Technical Specification Group Services and System Aspects
Meeting #13, Beijing, China, 24-27 September 2001

TSGS#13(01)0439

Source: **SA1**

Title: **CRs to 22.127 Rel-5 to introduce new functions**

Document for: **Approval**

Agenda Item: **7.1.3**

Doc-1st-Level	Spec	CR	Rev	Phase	Cat	Subject	Vers	Vers New	Doc-2nd-Level
SP-010439	22.127	014	1	Rel-5	B	Re-introduction of R5 OSA function; Traceability, CR 22.127 - 14	5.0.0	5.1.0	S1-010864
SP-010439	22.127	015		Rel-5	B	Re-introduction of R5 OSA function; Multi Media Channel Control CR 22.127-15	5.0.0	5.1.0	S1-010658
SP-010439	22.127	016		Rel-5	B	Re-introduction of R5 OSA function; Retrieval of Network Capabilities CR 22.127-16	5.0.0	5.1.0	S1-010659
SP-010439	22.127	017		Rel-5	B	OSA support of information service function CR 22.127-17	5.0.0	5.1.0	S1-010660
SP-010439	22.127	018		Rel-5	B	OSA support of Presence service function CR 22.127-18	5.0.0	5.1.0	S1-010661
SP-010439	22.127	019		Rel-5	B	OSA requirements for User Data Management CR 22.127-19	5.0.0	5.1.0	S1-010662
SP-010439	22.127	020		Rel-5	B	OSA requirements on User Profile Access Management CR 22.127-20	5.0.0	5.1.0	S1-010663
SP-010439	22.127	021		Rel-5	F	Correction of Scope statement CR 22.127-21	5.0.0	5.1.0	S1-010664

TSG-SA WG 1 (Services) meeting #13
Lake Tahoe, US, 9-13 July 2001

TSG S1 (01) 0864
Agenda Item:

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CHANGE REQUEST

⌘ **22.127** **CR** **014** ⌘ rev **1** ⌘ Current version: **5.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Re-introduction of Rel'5 OSA functions; Traceability
Source:	⌘	SA1
Work item code:	⌘	OSA
Date:	⌘	13/07/2001
Category:	⌘	**B**
Release:	⌘	REL-5

Use one of the following categories:
F *(essential 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)*

Reason for change:	⌘	Functions, that were not realised in Rel'4 or were depending on other 3GPP workitems that were postponed in Rel'4 are re-introduced for Rel'5
Summary of change:	⌘	It shall be possible to log usage of the OSA interface and to make actions performed through the OSA interface traceable to their originating applications. It was found better to separate Charging and Tracing to individual chapters, chapter 8 is for charging only and the new Journal function is introduced to the new chapter 9.
Consequences if not approved:	⌘	Logging of OSA applications not possible.

Clauses affected:	⌘	8, new chapter 9		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	29.198
Other comments:	⌘			

8 Charging ~~and traceability~~ requirements

~~8.1 Charging Requirements~~

The charging functionality of OSA allows an application to raise a charge against a subscriber's account for goods and services provided to her. It enables the invoicing, by the operator, of soft (e.g. download of software, music,...) and hard goods (e.g. CDs, books,...), which potentially are provided by third parties.

Additionally, the charging functionality of OSA shall provide for the maintenance of non-monetary subscriber accounts. An application may add or deduct non-monetary units to or from these accounts.

The responsibility for the subscriber accounts can be assigned to either the home network or elsewhere.:

- If the home network does not handle the accounts itself, charging requests are sent from the home network (and possible other applications) to a dedicated charging application, typically a charging centre. This case is out of scope of OSA.
- If the accounts are handled by the home network, the operator takes care of them.
  They may be used to charge for network resource usage (*call charging*, as it is done today) as well as any non-telecommunication related activity (any *E-commerce activity like service usage, online purchases*...)

OSA shall provide sufficient functions to support charging when the accounts are handled by the home network.

Two cases need to be considered in more detail:

> **Call and Event Charging**: OSA shall enable applications to control the charge of a call and / or an event that is under supervision of this application. OSA shall allow an application to provide additional charging information to the network;
>
> **Service Usage** (e.g. Online Purchases): On the other hand, OSA shall allow to employ the charging capabilities of the network to charge subscribers for any kind of service or even online purchases. Calculation of the charge may be based on monetary and/or non monetary grounds.

Beyond this, there are **general** charging **functions** on subscriber accounts (monetary and non-monetary) that shall be available via OSA:

- Query the current account balance and current reservations.
- Monitor account access (send notifications if charges or recharges are applied to a subscriber's account).
- Retrieve the history of the transactions

~~8.2~~9 ~~Traceability~~ Journalling requirements

Applications, that use the OSA interface, may perform actions in the network that might cause costs or potentially undesired effects to the user or operator. Therefore it shall be possible to log usage of the OSA interface and thus to make actions performed through the OSA interface traceable to their originating applications.

Journal Information shall at least consist of the following parts:

- Unique identity of the application
- Date and time of invoking execution of an OSA function
- Name of invoked OSA function
- Identity of the served subscriber.

Additional information may be provided by the application (e.g. name of the service or reference to an application in the terminal).

The OSA shall offer sufficient capabilities to:

- Request an application to supply the network with the application's Journal Information. The network operator may decide on the level of granularity (i.e. with which OSA functions Journal Information shall be provided).
- Reject execution of OSA functions if insufficient or inaccurate Journal Information is provided by the application.
- Supply a (logging-)application with Journal Information collected from various applications.

Collection of Journal information may take place in the network or by a dedicated application using the OSA interface

~~No requirements for this release are identified~~.

3GPP TSG SA1 – OSA ad-hoc #7 S1O01060
Sophia Antipolis, France
6th – 7th June, 2001

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CHANGE REQUEST

⌘ **22.127** **CR** **015** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Re-introduction of Rel'5 OSA functions, Multi Media Channel Control
Source:	⌘	SA1
Work item code:	⌘	OSA1 ***Date:*** ⌘ 13/07/2001
Category:	⌘	**B** ***Release:*** ⌘ REL-5

Use one of the following categories:
F *(essential 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)*

Reason for change:	⌘	Functions, that were not realised in Rel'4 or were depending on other 3GPP workitems that were postponed in Rel'4 are re-introduced for Rel'5
Summary of change:	⌘	Control of multimedia channels by OSA applications. OSA applications shall be able to create, release, modify and monitor multimedia channels.
Consequences if not approved:	⌘	No multimedia call control for OSA applictions

Clauses affected:	⌘	3.1, 12.2.2		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	29.198
Other comments:	⌘			

=== First modified section ===

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

Applications: software components providing services to users by utilising service capability features.

Application Interface: standardised Interface used by applications to access service capability features.

Call: A logical association between several users (this could be connection oriented or connection less). This pertains to the CS CN domain, the PS CN domain and the IP Multimedia Subsystem

Charging: A function whereby information related to a chargeable event is formatted and transferred in order to make it possible to determine usage for which the charged party may be billed.

HE-VASP: Home Environment Value Added Service Provider. For the definition see [1]

Home Environment: For the definition see [1]

Local Service: For the definition see [1]

Personal Service Environment: For the definition see [1]

Policy: is a formalism that may be used to express business, engineering or management criteria. A policy is represented by a set of rules. Rules are expressed as condition(s)-actions(s) pairs. When the conditions associated with a rule are satisfied the associated actions are executed.

Note: Policies created by applications are matched against the policies of a Network.

Policy Event : A policy event is associated with the action part of designated rule(s). The event is generated when the action part is executed.

Policy Management: is the capability to create, modify and delete policy related information, including policy events.

Policy Enabled Service: is a Service which has some or all of its properties expressed in terms of policy rules. E.g. Charging Service wherein charging criteria are expressed in terms of policy rules

Policy Decision Point: A function of the network where the applicable policy is chosen.

Policy Enforcement Point: A function of the network where the chosen policy is applied.

Policy Repository: A function of the network where policies are stored.

Policy Enabled network: is a network that supports at least one instance of a Policy Repository and Policy Decision Point and Policy Enforcement Point.

Service Capabilities: bearers defined by parameters, and/or mechanisms needed to realise services. These are within networks and under network control.

Service Capability Feature: functionality offered by service capabilities that are accessible via the standardised application interface.

Service Provider: an organisation which delivers services to the subscriber. This can be e.g. the operator of the subscriber's Home Environment or an authorised VASP.
Note: In the context of this specification it is assumed, that at least one application providing the services of the Service Provider makes use of OSA functions

Services: a service is the user experience provided by one or more applications.

User: For the definition see [1]

Virtual Home Environment: For the definition see [1]

Further 3G related definitions are given in 3G TS 21.905 [3].

=== Next modified section ===

12.2.2 Multi-Media Channel Control:

These capabilities allow an application to control individual channels in an IP Multimedia call. An application shall be enabled to:

- **Be notified on Media channel events**
  OSA shall enable an application to be notified when a certain type of media channel is opened or closed. This may be dependent on additional criteria (tbd.)

- **Monitor Media channels**
  OSA shall enable an application to request information on all the media channels currently available on a call. In addition the application must be able to monitor on the opening and closing of channels for media for a specified call.

- **Open/Close/Modify Media channels**
  OSA shall enable an application to open, close and modify the parameters of a media channel on a certain call.

- **Reserve/Free conference resources**
  OSA shall enable an application to reserve resources in the network or free earlier reserved resources for a conference in advance.

- **Create Multi-media Conference**
  OSA shall enable an application to create an Multi-media Conference Call. This can either be an add-hoc conference creation or it can refer to resources that were reserved in advance

- **Party join/leave control**
  OSA shall enable an application to be informed when a new call party wants to join/leave the conference. It shall be possible to attach the call leg to the conference or reject the join

~~No requirements for this release are identified.~~

3GPP TSG SA1 – OSA ad-hoc #7 S1O01061
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6th – 7th June, 2001

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CHANGE REQUEST

⌘ **22.127** **CR** **016** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Re-introduction of Rel'5 OSA functions, Retrieval of Network Capabilities
Source:	⌘	SA1
Work item code:	⌘	OSA
Date:	⌘	13/07/2001
Category:	⌘	**B**
Release:	⌘	REL-5

Use one of the following categories:
F *(essential 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)

Reason for change:	⌘	Functions, that were not realised in Rel'4 or were depending on other 3GPP workitems that were postponed in Rel'4 are re-introduced for Rel'5
Summary of change:	⌘	It shall be possible for an OSA application to retrieval of Network Capabilities
Consequences if not approved:	⌘	Applications can not retrieve network capabilities

Clauses affected:	⌘	12.3.6		
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	29.198
Other comments:	⌘			

12.3.6 Functions for retrieval of Network Capabilities

The functions for retrieval of Network Capabilities shall enable the application to discover the network capabilities of the serving network of a subscriber.

Information provided to the application shall contain the following information, if available:

- Available network toolkits, including level of support (e.g. CAMEL Phase X, OSA version Y),
- Available Service Capability Servers (e.g. SMSC, CSE),
- Supported Network access, (e.g. GPRS, CS, IMS),

~~No requirements for this release are identified~~

3GPP TSG SA1 – OSA ad-hoc #7 S1O01062
Sophia Antipolis, France
6th-7th June, 2001

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CHANGE REQUEST

⌘ **TS 22.127** **CR** **017** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	OSA support of information services functions
Source:	⌘	SA1
Work item code:	⌘	OSA1 ***Date:*** ⌘ 13/07/01
Category:	⌘	**B** ***Release:*** ⌘ REL-5

Use one of the following categories:
F *(essential 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)

Reason for change:	⌘	Introduction of OSA support for information services functions
Summary of change:	⌘	The following changes are introduced:- • new OSA functions to support supplying of information • new OSA function to support retrieval of information (e.g. traffic info, local weather) • new OSA functions to support notification of changes in information
Consequences if not approved:	⌘	Inability for OSA applications to supply/retrieve information (e.g. local services) that are available.

Clauses affected:	⌘	new 12.4 added
Other specs affected:	⌘	☒ Other core specifications ⌘ 29.198 ☐ Test specifications ☐ O&M Specifications
Other comments:	⌘	

12.3.6 Functions for retrieval of Network Capabilities

No requirements for this release are identified

12.4 Information Services functions

The information services functions enable applications to supply and retrieve information that is available for distribution from the Home Environment, HE-VASPs and/or visited networks, as determined by the Home Environment.

Examples of such information could include traffic information, weather, headlines, local services etc., or indeed any type of generic information that is considered useful to make available to OSA applications.

The following functions shall be provided:-

- **supply and update of Information:**
  - the application shall be able to supply and update details to the information service in order to make it available to other applications
- **retrieval of Information:**
  - the application shall be able to retrieve details from the information service
- **notification of Information change:**
  - the application shall be able to receive notifications from the information service when the details are updated:
    - addition of new information;
    - removal of existing information;
    - upgrade of existing information;

  The application shall be able to enable, disable and modify receipt of information service notifications.

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CHANGE REQUEST

⌘ **TS 22.127** **CR** **018** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

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Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	OSA support of Presence Service functionality
Source:	⌘	SA1
Work item code:	⌘	OSA1 ***Date:*** ⌘ 13/07/01
Category:	⌘	**B** ***Release:*** ⌘ REL-5

Use one of the following categories:
F *(essential 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)

Reason for change:	⌘	Introduction of OSA support for access to Presence Service functionality
Summary of change:	⌘	The following changes are introduced:- • A new category Event Notification Functions "Other Related Events" is introduced. In this new category, the support of general presence service notifications is added. • new OSA functions to support presence service creation/modification/watch/deletion of presentities are introduced
Consequences if not approved:	⌘	Inability for OSA applications to exploit Presence Service for the support of innovative presence-based applications.

Clauses affected:	⌘	2.1, 3.1, new 11.3 added, new 12.4 added
Other specs affected:	⌘	☒ Other core specifications ⌘ 29.198 ☐ Test specifications ☐ O&M Specifications
Other comments:	⌘	

First change in chapter 2.1

1 Scope

This document specifies the stage 1 requirements for realisation of an Open Service Access (OSA).

OSA enables applications to make use of network functionality through an open standardised interface (the OSA API). OSA provides the glue between applications and network functionality. In this way applications implementing the services become independent from the underlying network technology.

Applications which make use of network functionality offered through the OSA interface are not standardised by 3GPP.

OSA is one toolkit, amongst others, that enables certain aspects of the requirements of the Virtual Home Environment (VHE) concept to be realised.

This document is only applicable to OSA release 4. In Release 99 Service requirements are described in the VHE stage 1 description [1].

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

2.1 Normative references

[1] 3GPP TS 22.121: Universal Mobile Telecommunications System (3G); "The Virtual Home Environment"

[2] 3GPP TS 22.101: Service principles

[3] 3GPP TS 21.905: Vocabulary for 3GPP Specifications

[4] 3GPP TS 23.107: QoS Concept and Architecture

[5] 3GPP TS 22.024: Description of Charge Advice Information (CAI)

[6] 3GPP TS 29.198: Open Service Architecture; Application Programming Interface; Part 1

[7] 3GPP TS 22.141: Presence Service Stage 1

2.2 Informative references

[10] World Wide Web Consortium Composite Capability/Preference Profiles (CC/PP): A user side framework for content negotiation (www.w3.org)

Next change in chapter 3.1

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

Applications: software components providing services to users by utilising service capability features.

Application Interface: standardised Interface used by applications to access service capability features.

Call: A logical association between several users (this could be connection oriented or connection less).

Charging: A function whereby information related to a chargeable event is formatted and transferred in order to make it possible to determine usage for which the charged party may be billed.

HE-VASP: Home Environment Value Added Service Provider. For the definition see [1]

Home Environment: For the definition see [1]

Local Service: For the definition see [1]

Personal Service Environment: For the definition see [1]

Policy: is a formalism that may be used to express business, engineering or management criteria. A policy is represented by a set of rules. Rules are expressed as condition(s)-actions(s) pairs. When the conditions associated with a rule are satisfied the associated actions are executed.

Note: Policies created by applications are matched against the policies of a Network.

Policy Event : A policy event is associated with the action part of designated rule(s). The event is generated when the action part is executed.

Policy Management: is the capability to create, modify and delete policy related information, including policy events.

Policy Enabled Service: is a Service which has some or all of its properties expressed in terms of policy rules. E.g. Charging Service wherein charging criteria are expressed in terms of policy rules

Policy Decision Point: A function of the network where the applicable policy is chosen.

Policy Enforcement Point: A function of the network where the chosen policy is applied.

Policy Repository: A function of the network where policies are stored.

Policy Enabled network: is a network that supports at least one instance of a Policy Repository and Policy Decision Point and Policy Enforcement Point.

Presence: For the definition see [7]

Presence Information: For the definition see [7]

Presence Entity: For the definition see [7]

Service Capabilities: bearers defined by parameters, and/or mechanisms needed to realise services. These are within networks and under network control.

Service Capability Feature: functionality offered by service capabilities that are accessible via the standardised application interface.

Next change: add chapter 11.3

11.3 Other Related Events:

- A change in the presence information.

  If one or more presence information attributes changes, and this event is armed by the application, that application shall be notified. Presence information may be associated with a user, device or service, or may be a more abstract entity that has the ability to report presence information.

Next change: add chapter 12.4

12.4 Presence Service functions

OSA shall enable the management of presence entities (i.e. presentity) in the presence service. The following management functions shall be supported:

- **presentity creation:**
  - the application shall be able to request the creation of a presentity. The application shall be able to supply all attributes of the presentity as well as any access rules pertaining to the presentity to be created.
- **presentity modification:**
  - the application shall be able to request the modification of a presentity. The application shall be able to modify any attributes of the presentity as well as any access rules pertaining to the presentity to be modified.
- **presentity watch:**
  - the application shall be able to request presence information about a presentity. This request may be for the current information, on a periodic basis or for future changes in the presentity's presence information (e.g. arming of event notifications). An application may only request presence information of a presentity for which it is allowed to do so.
- **presentity deletion:**
  - the application shall be able to request the deletion of a presentity.

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6th-7th June, 2001

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CHANGE REQUEST

⌘ **TS 22.127** **CR** **019** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	OSA requirements for User Data Management
Source:	⌘	SA1
Work item code:	⌘	OSA1 ***Date:*** ⌘ 13/07/01
Category:	⌘	**B** ***Release:*** ⌘ REL-5

Use one of the following categories:
F *(essential 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)

Reason for change:	⌘	Requirements for User Data Management were not identified in OSA Release 4 but needed and still missing.
Summary of change:	⌘	The following changes are introduced:- • A generic access to User Profile information is added. • A new User Profile Access Manager is defined to protect the User Profile and to grant access to application where permitted.
Consequences if not approved:	⌘	Inability for OSA applications to exploit User Profile Information

Clauses affected:	⌘	new chapter 7 added			
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	29.198	
Other comments:	⌘				

Begin of change

7 Requirements for user data management

The User Profile logically is a set of information relevant for a given user. The set of information is provided by Service Capability Servers and – if permitted – from Value Added Services. The amount of User Profile information might be distributed over various physically separated entities. The concept of distributed information is not within the scope of this specification. The detailed content of the User Profile depends on the Service Capability Servers and is not subject herein.

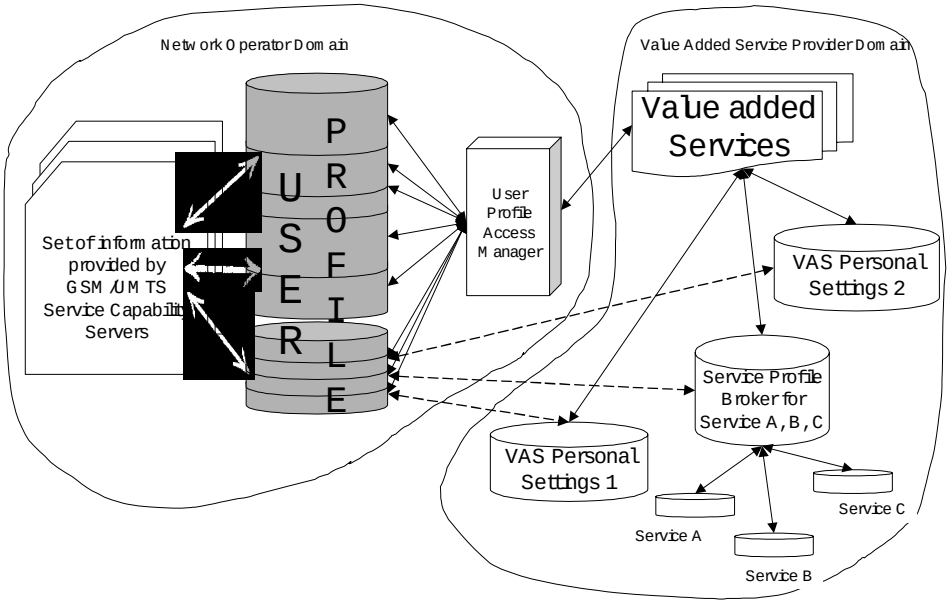
However, subscribers are able to subscribe or use services provided from Value added service Providers. Subscriber may customise these VAS according to their needs equally as the subscriber customise her GSM/UMTS services provided by the network operator. To avoid malicious or conflicting situations it is needed to allow VAS to access the users USER Profile. The co-existence of several services and the correct inter-working between them are founded on sufficient information about other services subscribed to.

VAS shall not be allowed to access the User Profile without permission. It is important to prevent the User Profile from malicious attacks.

Therefore a User Profile Access Manager (UPAM) shall enable a VAS to access the User Profile. The User Profile Access Manager herein is defined as a network function. The realisation of the UPAM functions is out of the scope of this specification but will be detailed in the relevant stage 2 specification(s). The scope of the UAPM is to protect the User Profile, to authorise a VAS, to grant access and to observe actions performed by the VAS.

Depending on the authorisation, an UPAM may permit the VAS to read from and/or to add to and/or to modify the User Profile or parts of it.

The figure below gives an logical overview of the relation between VAS, UPAM and the User Profile itself.



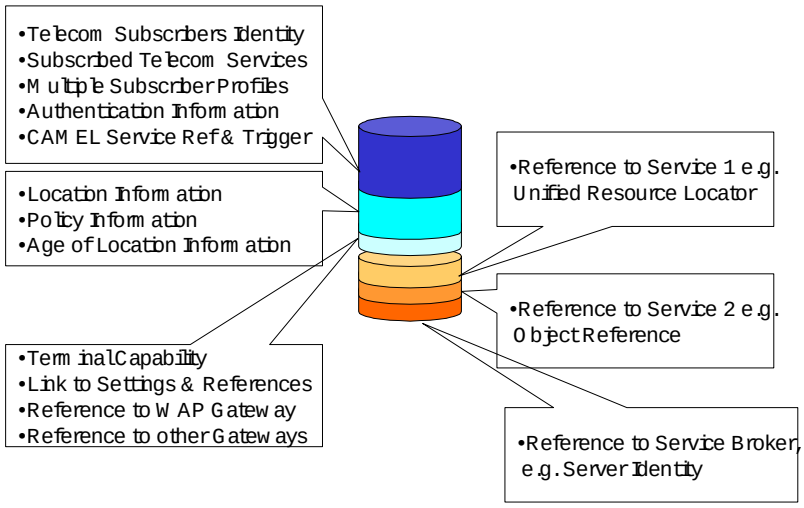
End of change

Note: the dotted line refers to additional Personal Settings. The reference itself shall unambiguously identify the location of the additional personal settings.

User specific information from the e.g. HLR and/or HSS are equally part of the User Profile as terminal settings and VAS specific preferences. The User Profile in principle is the summary and collection of information with a relevance for the services supported for a given subscriber.

The figure above shows User and Network Service and VAS specific information, customised by the user. It is assumed that the user profile consists of several parts. The User Profile elements shall at least be capable to store a reference to additional information stored else where. The User Profile shall act as a root towards all user specific information.

Even when the content of the User Profile is outside this specification, the following figure shows how a content could look like.



On the left side of the figure above, typical GSM/UMTS information are listed (this is not an exhaustive list).

The right side depict references to VAS specific information. The representation of references to VAS specific information above, is an example and does not insist to be complete.

~~No requirements for this release are identified~~

End of change

3GPP TSG SA1 – OSA ad-hoc #7 S1O01065
Sophia Antipolis, France
6th-7th June, 2001

CR-Form-v3

CHANGE REQUEST

⌘ **TS 22.127** **CR** **020** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	OSA requirements on User Profile Access Management
Source:	⌘	SA1
Work item code:	⌘	OSA1 ***Date:*** ⌘ 13/07/01
Category:	⌘	**B** ***Release:*** ⌘ REL-5

Use one of the following categories:
F *(essential 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)

Reason for change:	⌘	Security Requirements on User Profile Management were not identified in OSA Release 4 but needed and still missing.
Summary of change:	⌘	The following changes are introduced:- • A generic access to User Profile information is added. • The relation between OSA application and Network stored User Data Information is defined
Consequences if not approved:	⌘	Inability for OSA applications to exploit User Profile Information

Clauses affected:	⌘	new chapter 9.1. added			
Other specs affected:	⌘	☒ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	29.198	
Other comments:	⌘				

Begin of change

9 Security requirements

9.1 Security requirements on User Profile Access management

An application shall be enabled to access User Profile data as long as permission is granted by the User Profile Access Manager.. The User Profile Access Manager shall be able to:

- verify authorised access to the requested parts of the User Profile for a given application and User
- identify the type of access which is requested,
- elaborate the access rights for the request,
- permit dedicated access,
- verify the granted access and
- deny access requests.

An application has to pass the framework functions prior to initiating the authorisation mechanism of the User Profile Access Manager.

The type of access is one out of:

- Reading user profile information; in case parts of the User profile is subject for reading it shall unambiguously be identified by the application,
- Adding information to the user profile,
- Modify existing information in the user profile.

The control of access rights are in principle on the users discretion. The user shall have the possibility to allow or restrict the retrieval and presentation of her user related data. The mechanism how a user is able to maintain access rights is for further study.

Whenever an application requires access of user related data, the application shall be forced by the User Profile Access Manager and shall be enabled by the OSA SCS to identify the user before it can use the requested service capabilities.

The network shall guarantee the privacy of the user's profile data. This shall be possible based upon

a) the already defined authentication/authorisation mechanisms of the Framework

b) and additional information, provided by the application via the OSA SCS, that uniquely identifies the user.

~~No requirements for this release are identified.~~

End of change

CR-Form-v3

CHANGE REQUEST

⌘ **22.127** **CR** **021** ⌘ rev **-** ⌘ Current version: **5.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: ⌘ (U)SIM ☐ ME/UE ☐ Radio Access Network ☐ Core Network **X**

Title:	⌘	Correction of Scope		
Source:	⌘	SA1		
Work item code:	⌘	OSA1	***Date:*** ⌘	13/07/2001
Category:	⌘	**F**	***Release:*** ⌘	REL-5

Use one of the following categories:
F *(essential 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)*

Reason for change:	⌘	Functions, that were not realised in Rel'4 or were depending on other 3GPP workitems that were postponed in Rel'4 are re-introduced for Rel'5
Summary of change:	⌘	Withdraw the reference to earlier Releases then R5 in the Scope of 22.127
Consequences if not approved:	⌘	OSA stage 1 would not apply to Release 5

Clauses affected:	⌘	1		
Other specs affected:	⌘	☐ Other core specifications ☐ Test specifications ☐ O&M Specifications	⌘	
Other comments:	⌘			

1 Scope

This document specifies the stage 1 requirements for realisation of an Open Service Access (OSA).

OSA enables applications to make use of network functionality through an open standardised interface (the OSA API). OSA provides the glue between applications and network functionality. In this way applications implementing the services become independent from the underlying network technology.

Applications which make use of network functionality offered through the OSA interface are not standardised by 3GPP.

OSA is one toolkit, amongst others, that enables certain aspects of the requirements of the Virtual Home Environment (VHE) concept to be realised.

~~This document is only applicable to OSA release 4. In Release 99 Service requirements are described in the VHE stage 1 description [1].~~