3GPP TSG-SA Meeting #26

13th – 16th December 2004. Athens, Greece.

TSGS#26(04)0757

Source:	**TSG SA WG2**	
Title:	**CRs on 23.240 (GUP Stage 2)**	
Agenda item:	**7.2.3**	
Document for:	**APPROVAL**	

The following CRs have been agreed by TSG SA WG2 and are requested to be approved by TSG SA plenary #26.

Note: the source of all these CRs is now SA2, 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	Rev	Cat	C_Ver	Rel	WI
S2-043205	Removal of UE as GUP Data Repository	23.240	25		F	6.5.0	Rel-6	GUP

CR-Form-v7.1

CHANGE REQUEST

| ⌘ | **23.240** CR **025** | ⌘**rev** | **-** | ⌘ | Current version: | **6.5.0** | ⌘ |

*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⌘ **X**   ME **X** Radio Access Network ☐   Core Network **X**

Title: ⌘	Removal of UE as GUP Data Repository	
Source: ⌘	Nokia	
Work item code:⌘	GUP	**Date:** ⌘ 06/10/2004

Category: ⌘	**F**	**Release:** ⌘	Rel-6

Use one 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 one 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: ⌘	TSG-SA #25 approved CR 006 (SP-040507) against TS 22.240 on UE requirements corrections. It removes the requirement of storing GUP components in the terminal, as well as notes that UE management standardisation is handled by the Device management group in OMA. This CR makes the required changes in GUP stage 2 specification.
Summary of change:⌘	A note is removed in subclause 4.1.9. Figure 4.2 in subclause 4.2 is modified by removing UE and Device Management Server as GUP Data Repositories. Example 1 on 'GUP Interworking with Device Management' is removed in Annex A. Data that is stored in UE or USIM/ISIM is removed in Annex B.
Consequences if not approved: ⌘	Misalignment with GUP stage 1 TS 22.240.

Clauses affected: ⌘	4.1.9, 4.2, Annex A, Annex B

	Y	N		
Other specs ⌘		X	Other core specifications	⌘
affected:		X	Test specifications	
		X	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.

First modified section

4.1.9   Charging for profile access

The GUP Server shall be capable of providing charging information, e.g. to enable transaction/event based charging.

Some GUP Data Repositories may provide charging information, while other GUP Data Repositories do not provide charging information.

Mechanisms are needed to permit the GUP Server to know which GUP Data Repositories are (and are not) producing their own charging information. When the GUP Data Repository is capable of producing charging information, mechanisms are needed for the correlation of the charging information produced by GUP Server and GUP Data Repository.

NOTE: ~~GUP Data Repositories within a UE are not expected to produce charging information.~~

The charging information may also be used for other event logging, customer care, privacy auditing, etc. functions.

4.2   GUP functional entities

The GUP reference architecture as shown in Figure 4.1 consists of:

-    GUP Server;

-    Repository Access Function (RAF);

-    GUP Data Repositories;
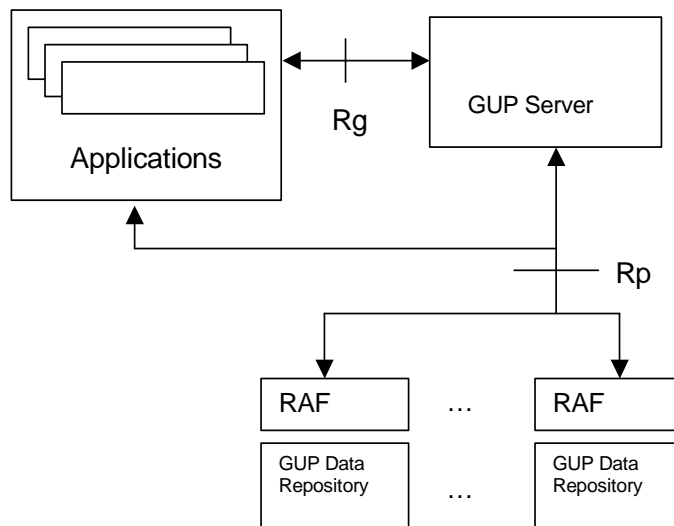
-    Rg and Rp reference points;

-    Applications.

Figure 4.1: GUP reference architecture

An example of mapping the GUP reference architecture to current infrastructure environment is shown in Figure 4.2.
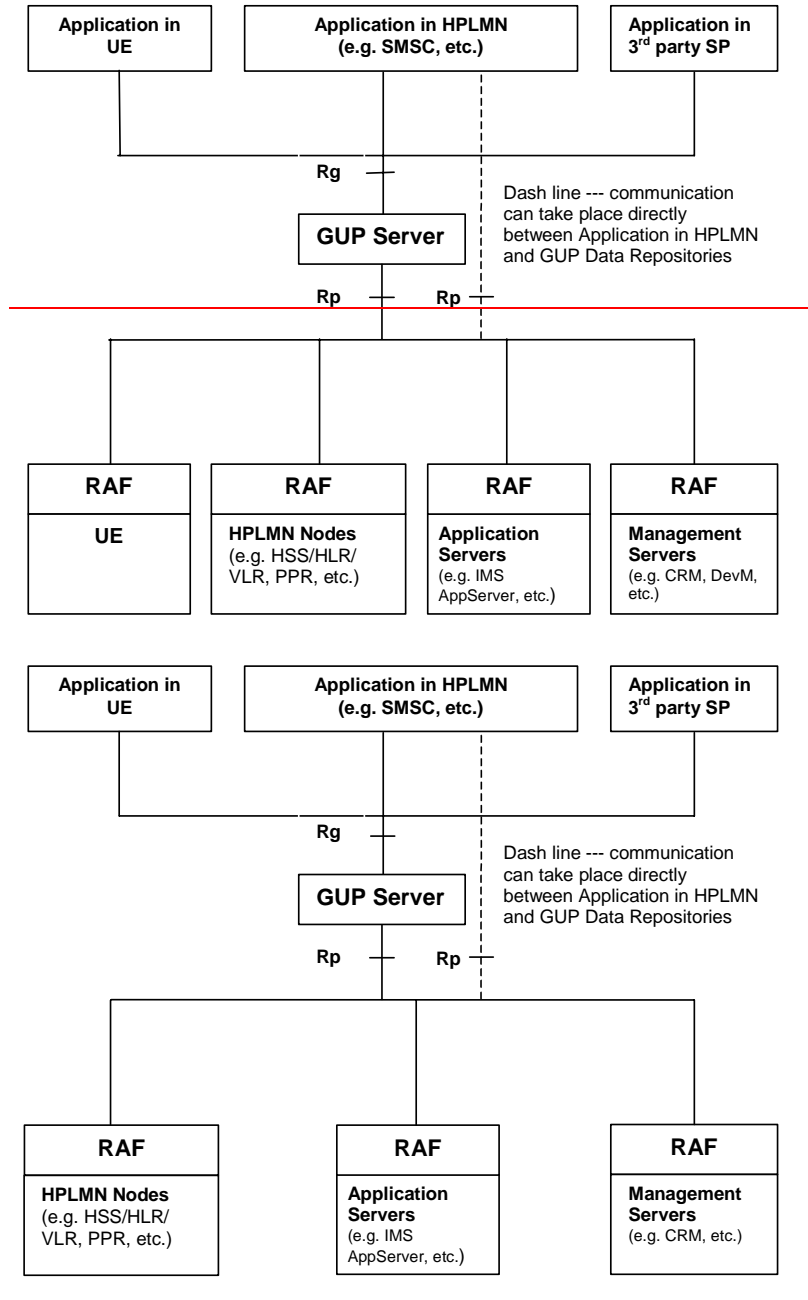
Figure 4.2: An example of mapping the GUP reference architecture to current infrastructure environment

4.2.1   GUP Server

End of first modified section

Annex A (informative): Examples of 3GPP Generic User Profile usage

Example 1: GUP Interworking with Device Management

As the device management specification 32.802 requests, the UEM Gateway controls the access available to the UE managers. The GUP server will perform gateway functionality for device management. The example of the interworking interface diagram is shown in Figure A.1.
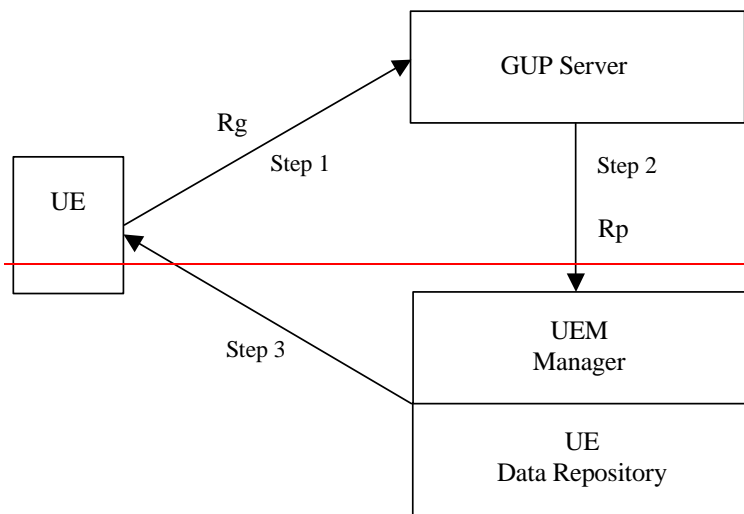

Figure A.1: An Example of the Interworking Diagram between GUP and Device Management

The interworking steps between GUP and Device management are summarized below:

Step 1:GUP Server allows any requests from UE to be accessed in a secured manner.

Step 2:GUP Server routes the request from UE to the appropriate UE management within the data repository.

Step 3:Data transactions take place.

NOTE: In this example the GUP server is working in proxy mode, this does not preclude the possibility for the GUP server to work in redirect mode when interworking with Device Management.

Example 12: GUP Usage with Subscription Management

An application is accessing targeted subscriber's subscription data (HSS GUP Component) stored in the HSS. It is assumed that RAF is implemented in the HSS and the targeted HSS GUP Component has been created by using the Create Component procedure. The application in this case can be e.g. a Subscription Management application, a service application or any third party application that is interested in the subscription data of a specific subscriber in operator A's network.

The example of the interworking interface diagram is shown in Figure A.2. In this example GUP Server is working in the proxy mode of operation.
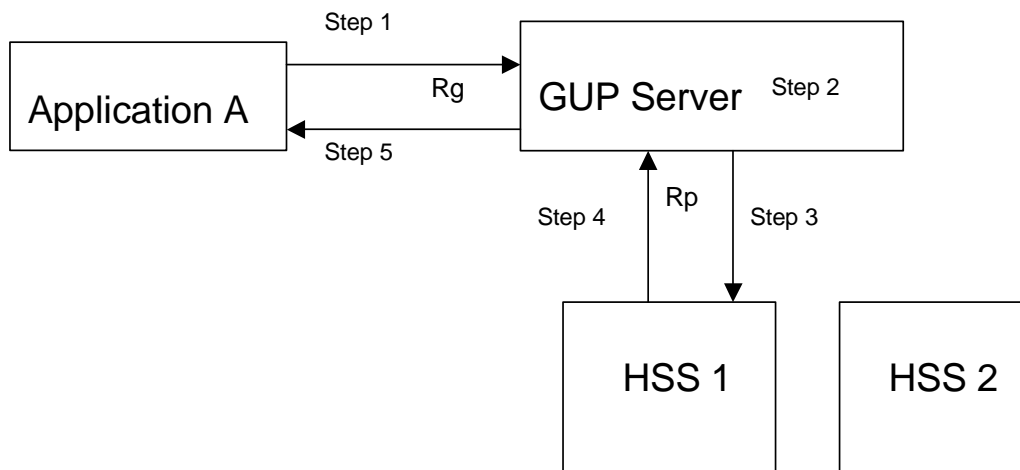
Figure A.2: An Example of the Interworking Diagram between GUP and an Application

The interworking steps between the Application, GUP Server and HSS are summarised below:

Step 1: Application A invokes a Query procedure to the GUP Server including the targeted subscriber's public user identity joe.doe@operatorA.com in the Resource Identity parameter. The HSS GUP Component will be included in the Data Reference parameter clarifying the targeted data (component type) that the application is interested in. Also specific data (i.e XML Data Element) within one GUP Component can be requested. Application A's identity is included in the Requestor data parameter for the identification and authorisation purposes of the request.

Step 2: GUP Server authenticates the application and authorises the request with the result that Application A is allowed to access the HSS GUP Component of the subscriber joe.doe@operatorA.com.

Step 3: GUP Server locates the target GUP Data Repository (RAF address), i.e. that the HSS GUP Component of the subscriber joe.doe@operatorA.com is located in the HSS 1, and invokes Read data procedure to HSS 1.

Step 4: HSS 1 makes an internal query by using the public user identity joe.doe@operatorA.com and returns a response to Read data procedure to the GUP Server including the requested HSS GUP Component data of the subscriber joe.doe@operatorA.com.

Step 5: GUP Server passes the received response to Query procedure further to Application A.

The GUP Server may retrieve authorisation GUP Components from a RAF, if it does not hold sufficient information by itself to carry out the authorisation.

If necessary, e.g. when the application requests several GUP Components, or the whole profile including several GUP components in different repositories, GUP Server can invoke several requests to various RAFs and combine responses to one response when returning a response to the application.

Annex B (informative): 3GPP Generic User Profile candidates

This table lists the Generic User Profile candidates grouped per GUP access. It gives for each data access, the supplier, the consumer and the data repository. The applied categorization of the data in the table does not imply similar GUP component structure.

GUP access	Supplier	Data repository	Description of the data	Consumer
~~Terminal related data for CS, PS, IMS~~	~~UE manager~~	~~UE-USIM/ISIM~~	~~Terminal capabilities of the terminal in use:~~ ~~- MS classmark 1, 2, 3~~ ~~- User interface capability~~ ~~- Communication capabilities~~ ~~Data for initial configuration and/or reset of the ME~~ ~~Backup data for recovery of the ME~~ ~~Configuration including service specific data~~	~~MSC/VLR~~ ~~SGSN~~ ~~GGSN~~ ~~S-CSCF~~ ~~AS~~
~~General user data for CS & PS~~	~~UE manager~~	~~UE-USIM~~	~~USIM user data for CS&PS:~~ ~~- Language indicator~~ ~~- IMSI~~ ~~- Phone books~~ ~~- available services~~ ~~- service capabilities~~	~~MSC/VLR~~ ~~SGSN~~ ~~GGSN~~
General user data for IMS	~~UE manager~~ AS manager	~~UE-USIM/ISIM~~ AS	ISIM subscriber data for IMS: - Private & Public SIP URI of the user - Settings back up/restore - Preferences (e.g. languages) - Phone books - Buddy list - Available services - Service capabilities - Active service profile	~~UE-USIM/ISIM~~ S-CSCF ~~AS~~
~~MMS terminal capability negotiation~~ ~~Ref 31.102, 23.140~~	~~UE manager~~	~~MMS-UA~~	~~MMS terminal capability information:~~ ~~- maximum supported size of an MM~~ ~~- maximum supported resolution of an image~~ ~~- list of supported media types and media formats (e.g. MIME types)~~ ~~- list of supported character sets~~ ~~- list of preferred languages~~ ~~- maximum supported colour depth~~ ~~- indication whether or not the recipient MMS User Agent supports streaming for the retrieval of MM contents~~	~~MMS server~~
MMS VASP applications Ref 23.141	AS manager	AS	MMS application specific data: - Authorization - Confidentiality - Charging information - Message distribution	MMS server
Privacy control settings of the user	AS manager	AS	Privacy control data of the user: - Privacy settings for standardized service like Presence - Privacy setting of non standardized services	UE-ISIM
PLMN specific user information	O&M	HSS	PLMN specific user information: - User addresses (e.g. MSISDNs, URLs) - WAP parameters (e.g. standard WAP gateway) - GPRS parameters - Preferred access technologies (e.g. UTRAN, GERAN, WLAN etc…)	S-CSCF AS
Authorized and subscribed service information for CS & PS	O&M HSS-HLR	HSS-HLR	Authorized and subscribed service information: - Subscriber ID (IMSI, MSISDNs) - General subscription information - Subscription restrictions - Basic & Supplementary services - Charging plans - Operator determined barring data is FFS - SMS subscription - MMS subscription	MSC/VLR GMSC SGSN GGSN MMS server
CSE handling of user subscriptions for CS & PS	CSE	HSS-HLR	- Forwarding & barring information - CAMEL subscription information	CSE

| Authorized and subscribed service information for IMS | O&M | HSS | Authorized and subscribed service information:
- IM Subscriber ID (Private User ID, Public ID)
- Subscribed media
- Billing policy
- Initial filter criteria
- Service keys & triggering aspects
- Authorized services that the subscriber may subscribe to
- Services the subscriber actually has subscribed to | S-CSCF AS |
| CAMEL services for IMS | O&M | HSS-HLR | CAMEL subscription information for IMS | IM-SSF |

End of second modified section