

Source: TSG SA WG2
Title: CRs on 23.221
Agenda Item: 7.2.3

The following Change Requests have been approved by TSG SA WG2 and are requested to be approved by TSG SA plenary #21.

Note: the source of all these CRs is now S2, even if the name of the originating company(ies) is still reflected on the cover page of all the attached CRs.

Tdoc #	Title	Spec	CR #	cat	Version in	REL	WI	S2 meeting
S2-032709	Combination of service domains	23.221	040r1	F	5.7.0	5	IMS	S2-33
S2-033264	Combination of service domains	23.221	041	A	6.0.0	6	IMS	S2-34

Note: CR41 was added after S2 #34 meeting as a pure mirror of CR40r1.

CHANGE REQUEST

⌘ **23.221 CR 040** ⌘ rev **1** ⌘ Current version: **5.7.0** ⌘

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:	⌘ Combination of service domains		
Source:	⌘ Nortel Networks		
Work item code:	⌘ IMS	Date:	⌘ 04/07/2003
Category:	⌘ F	Release:	⌘ Rel-5
	<i>Use one of the following categories:</i> 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 .		<i>Use one of the following releases:</i> 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:	⌘	23.221 describes IP Addressing domains involved in PS domain and IM Services. Each IP network is associated to a single IP addressing domain. It is clarified that it is allowed to have multiple types of service domains belonging to one IP network, thus same addressing domain. This ensures that various service domains can be accessed from one IP addressing domain. For example an operator can use one single APN to provide PS domain and IM services.
Summary of change:	⌘	State that there can be a combination of service domains within the same IP network.
Consequences if not approved:	⌘	Unnecessary restrictions for the operator to separate service domains artificially.

Clauses affected:	⌘ 5.3											
Other specs affected:	<table style="border-collapse: collapse;"> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">Y</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">N</td> <td rowspan="3" style="padding-left: 10px;">Other core specifications</td> <td rowspan="3" style="padding-left: 20px;">⌘</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td>Test specifications</td> <td rowspan="2" style="padding-left: 20px;">⌘</td> </tr> <tr> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td style="border: 1px solid black; padding: 2px; text-align: center;">X</td> <td>O&M Specifications</td> </tr> </table>	Y	N	Other core specifications	⌘	X	X	Test specifications	⌘	X	X	O&M Specifications
Y	N	Other core specifications	⌘									
X	X					Test specifications	⌘					
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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.

5.3 Address management

The UMTS network may be implemented as a number of logically separate IP networks which contain different parts of the overall system. In this discussion each of these elements is referred to as an “IP Addressing Domain”. Within an “IP Addressing Domain” it is required that the nodes within the domain are part of a consistent non-overlapping IP-address space. It is also required that IP packets may be routed from any node in the domain to any other node in the domain using conventional IP routing. In a real implementation an IP Addressing Domain may be a physically separate IP network or an IP VPN.

IP Addressing Domains may be interconnected at various points. At these points of interconnect gateways, firewalls or NATs may be present. It is not guaranteed that IP packets from one IP Addressing Domain can be directly routed to any inter-connected IP Addressing Domain. Rather inter-Domain traffic may be handled via firewalls or tunnels. This implies that different IP Addressing Domains can have different (and possibly overlapping) address spaces.

Figure 5-4 below shows an example of the IP Addressing Domains involved in PS-domain and IP-subsystem services.

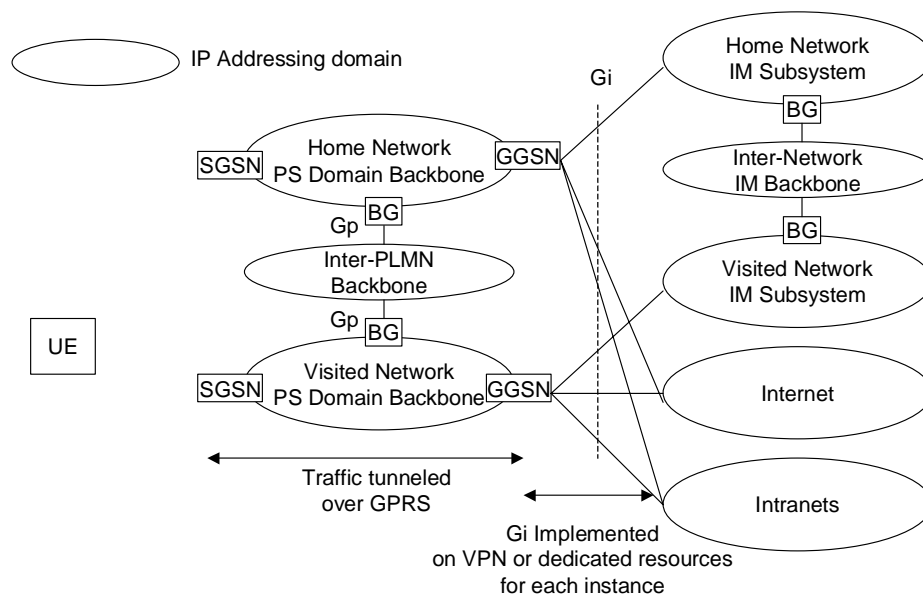


Figure 5-4 – IP Addressing Domains Involved In PS-Domain and IM Services

Though UMTS permits the possibility of using different IP Addressing Domains as shown above it is possible that several different IP Addressing Domains fall under a common co-operative management regime. In this case the different IP Addressing Domains may be implemented as a single administrative domain at the operator’s discretion, thus using a common IP-address space.

A UE accessing services in either an IM subsystem, the Internet, or an external Intranet, [or a combination of these service domains within the same IP network](#), requires an IP address that is part of the target network’s IP Addressing Domain. For each of these IP networks, the IP address is linked to a specific PDP context, or set of PDP contexts sharing this IP address [via a single APN](#).

When the UE establishes the PDP context to access an IP network, it may use an existing PDP context if it has an active context with a compatible IP addressing domain and quality of service profile.

CHANGE REQUEST

⌘ **23.221 CR 041** ⌘ rev - ⌘ Current version: **6.0.0** ⌘

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:	⌘ Combination of service domains		
Source:	⌘ Nortel Networks		
Work item code:	⌘ IMS	Date:	⌘ 02/09/2003
Category:	⌘ A	Release:	⌘ Rel-6
	<i>Use one of the following categories:</i> 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 .		<i>Use one of the following releases:</i> 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)

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Y	N					
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Other comments:	⌘	This CR was created after the SA2#34 meeting to provide a mirror Rel-6 to the Rel-5 version (CR#40r1) for the SA#21 plenary.				

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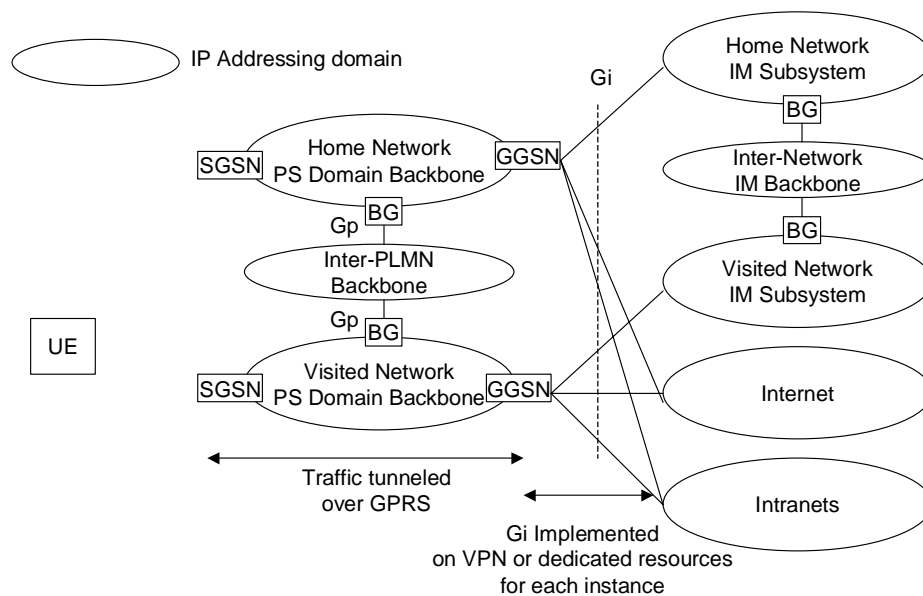


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