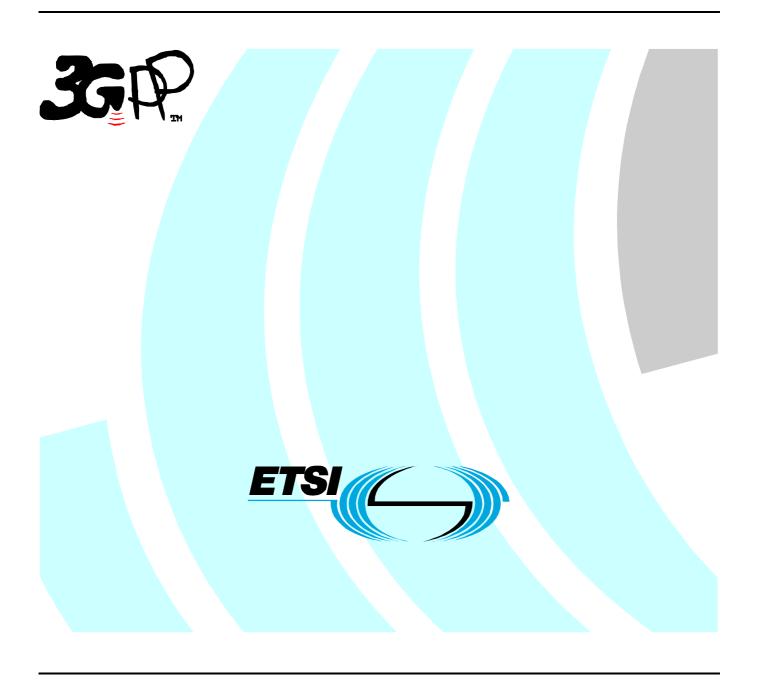
## ETSITS 134 229-2 V6.0.0 (2006-12)

Technical Specification

Universal Mobile Telecommunications System (UMTS); Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Part 2: Implementation Conformance Statement (ICS) specification (3GPP TS 34.229-2 version 6.0.0 Release 6)



Reference
RTS/TSGR-0534229-2v600

Keywords

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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

To evaluate conformance of a particular implementation, it is necessary to have a statement of which capabilities and options have been implemented for a telecommunication specification. Such a statement is called an Implementation Conformance Statement (ICS).

The present document is 2<sup>rd</sup> part of a multi-part conformance test specification for UE and is *valid for 3GPP Release 5*. The specification contains the UE IMS CC capability and the applicability of the UE IMS CC conformance test cases.

3GPP TS 34.229-1 [5]: Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); User Equipment (UE) conformance specification; Part 1: Protocol conformance specification.

3GPP TS 34.229-2 (the present document): "Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification" - current document.

3GPP TS 34.229-3 [6]: "Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); User Equipment (UE) conformance specification; Part 3: Abstract Test Suites (ATS)".

Note: For conformance testing of the UTRAN requirements refer to 3GPP TS 34.123 Parts 1 to 3 [2] [3] [4].

### 1 Scope

The present document provides the Implementation Conformance Statement (ICS) proforma for 3<sup>rd</sup> Generation User Equipment (UE) supporting the Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP), in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [8] and ETS 300 406 [9].

The present document also specifies a recommended applicability statement for the test cases included in TS 34.229-1 [5]. These applicability statements are based on the features implemented in the UE.

The present document is valid for UE implemented according to 3GPP releases starting from Release 5 up to the Release indicated on the cover page of the present document.

### 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.
  - For a Release 5 UE, references to 3GPP documents are to version 5.x.y, when available
  - For a Release 6 UE, references to 3GPP documents are to version 6.x.y, when available
- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 34.123-1: "User Equipment (UE) conformance specification; Part 1: Protocol conformance specification".
- [3] 3GPP TS 34.123-2: "User Equipment (UE) conformance specification; Part 2: Implementation Conformance Statement (ICS) proforma specification".
- [4] 3GPP TS 34.123-3: "User Equipment (UE) conformance specification; Part 3: Abstract Test Suites (ATS)".
- [5] 3GPP TS 34.229-1: "Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); User Equipment (UE) conformance specification; Part 1: Protocol conformance specification ".
- [6] 3GPP TS 34.229-3: "Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); User Equipment (UE) conformance specification; Part 3: Abstract Test Suites (ATS)".
- [7] ISO/IEC 9646-1: "Information technology Open systems interconnection Conformance testing methodology and framework Part 1: General concepts".
- [8] ISO/IEC 9646-7: "Information technology Open systems interconnection Conformance testing methodology and framework Part 7: Implementation Conformance Statements".
- [9] ETSI ETS 300 406: "Methods for testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

[10]	3GPP TS 24.229: "IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3".
[11]	3GPP TS 26.234: "Transparent end-to-end Packet-switched Streaming Service (PSS); Protocols and codecs".
[12]	3GPP TS 33.203: "Access security for IP-based services".
[13]	3GPP TS 23.221: "Architectural requirements".
[14]	3GPP TS 26.235: "Packet switched conversational multimedia applications; Default codecs".
[15]	RFC 3261: "SIP: Session Initiation Protocol".
[16]	3GPP TS 24.141: "Presence service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3".
[17]	3GPP TS 24.247: "Messaging using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3".
[18]	3GPP TR 23.981: "Interworking aspects and migration scenarios for IPv4-based IP Multimedia Subsystem (IMS) implementations".
[19]	3GPP TS 24.147: "Conferencing using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3".
[20]	RFC 3455: "Private Header (P-Header) Extensions to the Session Initiation Protocol (SIP) for the 3rd-Generation Partnership Project (3GPP)"
[21]	RFC 3608: "Session Initiation Protocol (SIP) Extension Header Field for Service Route Discovery During Registration".
[22]	RFC 3327: "Session Initiation Protocol Extension Header Field for Registering Non-Adjacent Contacts".
[23]	RFC 3329: "Security Mechanism Agreement for the Session Initiation Protocol (SIP)".
[24]	RFC 3680: "A Session Initiation Protocol (SIP) Event Package for Registrations".
[25]	RFC 3486: "Compressing the Session Initiation Protocol (SIP)"
[26]	RFC 3312: "Integration of Resource Management and Session Initiation Protocol (SIP)".
[27]	RFC 3262: "Reliability of provisional responses in Session Initiation Protocol (SIP)".
[28]	RFC 3265: "Session Initiation Protocol (SIP) Specific Event Notification".
[29]	RFC 3515: "The Session Initiation Protocol (SIP) REFER method".
[30]	RFC 3311: "The Session Initiation Protocol (SIP) UPDATE method".
[31]	RFC 3313: "Private Session Initiation Protocol (SIP) Extensions for Media Authorization".
[32]	RFC 3323: "A Privacy Mechanism for the Session Initiation Protocol (SIP)".
[33]	RFC 3325: "Private Extensions to the Session Initiation Protocol (SIP) for Network Asserted Identity within Trusted Networks".
[34]	RFC 3428: "Session Initiation Protocol (SIP) Extension for Instant Messaging".
[35]	RFC 3326: "The Reason Header Field for the Session Initiation Protocol (SIP)".
[36]	RFC 3841: "Caller Preferences for the Session Initiation Protocol (SIP)"
[37]	RFC 3903: "An Event State Publication Extension to the Session Initiation Protocol (SIP)".
[38]	RFC 4028: "Session Timers in the Session Initiation Protocol (SIP)".

[39]	RFC 3892: "The Session Initiation Protocol (SIP) Referred-By Mechanism".
[40]	RFC 3891: "The Session Inititation Protocol (SIP) "Replaces" Header".
[41]	RFC 3911: "The Session Inititation Protocol (SIP) "Join" Header".
[42]	RFC 3840: "Indicating User Agent Capabilities in the Session Initiation Protocol (SIP)"
[43]	RFC 3857: "A Watcher Information Event Template Package for the Session Initiation Protocol (SIP)".
[44]	RFC 3856: "A Presence Event Package for the Session Initiation Protocol (SIP)".
[45]	draft-ietf-sipping-config-framework-07 (July 2005): "A Framework for Session Initiation Protocol User Agent Profile Delivery".
Editor's note: Th	e above document cannot be formally referenced until it is published as an RFC.
[46]	draft-ietf-sipping-conference-package-12 (July 2005): "A Session Initiation Protocol (SIP) Event Package for Conference State"
Editor's note: Th	e above document cannot be formally referenced until it is published as an RFC.
[47]	RFC 2403 "The Use of HMAC-MD5-96 within ESP and AH".
[48]	RFC 2404 "The Use of HMAC-SHA-1-96 within ESP and AH".
[49]	RFC 3388: "Grouping of Media Lines in Session Description Protocol".
[50]	RFC 3524: "Mapping of Media Streams to Resource Reservation Flows".
[51]	RFC 3556: "Session Description Protocol (SDP) Bandwidth Modifiers for RTP Control Protocol

3GPP TR 33.978: "Security aspects of early IP Multimedia Subsystem (IMS)".

RFC 3602: "The AES-CBC Cipher Algorithm and Its Use with IPsec".

### 3 Definitions and abbreviations

(RTCP) Bandwidth".

#### 3.1 Definitions

[52]

[53]

[54]

For the purposes of the present document, the following terms and definitions apply, in addition to those in TR 21.905 [1]:

terms defined in the relevant 3GPP core specifications (see normative references);

RFC 2451: "The ESP CBC-Mode Cipher Algorithms".

- terms defined in ISO/IEC 9646-1 [7] and in ISO/IEC 9646-7 [8].

In particular, the following terms defined in ISO/IEC 9646-1 [7] apply:

**Implementation Conformance Statement (ICS):** statement made by the supplier of an implementation or system claimed to conform to a given specification, stating which capabilities have been implemented The ICS can take several forms: protocol ICS, profile ICS, profile specific ICS, information object ICS, etc.

**ICS proforma:** document, in the form of a questionnaire, which when completed for an implementation or system becomes an ICS

#### 3.2 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in TR 21.905 [1].

ICS Implementation Conformance Statement

SCS System Conformance Statement UEUT User Equipment Under Test

### 4 Recommended test case applicability

The applicability of each individual test is identified in the table 1. This is just a recommendation based on the purpose for which the test case was written.

The applicability of every test is formally expressed by the use of Boolean expression that are based on parameters (ICS) included in annex A of the present document.

The columns in table 1 have the following meaning:

#### Clause

The clause column indicates the clause number in TS 34.229-1 [5] that contains the test body.

#### Title

The title column describes the name of the test.

#### Release

The release column indicates the earliest release from which each testcase is applicable, except if otherwise stated of an individual test case.

#### Applicability

The following notations are used for the applicability column:

R recommended - the test case is recommended

O optional – the test case is optional

N/A not applicable - in the given context, the test case is not recommended.

Ci conditional - the test is recommended ("R") or not ("N/A") depending on the support of other

items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ...

THEN ... ELSE...) ELSE ..." is used to avoid ambiguities.

#### Comments

This column contains a verbal description of the condition included in the applicability column.

Table 1: Applicability of tests

Clause	Title	Release	Applicability	Comments
PDP Context	Activation			
6.2	General Purpose PDP Context Establishment (UE Requests for a Dedicated PDP Context)	Rel-5	C04	UE supporting 3GPP IMS or early IMS security and capable of being configured to initiate Dedicated PDP Context
6.3	Dedicated PDP Context Establishment	Rel-5	C04	UE supporting 3GPP IMS or early IMS security and capable of being configured to initiate Dedicated PDP Context
P-CSCF Disc				
7.1	P-CSCF Discovery via PDP Context	Rel-5	C05	UE supporting 3GPP IMS or early IMS security and capable of being configured to initiate P-CSCF Discovery via PCO
7.2	P-CSCF Discovery via DHCP – IPv4	Rel-5	C06	UE supporting 3GPP IMS or early IMS security and UE supporting IPv4 and capable of being configured to initiate P-CSCF Discovery via DHCPv4
7.3	P-CSCF Discovery via DHCP – IPv4 (UE Requests P-CSCF discovery via PCO)	Rel-5	C07	UE supporting 3GPP IMS or early IMS security and UE supporting IPv4, supporting P-CSCF Discovery via PCO and DHCPv4 and capable of being configured to initiate P-CSCF Discovery via PCO
7.4	P-CSCF Discovery by DHCP – IPv6	Rel-5	C08	UE supporting 3GPP IMS or early IMS security and capable of being configured to initiate P-CSCF Discovery via DHCPv6
7.5	P-CSCF Discovery by DHCP-IPv6 (UE Requests P-CSCF discovery by PCO)	Rel-5	C09	UE supporting 3GPP IMS or early IMS security and supporting P-CSCF Discovery via PCO and DHCPv6 and capable of being configured to initiate P-CSCF Discovery via PCO
7.6	P-CSCF Discovery by DHCP – IPv6 (UE does not Request P-CSCF discovery by PCO, SS includes P-CSCF Address(es) in PCO)	Rel-5	C10	UE supporting 3GPP IMS or early IMS security and supporting P-CSCF Discovery via PCO and DHCPv6 and capable of being configured to initiate P-CSCF Discovery via DHCPv6
7.7	P-CSCF Discovery (UE Receives list of FQDNs / IPv6 addresses)	Rel-5	C15	UE supporting 3GPP IMS or early IMS security
7.8	P-CSCF Discovery (UE Receives list of FQDNs / IPv4 addresses)	Rel-5	C12	UE supporting 3GPP IMS or early IMS security and UE supporting IPv4
Registration	Liver is a			LUE « CORP.IMO
8.1	Initial registration	Rel-5 Rel-5	C00	UE supporting 3GPP IMS UE supporting 3GPP IMS
8.2	User Initiated Re-Registration  Mobile Initiated Deregistration	Rel-5	C00 C00	UE supporting 3GPP IMS
8.4	Invalid Behaviour – 423 Interval Too Brief	Rel-5	C00	UE supporting 3GPP IMS
8.5	Initial registration for early IMS security	Rel-5	C16	UE supporting early IMS security only
8.6	Initial registration for combined IMS support and early IMS security	Rel-5	C14	UE supporting 3GPP IMS and early IMS security
8.7	Initial registration for combined IMS support and early IMS security with SIM application	Rel-5	C14	UE supporting 3GPP IMS and early IMS security
Authentication				T
9.1	Invalid Behaviour – MAC Parameter Invalid	Rel-5	C00	UE supporting 3GPP IMS
9.2	Invalid Behaviour – SQN out of range	Rel-5	C00	UE supporting 3GPP IMS
Subscription 10.1	Invalid Behaviour – 503 Service Unavailable	Rel-5	C15	UE supporting 3GPP IMS or early IMS security
Notification				1 county
11.1	Network-initiated deregistration	Rel-5	C15	UE supporting 3GPP IMS or early IMS security
11.2	Network initiated re-authentication	Rel-5	C00	UE supporting 3GPP IMS
Call Control				
12.1	MO Call Successful with preconditions	Rel-5	C03	UE supporting 3GPP IMS or early IMS security and capable of initiating a session and supporting preconditions and supporting initiating a session which require local and/or remote resource reservation
12.2	MO Call – 503 Service Unavailable	Rel-5	C01	UE supporting 3GPP IMS or early IMS security and capable of initiating a session

Clause	Title	Release	Applicability	Comments
12.3	Void			
12.4	Call initiation – mobile terminating case	Rel-5	C03	UE supporting 3GPP IMS or early IMS security and capable of initiating a session and supporting preconditions
SIP Compre	ession (SigComp)			
13.1	SigComp in the Initial registration	Rel-5	C00	UE supporting 3GPP IMS
		rgency Service		
14.1	Emergency Call Initiation – Using CS domain	Rel-5	C11	UE supporting 3GPP IMS or early IMS security and supporting Emergency speech call
14.2	Emergency Call Initiation – 380 Alternative Service	Rel-5	C13	UE supporting 3GPP IMS and supporting Emergency speech call and capable of initiating a bidirectional voice session over IMS
	Conditions/Options			
C00	IF A.0/1 THEN R ELSE N/A			3GPP IMS
C01	IF (A.0/1 OR A.6/9) AND A.4/2B THEN R ELS	SE N/A		3GPP IMS or early IMS security AND Initiating session
C02	Void			
C03	IF (A.0/1 OR A.6/9) AND A.4/2B AND A.4/16		E N/A	3GPP IMS or early IMS security AND Initiationg session AND preconditions
C04	IF (A.0/1 OR A.6/9) AND A.12/4 THEN R ELS			3GPP IMS or early IMS security AND Dedicated PDP Context
C05	IF (A.0/1 OR A.6/9) AND A.12/5 THEN R ELS			3GPP IMS or early IMS security AND P-CSCF Discovery via PCO
C06	IF (A.0/1 OR A.6/9) AND A.7/1 AND A.13/1 THEN R ELSE N/A			3GPP IMS or early IMS security AND IPv4 AND configured to initiate P-CSCF discovery via DHCPv4
C07	IF (A.0/1 OR A.6/9) AND A.7/1 AND A.12/8 AND A.13/2 AND A.12/5 THEN R ELSE N/A			3GPP IMS or early IMS security AND IPv4 AND P-CSCF discovery via PCO AND P-CSCF discovery via DHCPv4 AND configured to initiate P-CSCF discovery via PCO
C08	O8 IF (A.0/1 OR A.6/9) AND A.12/7 THEN R ELSE N/A			3GPP IMS or early IMS security AND Configured to initiate P-CSCF discovery via DHCPv6
C09	IF (A.0/1 OR A.6/9) AND A.12/8 AND A.12/10 N/A			3GPP IMS or early IMS security AND P-CSCF Discovery via PCO AND P-CSCF discovery via DHCPv6 AND configured to initiate P-CSCF discovery via PCO
C10	IF (A.0/1 OR A.6/9) AND A.12/8 AND A.12/10 N/A	0 AND A.12/7	THEN R ELSE	3GPP IMS or early IMS security AND P-CSCF Discovery via PCO AND P-CSCF discovery via DHCPv6 AND configured to initiate P-CSCF discovery via DHCPv6
C11	IF (A.0/1 OR A.6/9) AND [3] A.2/2 THEN R EL	_SE N/A		3GPP IMS or early IMS security AND Emergency speech call
C12	IF A.0/1 AND A.7/1 THEN R ELSE N/A			IPv4
C13	IF A.0/1 AND [3] A.2/2 AND A.12/12 THEN R ELSE N/A		3GPP IMS AND Emergency speech call AND initiating a bidirectional voice session over IMS	
C14	IF A.0/1 AND A.6/9 THEN R ELSE N/A			3GPP IMS and Early IMS security
C15	IF (A.0/1 OR A.6/9) THEN R ELSE N/A			3GPP IMS or early IMS security
C16	IF NOT A.0/1 AND A.6/9 THEN R ELSE N/A			Early IMS security only

# Annex A (normative): ICS proforma for 3<sup>rd</sup> Generation User Equipment supporting IP multimedia call control based on SIP and SDP

Notwithstanding the provisions of the copyright related to the text of the present document, The Organizational Partners of 3GPP grant that users of the present document may freely reproduce the ICS proforma in this annex so that it can be used for its intended purposes and may further publish the completed ICS.

### A.1 Guidance for completing the ICS proforma

### A.1.1 Purposes and structure

The purpose of this ICS proforma is to provide a mechanism whereby a supplier of an implementation of the requirements defined in relevant specifications may provide information about the implementation in a standardised manner.

The ICS proforma is subdivided into clauses for the following categories of information:

- instructions for completing the ICS proforma;
- identification of the implementation;
- identification of the protocol;
- ICS proforma tables (for example: UE roles specific to additional capabilities, Major capabilities etc).

#### A.1.2 Abbreviations and conventions

This annex does not reflect dynamic conformance requirements but static ones. In particular, a condition for support of a PDU parameter does not reflect requirements about the syntax of the PDU (i.e. the presence of a parameter) but the capability of the implementation to support the parameter.

In the sending direction, the support of a parameter means that the implementation is able to send this parameter (but it does not mean that the implementation always sends it).

In the receiving direction, it means that the implementation supports the whole semantic of the parameter that is described in the main part of this specification.

As a consequence, PDU parameter tables in this annex are not the same as the tables describing the syntax of a PDU in the reference specification, e.g. RFC 3261 [15] tables 2 and 3. It is not rare to see a parameter which is optional in the syntax but mandatory in subclause below.

The ICS proforma contained in this annex is comprised of information in tabular form in accordance with the guidelines presented in ISO/IEC 9646-7 [8].

#### Item column

The item column contains a number which identifies the item in the table.

#### Item description column

The item description column describes in free text each respective item (e.g. parameters, timers, etc.). It implicitly means "is <item description> supported by the implementation?".

#### Reference column

The reference column gives reference to the relevant 3GPP core specifications.

#### Status column

The various statii used in this annex are in accordance with the rules in table A.1.

Table A.1: Key to status codes

Status code	Status name	Meaning
m	mandatory	the capability shall be supported. It is a static view of the fact that the conformance requirements related to the capability in the reference specification are mandatory requirements. This does not mean that a given behaviour shall always be observed (this would be a dynamic view), but that it shall be observed when the implementation is placed in conditions where the conformance requirements from the reference specification compel it to do so. For instance, if the support for a parameter in a sent PDU is mandatory, it does not mean that it shall always be present, but that it shall be present according to the description of the behaviour in the reference specification (dynamic conformance requirement).
0	optional	the capability may or may not be supported. It is an implementation choice.
n/a	not applicable	it is impossible to use the capability. No answer in the support column is required.
C <integer></integer>	conditional	the requirement on the capability ("m", "o" or "n/a") depends on the support of other <b>optional or conditional</b> items. <integer> is the identifier of the conditional expression.</integer>
o. <integer></integer>	qualified optional	for mutually exclusive or selectable options from a set. <integer> is the identifier of the group of options, and the logic of selection of the options.</integer>

#### Release column

The release column indicates the earliest release from which the capability or option is relevant.

#### Mnemonic column

The Mnemonic column contains mnemonic identifiers for each item.

#### Support column

The support column shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [8], are used for the support column:

 $Y \ or \ y \\ \hspace{1cm} supported \ by \ the \ implementation$ 

N or n not supported by the implementation

N/A, n/a or - no answer required (allowed only if the status is N/A, directly or after evaluation of a conditional

status)

#### References to items

For each possible item answer (answer in the support column) within the ICS proforma there exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table.

EXAMPLE: A.5/4 is the reference to the answer of item 4 in table A.5.

### A.1.3 Instructions for completing the ICS proforma

The supplier of the implementation may complete the ICS proforma in each of the spaces provided. More detailed instructions are given at the beginning of the different clauses of the ICS proforma.

### A.2 Identification of the User Equipment

Identification of the User Equipment should be filled in so as to provide as much detail as possible regarding version numbers and configuration options.

The product supplier information and client information should both be filled in if they are different.

A person who can answer queries regarding information supplied in the ICS should be named as the contact person.

A.2.1	Date of the statement
A.2.2 UEUT name	User Equipment Under Test (UEUT) identification
Hardware co	onfiguration:
Software co	nfiguration:
A.2.3 Name:	Product supplier
Address:	
Telephone n	umber:
Facsimile nu	

Additional information:
A.2.4 Client
Name:
Address:
Telephone number:
Facsimile number:
E-mail address:
Additional information:
A.2.5 ICS contact person
Name:
Telephone number:
Facsimile number:
E-mail address:
Additional information:

### A.3 Identification of the protocol

This ICS proforma applies to the 3GPP standards listed in the normative references clause of the present document.

### A.4 ICS proforma tables

NOTE: Tables A.2 to A.5, A.317 and A.318 have been based on tables with the same number in TS 24.229 [10]. In order to facilitate traceability, table and item numbers are the same as those in the corresponding tables in TS 24.229 [10].

### A.4.0 IMS support

Table A.0: IMS support

ı	Item	IMS support	Reference	Status	Release	Support
	1	UE supports all mandatory capabilities listed in the present Annex A	24.229 [10]	0	Rel-5	

#### A.4.1 Roles

Table A.2: Roles

Item	UE roles	Reference	Status	Release	Support
1	User agent	24.229 [10], A.2.1	m	Rel-5	
		RFC 3261 [15]			

Table A.3A: UE roles specific to additional capabilities

Item	UE roles	Reference	Status	Release	Support
2	Presence user agent	24.141 [16]	0	Rel-6	
4	Watcher	24.141 [16]	0	Rel-6	
12	Conference participant	24.147 [19]	0	Rel-6	
13	Messaging conference participant	24.247 [17], 5,3	0	Rel-6	

### A.4.2 ICS related to SIP

### A.4.2.1 Major capabilities

Table A.4: Major capabilities

Item	Does the implementation support	Reference	Status	Release	Support
	Capabilities within main protocol				
1	client behaviour for registration?	24.229 [10], A.2.1.2 RFC 3261 [15], 10.2	m	Rel-5	
2A	registration of multiple contacts for a single address of record	24.229 [10], A.2.1.2 RFC 3261 [15], 10.2.1.2, 16.6	0	Rel-6	
2B	initiating a session?	24.229 [10], A.2.1.2 RFC 3261 [15], 13	0	Rel-5	
2C	initiating a session which require local and/or remote resource reservation?	24.229 [10], A.2.1.2 RFC 3262 [27]	c19	Rel-6	
3	client behaviour for INVITE requests?	24.229 [10], A.2.1.2 RFC 3261 [15], 13.2	c18	Rel-5	
4	server behaviour for INVITE requests?	24.229 [10], A.2.1.2 RFC 3261 [15], 13.3	c18	Rel-5	
5	session release?	24.229 [10], A.2.1.2 RFC 3261 [15], 15.1	c18	Rel-5	
6	timestamping of requests?	24.229 [10], A.2.1.2 RFC 3261 [15], 8.2.6.1	0	Rel-5	
7	authentication between UA and UA?	24.229 [10], A.2.1.2 RFC 3261 [15], 22.2	0	Rel-5	
8A	authentication between UA and proxy?	24.229 [10], A.2.1.2 RFC 3261 [15], 20.28, 22.3	0	Rel-5	
9	server handling of merged requests due to forking?	24.229 [10], A.2.1.2 RFC 3261 [15], 8.2.2.2	m	Rel-5	
10	client handling of multiple responses due to forking?	24.229 [10], A.2.1.2 RFC 3261 [15], 13.2.2.4	m	Rel-5	
11	insertion of date in requests and responses?	24.229 [10], A.2.1.2 RFC 3261 [15], 20.17	0	Rel-5	
12	downloading of alerting information?	24.229 [10], A.2.1.2 RFC 3261 [15], 20.4	0	Rel-5	
	Extensions				
14	reliability of provisional responses in SIP?	24.229 [10], A.2.1.2 RFC 3262 [27]	c18	Rel-5	
15	the REFER method?	24.229 [10], A.2.1.2 RFC 3515 [29]	0	Rel-5	
			c33	Rel-6	
16	integration of resource management and SIP? (use of preconditions)	24.229 [10], A.2.1.2 RFC 3312 [26]	c44	Rel-5	
17	the SIP UPDATE method?	24.229 [10], A.2.1.2 RFC 3311 [30]	c18	Rel-5 [FFS for Rel-6]	
19	SIP extensions for media authorization?	24.229 [10], A.2.1.2 RFC 3313 [31]	0	Rel-5	
20	SIP specific event notification?	24.229 [10], A.2.1.2 RFC 3265 [28]	m	Rel-5	
22	acting as the notifier of event information?	24.229 [10], A.2.1.2 RFC 3265 [28]	0	Rel-5	_
23	acting as the subscriber to event information?	24.229 [10], A.2.1.2 RFC 3265 [28]	m	Rel-5	
24	session initiation protocol extension header field for registering non-adjacent contacts?	24.229 [10], A.2.1.2 RFC 3327 [22]	m	Rel-5	
25	private extensions to the Session Initiation Protocol (SIP) for network asserted identity within trusted networks?	24.229 [10], A.2.1.2 RFC 3325 [33]	m	Rel-5	
26	a privacy mechanism for the Session Initiation Protocol (SIP)?	24.229 [10], A.2.1.2 RFC 3323 [32]	m	Rel-5	

26A	request of privacy by the inclusion of a Privacy header indicating any privacy option?	24.229 [10], A.2.1.2 RFC 3323 [32]	0	Rel-5	
27	a messaging mechanism for the Session Initiation Protocol (SIP)?	24.229 [10], A.2.1.2 RFC 3428 [34]	0	Rel-5	
28	session initiation protocol extension header field for service route discovery during registration?	24.229 [10], A.2.1.2 RFC 3608 [21]	m	Rel-5	
29	compressing the session initiation protocol?	24.229 [10], A.2.1.2 RFC 3486 [25]	m	Rel-5	
30	private header extensions to the session initiation protocol for the 3 <sup>rd</sup> -Generation Partnership Project (3GPP)?	24.229 [10], A.2.1.2 RFC 3455 [20]	m	Rel-5	
31	the P-Associated-URI header extension?	24.229 [10], A.2.1.2 RFC 3455 [20], 4.1	m	Rel-5	
32	the P-Called-Party-ID header extension?	24.229 [10], A.2.1.2 RFC 3455 [20], 4.2	0	Rel-5	
34	the P-Access-Network-Info header extension?	24.229 [10], A.2.1.2 RFC 3455 [20], 4.4	m	Rel-5	
37	security mechanism agreement for the session initiation protocol?	24.229 [10], A.2.1.2 RFC 3329 [23]	m	Rel-5	
38	the Reason header field for the session initiation protocol?	24.229 [10], A.2.1.2 RFC 3326 [35]	0	Rel-6	
40	caller preferences for the session initiation protocol?	24.229 [10], A.2.1.2 RFC 3841 [36]	c29	Rel-6	
40A	the proxy-directive within caller-preferences?	24.229 [10], A.2.1.2 RFC 3841 [36], 9.1	0.5	Rel-6	
40B	the cancel-directive within caller-preferences?	24.229 [10], A.2.1.2 RFC 3841 [36], 9.1	0.5	Rel-6	
40C	the fork-directive within caller-preferences?	24.229 [10], A.2.1.2 RFC 3841 [36], 9.1	m	Rel-6	
40D	the recurse-directive within caller-preferences?	24.229 [10], A.2.1.2 RFC 3841 [36], 9.1	0.5	Rel-6	
40E	the parallel-directive within caller- preferences?	24.229 [10], A.2.1.2 RFC 3841 [36], 9.1	m	Rel-6	
40F	the queue-directive within caller- preferences?	24.229 [10], A.2.1.2 RFC 3841 [36], 9.1	0.5	Rel-6	
41	an event state publication extension to the session initiation protocol?	24.229 [10], A.2.1.2 RFC 3903 [37]	c30	Rel-6	
42	SIP session timer?	24.229 [10], A.2.1.2 RFC 4028 [38]	c19	Rel-6	
43	the SIP Referred-By mechanism?	24.229 [10], A.2.1.2 RFC 3892 [39]	c33	Rel-6	
44	the Session Inititation Protocol (SIP) "Replaces" header?	24.229 [10], A.2.1.2 RFC 3891 [40]	c19	Rel-6	
45	the Session Inititation Protocol (SIP) "Join" header?	24.229 [10], A.2.1.2 RFC 3911 [41]	c19	Rel-6	
46	the callee capabilities?	24.229 [10], A.2.1.2 RFC 3840 [42]	0	Rel-6	
	Conditions/Options				
c18	IF A.4/2B THEN m ELSE n/a			initiating sessions.	
c29	IF A.4/40A OR A.4/40B OR A.4/40C OR A.4/4 m ELSE n/a	0D OR A.4/40E OR A.4/4	OF THEN	support of any directives within caller preferences for the session initiation protocol.	
c30	IF A.3A/2 THEN m ELSE o			presence user agent.	
c19	IF A.4/2B THEN o ELSE n/a			initiating sessions.	
c33	IF A.3A/12 OR A.4/44 THEN m ELSE o			conference participant or the Session Initiation Protocol (SIP) "Replaces" header.	
c44	IF A.4/2C THEN m ELSE o	initiating a session which require local and/or remote resource reservation			
0.5	At least one of these capabilities is supported.				

Table A.4A: Supported event packages

Item	Does the	Reference		Subscribe	er	Notifier		
	implementation support		Status	Release	Support	Status	Release	Support
1	reg event package?	24.229 [10], 5.1.1.3, A.2.1.2 RFC 3680 [24]	m	Rel-5		n/a	Rel-5	
2	refer package?	24.229 [10], A.2.1.2 RFC 3515 [29], 3	c13	Rel-6		c13	Rel-6	
3	presence package?	24.229 [10], A.2.1.2 RFC 3856 [44], 6	c5	Rel-6		c2	Rel-6	
4	eventlist with underlying presence package?	24.229 [10], A.2.1.2 RFC 3856 [44], 6	c5	Rel-6		c2	Rel-6	
5	presence.winfo template- package?	24.229 [10], A.2.1.2 RFC 3857 [43], 4	c9	Rel-6		c2	Rel-6	
6	ua-profile package?	24.229 [10], A.2.1.2 [45], 3	0	Rel-6		c2	Rel-6	
7	conference package?	24.229 [10], A.2.1.2 [46], 3	c21	Rel-6		c2	Rel-6	
	Conditions/Options							
c2	IF A.4/22 THEN o ELSE n/a						s the notifier ion.	of event
c5	IF A.3A/4 THEN m ELSE o					watcher.	ı	
с9	IF A.3A/2 THEN m ELSE o						e user agen	t
c13	IF A.4/15 THEN m ELSE n/a					the REFER method		
c21	IF A.3A/12 THEN m ELSE of	)				conferer	nce participa	ınt

### A.4.2.2 PDUs

**Table A.5: Supported methods** 

Status   Release Support   Status   Release Support   Status   Release Support   Rel-5   Italia   Rel-5	Item	PDU	Reference		Sending Rec			Receiving	eiving	
ACK request   RFC 3261   101   Rel-5   c11   Rel-5   Rel-5   Rel-5   REC 3261   Rel-5   C12   Rel-5   Rel-5   REC 3261   Rel-5   C12   Rel-5   C12   Rel-5   Rel-5   REC 3261   Rel-5   Re				Status		Support	Status	Release	Support	
BYE request   RFC 3261   112   Rel-5   112   Rel-5   115   15.1   15.1   15.1   15.1   17.2   Rel-5   17.2   Rel-5   17.3   17	1	ACK request		c10	Rel-5		c11		• •	
115], 15.1	2	BYE request	RFC 3261	c12	Rel-5		c12	Rel-5		
CANCEL request   RFC 3261   m   Rel-5   m   Rel-5	3	BYE response		c12	Rel-5		c12	Rel-5		
CANCEL response	4	CANCEL request	RFC 3261	m	Rel-5		m	Rel-5		
INVITE request	5	CANCEL response	RFC 3261	m	Rel-5		m	Rel-5		
15  13	8	INVITE request	RFC 3261	c10	Rel-5		c11	Rel-5		
MESSAGE request	9	INVITE response	RFC 3261	c11	Rel-5		c10	Rel-5		
10 NOTIFY request   RFC 3265   C4   Rel-5   m   Rel-5   [28], 8.1.2	9A	MESSAGE request	RFC 3428 [34], 4	m	Rel-5		m	Rel-5		
NOTIFY request	9B	·		m	Rel-5		m	Rel-5		
NOTIFY response	10	NOTIFY request	RFC 3265	c4	Rel-5		m	Rel-5		
OPTIONS request	11	NOTIFY response	RFC 3265	m	Rel-5		c4	Rel-5		
13	12	OPTIONS request	RFC 3261	m	Rel-5		m	Rel-5		
PRACK request	13	OPTIONS response	RFC 3261	m	Rel-5		m	Rel-5		
15	14	PRACK request	RFC 3262	c5	Rel-5		c5	Rel-5		
16         REFER request         RFC 3515 [29], 3         c1         Rel-5         c1         Rel-5           17         REFER response         RFC 3515 c1         c1         Rel-5         c1         Rel-5           18         REGISTER request         RFC 3261 m Rel-5 (note)         m         Rel-5 (note)         Rel-5 (note)           19         REGISTER response         RFC 3261 n/a (note)         m         Rel-5 (note)         m           20         SUBSCRIBE request RFC 3265 [28], 8.1.1         m         Rel-5 (28], 8.1.1         c4         Rel-5 (28], 8.1.1           21         SUBSCRIBE response RFC 3312 [28], 8.1.1         c6         Rel-5 (28], 8.1.1         m         Rel-5 (28], 8.1.1           22         UPDATE request RFC 3312 [26], 6.1         c6         Rel-5 (26], 6.2         c6         Rel-5 (26], 6.2           23         UPDATE response RFC 3312 [26], 6.2         c6         Rel-5 (26], 6.2         c6         Rel-5 (26], 6.2           23         UPDATE response RFC 3312 [26], 6.2         c6         Rel-5 (26], 6.2         reliability of provisional responses extension.           c1         IF A.4/15 THEN m ELSE n/a         reliability of provisional responses extension.           c6         IF A.4/21 THEN m ELSE n/a         client behaviour for INVITE requests.	15	PRACK response	RFC 3262	c5	Rel-5		c5	Rel-5		
REFER response	16	REFER request	RFC 3515	c1	Rel-5		c1	Rel-5		
REGISTER request	17	REFER response	RFC 3515	c1	Rel-5		c1	Rel-5		
19         REGISTER response [15], 10 (note)         RRI-5 (note)         m (note)         Rel-5 (note)           20         SUBSCRIBE request RFC 3265 [28], 8.1.1         m Rel-5         c4 Rel-5           21         SUBSCRIBE response RFC 3265 [28], 8.1.1         c4 Rel-5         m Rel-5           22         UPDATE request RFC 3312 [26], 6.1         c6 Rel-5         c6 Rel-5           23         UPDATE response RFC 3312 [26], 6.2         c6 Rel-5         c6 Rel-5           Conditions/Options           c1         IF A.4/15 THEN m ELSE n/a         notifier of event information.           c4         IF A.4/22 THEN m ELSE n/a         reliability of provisional responses extension.           c5         IF A.4/17 THEN m ELSE n/a         the SIP update method extension.           c6         IF A.4/3 THEN m ELSE n/a         client behaviour for INVITE requests.           c11         IF A.4/4 THEN m ELSE n/a         server behaviour for INVITE requests.           c12         IF A.4/5 THEN m ELSE n/a         session release.	18	REGISTER request	RFC 3261		Rel-5			Rel-5		
SUBSCRIBE request	19	REGISTER response	RFC 3261	n/a	Rel-5		m	Rel-5		
21         SUBSCRIBE response         RFC 3265 [28], 8.1.1         c4         Rel-5         m         Rel-5           22         UPDATE request         RFC 3312 [26], 6.1         c6         Rel-5         c6         Rel-5           23         UPDATE response         RFC 3312 [26], 6.2         c6         Rel-5         c6         Rel-5           Conditions/Options           c1         IF A.4/15 THEN m ELSE n/a         the REFER method extension.           c4         IF A.4/22 THEN m ELSE n/a         notifier of event information.           c5         IF A.4/14 THEN m ELSE n/a         reliability of provisional responses extension.           c6         IF A.4/17 THEN m ELSE n/a         the SIP update method extension.           c10         IF A.4/3 THEN m ELSE n/a         client behaviour for INVITE requests.           c11         IF A.4/4 THEN m ELSE n/a         server behaviour for INVITE requests.           c12         IF A.4/5 THEN m ELSE n/a         session release.	20	SUBSCRIBE request	RFC 3265		Rel-5			Rel-5		
UPDATE request  RFC 3312 [26], 6.1  UPDATE response  RFC 3312 [26], 6.2  Conditions/Options  C1 IF A.4/15 THEN m ELSE n/a  C5 IF A.4/17 THEN m ELSE n/a  C1 IF A.4/17 THEN m ELSE n/a  C1 IF A.4/17 THEN m ELSE n/a  C1 IF A.4/17 THEN m ELSE n/a  C2 IF A.4/17 THEN m ELSE n/a  C3 IF A.4/17 THEN m ELSE n/a  C4 IF A.4/17 THEN m ELSE n/a  C5 IF A.4/17 THEN m ELSE n/a  C6 IF A.4/17 THEN m ELSE n/a  C7 IF A.4/17 THEN m ELSE n/a  C8 IF A.4/17 THEN m ELSE n/a  C9 IF A.4/17 THEN m ELSE n/a  C10 IF A.4/17 THEN m ELSE n/a  C11 IF A.4/17 THEN m ELSE n/a  C12 IF A.4/15 THEN m ELSE n/a  C13 IF A.4/15 THEN m ELSE n/a  C14 IF A.4/15 THEN m ELSE n/a  C15 IF A.4/15 THEN m ELSE n/a  C16 Rel-5  C1	21	SUBSCRIBE response	RFC 3265	c4	Rel-5		m	Rel-5		
UPDATE response RFC 3312 c6 Rel-5 c6 Rel-5  Conditions/Options  C1 IF A.4/15 THEN m ELSE n/a the REFER method extension. Optifier of event information. IF A.4/22 THEN m ELSE n/a reliability of provisional responses extension.  C5 IF A.4/14 THEN m ELSE n/a the SIP update method extension.  C6 IF A.4/3 THEN m ELSE n/a the SIP update method extension.  C10 IF A.4/3 THEN m ELSE n/a client behaviour for INVITE requests.  C11 IF A.4/4 THEN m ELSE n/a server behaviour for INVITE requests.  C12 IF A.4/5 THEN m ELSE n/a session release.	22	UPDATE request	RFC 3312	c6	Rel-5		c6	Rel-5		
Conditions/Options  C1	23	UPDATE response	RFC 3312	c6	Rel-5		c6	Rel-5		
C4 IF A.4/22 THEN m ELSE n/a notifier of event information.  C5 IF A.4/14 THEN m ELSE n/a reliability of provisional responses extension.  C6 IF A.4/17 THEN m ELSE n/a the SIP update method extension.  C10 IF A.4/3 THEN m ELSE n/a client behaviour for INVITE requests.  C11 IF A.4/4 THEN m ELSE n/a server behaviour for INVITE requests.  C12 IF A.4/5 THEN m ELSE n/a session release.		Conditions/Options								
c5 IF A.4/14 THEN m ELSE n/a reliability of provisional responses extension.  c6 IF A.4/17 THEN m ELSE n/a the SIP update method extension.  c10 IF A.4/3 THEN m ELSE n/a client behaviour for INVITE requests.  c11 IF A.4/4 THEN m ELSE n/a server behaviour for INVITE requests.  c12 IF A.4/5 THEN m ELSE n/a session release.	c1	IF A.4/15 THEN m ELSE	n/a							
responses extension.  C6 IF A.4/17 THEN m ELSE n/a the SIP update method extension.  C10 IF A.4/3 THEN m ELSE n/a client behaviour for INVITE requests.  C11 IF A.4/4 THEN m ELSE n/a server behaviour for INVITE requests.  C12 IF A.4/5 THEN m ELSE n/a session release.	c4				-	-				
c6 IF A.4/17 THEN m ELSE n/a the SIP update method extension. c10 IF A.4/3 THEN m ELSE n/a client behaviour for INVITE requests. c11 IF A.4/4 THEN m ELSE n/a server behaviour for INVITE requests. c12 IF A.4/5 THEN m ELSE n/a session release.	c5						respons	es extensior	٦.	
c10 IF A.4/3 THEN m ELSE n/a client behaviour for INVITE requests.  c11 IF A.4/4 THEN m ELSE n/a server behaviour for INVITE requests.  c12 IF A.4/5 THEN m ELSE n/a session release.	с6	IF A.4/17 THEN m ELSE	n/a				the SIP	update meth		
c11 IF A.4/4 THEN m ELSE n/a server behaviour for INVITE requests. c12 IF A.4/5 THEN m ELSE n/a session release.	c10	IF A.4/3 THEN m ELSE n/	′a				client be	haviour for I	NVITE	
c12 IF A.4/5 THEN m ELSE n/a session release.	c11	IF A.4/4 THEN m ELSE n/a					server behaviour for INVITE			
	c12									
	NOTE:			0], Rel-5. I	t is assume	to be the sa			0], Rel-6	

### A.4.2.3 Security

Table A.6: Security capabilities

Item	Security capabilities	Reference	Status	Release	Support
1	"ipsec-3gpp" security mechanism	RFC 3329 [23]	m	Rel-5	
		24.229 [10], 5.1.1.2			
2	IMS-AKA authentication protocol	33.203 [12], 5.1.1	m	Rel-5	
3	IPSec ESP integrity protection	33.203 [12], 6.3	m	Rel-5	
4	HMAC-MD5-96 integrity algorithm	RFC 2403 [47]	m	Rel-5	
		24.229 [10], 5.1.1.2			
5	HMAC-SHA-1-96 integrity algorithm	RFC 2404 [48]	m	Rel-5	
		24.229 [10], 5.1.1.2			
6	IPSec protocol Transport mode	33.203 [12], annex H	m	Rel-5	
7	Setup of two pairs of security	33.203 [12], 6.1	m	Rel-5	
	associations	24.229 [10], 5.1.1.2			
8	Procedures to announce support of	RFC 3329 [23]	m	Rel-5	
	IPSec algorithms	24.229 [10], 5.1.1.2			
9	Early IMS security	33.978 [52]	0	Rel-5	
10	IPSec ESP confidentiality protection	33.203 [12], 6.2	0	Rel-6	
11	DES-EDE3-CBC encryption algorithm	RFC 2451 [53]	0	Rel-6	
		24.229 [10], 5.1.1.2			
12	AES-CBC encryption algorithm	RFC 3602 [54]	0	Rel-6	
		24.229 [10], 5.1.1.2			

### A.4.2.4 Addressing

Table A.7: IP address format

Item	IP address format	Reference	Status	Release	Mnemonic	Support		
1	IPv4	23.221 [13], 5.1	0	Rel-5				
2	IPv6	23.221 [13], 5.1	m	Rel-5				
NOTE 1: For testing purposes, at least one of these IP address format has to be supported by the UE.								

### A.4.2.5 SIP Compression

**Table A.8: SIP Compression** 

Item		Reference	Status	Release	Support
1	SigCom	24.229 [10], 8.1.1	m	Rel-5	
2	SIP dictionary	24.229 [10], 8.1.1	m	Rel-5	
3	Compression of transmitted SIP messages	24.229 [10], 8.1.2	0	Rel-5	
4	Decompression of received SIP messages	24.229 [10], 8.1.2	m	Rel-5	

#### A.4.3 ICS related to SDP

### A.4.3.1 Major capabilities

Table A.317: Major capabilities

Item	Does the implementation support	Reference	Status	Release	Support
	Capabilities within main protocol				
	-				
	Extensions				
22	Integration of resource management and SIP?	24.229 [10], A.3.2.1 RFC 3312 [26]	m	Rel-5	
23	Grouping of media lines	24.229 [10], A.3.2.1 RFC 3388 [49]	m	Rel-5	
24	Mapping of Media Streams to Resource Reservation Flows	24.229 [10], A.3.2.1 RFC 3524 [50]	m	Rel-5	
25	SDP Bandwidth Modifiers for RTCP Bandwidth	24.229 [10], A.3.2.1 RFC 3556 [51]	o (NOTE 1)	Rel-5	
NOTE 1:	For "video" and "audio" media types that utilise I	RTP/RTCP, it shall be sp	ecified. For	other media	types, it

### A.4.3.2 SDP types

Table A.318: SDP types

ltem	Туре	Reference		Sending			Receiving	
			Status	Release	Support	Status	Release	Support
	Session level description							
1	v= (protocol version)	24.229 [10], A.3.2.2	m	Rel-5		m	Rel-5	
2	o= (owner/creator and session identifier)	24.229 [10], A.3.2.2	m	Rel-5		m	Rel-5	
3	s= (session name)	24.229 [10], A.3.2.2	m	Rel-5		m	Rel-5	
4	i= (session information)	24.229 [10], A.3.2.2	o (NOTE 2)	Rel-5		m (NOTE 2)	Rel-5	
8	c= (connection information)	24.229 [10], A.3.2.2	o (NOTE 2)	Rel-5		m (NOTE 2)	Rel-5	
9	b= (bandwidth information)	24.229 [10], A.3.2.2	o (NOTE 1)	Rel-5		m (NOTE 2)	Rel-5	
	Time description (one or	more per descr	iption)					
10	t= (time the session is active)	24.229 [10], A.3.2.2	m	Rel-5		m	Rel-5	
	Session level description	(continued)				•		
13	k= (encryption key)	24.229 [10], A.3.2.2	o (NOTE 2)	Rel-5		o (NOTE 2)	Rel-5	
14	a= (zero or more session attribute lines)	24.229 [10], A.3.2.2	o (NOTE 2)	Rel-5		m (NOTE 2)	Rel-5	
	Media description (zero o	r more per des	cription)					
15	m= (media name and transport address)	24.229 [10], A.3.2.2	0	Rel-5		m	Rel-5	
16	i= (media title)	24.229 [10], A.3.2.2	o (NOTE 2)	Rel-5		o (NOTE 2)	Rel-5	
17	c= (connection information)	24.229 [10], A.3.2.2	c1	Rel-5		c1 (NOTE 2)	Rel-5	
18	b= (bandwidth information)	24.229 [10], A.3.2.2	o (NOTE 1)	Rel-5			Rel-5	
19	k= (encryption key)	24.229 [10], A.3.2.2	o (NOTE 2)	Rel-5		o (NOTE 2)	Rel-5	
20	a= (zero or more media attribute lines)	24.229 [10], A.3.2.2	o (NOTE 2)	Rel-5		m (NOTE 2)	Rel-5	
·	Conditions/Options							
c1	IF A.318/15 THEN m ELSE	n/a				_		

may be specified.

NOTE 2: No statement is included in TS 24.229 [10], Rel-5. It is assume to be the same as in TS 24.229 [10], Rel-6

# A.4.4 ICS related to Packet-switched Streaming Service (PSS) media types

### A.4.4.1 PSS media types supported by the UE

Table A.9: PSS media types supported by the UE

Item	PSS media types supported by the UE	Ref.	Status	Release	Mnemonic	Support
1	Narrow-band speech	26.234 [11], 7.2	0	Rel-5		
2	Wideband speech	26.234 [11], 7.2	0	Rel-5		
3	Audio	26.234 [11], 7.3	0	Rel-5		
4	Synthetic audio	26.234 [11],	0	Rel-5		
		7.3a				
5	Video	26.234 [11], 7.4	0	Rel-5		
6	Still images	26.234 [11], 7.5	0	Rel-5		
7	Bitmap graphics	26.234 [11], 7.6	0	Rel-5		
8	Vector graphics	26.234 [11], 7.7	0	Rel-5		
9	Text	26.234 [11], 7.8	0	Rel-5		
10	Timed text	26.234 [11], 7.9	0	Rel-5		
11	Real time text	26.235 [14], 6.3	0	Rel-5		
12	Speech Enabled Service	26.235 [14], 6.5	0	Rel-6		

### A.4.4.2 Media Data Transport

**Table A.10: Media Data Transport** 

Item	Media Data Transport	Reference	Status	Release	Mnemonic	Support			
1	UDP	26.234 [11], 6.2	c01	Rel-5					
2	TCP	26.234 [11], 6.3	c02	Rel-5					
	Conditions/Options								
c01	IF A.9/1 OR A.9/2 OR A.	9/3 OR A.9/5 THEN r	n ELSE o		speech, audio, video				
c02									

### A.4.4.3 Codecs supported by the UE

Table A.11: Codecs supported by the UE

Item	Codecs supported by the UE	Ref.	Status	Release	Mnemonic	Support
1	AMR narrowband	26.234 [11], 7.2 26.235 [14], 6.2	c01	Rel-5		
2	AMR wideband	26.234 [11], 7.2	c02	Rel-5		
3	MPEG-4 AAC Low Complexity (AAC-LC)	26.234 [11], 7.3	003	Rel-5		
4	MPEG-4 AAC Long Term Prediction (AAC-LTP)	26.234 [11], 7.3	003	Rel-5		
5	Enhanced aacPlus	26.234 [11], 7.3	003	Rel-6		
6	Extended AMR-WB	26.234 [11], 7.3	003	Rel-6		
7	Scalable Polyphony MIDI (SP-MIDI)	26.234 [11], 7.3a	o04	Rel-5		
8	Mobile DLS	26.234 [11], 7.3a	o04	Rel-6		
9	Mobile XMF	26.234 [11], 7.3a	004	Rel-6		
10	ITU-T H.263 Profile 0 Level 10	26.234 [11], 7.4 26.235 [14], 6.2	o05	Rel-5 only		
11	ITU-T H.263 Profile 3 Level 10	26.234 [11], 7.4 26.235 [14], 6.2	006	Rel-5 only		
12	MPEG-4 Visual Simple Profile Level 0	26.234 [11], 7.4	006	Rel-5 only		
13	ITU-T H.263 Profile 0 Level 45	26.234 [11], 7.4 26.235 [14], 6.2	c05	Rel-6		
14	ITU-T H.263 Profile 3 Level 45	26.234 [11], 7.4 26.235 [14], 6.2	006	Rel-6		
15	MPEG-4 Visual Simple Profile Level 0b	26.234 [11], 7.4	006	Rel-6		
16	ITU-T H.264 (AVC) Baseline Profile Level 1b	26.234 [11], 7.4 26.235 [14], 6.2	006	Rel-6		
17	ISO/IEC JPEG	26.234 [11], 7.5	c07	Rel-5		
18	JFIF	26.234 [11], 7.5	c07	Rel-5		
19	GIF87a	26.234 [11], 7.6	008	Rel-5		
20	GIF89a	26.234 [11], 7.6	800	Rel-5		
21	PNG	26.234 [11], 7.6	008	Rel-5		
22	SVG Tiny 1.1	26.234 [11], 7.7	c09	Rel-5 only		
23 24	SVG Basic profile	26.234 [11], 7.7	010	Rel-5 only		
25	SVG Tiny 1.2 ECMAScript	26.234 [11], 7.7 26.234 [11], 7.7	c09 c09	Rel-6 Rel-6		
26	XHTML Mobile Profile	26.234 [11], 7.8	c11	Rel-5		
27	SMIL 2.0	26.234 [11], 7.8	c11	Rel-5		-
28	UTF-8	26.234 [11], 7.8	c11	Rel-5		
29	UCS-2	26.234 [11], 7.8	c11	Rel-5		
30	Timed text format	26.234 [11], 7.9	c12	Rel-5		
31	ITU-T T.140	26.235 [14], 6.3	o13	Rel-5		
32	DSR	26/235 [14]. 6.5	o14	Rel-6		
c01	Conditions/Options  IF A.9/1 OR A.9/3 THEN m ELSE	IF A.9/12 THEN o E	ELSE n/a		Narrow-band speech, Speech Enabled Serv	
c02	IF A.9/2 THEN m ELSE IF A.9/12	THEN o ELSE n/a			Wideband speech, Sp Enabled Service	
003	IF A.9/3 THEN o ELSE n/a A				Audio	
004	IF A.9/4 THEN o ELSE n/a	Synthetic audio				
005	IF A.9/5 THEN m ELSE n/a	Video				
006	IF A.9/5 THEN o ELSE n/a	Video				
c07	IF A.9/6 THEN m ELSE n/a	Still images				
008	IF A.9/7 THEN o ELSE n/a	Bitmap graphics				
c09	IF A.9/8 THEN m ELSE n/a A	Vector graphics				
o10	IF A.9/8 THEN o ELSE n/a	Vector graphics				
c11	IF A.9/9 THEN m ELSE n/a		Text			
c12	IF A.9/10 THEN m ELSE n/a	Timed text				
o13	IF A.9/11 THEN o ELSE n/a				Real time text	

o14 | IF A.9/12 THEN o ELSE n/a | Speech Enabled Service

### A.4.5 Additional information

**Table A.12: Additional information** 

Item	Additional information	Ref.	Status	Release	Mnemonic	Support
	Void					
2	UE compresses the initial REGISTER message	24.229 [10], 8.1.1 RFC 3486 [25]	0	Rel-5		
3	UE compresses upon receiving the first compressed message	24.229 [10], 8.1.1 RFC 3486 [25]	0	Rel-5		
4	UE capable of being configured to initiate Dedicated PDP Context	24.229 [10], 9.2.1	0	Rel-5		
5	UE capable of being configured to initiate P-CSCF discovery via PCO	24.229 [10], 9.2.1	0	Rel-5		
6	Void					
7	UE capable of being configured to initiate P-CSCF discovery via DHCPv6	24.229 [10], 9.2.1	0	Rel-5		
8	UE supports P-CSCF discovery via PCO	24.229 [10], 9.2.1	0	Rel-5		
9	Void					
10	UE supports P-CSCF discovery via DHCPv6	24.229 [10], 9.2.1	0	Rel-5		
	Void					
13	UE requires the usage of preconditions by Require header	24.229 [10], 5.1.3	0	Rel-5		
14	UE indicates the support for preconditions by Supported header	24.229 [10], 5.1.3	0	Rel-6		
15	UE supports a=inactive	24.229 [10], 6.1.2	0	Rel-6		

### A.4.6 Additional information for Early IMS

Table A.13: Additional information for IPv4

Precondition: This table is only applicable if A.7/1 IPv4 is supported						
Item	Additional information for IPv4	Ref.	Status	Release	Mnemonic	Support
	UE capable of being configured to initiate P-CSCF discovery via DHCPv4	23.981 [18], 5.2.1	0	Rel-5		
2	UE supports P-CSCF discovery via DHCPv4	23.981 [18], 5.2.1	0	Rel-5		

Table A.14: Additional information for Early IMS security

Precondition: This table is only applicable if A.6/9 Early IMS security is supported						
Item	Additional information	Ref.	Status	Release	Mnemonic	Support
	for Early IMS security					
	FFS					

# Annex B (informative): Change history

Meeting -1st- Level	Doc-1st- Level	CR	Rev	Subject	Cat	Version - Current	Version -New	Doc-2nd- Level
RP-31	RP-060053	-	-	Update to version 1.0.0 and present to RAN#31 for information	-	0.0.1	1.0.0	R5-060523
-	-	-	-	Update to version 2.0.0 during RAN5#31 e-mail agreement procedure	-	1.0.0	2.0.0	R5-061399
RP-32	RP-060320	=	-	MCC Editorial clean up version 2.0.1 - and present to RAN#32 for approval to go under revision control (as version 5.0.0)	-	2.0.0	2.0.1	-
-	-	-	-	Update to version 5.0.0 after RAN#32	-	2.0.1	5.0.0	-
RP-33	RP-060565	0001	-	Applicability for new P-CSCF Discovery List test cases	F	5.0.0	5.1.0	R5-062365
RP-33	RP-060565	0002	-	CR to 34.229-2: Update applicability table for IMSCC test	F	5.0.0	5.1.0	R5-062026
RP-34	RP-060746	0003	-	Updating of test cases to cover both IMS support and early IMS security scenarios, ICS part	F	5.1.0	5.2.0	R5-063528
RP-34	RP-060746	0004	-	ICS part for new registration test cases 8.5, 8.6 and 8.7 for early IMS security	F	5.1.0	5.2.0	R5-063527
RP-34	RP-060746	0005	-	Removal of MO Call - 488 not accepted here for rel 5, ICS part	F	5.1.0	5.2.0	R5-063331
RP-34	RP-060746	0006	-	Production of pointer version 5.2.0 of TS 34.229-2 with no technical contents	F	5.1.0	5.2.0	R5-063292
RP-34	RP-060748	0007	-	Update to 34.229-2 : Major capabilities	F	5.1.0	6.0.0	R5-063571

## History

Document history				
V6.0.0	December 2006	Publication		