# 3GPP TSG-CN Meeting #24

2<sup>nd</sup> – 4<sup>th</sup> June 2004. Seoul, Korea.

Source: TSG CN WG 1

Title: Revision of IMS Stage-3 Enhancements

Agenda item: 9.1

Document for: APPROVAL

#### Introduction

The IMS2 Work Item is revised in order

- explicitly remove IMS conferencing media policy control from the scope of Rel-6, due to the slow progress in IETF; and
- to update the dates at which the documents are presented for information and for approval to the plenary.

# **Work Item Description**

### **Title**

IMS Stage-3 Enhancements

#### 1 3GPP Work Area

|   | Radio Access |
|---|--------------|
| X | Core Network |
|   | Services     |

## 2 Linked work items

Stage-2 of IMS Phase 2 (32027)

Emergency Call Enhancements for IP & PS Based Calls – stage 3 (32045)

Interworking between IMS and CS networks (2047)

Interworking between IMS and IP networks (2048)

Interoperability and Commonality between IP Multimedia Systems using different "IP-connectivity Networks" (11032)

#### 3 Justification

In Release 5, the IMS was defined to support IP Multimedia services. The feature set in Release 5 provides a basis for IP Multimedia support. For some capabilities already identified, Stage 2 was not completed as part of Release 5 and the need for other new capabilities is being identified.

## 4 Objective

The objectives of this work item are to finalise Stage 3 work on postponed Release 5 features and to refine and further develop support of the IP Multimedia services in a wireless network. The areas to be considered are:

1. IM CN subsystem local services

This item is to provide any additional SIP and SDP (or other SIP message body) work that may be necessary to support access to services in the local serving IM CN subsystem.

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Note: It is not yet clear what work will be required in CN1 for this work item.

#### 2. IM CN subsystem Group management

This item is to provide SIP and SDP (or other SIP message body) specification necessary to support the IM CN subsystem capabilities to facilitate group-enabled services (e.g., chat).

#### 3. IM CN subsystem Conferencing

This item is to provide any additional SIP and SDP (or other SIP message body) specification that may be necessary in support of conferencing services. Additionally this item is to provide data manipulation for conferencing (CPCP) in IMS.

Note: There is ongoing work in IETF SIP and SIPPING groups that needs to be taken into account in conjunction with this area.

Note: As the work in IETF on media policy control for conferencing is not progressing, these issues are left out from the Rel-6 time frame.

## 4. IM CN subsystem Messaging

This item is to provide the SIP and SDP (or other SIP message body) support necessary to support the capabilities required for messaging services in the IM CN subsystem being defined by SA1.

Note: This is subject to a feasibility study at stage 1, and work in this area should not commence until that stage 1 work has determined that this work area should proceed.

#### 5. Additional SIP Capabilities Support

This item is to provide any SIP and SDP (or other SIP message body) specification necessary to support desired SIP capabilities that are not covered in Release 5 (e.g., forking).

Note: This work area needs to explicitly identify enhancements before they can be included in the expected output and timescale table.

## 6. End-to-end aspects for interworking with other IP networks

This item is to provide any SIP and SDP (or other SIP message body) specification necessary to support interworking with other IP networks. This may include changes to preconditions requirements, and other material to support interworking with Ipv4 networks

These are based on stage 2 work performed under work item: "IMS Stage-2 Enhancements"

Additionally the following stage 3 specific area is covered by this work item:

7. Review of additional capabilities provided in SIP by IETF, and provide documentation as whether these capabilities are supported in the IM CN subsystem or not

In addition to the existing interfaces on IMS some of the listed areas e.g. conferencing, require work on data manipulation related signalling via the Ut interface.

## 5 Service Aspects

None. Service aspects are covered by other work item descriptions.

## 6 MMI-Aspects

None. MMI Aspects are covered by other work item descriptions.

### 7 Charging Aspects

None. Charging Aspects are covered by other work item descriptions. Within release 5 there are protocol mechanism providing in support of charging, and these may require enhancement by work areas described by this work item.

#### 8 Security Aspects

None. Security Aspects are covered by other work item descriptions. Within release 5 there are protocol mechanism providing in support of security, and these may require enhancement by work areas described by this work item.

# 9 Impacts

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

|              | New specifications  |   |                                      |             |                      |                                     |                                     |  |
|--------------|---|---|--------------------------------------|-------------|----------------------|-------------------------------------|-------------------------------------|--|
| Spec No.     | Title   |   | Prime<br>rsp. WG                     | rsp.        | info                 | esented for<br>ormation at<br>nary# | Approved at plenary#                | Comments   |
| TR<br>29.847 | Conferencing based<br>on SIP, SDP and<br>other protocols,<br>Functional Models,<br>information flows and<br>protocol details<br>(Release 6) |   | CN1                                  |             |                      | I#21<br>eptember<br>03)             | CN#24<br>(June<br>2004)             | Includes SIP and SDP specific conferencing procedures and call flows for UE, AS and CSCFs. Includes signalling for conferencing specific data manipuliation over the Ut interface.                             |
| TS<br>24.147 | Conferencing using<br>the IM CN<br>subsystem; Stage 3   |   | CN1                                  |             | CN#24 (June<br>2004) |                                     | CN#25<br>(Septemb<br>er 2004)       | Includes SIP and SDP specific conferencing procedures and call flows for UE and AS. Includes functional signalling for conferencing specific data manipuliation over the Ut interface based on IETF solutions. |
| TS<br>24.247 | Messaging service using the IM CN subsystem; Stage 3  |   | CN1                                  |             | CN#24 (June<br>2004) |                                     | CN#25<br>(Septemb<br>er 2004)       | Includes SIP specific<br>messaging procedures<br>and call flows for UE and<br>AS.  |
|              | •   | _   | Affe                                 | cted existi | ting specifications  |                                     |                                     |  |
| Spec No.     | CR  | Subject   |                                      |             |                      | Approved at plenary#                |                                     | Comments   |
|              |   |   |                                      |             |                      |                                     |                                     |  |
|              |   |   |                                      |             |                      |                                     |                                     |  |
| 23.218       |   | Enhancements  | ts in support of IM CN cal services  |             | CN                   | CN#25                               |                                     | Impact of work area to be evaluated  |
| 24.228       |   | Enhancements subsystem loc  | s in support of IM CN                |             | CN#25                |                                     | Impact of work area to be evaluated |  |
| 24.229       |   | Enhancements  | in support of IM CN                  |             | CN#25                |                                     | Impact of work area to be           |  |
| 23.218       |   | subsystem local services  Enhancements in support of IM CN subsystem Conferencing |                                      |             | CN                   | CN#25                               |                                     | evaluated Incorporation of IETF work, possibly after submission of 3GPP requirements to IETF   |
| 24.228       |   | Enhancements<br>subsystem Co  | s in support of IM CN<br>onferencing |             |                      | CN#25                               |                                     | Incorporation of IETF<br>work, possibly after<br>submission of 3GPP<br>requirements to IETF  |
| 24.229       |   | Enhancements<br>subsystem Co  |                                      |             | CN                   | CN#25                               |                                     | Incorporation of IETF work, possibly after submission of 3GPP requirements to IETF Conferencing specific procedures at CSCFs (if applicable) Messaging specific procedures at CSCFs (if applicable)            |

| 23.218 | Enhancements in support of IM CN subsystem Messaging   | CN#25 | Incorporation of MESSAGE method, and also IETF solution for a session-based mechanism |
|--------|--|-------|---|
| 24.228 | Enhancements in support of IM CN subsystem Messaging   | CN#25 | Incorporation of MESSAGE method, and also IETF solution for a session-based mechanism |
| 24.229 | Enhancements in support of IM CN subsystem Messaging   | CN#25 | Incorporation of MESSAGE method, and also IETF solution for a session-based mechanism |
| 23.218 | Enhancements in support of end-<br>to-end aspects for interworking with<br>other IP networks   | CN#25 |   |
| 24.228 | Enhancements in support of end-<br>to-end aspects for interworking with<br>other IP networks   | CN#25 |   |
| 24.229 | Enhancements in support of end-<br>to-end aspects for interworking with<br>other IP networks   | CN#25 |   |
| 23.218 | Review of additional capabilities provided in SIP by IETF, and provide documentation as whether these capabilities are supported in the IM CN subsystem or not | CN#25 | Currently this includes session-timer, caller-preferences, referred-by                |
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# Work item raporteurs

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## Work item leadership

CN1

# 13 Supporting Companies

Lucent Technologies, Siemens, Qualcomm, Nokia

## 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

IMS Phase 2 (unique id 32021)

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

(one Work Item identified as a building block)