3GPP TSG SA WG3 Security — S3#23 **S3-020197**
14 - 17 May 2002
Victoria, Canada

3GPP TSG-SA WG2 #24 ***S2-021513***
Madrid, Spain
22nd – 26th April 2002

Title: Liaison Statement on GUP work progress
Source: S2
To: SA1, SA3, SA4, SA5, CN1, CN3, CN4, CN5, T1, T2, T3
Cc: TSG-SA, TSG-T
Response to:
Contact Person:

Name: Gunilla Bratt
Tel. Number: +46705693729
E-mail Address: gunilla.bratt@emp.ericsson.se

Attachments: SP-020163 and UP-020053
Annex: Proposed Work Plan task list

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1. Overall Description:

SA2 has been tasked by TSG-SA to actively co-ordinate the Generic User Profile development work within 3GPP.

SA2 would like to start its coordination role by providing a status update on the GUP activity. To this end please find attached the GUP work item description [SP-020163] and the primary output documents from the GUP Ad hoc activity [UP-020053]. SA2 recommends working groups read this material to increase their understanding of this subject, while being aware that SA1 is still currently actively refining the GUP requirements.

Going forward, SA2 has created a task list (based on SP-020191) intended as a starting point for the analysis. Groups are asked to review the task list and highlight any modifications they believe are required.

Since there are a large number of groups involved in the GUP activity SA2 plans to provide further updates. Please note that SA2 has issued another liaison statement proposing to handle the Data Description Framework as a separate, but related Work Item to GUP.

2. Actions:

To the SA1, SA3, SA4, SA5, CN1, CN3, CN4, CN5, T1, T2 and T3 groups.

ACTION: S2 kindly requests responses on the items below to *their next meeting*.

All WGs: Be aware that the GUP activity will be proactively co-ordinated by SA2 over the release 6 timeframe. SA2 recommends reading the attached documents.

SA1: S2 asks to be provided with the latest version of the 22.240 (Stage1) TS.

T2: S2 asks to be provided with information about the status of the work on DDF and Common objects, TSs 23.241 and 24.241.

SA5, T2: S2 asks to be informed about the status and progress of the joint efforts of the groups concerning management aspects.

3. Date of Next S2 Meetings:

S2#25	24-28 June, 2002	Finland
S2#26	19-23 August, 2002	Toronto
S2#27	14-18 October, 2002	TBD

ANNEX: PROPOSED WORK PLAN TASK LIST

Task Name	***Resource Names***	***Starts***	***Finish***	***Comments***
Generic User Profile	**WG SA1**			
Service Requirements	WG SA1			
GUP actors	WG SA1			operator, subscriber, user, VASP, manufacture…..
GUP and 3GPP services/functions	WG SA1			
GUP and external services/functions	WG SA1			
End-user related requirements	WG SA1			
Security, privacy and integrity	WG SA1			
Data distribution, resilience, synchronisation	WG SA1			
Charging	WG SA1 (SA5?)			
Management	WG SA1 (SA5?)			
Concept definition and architecture	**WG SA2**			
GUP concept(s)	WG SA2	SA2#25		May eventually lead to stage2/3 tasks for CN5, T3, SA3, SA4, SA5, T2, CN1, CN4
Impact(s) on 3GPP architecture	WG SA2			May eventually lead to stage2/3 tasks for CN5, T3, SA3, SA5, SA4, T2, CN1, CN4
GUP coordination setup	**WG SA2**			
Definition of inter-group working procedures	WG SA2	SA2#24		
Data Description Framework	**WG T2**			
DDF requirements and definition	WG T2			Contributions from other groups strongly encouraged
DDF trial application	WG T2 / SA5			GPRS and MMS terminal provisioning
Shared objects definition	WG T2? / SA5?			Contributions from other groups strongly encouraged
Testing	**WG T1?**			

3GPP Joint Ad-Hoc on Generic User Profile 10
Cork, Ireland
2-5 April 2002

UP-020053

Title: Transfer of the Generic User Profile Work
Source: 3GPP Joint ad-hoc on Generic User Profile (GUP)
To: SA2
Cc: SA1, T2
Response to: none

Contact Person:
Name: **Kevin Holoubek & Bo Johansson**
Tel. Number: +1-847-523-5024, +46(0)46193673
E-mail Address: kevin.holoubek@motorola.com, bo.johansson@emp.ericsson.se

Attachments: UP-020039 (TS23.241, v0.3.0)
UP-020040 (TS24.241, v0.3.0)
UP-020058 (Minutes of UP-10, Cork, Ireland)
UP-020054 (Doclist after UP-10 Joint Ad-hoc on GUP)

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1. Overall Description:

The 3GPP Joint ad-hoc on Generic User Profile (Joint GUP ad-hoc) has been defining the concept of the Generic User Profile based on the Work Item Description SP-010548. In total, seven meetings have been held during the last 10 months and drafts of the four TS's, 22.240, 23.240, 23.241 and 24.241, have been developed. The work has been done with the technical requirements for capability negotiation, provisioning aspects, Subscription Management, and UE Management in mind. The current status of work on this task is as follows:

- Draft Stage 1 (SA1), 22.240, (now v0.6.0), has been handed to SA1.
- Draft Stage 2 (SA2), 23.240, (now v0.4.0), has been handed to SA2.
- Draft Stage 2 (T2), 23.241, v0.3.0 (ref UP-020039). The T2 GUP ad-hoc awaits feedback from SA2 regarding the progression and responsibility of this work. SA2's attention is drawn to the fact that T2 has a responsibility to develop this work within the timeframe defined by SA5 for UEM and SuM.
- Draft Stage 3 (T2), 24.241, v0.3.0 (ref UP-020040). The T2 GUP ad-hoc awaits feedback from SA2 regarding the progression and responsibility of this work.

The Joint GUP ad-hoc notes the email request from the SA2 chair for the attendance of GUP experts that have attended the Joint GUP ad-hoc sessions at the SA2 sessions concerning GUP.

Members from the Joint GUP ad-hoc offer to join the SA2 sessions and give a review of the documents outlined above, as well as an overview of the GUP concept and example applications of the concept. By offering this, the Joint GUP ad-hoc hope to provide the SA2 delegates, who may not be familiar with the GUP work, an understanding of the achievements of the Joint GUP ad-hoc.

2. Actions:

To SA2.

ACTION: The Joint GUP ad-hoc asks SA2 to kindly note the time constraints on the T2 GUP work in developing the UEM and SuM support mechanisms (specifically the Data Description Framework contained in TS 23.241) in conjunction with SA5, and provide feedback accordingly. To assist in this effort, the Joint GUP ad-hoc offers to give an overview explaining the GUP concept and the work that is currently being progressed jointly between SA5 and T2 GUP ad hoc.

3. Date of Next T2 Meeting:

T2	11-15 May 2002	Vancouver, B.C. Canada

T2 ad-hoc on Generic User Profile **T2GUP-020013**
Sophia Antipolis, France
5 – 7 February 2002

3GPP TS 23.241 V0.~~2.1~~3.0 (200~~1-12~~2-02)

Technical Specification

3rd Generation Partnership Project; Technical Specification Group Terminals; 3GPP Generic User Profile - Data Description Framework; Stage 2 (Release 6~~5~~)

Remove GSM logo from the cover page for pure 3rd Generation documents.

Select keywords from list provided in specs database.

Keywords

<keyword[, keyword]>

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Contents

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

Introduction

This clause is optional. If it exists, it is always the second unnumbered clause.

1 Scope

This clause shall start on a new page.

The present document …

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.*

[1] W3C Recommendation: "Extensible Markup Language (XML) 1.0 (Second Edition)". http://www.w3.org/TR/2000/REC-xml-20001006

[2] W3C Recommendation: "Namespaces in XML", 2 May 2001. http://www.w3.org/TR/1999/REC-xml-names-19990114/

[3] W3C Recommendation: "XML Schema Part 0: Primer", 2 May 2001. http://www.w3.org/TR/2001/REC-xmlschema-0-20010502/

[4] W3C Recommendation: "XML Schema Part 1: Structures", 2 May 2001. http://www.w3.org/TR/2001/REC-xmlschema-1-20010502/

[5] W3C Recommendation: "XML Schema Part 2: Datatypes", 2 May 2001. http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/

[6] W3C Recommendation: "XML Path Language (XPath) Version 1.0", 16 November 1999. http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/

[7] W3C Candidate Recommendation: "XML Pointer Language (XPointer) Version 1.0", 11 September 2001. http://www.w3.org/TR/1999/REC-xpath-19991116

[8] ISO (International Organization for Standardization): "ISO 11404, Language-independent Datatypes.

3 Definitions, symbols and abbreviations

Delete from the above heading those words which are not applicable.

Subclause numbering depends on applicability and should be renumbered accordingly.

3.1 Definitions

For the purposes of the present document, the [following] terms and definitions [given in ... and the following] apply.

Definition format

***<defined term>**: <definition>.*

example: text used to clarify abstract rules by applying them literally.

3.2 Symbols

For the purposes of the present document, the following symbols apply:

Symbol format

<symbol> <Explanation>

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

Abbreviation format

<ACRONYM> <Explanation>

4 Data Description Framework

Editor's note: Align with S2 stage 2 on GUP and DDF, 23.xyz.

The data description "matter" can be split in the following domains:

- **Data**
  Data stored and or access in a User Profile
- **Data Description**
  describes the data contained in the User Profile. (This also called the Schema level.)
- **Data Description Framework**
  Defines how to create the data description. (This also called the Schema-Schema level i.e. the Schema describing the Schema, which describes the data.)

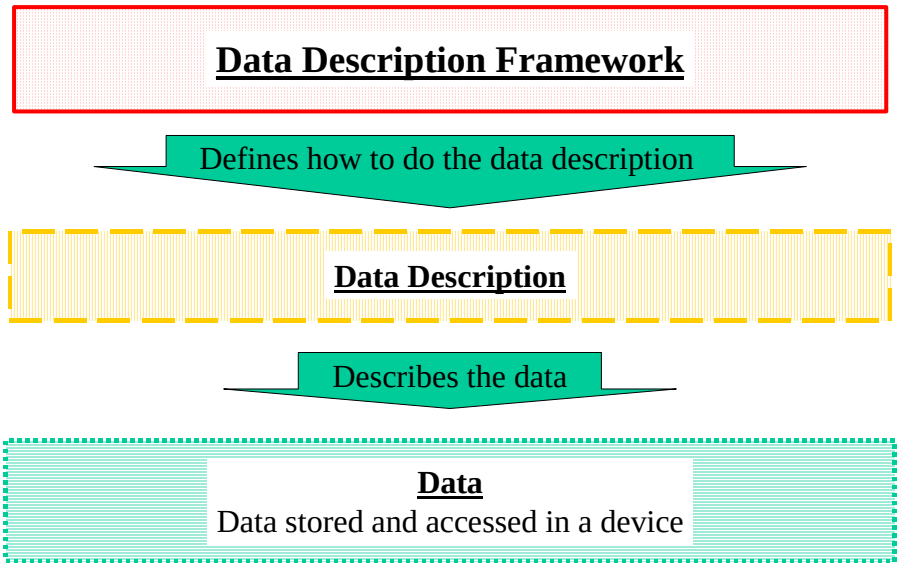


Figure 1: xxx

The Data Description Framework defines the method to describe the data in a Generic User Profile. It defines the structure of the Data Description as based on XML-schema. The Data Description Framework also defines a default representation (or transport format) of Data Descriptions and the data in a Generic User Profiles.

A specific Generic User Profile will be described, according to the Data Description Framework, resulting in a Data Description.

The structure and semantic of the data in a Generic User Profile is described in the Data Description. The Data Description Framework also defines a default representation of the data in the User Profile.

4.1 Basic Structure of the Generic User Profile

The Data Description Framework is used to describe Generic User Profiles with the basic structure shown in the picture below.

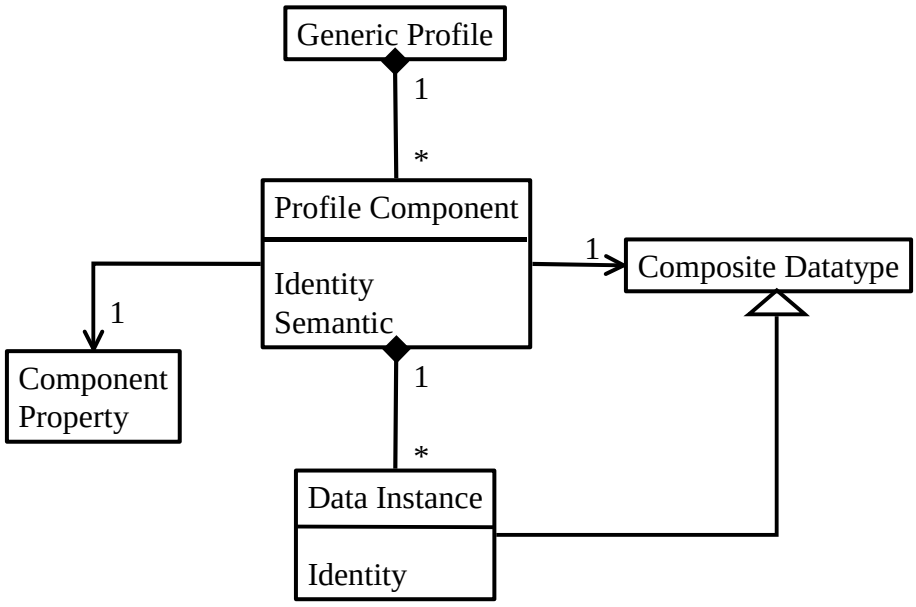


Figure 2: xxx

4.2 Types of Data Description Documents

A Data Description consists of a number of XML-documents.

The picture “Relationship between Data Description Documents” indicates the types of documents and the relation between those documents.

Note: An arrow means a reference between documents.

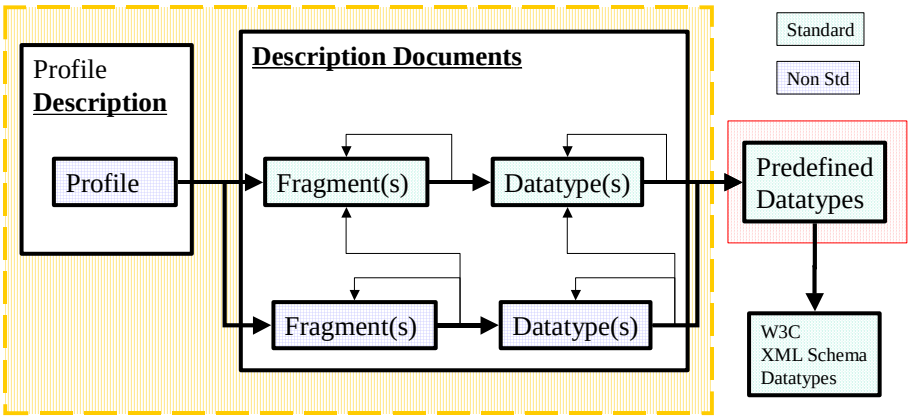


Figure 3: Relationship between Data Description Documents

There are three types of Data Description documents:

- Profile
  A Profile document is the main document in the description of the data in a Generic User Profile. It mainly contains references to Generic User Profile parts defined in Fragment documents. It is specific for a class of Generic User Profiles.

- Fragment
  Generic User Profiles parts containing Profile Components are defined in Fragment documents. Profile Components are declared mainly by connecting a Profile Component identity to a Datatype. Fragment documents can be shared between Data Descriptions.

- Datatype
  In this kind of document Datatypes are defined. Datatypes are defined using in the Data Description Framework predefined Datatypes and **user defined** Datatypes. Datatype documents can be shared between Data Descriptions.

4.3 Data Description Framework Parts

The Data Description Framework consists of:

- XML-schema files (in the appendix of this document)
- Description rules
- Default XML-based transport format

5 Logical Structure of Data Descriptions

Main elements used in the Data Descriptions are:

Profile Declares a Generic User Profile.

Fragment Defines a reusable Generic User Profile part.

Component Declares a Profile Component.

Property Declares a set of properties, which can be associated with some Profile Components.

Semantic Defines the meaning of things. Is used to understand the content of the Generic User Profile.

Comment Provides information intended for (the remainder of)? the Data Description.

Datatype Defines a Datatype.

Each of the elements is briefly described in the following section and in more detail in a separate chapter (NS: what chapter?).

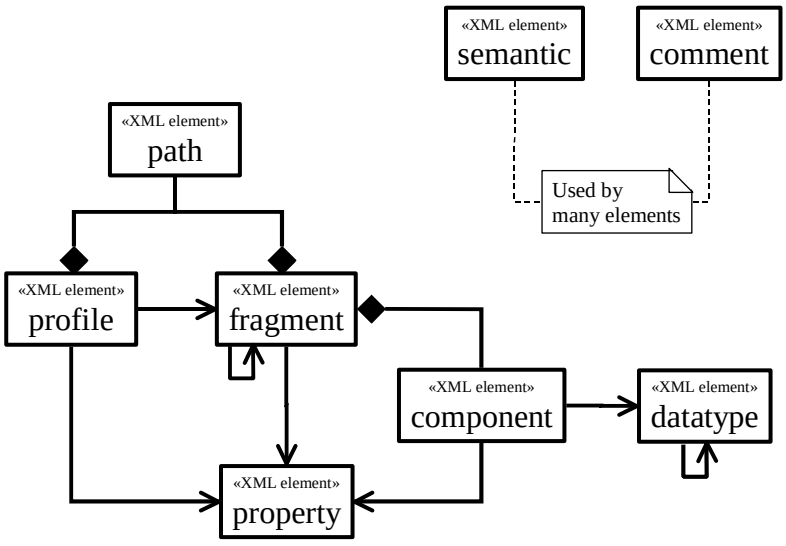


Figure 4: xxx

5.1 Profile

The Profile element is used to declare a Generic User Profile. It mainly contains the references to a number of Profile Fragments. The results of merging the referenced Profile Fragments are:

- A hierarchical name structure containing a number of Profile Components.
- A description of each Profile Component
    - Abstract syntax
    - Semantic

5.2 Fragment

In a Fragment element a number of Profile Components are declared. A Profile Fragment is normally used in many Generic User Profiles.

A Profile Fragment can include other Profile Fragments by referencing them.

5.3 Component

The Component element is used to declare the Profile Component.

The following are defined for a Profile Component :

- Identity
  a hierarchical namespace, similar to that in a file system, is used. The identities are selected in a way that they can be used as Universal Resource Locators, URLs.
- Semantic
  gives the meaning of the Profile Component.
- For the Data Instance
  - Possible number of Data Instances
  - Datatype
    The abstract syntax of the Data Instance is defined by referencing a Composite Datatype.
- Component Properties

5.4 Property

The property element declares a Component Property, which is used to control the usage and handling of Profile Components.

A Profile Component is directly or indirectly referencing one Component Property.

5.5 Semantic

The Semantic element is used in many elements to define the meaning. Examples are defining the meaning of a Profile Component, a Datatype, or a specific value in enumerations. The semantic is given using normal language. It is possible to give it in several different languages.

The information in the semantic elements is used by the interpretation and usage of the values in a Generic User Profile

5.6 Comment

Comment elements are used to add(?) comments to the Data Description.

5.7 Datatype

A group of elements is used to describe Datatypes. In the Data Description Framework there are a number of predefined Datatypes. Simple user defined Datatypes can be defined based on the predefined simple Datatypes. Composite Datatypes are defined using simple and other composite Datatypes.

The abstract syntax of a Component Data Instance is defined by referencing a Composite Datatype.

6 Notation used in this Specification

6.1 Rules

In this document an informal "Extended Backus-Naur Form (EBNF)" like notation is used.

EBNF rules are used in the document. The syntax of a rule is:

```
{symbol} ::= expression.
```

The rule is describing the {symbol} using an expression (or some text).

The special symbols used in the expression are:

{symbol**}**	{symbol} is explained in a rule with {symbol} as its right side (**{**symbol**}::=** …). It can be regarded as a placeholder for the thing described in the rule.
(expression**)**	Expression is treated as a unit when combined as described in the following 5 rows.
A**?**	Zero or one occurrences of A; optional A
A B	A followed by B (Concatenation). This operator has higher precedence than alternation; thus A B | C D is identical to (A B) | (C D).
A **|** B	A or B but not both (Alternation).
A**+**	One or more occurrences of A. Concatenation has higher precedence than alternation; thus A+ | B+ is identical to (A+) | (B+).
A*****	Zero or more occurrences of A. Concatenation has higher precedence than alternation; thus A* | B* is identical to (A*) | (B*).
{* comment ***}**	A comment in the expression.
{xsi:datatype**}**	Data of a simple type defined in "XML Schema Part 2: Datatypes" [5].
elementName	Used in XML-element content models.

6.2 XML-element

The following layout is used in the description of XML-elements:

Synopsis:

```
<tag
  attributeName
  attributeType = {xsi:datatype}
  optionalAttribute?
  enumAttribute = (large | medium | small) : medium
>
Content: expression
</tag>
```

In the start tag there is a list of attribute names (`attributeName`, `attributeType`, `optionalAttribute` and `enumAttribute`).

Optional attributes has a "?" after its name.

Attribute of a simple type defined in “XML Schema Part 2: Datatypes” [5] is indicated with `{xsi:datatype}` as for the `attributeType` above.

Where an attribute is of an enumerated datatype, the possible values are shown separated by vertical bars, as for the `enumAttribute` above; if there is a default value, it is shown following a colon.

The expression following “Content:” is an expression describing the allowed content of the element. Name not surrounded by {}, used in the expression is the name of an element, which may appear as a child element. The optional character following a name or sub-expression, governs whether the element or the sub-expression may occur one or more (+), zero or more (*), or zero or one times (?). The absence of such an operator means that the element or content particle must appear exactly once.

Example:

```
<example
  count = {xsi:integer}
  size? = (large | medium | small) : medium
>
Content: (all | any*)
</example>
```

6.2.1 Headlines used in XML-element descriptions

[editor’s note: need a 11.1.2.2]

The following headlines are used in the description of XML-elements:

Synopsis:

Indicating the syntax in the description of datatype.

Example:

Contains an example of a (part) of a datatype description.

Example data in XML-format:

Contains an example of a data in XML-format conforming to the datatype description.

Synopsis as expanded XML-schema:

The synopsis expressed using in XML-schema.

Example as expanded XML-schema:

The example expressed using in XML-schema.

7 Generic User Profile Description

7.1 Element profile

Synopsis:

```
<profile {propertyRef}?
>
  Content: {semantic} (fragmentRef | pathInProfile)*
</profile>
```

7.2 Element path used in profile element

Synopsis pathInProfile:

```
<path pathName = {pathName}>
  Content: {optSemantic} (fragmentRef | pathInProfile)*
</path>
```

8 Profile Fragment Description

8.1 Element fragment

Synopsis:

```
<fragment
      name = {fragmentName}
      pathName? = {pathName}>
  Content: {optSemantic} (component | fragmentRef | pathInFragment)*
</fragment>
```

The {fargmentName} is used when the fragment is referenced form a profile element or other fragment elements.

8.2 Element fragmentRef

Synopsis:

```
<fragmentRef
      fragmentRef = {fragmentRef}
      pathName? = {pathName}
      propertyRef? = {propertyRef}
>
  Content: {optSemantic}
</fragmentRef>
```

The fragment referenced by {fragmentRef} will in the resulting profile replace this element. It works like an include statement.

It is regarded an error if both the referring fragmentRef-element and the referenced fragment-elements have a pathName attribute.

8.3 Element path used in fragment element

Synopsis pathInFragment:

```
<path pathname =”{pathName}”
      propertyRef?="{propertyRef}">
  Content: {optSemantic} (component | fragmentRef | pathInFragment)*
</path>
```

9 Profile Component Description

9.1 Element component

Synopsis:

```
<component
      pathname? = {pathName}
      datatypeRef = {compositeDatatype}
      propertyRef? = {propertyRef}
      minInstances? = {minOccur}
      maxInstances? = {maxOccur}
>
  Content: {optSemantic}
</component>
```

Synopsis:

```
{minOccur} ::= {xsi:unsignedShort}
{maxOccur} ::= {xsi:unsignedShort} | “unbounded”
```

10 Component Property

The Component Property contains information controlling the usage and handling of a Profile Component. To allow several Profile Components to use the same Component Property, references are used. A Profile Component is directly or indirectly referencing one Component Property. Profile Components sharing Component Properties will be handled in the same way.

Example of property information is:

- Dynamics, change rate of
  - Component creation/deletion
  - Data Instance creation/deletion
  - Data value
- Ownership
- Access rights for users
  - No access, read, write access
  - Right to create, delete

10.1 Element property

Synopsis:

```
<property
      name = {propertyName}
>
  Content: [TBD]
</property>
```

11 Semantic and Comment

Comment elements are used to give comments in English to the Data Description itself.

Semantic is used to define the meaning of the main concepts used in Data Description. Examples are: Profile Component, Datatype, item in Datatype and specific value (in enumerations).

The semantic is given using normal language. It is possible to give it in several different languages.

Synopsis:

```
{semantic} ::= comment? semantic
{optSemantic} ::= comment? semantic?
```

11.1 Element comment

Synopsis:

```
<comment xml:lang="en">
  Content: [TBD]
</comment>
```

Comments elements are used to give comments to the Data Description. It is given in the English language.

11.2 Element semantic

Synopsis:

```
<semantic>
  Content: label+ definition? description?
</semantic>
```

The information in the semantic elements is used by the interpretation and usage of the described content. The semantic can be given in three different levels of detail:

- Label
  A human-readable label.
- Definition
  A statement that describes the essential nature of the element been described.
- Description
  Additional information (optional).

Synopsis:

```
<label xml:lang = {language} >
  Content:
</label>
```

Examples:

```
<label xml:lang="en">Understandable label</label>
<label xml:lang="se">Tolkbar etikett</label>
```

Synopsis:

```
<definition xml:lang = {language} >
  Content:
</definition>
```

Examples:

```
<definition xml:lang="en">
      A short definition</definition>
<definition xml:lang="se">
      En kort definition</definition>
```

Synopsis:

```
<description xml:lang = {language} >
  Content:
</description>
```

Examples:

```
<description xml:lang="en">
  A longer description ...
</description>
<description xml:lang="se">
  En längre beskrivning ...
</description>
```

Synopsis:

```
{languageId} ::= {xsi:language}
```

Language represents natural language identifiers as defined by [RFC 1766].

12 Datatype Description

12.1 Definitions

12.1.1 Datatype

[From XML-schema specification]

In this specification, a datatype is a 3-tuple, consisting of a) a set of distinct values, called its ·value space·, b) a set of lexical representations, called its ·lexical space·, and c) a set of ·facets that characterize properties of the ·value space·, individual values or lexical items.

12.1.2 Atomic datatypes

Atomic datatypes are those having values, which are regarded by as being indivisible or not further decomposable.

12.1.3 Predefined Atomic datatypes

Predefined Atomic datatypes are atomic datatypes, which are defined in this specification.

12.1.4 Derived Atomic datatypes

Derived Atomic datatypes are Atomic datatypes derived from the Atomic predefined datatypes by constraining them or by defining a union of Atomic datatypes

12.1.5 Composite datatypes

Composite datatypes are defined using atomic and other composite datatypes.

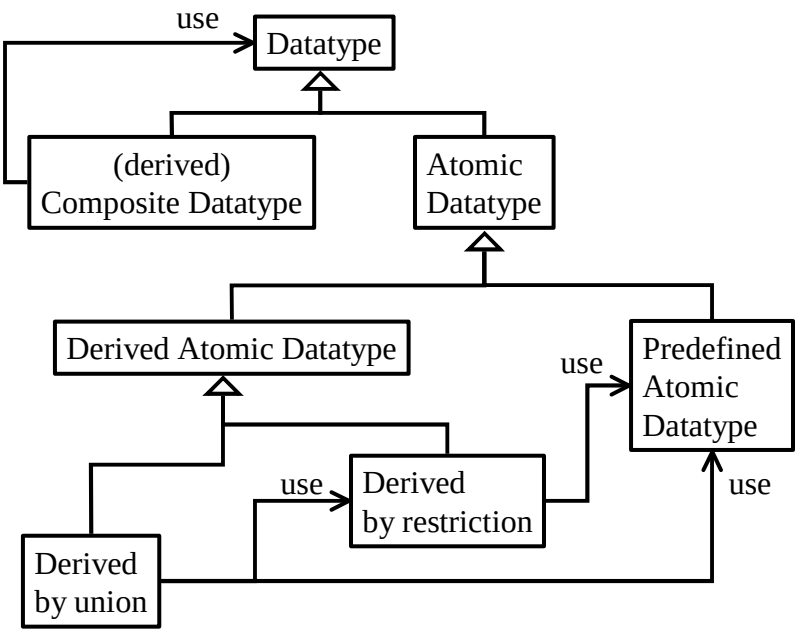


Fig xx Relationship between kinds of datatypes

Synopsis:

{datatypeDefinition} ::= atomicType | compositeType

{datatypeName} ::= [TBD]

12.2 Atomic Datatypes

12.2.1 Introduction

Atomic datatypes are those having values, which are regarded by as being indivisible or not further decomposable.

There are predefined atomic datatypes and derived atomic datatypes. Derived datatypes can be defined by restricting a predefined atomic datatype or by defining a union datatype.

12.2.2 Predefined atomic datatypes

Predefined atomic datatypes can only be added by revisions to this specification.

The XML-schema primitive datatypes are: string, boolean, decimal, float, double, duration, dateTime, time, date, gYearMonth, gYear, gMonthDay, gDay, gMonth, hexBinary, base64Binary, anyURI, QName, and NOTATION.

The XML-schema primitive derived datatypes are: normalizedString, token, language, NMTOKEN, NMTOKENS, Name, NCName, ID, IDREF, IDREFS, ENTITY, ENTITIES, integer, nonPositiveInteger, negativeInteger, long, int, short, byte, nonNegativeInteger, unsignedLong, unsignedInt, unsignedShort, unsignedByte, positiveInteger.

The predefined atomic datatypes are a subset of the XML-schema primitive datatypes.

The datatypes in the comments "{* … *}" below are for the moment excluded.

```
{predefinedAtomicDatatype} ::=
string | boolean
          {*| decimal | float | double*}
| duration | dateTime | time | date
          {*| gYearMonth | gYear | gMonthDay | gDay | gMonth*}
          {*| hexBinary | base64Binary*}
| anyURI
          {*| QName | NOTATION*}
| normalizedString
          {*| token *}
| language
          {*| NMTOKEN | NMTOKENS | Name | NCName*}
| ID | IDREF
          {*| IDREFS | ENTITY | ENTITIES*}
          {*| integer | nonPositiveInteger | negativeInteger | long*}
| int | short | byte
          {*| nonNegativeInteger | unsignedLong*}
```

```
| unsignedInt | unsignedShort | unsignedByte
          {*| positiveInteger*}
```

12.2.3 Derived Atomic Datatypes

Synopsis:

```
<atomicType name = {datatypeName} >
      Content: {optSemantic} ({restriction} | {union})
</atomicType>
```

Derived atomic datatypes can be defined by restricting a predefined atomic datatype or by defining a union datatype.

Synopsis as expanded XML-schema:

```
<simpleType
      final="list","restriction"
      id = [TBD]
      name = "{dataTypeName}"
>
  {optSemantic} ({restriction} | {union})
</simpleType>
```

Example:

12.2.4 Atomic datatypes derived by restriction

[From XML-schema specification]

A datatype is said to be derived by restriction from another datatype when values for zero or more constraining facets are specified that serve to constrain its value space and/or its lexical space to a subset of those of its base type. A constraining facet is an optional property that can be applied to a datatype to constrain its ·value space.

Note: Atomic datatypes derived by restriction can only be derived directly from Predefined atomic datatypes and not as restriction on derived atomic datatypes as in XML-Schema.

Synopsis:

```
<restriction base = {predefinedAtomicDatatype} >
  Content: {optSemantic} ({constrainingFacet})*
</restriction>
```

Example:

```
<atomicType  name="more-than-ninety-nine">
             <restriction base="int">
   <minExclusive value='99'/>
 <restriction/>
</atomicType>
```

Example data in XML-format:

```
100
```

Synopsis as expanded XML-schema:

```
<xs:simpleType name="{datatypeName}">
  <xs:restriction base="{predefinedAtomicDatatypeName}">
    {constrainingFacet}
  </xs:restriction>
</xs:simpleType>
```

Example as expanded XML-schema:

```
<xs:simpleType name='more-than-ninety-nine'>
  <xs:restriction base='int'>
    <xs:minExclusive value='99'/>
  </xs:restriction>
</xs:simpleType>
```

12.2.5 Constraining Facets

Constraining Facets in XML–schema are: length minLength maxLength pattern enumeration

whiteSpace maxInclusive maxExclusive minExclusive minInclusive

totalDigits fractionDigits.

[Issue: Which XML-schema Constraining Facets to select to be used]

Synopsis:

```
{constrainingFacetTag} =: minExclusive | minInclusive | maxExclusive |
maxInclusive | totalDigits | fractionDigits | length | minLength |
maxLength | enumeration | whiteSpace | pattern
```

Synopsis:

```
<{constrainingFacetTag}  value>
      Content: {optSemantic}
</{constrainingFacetTag}>
```

Example:

12.2.6 Union datatype

A union type enables an attribute value to be one instance of one type draw from the union of multiple atomic.

[From XML-schema specification] Union datatypes are those whose ·value spaces and ·lexical spaces are the union of the ·value spaces and ·lexical spaces of one or more other datatypes.

The datatypes that participate in the definition of a union datatype are called member types of that union datatype.

Synopsis:

```
<union>
      Content: {optSemantic} member*
</union>

<member  ref = {atomicNonUnionDatatype} >
      Content: {optSemantic}
</member>
```

Example:

```
<atomicType name="booleanOrDate">
  <union >
      <member ref="xsi:boolean"/>
      <member ref="xsi:date"/>
  </union>
</atomicType>
```

Example data in XML-format:

```
<someTag xsi:type="xsi:boolean">false</someTag>
```

or

```
<someTag xsi:type="xsi:date">1948-10-11</someTag>
```

Synopsis as expanded XML-schema:

```
<union id=”ID”>
  <simpleType ref="{atomicNonUnionDatatype}">
      {optSemantic}
  </simpleType>
  <simpleType ref= …>
      …
  </simpleType>
  …
</union>
```

Example as expanded XML-schema:

```
<atomicType name="booleanOrDate" … >
  <union … >
      <simpleType ref="xsi:boolean"/>
      <simpleType ref="xsi:date"/>
  </union>
```

</atomicType>

12.3 Composite Datatypes

12.3.1 Introduction

A composite datatype contains a number of name items each with a defined datatype.

```
{compositeType} ::= recordType
```

12.3.2 Record datatype

A record datatype contains a number of named items called fields each with a defined datatype. The field names must be unique with a record datatype. The datatype of a field can be any atomic data type or composite datatype.

Synopsis:

```
<recordType name = {datatypeName} >
      Content: {optSemantic} (field | fieldVector)*
</recordType>
```

Synopsis:

```
{fieldName} ::= [TBD]
```

There are two types of fields: Simple field and vector field. A simple field contain on instance of the field datatype. A vector field contains a vector or a number of instances of the datatype.

Example:

```
<recordType name="screenCoordinate">
  …
</recordType>
```

Synopsis as expanded XML-schema:

```
<xs:complexType name="{datatypeName}">
  <xs:sequence>
    …
  <xs:sequence>
</xs:complexType>
```

Example as expanded XML-schema:

```
<xs:complexType name=" screenCoordinate">
  <xs:sequence>
    …
```

```
  <xs:sequence>
</xs:complexType>
```

12.3.3 Simple field

Synopsis:

```
<field name="{fieldName}" dataType="{dataTypeName}"/>
```

Example:

```
<recordType name="screenCoordinate">
 <field name="x" datatype="xCoordinate"/>
 <field name="y" datatype="yCoordinate"/>
</recordType>
```

Synopsis as expanded XML-schema:

```
<xs:element name="{fieldName}" type="{datatypeName}"/>
```

Example as expanded XML-schema:

```
<xs:complexType name=" screenCoordinate">
  <xs:sequence>
   <xs:element name="x" type=" xCoordinate"/>
   <xs:element name="y" type=" yCoordinate"/>
  <xs:sequence>
</xs:complexType>
```

Example data in XML-format:

```
<x>12</x>
<y>5</y>
```

12.3.4 Vector field

Synopsis:

```
<fieldVector
      name="{fieldName}"
      dataType="{datatypeName}
      minOccurs="{minOccur}"
      maxOccurs="{ maxOccur}"
```

>

Content: {optSemantic}

</fieldVector>

Example:

```
<fieldVector name="c" dataType="coordinate"
      minOccurs="3" maxOccurs="3"/>
```

Example data in XML-format:

```
<c index="1">10</x>
<c index="2">20</x>
      <c index="3">30</x>
```

Synopsis expanded XML-schema:

```
<xs:element name="{fieldName}" type="{datatypeName}"
      minOccurs="{minOccur}" maxOccurs="{maxOccur}">
      <xs:attribute name="index" type="xs:byte"/>
</xs:element>
```

Example expanded XML-schema:

```
<xs:element name="x" type="coordinate"
      minOccurs="3" maxOccurs="3">
      <xs:attribute name="index" type="xs:byte"/>
</xs:element>
```

Annex A (normative): XML-schema files

This annex is a placeholder for the XML-schema files that are part of the Data Description Framework. These files will be used for the creation and consistency check of the Data Descriptions.

The following files represent XML-schemas. These files correspond to the definitions made above in this TS.

"3GPPsemantic.xsd" is the schema describing how to represent the semantics. "3GPPdatatype.xsd" is the schema describing how to represent the datatypes. "3GPPdatatype.xslt" is the definition of the translation between 3GPP representation of datatypes and the corresponding schema.


3GPPsemantic.xsd


3GPPdatatype.xsd


3GPPdatatype.xslt

The following files are new version of the XML-schemas.

Please observe that the corresponding changes are NOT yet made to this specification.

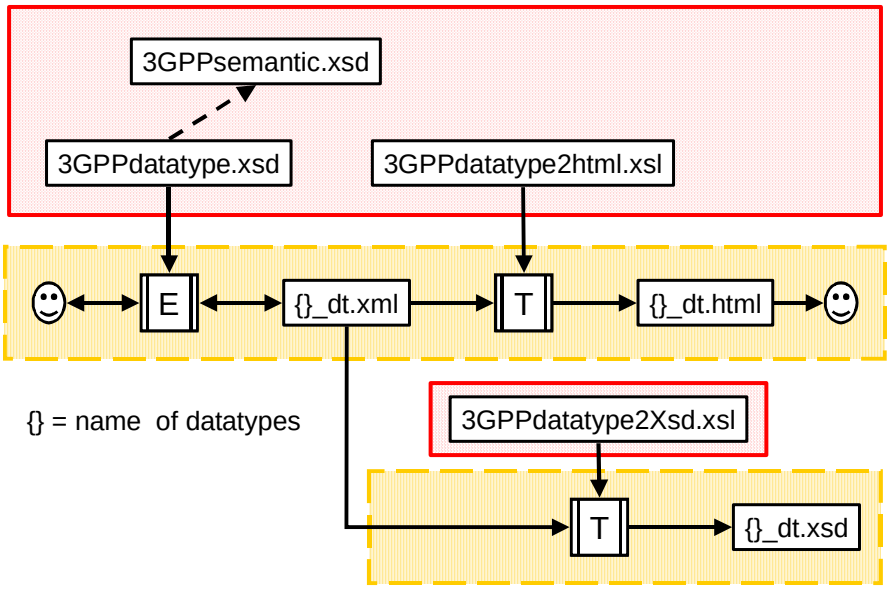

3GPPsemantic.xsd


3GPPdatatype.xsd


3GPPdatatype2Xsd.xsl


3GPPdatatype2Html.xsl

The following picture shows the relationship between the files above and a datatype description file ({}_dt.xml), the corresponding html ({}_dt.html), and XML-schema ({}_dt.xsd) files.



Annex B (Informative): XML-schema in brief

XML-schema is a Schema definition language. The functionality is above and beyond what is provided by DTDs.

The W3C Recommendation consists of three parts:

- XML Schema Part 0: http://www.w3.org/TR/xmlschema-0/
  Primer is a non-normative document intended to provide an easily readable description of the XML Schema facilities, and is oriented towards quickly understanding how to create schemas using the XML Schema language. This primer describes the language features through numerous examples, which are complemented by extensive references to the normative texts.

- XML Schema Part 1, Structures: http://www.w3.org/TR/xmlschema-1/
  and

- XML Schema Part 2 ,Datatypes: http://www.w3.org/TR/xmlschema-2/
  provide the complete normative description of the XML Schema language.

B.1 XML-Schema Type System

The XML-schema Part 2 defines a Data Type System.

A Datatype is defined as follows:

- A Datatype is a 3-tuple, consisting of:

  a) a set of distinct values, called its·**value space**,

  b) a set of lexical representations, called its·**lexical space**, and

  c) a set of ·facet·s that characterize properties of the·value space, individual values or **lexical items**.

The definition of Boolean is:

- Boolean has the·value space·required to support the mathematical concept of binary-valued logic: {true, false}.

The lexical space of Boolean is defined:

- An instance of a datatype that is defined as ·boolean· can have the following legal literals {true, false, 1, 0}.

B.2 Examples of user defined types

To create a new type of integer called myInteger whose range of values is between 10000 and 99999 (inclusive) can be done by restricting the built-in simple type integer, whose range of values also includes integers less than 10000 and greater than 99999. To define myInteger, we restrict the range of the integer base type by employing two facets called minInclusive and maxInclusive:

```
<xsd:simpleType name="myInteger">
  <xsd:restriction base="xsd:integer">
    <xsd:minInclusive value="10000"/>
    <xsd:maxInclusive value="99999"/>
  </xsd:restriction>
</xsd:simpleType>
```

XML Schema defines fifteen facets. Among these, the enumeration facet is particularly useful and it can be used to constrain the values of almost every simple type, except the boolean type. The enumeration facet limits a simple type to a set of distinct values. For example, we can use the enumeration facet to define a new simple type called USState, derived from string, whose value must be one of the standard US state abbreviations:

```
<xsd:simpleType name="USState">
<xsd:restriction base="xsd:string">
   <xsd:enumeration value="AK"/>
   <xsd:enumeration value="AL"/>
   <xsd:enumeration value="AR"/>
   <!-- and so on ... -->
</xsd:restriction>
</xsd:simpleType>
```

New complex types are defined using the complexType element For example, USAddress is defined as a complex type, and within the definition of USAddress we see five element declarations.

```
<xsd:complexType name="USAddress" >
  <xsd:sequence>
   <xsd:element name="name"   type="xsd:string"/>
   <xsd:element name="street" type="xsd:string"/>
   <xsd:element name="city"   type="xsd:string"/>
   <xsd:element name="state"  type="xsd:string"/>
   <xsd:element name="zip"    type="xsd:decimal"/>
  </xsd:sequence>
```

```
                    </xsd:complexType>
```

B.3 DTD and XML-schema in the data Description architecture

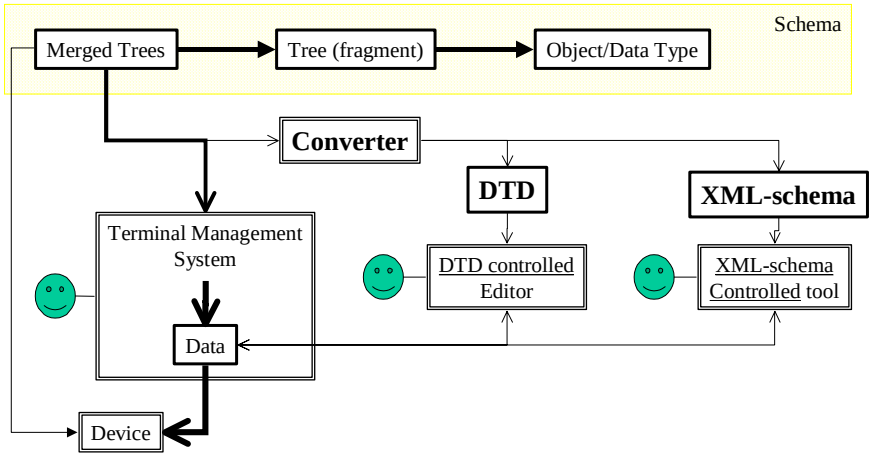
The following picture puts together the data description proposed with the DTD/XML-schema coding.

It also shows some usages of a Data Description:

- Terminal Management System
  The Data Description is defining the syntax and the format of the data sent to the device. The data values can be checked. The text describing the meaning of the parameters is fetched form the Data Description.

- Standard tools
  The Data Description can be translate to a XML DTD and an XML-schema. These can be used by tools, which understand DTDs and XML-schemas.

Data Description Architecture (2)



Annex C (Informative): Examples of Data Modelling Languages

Here follow a number of possible data modelling languages and principles.

Editor's note: Annex C is kept for reference for the time being.

C.1 ASN.1

ASN.1 defines the abstract syntax of information but does not restrict in any way, how the information is encoded.

There are various ASN.1 encoding rules, which provide transfer syntax (a concrete representation) of the data values, whose abstract syntax is described in ASN.1. The standard ASN.1 encoding rules include:

- BER (Basic Encoding+ Rules),
- CER (Canonical Encoding Rules),
- DER (Distinguished Encoding Rules) and
- PER (Packed Encoding Rules).

C.2Interface Definition Language, IDL

The OMG Interface Definition Language (IDL) is the language used to describe the interfaces that client objects call and object implementations provide. An interface definition written in OMG IDL completely defines the interface and fully specifies each operation's parameters. An OMG IDL interface provides the information needed to develop clients that use the interface's operations.

CORBA 2.4.2 OMG IDL Syntax and Semantics chapter http://www.omg.org/cgi-bin/doc?formal/01-02-39

C.3 Unified Modelling Language, UML

The Unified Modelling Language (UML) is a graphical language for visualising, specifying, constructing, and documenting the artifacts of a software-intensive system.

The UML offers a standard way to write a system's blueprints, including conceptual things such as business processes and system functions as well as concrete things such as programming language statements, database schemas, and reusable software components.

OMG Modelling Specifications:
http://www.omg.org/technology/documents/formal/omg_modeling_specifications_avai.htm

UML Forum, a virtual community and knowledge portal that provides current information for modellers interested in UML: http://www.celigent.com/uml/

C.4 Document Type Definition, DTD and XML

The XML document type declaration contains or points to markup declarations that provide a grammar for a class of documents. This grammar is known as a document type definition, or DTD.

The DTD is defined in the XML specification.

XML home page: http://www.w3.org/XML/

Main specification: http://www.w3.org/TR/REC-xml

C.5 Resource Description Framework (RDF)

RDF integrates a variety of web-based metadata activities using XML as interchange syntax.

RDF home page: http://www.w3.org/RDF/

Model and Syntax Specification: http://www.w3.org/TR/REC-rdf-syntax/

Schema Specification 1.0: http://www.w3.org/TR/2000/CR-rdf-schema-20000327/

C.6 XML Schema

XML Schemas express shared vocabularies. It provides a means for defining the structure, content and semantics.

- XML home page: http://www.w3.org/XML/Schema
- XML Schema Part 0: Primer: http://www.w3.org/TR/xmlschema-0/
- XML Schema Part 1: Structures: http://www.w3.org/TR/xmlschema-1/
- XML Schema Part 2: Datatypes: http://www.w3.org/TR/xmlschema-2/

C.7 Composite Capability/Preference Profiles (CC/PP)

The W3C Metadata Activity addressed the combined needs of several groups for a common framework to express assertions about information on the Web. The primary work in this activity was the Resource Description Framework.

Composite Capability/Preference Profiles (CC/PP): A user side framework for content negotiation is one of the W3C Metadata Activities.

Here are some links:

http://www.w3.org/Metadata/

- CC/PP Working Group: http://www.w3.org/Mobile/CCPP/
- CC/PP home page: http://www.w3.org/TR/NOTE-CCPP/
- Composite Capabilities/Preference Profiles: Requirements and Architecture: http://www.w3.org/TR/2000/WD-CCPP-ra-20000721/
- Composite Capability/Preference Profiles (CC/PP): Structure: http://www.w3.org/TR/2000/WD-CCPP-struct-20000721/
- CC/PP Attribute Vocabularies: http://www.w3.org/TR/CCPP-vocab/

C.8 Common Information Model (CIM)

The DMTF http://www.dmtf.org/index.html Common Information Model (CIM) is an approach to the management of systems, software, users, networks and more, that applies the basic structuring and conceptualisation techniques of the object-oriented paradigm.

A management model is provided to establish a common conceptual framework for a description of the managed environment. A fundamental taxonomy of objects is defined — both with respect to classification and association, and with respect to a basic set of classes intended to establish a common framework.

The white paper about Common Information Model (CIM) Core Model:
http://www.dmtf.org/var/release/Whitepapers/DSP0111.htm gives a good introduction to CIM.

C.9 Language Independent Datatypes, LID

- ISO/IEC 11404:1995, Information technology - Language-Independent Datatypes
  http://pueblo.lbl.gov/~olken/mendel/w3c/iso11404.html
- ISO/IEC TR 10182:1994 - Binding Techniques for Programming Languages
- ISO/IEC 13886:1996 - Language Independent Procedure Calling
- ISO/IEC TR 14369:1999 - Guidelines for the Preparation of Language Independent Service Specifications
  http://wwwold.dkuug.dk/JTC1/SC22/WG11/docs/n455.rtf
- A taxonomy of datatypes http://www.kcl.ac.uk/kis/support/cit//staff/brian/taxosn.html

C.10 ISO/IEC 11179 - Specification and Standardization of Data Elements

http://pueblo.lbl.gov/~olken/X3L8/drafts/draft.docs.html

International Standard ISO/IEC 11179 parts are:

- Part 1: Framework for the Generation and Standardization of Data Elements;
- Part 2: Classification of Concepts for the Identification of Domains;
- Part 4: Rules and Guidelines for the Formulation of Data Definitions
- Part 5: Naming and Identification Principles for Data Elements; and
- Part 6: Registration of Data Elements.

Annex D (informative): Examples of Vocabularies

Here follow examples on Vocabularies.

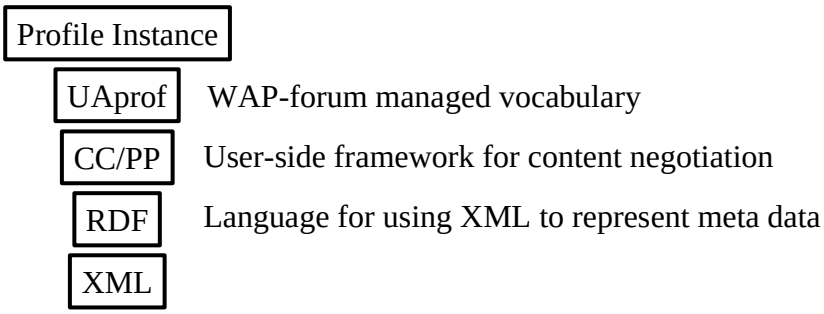
Editor's note: Annex D is kept for reference for the time being.

D.1 WAP UAProf

A WAP Forum specification. WAP UAProf Wireless Application Group, User Agent Profile Specification: http://www1.wapforum.org/tech/terms.asp?doc=SPEC-UAProf-19991110.pdf

WAP UAprof and CC/PP

- http://www.w3.org/Mobile/Activity
- http://www.w3.org/TR/CCPP-struct/
- http://www.w3.org/TR/CCPP-vocab/



D.2 SyncML device specific information

The DevInf.DTD is intended to be used to exchange device specific information. Exchange of device specific information such as available memory and item identifiers, supported local databases is a prerequisite to successful data synchronization. http://www.syncml.org/docs/syncml_devinf_v10_20001207.pdf

D.3 A Comparison of Schemas for Video Metadata Representation

This could give some inputs. http://www8.org/w8-papers/3c-hypermedia-video/comparison/comparison.html

D.4 vCard and vCalendar

vCard and vCalendar defines a transport and platform-independent format for exchanging personal information typically found on a traditional business card calendaring and scheduling information.

Personal Data Interchange (PDI) http://www.imc.org/pdi/

vCard in RDF draft-iannella-vcard-rdf-00.txt http://www.oasis-open.org/cover/draft-dawson-vcard-xml-dtd-00.txt

Annex E (informative): Example of Data Type Description

Data type “screenCoordinate”

This XML document describes a composite datatype screenCoordinate. It has two items x and y of type xCoordinate and yCoordinate. XCoordinate can have values 0 to 60.

```
<?xml version="1.0" encoding="UTF-8"?>

<dataTypes xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="D:\ecsbojn\proj\dataDescription\DDcurrent\3GPPdataType.xsd">


    <compositeType name="screenCoordinate">
        <item name="x" dataType="xCoordinate"/>
        <item name="y" dataType="yCoordinate"/>
    </compositeType>


    <atomicType name="xCoordinate" base="int">
        <minInclusive value="0"/>
        <maxInclusive value="60"/>
    </atomicType>


    <atomicType name="yCoordinate" base="int">
        <minInclusive value="0"/>
        <maxInclusive value="30"/>
    </atomicType>


</dataTypes>
```

XML representation of data

This XML document is an example of how data of datatype screenCoordinate can be represented.

The item names x and y is used as tags. The format of text in the x-tag and y-tag follows the XML-schema specification.

```
<?xml version="1.0" encoding="UTF-8"?>

<screenPositionS xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:noNamespaceSchemaLocation="D:\ecsbojn\proj\dataDescription\DDcurrent\dataTypeExample.xsd">

    <screenPosition>
        <x>12</x>
        <y>15</y>
    </screenPosition>
    <screenPosition>
```

```
        <x>5</x>
        <y>13</y>
    </screenPosition>
</screenPositionS>
```

Full XML-schema

This XML document is a XML-schema defining the constrains on a XML-document containing screen Positions. The part in **bold** text can automatically be generated from the data description of screenCoordinate.

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XML Spy v4.0 beta 3.1 build Aug 27 2001 (http://www.xmlspy.com) by Bo Johansson (Ericsson Mobile Communications AB) -->
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" attributeFormDefault="unqualified">
    <xs:element name="screenPositionS">
        <xs:complexType>
            <xs:sequence>
                <xs:element ref="screenPosition" maxOccurs="unbounded"/>
            </xs:sequence>
        </xs:complexType>
    </xs:element>
    <xs:element name="screenPosition" type="screenCoordinate">
        <xs:annotation>
            <xs:documentation>Comment describing screenPosition</xs:documentation>
        </xs:annotation>
    </xs:element>

    <xs:complexType name="screenCoordinate">
        <xs:sequence>
            <xs:element name="x" type="xCoordinate"/>
            <xs:element name="y" type="yCoordinate"/>
        </xs:sequence>
    </xs:complexType>

    <xs:simpleType name="xCoordinate">
        <xs:restriction base="xs:int">
            <xs:minInclusive value="0"/>
            <xs:maxInclusive value="60"/>
        </xs:restriction>
    </xs:simpleType>
```

```
    <xs:simpleType name="yCoordinate">
        <xs:restriction base="xs:int">
            <xs:minInclusive value="0"/>
            <xs:maxInclusive value="30"/>
        </xs:restriction>
    </xs:simpleType>
</xs:schema>
```

Annex F (informative) Examples of Datatype Definitions

F.1. Introduction

This annex shows some examples of datatypes definition.

F.2. Test Datatype Definitions Examples

The datatypes tested are called:

- "more-than-ninety-nine"
- "booleanOrDate"
- "screenCoordinate"
- "wapId"

F.2.1 Test datatypes definition according to the UP-010089

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XML Spy v4.0 U (http://www.xmlspy.com) by Bo Johansson (Ericsson Mobile Platforms AB) -->
<?xml-stylesheet type="text/xsl" href="3GPPdatatype.xslt"?>
<datatypes xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="3GPPdatatype.xsd">
    <atomicType name="more-than-ninety-nine">
        <restriction base="int">
            <minExclusive value="99"/>
        </restriction>
    </atomicType>
    <atomicType name="booleanOrDate">
        <union>
            <member ref="xs:boolean"/>
            <member ref="xs:date"/>
        </union>
    </atomicType>
    <recordType name="screenCoordinate">
        <field name="x" datatype="coordinateX"/>
        <field name="y" datatype="coordinateY"/>
    </recordType>
    <atomicType name="coordinateX" base="int">
        <restriction base="int">
            <minInclusive value="0"/>
            <maxInclusive value="60"/>
        </restriction>
    </atomicType>
    <atomicType name="coordinateY" base="int">
        <restriction base="int">
            <minInclusive value="0"/>
            <maxInclusive value="30"/>
        </restriction>
    </atomicType>
    <atomicType name="wapId">
        <semantic>
```

```
            <label lang="en">Globally unique wap id</label>
            <definition xml:lang="en">
      Uniqueness MUST be obtained by either using a fully qualified Internet domain name
      (i.e. hostname as defined in section 3.2.2 of {RFC2396])
      or a globally unique IP address (IPv4 {RFC791] in decimal format with dots as delimiters
      or IPv6 {RFC2373], as hexadecimal numbers with colons as delimiters or as a combination of
hexadecimal and decimal numbers with dots and colons as delimiters)
      </definition>
            <description lang="en">
            http://www.ietf.org/rfc/rfc2396.txt
            http://www.ietf.org/rfc/rfc791.txt
            http://www.ietf.org/rfc/rfc2373.txt
      </description>
         </semantic>
         <union>
            <member ref="wapfqIDN"/>
            <member ref="IPv4Add"/>
            <member ref="IPv6Add"/>
         </union>
      </atomicType>
      <atomicType name="wapfqIDN">
         <semantic>
            <label lang="en">Fully qualfied host name</label>
            <description lang="en">
       http://www.ietf.org/rfc/rfc2396.txt
       </description>
         </semantic>
         <restriction base="string">
            <pattern value=".+"/>
         </restriction>
      </atomicType>
      <atomicType name="IPv4Add">
         <semantic>
            <label lang="en">IPv4 address</label>
            <description lang="en">
       http://www.ietf.org/rfc/rfc791.txt
             </description>
         </semantic>
         <restriction base="string">
            <pattern value="\d{1,3}(.\d{1,3}){3}"/>
         </restriction>
      </atomicType>
      <atomicType name="IPv6Add">
         <semantic>
            <label lang="en">IPv6 address</label>
            <description lang="en">
       http://www.ietf.org/rfc/rfc2373.txt
       </description>
         </semantic>
         <restriction base="string">
```

```
        <pattern value="[0-9a-fA-F]{0,4}(:[0-9a-fA-F]{0,4}){7}|[0-9a-fA-F]{0,4}(:[0-9a-fA-F]{0,4}){5}(.\d{1,3}){4}"/>
      </restriction>
    </atomicType>
</datatypes>
```

F.2.2 Test datatypes as expanded XML-schema:

```
<?xml version="1.0" encoding="UTF-16" ?>
- <xs:schema elementFormDefault="qualified" attributeFormDefault="unqualified"
    xmlns:xs="http://www.w3.org/2001/XMLSchema">
  - <xs:simpleType name="more-than-ninety-nine" final="list restriction">
    - <xs:restriction base="xs:int">
        <xs:minExclusive value="99" />
      </xs:restriction>
    </xs:simpleType>
  - <xs:simpleType name="booleanOrDate" final="#all">
      <xs:union memberTypes="xs:boolean xs:date" />
    </xs:simpleType>
  - <xs:complexType name="screenCoordinate">
    - <xs:sequence>
        <xs:element name="x" type="coordinateX" />
        <xs:element name="y" type="coordinateY" />
      </xs:sequence>
    </xs:complexType>
  - <xs:simpleType name="coordinateX" final="list restriction">
    - <xs:restriction base="xs:int">
        <xs:minInclusive value="0" />
        <xs:maxInclusive value="60" />
      </xs:restriction>
    </xs:simpleType>
  - <xs:simpleType name="coordinateY" final="list restriction">
    - <xs:restriction base="xs:int">
        <xs:minInclusive value="0" />
        <xs:maxInclusive value="30" />
      </xs:restriction>
```

```
  </xs:simpleType>
- <xs:simpleType name="wapId">
  - <xs:annotation>
      <xs:documentation>Globally unique wap id</xs:documentation>
      <xs:documentation>Uniqueness MUST be obtained by either using
        a fully qualified Internet domain name (i.e. hostname as
        defined in section 3.2.2 of {RFC2396]) or a globally unique IP
        address (IPv4 {RFC791] in decimal format with dots as
        delimiters or IPv6 {RFC2373], as hexadecimal numbers with
        colons as delimiters or as a combination of hexadecimal and
        decimal numbers with dots and colons as
        delimiters)</xs:documentation>
      <xs:documentation>http://www.ietf.org/rfc/rfc2396.txt
        http://www.ietf.org/rfc/rfc791.txt
        http://www.ietf.org/rfc/rfc2373.txt</xs:documentation>
    </xs:annotation>
    <xs:union memberTypes="wapfqIDN IPv4Add IPv6Add" />
  </xs:simpleType>
- <xs:simpleType name="wapfqIDN">
  - <xs:annotation>
      <xs:documentation>Fully qualfied host name</xs:documentation>
      <xs:documentation>http://www.ietf.org/rfc/rfc2396.txt</xs:do
      cumentation>
    </xs:annotation>
  - <xs:restriction base="xs:string">
      <xs:pattern value=".+" />
    </xs:restriction>
  </xs:simpleType>
- <xs:simpleType name="IPv4Add">
  - <xs:annotation>
      <xs:documentation>IPv4 address</xs:documentation>
      <xs:documentation>http://www.ietf.org/rfc/rfc791.txt</xs:doc
      umentation>
    </xs:annotation>
  - <xs:restriction base="xs:string">
      <xs:pattern value="\d{1,3}(.\d{1,3}){3}" />
```

```
      </xs:restriction>
    </xs:simpleType>
  - <xs:simpleType name="IPv6Add">
    - <xs:annotation>
        <xs:documentation>IPv6 address</xs:documentation>
        <xs:documentation>http://www.ietf.org/rfc/rfc2373.txt</xs:do
        cumentation>
      </xs:annotation>
    - <xs:restriction base="xs:string">
        <xs:pattern value="[0-9a-fA-F]{0,4}(:[0-9a-fA-F]{0,4}){7}|[0-
          9a-fA-F]{0,4}(:[0-9a-fA-F]{0,4}){5}(.\d{1,3}){4}" />
      </xs:restriction>
    </xs:simpleType>
  - <xs:element name="testDatatype">
    - <xs:complexType>
      - <xs:choice minOccurs="0" maxOccurs="unbounded">
          <xs:element name="more-than-ninety-nine" type="more-than-
            ninety-nine" />
          <xs:element name="booleanOrDate" type="booleanOrDate" />
          <xs:element name="screenCoordinate"
            type="screenCoordinate" />
          <xs:element name="coordinateX" type="coordinateX" />
          <xs:element name="coordinateY" type="coordinateY" />
          <xs:element name="wapId" type="wapId" />
          <xs:element name="wapfqIDN" type="wapfqIDN" />
          <xs:element name="IPv4Add" type="IPv4Add" />
          <xs:element name="IPv6Add" type="IPv6Add" />
        </xs:choice>
      </xs:complexType>
    </xs:element>
</xs:schema>
```

F.2.3 Generated documentation of the test datatype XML-schema.

test_datatype_html.zip

Annex G (informative): Data Description Files and Tools

This annex is planned to contain an introduction of the files and tools that are related to the Data Description Framework and the development of data descriptions. The appended presentation will be used as the basis for this introduction.

Microsoft PowerPoint Presentation

Annex H (informative): Examples of GUP profiles

The appended document contains examples of GUP profile descriptions. Two small profiles are described using the Data Description Framework. When more realistic examples are available an annex with a similar structure will be created using these examples to give an introduction of how GUP profiles are created according to the Data Description Framework.

"T2GUP-020012 (Profile description).c

Annex <X> (informative): Change history

It is usual to include an annex (usually the final annex of the document) for specifications under TSG change control which details the change history of the specification using a table as follows:

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
01-11-13		UP-010104			First draft of the specification from UP-010066		
01-11-14		UP-010106			Second Draft of the specification		
01-12-05		UP-010139			v.0.2.1 After UP#07 Editorial changes based on UP-010118: chapter 11.1 moved after chapter 5, becoming chapter 6		
02-02-07		T2GUP-020004 T2GUP-020012			v.0.3.0 after T2GUP#1 Annex A: New XML-schema files added. New Annex G added, describing data description related files and tools. New Annex H added, containing examples of GUP profiles		

3GPP TS 24.241 V0.~~2~~3.0 (~~2001~~2002-~~12~~02)

3rd Generation Partnership Project;
Technical Specification Group Terminals;
3GPP Generic User Profile Common Objects;
Stage 3
(Release x)

Reference
3TS/TSGT-02xxxxx

Keywords
R4 Specification 3G

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Contents

Foreword

This Technical Specification has been produced by the 3GPP.

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of this TS, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 Indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the specification;

1 Scope

This specification serves as a vessel to manage the process of adding new datatypes, Generic User Profile fragments, and other constructs for use in 3GPP applications within various specifications.

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.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

[1] 3GPP TS 27.103 V4.1.0 (2001-04), 3rd Generation Partnership Project; Technical Specification Group Terminals; Wide Area Network Synchronisation Standard (Release 4)

[2] 3GPP 22.240

[3] 3GPP 23.240

[4] 3GPP 23.241

3 Definitions and abbreviations

3.1 Definitions

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

vObject: ….

data store ..

Datatype

GUP fragment

…

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

[tbd]

4 Background

[Editor's note: to be redrafted]

The request for data synchronisation support for the VHE MExE User Profile extensions brought up the long term need to define standards for and manage the process of adding new vObjects and other constructs as data store types for use in data synchronisation activities. Managing this process targets the following areas:

- Definition of new vObject and Other Constructs standardised formats for use in data synchronisation as required by other groups within 3GPP.
- Management of the process of publishing these new standardised formats for use within and external to 3GPP.
- Support of terminal and network interoperability through the use of a standardised approach to the definition of these new formats.
- Extension of the usefulness of the TSG-T2-defined data synchronisation architecture and mechanisms to new data store semantic content.
- Identification of required protocols and development, if needed

The vObjects and other constructs listed in Section 6 should enhance interoperability and be implemented in a way that ensures backwards compatibility, where possible.

Standardised vObject and Other Construct formats must allow users and operators to keep local copies up to date with remotely stored copies of the user's and the operator's mission-critical data stores in a manner that will allow data synchronisation to a wide variety of potentially disparate data stores. These standardised formats must allow rapid expansion of the nature and type of future data store enhancements.

Data synchronisation of vObjects and Other Constructs should standardise charging mechanisms, especially in roaming situations and between different operators. Other charging mechanisms (e.g. air time) may be needed when data synchronization of vObjects and Other Constructs is attempted outside of the operator's domain.

5 Process for Addition of New Datatypes

[tbd]

The appended presentation is a first try to describe the work process to be used when defining new datatypes. When this and the following two chapters are developed, ideas can be fetched from this presentation.

Microsoft PowerPoint Presentation

6 Process for Addition of New Fragments

[tbd]

7 Process for Addition of New Common Objects

[tbd]

8 Process for Addition of New vObjects or Other Constructs

[Editor's Note: to be redrafted]

8.1 New vObjects or Other Constructs

New vObjects or other constructs shall be defined in a stand-alone 3GPP specification. This specification may be a wholly self-contained definition or it may simply be a reference to an independent SDO's specification, where such exists.

8.2 Formal Recognition

Formal recognition of the new vObject or other construct shall be through the use of a CR to this specification requesting the addition to Section 6 of the specification of the vObject or other construct to be recognized.

8.3 Approval Process

[tbd]

Annex A (Normative)

Generic User Profile Components

Annex A1 Datatypes

Annex A2 GUP Fragments

Annex A3 Other Constructs

Annex B (Informative)

Parameters for Component Construction

Annex B1 GPRS Parameters

Parameter Requirements	Data Description	Generated Documentation	Generated XML Schema

UP-010091 (GPRS parameters).zip

gprsDatatype.xml

gprsDatatype_dt.xml

gprsDatatype.htm

gprsDatatype_dt.html

gprsDatatype.xsd

gprsDatatype_dt.xsd

[Please note that these files are included here for information only. The final structure (i.e., to include the object files within this specification or to reference them as external specifications) has not been decided.

Please note, also, that these are very early, representative drafts. More work must be done by experts on GPRS prior to these being used by developers.]

Annex B2 Subscription Management

[tbd]

Annex B3 MMS Parameters

Parameter Requirements	Data Description	Generated Documentation	Generated XML Schema

"T2GUP-020007 (MMS parameters).d

[tbd]

Please note that this file is included here for information only.

Please also note that this is a very early draft and more work must be done by experts on MMS.

Annex C (Normative)

Recognised vObjects and Other Constructs

Specification	Title	Comment(s)
(T2-000676)	Bookmark	Bookmark URL standard

Annex D:
Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
2001-11					Submitted by T2 to TSG-T for preliminary information		0.1.0
2001-12					Added GPRS examples to Annex B	0.1.0	0.2.0
2002-02					After T2GUP#1 Example of work procedure added to chapter 5 In annex B1the files gprsDatatype.xml gprsDatatype.html and gprsDatatype.xsd are replaced by new versions. In annex B3 draft ofto data requirements added	0.2.0	0.3.0

3GPP Joint ad-hoc on Generic User Profile (UP-10) **UP-020054**
Cork, Ireland, 2-5 of March, 2002

ALL UP-010xxx/020xxx NUMBERS ISSUED UP T0 2002-04-05

Document Number	Title	Source	Result
	UP-01, STOCKHOLM, SWEDEN, JUNE, 2001		
UP-010001	Draft agenda	Ericsson	Approved
UP-010002	Ad-hoc Objectives	Ericsson	
UP-010003	User Profile in Standards For a	Ericsson	
UP-010004	Use Cases	Ericsson	
UP-010005	What is a User Profile	Ericsson	
UP-010006	CC_PP and RDF presentation	Nokia	
UP-010007	CC_PP and RDF	Nokia	
UP-010008	Some first ideas how a User Profile should look like	Siemens	
UP-010009	Data description framework	Ericsson	Postponed to UP-04
UP-010010	Continued work on User Profiles	Ericsson	
UP-010011	Managing a Personal Service Environment for the UMTS Virtual Home Environment	Alcatel	
UP-010012	LS from SA5 to SA1 on User Profile	xxx/SA5	
UP-010013	CIM Overview	IBM	
UP-010014	Working assumption for User Profile	UP ad hoc	**Output of UP-01**
UP-010015	User Profile Description	Ericsson	
UP-010016	User profile defintion	UP ad hoc	**Output of UP-01**
UP-010017	Draft WID	UP ad hoc	Withdrawn
	UP-03, SOPHIA ANTIP., FRANCE, SEPT., 2001		
UP-010018	Report from Stockholm meeting	Siemens	
UP-010019	Agenda for meeting 03 in Sophia Antipolis	Chairman	
UP-010020	Proposed first draft of a stage 1	Siemens	
UP-010021	User profile data categories	Siemens	
UP-010022	User profile management	Siemens	
UP-010023	Liaison Statement on the 3GPP Generic User Profile work impact on VHE stage 2 description	SA2	Postponed to UP-04
UP-010024	Proposed draft stage 1	Ericsson	
UP-010025	Data Type description	Ericsson	Postponed to UP-04
UP-010026	Suggested Work Activities	Orange	
UP-010027	Proposed draft stage 1	Orange	
UP-010028	3GPP TSG-S1 Generic User Profile Adhoc	SA1	
UP-010029	WI for User Profile	UP ad hoc	
UP-010030	Draft LS on User Profile	Motorola	
UP-010031	Draft TS 32.140 v0.1.3	SA5	
UP-010032	Reply to "LS on Generic User Profile" (S1-010866/ S5-010418)	SA5	
UP-010033	Liaison Statement on 3GPP User Profiles	CN4	
UP-010034	LS on Subscription Management to CN4	SA5	
UP-010035	Draft TS 32.140 v1.4.0	SA5	
UP-010036	Ad hoc draft 1 of stage 1	Drafting	Revised to 39

		group	
UP-010037	Revised UP-010014 (Tree diagram)	AT&T W	
UP-010038	Revised UP-010037	AT&T W	
UP-010039	Ad-hoc draft 2 of stage 1	Rapporteur	Revised to 44
UP-010040	Continued work	Ericsson	
UP-010041	LS to WAP Forum (Client Prov. and UA Prof)	Motorola draft	**Approved at UP-04**
UP-010042	LS to SyncML	Motorola draft	**Approved. See 58**
UP-010043	LS to GSM-A TWG and SERG	Orange draft	Revised to 45
UP-010044	Ad-hoc draft 3 of stage 1	Ad-hoc	**Output of UP-03**
UP-010045	LS to GSM-A TWG and SERG	Orange	Revised to 46
UP-010046	LS to GSM-A TWG and SERG	Orange	**Approved. See 59**
	UP-04, STUTTG., GERMANY, OCTOBER, 2001		
UP-010047	Draft Agenda: Data Description Framework Part, 9th -10th of Oct + General part 10th-12th	Chairman	Approved
UP-010048	User Profile Components	Ericsson	
UP-010049	Generic User Profile introduction	Ericsson	
UP-010050	Classification of User Profile data	Ericsson	Postponed (Stage2 part) to UP-07
UP-010051	Harmonised description (instead of Section 12)	Ericsson	Postponed Sent to SA1 at UP-07
UP-010052	Generic User Profile use cases	ALCATEL	
UP-010053	Generic User Profile Model WITHDRAWN due to IPR statements remaining in text	ALCATEL	WITHDRAWN Replaced by 138 (Postponed; Ex. for Stage 2 disc)
UP-010054	Generic User Profile Management Architecture	ALCATEL	
UP-010055	Management of Distributed User Profile defined by the IST Project VESPER	Siemens	Postponed Sent to SA1 at UP-07
UP-010056	SP-010548, Generic User Profile WID	TSG-SA	
UP-010057	Chairman's report, rev1, from UP-03	Ericsson	
UP-010058	SP-010557, LS to SyncML. See 42	Ericsson/TSG -SA	Officially approved and sent version
UP-010059	SP-010558, LS to GSM-A. See 46	Ericsson/TSG -SA	Officially approved and sent verison
UP-010060	Draft Stage 1, Tdoc 44 with editorial changes	Orange	Revised to 72, 73
UP-010061	List of editorial changes and needed work	Orange	
UP-010062	Draft 1 of S2 Stage 2	Ericsson	Revised to 65
UP-010063	Draft 1 of T2 Stage 2	Ericsson	Revised to 64
UP-010064	Draft 2 of T2 Stage 2	Ericsson	Revised to 66
UP-010065	Draft 2 of S2 Stage 2	DDF ad-hoc	**Output of UP-04**
UP-010066	Draft 3 of T2 Stage 2	DDF ad-hoc	**Output of UP-04**
UP-010067	Service Customisation Sets and the GUP Component Model	Materna	
UP-010068	3GPP User Profile presentation	Orange	Withdrawn. Revised to 77
UP-010069	GUP Component Instances (cf., tdocs 48, 67)	Ericsson	
UP-010070	Clarification on the Stage 1, Section 4.2	Siemens	
UP-010071	LS to S2 (response to 23)	Nokia	**Approved**
UP-010072	Ad-hoc draft of stage 1 – with revision marks	Ad-hoc	
UP-010073	Ad-hoc draft of stage 1 – no revision marks	Ad-hoc	
UP-010074	Classification; Updates to 4.3 based on 50	Ericsson,	

		Siemens	
UP-010075	Future work – calendar	Ericsson	Withdrawn. Revised to 84
UP-010076	New stage 1 introduction	Hutchison 3G	Postponed Sent to SA1 at UP-07
UP-010077	3GPP User Profile presentation	Orange	
UP-010078	Cleaning up of the Introduction chapter	Siemens	Postponed Sent to SA1 at UP-07
UP-010079	Cleaning up the General description of the GUP Stage 1 (section 4.0)	Siemens	Postponed Sent to SA1 at UP-07
UP-010080	Cleaning up the GUP an GUP component description of the GUP Stage 1 (section 4.2)	Siemens	Postponed Sent to SA1 at UP-07
UP-010081	Cleaning up the GUP data classification of the GUP Stage 1 (section 4.3)	Siemens	
UP-010082	Draft Stage1, Section 5 restructuring	Drafting group	Postponed Sent to SA1 at UP-07
UP-010083	4.3 restructuring (based on 86)	Orange	Postponed Sent to SA1 at UP-07
UP-010084	Future work - calendar	Ericsson	
UP-010085	Draft Stage 1, v0.3.0, with revision marks	Ad-hoc	**Output of UP-04**
UP-010086	Draft Stage 1, v0.3.0; no revision marks	Ad-hoc	**Output of UP-04**
	UP-06, LUND, SWEDEN, NOV., 2001		
UP-010087	Add References to XML, XML-Schema in 23.241	Ericsson	
UP-010088	Data Description Framework and Data Description Elements in 23.241	Ericsson	
UP-010089	Datatype description improvements in 23.241	Ericsson	Revised to 105
UP-010090	Examples on datatypes	Ericsson	
UP-010091	GPRS parameters belonging to Generic User Profile	Ericsson	
UP-010092	Proposed editorial changes to UP-010088	NTT DoCoMo	Revised to 102
UP-010093	Draft minutes from the UP-04 in Stuttgart	NTT DoCoMo, Ericsson	
UP-010094	Agenda for UP-06 in Lund, November	Ericsson	
UP-010095	LS form S1 to GUP ad-hoc (S1-011176)	SA1	
UP-010096	27.104, v.0.1.1, vObjects and Other Constructs for Use in Data Synchronisation (SP-000657)	Motorola	
UP-010097	LS from SyncML on Data Formats in SyncML (T2-010899)	Motorola	
UP-010098	32.140, v.0.4.0, Stage1 on Subscription Management; Detailed Req.s & Architecture	BT (SA5)	
UP-010099	32.802, v.0.0.4, UE Management Feasibility Study	BT (SA5)	
UP-010100	23.240, Section 4 revision	Siemens	Revised to 107
UP-010101	23.240, Section 7.4 revision	Ericsson	Revised to 108
UP-010102	23.241, Revision of Sections 4-5	Ad-hoc	
UP-010103	23.240, v0.1.0, first draft with TS number	Ericsson	
UP-010104	23.241, v0.1.0, first draft with TS number	Ericsson	
UP-010105	23.241, Revision of Section 6	Ad-hoc	
UP-010106	23.241, v0.2.0; UP-010104 with 90, 102, 105 incorporated; With revisions	Ad-hoc/ Motorola	**Output of UP-06**
UP-010107	23.240, Revision of Section 4	Ad-hoc	
UP-010108	23.240, Revision of Section 7.4	Ad-hoc	
UP-010109	23.240, v0.2.0; With revisions	Ad-hoc	**Output of UP-06**

UP-010110	24.241, v0.1.0	Ad-hoc	Revised to 113
UP-010111	23.240, v0.2.0; No revision marks	Ad-hoc	**Output of UP-06**
UP-010112	23.241, v0.2.0; No revision marks	Ad-hoc	**Output of UP-06**
UP-010113	24.241, v0.1.0; Cover sheet deleted	Ad-hoc	**Output of UP-06**
	UP-07, CANCUN, MEXICO, DEC., 2001		
UP-010114	Draft Agenda for UP-07, Cancun	Chairman	
UP-010115	UP-06 Minutes (Lund)	Chairman	
UP-010116	Editorial change in 23.240	Ericsson	
UP-010117	Classification of data in stage 2 (23.240); Cp. UP-010050	Ericsson	Revised to 134
UP-010118	Editorial change in 23.241	Ericsson	
UP-010119	GPRS Data types (for 24.241)	Ericsson	
UP-010120	LS on 3GPP GUP Stage 1 (S1-011176)	SA1	
UP-010121	LS on Cx User Profile	CN4	
UP-010122	LS to CN4 on Cx User Profile; Response to 121	Ad-Hoc	**Output of UP-07**
UP-010123	S5-010722; LS to T2 on 32.802 (T2-011255)	SA5/Chairman	
UP-010124	S5A010701 –Edited 32.140, v0.4.0, Nov-01	BT	
UP-010125	S5A010501r3 – 32.140 v0.3.0, Sep-01	BT	
UP-010126	SUM slides to GUP (SA5)	BT	
UP-010127	S5A010706_IMS management	BT	
UP-010128	LS to Joint groups on Work Status of the GUP Appends 129, 141, 142, 143	Ad-hoc	**Output of UP-07**
UP-010129	LS Reply to SA1; Response to 120 Appends 130, 132, 137, 145 as well as postponed 51, 55, 76, 78, 79, 80, 82, 83, 86	Ad-hoc	**Output of UP-07**
UP-010130	22.240 Section 5 (based on 82)	Ad-hoc	(Output- see 129)
UP-010131	GUP definition	AT&T W	
UP-010132	22.240 Req. on SA2 Classification	Ad-hoc	(Output- see 129)
UP-010133	LS to SyncML on UICC management	Motorola	Withdrawn
UP-010134	23.240; Changes to the classification	Ad-hoc	
UP-010135	23.240; Section 4	Ad-hoc	
UP-010136	23.240, v0.3.0 (116,134,135 based on 111); With revisions	Ad-hoc	**Output of UP-07**
UP-010137	22.240 LS text: Relationship between VHE, GUP	Ericsson	(Output- see 129)
UP-010138	Generic User Profile Model	Alcatel	Replaces 53. Noted
UP-010139	23.241, v0.2.1; With revisions	Ad-hoc	**Output of UP-07**
UP-010140	24.241, v0.2.0; With revisions	Ad-hoc	**Output of UP-07**
UP-010141	23.240, v0.3.0; No revision marks	Ad-hoc	**Output of UP-07**
UP-010142	23.241, v0.2.1; No revision marks	Ad-hoc	**Output of UP-07**
UP-010143	24.241, v0.2.0; No revision marks	Ad-hoc	**Output of UP-07**
UP-010144	N4-011418, 29.228	Lucent	
UP-010145	22-240 Miscellaneous comments for treatment Included in 129	Ad-hoc	(Output- see 129)
UP-010146	UP-07 minutes of meeting	NTT DoCoMo	
	UP-09, SOPHIA ANTIPOLIS, FEB., 2002		
UP-020001	UP-07 minutes of meeting (Cancun)	NTT DoCoMo	
UP-020002	Draft agenda	Chairman	
UP-020003	Proposal for 3GPP GUP Terminology and Architecture	Alcatel	

UP-020004	GUP Logical Architecture - Discussion	Ericsson	
UP-020005	LS from T2 SW3 on MMS availability and USIM/UICC portability (T2M-020109)	AT&T W /T2 SWG3	**Not yet approved by T2**
UP-020006	LS on relationship of GUP to Subscription Management (T2-020031, S5-020016)	SA5	Replaced by 0017
UP-020007	22.240, v0.5.0, 2002-01	SA1 Ad-hoc	
UP-020008	Report from SA1 Ad-hoc 2000-01	Cingular	
UP-020009	STF180-SG-014 DEG-HF-00025e; Universal Communications Identification (UCI) solutions	Motorola /STF180	
UP-020010	Modelling interorganisation relationships for SuM (S5A020004r1)	BT	
UP-020011	LS on User Equipment Management Feasibility Study (SA5's TR 32.802); T2-020032	Chairman/SA 5	
UP-020012	LS on SyncML Initiative's Responses to T2's Follow-Up Questions (T2-020021)	Chairman /SyncML	
UP-020013	SA1#15 input on GUP overview in 22.240 (S1-020340)	Chairman /Siemens	
UP-020014	SA1#15 input on ToR for GUP (S1-020339)	Chairman /Siemens	
UP-020015	SA1#15 input on Network Requirements for GUP (S1-020371)	Chairman /Nokia	
UP-020016	LS on Status of the Generic User Profile Work (T2-020242)	T3	
UP-020017	Comments on UP-010141 and relationship of GUP to Subscription Management (T2-020243)	SA5	
UP-020018	LS to S5 on Comments on UP-010141 and relationship of GUP to Subscription Management	Ad-hoc	**Output Response to 0017**
UP-020019	LS to S3,S4,S5,N1,N4,N5,T3 on co-ordination of data definitions identified in GUP development	Ad-hoc	**Output Draft to T2**
UP-020020	LS to S1,SA on time scales for the GUP/DDF work	Ad-hoc	**Output Draft to T2**
UP-020021	Work in Progress for the Joint GUP Ad-hoc	Ad-hoc	**Ongoing work**
	UP-10, CORK, IRELAND, APRIL, 2002		
UP-020022	Draft agenda	Chairman	Withdrawn
UP-020023	GUP Information Model	Ericsson	Revised to 43
UP-020024	References in GUP	Ericsson	
UP-020025	23.241, Updated Annex B	Ericsson	
UP-020026	23.241, Updated v0.3.0	Ericsson	
UP-020027	DDF files and examples	Ericsson	
UP-020028	GUP Terminology and Architecture	Alcatel	
UP-020029	GUP Management Model	Alcatel	
UP-020030	GUP Data Components Model	Alcatel	
UP-020031	GUP Data Storage	Alcatel	
UP-020032	GUP Stage 1	Alcatel	
UP-020033	Agenda, draft2	Chairman	
UP-020034	Minutes of UP-09, Sophia Antipolis, February-02	NTT DoCoMo	
UP-020035	Minutes of T2GUP#1	NTT DoCoMo	
UP-020036	GUP Task List, TSGS#15(02)0191	Chairman	
UP-020037	22.240, v050, Stage1, S1-020186	Chairman	
UP-020038	23.240, v040, Stage2, S2-020705	Chairman	
UP-020039	23.241, v030, T2 DDF Stage2, T2GUP-020013	Chairman	
UP-020040	24.241, v030, T2 Stage3, T2GUP-020014	Chairman	
UP-020041	32.140, v100, SuM Stage1, SP-020012	Chairman	

UP-020042	32.802, v104, UEM FS, SP-020011	Chairman	
UP-020043	GUP Information Model, Rev. 2	Ad-hoc	
UP-020044	22.240, v060, Stage1, S1-020661	Chairman	
UP-020045	Reply LS on support for subscriber certificates (S5-020008 response S5-020313 S3-020163_LS_to S1)	SA5 SWGA	Withdrawn SA5 draft version
UP-020046	Relationship of GUP to Subscription Management from SA5 (S5-020009 response to S5-020145)	SA5 SWGA	SA5 draft version
UP-020047	Liaison Statement on co-ordination of data definitions, identified in GUP development (S5-020010 response to S5-020126)	SA5 SWGA	SA5 draft version
UP-020048	Liaison Statement on VASP MMS Connectivity (S5-022007 response to T2-020038)	SA5 SWGA	SA5 draft version
UP-020049	23.008, v410 (Organisation of subscriber data)	BT	
UP-020050	LS from T2 to SA5 on UEM (T2-020116)	Chairman	
UP-020051	Draft Agenda SA2 #24	Chairman/SA 2 Chairman	
UP-020052	Comparison of 37 and 44 (22.240 v050, v060)	Ad-hoc	
UP-020053	LS to SA2 handing over the GUP work	Ad-hoc	**Output**
UP-020054	Document list; Final GUP list	Ad-hoc	**(Output, see 53)** **THIS LIST!** **See also T2GUP adhoc**
UP-020055			Withdrawn
UP-020056		Ad-hoc	Withdrawn
UP-020057	Draft Presentation to SA1 and SA2	Ad-hoc	Replaced by 60
UP-020058	Minutes of UP-10	DoCoMo	**(Output, see 53)**
UP-020059	UEM roles and relationships	AT&TW, Ericsson	
UP-020060	Presentation to SA1 and SA2	Ad-hoc	**(Output, see 53)**
UP-020061	Minutes Joint Meeting with SA5	DoCoMo, Ericsson	**Output**

TSG-S2/S3/S4/S5/CN4/CN5/T2/T3 Joint Ad-hoc Meeting
On Generic User Profile

Draft Report

Annex A: Agenda
Annex B: Participants list
Annex C: Document list

Executive Summary

The Joint ad-hoc meeting was held in Cork, Ireland on 2-5 April 2002. The meeting was kindly hosted by Motorola.

As it was the last meeting of the Joint GUP ad-hoc, the group concentrated their efforts on developing output for SA2 and other Working Groups that summarised the GUP concept and what the Joint ad-hoc had achieved to date.

On the **3rd (10.45-17.30**) there was a joint session with SA5 SWG-A **on Subscription Management** (in the Joint GUP Ad-hoc room). As a result of the meeting, it was agreed that a "pilot" project to test the GUP concept and DDF would be developed and implemented jointly by T2GUP and SA5.

See agenda item 17 for output documents.

The group thanked the chairman for all her hard work and the ad-hoc was disbanded at the end of the meeting. All outputs were to be sent to SA2.

1 Opening of the meeting and call for IPRs

The Chairman, Dr Gunilla Bratt (Ericsson) opened the meeting and made a call for IPR.

2 Approval of the agenda

UP-020033	Agenda, draft2	Chairman	**AGREED**

The Chairman explained the comments on the top of the agenda regarding the Joint meetings with SA5. The intention of holding the Joint GUP ad-hoc meeting in Cork was to proceed with the Stage 2 work and the data modelling work, partly in conjunction with SA5. The agenda was approved without change.

3 Identification of the meeting secretary

Nicola McGregor (NTT DoCoMo) acted as secretary for the meeting.

4 Introduction of participants

The participants introduced themselves. Representatives included delegates from T2, S1, S3, and T3.

5 Registration of input documents

Dave Milham commented that the Subscription Management Stage 2 document had not yet been stabilised. SA5 had not received any new contributions yet this meeting. The plan was to develop a requirements document for Release 5 and develop Stage 2 for Release 6. Hence there had been no pressure to develop the Stage 2 as of yet.

6 Objectives of the meeting

The objectives of the meeting were to continue with some of the architectural issues that were initiated at the last meeting and, further, to discuss how to proceed with data modelling and common objects work in conjunction with SA5.
SA5 was considered a key group by the Joint GUP ad-hoc, as it was perhaps the only other group that has done data modelling within 3GPP. The support for Subscription Management (SuM) and User Equipment Management (UEM) were identified as some of the urgent issues for the GUP.
Inputs from Ericsson and Alcatel that continued on discussions initiated at the last meeting were to be examined. The issue of GUP version handling was raised, but it was suggested to be deferred to SA2.
The Chairman stated that in accordance with decisions taken at SA#15 Plenary, this would be the last GUP Joint Ad Hoc meeting. Accordingly, the outputs of this meeting will be transferred to SA2 for their review and continuation of the GUP work.

7 Reports and Letters from other groups

Nigel Barnes (Motorola) gave a brief presentation of the Draft SA#15 report (Draft_report_SA#15_v003, SA area of the 3GPP server). Nigel explained that SP-020191 (Ericsson, Siemens) on the progress of the GUP work was presented at SA#15. An outline of the decisions made at the SA Plenary was also given.

UP-020036	GUP Task List, TSGS#15(02)0191	Chairman	**NOTED**

This document was presented at the SA plenary to explain the need for a cross group to initially handle the GUP work before distributing the tasks to the relevant working groups. It also drafts a list of relevant tasks.

The technical coordination was within the scope of SA2. SA2 will take responsibility for all the GUP work, which means an initial expansion of the scope of their work. SA2 will decide who will chair the group and they may create a GUP drafting group, or they may combine it with the VHE/OSA group. This group could have extra drafting sessions outside of the SA2 plenaries.

The work would have to be moved out to the other relevant groups at some point.
While the work was being progressed at SA2, the experts from the Joint GUP are encouraged to attend the SA2 meetings. Information would be sent out on the 3GPP-GUP list (3GPP_GUP@LIST.ETSI.FR). TSG-TT had been asked not to approve any new versions of the GUP specifications until SA2 had had a chance to review the GUP work.
Rolf (Telia AB) requested to have clarification from SA2 that the GUP work was expected to continue at SA2 for the short term.

There was concern from Ericsson and AT&T Wireless about losing momentum on the work and the SA2 Chairman had made it clear via email that GUP experts could attend the SA2 meetings on GUP.

It was reported that the S1 chairman had stated that the Stage 1 was currently stable enough to be distributed to other groups but not to be upgraded to version 1.

UP-020042	32.802, v104, UEM FS, SP-020011		**NOTED**

This document was provided for reference only.

UP-020050	(T2-020116 LS to SA5 on response to UEM Feasibility Study)		**NOTED**

This document was an LS sent from T2 to SA5 regarding the UEM Feasibility Study. It was to be discussed at the Joint T2SWG2 and SA5 meeting.
This document was noted.

8 Approval of the minutes from the previous meeting Review of the outputs

UP-020034	Minutes of UP-09, Sophia Antipolis, February-02	NTT DoCoMo	**AGREED**

The document was presented briefly by the Chairman. The document was agreed with no changes.

UP-020035	Minutes of T2GUP#1	NTT DoCoMo	**AGREED**

The document was presented briefly by the Chairman. The document was agreed with no changes. It was agreed that the latest version of the documents should be sent to CN4 as they have adopted the GUP DDF for the Cx User Profile.

9 Subscription Management, Stage1 (32.140) Joint with SA5 SWG-A

See also UP-020061 (Minutes from the Joint meeting) for tdocs 28, 29, 39, 40, 43, 45, 46, 47, 48, 49 (in addition to 17, 18, 41 below).

UP-020041	32.140, v100, SuM Stage1, SP-020012		**NOTED**

NOTES TAKEN FROM JOINT GUP/SA5 MEETING*

This document was presented for information by Dave Milham (BT). The document outlined service requirements for Subscription Management. The document suggests a modified definition for "subscriber". This definition is being proposed to SA1 for addition to 21.905. It was noted that no alternative definition for "user" was being proposed, although this had been discussed at length in SA5.

The idea behind the document was to provide standardised interfaces to the HSS to allow VASP/Customer Care access. It was suggested that as these interfaces become more open, it would prove difficult to avoid standardization. The use of profile components was adopted from the GUP work, since that way of structuring was felt to fit the SuM approach.

It was identified that some of the User Profile components may overlap with the SA5 Subscription Components, although the intended users of the components would differ. Accordingly, the views on access control and security may differ. The feasibility that the operator may not have complete access to all the data was discussed. In some cases there may only be limited number of people with access rights. Many of the security requirements for TS32.140 were taken from the GUP specification Stage 1 TS 22.240. The decision had been to simplify the requirements for Subscription management.

There was general consensus that the 3GPP system was too narrow in scope for certain situations to identify all the data involved, particularly in the case of wireless LANs. There was discussion over the lack of business models to facilitate the modelling of complex supply chains. In conclusion, Dave stated that the real issue is to provide support mechanisms to deliver complex services. The document was noted.

UP-020017	Comments on UP-010141 and relationship of GUP to Subscription Management (T2-020243)	SA5	**NOTED**
UP-020018	LS to S5 on Comments on UP-010141 and relationship of GUP to Subscription Management	Ad-hoc	**Output Response to 0017**

UP-020018 was the response to UP-020017. The document was intended for distribution at SA5 Miami meeting but was not distributed there, so was made available to the co-located SA5 meeting being held at the same time as this meeting.

The documents were presented by Bo (Ericsson).

10 Subscription Management, Stage2 Joint with SA5 SWG-A **(Initial identification of common objects)**

No input.

11 22.240, Stage 1, implementation aspects

UP-020037	22.240, v050, Stage1, S1-020186		**Input for information**
UP-020044	22.240, v060, Stage1, S1-020661	Chairman	**NOTED**
UP-020052	22.240, v060, Stage1, S1-020661 with changes	Chairman	**NOTED**

UP-020037 was presented by Nigel (Motorola), who observed that it was surprising that this document had not been updated and made available after the SA1 Saalfelden meeting. Later in the meeting the chairman found a later version of this document: UP-020044 (22.240 v060 no change bars), and derived UP 020052, from comparing UP-020044 and UP-020037, adding change bars.

Comments from Brendan (Jinny Software) included that there was far too much information and that the project was possibly too ambitious. The administration would be hard and it might be dangerous from a privacy point of view.

Bo (Ericsson) responded that the intention was not to store the data in one place but to handle the data in a uniform way.

Alcatel mentioned that there were words that had not yet been defined and needed to be addressed at some point.

Bo (Ericsson) stated that we should start with particular usages of GUP and build up from there. (This suggestion was brought up again at the joint SA5/GUP meeting and led to the proposal of a GUP “pilot” project).
The documents were noted.

UP-020032	GUP Stage 1	Alcatel	**NOTED**

This document was presented for information. It was suggested that Alcatel submit it to the SA1 SWG GUP meeting (April 8-12). Comments included that the definition of ownership of the data was unclear. The owner could sometimes be the supplier, and sometimes the customer. In the GUP work “owner” of an object has been assumed to be the entity that has the control over the access rights for that particular object. Bo clarified that there is a need to distinguish User preferences and Service preferences. He was also concerned that the discussion didn’t always distinguish properly between the storage, the usage, and the “production” of data, i.e., the content of the components.
The document was noted.

12 23.240, SA2 Stage 2 matters

UP-020021	Work in Progress for the Joint GUP Ad-hoc	Ad-hoc	**Ongoing work**

This document was presented by Bo (Ericsson).

The document was a collection of diagrams and information that had been added to the Stage 1 and Stage 2 specifications but later removed (with the exception of the GUP logical architecture diagram). Figure 4.1.2 was felt to be similar to UP-020028 (Alcatel).

It was indicated that the GUP logical architecture gave a pictorial representation of where the GUP information could be found.

The document was noted.

UP-020023	GUP Information Model	Ericsson	**NOTED Updated in UP-020043**
UP-020043	GUP Information Model, Rev. 2	GUP Ad Hoc Group	**NOTED – to be revisited**

UP-020023 was presented by Bo (Ericsson).

There was confusion over the terms “fixed connected” and “temporary connected” profiles. Ericsson and NTT DoCoMo worked on a new version of the document, where the terms "Permanent Profile" and "Associated Profile" were used instead, and this brought greater understanding of the issue to the group. The new version was included in document UP-020043.

Ericsson suggested that these documents be added to one of the specifications, but it was not clear which specification or where in the specification. Brendan expressed concern that unless a practical application was evident, there may be some reluctance to implement the GUP, as it might be regarded as being too late and complex. It was agreed that a "pilot" example using a real situation might illustrate the effectiveness of the GUP. Brendan commented that all a VASP really needed to know was the model number of the terminal. The model number could be cross-referenced with the VASP's database to determine the capabilities of the terminal. The VASP did not need to obtain this information from the device directly. The chairman replied that this was an old suggestion that had been over the years repeatedly rejected due to a number of inadequacies. Alcatel did not support Brendan's view either.

It was also agreed that the information presented in the document would not convey the practical need for GUP to other WGs. Unless the information model was simplified, people would not understand it.

The general conclusion was that a practical application should be identified in order to prove the commercial viability of the concept. Bo pointed out that ease of implementation is one of the basic requirements of the GUP work.

There was general agreement that there was a need to select particular implementations (pilot projects) for GUP to test the concept. There was a need for a simple solution that it is easy to implement. Dave underlined that "component" was the key concept and its definition crucial.

After some debate, it was agreed that the group should stop discussions on the document and concentrate on developing a presentation that explained the GUP concept in non-technical terms to SA2 and other WGs.

UP-020023 was NOTED and UP-020043 was to be submitted as an input to SA2, as the document was not fully examined at this meeting.

UP-020024	References in GUP	Ericsson	**NOTED**

This document was presented by Ericsson.

Ericsson explained that the main aim of this work was to be able to describe a terminal in a standardized way. There were discussions over the meaning of the WAP Gateway in the diagram. It was explained that the model must allow for the fact that the MMS Service may not use the same WAP address as the WAP browser. The MMS and WAP services may share data but may not necessary have the same data.

The proposal was to introduce a datatype that would reference another field, component or instance. The links could be within profile components, or between profile components (either to the whole profile instance, the profile component or a field within the component instance). By using components, the internal data structure could be described once, and then utilised in different ways.

There was discussion over the definition of profile "instance" as the profile instance cannot be a full instance of the Generic User Profile. Some believed that a profile instance would always be a subset of the Generic User Profile and hence should not be named "instance". As part of the discussion it was clarified that there are several levels of abstraction: the logical level the component definition, the logical level of component content, and the physical level, where both content and storage place of a component is given.
It was explained further that the model had been abstracted so that it could cover any profile, whether in an entity or as a service. The aim of the document was to come up with a simple model that could be used to describe GUP data in the 3GPP system.

The general conclusion of the group was that the reasons and objectives of the model should be explained to SA2, without explaining the technical details of the model itself. The group also concluded that there was a need for such a telecom management system as was being suggested here. There was a need to add an explanation about the data description framework in Stage 1. This was to be proposed at the SA1 SWG GUP (8 April 2002, ETSI).

UP-0200xx	Example User Profile Scenario	Hutchinson 3G UK LTD	**NOTED** **Added to UP-020060**

This document was drafted by Hutchinson 3G UK in order to present a practical example of a GUP Scenario. The document was added to UP-020060 as an example annex.

UP-020028	GUP Terminology and Architecture	Alcatel	**NOTED**

This document was presented by Arto (Alcatel).

There were concerns over the use of the term “subscriber” vs. "user", as these are already defined in 21.905, and the "user" is "not part" of the 3GPP system. The definition used in UP-020028 was not considered to be the same as the definition in 21.905.

The general consensus was that the terms in the GUP work should be used as defined in 21.905 and any new terms (terms that have not yet been defined) should be proposed for addition to 21.905. There was discussion about creating a new 'entity', "company" or similar.

A question was raised on whether different charges can be incurred for different profiles but it was agreed that this was a question for SA5.

The document was noted. It was also briefly presented in the Joint GUP Ad Hoc/SA5 meeting.

UP-020029	GUP Management Model	Alcatel	**NOTED**

This document presented a high level model for the Generic User Profile.

There were comments that any management should only be given to the subscriber (as opposed to the user). It was agreed that the issue of how the subscriber then proportions the bill was outside of the 3GPP system.

It was added that the “subscriber” makes sense for a commercial solution but that “user” has no commercial relevance. It was suggested that the model was simplified to only three levels: "company", subscriber and user.

The document was noted. It was also briefly presented in the Joint GUP Ad Hoc/SA5 meeting.

UP-020030	GUP Data Components Model	Alcatel	**NOTED**

This document was presented by Alcatel.

There were comments that it was not obvious what the commercial gain was from the model. The model did not provide the ability to provide any new functionality.

Alcatel explained that there is a need to have a systematic way to describe the present 3GPP network. There were comments that there was no merit to remodel what was already there.

There was general agreement that it was not possible to identify all the data in the network. It would take too long and is beyond the scope and expertise of the Joint GUP ad hoc.

There were extensive discussions on the diagram. The general conclusions were that rather than trying to attempt to model all the data in the 3GPP system, there was a need to focus on proving the validity of the GUP concept, to identify real problems and to test the GUP concept as a mechanism for providing the solution to these problems.

The document was noted.

UP-020031	GUP Data Storage	Alcatel	**NOTED**

This document was presented by Alcatel.

The general conclusions were that the documents (UP-020030 and UP-020031) were of more relevance to SA2. The models could be of benefit to the proposed pilot project.

The document was noted.

UP-020038	23.240, v040, S2 Stage2, S2-020705		**NOTED**

This document was presented for information. It was commented that although the most important parts, the diagram(s) now found in Section 5, had been retained, it was noted with some concern that substantial amounts of the text has been removed since presentation at the S2 meeting. It was suggested that SA2 should be asked why Section 7 had been deleted and to possibly reconsider.

13 23.241, T2 Stage2, matters

UP-020025	23.241, Updated Annex B	Ericsson	**Postponed**
UP-020026	23.241, Updated v0.3.0	Ericsson	**Postponed**
UP-020027	DDF files and examples	Ericsson	**Postponed**

These documents were not presented due to time constraints. There were to be resubmitted to the next T2 meeting.

UP-020039	23.241, v030, T2 DDF Stage2, T2GUP-020013	Chairman	

This document was presented for information at the SA5 joint meeting.

14 24.241, Stage3, matters

UP-020040	24.241, v030, T2 Stage3, T2GUP-020014	Chairman	

This document was presented for information at the SA5 joint meeting.

15 Outgoing Letters

UP-020053	LS to SA2	Joint GUP Ad hoc	**AGREED**

An LS to S2 was prepared and approved in UP-020053 including attachments, in order to increase awareness in S2 of the extent of the work that has already been accomplished in the GUP Joint Ad Hoc. The LS was to be sent to SA2 once the chairman's report (meeting minutes) had been approved and attached.

UP-020057	GUP Presentation	Joint GUP AD-hoc	**NOTED**
UP-020060	Updated GUP Presentation	Joint GUP Ad-hoc	**AGREED**

This was a presentation that was drafted by the ad-hoc group to capture the discussions that had occurred during the week. This presentation was to be used to explain the need for and the objective of the GUP work to SA2 and SA1.

The group agreed to submit the presentation to the SA1 SWG GUP meeting (8th April 2002, Sophia Antipolis) as a Joint GUP Ad-hoc contribution.

The presentation was agreed as UP-020060. Either this version or an updated version was to be input to the next T2 meeting (11-15 May). The presentation was to be discussed and possibly updated via GUP mailing list before submitting to SA2 as a company contribution (as the Joint GUP ad-hoc will no longer exist) if updated.

UP-020059	Diagram on UE Management Roles and relationships		**NOTED**

This diagram was drafted to give an example of the management roles and relationships in GUP from a non-technical perspective.

The document was noted.

16 Plan of continued work

As a result of the Joint meeting between SA5 and Joint GUP ad-hoc, SA5 invited T2GUP to continue the discussions on GUP that had been initiated with the Joint GUP ad-hoc, particularly in relation to UEM and SuM management. SA5 was to distribute the older version of the Subscription Management Stage 2 specification, complete with requirements, to the T2 list.

It was agreed at the Joint GUP Ad-hoc/SA5 meeting that a "pilot" project was needed to test the data description framework and the data description model. GPRS data was selected for the pilot project, which was to be implemented jointly by T2 and SA5.

It was agreed that where possible, Joint ad-hoc delegates would try and attend the SA2 meetings, in order to provide feedback on the work that had been achieved by the Joint GUP ad-hoc so far.

UP-020051	(S2-020xxx draft agenda for SA2#24)		**NOTED**

The draft agenda of the next SA2#24 meeting was briefly presented for information. It was noted that there was be a SA2 GUP related session on 24/25th April in Madrid.

Discussion was held on how to handle the GUP work and how to hand over to SA2. There were extensive discussions on the value of the GUP work and how this could be presented to SA2. These discussions were captured in UP-020060.

The document was noted.

17 Review of output and action items

OUTPUT

UP-020053	LS to SA2	Joint GUP Ad hoc	**AGREED To be sent to SA2 once the meeting report and complete document list was agreed and attached**
UP-020060	Updated GUP Presentation	Joint GUP Ad-hoc	**AGREED To be input to SA1 SWG GUP initially and then to SA2, possibly after being discussed further on email reflector**

UP-020054	3GPP GUP document list		**NOTED & attached to UP-020053**

This was a complete list of all the documents related to GUP so far.

Postponed Documents

There were three postponed documents and two documents to be revisited. The further treatment of these would be up to SA2.

UP-020024	References in GUP	Ericsson	**To be revisited**
UP-020025	23.241, Updated Annex B	Ericsson	**Postponed**
UP-020026	23.241, Updated v0.3.0	Ericsson	**Postponed**
UP-020027	DDF files and examples	Ericsson	**Postponed**
UP-020043	GUP Information Model, Rev. 2	GUP Ad Hoc Group	**To be revisited at SA2**

ACTION ITEMS

- Gunilla to call Karen Hughes to check whether "archive" was optional or not for the 3GPP_GUP@LIST.ETSI.FR mailing list.
- Explanation on DDF to be added to Stage 1 (SA1 SWG GUP). (CLOSED)

- Outputs were to be sent to CN4 for their reference as they have adopted the GUP DDF for the Cx User Profile.

18 Any other business

None identified.

19 Thanks to the host

The Chairman thanked the host, Motorola, for their kind hospitality throughout the duration of the meeting.

20 Closing of the meeting

The Chairman closed the meeting at 15:00 on Friday 5th April.

ANNEX A: AGENDA

3GPP Joint ad-hoc on Generic User Profile (UP-10) UP-020033

Cork, Ireland, 2-5 of April, 2002

TSG-S2/S3/S4/S5/CN4/CN5/T2/T3 Joint Ad-hoc Meeting
On Generic User Profile

Draft Agenda

The meeting will begin at 14.00 a.m. on the 2nd and close at the latest at 16.00 on the 5th.

*On the **3rd (10.45-15.30/17.00)** there will be a joint session with SA5 SWG-A **on Subscription Management** (in the Joint GUP Ad-hoc room).*

*Further, note that on the **3rd (15.45-) to the 4th (-10.30/12.30)** there will be a T2 SWG2 joint session with SA5 SWG-A on **UE Management**. If the Joint GUP delegates so request the Ad-hoc can recess for the duration of this joint session to allow attendance.*

1	Opening of the meeting and call for IPRs	
2	Approval of the agenda	
3	Identification of the meeting secretary	
4	Introduction of participants	
5	Registration of input documents	
6	Objectives of the meeting	
7	Reports and Letters from other groups	
8	Approval of the minutes from the previous meeting	
	Review of the outputs	
9	Subscription Management, Stage1 (32.140)	**Joint with SA5 SWG-A**
10	Subscription Management, Stage2 (Initial identification of common objects)	**Joint with SA5 SWG-A**
11	22.240, Stage 1, implementation aspects	
12	23.240, SA2 Stage 2, matters	
13	23.241, T2 Stage2, matters	
14	24.241, Stage3, matters	
15	Outgoing Letters	
16	Plan of continued work	
17	Review of output and action items	
18	Any other business	
19	Thanks to the host	
20	Closing of the meeting	

ANNEX B: PARTICIPANTS LIST

NAME		COMPANY REPRESENTED
Tim	Ambrose	Hutchison 3G (from 3rd)
Nigel	Barnes	Motorola
Marc	Bojarzin	Materna
Gunilla	Bratt	Ericsson LM
Alan	Chau	Nokia UK
Rolf	Gustavsson	Telia AB
Kevin	Holoubek	Motorola Inc.
Bo	Johansson	Ericsson LM
Dave	Milham	BT (parts only)
Nicola	McGregor	NTT DoCoMo Inc.
Brendan	McKenna	Jinny Software Limited
Michael	Rogers	Logica Aldiscon
Venson	Shaw	AT&T Wireless Inc.
Arto	Vaaraniemi	Alcatel SEL AG
Paul	Voskar	Nokia UK

ANNEX C: DOCUMENT LIST

For a complete list of UP-documents, see UP-020054

	UP-10, CORK, IRELAND, APRIL, 2002		
UP-020022	Draft agenda	Chairman	Withdrawn
UP-020023	GUP Information Model	Ericsson	Revised to 43
UP-020024	References in GUP	Ericsson	
UP-020025	23.241, Updated Annex B	Ericsson	
UP-020026	23.241, Updated v0.3.0	Ericsson	
UP-020027	DDF files and examples	Ericsson	
UP-020028	GUP Terminology and Architecture	Alcatel	
UP-020029	GUP Management Model	Alcatel	
UP-020030	GUP Data Components Model	Alcatel	
UP-020031	GUP Data Storage	Alcatel	
UP-020032	GUP Stage 1	Alcatel	
UP-020033	Agenda, draft2	Chairman	
UP-020034	Minutes of UP-09, Sophia Antipolis, February-02	NTT DoCoMo	
UP-020035	Minutes of T2GUP#1	NTT DoCoMo	
UP-020036	GUP Task List, TSGS#15(02)0191	Chairman	
UP-020037	22.240, v050, Stage1, S1-020186	Chairman	
UP-020038	23.240, v040, Stage2, S2-020705	Chairman	
UP-020039	23.241, v030, T2 DDF Stage2, T2GUP-020013	Chairman	
UP-020040	24.241, v030, T2 Stage3, T2GUP-020014	Chairman	
UP-020041	32.140, v100, SuM Stage1, SP-020012	Chairman	
UP-020042	32.802, v104, UEM FS, SP-020011	Chairman	
UP-020043	GUP Information Model, Rev. 2	Ad-hoc	
UP-020044	22.240, v060, Stage1, S1-020661	Chairman	
UP-020045	Reply LS on support for subscriber certificates (S5-020008 response S5-020313 S3-020163_LS_to S1)	SA5 SWGA	Withdrawn SA5 draft version
UP-020046	Relationship of GUP to Subscription Management from SA5 (S5-020009 response to S5-020145)	SA5 SWGA	SA5 draft version
UP-020047	Liaison Statement on co-ordination of data definitions, identified in GUP development (S5-020010 response to S5-020126)	SA5 SWGA	SA5 draft version
UP-020048	Liaison Statement on VASP MMS Connectivity (S5-022007 response to T2-020038)	SA5 SWGA	SA5 draft version
UP-020049	23.008, v410 (Organisation of subscriber data)	BT	
UP-020050	LS from T2 to SA5 on UEM (T2-020116)	Chairman	
UP-020051	Draft Agenda SA2 #24	Chairman/SA 2 Chairman	
UP-020052	Comparison of 37 and 44 (22.240 v050, v060)	Ad-hoc	
UP-020053	LS to SA2 handing over the GUP work	Ad-hoc	**Output**
UP-020054	Document list; Final GUP list	Ad-hoc	**(Output, see 53) THIS LIST! See also T2GUP adhoc**
UP-020055			Withdrawn
UP-020056		Ad-hoc	Withdrawn
UP-020057	Draft Presentation to SA1 and SA2	Ad-hoc	Replaced by 60
UP-020058	Minutes of UP-10	DoCoMo	**(Output, see 53)**
UP-020059	UEM roles and relationships	AT&TW, Ericsson	
UP-020060	Presentation to SA1 and SA2	Ad-hoc	**(Output, see 53)**
UP-020061	Minutes Joint Meeting with SA5	DoCoMo, Ericsson	**Output**