted-Identity

INFO1

- XML mcid
  - request
    - McidRequestIndicator = 1

INFO2

- XML mcid
  - response
    - McidResponseIndicator = 0
  - without originating identity

**Comments:**

| Test equipment (ISC) | | AS | | Test equipment (Gm) |
|---|---|---|---|---|
| INVITE | → | | | |
| 100 Trying | ← | | | |
| **CASE A** | | | | |
| INFO1 (MIME body) | ← | $T_{O-ID}$ started | → | INVITE |
| 200 OK INFO | → | | ← | 100 Trying |
| | | | ← | 180 Ringing |
| INFO2 (MIME body) | → | $T_{O-ID}$ stopped | | |
| 200 OK INFO | ← | | | |
| 180 Ringing | ← | | | |
| **CASE B** | | | | |
| INFO1 (MIME body) | ← | $T_{O-ID}$ started | | |
| 200 OK INFO | → | | | |
| INFO2 (MIME body) | → | $T_{O-ID}$ stopped | → | INVITE |
| 200 OK INFO | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| | | **Apply post test routine** | | |

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/terminating_AS | MCID_N01_011 | 4.5.2.5.3 | PICS 4.5.1/2 AND PICS 4.7.1/3 |

**Test purpose**
*Requesting the originating identity not received in the initial INVITE; no response received*
An INVITE request was received and a P-Asserted. Identity is not present.
Ensure that the AS, having sent an INFO message containing a XML 'mcid' body with MCID XML Request schema requesting the originating ID, on the expiry of $T_{O-ID}$, passes on the 180 Ringing from the called user.

**Preconditions:** Called user has MCID subscription (Permanent Mode or Temporary Mode)

**SIP header values:**
INFO
XML mcid
request
McidRequestIndicator = 1

**Comments:**

| Test equipment (ISC) | | AS | | Test equipment (Gm) |
|---|---|---|---|---|
| INVITE | → | | | |
| 100 Trying | ← | | | |
| **CASE A** | | | | |
| INFO (MIME body) | ← | $T_{O-ID}$ started | → | INVITE |
| 200 OK INFO | → | | ← | 100 Trying |
| | | | ← | 180 Ringing |
| 180 Ringing | ← | $T_{O-ID}$ expires | | |
| **CASE B** | | | | |
| INFO1 (MIME body) | ← | $T_{O-ID}$ started | | |
| 200 OK INFO | → | | | |
| | | $T_{O-ID}$ expires | → | INVITE |
| | | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| | | **Apply post test routine** | | |

## 5.2.2 Actions at the destination UE

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/destination_UE | MCID_U01_001 | 4.5.2.12 | PICS 4.5.1/1 AND PICS 4.6.1/1 |

**Test purpose**
*The UE sends a MCID request in the confirmed state*
Ensure that the UE is able to invoke MCID in the confirmed state. The UE sends a Re-INVITE without session modification and no 'mcid' XML element is present.

**Preconditions:**

**SIP header values:**
Re-INVITE without session modification

**Comments:**

| Test equipment | | | User equipment |
|---|---|---|---|
| | | INVITE | → |
| | ← | 100 Trying | |
| | ← | 180 Ringing | |
| | ← | 200 OK INVITE | |
| | | ACK | → |
| | ← | Re-INVITE requesting MCID | |
| | | 200 OK INVITE | |
| | ← | ACK | ← |
| | | **Apply post test routine** | |

| **TSS** | **TP** | **MCID reference** | **Selection expression** |
|---|---|---|---|
| MCID/destination_UE | MCID_U01_002 | 4.5.2.12 | PICS 4.5.1/1 AND PICS 4.6.1/1 |

**Test purpose**
*The UE sends a MCID request in the early dialogue*
Ensure that the UE is able to invoke MCID in the early dialogue. The UE sends a Re-INVITE without session modification and no 'mcid' XML element is present.

**Preconditions:**

**SIP header values:**
Re-INVITE without session modification

**Comments:**

| **Test equipment** | | **User equipment** |
|---|---|---|
| | INVITE → | |
| ← | 100 Trying | |
| ← | 180 Ringing | |
| ← | Re-INVITE requesting MCID | |
| | 200 OK INVITE | |
| ← | ACK ← | |
| | **Apply post test routine** | |

| **TSS** | **TP** | **MCID reference** | **Selection expression** |
|---|---|---|---|
| MCID/destination_UE | MCID_U01_003 | 4.5.2.12 | PICS 4.5.1/1 AND PICS 4.6.1/2 |

**Test purpose**
*The UE sends a MCID request using the XML **McidRequestIndicator** in the confirmed state*
Ensure that the UE is able to invoke MCID in the confirmed state. The UE sends a Re-INVITE without session modification. Ensure that the UE is able to send a 'mcid' XML MIME body with the **McidRequestIndicator** set to 1.

**Preconditions:**

**SIP header values:**
Re-INVITE without session modification
XML mcid
request
McidRequestIndicator = '1'

**Comments:**

| **Test equipment** | | **User equipment** |
|---|---|---|
| | INVITE → | |
| ← | 100 Trying | |
| ← | 180 Ringing | |
| ← | 200 OK INVITE | |
| | ACK → | |
| ← | Re-INVITE requesting MCID | |
| | 200 OK INVITE → | |
| ← | ACK | |
| | **Apply post test routine** | |

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/destination_UE | MCID_U01_004 | 4.5.2.12 | PICS 4.5.1/1 AND PICS 4.6.1/2 |

**Test purpose**
*The UE sends a MCID request using the XML **McidRequestIndicator** in the early dialogue*
Ensure that the UE is able to invoke MCID in the early dialogue. The UE sends a Re-INVITE without session modification. Ensure that the UE is able to send a 'mcid' XML MIME body with the **McidRequestIndicator** set to 1.

**Preconditions:**

**SIP header values:**
Re-INVITE without session modification
XML mcid
request
McidRequestIndicator = '1'

**Comments:**

| Test equipment | | | User equipment |
|---|---|---|---|
| | | INVITE | → |
| | ← | 100 Trying | |
| | ← | 180 Ringing | |
| | ← | Re-INVITE requesting MCID | |
| | | 200 OK INVITE | → |
| | ← | ACK | |
| | | **Apply post test routine** | |

## 5.3 Interaction with other services

### 5.3.1 Explicit Communication Transfer (ECT)

| TSS | TP | MCID reference | Selection expression |
|---|---|---|---|
| MCID/interaction/ECT | MCID_N02_001 | 4.6.10 | PICS 4.5.1/2 AND PICS 4.7.1/4 |

**Test purpose**
*MCID request is rejected if a communication is transferred*
MCID is subscribed in Temporary Mode by the called user and the confirmed communication is set on hold. Ensure that a MCID request is rejected if a communication was transferred before by the called user.

**Preconditions:** Called user has MCID subscription with Temporary Mode

**SIP header values:**
INVITE
*XML mcid*
*request*
*McidRequestIndicator = 1*

**Comments:**

| Test equipment (ISC) | | AS | | Test equipment (Gm) |
|---|---|---|---|---|
| INVITE 1 | → | | → | INVITE |
| 100 Trying | ← | | ← | 100 Trying |
| 180 Ringing | ← | | ← | 180 Ringing |
| 200 OK INVITE | ← | | ← | 200 OK INVITE |
| ACK | → | | → | ACK |
| | | | | |
| INVITE | ← | | ← | INVITE 2 (sendonly) |
| 200 OK INVITE | → | | → | 200 OK INVITE (recvonly) |
| ACK | ← | | ← | ACK |
| | | | | |
| | | | ← | REFER |
| | | | → | 202 Accepted |
| | | | | |
| | | | ← | INVITE 3 |
| | | | → | 488 Not Acceptable Here |
| | | | ← | ACK |
| | | **Apply post test routine** | | |

# History

| Document history | | |
|---|---|---|
| V5.1.1 | October 2012 | Publication |
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