

Source: TSG CN WG1
Title: CR to Rel-6 WI "PRESNC" for TS 24.229 and TS 24.141
Agenda item: 9.2
Document for: APPROVAL

This document contains 5 **CRs on Rel-6 Work Item "PRESNC"**, that have been agreed by TSG CN WG1 CN#37 meeting and forwarded to TSG CN Plenary meeting #27 for approval.

TDoc #	Tdoc Title	Spec	CR #	Rev	CAT	C_Version	WI
N1-050082	Authentication proxy for presence	24.141	035		F	6.2.0	PRESNC
N1-050244	XCAP-change correction	24.141	38		F	6.2.0	PRESNC
N1-050245	IFC corrections	24.141	39		F	6.2.0	PRESNC
N1-050306	Sip-profile package in major capabilities	24.229	795	1	F	6.5.1	PRESNC
N1-050243	XCAP-change clarification	24.141	37		D	6.2.0	PRESNC

CR-Form-v7.1

CHANGE REQUEST

⌘ **24.141 CR 35** ⌘ rev **-** ⌘ Current version: **6.2.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Authentication proxy for presence		
Source:	⌘ Siemens		
Work item code:	⌘ PRESNC	Date:	⌘ 12/01/2005
Category:	⌘ F	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

Reason for change:	⌘ Up till now no presence specific requirements have been standardized for an authentication proxy acting within the context of presence. However 33.141 requires presence specific behaviour of the AP
Summary of change:	⌘ In case of acting as an AP for Presence the AP shall support the handling of the "X-3GPP-Intended-Identity" and of the "X-3GPP-Asserted-Identity" headers.
Consequences if not approved:	⌘ Stage-2 requirements not implemented

Clauses affected:	⌘ 6.2.3						
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Test specifications	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘			
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> O&M Specifications	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘			
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
Other comments:	⌘						

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

6.2.3 Authentication proxy

The generic requirements for an Authentication Proxy are defined in 3GPP TS 24.109 [7].

In addition an authentication proxy acting within the scope of Presence shall:

- 1) verify the content of the "X-3GPP-Intended-Identity" header in case it is available in HTTP requests; and
- 2) indicate an asserted identity of the user in the "X-3GPP-Asserted-Identity" header in HTTP requests sent to the AS.

~~Editor's note: This sub-clause will contain service specific requirements for an authentication proxy. It is for further study whether presence specific requirements exist or whether all requirements are covered in 3GPP TS 24.109 [7].~~

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CHANGE REQUEST

⌘ **24.141 CR 37** ⌘ rev **-** ⌘ Current version: **6.2.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ XCAP-change clarification		
Source:	⌘ Nokia		
Work item code:	⌘ PRESNC	Date:	⌘ 03/02/2005
Category:	⌘ D	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

Reason for change:	⌘ The description for Event header is incomplete.
Summary of change:	⌘ Additional text added to Event header description.
Consequences if not approved:	⌘ Event header parameters are not explained.

Clauses affected:	⌘ A.3.6.1 (the complete clause is not included)										
Other specs affected:	<table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	X	X	X	X	X	X	Other core specifications	⌘
	Y	N									
	X	X									
	X	X									
X	X										
Test specifications	⌘										
O&M Specifications	⌘										
Other comments:	⌘										

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- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

A.3.6.1 Watcher subscribing to XCAP change in his resource list, UE in visited network - Successful subscription

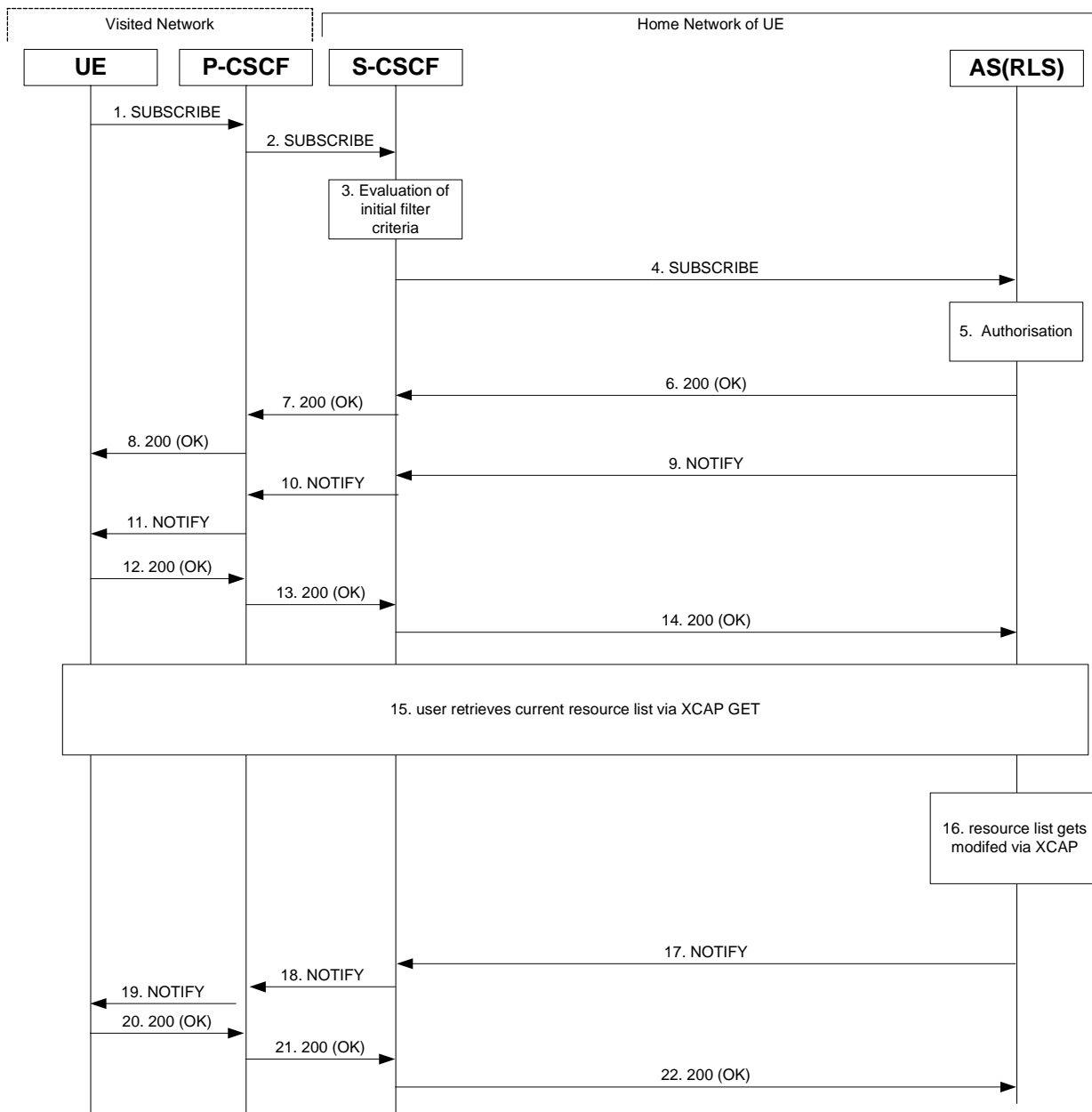


Figure A.3.6.1-1: Watcher subscribing to XCAP change in his resource list

Figure A.3.6.1-1 shows a watcher subscribing to XCAP change event notification. The details of the flows as follows:

1. SUBSCRIBE request (UE to P-CSCF) – see example in table A.3.6.1-1

A watcher agent in a UE wishes to get notification when his resource list gets modified via XCAP. In order to initiate a subscription to XCAP changes in RLS, the UE generates a SUBSCRIBE request indicating support for "xcap-change", together with an indication of the length of time this periodic subscription should last.

Table A.3.6.1-1: SUBSCRIBE request (UE to P-CSCF)

```

SUBSCRIBE sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKehuefdam
Max-Forwards: 70
P-Access-Network-Info: 3GPP-UTRAN-TDD; utran-cell-id-3gpp=234151D0FCE11
Route: <sip:pcscf1.visited1.net:7531;lr;comp=sigcomp>, <sip:orig@scscf1.home1.net;lr>
P-Preferred-Identity: <sip:user1_public1@home1.net>
Privacy: none
From: <sip:user1_public1@home1.net>;tag=31415
To: <sip:user1_public1@home1.net>
Call-ID: b89rjhnedlrfjflslj40a222
CSeq: 123 SUBSCRIBE
Require: sec-agree
Proxy-Require: sec-agree
Security-Verify: ipsec-3gpp; q=0.1; alg=hmac-sha-1-96; spi-c=98765432; spi-s=87654321; port-
c=8642; port-s=7531
Event: sip-profile;profile-type=application;app-id=resource-lists;document="users/user1"
Expires: 7200
Accept: application/xcap-diff+xml
Contact: <sip:[5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp>
Content-Length: 0

```

- Request-URI:** The users own SIP URI to get notifications of changes on all lists owned by the user.
- Event:** This field is populated with the value "sip-profile" to specify the use of the sip-profile package to get notified of changes to XCAP documents. [The "app-id" in the field identifies the XCAP application usage. The "document" further details the document that is being subscribed.](#)
- Accept:** This field is populated with the value application/xcap-diff+xml ' indicating that the UE supports the MIME type.
- To:** Same as the Request-URI.

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CHANGE REQUEST

⌘ **24.141 CR 038** ⌘ rev **-** ⌘ Current version: **6.2.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ XCAP-change corrections		
Source:	⌘ Nokia		
Work item code:	⌘ PRESNC	Date:	⌘ 03/02/2005
Category:	⌘ F	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

Reason for change:	⌘ Errors in XCAP change subscription message flows.
Summary of change:	⌘ 'xcap-change' replaced to 'sip-profile'.
Consequences if not approved:	⌘ Errors in specification.

Clauses affected:	⌘ A.3.6.1 (the complete clause is not included)										
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications Test specifications O&M Specifications	Y	N	X	X	X	X	X	X	⌘	
Y	N										
X	X										
X	X										
X	X										
Other comments:	⌘										

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A.3.6.1 Watcher subscribing to XCAP change in his resource list, UE in visited network - Successful subscription

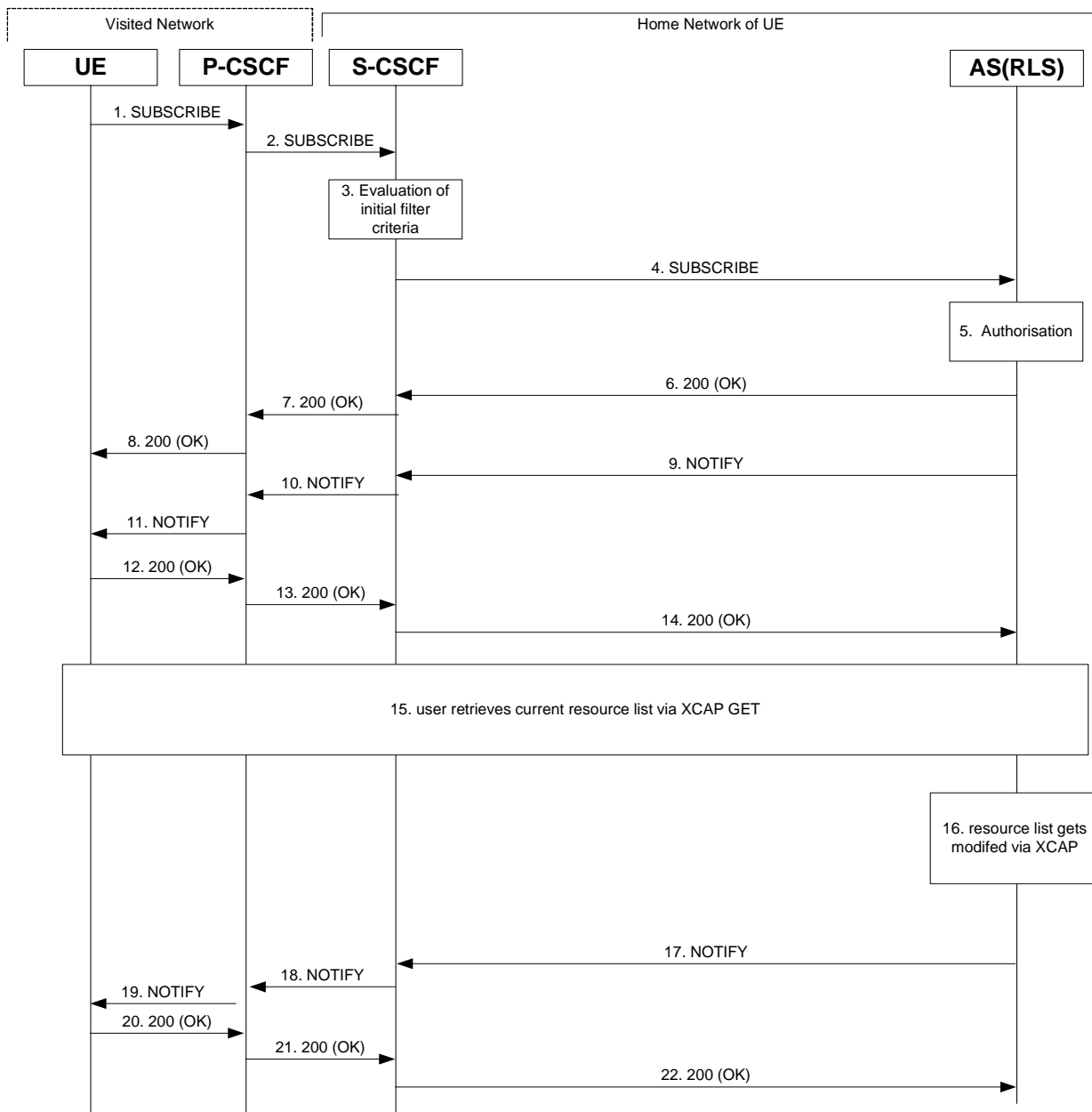


Figure A.3.6.1-1: Watcher subscribing to XCAP change in his resource list

Figure A.3.6.1-1 shows a watcher subscribing to XCAP change event notification. The details of the flows as follows:

1. SUBSCRIBE request (UE to P-CSCF) – see example in table A.3.6.1-1

A watcher agent in a UE wishes to get notification when his resource list gets modified via XCAP. In order to initiate a subscription to XCAP changes in RLS, the UE generates a SUBSCRIBE request indicating support for "~~xcap-change~~sip-profile", together with an indication of the length of time this periodic subscription should last.

Table A.3.6.1-1: SUBSCRIBE request (UE to P-CSCF)

```

SUBSCRIBE sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKehuefdam
Max-Forwards: 70
P-Access-Network-Info: 3GPP-UTRAN-TDD; utran-cell-id-3gpp=234151D0FCE11
Route: <sip:pcscf1.visited1.net:7531;lr;comp=sigcomp>, <sip:orig@scscf1.home1.net;lr>
P-Preferred-Identity: <sip:user1_public1@home1.net>
Privacy: none
From: <sip:user1_public1@home1.net>;tag=31415
To: <sip:user1_public1@home1.net>
Call-ID: b89rjhnedlrfjflslj40a222
CSeq: 123 SUBSCRIBE
Require: sec-agree
Proxy-Require: sec-agree
Security-Verify: ipsec-3gpp; q=0.1; alg=hmac-sha-1-96; spi-c=98765432; spi-s=87654321; port-
c=8642; port-s=7531
Event: sip-profile;profile-type=application;app-id=resource-lists;document="users/user1"
Expires: 7200
Accept: application/xcap-diff+xml
Contact: <sip:[5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp>
Content-Length: 0

```

- Request-URI:** The users own SIP URI to get notifications of changes on all lists owned by the user.
- Event:** This field is populated with the value "sip-profile" to specify the use of the sip-profile package to get notified of changes to XCAP documents.
- Accept:** This field is populated with the value application/xcap-diff+xml ' indicating that the UE supports the MIME type.
- To:** Same as the Request-URI.

2. SUBSCRIBE request (P-CSCF to S-CSCF) - see example in table A.3.6.1-2

The P-CSCF looks up the serving network information for the public user identity that was stored during the registration procedure. The SUBSCRIBE request is forwarded to S-CSCF#1. A Route header is inserted into SUBSCRIBE request. The information for the Route header is taken from the service route determined during registration.

Table A.3.6.1-2: SUBSCRIBE request (P-CSCF to S-CSCF)

```

SUBSCRIBE sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP pcscf1.visited1.net;branch=z9hG4bK120f34.1, SIP/2.0/UDP
[5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKehuefdam
P-Access-Network-Info:
Route: <sip:orig@scscf1.home1.net;lr>
Max-Forwards: 69
P-Asserted-Identity: <sip:user1_public1@home1.net>
P-Charging-Vector: icid-value="AyretyU0dm+602IrT5tAFrbHLso=223551024"
Privacy:
Record-Route: <sip:pcscf1.visited1.net;lr>
Route: <sip:scscf1.home1.net;lr>
From:
To:
Call-ID:
CSeq:
Event:
Supported:
Expires:
Accept:
Contact:
Content-Length:

```

3. Evaluation of initial filter criteria

The S-CSCF validates the service profile of this subscriber and evaluates the initial filter criteria. For sip:user1_public1@home1.net the S-CSCF has originating initial Filter Criteria with Service Point Trigger of Method = SUBSCRIBE AND Event = "~~xcap-changes~~sip-profile" that informs the S-CSCF to route the SUBSCRIBE request to the Application Server sip:rls.home1.net.

4. SUBSCRIBE request (S-CSCF to RLS) - see example in table A.3.6.1-4

The S-CSCF forwards the SUBSCRIBE request to the RLS.

Table A.3.6.1-4 SUBSCRIBE request (S-CSCF to RLS)

```
SUBSCRIBE sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP scscf1.home1.net;branch=z9hG4bK344a65.1, SIP/2.0/UDP
    pcscf1.visited1.net;branch=z9hG4bK120f34.1, SIP/2.0/UDP
    [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKehuefdam
Max-Forwards: 68
P-Access-Network-Info:
P-Asserted-Identity: <sip:user1_public1@home1.net>, <tel:+1-212-555-1111>
P-Charging-Vector: icid-value="AyretyU0dm+602IrT5tAFrbHLso=223551024"; orig-ioi=home1.net
P-Charging-Function-Addresses: ccf=[5555::b99:c88:d77:e66]; ccf=[5555::a55:b44:c33:d22];
    ecf=[5555::1ff:2ee:3dd:4ee]; ecf=[5555::6aa:7bb:8cc:9dd]
Privacy:
Record-Route: <sip:orig@scscf1.home1.net;lr>, <sip:pcscf1.visited1.net;lr>
Route: <sip:rls.home1.net;lr>, <sip:orig@scscf1.home1.net;lr>
From:
To:
Call-ID:
CSeq:
Event:
Supported:
Expires:
Accept:
Contact:
Content-Length:
```

P-Charging-Vector: The S-CSCF populates the identifier of its own network to the originating Inter Operator Identifier (IOI) parameter of this header.

P-Charging-Function-Addresses: The S-CSCF populates the P-Charging-Function-Addresses header field to be passed to the RLS.

5. Authorization

The RLS performs the necessary authorization checks on the originator to ensure that he/she is authorized to subscribe to xcap-change. In this example this condition has been met, so the RLS sends a 200 (OK) response to the S-CSCF.

6. 200 (OK) response (RLS to S-CSCF) - see example in table A.3.6.1-6

The RLS sends the response to the S-CSCF.

Table A.3.6.1-6: 200 (OK) response (RLS to S-CSCF)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP scscf1.home1.net;branch=z9hG4bK344a65.1, SIP/2.0/UDP
    pcscf1.visited1.net;branch=z9hG4bK120f34.1, SIP/2.0/UDP
    [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKehuefdam
P-Charging-Vector: icid-value="AyretyU0dm+602IrT5tAFrbHLso=223551024"; orig-ioi=home1.net;
    term-ioi=home1.net
Record-Route:
From:
To: <sip:user1_public1@home1.net>;tag=151170
Call-ID:
CSeq:
Expires:
Contact:
Content-Length: 0
```

7. 200 (OK) response (S-CSCF to P-CSCF) - see example in table A.3.6.1-7

The S-CSCF forwards the response to the P-CSCF.

Table A.3.6.1-7: 200 (OK) response (S-CSCF to P-CSCF)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP pcscf1.visited1.net;branch=z9hG4bK120f34.1, SIP/2.0/UDP
    [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKehuefdam
P-Charging-Vector: icid-value="AyretyU0dm+602IrT5tAFrbHLso=223551024"
Record-Route:
From:
To:
Call-ID:
CSeq:
Expires:
Contact:
Content-Length:
```

8. 200 (OK) response (P-CSCF to UE) - see example in table A.3.6.1-8

The P-CSCF forwards the response to the watcher agent in the UE.

Table A.3.6.1-8: 200 (OK) response (P-CSCF to UE)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKehuefdam
Record-Route: <sip:orig@scscf1.home1.net;lr>, <sip:pcscf1.visited1.net:7531;lr;comp=sigcomp>
From:
To:
Call-ID:
CSeq:
Expires:
Contact:
Content-Length:
```

9. NOTIFY request (RLS to S-CSCF) – see example in table A.3.6.1-9

The RLS generates a NOTIFY request including the [xcap-change-diff](#) document as a result of the SUBSCRIBE request. As this is the initial NOTIFY it contains only the new-etag, previous-etag and document-selector elements.

Table A.3.6.1-9 NOTIFY request (RLS to S-CSCF)

```
NOTIFY sip:[5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp SIP/2.0
Via: SIP/2.0/UDP rls.home1.net;branch=z9hG4bK240f34.1
Max-Forwards: 70
P-Charging-Vector: icid-value="AyretyU0dm+602IrT5tAFrbHLso=323551024"; orig-ioi=home1.net
P-Charging-Function-Addresses: ccf=[5555::b99:c88:d77:e66]; ccf=[5555::a55:b44:c33:d22];
    ecf=[5555::1ff:2ee:3dd:4ee]; ecf=[5555::6aa:7bb:8cc:9dd]
Route: <sip:scscf1.home1.net;lr>, <sip:pcscf1.visited1.net;lr>
From: <sip:user1@home1.net>;tag=151170
To: <sip:user1_public1@home1.net>;tag=31415
Call-ID: b89rjhnedlrfjflslj40a222
CSeq: 89 NOTIFY
Subscription-State: active;expires=7200
Event: xcap-changesip-profile
Contact: <sip:rls.home1.net>
Content-Type: application/xcap-diff+xml;charset="UTF-8"
Content-Length:

<?xml version="1.0" encoding="UTF-8"?>

<xcap-diff xmlns="urn:ietf:params:xml:ns:xcap-diff"

    xcap-root="http://xcap.home1.net/services">

    <document doc-selector="resource-lists/users/user1/friends"
        new-etag="7hahsd" previous-etag="7hahsd"/>
    </document>
    <document doc-selector="resource-lists/users/user1/coworkers"
        new-etag="ffds66a" previous-etag="ffds66a">
    </document>

</xcap-diff>
```

The content of the document element contains a new-etag and a previous etag element with identical value and no list of instructions. This way it is indicated that this is the reference XML diff document. This documents has only the information about the etags and the document URI's covered by that subscription.

CR-Form-v7.1

CHANGE REQUEST

⌘ **24.141 CR 039** ⌘ rev **-** ⌘ Current version: **6.2.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ IFC corrections		
Source:	⌘ Nokia		
Work item code:	⌘ PRESNC	Date:	⌘ 03/02/2005
Category:	⌘ F	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

Reason for change:	⌘ IFC service point triggers are incorrect		
Summary of change:	⌘ Corrections of iFC SPT in examples		
Consequences if not approved:	⌘ Error in specification.		

Clauses affected:	⌘ A.4.2.1, A.4.3.1, A.6.2 (not the complete clauses are shown)										
Other specs affected:	<table border="1" style="border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> </table>	Y	N	X	X	X	X	X	X	Other core specifications	⌘
	Y	N									
	X	X									
X	X										
X	X										
		Test specifications									
		O&M Specifications									
Other comments:	⌘										

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.

- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

A.4.2.1 Successful publication

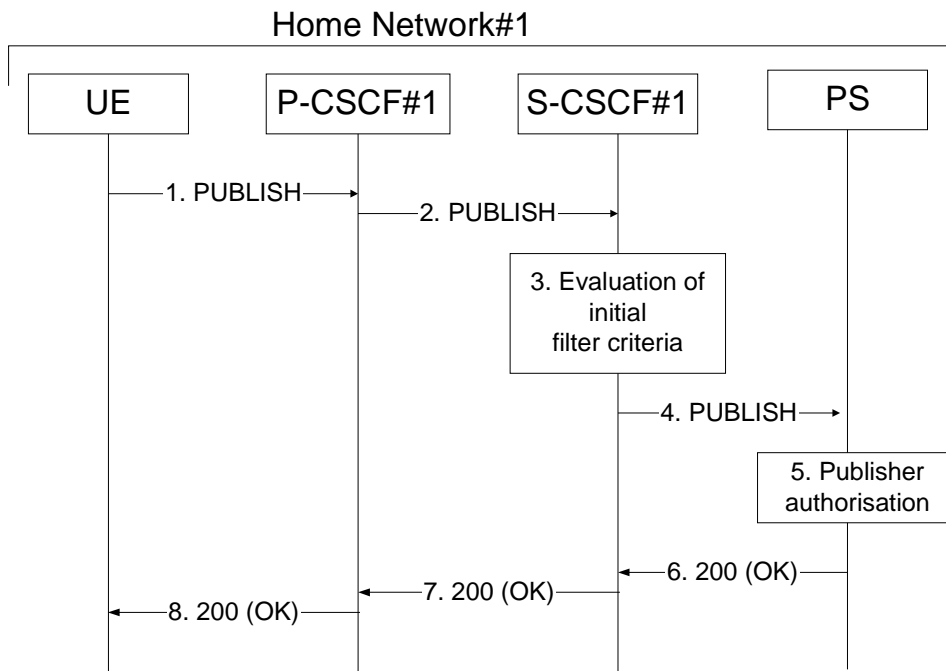


Figure A.4.2.1-1: UE publishing presence information

The UE may publish the partial presence information or the full presence information about a presentity to the PS.

In this example, it is assumed that the UE publishes the full presence information.

Figure A.4.2.1-1 shows a UE publishing or modifying already existing presence information about a presentity. The details of the signalling flows as follows:

1. PUBLISH request (UE to P-CSCF) - see example in table A.4.2.1-1

A PUA in a UE wishes to publish presence information. To initiate the publication, the UE generates a PUBLISH request according to RFC 3903 [23] containing the presence information that it wishes to publish.

The message body in the PUBLISH request that carries the PUA presence update state is formed as indicated in draft-ietf-simple-presence-data-model [44], RFC 3863 [21], draft-ietf-simple-rpid [26], draft-ietf-simple-cipid[32], and draft-ietf-simple-prescaps-ext [25].

Table A.4.2.1-1: PUBLISH request (UE to P-CSCF)

```
PUBLISH sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKnashds7
Max-Forwards: 70
P-Access-Network-Info: 3GPP-UTRAN-TDD; utran-cell-id-3gpp=234151D0FCE11
Route: <sip:pcscf1.visited1.net:7531;lr;comp=sigcomp>, <sip:orig@scscf1.home1.net;lr>
P-Preferred-Identity: <sip:user1_public1@home1.net>
Privacy: none
From: <sip:user1_public1@home1.net>;tag=31415
To: <sip:user1_public1@home1.net>
Call-ID: b89rjhnedlrfjflslj40a222
CSeq: 61 PUBLISH
Require: sec-agree
Proxy-Require: sec-agree
Security-Verify: ipsec-3gpp; q=0.1; alg=hmac-sha-1-96; spi-c=98765432; spi-s=87654321; port-c=8642; port-s=7531
Event: presence
Expires: 7200
Content-Type: application/pidf+xml
Content-Length: (...)

<?xml version="1.0" encoding="UTF-8"?>
  <presence xmlns="urn:ietf:params:xml:ns:pidf"
    xmlns:es="urn:ietf:params:xml:ns:pidf:status:rpid-status"
    xmlns:et="urn:ietf:params:xml:ns:pidf:rpid-tuple"
    xmlns:ep="urn:ietf:params:xml:ns:pidf:rpid-person"
    xmlns:dmp="urn:ietf:params:xml:ns:pidf:person"
    xmlns:pcp="urn:ietf:params:xml:ns:pidf:servcaps"
    xmlns:ci="urn:ietf:params:xml:ns:pidf:cipid"
    entity="pres:user2_public1@home2.net">
    <tuple id="a8098a.672364762364">
      <status>
        <basic>open</basic>
        <es:privacy><text/></es:privacy>
        <es:status-icon>http://example.com/~user2/icon.gif</es:status-icon>
      </status>
      <et:class>sip</et:class>
      <pcp:video>>false</pcp:video>
      <pcp:audio>>true</pcp:audio>
      <contact priority="0.8">sip:user2_public1@home2.net</contact>
      <note xml:lang="en">Don't Disturb Please!</note>
      <note xml:lang="fr">Ne derangez pas, s'il vous plait</note>
      <timestamp>2003-08-27T11:49:29Z</timestamp>
    </tuple>
    <tuple id="jklhgf9788934774.78">
      <status>
        <basic>open</basic>
      </status>
      <et:class>assistant</et:class>
      <et:relationship>assistant</et:relationship>
      <contact priority="1.0">tel:+1-212-555-2222</contact>
      <note xml:lang="en">She's my secretary</note>
      <timestamp>2003-08-27T11:49:29Z</timestamp>
    </tuple>
    <dmp:person>
      <ep:class>presentity</ep:class>
      <ci:homepage>http://example.com/~user2</ci:homepage>
      <ci:card>http://example.com/~user2/card.vcd</ci:card>
      <dmp:status>
```

```

    <ep:place-type until="2003-08-27T17:30:00Z">office</ep:place-type>
  </dmp:status>
</dmp:person>

</presence>

```

Request-URI: Public user identity whose presence information the PUA intends to publish.

Event: This field is populated with the value "presence" to specify the use of the presence package.

To: Same as the Request-URI.

Content-Type: Set to the value 'application/pidf+xml'.

2. PUBLISH request (P-CSCF to S-CSCF) - see example in table A.4.2.1-2

P-CSCF looks up the serving network information for the public user identity that was stored during the registration procedure. The PUBLISH request is forwarded to the S-CSCF. A Route header is inserted into PUBLISH request. The information for the Route header is taken from the service route determined during registration.

Table A.4.2.1-2: PUBLISH request (P-CSCF to S-CSCF)

```

PUBLISH sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP pcscf1.home1.net;branch=z9hG4bK240f34.1, SIP/2.0/UDP
    [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKKnashds7
P-Access-Network-Info:
Max-Forwards: 69
P-Asserted-Identity: <sip:user1_public1@home1.net>
P-Charging-Vector: icid-value="AyretyU0dm+6O2IrT5tAFrbHLso=023551024"
Privacy:
Route: <sip:orig@scscf1.home1.net;lr>
From:
To:
Call-ID:
CSeq:
Event:
Expires:
Content-Type:
Content-Length:

(...)

```

3. Evaluation of initial filter criteria

S-CSCF validates the service profile of the publisher and evaluates the initial filter criteria. For user1_public1@home1.net S-CSCF#1 has originating initial Filter Criteria with Service Points of Interest [Trigger](#) of Method = PUBLISH AND Event = "presence" AND ~~To~~ [Request-URI](#) = "sip:user1_public1@home1.net" that informs the S-CSCF to route the PUBLISH request to the PS ps.home1.net.

-----NEXT CHANGE-----

A.4.3.1 Successful refresh

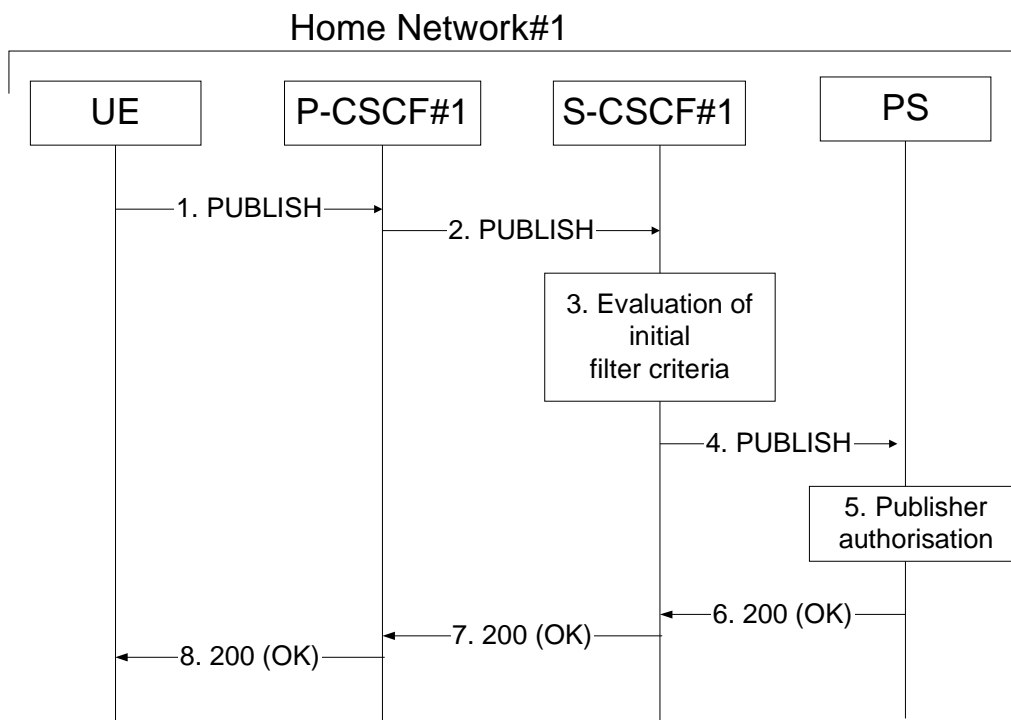


Figure A.4.3.1-1: UE updating presence information

Figure A.4.3.1-1 shows an UE refreshing the presence information about a presentity. The details of the signalling flows are as follows:

1. PUBLISH request (UE to P-CSCF) – see example in table A.4.3.1-1

A PUA in a UE wishes to refresh already existing presence information. To initiate the publication, the UE generates a PUBLISH request according to RFC 3903 [23].

Table A.4.3.1-1: PUBLISH request (UE to P-CSCF)

```

PUBLISH sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKnashds7
Max-Forwards: 70
P-Access-Network-Info: 3GPP-UTRAN-TDD; utran-cell-id-3gpp=234151D0FCE11
Route: <sip:pcscf1.visited1.net:7531;lr;comp=sigcomp>, <sip:orig@scscf1.home1.net;lr>
P-Preferred-Identity: <sip:user1_public1@home1.net>
Privacy: none
From: <sip:user1_public1@home1.net>;tag=31415
To: <sip:user1_public1@home1.net>
Call-ID: b89rjhnedlrfjflslj40a111
CSeq: 61 PUBLISH
Require: sec-agree
Proxy-Require: sec-agree
Security-Verify: ipsec-3gpp; q=0.1; alg= hmac-sha-1-96; spi-c=98765432; spi-s=87654321; port-c=8642; port-s=7531
Event: presence
SIP-If-Match: 123xy
Expires: 7200
Content-Length: 0
    
```

Request-URI: Public user identity whose presence information the PUA intends to publish.

Event: This field is populated with the value "presence" to specify the use of the presence package.

To: Same as the Request-URI.

SIP-If-Match: This field is populated with the entity-tag earlier provided by the PS in the SIP-ETag header field of the previous 200(OK) response and is used as a versioning precondition to the PUBLISH refresh.

2. **PUBLISH request (P-CSCF to S-CSCF) - see example in table A.4.3.1-2**

P-CSCF looks up the serving network information for the public user identity that was stored during the registration procedure. The PUBLISH request is forwarded to the S-CSCF. A Route header is inserted into PUBLISH request. The information for the Route header is taken from the service route determined during registration.

Table A.4.3.1-2: PUBLISH request (P-CSCF to S-CSCF)

```
PUBLISH sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP pcscf1.home1.net;branch=z9hG4bK240f34.1, SIP/2.0/UDP
    [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKnashds7
P-Access-Network-Info:
Max-Forwards: 69
P-Asserted-Identity: <sip:user1_public1@home1.net>
P-Charging-Vector: icid-value="AyretyU0dm+602IrT5tAFrbHLso=023551024"
Privacy:
Route: <sip:orig@scscf1.home1.net;lr>
From:
To:
Call-ID:
CSeq:
Event:
SIP-If-Match:
Expires:
Content-Length:
```

P-Charging-Vector: The P-CSCF populates the icid parameter with a globally unique value.

3. **Evaluation of initial filter criteria**

S-CSCF#1 validates the service profile of this publisher and evaluates the initial filter criteria. For user1_public1@home1.net the S-CSCF has originating initial Filter Criteria with Service Points of ~~Interest~~ Trigger of Method = PUBLISH AND Event = "presence" AND ~~Request-URI~~ Request-URI = "sip:user1_public1@home1.net" that informs the S-CSCF to route the PUBLISH request to the PS ps.home1.net.

-----NEXT CHANGE-----

A.6.2 PUA subscribing to watcher list and receiving a notification of an already pending watcher subscription followed by a notification of a subscription from a new watcher not already in the watcher list

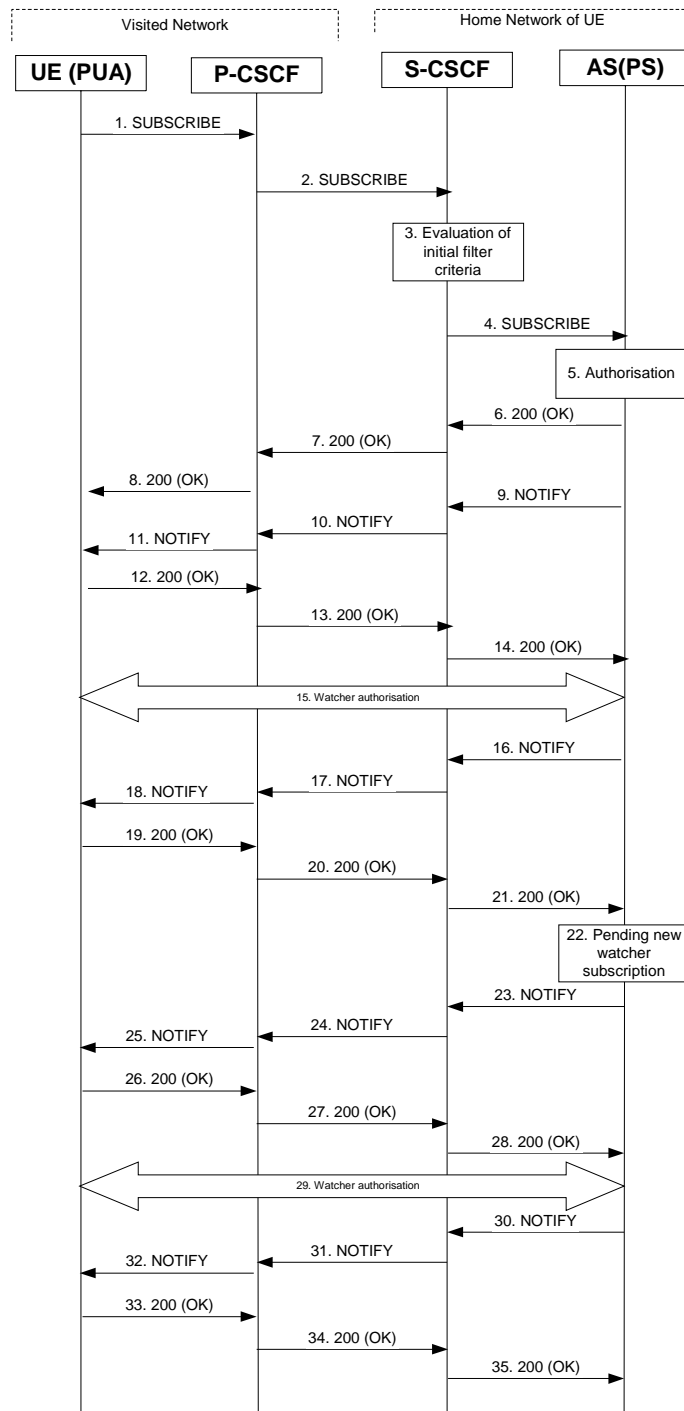


Figure A.6.2-1: PUA subscribing to watcher list and receiving a notification of an already pending watcher subscription followed by a notification of a subscription from a new watcher not already in the watcher list

Figure A.6.2-1 shows a PUA subscribing to watcher list and receiving a notification of an already pending watcher subscription followed by a notification of a subscription from a new watcher not already in the watcher list. In this

example the default watcherinfo subscription filtering policy is applied meaning that a partial state of a watcher-info document is transported in the notifies. The details of the signalling flows as follows:

1. **SUBSCRIBE request (UE to P-CSCF) – see example in table A.6.2-1**

The presentity wishes to watch his own watcher information, therefore he subscribes for the watcher information template-package of presence. The UE generates a SUBSCRIBE request containing the presence.wininfo event, together with an indication of the length of time this periodic subscription should last.

Table A.6.2-1: SUBSCRIBE request (UE to P-CSCF)

```
SUBSCRIBE sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKehuefdam
Max-Forwards: 70
P-Access-Network-Info: 3GPP-UTRAN-TDD; utran-cell-id-3gpp=234151D0FCE11
Route: <sip:pcscf1.visited1.net:7531;lr;comp=sigcomp>, <sip:orig@scscf1.home1.net;lr>
P-Preferred-Identity: <sip:user1_public1@home1.net>
Privacy: none
From: <sip:user1_public1@home1.net>;tag=31415
To: <sip:user1_public1@home1.net>
Call-ID: b89rjhnedlrfjflslj40a222
CSeq: 123 SUBSCRIBE
Require: sec-agree
Proxy-Require: sec-agree
Security-Verify: ipsec-3gpp; q=0.1; alg=hmac-sha-1-96; spi-c=98765432; spi=87654321; port-
c=8642; port-s=7531
Event: presence.wininfo
Expires: 7200
Accept: application/watcherinfo+xml
Contact: <sip:[5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp>
Content-Length: 0
```

- Request URI:** Public user identity whose events the subscriber subscribes to. In this case the Public User Identity of the presentity in SIP URI format.
- Event:** This field is populated with the value "presence.wininfo" to specify the use of the watcher information template-package of presence.
- Accept:** This field is populated with the value 'application/watcherinfo+xml' indicating that the UE supports this body type for notification.
- To:** Same as the Request-URI.

2. SUBSCRIBE request (P-CSCF to S-CSCF) – see example in table A.6.2-2

The P-CSCF looks up the serving network information for the public user identity that was stored during the registration procedure. The SUBSCRIBE request is forwarded to the S-CSCF. A Route header is inserted into SUBSCRIBE request.

Table A.6.2-2: SUBSCRIBE request (P-CSCF to S-CSCF)

```
SUBSCRIBE sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP pcscf1.visited1.net;branch=z9hG4bK120f34.1 ,SIP/2.0/UDP
    [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKehuefdam
P-Access-Network-Info:
Max-Forwards: 69
P-Asserted-Identity: <sip:user1_public1@home1.net>
P-Charging-Vector: icid-value="AyretyU0dm+602IrT5tAFrbHLso=023551024"
Privacy:
Route: <sip:orig@scscf1.home1.net;lr>
Record-Route: <sip:pcscf1.visited1.net;lr>
From:
To:
Call-ID:
CSeq:
Event:
Expires:
Accept:
Contact:
Content-Length:
```

3. Evaluation of initial filter criteria

The S-CSCF validates the service profile of this subscriber and evaluates the initial filter criteria. For sip:user1_public1@home1.net the S-CSCF has originating initial Filter Criteria with Service Point Trigger of Method = SUBSCRIBE AND Event = "presence.wininfo" that informs the S-CSCF to route the SUBSCRIBE request to the Application Server sip:ps.home1.net.

4. SUBSCRIBE request (S-CSCF to PS) – see example in table A.6.2-4

The S-CSCF forwards the SUBSCRIBE request to the PS.

Table A.6.2-4: SUBSCRIBE request (S-CSCF to PS)

```
SUBSCRIBE sip:user1_public1@home1.net SIP/2.0
Via: SIP/2.0/UDP scscf1.home1.net;branch=z9hG4bK344a65.1, SIP/2.0/UDP
    pcscf1.visited1.net;branch=z9hG4bK120f34.1, SIP/2.0/UDP
    [5555::aaa:bbb:ccc:ddd]:1357;comp=sigcomp;branch=z9hG4bKehuefdam
P-Access-Network-Info:
Max-Forwards: 68
P-Asserted-Identity: <sip:user1_public1@home1.net>, <tel:+1-212-555-1111>
P-Charging-Vector: icid-value="AyretyU0dm+602IrT5tAFrbHLso=023551024"; orig-ioi=home1.net
P-Charging-Function-Addresses: ccf=[5555::b99:c88:d77:e66]; ccf=[5555::a55:b44:c33:d22];
    ecf=[5555::1ff:2ee:3dd:4ee]; ecf=[5555::6aa:7bb:8cc:9dd]
Privacy:
Route: <sip:ps.home1.net;lr>, <sip:scscf1.home1.net;lr>
Record-Route: <sip:scscf1.home1.net;lr>, <sip:pcscf1.visited1.net;lr>
From:
To:
Call-ID:
CSeq:
Event:
Expires:
Accept:
Contact:
Content-Length:
```

P-Charging-Vector:

The S-CSCF inserts the originating Inter Operator Identifier (IOI) parameter received and populates the identifier of its own network to the originating Inter Operator Identifier (IOI) parameter of this header.

P-Charging-Function-Addresses:

The S-CSCF stores the P-Charging-Function-Addresses header field and passes this header to the PS.

5. Authorization

The PS performs the necessary authorization checks on the originator. In this example, the originator is the owner of the watcher information, so he/she is authorized to see the full watcher information.

In other examples (when the originator is not the owner of the watcher information) subscribers are only allowed to monitor the state of their own subscription, which means that they will receive notifications only containing the state of their own subscription. This requires that a terminating initial Filter Criteria with Service Point Trigger of Method = SUBSCRIBE AND Event = "presence.winfo" ~~AND To = "sip:user1_public1@home1.net"~~ has been defined for the user sip:user1_public1@home1.net.

CR-Form-v7.1

CHANGE REQUEST

⌘ **24.229 CR 795** ⌘ rev **1** ⌘ Current version: **6.5.1** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

Proposed change affects: UICC apps ME Radio Access Network Core Network

Title:	⌘ Sip-profile package in major capabilities		
Source:	⌘ Siemens		
Work item code:	⌘ PRESNC	Date:	⌘ 12/01/2005
Category:	⌘ F	Release:	⌘ Rel-6
	Use <u>one</u> of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900 .		Use <u>one</u> of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)

Reason for change:	⌘ The event package used for notification of document changes is still set to "xcap-change" in the major capabilities of Annex A. However this was changed in IETF to "sip-profile".
Summary of change:	⌘ "sip-profile" event package introduced in major capabilities table for the UA role.
Consequences if not approved:	⌘ Notification of document changes as described in 24.141 does not work

Clauses affected:	⌘ 2, A.2.1.2						
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> Test specifications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	⌘			
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> O&M Specifications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	⌘			
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
Other comments:	⌘						

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at <http://www.3gpp.org/specs/CR.htm>. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under <ftp://ftp.3gpp.org/specs/> For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

**** 1st change ****

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 23.002: "Network architecture".
- [3] 3GPP TS 23.003: "Numbering, addressing and identification".
- [4] 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service description; Stage 2".
- [4A] 3GPP TS 23.107: "Quality of Service (QoS) concept and architecture".
- [5] 3GPP TS 23.218: "IP Multimedia (IM) Session Handling; IM call model".
- [6] 3GPP TS 23.221: "Architectural requirements".
- [7] 3GPP TS 23.228: "IP multimedia subsystem; Stage 2".
- [8] 3GPP TS 24.008: "Mobile radio interface layer 3 specification; Core Network protocols; Stage 3".
- [8A] 3GPP TS 24.141: "Presence service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3".
- [8B] 3GPP TS 24.147: "Conferencing using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3".
- [9] 3GPP TS 25.304: "UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode".
- [9A] 3GPP TS 25.331: "Radio Resource Control (RRC); Protocol Specification".
- [10] 3GPP TS 26.235: "Packet switched conversational multimedia applications; Default codecs".
- [10A] 3GPP TS 27.060: "Mobile Station (MS) supporting Packet Switched Services".
- [11] 3GPP TS 29.061: "Interworking between the Public Land Mobile Network (PLMN) supporting Packet Based Services and Packet Data Networks (PDN)".
- [11A] 3GPP TS 29.162: "Interworking between the IM CN subsystem and IP networks".
- [12] 3GPP TS 29.207: "Policy control over Gq interface".
- [13] 3GPP TS 29.208: "End to end Quality of Service (QoS) signalling flows".
- [13A] 3GPP TS 29.209: "Policy control over Gq interface".
- [14] 3GPP TS 29.228: "IP Multimedia (IM) Subsystem Cx and Dx Interfaces; Signalling flows and message contents".

- [15] 3GPP TS 29.229: "Cx and Dx Interfaces based on the Diameter protocol, Protocol details".
- [16] 3GPP TS 32.240: "Telecommunication management; Charging management; Charging architecture and principles".
- [17] 3GPP TS 32.260: "Telecommunication management; Charging management; IP Multimedia Subsystem (IMS) charging".
- [18] 3GPP TS 33.102: "3G Security; Security architecture".
- [19] 3GPP TS 33.203: "Access security for IP based services".
- [19A] 3GPP TS 33.210: "IP Network Layer Security".
- [20] 3GPP TS 44.018: "Mobile radio interface layer 3 specification, Radio Resource Control Protocol".
- [20A] RFC 2401 (November 1998): "Security Architecture for the Internet Protocol".
- [20B] RFC 1594 (March 1994): "FYI on Questions and Answers to Commonly asked "New Internet User" Questions".
- [20C] RFC 2403 (November 1998) "The Use of HMAC-MD5-96 within ESP and AH".
- [20D] RFC 2404 (November 1998) "The Use of HMAC-SHA-1-96 within ESP and AH".
- [20E] RFC 2462 (November 1998): "IPv6 Address Autoconfiguration".
- [21] RFC 2617 (June 1999): "HTTP Authentication: Basic and Digest Access Authentication".
- [22] draft-ietf-iptel-rfc2806bis-09 (June 2004): "The tel URI for Telephone Numbers".

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

- [23] RFC 2833 (May 2000): "RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals".
- [24] RFC 3761 (April 2004): "The E.164 to Uniform Resource Identifiers (URI) Dynamic Delegation Discovery System (DDDS) Application (ENUM)".
- [25] RFC 2976 (October 2000): "The SIP INFO method".
- [25A] RFC 3041 (January 2001): "Privacy Extensions for Stateless Address Autoconfiguration in IPv6".
- [26] RFC 3261 (June 2002): "SIP: Session Initiation Protocol".
- [27] RFC 3262 (June 2002): "Reliability of provisional responses in Session Initiation Protocol (SIP)".
- [28] RFC 3265 (June 2002): "Session Initiation Protocol (SIP) Specific Event Notification".
- [29] RFC 3311 (September 2002): "The Session Initiation Protocol (SIP) UPDATE method".
- [30] RFC 3312 (October 2002): "Integration of resource management and Session Initiation Protocol (SIP)".
- [31] RFC 3313 (January 2003): "Private Session Initiation Protocol (SIP) Extensions for Media Authorization".
- [32] RFC 3320 (March 2002): "Signaling Compression (SigComp)".
- [33] RFC 3323 (November 2002): "A Privacy Mechanism for the Session Initiation Protocol (SIP)".
- [34] RFC 3325 (November 2002): "Private Extensions to the Session Initiation Protocol (SIP) for Network Asserted Identity within Trusted Networks".
- [34A] RFC 3326 (December 2002): "The Reason Header Field for the Session Initiation Protocol (SIP)".
- [35] RFC 3327 (December 2002): "Session Initiation Protocol Extension Header Field for Registering Non-Adjacent Contacts".

- [36] RFC 3515 (April 2003): "The Session Initiation Protocol (SIP) REFER method".
- [37] RFC 3420 (November 2002): "Internet Media Type message/sipfrag".
- [38] RFC 3608 (October 2003): "Session Initiation Protocol (SIP) Extension Header Field for Service Route Discovery During Registration".
- [39] draft-ietf-mmusic-sdp-new-13 (May 2003): "SDP: Session Description Protocol".

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

- [40] RFC 3315 (July 2003): "Dynamic Host Configuration Protocol for IPv6 (DHCPv6)".
- [41] RFC 3319 (July 2003): "Dynamic Host Configuration Protocol (DHCPv6) Options for Session Initiation Protocol (SIP) Servers".
- [42] RFC 3485 (February 2003): "The Session Initiation Protocol (SIP) and Session Description Protocol (SDP) static dictionary for Signaling Compression (SigComp)".
- [43] RFC 3680 (March 2004): "A Session Initiation Protocol (SIP) Event Package for Registrations".
- [44] Void.
- [45] Void.
- [46] Void.
- [47] Void.
- [48] RFC 3329 (January 2003): "Security Mechanism Agreement for the Session Initiation Protocol (SIP)".
- [49] RFC 3310 (September 2002): "Hypertext Transfer Protocol (HTTP) Digest Authentication Using Authentication and Key Agreement (AKA)".
- [50] RFC 3428 (December 2002): "Session Initiation Protocol (SIP) Extension for Instant Messaging".
- [51] Void.
- [52] RFC 3455 (January 2003): "Private Header (P-Header) Extensions to the Session Initiation Protocol (SIP) for the 3rd-Generation Partnership Project (3GPP)".
- [53] RFC 3388 (December 2002): "Grouping of Media Lines in Session Description Protocol".
- [54] RFC 3524 (April 2003): "Mapping of Media Streams to Resource Reservation Flows".
- [55] RFC 3486 (February 2003): "Compressing the Session Initiation Protocol (SIP)".
- [56] RFC 3556 (July 2003): "Session Description Protocol (SDP) Bandwidth Modifiers for RTP Control Protocol (RTCP) Bandwidth".
- [56A] RFC 3581 (August 2003): "An Extension to the Session Initiation Protocol (SIP) for Symmetric Response Routing".
- [56B] RFC 3841 (August 2004): "Caller Preferences for the Session Initiation Protocol (SIP)"
- [57] ITU-T Recommendation E.164: "The international public telecommunication numbering plan".
- [58] draft-ietf-sip-session-timer-15 (November 2004): "Session Timers in the Session Initiation Protocol (SIP)".

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

- [59] RFC 3892 (September 2004): "The Session Initiation Protocol (SIP) Referred-By Mechanism".
- [60] RFC 3891 (September 2004): "The Session Initiation Protocol (SIP) "Replaces" Header".
- [61] RFC 3911 (October 2004): "The Session Initiation Protocol (SIP) "Join" Header".

- [62] RFC 3840 (August 2004): "Indicating User Agent Capabilities in the Session Initiation Protocol (SIP)"
- [63] RFC 3861 (August 2004): "Address Resolution for Instant Messaging and Presence".
- [70] RFC 3903 (October 2004): "An Event State Publication Extension to the Session Initiation Protocol (SIP)".
- [71] Void.
- [72] RFC 3857 (August 2004): "A Watcher Information Event Template Package for the Session Initiation Protocol (SIP)".
- [74] RFC 3856 (August 2004): "A Presence Event Package for the Session Initiation Protocol (SIP)".
- [75] draft-ietf-simple-event-list-04 (June 2003): "A Session Initiation Protocol (SIP) Event Notification Extension for Collections".

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

- [77] [draft-ietf-sipping-config-framework-05 \(October 2004\): "A Framework for Session Initiation Protocol User Agent Profile Delivery"](#). ~~draft-ietf-simple-xcap-package-01 (February 2004): "A Session Initiation Protocol (SIP) Event Package for Modification Events for the Extensible Markup Language (XML) Configuration Access Protocol (XCAP) Managed Documents"~~.

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

- [78] draft-ietf-sipping-conference-package-03 (February 2004): "A Session Initiation Protocol (SIP) Event Package for Conference State"

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

- [79] draft-ietf-rohc-sigcomp-sip-01 (February 2004): "Applying Signaling Compression (SigComp) to the Session Initiation Protocol (SIP)".

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

****** next change ******

A.2.1 User agent role

A.2.1.1 Introduction

This subclause contains the ICS proforma tables related to the user role. They need to be completed only for UA implementations:

Prerequisite: A.2/1 - - user agent role.

A.2.1.2 Major capabilities

Table A.4: Major capabilities

Item	Does the implementation support	Reference	RFC status	Profile status
	Capabilities within main protocol			
1	client behaviour for registration?	[26] subclause 10.2	o	c3
2	registrar?	[26] subclause 10.3	o	c4
2A	registration of multiple contacts for a single address of record	[26] 10.2.1.2, 16.6	o	o
2B	initiating a session?	[26] subclause 13	o	o
3	client behaviour for INVITE requests?	[26] subclause 13.2	c18	c18
4	server behaviour for INVITE requests?	[26] subclause 13.3	c18	c18
5	session release?	[26] subclause 15.1	c18	c18
6	timestamping of requests?	[26] subclause 8.2.6.1	o	o
7	authentication between UA and UA?	[26] subclause 22.2	c34	c34
8	authentication between UA and registrar?	[26] subclause 22.2	o	n/a
8A	authentication between UA and proxy?	[26] 20.28, 22.3	o	o
9	server handling of merged requests due to forking?	[26] 8.2.2.2	m	m
10	client handling of multiple responses due to forking?	[26] 13.2.2.4	m	m
11	insertion of date in requests and responses?	[26] subclause 20.17	o	o
12	downloading of alerting information?	[26] subclause 20.4	o	o
	Extensions			
13	the SIP INFO method?	[25]	o	n/a
14	reliability of provisional responses in SIP?	[27]	c19	c18
15	the REFER method?	[36]	o	c33
16	integration of resource management and SIP?	[30]	c19	c18
17	the SIP UPDATE method?	[29]	c5	c18
19	SIP extensions for media authorization?	[31]	o	c14
20	SIP specific event notification?	[28]	o	c13
21	the use of NOTIFY to establish a dialog?	[28] 4.2	o	n/a
22	acting as the notifier of event information?	[28]	c2	c15
23	acting as the subscriber to event information?	[28]	c2	c16
24	session initiation protocol extension header field for registering non-adjacent contacts?	[35]	o	c6
25	private extensions to the Session Initiation Protocol (SIP) for network asserted identity within trusted networks?	[34]	o	m
26	a privacy mechanism for the Session Initiation Protocol (SIP)?	[33]	o	m
26A	request of privacy by the inclusion of a Privacy header indicating any privacy option?	[33]	c9	c11
26B	application of privacy based on the received Privacy header?	[33]	c9	n/a
26C	passing on of the Privacy header transparently?	[33]	c9	c12
26D	application of the privacy option "header" such that those headers which cannot be completely expunged of identifying information without the assistance of intermediaries are obscured?	[33] 5.1	c10	c27
26E	application of the privacy option "session" such that anonymization for	[33] 5.2	c10	c27

	the session(s) initiated by this message occurs?			
26F	application of the privacy option "user" such that user level privacy functions are provided by the network?	[33] 5.3	c10	c27
26G	application of the privacy option "id" such that privacy of the network asserted identity is provided by the network?	[34] 7	c10	n/a
27	a messaging mechanism for the Session Initiation Protocol (SIP)?	[50]	o	c7
28	session initiation protocol extension header field for service route discovery during registration?	[38]	o	c17
29	compressing the session initiation protocol?	[55]	o	c8
30	private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP)?	[52]	o	m
31	the P-Associated-URI header extension?	[52] 4.1	c21	c22
32	the P-Called-Party-ID header extension?	[52] 4.2	c21	c23
33	the P-Visited-Network-ID header extension?	[52] 4.3	c21	c24
34	the P-Access-Network-Info header extension?	[52] 4.4	c21	c25
35	the P-Charging-Function-Addresses header extension?	[52] 4.5	c21	c26
36	the P-Charging-Vector header extension?	[52] 4.6	c21	c26
37	security mechanism agreement for the session initiation protocol?	[48]	o	c20
38	the Reason header field for the session initiation protocol?	[34A]	o	o (note 1)
39	an extension to the session initiation protocol for symmetric response routing?	[56A]	o	x
40	caller preferences for the session initiation protocol?	[56B]	C29	c29
40A	the proxy-directive within caller-preferences?	[56B] 9.1	o.5	o.5
40B	the cancel-directive within caller-preferences?	[56B] 9.1	o.5	o.5
40C	the fork-directive within caller-preferences?	[56B] 9.1	o.5	c28
40D	the recurse-directive within caller-preferences?	[56B] 9.1	o.5	o.5
40E	the parallel-directive within caller-preferences?	[56B] 9.1	o.5	c28
40F	the queue-directive within caller-preferences?	[56B] 9.1	o.5	o.5
41	an event state publication extension to the session initiation protocol?	[70]	o	c30
42	SIP session timer?	[58]	c19	c19
43	the SIP Referred-By mechanism?	[59]	o	c33
44	the Session Initiation Protocol (SIP) "Replaces" header?	[60]	c19	c19 (note 1)
45	the Session Initiation Protocol (SIP) "Join" header?	[61]	c19	c19 (note 1)
46	the callee capabilities?	[62]	o	c35

c2:	IF A.4/20 THEN o.1 ELSE n/a - - SIP specific event notification extension.
c3:	IF A.3/1 OR A.3/4 THEN m ELSE n/a - - UE or S-CSCF functional entity.
c4:	IF A.3/4 THEN m ELSE IF A.3/7 THEN o ELSE n/a - - S-CSCF or AS functional entity.
c5:	IF A.4/16 THEN m ELSE o - - integration of resource management and SIP extension.
c6:	IF A.3/4 OR A.3/1 THEN m ELSE n/a. - - S-CSCF or UE.
c7:	IF A.3/1 OR A.3/4 OR A.3/7A OR A.3/7B OR A.3/7D THEN m ELSE n/a - - UA or S-CSCF or AS acting as terminating UA or AS acting as originating UA or AS performing 3 rd party call control.
c8:	IF A.3/1 THEN m ELSE n/a - - UE behaviour.
c9:	IF A.4/26 THEN o.2 ELSE n/a - - a privacy mechanism for the Session Initiation Protocol (SIP).
c10:	IF A.4/26B THEN o.3 ELSE n/a - - application of privacy based on the received Privacy header.
c11:	IF A.3/1 OR A.3/6 THEN o ELSE n/a - - UE or MGCF.
c12:	IF A.3/7D THEN m ELSE n/a - - AS performing 3rd-party call control.
c13:	IF A.3/1 OR A.3/2 OR A.3/4 THEN m ELSE o - - UE behaviour or S-CSCF.
c14:	IF A.3/1 THEN m ELSE IF A.3/2 THEN o ELSE n/a - - UE or P-CSCF.
c15:	IF A.4/20 and A.3/4 THEN m ELSE o - - SIP specific event notification extensions and S-CSCF.
c16:	IF A.4/20 and (A.3/1 OR A.3/2) THEN m ELSE o - - SIP specific event notification extension and UE or P-CSCF.
c17:	IF A.3/1 or A.3/4 THEN m ELSE n/a - - UE or S-CSCF.
c18:	IF A.4/2B THEN m ELSE n/a - - initiating sessions.
c19:	IF A.4/2B THEN o ELSE n/a - - initiating sessions.
c20:	IF A.3/1 THEN m ELSE n/a - - UE behaviour.
c21:	IF A.4/30 THEN o.4 ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP).
c22:	IF A.4/30 AND (A.3/1 OR A.3/4) THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and S-CSCF or UA.
c23:	IF A.4/30 AND A.3/1 THEN o ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and UE.
c24:	IF A.4/30 AND A.3/4) THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and S-CSCF.
c25:	IF A.4/30 AND (A.3/1 OR A.3/4 OR A.3/7A OR A.3/7D) THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and UE, S-CSCF or AS acting as terminating UA or AS acting as third-party call controller.
c26:	IF A.4/30 AND (A.3/6 OR A.3/7A OR A.3/7B or A.3/7D) THEN m ELSE n/a - - private header extensions to the session initiation protocol for the 3rd-Generation Partnership Project (3GPP) and MGCF, AS acting as a terminating UA, or AS acting as an originating UA, or AS acting as third-party call controller.
c27:	IF A.3/7D THEN o ELSE x - - AS performing 3rd party call control.
c28:	IF A.3/1 THEN m ELSE o.5 - - UE.
c29:	IF A.4/40A OR A.4/40B OR A.4/40C OR A.4/40D OR A.4/40E OR A.4/40F THEN m ELSE n/a - - support of any directives within caller preferences for the session initiation protocol.
c30:	IF A.3A/1 OR A.3A/2 THEN m ELSE IF A.3/1 THEN o ELSE n/a - - presence server, presence user agent, UE, AS.
c33:	IF A.3/11 OR A.3/12 OR A.4/44 THEN m ELSE o - - conference focus or conference participant or the Session Initiation Protocol (SIP) "Replaces" header.
c34:	IF A.4/44 OR A.4/45 THEN m ELSE n/a - - the Session Initiation Protocol (SIP) "Replaces" header or the Session Initiation Protocol (SIP) "Join" header.
c35:	IF A.3/4 THEN m ELSE IF (A.3/1 OR A.3/6 OR A.3/7 OR A.3/8) THEN o ELSE n/a - - UE, MGCF, AS MRFC or S-CSCF functional entity.
o.1:	At least one of these capabilities is supported.
o.2:	At least one of these capabilities is supported.
o.3:	At least one of these capabilities is supported.
o.4:	At least one of these capabilities is supported.
o.5:	At least one of these capabilities is supported.
NOTE 1:	At the MGCF, the interworking specifications do not support a handling of the header associated with this extension.

Prerequisite A.5/20 - - SIP specific event notification

Table A.4A: Supported event packages

Item	Does the implementation support	Subscriber			Notifier		
		Ref.	RFC status	Profile status	Ref.	RFC status	Profile status
1	reg event package?	[43]	c1	c3	[43]	c2	c4
2	refer package?	[36] 3	c13	c13	[36] 3	c13	c13
3	presence package?	[74] 6	c1	c5	[74] 6	c2	c6
4	eventlist with underlying presence package?	[75], [74] 6	c1	c7	[75], [74] 6	c2	c8
5	presence.wininfo template-package?	[72] 4	c1	c9	[72] 4	c2	c10
6	xcap-change-sip-profile package?	[77] 23	c1	c11	[77] 23	c2	c12
7	conference package?	[78] 3	c1	c21	[78] 3	c1	c22

c1: IF A.4/23 THEN o ELSE n/a - - acting as the subscriber to event information.
 c2: IF A.4/22 THEN o ELSE n/a - - acting as the notifier of event information.
 c3: IF A.3/1 OR A.3/2 THEN m ELSE IF A.3/7 THEN o ELSE n/a - - UE, P-CSCF, AS.
 c4: IF A.3/4 THEN m ELSE n/a - - S-CSCF.
 c5: IF A.3A/3 OR A.3A/4 THEN m ELSE IF A.4/23 THEN o ELSE n/a - - resource list server or watcher, acting as the subscriber to event information.
 c6: IF A.3A/1 THEN m ELSE IF A.4/22 THEN o ELSE n/a - - watcher, acting as the notifier of event information.
 c7: IF A.3A/4 THEN m ELSE IF A.4/23 THEN o ELSE n/a - - watcher, acting as the subscriber to event information.
 c8: IF A.3A/3 THEN m ELSE IF A.4/22 THEN o ELSE n/a - - resource list server, acting as the notifier of event information.
 c9: IF A.3A/1 THEN m ELSE IF A.4/23 THEN o ELSE n/a - - presence user agent, acting as the subscriber to event information.
 c10: IF A.3A/2 THEN m ELSE IF A.4/22 THEN o ELSE n/a - - presence server, acting as the notifier of event information.
 c11: IF A.3A/2 OR A.3A/4 THEN o ELSE IF A.4/23 THEN o ELSE n/a - - watcher or presence user agent, acting as the subscriber to event information.
 c12: IF A.3A/1 OR A.3A/3 THEN m ELSE IF A.4/22 THEN o ELSE n/a - - presence server or resource list server, acting as the notifier of event information.
 c13: IF A.4/15 THEN m ELSE n/a - - the REFER method.
 c21: IF A.3A/12 THEN m ELSE IF A.4/23 THEN o ELSE n/a - - conference participant or acting as the subscriber to event information.
 c22: IF A.3A/11 THEN m ELSE IF A.4/22 THEN o ELSE n/a - - conference focus or acting as the notifier of event information.