3GPP - TSG SA #5 **Tdoc SP-99390**
11-13 October, 1999
Kyongju, Korea

Title: 3G TR 30.801 V 1.0.0:
Overall Project Plan

Date: 1999-10-06

Source: S2

Purpose: For information

Agenda Point: 5.2.3

The attached document contains version 1.0.0 of the 3G Technical Report on Overall Project Plan.

3G PD 30.801 1.0.0 (1999-10)

Permanent Document

3rd Generation Partnership Project
3GPP work program
Project coordination aspects
Overall Project Plan
(3G PD 30.801 version 1.0.0)

Reference

DTR/TSGS-0230801U

Keywords

Inter-Groups Co-ordination (IGC)

Universal Mobile Telecommunication System (UMTS)

3GPP

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Foreword

[Ed note: to be added by ETSI MCC]

1 Scope

This permanent document describes the principle and the working method of the Inter Group Co-ordination ad-hocs (IGCs), the scope, reference and output of each individual IGC and the overall time plan.

2 Working method of the technical Inter-Group Co-ordination ad-hocs (IGCs)

TSG-SA has a responsibility of technical co-ordination within 3GPP. TSG-S2 has been allocated a task to divide the feature descriptions defined by TSG-S1 to a Building blocks or Work packages based on System architecture and elaborate a project plan.

Therefore Inter Group Co-ordination ad-hocs (IGCs) are created. The outcome of the IGCs should be a draft 3GPP wide project plan for each feature, defining the work that is needed and proposing the responsible WGs/TSGs and a time schedule. These draft project plans will become 3GPP project plans after they have been approved by all relevant WGs/TSGs and finally by TSG-SA. The project plans will be elaborated with all concerned working group of the technical subject, where from each working group a contact person is nominated.

The task of the IGCs is **not** to perform any technical work of substance on the technical issue (e.g. as architectural work).

The method of working of the IGC meetings shall be mainly by email or tele-conferencing.

For each IGC, a permanent document is maintained comprising

- Work identified to fullfill the requirements
- List of all the deliverables applicable to the subject
  Note that a deliverable can be applicable to more than one technical project co-ordination subject
- Time plan

for Release 99 and subsequently for future releases.

3 List of IGCs

0 General

Coordinator: Alain Sultan, MCC (alain.sultan@etsi.fr)

Site: ftp://ftp.3gpp.org/TSG_SA/WG2_Arch/IGC

1 Bearer Services and QoS

Chair: Oscar Lopez-Torres, T-Mobil (Oscar.Lopez@t-mobil.de)

Site: ftp://ftp.3gpp.org/TSG_SA/WG2_Arch/IGC/Bearer&QoS

reflector address: 3GPP_TSG_SA_IGC_Bearer&QoS@list.etsi.fr

2 GSM/UMTS Interoperation and Mobility Management

Chair: François Courau, Alcatel (francois.courau@alcatel.fr)

Site: ftp://ftp.3gpp.org/TSG_SA/WG2_Arch/IGC/GUinterop&MM

reflector address: 3GPP_TSG_SA_IGC_GUinterop&MM@list.etsi.fr

3 Location based services

Chair: Jan Kåll, Nokia (jan.kall@NOKIA.COM)

Site: ftp://ftp.3gpp.org/TSG_SA/WG2_Arch/IGC/LCS

reflector address: 3GPP_TSG_SA_IGC_LCS@list.etsi.fr

4 Packet Architecture and Circuit Architecture

Chair: Ulrich Dropmann, Siemens (Ulrich.Dropmann@ICN.SIEMENS.DE)

Site: ftp://ftp.3gpp.org/TSG_SA/WG2_Arch/IGC/PS&CS

reflector address: 3GPP_TSG_SA_IGC_PS&CS@list.etsi.fr

5 Security

Chair: Chris Pudney, Vodafone (chris.pudney@VF.VODAFONE.CO.UK)

Site: ftp://ftp.3gpp.org/TSG_SA/WG2_Arch/IGC/Security

reflector address: 3GPP_TSG_SA_IGC_Security@list.etsi.fr

6 Services and Service platforms

Chair: Rob Schmersel, Ericsson (Rob.Schmersel@era.ericsson.se)

Site: ftp://ftp.3gpp.org/TSG_SA/WG2_Arch/IGC/Services

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4 Scope of the IGCs

4.1 Bearer Services and QoS

[editor's note: the scope has to be revised to reflect more clearly that the IGC is only supervising the groups and not providing the actual technical work]

The scope is to provide a consistent definition of the Services and Bearer Services mapping throughout the system:

UMTS bearers, bearer management in the control and user planes, for the circuit switched and packet domains.

Regarding QoS, the scope is to provide a comprehensive QoS model and mapping of parameters for the different interfaces, reference points, and layers (a two-dimensional approach) throughout the system.

4.2 GSM/UMTS Interoperation and Mobility Management

[editor's note: to be further elaborated by the IGC chairman]

Consistent UMTS/GSM interoperation

Mobility handling within the system, RRC and MM interaction, MAP, consistent mobility management

4.3 Location based services (LCS)

The UMTS LCS IGC shall coordinate the work on location services in UMTS and ensure that all 3GPP groups relevant for location services get involved in a timely manner. The ongoing work in T1P1.5 on GSM LCS Phase II shall be taken in account as well.

The LCS IGC shall evaluate the UMTS location services in order to identify what issues are to be standardized and what are the appropriate Work Groups for this and set up a time plan for the work.

LCS in UMTS is mainly a release 2000 issue, but the LCS IGC ad hoc shall also seek to identify what LCS system functions should be included in Release 99 and the affected WGs and specifications.

LCS IGC ad hoc reports to TSG SA WG2.

Locationing and the location based services shall be considered.

4.4 Packet Architecture and Circuit Architecture

The technical scope of the “packet and circuit architecture IGC” is to work on the architecture of the packet and circuit domain and protocols.

It contains the following main areas:

1. The identification of new entities and interfaces of the overall system architecture
2. The determination of the principle protocol stacks of the user and control plane
3. Call control/session management related control plane issues

Examples of issues are of the area of “packet and circuit architecture” are (without indication of whether R99 and R00 issue):

- Multimedia architectural issues
- Multicall issues
- Location of the transcoder in the core network
- Identification of new interworking scenarios
- Evolving interworking functions to other networks
- Control plane architecture of the UTRAN

Not part of the “packet and circuit architecture” area are

architectural questions clearly associated with one of the other technical areas (Location Based Services, Services and Service platforms, Mobility Management&GSM/UMTS interoperation, Security, Bearer&QoS).

The IP/packet domain architecture and protocols

The PSTN/ISDN domain architecture and protocols

4.5 Security

This ad hoc group is intended to produce, maintain and monitor the work plan for the delivery of a consistent security specifications for release 99.

The work items being progressed in TSG-S3 are listed in the table below. Each work item addresses a particular security issue and is assigned a particular priority which includes whether or not the feature or mechanism should be specified in Release 99. This table is an updated version of a table presented to TSG-S#4 in Tdoc SP-99284.

Table 2 : Priorities of security work items assigned by TSG-S3

	Work item	**Priority**
1	User identity confidentiality	The specification of an enhanced mechanism to help guard against active attacks against user identity confidentiality on the radio interface is essential in R99. Note that only the transport mechanism needs to be specified. The exact mechanism to protect the user identity can be home operator dependent. The specification of algorithm requirements and interfaces is also essential for R99, although the algorithms themselves can be home operator dependent and do not need to be specified.
2	Authentication and key agreement	The specification of an enhanced mechanism to help guard against active attacks on the radio interface is essential for R99. Furthermore, the specification of algorithm requirements and interfaces is also essential for R99, although the algorithms themselves can be home operator dependent and do not need to be specified.
3	Access link integrity protection	This is a new security mechanism in UMTS introduced to help guard against active attacks on the radio interface. The specification of the message authentication mechanism is essential in R99.
4	Access link confidentiality	The GSM ciphering mechanism cannot be used in the new access network and the GSM algorithms are unsuitable. The specification of a new ciphering mechanism and algorithm is essential in R99.
5	Network-wide encryption	Appropriate ‘hooks’ must be provided in the R99 specification so that network-wide encryption can be introduced in later releases. It may be possible to re-use the algorithm for ciphering in the UTRAN. If a new algorithm is required then its specification can be left to later releases providing that appropriate ‘hooks’ are incorporated into the R99 specification.
6	User equipment identification	TSG-S have recommended that TSG-S3 specify a secure mechanism in R99. The mechanism will require manufacturers to secure terminal identities and associated authentication data.
7	Core network signalling security	Although this is a high priority item, it is recognised that implementable specifications might not be achievable in R99. A cipher algorithm designed by ETSI SAGE for this purpose called BEANO is already available. Off-the-shelf algorithms are likely to be suitable for the message authentication functions.
8	Fraud information gathering system	The GSM mechanism can be used. Enhancements will be considered in later releases.
9	USIM application security	The GSM mechanisms can be used. Enhancements will be considered in later releases.

10	Visibility and configurability	An encryption indicator should be included in R99. Other items are of lower priority and will be considered in later releases.
11	Mobile Execution Environment Security	The GSM mechanisms will be enhanced in R99.
12	Location services	Specification of privacy mechanism is essential in R99. Can be largely based on GSM Location Services privacy mechanisms.
13	Lawful interception architecture	The specification of a lawful interception architecture is essential in R99. This architecture can be largely based on the GSM/GPRS architecture.
14	IP security	Impact not fully understood. Priority is unclear.

Owing to the requirements for both CS and PS 'handover' between UMTS and GSM and to the requirements to be able to perform roaming between GSM and UMTS networks, for all these items, dual mode UMTS/GSM operational aspects need to be considered.

Consistent security architecture

4.6 Services and Service platforms

The 3GPP Services and Service Platforms IGC is responsible for the following activities:

- establish a common understanding in 3GPP of the VHE and OSA work to be carried out for stage2 and 3 in 3GPP Release99;
- identify the appropriate working groups for carrying out the VHE and OSA work and ensure these groups get involved in a timely manner;
- coordinate the work on VHE and OSA in 3GPP;establish a time plan for the work.

WAP, VHE, Camel, OSA, Mexe, the consistent service and service generation platform concept

5 Overall time plan

[Ed. note: scope to be provided by the rapporteur]

6 Change history

Version	Date	Subject/Comments
0.0.0	July 1999	Creation of document
0.1.0	August 1999	Inclusion of comments from SA2#7
0.2.0	September, 4th 1999	Inclusion of results from SA2#8: addition of scope of IGC Security, Bearer and QoS, PS and CS architecture, Services and Service Platform, LCS.
0.3.0	September, 23rd 1999	Addition of the chapter 3, deletion of the Annex on "Proposed Structure for all Inter Group Co-ordination work plans"
1.0.0	October, 7th 1999	Prepared for presentation to TSG SA#5 (content identical to v.0.0.3, except for some minor editorial corrections)