3GPP TSG CN Plenary Meeting #20   **NP-030302**
4th - 6th June 2003. HÄMEENLINNA, Finland.   Revision of NP-030285
Source: **CN1**

Title: **Support of the Presence Service in Core Network Signalling Protocols**

Agenda item: **9.4**

Document for: **APPROVAL**

3GPP TSG-CN1 Meeting #29   *Tdoc N1-030610*
Sophia-Antipolis, France,   31 March – 04 April 2003
was tdoc N1-030406, N1-030546

Source: Nokia

Title: Work Item Description for Presence (was NP-020491)

Agenda item: 8.8

Document for: APPROVAL

Proposed changes

The following changes are required:

1. Presence should be documented in a separate TS.

The indicated approval dates shall be adjusted to the actual Rel-6 time frame as soon as decided.

Note that all changes from the last approved rework (N1-030545) have been kept as the WID was not presented to CN plenary in the meantime.

Work Item Description

Title

Support of the Presence Service in Core Network Signalling Protocols

1   3GPP Work Area

	Radio Access
X	Core Network
	Services

2   Linked work items

Support of the Presence Capability (22.141), unique ID = 2499
Support of the Presence Service Architecture (23.1841), unique ID = 2502

3   Justification

The concept of presence, whereby users (presentities) make their presence status known to other parties of their choice, allowing enhancement of various services such as group and private "chats" to take place. Presence is an attribute providing a new capability to be exploited by other services. The concept of presence, will enable other multimedia services to exploit this key enabler to support other advanced multimedia services and communications.

Examples of multimedia services that could potentially exploit the presence capability include "chat", e-mail, multimedia messaging, instant messaging etc.

4   Objective

The objectives of this work item:-
- To define and develop the signalling protocols to support a presence service to facilitate multimedia services in a wireless network as defined by 22.141 and 23.141.
- To ensure that these protocols are interoperable with existing presence services so that the wireless service can integrate with external non-wireless services.
- To ensure that the specifications cover also the data manipulation related issues for presence.

5   Service Aspects

Presence service shall support the gathering and distribution of the current presence and availability information of subscribers in the wireless and non-wireless networks.

6   MMI-Aspects

Services exploiting the presence service, will enable watchers to request notification of changes in status information of other users, and enable setting the visibility of users.

7   Charging Aspects

The ability to charge for access to, and use of, presence information shall be supported.

8   Security Aspects

Any presence solution shall provide a secure procedure to gain access to, and use, presence information.

9   Impacts

Affects:	USIM	ME	AN	CN	Others
Yes		X		X	
No	X		X		
Don't know					X

10   Expected Output and Time scale (to be updated at each plenary)

The results of this Work Item shall be provided in a Technical Standard or CRs to existing Technical Standards.

For WG CN1, in order to postpone creation of Release 6 versions of various specifications, and in order to attain stability for the material to be incorporated, material for these specifications will be gathered in a non-published TR.

For WG CN2, network supplied presence information will rely on capabilities provided by 23.078 and 29.002 (CAMEL based information). No additional changes to the R5 specifications of these documents to support Presence Service are expected.

For WG CN5, an API-to-Protocol mapping recommendation for the PAM API to Presence Protocol needs to be created. As a result, discrepancies between functional support in the API and in the Protocol may become apparent, requiring modifications to the PAM API specification in 3G TS 29.198-14.

The following Work Plan is proposed.

New specifications						
Spec No.	Title	Prime rsp. WG	2ndary rsp. WG(s)	Presented for information at plenary#	Approved at plenary#	Comments
24.841de	Presence Service based on SIP; Functional Models Flows and Protocol Details;	CN1		CN #2018	CN #2118	At CN #18 contents of this TR would also be presented as CRs to other specifications
TS 24.xyz	Presence Service using the IM CN subsystem; Stage 3	CN1		CN#21	CN#22 (December 2003)	Includes SIP and SDP specific presence procedures and call flows for UE and AS. Includes functional signalling for presence specific data manipuliation over the Ut interface based on IETF solutions.
29.998-14-x	Presence Service to OSA GW mapping	CN5		CN#2118	CN#2219	CN5 need to identify if such a mapping document is required between the OSA API and a Presence Service within 3GPP.

Affected existing specifications				
Spec No.	CR	Subject	Approved at plenary#	Comments
24.228		Signalling flows for the IP multimedia call control based on SIP and SDP	CN #2219	May wish to provide an alternative specification showing flows specifically for Presence. This depends on the degree of integration with the existing flows that would be required.
24.229		IP Multimedia Call Control Protocol based on SIP and SDP	CN #2219	Define use of event packages.
23.218		IP Multimedia (IM) Session Handling; IP multimedia (IM) call model	CN #2219	Define presence server as an application server, and watcher applications as an application server.
29.002		Data flows from the Network "agent" to existing network entities	CN#19 (March 2003)22	Interfaces identified are Pc, Pg, Pl. These interfaces are expected to reutilise existing functionality. It needs to be determined if changes are required in this area.
29.228		Data flows for the Presentity Presence Proxy to the HSS.	CN#19 (March 200322)	Interfacesidentifie is Px = Cx. To locate the Presence server of the presentity.
29.229		Data fows for the Presentity Presence Proxy to the HSS.	CN#19 (March 2003)22	Interface identified is Px = Cx. To locate the Presence server of the presentity.

29.328		Data flows for the Network agent to the HSS.	CN#~~19 (March 2003)~~22	Interface identified is Ph = Sh. This interface is expected to reutilise existing functionality. It needs to be determined if changes are required in this area.
29.329		Data flows for the Network agent to the HSS.	CN#~~19 (March 2003)~~22	Interface identified is Ph = Sh. This interface is expected to reutilise existing functionality. It needs to be determined if changes are required in this area.
23.078		CAMEL-specific data flows between the Network Presence Agent and existing network entities.	CN#~~19 (March 2003)~~22	Interfaces identified are Pc, Pg, Pl. These interfaces are expected to reutilise existing CAMEL Phase 4 capabilities (i.e. Any Time Interrogation and Mobility Management). No changes have been identified for the Rel-5 specification. No change is expected at present time.
29.061			CN#~~19 (March 2003)~~22	Interface identified is Pk. This interface is expected to reutilise existing functionality. It needs to be determined if changes are required in this area.
29.198-14		Application Programming Interface (API); Part 14: Presence and Availability Management	CN#~~19 (March 2003)~~22	The API to Protocol mapping recommendation (TR) for the Presence and Availability Management API.
~~Affected existing or new IETF specifications~~				
~~Spec No.~~	~~CR~~	~~Subject~~	~~Approved at plenary #~~	~~Comments~~
~~draft-ietf-simple-presence~~		~~SIP Extensions for Presence~~		~~defines the presence event - will need to be normatively referenced from 24.229~~
~~draft-ietf-simple-winfo-format~~		~~An XML Based Format for Watcher Information~~		~~defines the XML schema of watcher information for a resource - will need to be normatively referenced from 24.229~~

~~draft-ietf-simple-winfo-package~~		~~A SIP Event Sub-Package for Watcher Information~~		~~defines the template package for watcher information - will need to be normatively referenced from 24.229. This needs to provide any 3GPP specific presence event extensions identified by SA1 and SA2 presence specifications~~
~~draft-ietf-impp-cpim-pidf~~		~~Common Presence and Instant Messaging (CPIM) Presence Information Data Format~~		~~defines the contents of the presence package - will need to be normatively referenced from 24.229~~
~~draft-ietf-impp-cpim-msgfmt-03.txt~~		~~Common Presence and Instant Messaging Message Format~~		

11 Work item raporteurs

Keith Drage
E-mail: drage@lucent.com
Tel No: +44 1793 736249

12 Work item leadership

CN1

13 Supporting Companies

Lucent Technologies~~??~~, ~~Dynamicsoft,~~ MMO2~~??~~, Nokia, Motorola~~??~~, AT&T Wireless~~??~~, ~~Hutchison 3G??~~ ~~UK??~~, NTT DoCoMo~~??~~, Alcatel~~??~~

14 Classification of the WI (if known)

	Feature (go to 14a)
x	Building Block (go to 14b)
	Work Task (go to 14c)

14a   The WI is a Feature: List of building blocks under this feature

(list of Work Items identified as building blocks)

14b   The WI is a Building Block: parent Feature

(one Work Item identified as a feature)
Support of Presence Capability (unique ID = 2499)

14c   The WI is a Work Task: parent Building Block

(one Work Item identified as a building block)