

3GPP TSG-CN Meeting #23
10th - 12th March 2004. Phoenix, USA.

NP-040035

Source: TSG CN WG 1
Title: CR to Rel-6 on Work Item IMSCOOP towards 24.229
Agenda item: 9.11
Document for: APPROVAL

Introduction:

This document contains 1 CR, **Rel-6** on Work Item "IMSCOOP", that have been agreed by **TSG CN WG1** in **CN1#33 meeting**, and are forwarded to TSG CN Plenary meeting #23 for approval.

Spec	CR	Rev	Phase	Subject	Cat	Version-Current	Version-New	Doc-2nd-Level	Meeting-2nd-Level
24.229	603		Rel-6	Cleanup for IP-CAN and GPRS	D	6.1.0	6.2.0	N1-040304	N1-33

CR-Form-v7

CHANGE REQUEST

⌘ **24.229** CR **603** ⌘ rev - ⌘ Current version: **6.1.0** ⌘

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:	⌘ Cleanup for IP-CAN and GPRS		
Source:	⌘ Ericsson		
Work item code:	⌘ IMSCOOP	Date:	⌘ 10/02/2004
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: 2 (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)

Reason for change:	⌘ Some reference to media streams seems needed in the generic text in clause 9.
Summary of change:	⌘ A link between the generic text in clause 9 and the actual description of each IP-CAN seems needed in order to have a consistent specification. The editors note is removed, and an introductory text for media and reference to GPRS and annex B is included.
Consequences if not approved:	⌘ Possible misunderstandings during design may occur.

Clauses affected:	⌘ 9.1, 9.2.2, 9.2.3								
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;">⌘</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N	⌘	X	⌘	X	⌘	X
Y	N								
⌘	X								
⌘	X								
⌘	X								
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.

9 IP-Connectivity Access Network aspects when connected to the IM CN subsystem

9.1 Introduction

A UE accessing the IM CN subsystem utilises the services supported by the IP-CAN to provide packet-mode communication between the UE and the IM CN subsystem. General requirements for the UE on the use of these packet-mode services are specified in this clause.

[Possible aspects particular to each IP-CAN is described separately for each IP-CAN.](#)

~~Editor's Note: Annex B may include further generic material that needs to be included in this clause. Which material in annex B applies to IP-Connectivity Access Network in general and which is specific to the GPRS access needs to be further investigated.~~

9.2 Procedures at the UE

9.2.1 Connecting to the IP-CAN and P-CSCF discovery

Prior to communication with the IM CN subsystem, the UE shall:

- a) establish a connection with the IP-CAN;
- b) obtain an IP address using either the standard IETF protocols (e.g., DHCP or IPCP) or a protocol that is particular to the IP-CAN technology that the UE is utilising. The obtained IP address shall be fixed throughout the period the UE is connected to the IM CN subsystem, i.e. from the initial registration and at least until the last deregistration; and
- c) acquire a P-CSCF address(es).

The methods for acquiring a P-CSCF address(es) are:

- I. Employ Dynamic Host Configuration Protocol for IPv6 (DHCPv6) RFC 3315 [40] and the DHCPv6 options for SIP servers RFC 3319 [41].

The UE shall either:

- in the DHCP query, request a list of SIP server domain names of P-CSCF(s) and the list of Domain Name Servers (DNS); or
- request a list of SIP server IPv6 addresses of P-CSCF(s).

- II. Obtain the P-CSCF address(es) by employing a procedure that the IP-CAN technology supports. (e.g. GPRS).

When acquiring a P-CSCF address(es) the UE can freely select either method I or II.

The UE may also request a DNS Server IPv6 address(es) as specified in RFC 3315 [40].

9.2.2 Handling of the IP-CAN

[The UE shall ensure that appropriate resources are available for the media flow\(s\) on the IP-CAN\(s\) related to a SIP-session. The means to ensure this is dependant on the characteristics for each IP-CAN, and is described separately for each IP-CAN in question.](#)

[GPRS is described in annex B.](#)

9.2.32 Special requirements applying to forked responses

Since the UE does not know that forking has occurred until a second provisional response arrives, the UE will request the radio/bearer resources as required by the first provisional response. For each subsequent provisional response that may be received, different alternative actions may be performed depending on the requirements in the SDP answer:

- the UE has sufficient radio/bearer resources to handle the media specified in the SDP of the subsequent provisional response, or
- the UE must request additional radio/bearer resources to accommodate the media specified in the SDP of the subsequent provisional response.

NOTE 1: When several forked responses are received, the resources requested by the UE is the “logical OR” of the resources indicated in the multiple responses to avoid allocation of unnecessary resources. The UE does not request more resources than proposed in the original INVITE request.

NOTE 2: When service-based local policy is applied, the UE receives the same authorization token for all forked requests/responses related to the same SIP session.

When a first final 200 (OK) response for the INVITE request is received for one of the early dialogues, the UE proceeds to set up the SIP session using the radio/bearer resources required for this session. Upon the reception of a first final 200 (OK) response for the INVITE request, the UE shall release all unneeded radio/bearer resources.