Technical Specification Group Services and System Aspects
Meeting #22, Maui, Hawaii, USA, 15-18 December 2003

TSGS#22(03)0659

Source: TSG SA WG2
Title: CRs on 23.240 (GUP Stage 2)
Agenda Item: 7.2.3

The following Change Requests (CRs) have been approved by TSG SA WG2 and are requested to be approved by TSG SA plenary #22.
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	Clauses affected
S2-034167	Selection of the GUP Server mode of operation	23.240	007r1	F	6.1.0	6	GUP	S2-36	4.2.1
S2-034125	Notification Reference	23.240	009r1	F	6.1.0	6	GUP	S2-36	4.3.5, 4.4.5
S2-034282	Subscribe Operation, Subscription Status	23.240	010r2	B	6.1.0	6	GUP	S2-36	4.3.5, 4.4.5
S2-034299	GUP information model improvement	23.240	011r1	C	6.1.0	6	GUP	S2-36	5
S2-034290	GUP Annex B terminal Capability negotiation for IMS	23.240	012r1	F	6.1.0	6	GUP	S2-36	Annex B

3GPP TSG-SA2 Meeting #36
New York, USA, 24-28 November 2003

Tdoc ⌘S2-034167

CR-Form-v7

CHANGE REQUEST

⌘ **23.240** **CR** **007** ⌘**rev** **1** ⌘ 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:	⌘	Selection of the GUP Server mode of operation
Source:	⌘	Nokia
Work item code:	⌘	GUP
Date:	⌘	19/11/2003
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:

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:	⌘	Selection of the GUP Server mode of operation (Proxy or Redirect) has aroused discussion and is somewhat vaguely specified in the current TS 23.240 specification.
Summary of change:	⌘	It is clarified how the GUP Server mode of operation is indicated, requested and selected.
Consequences if not approved:	⌘	Unclarity in stage 3 Rg reference point definition and GUP Server implementation.

Clauses affected:	⌘	4.2.1			
Other specs affected:	⌘	**Y**	**N**		
		X		Other core specifications	⌘ 29.240
			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:

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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.

4.2.1 GUP Server

The GUP Server is a functional entity providing a single point of access to the Generic User Profile data of a particular subscriber. The reference architecture does not specify or limit the physical location of the GUP Server enabling flexibility in the implementations.

The GUP Server includes the following main functionalities:

- Single point of access for reading and managing generic user profile data of a particular subscriber.
- Location of Profile Components.
- Authentication of profile requests.
- Authorization of profile requests.
- Synchronization of Profile Components.

The GUP Server may ~~shall~~ support two modes of operation:

- **Proxy mode** (see figure 4.3). The Application requests user related data located in the GUP Data Repositories from the GUP Server. After taking care of needed actions specified for the GUP Server (and depending on the type of the request) the GUP Server makes requests to the corresponding GUP Data Repositories and receives responses from them. Finally the Application gets a response to the original request from the GUP Server. Depending on the type of the request also possible subsequent responses are delivered through the GUP Server.
- **Redirect mode** (see figure 4.4). The Application requests user related data located in the GUP Data Repositories from the GUP Server. After taking care of needed actions specified for the GUP Server (and depending on the type of the request) the GUP Server returns to the Application the information (e.g. address of GUP Data Repository(s)) to allow the Application to request the information from the GUP Data Repositories. The Application then directly requests the information from the GUP Data Repositories.

The Proxy mode is the default mode of operation. Redirect capability and preference for the applied mode may be indicated by the application with the Requestor data parameter when accessing the GUP Server. The GUP Server decides which mode is selected for the different requests. In addition to the Requestor data parameter, the decision is based on the capabilities of the GUP Server and the related Repository Access Functions (RAF) as well as on the service configuration and policy data in the GUP Server related to the particular application. These service configuration and policy data are out of the scope of GUP standardisation. If the Redirect mode is not supported by the GUP Server the response is always sent according to the Proxy mode.

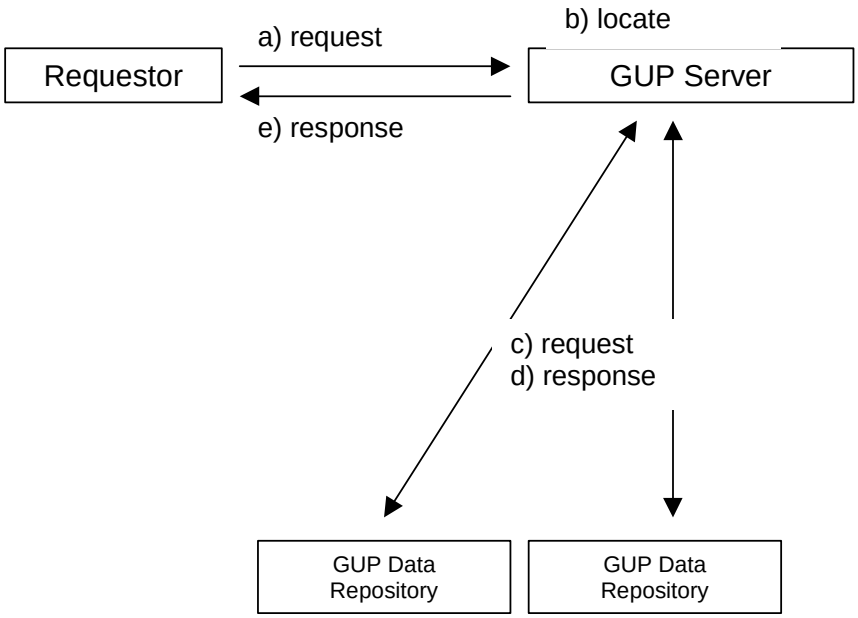

Figure 4.3: GUP Server acting as a Proxy Server.

3GPP TSG-SA WG2 Meeting #36 ***S2-034125***
New York, U.S.A., 24 - 28 November 2003

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CHANGE REQUEST

⌘ **23.240** **CR** **009** ⌘**rev** **1** ⌘ Current version: **6.1.0** ⌘

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Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Addition of Notification Reference to Subscribe procedure
Source:	⌘	Ericsson
Work item code:	⌘	GUP
Date:	⌘	10/10/2003
Category:	⌘	**F**
Release:	⌘	

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:
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:	⌘	As it is currently specified, when an application subscribes to notifications of changes in GUP data, it does not send any kind of call-back address to which the notifications should be sent by the GUP server or by the repository.
Summary of change:	⌘	Notification reference is added as a new mandatory parameter into the Subscribe procedure and Subscribe to Data procedure. GUP server and GUP repositories will use this reference as a call-back address to send notifications to.
Consequences if not approved:	⌘	GUP server and GUP repositories will not have a reliable call-back address for sending of notifications. They would have to use the address received in the underlying protocol which may not be reliable as it may change in the time between Subscription operation and sending of Notify.

Clauses affected:	⌘	4.3.5, 4.4.5

Other specs affected: ⌘	Y	N	
		X	Other core specifications
		X	Test specifications
		X	O&M Specifications

⌘

Other comments: ⌘

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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

4.3.5 Subscribe procedure

Subscribe procedure is used by the application to request notifications about changes in the GUP component data. The subscribed data are identified by the user identity and the data reference. Furthermore the application can identify which elements are to be monitored for changes if it is not interested in all changes. Data synchronization can be performed by Subscribe and Notify procedures. The GUP Server returns the identification of the subscription request to provide means for the application to link the notifications of Notify procedure to the related subscribe requests.

A filtering data parameter is defined to facilitate performance optimization. This may be left partly vendor/operator specific. The requestor shall provide the necessary data for authentication and authorization purposes (e.g. credentials, assertions and identifications).

The outcome of the procedure shall be provided in a separate response message. If the requestor data indicated that the application is able to receive redirect instructions, the GUP server may decide to return redirect instructions based on policies set by the operator in the GUP server. After this response the procedure is terminated without any other specified results or retained information in the GUP Server.

Table 4.11: Request data of Subscribe procedure

Parameter	Description	Use
Subscriber identity	Specifies the user identity with its type (e.g. SIP URI public ID).	Mandatory
Notification Reference	Specifies the call-back address of the Requestor. The GUP server shall send the notifications to this address.	Mandatory
Data references	Specifies which data are monitored for changes. The reference identifies both the component type and the possible deeper level data reference. Multiple references may be given. Any change within the referenced data structure causes a notification to be sent. If the parameter is absent, all modifications are notified.	Optional
Requestor data	Specifies the data related to the requestor. These data may be used as input in the authentication and authorization process. E.g. end user and application identification, credentials or privacy policy information.	Optional
Filter data	Specifies additional conditions for sending notifications to optimise the performance e.g. when immediate synchronization is not required. The parameter specifies also whether the initial data values are requested to be reported.	Optional

Table 4.12: Response data of Subscribe procedure

Parameter	Description	Use
Invoke identification	Contains the invoke identification assigned by the GUP Server for this request.	Mandatory (unless the request is redirected or fails)
Redirection data	Specifies the redirection instructions and assertions.	Optional
Status	Indicates whether: 1. The procedure was carried out successfully, 2. The request was redirected, or 3. A failure was detected. For the proxy mode 1 or 3 can be indicated. For the redirect mode 2 or 3 can be indicated. The possible failure is described in sufficient detail.	Mandatory (like the response itself)

Next modified section

4.4.5 Subscribe To Data procedure

Subscribe To Data procedure is used by the application to request notifications about changes in the profile component data. The component is identified by the user identity and the component type. Furthermore the application can identify which elements are to be monitored for changes if it is not interested in all changes. Data synchronization can be performed by Subscribe To Data and Notify Data procedures. The RAF returns the identification of the subscription request to provide means for the application to link the notifications of Notify Data procedure to the related subscribe requests.

A filtering data parameter is defined to facilitate performance optimization. This may be left partly vendor/operator specific. The requestor shall provide the necessary data for authorization purposes (e.g. assertions and identifications).

Table 4.28: Request data of Subscribe To Data procedure

Parameter	Description	Use
Subscriber identity	Specifies the user identity with its type (e.g. SIP URI public ID).	Mandatory
Notification Reference	Specifies the call-back address of the Requestor. The RAF shall send the notifications to this address.	Mandatory
Component type	Specifies the type of the component.	Mandatory
Data references	Specifies which data are monitored for changes. Multiple references may be given. Any change within the referenced data structure causes a notification to be sent. If the parameter is absent, all modifications are notified.	Optional
Requestor data	Specifies the data related to the requestor. These data may be used as input in the authorization process. E.g. end user and application identification. See subclause 4.4.9.	Optional
Filter data	Specifies additional conditions for sending notifications to optimise the performance e.g. when immediate synchronization is not required. The parameter specifies also whether the initial data values are requested to be reported.	Optional

Table 4.29: Response data of Subscribe To Data procedure

End of modified section

3GPP TSG-SA WG2 Meeting #36 ***S2-034282***
New York, U.S.A., 24 - 28 October 2003

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CHANGE REQUEST

⌘ **23.240** **CR** **010** ⌘**rev** **2** ⌘ 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:	⌘	Subscribe Operation, Subscription Status
Source:	⌘	Ericsson
Work item code:	⌘	GUP
Date:	⌘	10/10/2003
Category:	⌘	**B**
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)*
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Use one of the following releases:

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R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	Currently there are no means specified by which an application could obtain the status of its own subscriptions to notifications. However, this function would be useful because it would allow the applications to get the information on it's own subscriptions in case the information is lost.
Summary of change:	⌘	It is specified how an application can obtain the status of its own subscriptions to notifications.
Consequences if not approved:	⌘	There would be no standard way for an application to get status of its own subscriptions to notifications.

Clauses affected:	⌘	4.3.5, 4.4.5

		Y	N		
Other specs affected:	⌘		X	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

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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

4.3.5 Subscribe procedure

Subscribe procedure is used by the application to request notifications about changes in the GUP component data. The subscribed data are identified by the user identity and the data reference. Furthermore the application can identify which elements are to be monitored for changes if it is not interested in all changes. Data synchronization can be performed by Subscribe and Notify procedures. The GUP Server returns the identification of the subscription request to provide means for the application to link the notifications of Notify procedure to the related subscribe requests. With Subscribe procedure an application can also request a list of all its subscriptions to notifications from the GUP Server. The GUP Server shall provide all the application's subscriptions to notifications in the response message.

A filtering data parameter is defined to facilitate performance optimization. This may be left partly vendor/operator specific. The requestor shall provide the necessary data for authentication and authorization purposes (e.g. credentials, assertions and identifications).

The outcome of the procedure shall be provided in a separate response message.

Table 4.11: Request data of Subscribe procedure

Parameter	Description	Use
Subscriber identity	Specifies the user identity with its type (e.g. SIP URI public ID). This parameter may be absent only when List of subscriptions parameter is present, otherwise this parameter shall always be present.	Conditional~~Mandatory~~
List of subscriptions	Indicates that the application requests the list of all its subscriptions from the GUP server.	Optional
Data references	Specifies which data are monitored for changes. The reference identifies both the component type and the possible deeper level data reference. Multiple references may be given. Any change within the referenced data structure causes a notification to be sent. If the parameter is absent, all modifications are notified.	Optional
Requestor data	Specifies the data related to the requestor. These data may be used as input in the authentication and authorization process. E.g. end user and application identification, credentials or privacy policy information.	Optional
Filter data	Specifies additional conditions for sending notifications to optimi~~z~~se the performance e.g. when immediate synchronization is not required. The parameter specifies also whether the initial data values are requested to be reported.	Optional

Table 4.12: Response data of Subscribe procedure

Parameter	Description	Use
Invoke identifications	Contains the invoke identification assigned by the GUP Server for this request. When the application has requested the list of all its subscriptions, this parameter will contain all the invoke identifications assigned by the GUP Server to the application.	Mandatory
Status	Indicates whether the procedure was carried out successfully or whether some failure was detected. The possible errors are described in sufficient detail.	Mandatory (like the response itself)

Next modified section

4.4.5 Subscribe To Data procedure

Subscribe To Data procedure is used by the application to request notifications about changes in the profile component data. The component is identified by the user identity and the component type. Furthermore the application can identify which elements are to be monitored for changes if it is not interested in all changes. Data synchronization can be performed by Subscribe To Data and Notify Data procedures. The RAF returns the identification of the subscription request to provide means for the application to link the notifications of Notify Data procedure to the related subscribe requests. With Subscribe To Data procedure an application can also request a list of all its subscriptions to notifications from the RAF. The RAF shall provide all the application's subscriptions to notifications in the response message.

A filtering data parameter is defined to facilitate performance optimization. This may be left partly vendor/operator specific. The requestor shall provide the necessary data for authorization purposes (e.g. assertions and identifications).

Table 4.28: Request data of Subscribe To Data procedure

Parameter	Description	Use
Subscriber identity	Specifies the user identity with its type (e.g. SIP URI public ID). This parameter may be absent only when List of subscriptions parameter is present, otherwise this parameter shall always be present.	ConditionalMandatory
List of subscriptions	Indicates that the application requests the list of all its subscriptions from the RAF.	Optional
Component type	Specifies the type of the component.	Mandatory
Data references	Specifies which data are monitored for changes. Multiple references may be given. Any change within the referenced data structure causes a notification to be sent. If the parameter is absent, all modifications are notified.	Optional
Requestor data	Specifies the data related to the requestor. These data may be used as input in the authorization process. E.g. end user and application identification. See subclause 4.4.9.	Optional
Filter data	Specifies additional conditions for sending notifications to optimizse the performance e.g. when immediate synchronization is not required. The parameter specifies also whether the initial data values are requested to be reported.	Optional

Table 4.29: Response data of Subscribe To Data procedure

Parameter	Description	Use
Invoke identifications	Contains the invoke identification assigned by the RAF for this request. When the application has requested the list of all its subscriptions, this parameter will contain all the invoke identifications assigned by the RAF to the application.	Mandatory
Status	Indicates whether the procedure was carried out successfully or whether some failure was detected. The possible errors are described in sufficient detail.	Mandatory (like the response itself)

End of modified section

3GPP TSG-SA2 Meeting #36
New York, USA, 24th – 28th November 2003

Tdoc ⌘S2-034299

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CHANGE REQUEST

⌘ **23.240** **CR** **011** ⌘ **1** ⌘ Current version: **6.1.0** ⌘

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Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	GUP information model improvement
Source:	⌘	Nokia
Work item code:	⌘	GUP
Date:	⌘	27/11/2003
Category:	⌘	**C**
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
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R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*

Reason for change:	⌘	The current information model does not show how other reusable components may be included in a component.
Summary of change:	⌘	A loop arrow to component itself is added to the information model figure. The text is modified accordingly with some refinitions of the component identification definitions in line with the other parts of this specification. Furthermore the example figure and the text desciptions are modified to show also the case of a component referencing another component.
Consequences if not approved:	⌘	It is left unclear how reusable components may be specified and handled in GUP.

Clauses affected:	⌘	5			
Other specs affected:	⌘	Y / N		⌘	23.241, 29.240
		X /	Other core specifications		
		/ X	Test specifications		
		/ X	O&M Specifications		
Other comments:	⌘				

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5 GUP information model

A Generic User Profile consists of a number of independent GUP Components. However a GUP Component may contain (i.e. reference) other GUP components e.g. to enable reuse of data.

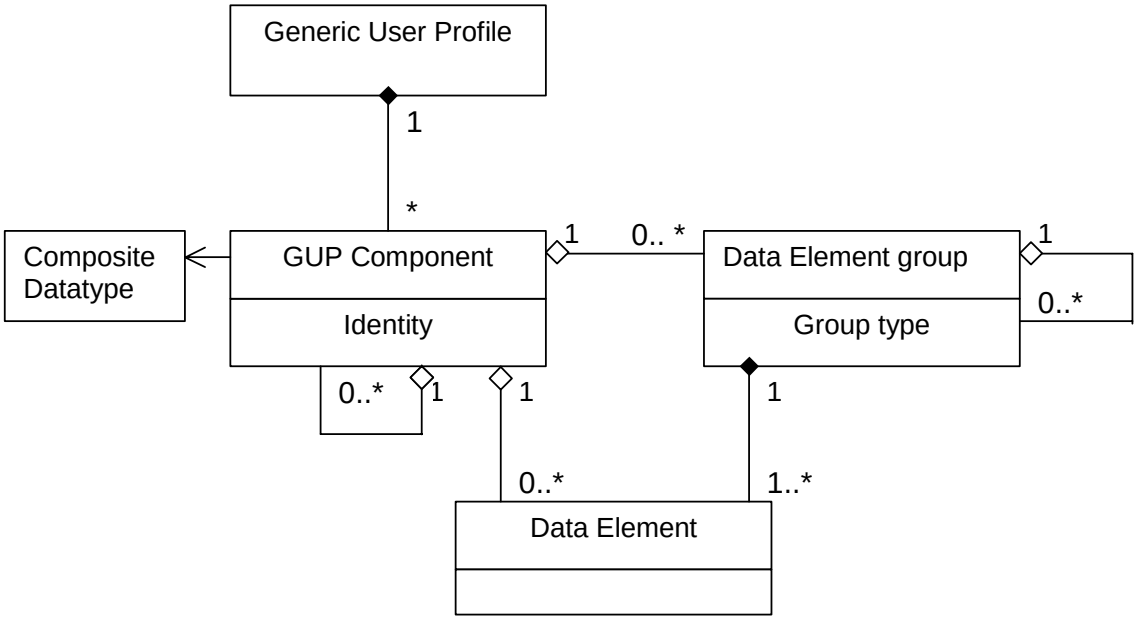
The GUP Component has a unique identity within the Generic User Profile. In addition to the component type the component identity contains either a subscriber identity or more generic identification depending on which kind of component is in question. A GUP Component~~, and it~~ can be retrieved through one RAF~~.~~, and it may consist of a number of GUP Components, Data Element Groups and/or Data Elements.

A GUP Component contains zero or more Data Element Groups. The Data Element Group contains indivisible Data Elements and/or Data Element Groups. The nested Data Elements Groups allow deeper hierarchical structures. The Data Element Group in the lowest hierarchical level contains one or more Data Elements. The Data Element Groups inside a GUP Component may be of the same or different types.

Alternatively the GUP Component may contain zero or more Data Elements without the Data Element Groups. A GUP component shall have at least one Data Element Group or Data Element.

A Composite Datatype is used to define the structure of the whole GUP Component. The structure includes definition about what kind of Data Element Groups and/or which Data Elements belong to the defined GUP Component as well as the data types and valid values of the data.

The UML Class Diagram below illustrates the basic concepts of the GUP Information Model.


Generic User Profile
1
*
Composite Datatype
GUP Component
Identity
1
0.. *
Data Element group
Group type
1
0..*
0..*
1
1
1
0..*
1..*
Data Element

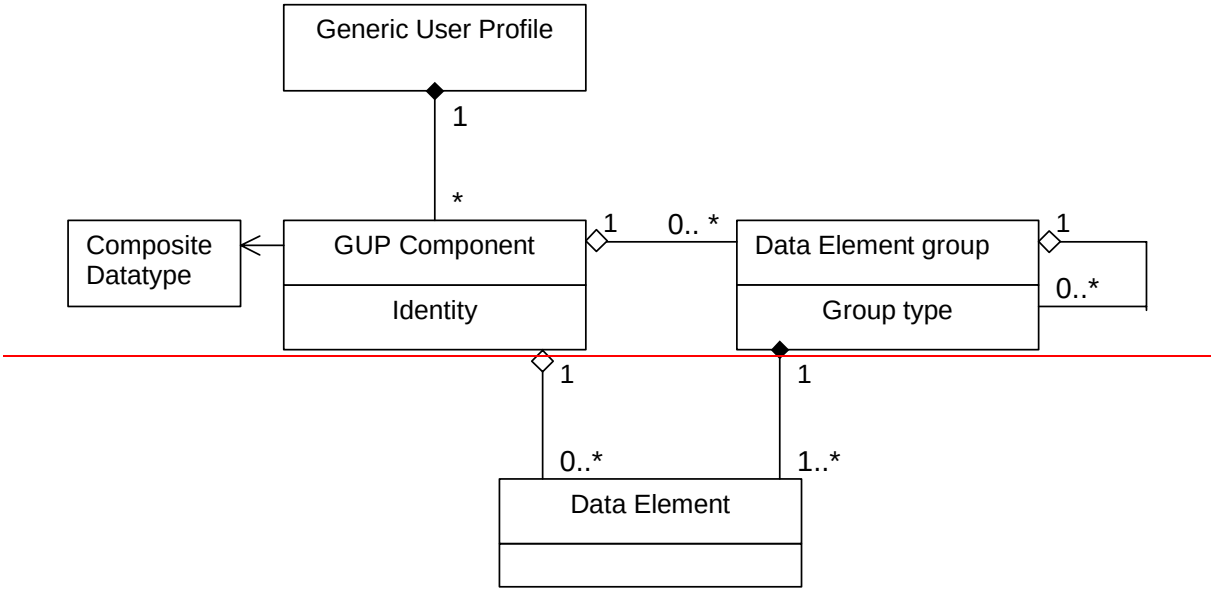
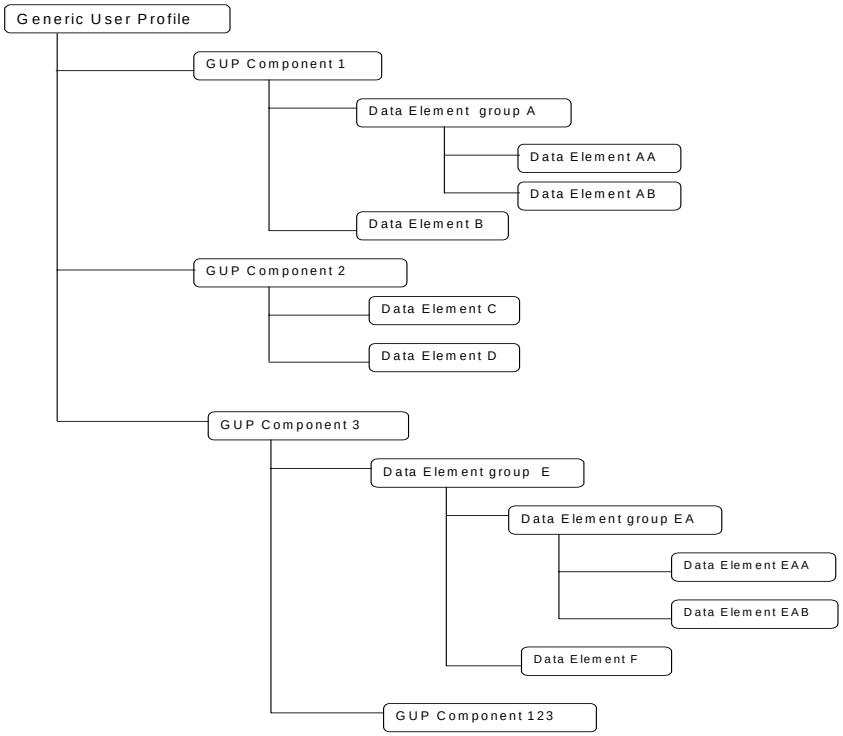

Generic User Profile
1
*
Composite Datatype
GUP Component
Identity
1
0.. *
Data Element group
Group type
1
0..*
1
1
0..*
1..*
Data Element

Figure 5.1: The basic concepts of GUP

Editor's note: Whether the authorization and privacy related enhancements have effect on the information model is FFS.

Figure 5.2 presents an example structure of Generic User Profile with the terms used in the UML Class Diagram. Note that the data structure may be also deeper than shown in the example figure, e.g., the Data Element Groups might consist of nested Data Element Groups.


Generic User Profile
GUP Component 1
Data Element group A
Data Element AA
Data Element AB
Data Element B
GUP Component 2
Data Element C
Data Element D
GUP Component 3
Data Element group E
Data Element group EA
Data Element EAA
Data Element EAB
Data Element F
GUP Component 123

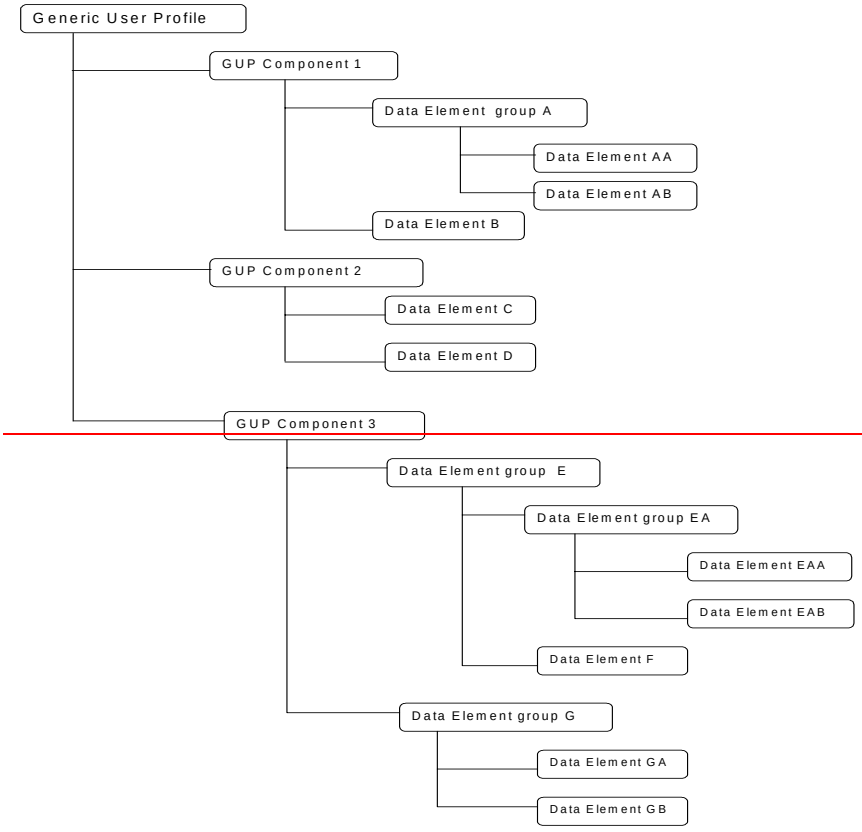

Generic User Profile
GUP Component 1
Data Element group A
Data Element AA
Data Element AB
Data Element B
GUP Component 2
Data Element C
Data Element D
GUP Component 3
Data Element group E
Data Element group EA
Data Element EAA
Data Element EAB
Data Element F
Data Element group G
Data Element GA
Data Element GB

Figure 5.2: Example structure of GUP information

One purpose of the example structure is to clarify the intended relation between the UML Class Diagram and the hierarchical structure of GUP in terms of XML. Use of XML fulfils the requirements for the architectural structure of the GUP information model.

Each Generic User Profile consists of one or several GUP Components depending on the nature of the user related data. GUP Components are independent XML documents. The Generic User Profile is thus formed of a number of XML documents.

Each GUP Component consists of GUP Components, Data Elements and/or Data Element Groups as defined in the component specific definitions. In XML terms the Data Elements are XML elements. The Data Element Group is a structured XML element with an arbitrarily deep data structure.

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CR-Form-v7

CHANGE REQUEST

⌘ **23.240** **CR** **0012** ⌘**rev** **1** ⌘ 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:	⌘	GUP Annex B terminal Capability negotiation for IMS
Source:	⌘	Fujitsu
Work item code:	⌘	GUP
Date:	⌘	19/11/2003
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:

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:	⌘	IMS application servers could make use of the IMS terminal capability information to decide which terminal to contact or whether content needs to be customised. An example will be IMS Immediate messaging service. It shares most of the requirements for capability negotiation as MMS.
Summary of change:	⌘	Indicate in the annex B that IMS AS could also be the consumer of the IMS terminal related data.
Consequences if not approved:	⌘	IMS AS can not make use of the terminal capability information provided by GUP.

Clauses affected:	⌘	Annex B

Other specs affected:	⌘	Y	N		⌘	
		X		Other core specifications		23.228
			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.

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