Draft T2#17 Report V 0.2 (2002-05)

3rd Generation Partnership Project (3GPP); Technical Specification Group Terminals (TSG-T); Working Group 2 Mobile Terminal Services and Capabilities; Draft Meeting Report T2#17 Vancouver, BC, Canada 13-17 May 2002



Contents

| 1 | Opening Plenary | 3 |
|--------|--|-----|
| 1.1 | Opening of the meeting | |
| 1.2 | Approval of the agenda and schedule | 3 |
| 1.3 | Notification of IPR Obligations | |
| 1.4 | Report of the last T2 meeting | |
| 1.5 | Reports from other groups | |
| 1.6 | Registration and allocation of documents | |
| 1.7 | Incoming Liaison Statements: | |
| 1.8 | Outgoing Liaison Statements: | |
| 1.9 | 3GPP Work Plan | |
| 1.10 | Other opening plenary issues | 9 |
| 1.10.1 | Presentation: Binary Runtime Environment for Wireless (BREW) technology for consideration as a | |
| | MExE classmark | |
| 1.10.2 | | |
| 1.10.3 | Presentation: WIPI (Wireless Internet Platform for Interoperability) | 10 |
| 2 | Subgroup Meetings | 10 |
| 3 | Closing Plenary | 10 |
| 3.1 | Results SWG1 Execution Environment | |
| 3.2 | Results SWG2 Terminal Interfaces | |
| 3.3 | Results SWG3 Messaging | |
| 3.3.1 | SMS/CBS/EMS | |
| 3.3.2 | MMS | |
| 3.3.3 | Liaison Statements | |
| 4 | | 1 / |
| 4 | Future meeting schedule | 14 |
| 5 | Any Other Business | 15 |
| 6 | Close of the Meeting | 15 |
| Annex | x A List of all temporary documents | 16 |
| | | |
| | x B Outgoing Documents | |
| B.1 | Change Requests submitted to TSG-T | |
| B.2 | Liaison Statements | |
| B.3 | Reports/Specifications submitted to TSG-T | |
| B.4 | Other documents submitted to TSG-T | 25 |
| Annex | x C: List of Participants | 26 |
| Annex | x D: Report from SWG1 Execution Environment | 29 |
| Annex | x E: Report from SWG2 UE Interfaces and Capabilties | 47 |
| Annes | F: Report from SWG3 Messaging | 73 |

Chairman: Ian HARRIS (Teleca Ltd.)

Secretary: Friedhelm RODERMUND (ETSI MCC)

1 Opening Plenary

1.1 Opening of the meeting

Ian HARRIS (Teleca Ltd.) opened the meeting and welcomed the delegates. Ed EHRLICH (Nokia) welcomed the delegates on behalf of host, the North American Friends, and Patti DAVIS (SKgroup) explained the organizational details.

Friedhelm RODERMUND reminded delegates about using a new tdoc number for every revised document. He also recommended delegates to use only filenames identical to the tdoc number since there are several problems connected with long filenames.

1.2 Approval of the agenda and schedule

The agenda and schedule in was presented **T2-020311**. The WIPI presentation and an agenda point for outgoing LSs were added to the agenda and it was agreed as **T2-020366**.

1.3 Notification of IPR Obligations

The chairman made the call for IPRs. T2-020312 gives some background information on IPR issues.

The chairman drew the attention of the delegates to the fact that 3GPP Individual Members have an obligation under the IPR Policies of their respective Organizational Partners to inform their respective Organizational Partners of Essential IPRs they become aware of. They were invited to investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of the TSG-Terminals and to notify the Director-General or chairman of their respective Organizational Partners, of all potential IPRs that their company may own, by means of the IPR Statement and the Licensing declaration forms.

1.4 Report of the last T2 meeting

The report of T2#16, Sophia Antipolis, France, 11-15 February 2002 (T2-020310) was approved.

The approved report is also available on the 3GPP server at:

ftp://www.3gpp.org/TSG_T/WG2_Capability/TSGT2_16/Report

1.5 Reports from other groups

1.5.1 TSG T

A summary of issues of T2 interest from T#15 meeting held in Jeju, 6-8 March 2002 was presented by Friedhelm RODERMUND in **T2-020315**:

All T2 CRs were approved as submitted except the CR42 to 23.040 on polyphonic objects. It was explained that two notes in Annex E and G (which are explaining what should be done in case SP-MIDI would not be

available in time) could be deleted since the SP-MIDI spec is now available. The CR was revised accordingly and approved (TP-020079).

The following additional comments were made on T2 CRs. These comments did not lead to any changes of the CRs:

Regarding the CR46 to 23.040 on Subaddressing scheme for SMS it was commented that there is a lack of functionality to use this from end user to end user.

Regarding the CR62 on MM7 Addressing it was commented that the added ability that MMS may support short codes to address Value Added Services is not covered in the stage 1 requirements. Materna volunteered to create a corresponding CR for stage 1.

The WID on MExE Release 6 Improvements and Investigations was approved.

The WID on MExE Run-Time Independent Framework was revised during the meeting. It was decided that a Feasibility Study (as a TR) should be created first before any changes to spec are introduced. T2 was asked to get SA1 involved in this (e.g. by sending the WID and asking for comments). The revised WID was approved (TP-020086).

Some companies proposed to delete the MExE Security analysis work item because no progress was made since the work item was created. The deletion was not agreed for the time being. TSG-T#16 will decide whether to keep it in Rel-5, or move it to Rel-6 or to delete it, based on input from T2.

The new work item on MExE testing submitted by T1 was approved (TP-020044). The intention is to produce first a feasibility study possibly as a TR.

T2 was asked to explain at the next TSG-T meeting the criteria for approving a new MExE classmark.

TSG-T agreed to T2's request to have a Rel-5 extension for MMS until June 2002 to complete MM7 stage 3.

TP-020061 contains the presentation slides from Tetsuro Tachizwa (Nokia), chair of WAP WAG MMDC. To improve the cooperation, the WAP Forum chairman proposed to make regular reports from WAP Forum meetings to 3GPP, and that he addresses the issue of the confidentiality of WAP Forum docs.

TP-020009 contains the LS from T2 to T3 cc T, SA1 on MMS related USIM changes for Rel-4. The LS was noted. T3 has not checked the attached CR yet (which was later approved at this meeting). They will report back to T2 in case they see any problem.

TP-020057 contains an LS from SA2 to T cc CN4 on mandatory support of UMTS AMR2 in dual mode terminals. A normative requirement is introduced for all 3GPP dual-mode terminals for R99 and onwards and for all UTRAN-only terminals for REL-4 and onwards to support the UMTS AMR2 as default speech version in UTRAN. As soon as the changes to the core specs are done, the UCR document TR 21.904 might need an update. The LS was forwarded to T1, T2, T3 and SA for further consideration.

TP-020010 contains an LS from T2 to TSG-T cc SA1, SA2, Joint GUP Ad Hoc on a proposal for Coordination of GUP-Related Work. To address this issue during TSG-SA, an LS from TSG-T to TSG-SA on coordination of the GUP related work was created in TP-020087.

It was decided that TR 27.903 "Discussion of synchronization standards" will not be part of the Rel-5.

It was highlighted that IPR issues should not be discussed in 3GPP WGs. It was requested that the T2 SWG chairmen should be reminded about the rules regarding IPRs.

The draft TSG-T#15 meeting report was available in **T2-020316**.

The documents can be found on the FTP server at:

ftp://ftp.3gpp.org/TSG_T/TSG_T/TSGT_15

The specifications updated after T#15 can be found at:

ftp://www.3gpp.org/Specs/2002 03

1.5.2 TSG SA

A summary of issues of T2 interest from SA#15 meeting held in Kyoto, 12 -14 December 2001 was presented by Friedhelm RODERMUND in **T2-020315**:

MMS:

CRs to 22.140 Rel-5 (SP-020055) on various MMS issues were approved except CR10 on charging which was revised in SP-020193 "Support of charging models in MMS". If T2 finds a problem with these requirements they can be enhanced or corrected. The CR approved for Rel-5.

CR to 22.140 on "Automatic bearer selection for MMS delivery and submission" (SP-020195) was submitted by several companies directly to SA. It was felt that the part of the required work related to the USIM seems already been done. The CR was approved for Rel-5.

A new work item on IMS Messaging (SP-020065) proposed by SA1 was approved.

3GPP TS 26.140 version 2.0.0 "Multimedia Messaging Service (MMS); Media formats and codecs" (Release 5) (SP-020075) was approved.

SA WG3 reported in their status report (SP-020106) to TSG SA#15 that currently comments related to security on TS 23.140 are being collected. SA3 have concerns about the use of HTTP basic authentication (clear text password).

GUP:

Several LSs, WID, and other docs (SP-020005, SP-020007, SP-020152, SP-020191) were discussed related to GUP. An updated WID was approved in SP-020163 knowing that some of dates for spec delivery dates have to be redebated later. SP-020191 is the proposed Generic User Profile Task List. It provides a list of the different tasks within the Generic User Profile work and a proposed mapping of these tasks to the different WGs. It was agreed that SA WG2 were most appropriate to do the initial architecture and object modeling and when detailed enough to hand over the individual tasks to the appropriate groups for elaboration. The Scope of the SA WG2 work will be broader than only architecture during this initial phase. TSG T were asked not to approve and place under Change Control the related documents until the work has been performed in SA WG2

UEM:

Rel-5 draft TR 32.802 v104 (User Equipment Management UEM feasibility study) was presented the second time for information to SA (SP-020011). It was reported that some late comments were received from T2 that may affect the prioritization of the UEM capabilities and also whether it is feasible to standardize one of the UEM capabilities (UE Software Update Capability) at all. A joint T2 SWG2/SA5 SWG-A meeting on UEM is being arranged (during SA5#27 in Cork, IRELAND, 2-5 April 2002) in order to resolve these comments. This has necessitated a delay in sending the document to TSG SA#15 meeting for Approval.

General Rel-5/Rel-6 status:

Rel-5 Status: Many work items especially in the CN area were reported as not complete. In summary it was noted that Rel-5 is not complete yet, but the content of Rel-5 is (almost completely) defined now, and most of the Rel-5 work is expected to be completed by June 2002.

Rel-6 estimation: June 2003 was considered the minimum timescale for the next Release, in order to have a reasonable functional enhancement to Rel-5. This is to be reviewed at TSG SA #16 when the full content of Rel-5 is known

Other items:

TS 22.242, V1.0.0 "Digital Rights Management; Proposed Stage 1" (SP-020061) Rel-6 was presented for information.

TS 22.233, V2.0.0 "Transparent End-to-End Packet-switched Streaming Service Stage 1" Rel-5 (SP-020062) was approved.

TR 22.944, V2.0.0 "Report on Service Requirements for UE Functionality Split" Rel-5 SP-020064 was approved. The work item on UE split is considered as completed for Rel-5. If members think more work is needed then a new work item for is needed for Rel-6.

SP-020146 LS from SA WG2 to TSG T on mandatory support of UMTS AMR2 in dual mode terminals. Extract from CR "UTRAN-only terminals of R99 may either use UMTS AMR or UMTS AMR2 as default speech version in UTRAN access." Concerns were raised about overlapping requirements in different specs. It was agreed that the text in the SA1 and SA4 area will be aligned.

The documents can be found on the FTP server at: ftp://ftp.3gpp.org/TSG_SA/TSG_SA/TSGS_15

The draft TSG-SA#15 meeting report was available in **T2-020317**.

Comments on the report from TSG#15:

Regarding the CR to 22.140 on "Automatic bearer selection for MMS delivery and submission", it was explained that in contradiction to the SA assumption, there is more work necessary on the required work related to the USIM.

The SWG2 chairman announced a document summarizing the discussion on mandatory support of UMTS AMR2 in dual mode terminals in T2-020428. Regarding UEM, he gave some background information and announced that further discussions are planned in SWG2. He highlighted that it is required that T2 gives further comment on UEM this week because these are needed at SA5 next week. He also stated that SWG2 is happy to cover the GUP work under their agenda.

Related to the transfer of responsibilities for MMS codec to SA4, the T2 chairman expressed his opinion that T2 is in the best condition to define requirements for e.g. messaging codecs. Of course, T2 should not define the codecs itself as this is the responsibility of SA4.

Regarding DRM, the T2 chairman reminded that whatever is done in 3GPP, it has to be considered what is done outside 3GPP. However, this shouldn't prevent T2 from doing a simple protection mechanism like a distribution advice informing the user not to copy an protected element further. This mechanism shouldn't impose any restrictions on equipment. It was explained that in the US and other countries everybody who receives a protected document is allowed to forward this to somebody else as long he doesn't make a copy.

1.5.3 TSG T2 SWG1

No SWG1 meeting took place since the last T2 meeting.

1.5.4 Joint T2 SWG2/ SA5 meeting on UEM

The SWG2 chairman Prem SOOD (Sharp) reported from the SA5 SWG-A and T2 SWG2 meeting on User Equipment Management (UEM) held 4/4/01 in Cork, Ireland. The report can be found in **T2-020422**.

The UEM feasibility study TR was reviewed at the meeting which was attended by a number of T2 delegates. After the meeting, the TR was updated to reflect the agreed changes and the revised version will reviewed at this T2 meeting. The target is to send the TR for approval to SA#16; this was delayed from SA#15 specifically to address the remaining T2 concerns. SA5#28 meeting (20 - 24 May 2002) is the week following the T2#17 meeting. If T2 tells SA5 that TR 32.802 can be send for approval then SA5 will bring the TR for approval to SA#16.

The question was raised if the TR is considered as finalised for Rel-5 or if it is expected to be continued for Rel-6. Prem SOOD replied that this TR is intended to be completed within Rel-5.

1.5.5 TSG T2 SWG3 MMS ad hocs

The SWG3 chairman Josef LAUMEN (Siemens) reported from the MMS ad hoc meetings SWG3#11 held 29th April to 2nd May 2002 in Seattle, Washington, USA. The reports can be found in **T2-020462**.

Design principles for MM7 stage 3 implementation were developed and agreed upon. These built the basis for the work on the CR to 23.140. After several iterations an MM7 stage 3 CR was endorsed. The endorsed document is expected to be a good basis for T2#17 finalisation of MM7 stage 3 for REL-5.

The impact of the "recipient party pays" CR to MMS stage 1 REL-5 (recently approved at SA#15) on 23.140 were discussed. The recipient party pays requirement is now reflected in an endorsed CR to 23.140. A new information element "Charged Party" is introduced on MM7 – which, once approved, will need to be reflected in MM7 stage 3 descriptions.

Three more CRs to MMS stage 1 REL-5 approved at SA#15 which were not discussed at SWG3#11.

During work on MM7 stage 3 a need to distinguish between informational-only and routing-purpose address fields was identified and reflected in a CR to 23.140 on the MM7 stage 2 description.

1.5.6 T2 GUP ad hoc

Bo JOHANSSON (Ericsson) gave a summary on the status of the GUP work and reported from the two meetings related to GUP held in Cork, Ireland, 2-5 of April, 2002. The slides were in **T2-020432**.

Joint Ad-hoc on Generic User Profile (UP-10)

SA#15's main decisions were that the GUP work (excluding the SA1 parts) will be driven and continued in the SA2. Joint GUP Ad-hoc work is moved to the SA2. It was concluded that the name "Generic User Profile" does not fully convey what is trying to be achieved. The technology (XML-schema,...) should not be explained to other groups but the main motivation for GUP needs to be clarified. To achieve this a presentation was generated which was submitted to the SA2 SWG GUP meeting (8th April 2002, Sophia Antipolis).

Joint session SA5 SWG-A / Joint GUP Ad-hoc on Subscription Management

It was noted that many data components are shared between "GUP" and "SuM". Therefore, a common data definition framework is essential. SA5 thinks that the main priority is to develop the data definitions.

The T2 chairman explained that everything related to GUP goes under the SWG2 umbrella, thus, the T2 GUP ad hoc does not exist anymore. He expects that any output from the GUP work goes into SA2. A concern was expressed with the proposal from SA2 to created a Draft new WID for DDF.

Nicola McGREGOR (NTT DoCoMo) gave an overview presentation about the GUP user profile concept. The slides can be found in **T2-020433**.

The presentation describes the existing problem of having the user profile date spread all over the place in various formats, which has a lot of negative implications. The current work on these issues in 3GPP is described, and a joint GUP recommended solution is outlined. It was stressed that time is running out for a solution. The T2 chairman proposed that T2 should report to SA2 regularly about the GUP work.

The SWG3 chairman proposed to have a joint meeting between SWG2/SWG3 on GUP and MMS alignment at the next T2 meeting in August.

1.5.7 SA5

Josef LAUMEN draw the attention to the report from a SA5 SWG-B "Service Charging" meeting which can be found in **T2-020519**.

He highlighted that from the operator side there exists the requirement of the mandatory acknowledgement of retrieve MM procedure by the recipient user agent. The send of the MM1_acknowledgement. REQ message must defined mandatory on this interfaces otherwise there exits no guarantee for the operator of the successful MM delivery to the recipient user agent. In 23.140, the acknowledgment for the retrieval of a MM is only send upon request form the network. SA5 wants to have it mandatory that every time a acknowledgement has to be sent form the user agent.

He pointed out that a quite significant number of CDRs has been developed for MMS.

1.5.8 IETF

Ileana LEUCA (AT&T Wireless) reported that there are some requirements regarding terminals supporting IPv6. So far, T2 was not exposed so far regarding IPv6 requirements. Maybe T2 should be involved to see

how this requirements fit into the overall 3GPP terminal requirements. It might be that a work item is needed for this.

1.5.9 WAP Forum

It was reported that Soeren THOMSEN (Motorola) is not available any longer as 3GPP-WAP liaison officer. The T2 chairman asked for any volunteers to come forward.

1.6 Registration and allocation of documents

The document list was presented and the documents were assigned to the subgroups. A complete document list as of the end of the meeting can be found in Annex A.

All registered meeting documents, which were made available in the inbox of the meeting server, can be found on the 3GPP server at:

ftp://www.3qpp.org/TSG T/WG2 Capability/TSGT2 17 Vancouver/Docs

1.7 Incoming Liaison Statements:

The LSs below were treated during the opening plenary. All other LSs were forwarded to the SWGs as shown in Annex A.

T2-020331 is an LS from SA1 asking for comments on the draft TR Priority Service Feasibility Study. T2 didn't identify much relation to its work. The SWG2 chairman agreed to bring it into SWG2 for a review.

T2-020343 is an LS reply from SA3 on the support for subscriber certificates. The LS was forwarded to SWG3.

T2-020347 is an LS reply from SA5 on the Priority Service Feasibility Study - draft TR 22.950 v1.0.0. The LS was noted.

T2-020348 is an LS from SCP on J2ME API to UICC/(U)SIM. The LS was noted.

1.8 Outgoing Liaison Statements:

The following LSs were already prepared in advance to the T2 meeting and presented for approval at the opening plenary:

T2-020323 is an LS to SA1 on MMS Stage 1 requirements for REL-5 and REL-6. Regarding the new MMS stage 1 requirements for Rel-5 it was reported that the charging requirement discussion had started in at the last SWG3 meeting in Seattle, but no discussion has taken place yet regarding the other requirements. The LS was agreed.

T2-020513 is an LS reply on a proposed SA5/CN5/T2 joint meeting on VASP MMS charging. The LS was agreed.

T2-020367 is an LS asking SA1 about intentions and comments regarding the creation of the draft MMS Rel-6 WID. The LS was agreed.

1.9 3GPP Work Plan

Friedhelm RODERMUND presented the latest version of the 3GPP work plan as in **T2-020318**. Besides listing all the work items including the expected completeion date and a progress indication, a lot of other useful information can be found (link to the WID, name of work item rapporteur etc.). All WGs are requested to review and update the work plan at each meeting.

Friedhelm RODERMUND presented the list of active T2 work items in T2-020319.

Friedhelm RODERMUND presented the list of TSs and TRs for which T2 is responsible in T2-020313.

1.10 Other opening plenary issues

1.10.1 Presentation: Binary Runtime Environment for Wireless (BREW) technology for consideration as a MExE classmark

Laurence LUNDBLAD (Qualcomm) held the presentation. The slides can be found in T2-020324.

BREW apps and extensions are discovered at runtime and loaded when needed. BREW is an open and flexible environment with many APIs and application management services. New API extensions can be created by Developers Manufacturers Carriers. BREW provides means for protecting the handset and network by supplying three components: control and prevention including digital signing, monitoring and testing, response like e.g. application recall. BREW has been launched in November 2001 by Korea Telecom and is running there on seven handsets. Qualcomm is considering proposing BREW as a new MEXE classmark.

It was explained that BREW has currently nothing specific regarding DRM implemented. Qualcomm announced that the BREW specifications and SDK will be made available to 3GPP members. It's the intention to standardize the APIs and also the application execution part should be standardized in MExE. It was clarified that the distribution model shown in the slides does not necessarily apply to BREW as a MExE classmark.

Concerns were expressed

- that BREW looks like an operating system. Laurence LUNDBLAD clarified that BREW is not an
 operating system e.g. it doesn't include necessary elements like device drivers for the hardware etc.
 It is intended as a layer on top of an operating system.
- that this is a technology which has a trademark
- about having proprietary proposals for MExE classmarks
- about the expansion of the MExE work although T2 had expressed a preference to simplify MExE

The SWG1 chairman expressed his opinion that it's very valid to introduce new classmarks if this is a market requirement. The new classmarks want to use e.g. the MExE security framework.

1.10.2 Presentation: IPv6 for Second and Third Generation Cellular Hosts

Ville WARSTA (Nokia) presented IPv6 for Second and Third Generation Cellular Hosts in the IETF on behalf of Paul VOSKAR who had lost his voice. The slides can be found in **T2-020354**.

The "IPv6 for 2G and 3G Cellular Hosts" Internet-Draft contains clearly defined IPv6 functionality set for 3GPP mobile terminals. The cellular host IPv6 Informational document is specified in the IETF IPv6 Working Group and used as a reference in 3GPP 23.221 specification. Authors of the draft want to promote rapid adoption of IPv6 in the mobile terminals (and networks) and ensure a smooth deployment.

It was commented that this draft will become an industry standard, and that it is important that 3GPP should check this work and the implications. Especially considering that IPv6 is related to terminal applications which is what we are doing in T2.

It was highlight that if IPv6 should be implemented, then the manufactures need to know when this is needed.

1.10.3 Presentation: WIPI (Wireless Internet Platform for Interoperability)

Sang Jin Yoon (ETRI) made the presentation on WIPI (Wireless Internet Platform for Interoperability). The slides can be found in **T2-020365**.

An introduction was given to ETRI, the Electronics and Telecommunications Research Institute, and KWISF, the Korean Wireless Internet Standardization Forum.

WIPI (Wireless Internet Platform for Interoperability) is an application execution environment specification for the mass market handsets. It has been developed under the guidance of KWISF and ETRI. It was made official standard in Korea through TTA (Telecommunication Technology Association). The security feature meet MExE requirements. WIPI is supposed to co-exist with other technologies such as WAP and MIDP. It is independent of underlying OS and air interface, and is supposed to embrace a broader community of application developers.

It was announced that the specification will be available in English soon.

It was pointed out that this is a good example of the use of MExE work. WIPI is reusing the MExE security model.

2 Subgroup Meetings

Between T2 opening and closing plenary, the sub group sessions (SWG1, SWG2, SWG3) were held. The reports can be found in Annexes D-F. The results may have been changed and amended during the closing plenary. The final results of the T2#17 meeting are reported in the following clauses.

3 Closing Plenary

3.1 Results SWG1 Execution Environment

SWG1 chairman Lars BRENK (TTPCom) presented the SWG1 report in **T2-020381**. The report can be found in Annex D.

The MExE group recommends, that the MExE security Analysis work item is being closed. Regarding the MEXE6-RTIF Work Item, a long discussion and clarification process took place, identifying more specifically some of the work that needs be done in this WID. A draft technical report going into details with the topics raised, will be prepared for the next meeting.

A presentation and discussion concerning a new WID called "Network Execution" took place. It was felt by the group that the WID did not belong in the MExE group. It was the groups recommendation, that the proposal should be presented for SA1, which then, during the 3GPP work item allocation process, will place the work item in the correct working group/sub working group (which might be T2 SWG1). A presentation focussed on the security aspects of BREW was given. A technical presentation on WIPI was given.

New rapporteur of the 23.057 specification is Lars BRENK (TTPCom).

T2-020393 is a CR to 23.057 Rel-6 restructuring the MExE specification to make it easier to understand and modify. The CR was agreed.

T2-020406 is a WID on the binary code execution feasibility study. It is not yet clear where the feasibility study will lead, therefore the related sentence in section 4 was deleted. The expected output documents where described more clearly by adding "TR" in section 10 and deleting 22.057 and 23.057 in section 10. The WID was agreed as **T2-020575**. Motorola stated that they do not support this work item.

T2-020394 is an LS to the SDR Forum giving general information about MExE. The LS was agreed.

T2-020402 is an LS to T on criteria's for selecting new classmarks. The LS was revised in **T2-020576** and postponed to a later point during the meeting because one company requested more studying time.

Concerns were raised that this document might be mistaken as giving formal requirements for classmark approval, and that approval is expected after the criteria's are fulfilled. It was clarified that every classmark proposal will be discussed on its own merit and that the document doesn't give a list of formal requirements. The LS was revised again to **T2-020581** and agreed.

T2-020405 is an LS to WAP Forum UAProf group on adding a CLIPlatform tag to the UAProf schema. The LS was agreed.

3.2 Results SWG2 Terminal Interfaces and Capabilities

The SWG2 report in **T2-020421** was presented by SWG2 chairman Prem SOOD (Sharp). The report can be found in Annex E.

Topics discussed at this meeting included, Generic User Profiles, User Equipment Management, AMR Codecs, Priority Services, UE Functionality Split, AT Commands, various IMS Liaison Statements and other logistics for future meetings, joint meetings, and meeting procedures.

There was thorough discussion on the organization and conduction of the T2 work on GUP. Preparation of a draft WID for the T2-only tasks is ongoing, and is pending the approval of a GUP WI split by SA1 and SA2. SWG2 decided that the T2 GUP work should be carried out in SWG2 meetings called with the dedicated objective of progressing the DDF-common objects work. Two meetings related to GUP work were approved – June 18-20 in Sweden hosted by Telia, and a proposed JM with SA5 in Tampere in the week of August 19-23.

The UEM feasibility study was further reviewed and comments will be provided to SA5 via the LS below.

T2-020438 is a CR to 27.005 Rel-4 correcting the description of +CNM. Wrong message 'RP-ERROR' is replaced by a reference to 3GPP TS 24.011. The CR was agreed.

T2-020439 is a CR to 27.005 R99 correcting the description of +CNM. Wrong message 'RP-ERROR' is replaced by a reference to 3GPP TS 24.011. The CR was agreed.

T2-020429 is a CR to 27.007 Rel-6 Enhancement of AT command +CIND to indicate SMS rejection. The CR was agreed.

T2-020440 is a LS to SA2 & SA1 on GUP DDF progress report . All T2-related GUP work will be carried out in T2 SWG2, and SWG2 will be responsible for the coordination of all relevant joint meetings and liaison statements. The LS informs that T2 decided that there was no longer a need for the T2 GUP ad-hoc group, and disbanded the group. T2 asks SA1 and/or SA2 to keep T2 informed concerning the decision taken regarding the split of the GUP WID. The LS was agreed.

T2-020435 is a response LS to SA1 on Priority Service Feasibility Study TR. T2 would like to be informed regarding any subsequent SA1 WI or Feasibility Study which would examine the use of Priority Service with MMS or SMS. The LS was agreed.

T2-020434 is a reply LS Response to SA5 on UEM and TR 32.802. T2 asks SA5 group to accept the changes suggested before submitting TR 32.802 to SA#16 for approval. The LS was agreed.

3.3 Results SWG3 Messaging

The report of SWG3 was presented in **T2-020461** by Josef LAUMEN. The report was revised to **T2-020577**. It can be found in Annex F.

3.3.1 SMS/CBS/EMS

SMS

T2-020488 is a CR to 23.040 REL-5 on clarification of bit value combinations within TP-PI. The CR was agreed.

T2-020490 is a CR to 23.040 REL-5 on references to the TP-RD bit. The CR was agreed.

T2-020528 is a CR to 23.040 REL-5 on TP-DCS values for SIM data download. The CR was agreed.

T2-020541 is a CR to 23.040 R99 clarifying the requirement for type 0 Short Messages. "SMS" was changed to "short message". The CR was revised in **T2-020578**. The CR was agreed.

T2-020542 is a CR to 23.040 Rel-4 clarifying the requirement for type 0 Short Messages. "SMS" was changed to "short message". The CR was revised to **T2-020579**. The CR was agreed.

T2-020543 is a CR to 23.040 Rel-5 clarifying the requirement for type 0 Short Messages. "message" was changed to "short message". The CR was revised to **T2-020580**. The CR was agreed.

T2-020565 is a CR to 23.040 REL-5 on the occurrence of the Reply Address Element. The CR was agreed.

EMS

T2-020552 is a CR to 23.040 REL-5 on corrections to WVG in EMS. The CR was agreed.

T2-020553 is a CR to 23.040 REL-5 on clarifications to WVG in EMS. The CR was agreed.

T2-020554 is a CR to 23.040 REL-5 on the websafe color palette in WVG in EMS. The CR was agreed.

The SWG3 chairman reported that there are two more CRs on WVG in EMS (T2-020567, T2-020568) which could not be agreed during the SWG3 session. It is planned to have a one week email discussion period starting immedeately. After that, they should be sent on a shortened e-approval period ending noon, Fri 31 May (12:00 GMT).

CBS

T2-020509 is a CR to 23.041 Rel-4 updating references. The CR was agreed.

T2-020512 is a CR to 23.041 R99 updating references. The CR was agreed.

3.3.2 MMS

REL-5 of MMS specification 3G TS 23.140 was finalized at this meeting.

During T2#17 the MM7 stage 3, the implementation of the connection of a VASP to an MMS Relay/Server was finalised. Some MM7 stage 2 corrections resulted from the discussions on MM7 stage 3.

The new SA#15 approved REL-5 MMS stage 1 requirements were analysed and implemented were needed. According to T2's understanding these requirements are now all fulfilled. LSs have been created on the matter to T3 and SA1. A CR on one of the charging requirements and a CR on the automatic bearer selection were approved. It was felt that the other charging requirements were already fulfilled.

Other results:

- Message size definition as requested by BARG.
- Message distribution indicator
- Inclusion of MIME type for SMS encapsulation and alignment with MMS codec spec, 26.140
- Other corrections to the existing REL-5 specification

Discussions of documents on MMS REL-6 matters had to be postponed due to lack of time. However, a preliminary draft WID was created which is to be send for information to SA1 and T#16.

T2-020511 is a CR to 23.140 Rel-5 on parameters for CDR creation related to VASP/VAS connectivity via MM7. Examination of Annex C to 23.140 revealed that additional parameters are needed for CDR creation when connectivity to VASP via MM7 results in a message to or from a VASP. The CR was agreed.

T2-020532 is a CR to 23.140 Rel-5 on Automatic Bearer Selection for MMS. Addition of two explanatory sentences about bearer selection. The note referring to T3 actions required might be deleted at TSG-T in case T3 has fulfilled the requirements. The CR was agreed.

T2-020533 is a CR to 23.140 Rel-5 on Charged Party Indication on MM7. In the MM7_submit.REQ a new field is introduced to send an indication to the MMS Relay/Server which party is expected to be charged for an MM. The CR was agreed.

T2-020534 is a CR to 23.140 REL-5 on MM1-MM7 and MM4-MM7 header mapping. For a complete MMS end-to-end solution the abstract messages and information elements used over MM7 needs to be mapped onto the elements used over the MM1 and MM4 interfaces. The CR was agreed. Friedhelm RODERMUND explained that according to 3GPP's drafting rules table notes have to be within the table instead of below the table.

T2-020535 is a CR to 23.140 REL-5 introducing the MM7 stage 3. The schema URL has to be defined. It was pointed out that it has to include a schema version number, and the URL once it is chosen should remain stable. Friedhelm RODERMUND will liaise with Ville WARSTA and Jerry WEINGARTEN to define the final URL. Then, the URL will be added to the CR before it goes to TSG-T. The CR was revised to **T2-020583** improving the "Reason for Change".

T2-020536 is a CR to 23.140 REL-5 on correction to MM7 Stage 2 on Address Visibility in Sender and Recipient IEs. The CR was agreed.

T2-020544 is a CR to 23.140 R'99 on encapsulation of a short message in a multimedia message. The change consists of indicating that the newly registered content type can be used for encapsulating a short message in a multipart message. The CR was agreed.

T2-020545 is a CR to 23.140 Rel-4 on encapsulation of a short message in a multimedia message. The CR was agreed.

T2-020550 is a CR to 23.140 Rel-5 on encapsulation of a short message in a multimedia message. The CR was agreed.

T2-020547 is a CR to 23.140 REL-5 on MM7 Interface - Message Distribution Indicator. Add the new field, Message Distribution Indicator, to the MM1 and MM7 interfaces to support the indication about the content protection. Nokia expressed strong concerns regarding this CR and on its impact on the parallel ongoing DRM work in SA1. The CR was agreed.

T2-020548 is a CR to 23.140 REL-5 making terminology more consistent. The CR was agreed.

T2-020549 is a CR to 23.140 REL-5 on store status in stage 2 features. The CR was agreed.

T2-020551 is a CR to 23.140 REL-5 on the alignment of 23.140 with 26.140. The issue was debated in SWG3 and some concerns were expressed. The procedure should be that whenever T2 wants new codec functionality, T2 can add a new section about codec requirements, and ask SA4 to implement the requirements. Of course, SA4 can also suggest new media types but it is expected that they will inform T2. Concerns were expressed that there is nothing in place to prevent SA4 from making changes without our knowledge. The CR was agreed.

T2-020559 is a CR to 23.140 Rel-5 on Binary Encoding of MMS Connectivity Information for storage on the USIM. The description for the storage of WAP Gateway Information and Interface to Core Network and Bearer Information on the USIM in annex F is too vague at the moment. The CR was agreed.

T2-020560 is a CR to 23.140 REL-5 on additional information elements for the MM1 abstract messages. The CR was agreed.

T2-020563 is a CR to 23.140 REL-5 on clarifications. Friedhelm RODERMUND commented that the subject, reason for change, and the consequence if not approved are not giving much information about the CR. For future CRs he recommends to be more precise. The CR was agreed.

T2-020564 is a CR to 23.140 REL-5 on message Size. The CR was agreed.

T2-020570 is a CR to 23.140 REL-5 on the correction of responsibility for MM4 delivery reports. The CR was agreed.

T2-020369 is the WAP MMDC Spring report and was presented by Ville WARSTA. The report was noted. Ville volunteered to be the new WAP Forum – 3GPP liaison officer.

3.3.3 Liaison Statements

T2-020321 is a LS to SA5 on Charging Support for VASP MMS Connectivity. T2-020268 to be attached. The LS was revised to **T2-020584** and agreed.

T2-020527 is a LS to SA5 on Service Operations Management on MM7. T2 asks SA5 group to not include MMS as part of the work done for Service Operations Management, until T2 has come to a conclusion on the scope of REL-6 work for MMS. T2 also asks SA5 to provide more information on Service Operations Management. The LS was agreed.

T2-020529 is a LS to T3 on TP-DCS values for SIM data download. The LS was agreed.

T2-020530 is a LS to T3 and SA1 on MMS configuration information in the USIM. T2-020516 to be attached. The LS was agreed.

T2-020531 is a LS to T3 and SA1 on automatic bearer selection for MMS delivery and submission. T2-020518, T2-020532, T2-020559 to be attached. The LS was agreed.

T2-020539 is a LS to SA1 and GSMA-SERG on use cases for VAS. T2-020538 to be attached. T2 SWG3 kindly asks SA1 and GSMA to consider and review the use cases for MMS VAS and provide feedback to T2. The LS was agreed.

T2-020557 is a reply-LS to T2-020338 on MMS codecs. T2-020551 to be attached. The LS was agreed.

T2-020574 is a reply-LS to SA3 on T2-020343 (subscriber certificates) . T2 kindly requests the recipients to update us on the work that has been done so far regarding subscriber certificates and to bring to our attention any documents or specifications that will deal with this issue in the future. The LS was agreed.

The following LSs were not agreed by SWG3 and were presented as draft documents during the closing plenary:

T2-020569 is a LS-reply to T2-020325 to BARG and SA5 on message size definition. The LS was agreed.

T2-020572 is a LS to SA1 cc T on preliminary draft MMS REL-6 WID. T2 requests SA1 to review the proposed preliminary MMS release 6 work item description and provide comments. In addition, T2 asks SA1 to have a joint meeting in order to finalize the MMS release 6 WID. The LS was agreed.

T2-020582 is a LS to SA1 on IMS Messaging. The LS was presented as a draft document. A debate took place whether it is appropriate for T2 to ask for involvement in stage 1 creation. Several changes were done to the draft document. The LS was agreed.

Josef LAUMEN thanked everybody for the hard work done in Rel-5 which leaded to the successful completion.

T2-020370 is an LS from SA4 on PSS Release 6 work program. The LS was noted by T2. It will be sent to the SWG3 email reflector and comments can be provided by SWG3 to SA4 if required.

4 Future meeting schedule

| Meeting | Date | Location | Host |
|---------------------------------------|-----------------|-----------------------|--------------------------|
| T#16 | 5 - 7 June 2002 | Marco Island, Florida | American Friends of 3GPP |
| SWG2 (on GUP) | 18-20 June 2002 | Sweden | Telia |
| SWG3 | tbd | Marseille tbc | GEMPLUS tbc |
| T2#18 | 12-16 Aug 2002 | Velen, Germany | Materna |
| JM T2 /SA1 (on Scope of MMS REL-6) | Tbd | | |

| JM T2 / SA5 (on MMS charging) | 19 Aug 2002 tbc | Tampere / Finland tbc | Co-located with SA5 meeting tbc |
|--|------------------|-----------------------|---------------------------------|
| JM T2 SWG2 / SA5 (on DDF-common objects and SuM) | 20 Aug 2002 tbc | Tampere / Finland tbc | Co-located with SA5 meeting tbc |
| T#17 | 4 - 6 Sep 2002 | Biarritz, France | |
| T2#19 | 18-22 Nov 2002 | Korea | Samsung |
| T#18 | 4 - 6 Dec 2002 | New Orleans, US | American Friends of 3GPP |
| T2#20 | 10 – 14 Feb 2003 | | |
| T#19 | 12 - 14 Mar 2003 | Jersey Island | |
| T2#21 | 12-16 May 2003 | | |
| T#20 | 4 - 6 Jun 2003 | Finland | |
| T2#22 | 25-29 Aug 2003 | | |
| T#21 | 17 - 19 Sep 2003 | Germany | |
| T2#23 | 17-21 Nov 2003 | | |
| T#22 | 10 - 12 Dec 2003 | | |

The T2 meeting dates for 2003 were agreed provisionally.

GEMPLUS offered to host the next SWG3 meeting in Marseille. T2 agreed to have a separate SWG3 meeting. The dates are not decided yet.

See also 3GPP on-line meeting calendar at http://www.3gpp.org. Companies were invited to consider hosting future T2 meetings.

5 Any Other Business

A discussion took place on size restriction of email attachments send to the email reflectors. The T2 chairman appealed to delegate not to send large attachments since this causes problems when reading emails while travelling. Friedhelm RODERMUND announced that he is checking the feasibility of having an size limitation enforced by the list server.

The question came up whether it would be possible to use the automatic document numbering tool for T2 meetings. Friedhelm RODERMUND explained that he didn't use the tool so far because it doesn't support structured document lists. Currently the T2 doclists are structured according to general OP documents, LSs, SWG1, SWG2, SWG3.

6 Close of the Meeting

Ian HARRIS thanked all delegates and the subgroup chairmen for their contributions and work at this meeting. He thanked the North American Friends of 3GPP for hosting the meeting, and he expressed special thanks to Patti DAVIS for her excellent organizational support.

Annex A List of all temporary documents

| TDOC | Subject | Source | SWG |
|-----------|--|-------------------------|----------|
| T2-020310 | Draft Meeting Report T2#16, Sophia Antipolis, France, 11-15 February 2002 | T2 secretary | OP |
| T2-020311 | Draft Agenda T2#17, Vancouver | T2 chairman | OP |
| T2-020312 | IPR guidance | MCC | OP |
| T2-020313 | T2 specs status list | MCC | OP |
| T2-020314 | 3GPP meeting calendar | MCC | СР |
| T2-020315 | Summary of T#15 and SA#15 issues of T2 interest | T2 secretary | OP |
| T2-020316 | Draft Report of TSG-T meeting #15 | T secretary | OP |
| T2-020317 | Draft Report of TSG SA meeting #15 | SA secretary | OP |
| T2-020318 | 3GPP work plan | MCC | OP |
| T2-020319 | list of active T2 work items | T2 secretary | OP |
| T2-020320 | proposed future T2 meeting dates | T2 chairman/secretary | СР |
| T2-020321 | LS to SA5 on Charging Support for VASP MMS Connectivity | Comverse | SWG3 |
| T2-020322 | LS to SA1 on charging MMS models | Teleca | SWG3 |
| T2-020323 | LS to SA1 on MMS Stage 1 Requirements for REL-5 and REL-6 | Nokia | OP |
| T2-020324 | BREW Presentation for T2 Plenary | Qualcomm | OP |
| T2-020325 | LS from BARG CPWP and SMS SC on Message Volume Measurement Methods | CPWP Doc 020/02 rev3 | SWG3 |
| T2-020326 | withdrawn | | |
| T2-020327 | LS from SA1 on Digital Rights Management (DRM) | S1-020493 | SWG3 |
| T2-020328 | LS from SA1 on revised "Draft Push Service Stage 1" | S1-020543 | SWG3 |
| T2-020329 | LS from SA1 on ISIM for support of IMS | S1-020579 | SWG2 |
| T2-020330 | LS from SA1 on Packet switched streaming service stage 1 TS for release 5 | S1-020605 | SWG3 |
| T2-020331 | LS from SA1 on Priority Service Feasibility Study TR - draft | S1-020642 | OP,SWG2 |
| T2-020332 | LS from SA1 on Generic User Profile Stage 1 | S1-020660 | SWG2 |
| T2-020333 | LS from SA2 on "sip compression" | S2-020859 | SWG2 |
| T2-020334 | LS from SA2 reply on: "Draft Push Service Stage 1" | S2-020868 | SWG3 |
| T2-020335 | LS from SA1 on 3GPP TSG SA WG 1 MMS SWG | S1-020518 | SWG3 |
| T2-020336 | LS from SA1 on Support of "Recipient Party pays" | S1-020519 | SWG3 |
| T2-020337 | LS from SA1 on Generic User Profile (GUP) time scales | S1-020571 | SWG2 |
| T2-020338 | LS from SA4 about transfer from T2 to SA4 of responsibility for MMS formats and codecs | S4-010196 | SWG3 |
| T2-020339 | LS from SA2 on Comments on UP-010141 and relationship of GUP to Subscription Management | S2-020887 | SWG2 |
| T2-020340 | LS from SA2 on Status of the Generic User Profile Work | S2-020886 | SWG2 |
| T2-020341 | LS from SA2 on Prefix allocation for IPv6 stateless address autoconfiguration | S2-020910 | SWG2 |
| T2-020342 | LS from SA3 reply on the User Equipment Management Feasibility Study | S3-020136 | SWG2 |
| T2-020343 | LS from SA3 reply on support for subscriber certificates | S3-020163 | OP, SWG3 |
| T2-020344 | LS from SA3 reply on Security for UE functional split | S3-020166 | SWG2 |
| T2-020345 | LS from SA5 reply on: "Draft Push Service Stage 1" | S5-020045 | SWG3 |
| T2-020346 | LS from SA5 reply on: "Liaison Statement on charging support for VAS MMS Connectivity Interface" | S5-020196 | SWG3 |
| T2-020347 | LS from SA5 reply on: Priority Service Feasibility Study - draft TR 22.950 v1.0.0 | S5-020198 | OP |
| T2-020348 | LS from SCP on J2ME API to UICC/(U)SIM | SCP-020051 | OP |
| T2-020349 | LS (forwarded from TSG-T) from SA4 on mandatory support of UMTS AMR2 in dual mode terminals | TP-020057 | SWG2 |
| T2-020350 | LS from SA5 on on 3GPP SA1 MMS SWG | S5-024033 | SWG3 |
| T2-020351 | LS from SA5 on VASP MMS Connectivity joint meeting | S5-020322 | SWG3 |
| T2-020352 | LS from SA5 on VASP MMS Connectivity | S5-022007 | SWG3 |
| | | | |

| LS from SA5 on Relationship of GUP to Subscription Management | S5-022009 | SWG2 |
|---|--|---|
| development | | SWG2 |
| | | SWG2 |
| · · | | SWG2 |
| MMS using MAP operations | N4-020512 | SWG3 |
| | S3-020167 | SWG2 |
| | S2-021513 | SWG2 |
| | S2-021521 | SWG2 |
| , | S5-020433 | SWG2 |
| development | | SWG2 |
| · · | | SWG2 |
| <u> </u> | | OP |
| · | | OP |
| | | OP |
| | Siemens | OP |
| User Profile Work | UP-020053 | OP |
| | | СР |
| <u> </u> | S4 (02)0346 | СР |
| not used | | |
| | | |
| | | SWG1 |
| <u>'</u> | | SWG1 |
| Restructuring of the MExE specification | Ericsson | SWG1 |
| e-mail approval status #4 | Chairman | SWG1 |
| | MExE group | SWG1 |
| New MExE classmark questions | Chairman | SWG1 |
| | Qualcomm | SWG1 |
| | | SWG1 |
| Independent Conformance Framework | | SWG1 |
| | · | SWG1 |
| | Ericsson | SWG1 |
| | MExE group | SWG1 |
| LS to WAP Forum UAProf group | Microsoft | SWG1 |
| | | SWG1 |
| MExE answers | Microsoft | SWG1 |
| Signed packages for installation of root certificates | Microsoft | SWG1 |
| | LS from SA5 on co-ordination of data definitions, identified in GUP development LS from CN3 on IPv6 update of stage 3 specifications LS from CN4 on coordination of data definitions, identified in GUP development LS from CN4 Complement to the Answer LS on MSISDN Address resolution for MMS using MAP operations LS from SA3 on the use of USIMs and ISIMs for IMS LS from SA2 on IPv6 update of stage 3 specifications LS from SA2 on IPv6 update of stage 3 specifications LS from SA2 on IPv6 update of stage 3 specifications LS from SA5 on User Equipment Management Feasibility Study (TR 32.802) LS from SA5 on User Equipment Management Feasibility Study (TR 32.802) LS from SA2 on GUP Work Item Description and DDF presentation: IPv6 for Second and Third Generation Cellular Hosts WIPI presentation: Agenda T2#17, Vancouver LS to SA1 on draft MMS Rel-6 WID LS from Joint ad-hoc on Generic User Profile (GUP) on Transfer of the Generic User Profile Work WAP MMDC Spring report LS from SA4 on PSS Release 6 work programm not used Not us | LS from SA5 on co-ordination of data definitions, identified in GUP development LS from CN3 on IPv6 update of stage 3 specifications N3-020361 LS from CN4 on coordination of data definitions, identified in GUP development N4-020463 LS from CN4 complement to the Answer LS on MSISDN Address resolution for MMS using MAP operations LS from SA3 on the use of USIMs and ISIMs for IMS S3-020167 LS from SA3 on the use of USIMs and ISIMs for IMS S3-0201613 LS from SA2 on GUP work progress S2-021513 LS from SA2 on IPv6 update of stage 3 specifications LS from SA3 on Ser Equipment Management Feasibility Study (TR 32.802) S5-020433 LS from SA5 on User Equipment Management Feasibility Study (TR 32.802) S5-020433 LS from SA5 on Oser Equipment Management Feasibility Study (TR 32.802) S5-020433 LS from SA2 on GUP Work Item Description and DDF S2-021514 presentation: IPv6 for Second and Third Generation Cellular Hosts Nokia WIPI presentation: IPv6 for Second and Third Generation Cellular Hosts Nokia WIPI presentation LS from Joint ad-hoc on Generic User Profile (GUP) on Transfer of the Generic User Profile Work WAP MMDC Spring report US from SA4 on PSS Release 6 work programm S4 (02)0346 Not used Not wash NEXE at T2#17 Chairman Restructuring of the MEXE specification Ericsson e-mail approval status #4 MEXE contribution to the SDR Forum MEXE Classmark for BREW DRAW Presentation for MEXE SWG Qualcomm WEXE Classmark for BREW DRAW Presentation for MEXE SWG Qualcomm Network Execution in MEXE WID Mexical Forum User Sund Mexical Forum Network Execution in MEXE WID Mexical Forum User Open Sund Mexical Forum Network Execution of Network execution Network Execution of Network execution Media Farm MEXE Sund Prorum User Open Sund Network User Sund Prorum User Open Sund Network Network Execution of Network execution Media Farm MEXE answers |

| T2-020399 | MExE answers version 2 | Microsoft | SWG1 |
|-----------|---|-------------------|----------|
| T2-020399 | UE architecture picture | Siemens | SWG1 |
| T2-020401 | MExE answers version 3 | MExE group | SWG1 |
| T2-020401 | LS to T: Criteria's for selecting new classmarks | MExE group | SWG1 |
| T2-020403 | MEXE feasibility study | MCC | SWG1 |
| T2-020404 | First MEXE WID | MCC | SWG1 |
| T2-020404 | LS to WAP Forum UAProf group on Adding a CLIPlatform tag to the UAProf schema | Microsoft | SWG1 |
| T2-020406 | WID: Binary code execution feasibility study | TTPCom / Qualcomm | SWG1 |
| T2-020407 | not used | | SWG1 |
| T2-020408 | not used | | SWG1 |
| T2-020409 | not used | | SWG1 |
| T2-020410 | not used | | SWG1 |
| T2-020411 | not used | | SWG1 |
| T2-020412 | not used | | SWG1 |
| T2-020413 | not used | | SWG1 |
| T2-020414 | not used | | SWG1 |
| T2-020415 | not used | | SWG1 |
| T2-020416 | not used | | SWG1 |
| T2-020417 | not used | | SWG1 |
| T2-020418 | not used | | SWG1 |
| T2-020419 | not used | | SWG1 |
| T2-020420 | Agenda SWG2#17 | SWG2 Chair | SWG2 |
| T2-020421 | Meeting Report SWG2#17 | SWG2 Chair | SWG2 |
| T2-020422 | Report/agenda of Cork UEM-JM with SA5 | T2 JM Co-Chair | SWG2 |
| T2-020423 | Report/agenda of T2-GUP Cork Meeting | T2-GUP Chair | SWG2 |
| T2-020424 | Report/agenda of UP-10 Cork Joint GUP-AH | GUP-AH Chair | SWG2 |
| T2-020425 | TSG-T Decision on GUP Work | SWG2 Chair | OP, SWG2 |
| T2-020426 | TSG-SA Decision on GUP work | SWG2 Chair | OP, SWG2 |
| T2-020427 | GUP Work Organization e-mail March 26 | SWG2 Chair | SWG2 |
| T2-020428 | TSG-T, SA Decision on UMTS_AMR2 codec | SWG2 Chair | SWG2 |
| T2-020429 | CR 27.007 Extention of +CIND | Siemens | SWG2 |
| T2-020430 | CR 07.05/27.005 Correction of +CNMA | Siemens | SWG2 |
| T2-020431 | Explanation for CR to +CNMA | Siemens | SWG2 |
| T2-020432 | status of GUP work | Ericsson | SWG2 |
| T2-020433 | GUP Presentation | GUP-AH, UP-020060 | SWG2 |
| T2-020434 | LS to SA5 on UEM & 32.802 | | SWG2 |
| T2-020435 | LS to SA1 on Priority Service | | SWG2 |
| T2-020436 | LS from GUP-AH UP-10 on Transfer of Work | UP-020053 | SWG2 |
| T2-020437 | Draft WID on T2 GUP work | Motorola | SWG2 |
| T2-020438 | CR 07.05/27.005 Correction of +CNMA REL 99 | | SWG2 |
| T2-020439 | CR 07.05/27.005 Correction of +CNMA REL4 | | SWG2 |
| T2-020440 | LS to SA2, SA1 on T2 Progress Report on GUP | | SWG2 |
| T2-020441 | GUP Information Model | UP-020043 | SWG2 |
| T2-020442 | TS23.241 Updated Annex B | UP-020025 | SWG2 |
| T2-020443 | TS23.241 version 0.3.0 updated | UP-020026 | SWG2 |
| T2-020444 | DDF files and examples | UP-020027 | SWG2 |
| T2-020445 | TS24.241 | | SWG2 |
| T2-020446 | GUP Work in Progress Information | | SWG2 |
| | | | |

| T2-020447 | not used | | SWG2 |
|-----------|---|--|------|
| T2-020448 | not used | | SWG2 |
| T2-020449 | not used | | SWG2 |
| T2-020450 | not used | | SWG2 |
| T2-020451 | not used | | SWG2 |
| T2-020452 | not used | | SWG2 |
| T2-020453 | not used | | SWG2 |
| T2-020454 | not used | | SWG2 |
| T2-020455 | not used | | SWG2 |
| T2-020456 | not used | | SWG2 |
| T2-020457 | not used | | SWG2 |
| T2-020458 | not used | | SWG2 |
| T2-020459 | not used | | SWG2 |
| T2-020460 | Agenda SWG3#17 | | SWG3 |
| T2-020461 | Meeting Report SWG3#17 | | SWG3 |
| T2-020462 | draft meeting report SWG3 MMS meeting, Seattle | | SWG3 |
| T2-020463 | MMS end-to-end security services | GEMPLUS | SWG3 |
| T2-020464 | MMS end-to-end security services using S/MIME and USIM | GEMPLUS | SWG3 |
| T2-020465 | CR 23.140 Rel-5 Status text in the MM1_delivery_report.REQ | Materna | SWG3 |
| T2-020466 | CR 23.140 Rel-5 information field in notification | Materna | SWG3 |
| T2-020467 | CR 23.140 Rel-5 reverse charging on MM7 | Materna | SWG3 |
| T2-020468 | CR 23.140 Rel-6 Encapsulation of a short message in a multimedia message | Alcatel | SWG3 |
| T2-020469 | Clarifications on attaching multimedia message content to MM7 Stage 3 CR | Nokia | SWG3 |
| T2-020470 | Clarification of the requirement for type 0 Short Messages | Vodafone Group | SWG3 |
| T2-020471 | CR 03.40 Ph2 (Cat. F) Clarification of the requirement for type 0 Short Messages | Vodafone Group | SWG3 |
| T2-020472 | CR 03.40 R96 (Cat. A) Clarification of the requirement for type 0 Short Messages | Vodafone Group | SWG3 |
| T2-020473 | CR 03.40 R97 (Cat. A) Clarification of the requirement for type 0 Short Messages | Vodafone Group | SWG3 |
| T2-020474 | CR 03.40 R98 (Cat. A) Clarification of the requirement for type 0 Short Messages | Vodafone Group | SWG3 |
| T2-020475 | CR 23.040 R99 (Cat. A) Clarification of the requirement for type 0 Short Messages | Vodafone Group | SWG3 |
| T2-020476 | CR 23.040 Rel-4 (Cat. A) Clarification of the requirement for type 0 Short Messages | Vodafone Group | SWG3 |
| T2-020477 | CR 23.040 Rel-5 (Cat. A) Clarification of the requirement for type 0 Short Messages | Vodafone Group | SWG3 |
| T2-020478 | CR 23.140 Correction to MM7 Stage 2 on Address Visibility in Sender and Recipient IEs | SWG3#11 | SWG3 |
| T2-020479 | CR 23.140 REL-5 consistent terminology | Siemens | SWG3 |
| T2-020480 | CR 23.140 REL-5 Alignment of 23.140 with 26.140 | Siemens, Nokia | SWG3 |
| T2-020481 | Definition of message size in MMS (discussion document) | Siemens | SWG3 |
| T2-020482 | Restructuring of 23.140 in REL-6 (discussion document) | Siemens | SWG3 |
| T2-020483 | Meeting planning for MMS REL-6 (discussion document) | Siemens | SWG3 |
| T2-020484 | CR 23.140 Rel-5 Automatic Bearer Selection for MMS | Siemens | SWG3 |
| T2-020485 | CR 23.140 Rel-5 Charged Party Indication on MM7 | Materna, Nokia, Teleca, Vodafone, Ericsson | SWG3 |
| T2-020486 | CR 23.140 Rel-6 User Prompt Identifier | Ericsson | SWG3 |
| T2-020487 | MMS end-to-end security services : use cases | Orange | SWG3 |
| T2-020488 | CR 23.040 Clarification of bit value combinations within TP-PI | Siemens | SWG3 |
| T2-020489 | CR 23.040 TP-DCS values for SIM data download | Siemens | SWG3 |
| | | | |

| T2-020490 | CR 23.040 References to the TP-RD bit | Siemens | SWG3 |
|-----------|--|--|------|
| T2-020491 | CR 23.040 Occurrence of the Reply Address Element | Siemens | SWG3 |
| T2-020492 | CR 23.040 WVG Corrections and Clarifications | Bijitec | SWG3 |
| T2-020493 | CR 23.140 Rel-5 inclusion of previously sent field to MM7 | Nokia | SWG3 |
| T2-020494 | CR 23.140 MM7 Interface - Message Distribution Indicator | AT&T Wireless | SWG3 |
| T2-020495 | CR 23.140 MM1 interface - Message Distribution Indicator | AT&T Wireless | SWG3 |
| T2-020496 | CR 23.140 Consistent use of RFC2822 | CMG | SWG3 |
| T2-020497 | CR 23.140 FQDN in RFC822 fields on MM4 | CMG | SWG3 |
| T2-020498 | CR 23.140 Correction of responsibility for MM4 delivery reports | CMG | SWG3 |
| T2-020499 | CR 23.140 Rel-5 Binary Encoding of MMS Connectivity Information for storage on the USIM | Siemens | SWG3 |
| T2-020500 | CR 23.140 MM7 stage 3 endorsed by SWG3#11 | Ericsson | SWG3 |
| T2-020501 | Corrections to MM7 stage 3 - discussion doc | Ericsson | SWG3 |
| T2-020502 | CR 23.140 Mapping of information elements (MM1, MM4, MM7) | Materna | SWG3 |
| T2-020503 | Use cases for VAS - discussion doc | Telia | SWG3 |
| T2-020504 | 23.140 v5.2.0 clarifications | Telia | SWG3 |
| T2-020505 | CR 23.140 Rel-5 Additional information elements for the MM1 abstract messages. | SchlumbergerSema | SWG3 |
| T2-020506 | CR 23.140 Rel-5 Acknowledgements for the unconfirmed transactions | SchlumbergerSema | SWG3 |
| T2-020507 | CR 23.040 Destination SME Mailbox Full TP-Failure-Cause | CMG | SWG3 |
| T2-020508 | MMS timezones - discussion doc | Teleca | SWG3 |
| T2-020509 | CR 23.041 Rel-4 Update of references | Teleca | SWG3 |
| T2-020510 | EMS feature overview | T2 secretary | SWG3 |
| T2-020511 | CR 23.140 Rel-5 Parameters for CDR creation related to VASP/VAS connectivity via MM7 | Comverse | SWG3 |
| T2-020512 | CR 23.041 R99 Update of references | MCC | SWG3 |
| T2-020513 | LS to SA5, CN5 cc SA1, SA2 on JM SA5/CN5/T2 on VASP MMS charging | Siemens | OP |
| T2-020514 | SWG3#11 agreed MM7 stage 3 design principles | SWG3#11 | SWG3 |
| T2-020515 | CR 22.140 REL-5 - MMS support of both MSISDN and e-mail addressing schemes (SP-020055 CR-11) | SA1 | SWG3 |
| T2-020516 | CR 22.140 REL-5 - MMS configuration information in the USIM (SP-020055 CR-13) | SA1 | SWG3 |
| T2-020517 | CR 22.140 REL-5 - Support of chargingmodels in MMS (SP-020193) | SA1 | SWG3 |
| T2-020518 | CR 22.140 REL-5 - Automatic bearer selection for MMS delivery and submission (SP-020195) | T-Mobile, Vodafone Group, Orange | SWG3 |
| T2-020519 | SWGB#27bis_Service Charging_Report | S5-024046 | SWG3 |
| T2-020520 | Generic Approach for UPI in MMS | Siemens | SWG3 |
| T2-020521 | CR 23.140 Rel-5 Binary Encoding of MMS Connectivity Information for storage on the USIM | Siemens | SWG3 |
| T2-020522 | CR 23.140 REL-4 Mandatory MM1_retrieve.RES | Siemens | SWG3 |
| T2-020523 | LS to SA5, WAP MMDC on REL-4 mandatory MM1_retrieve.RES | Siemens | SWG3 |
| T2-020524 | Discussion of stage 1 push specification | Comverse | SWG3 |
| T2-020525 | reply-LS to SA3 on T2-020343 (subscriber certificates) | Comverse | SWG3 |
| T2-020526 | Generic Approach for UPI in MMS | Siemens | SWG3 |
| T2-020527 | LS to SA5 cc CN5, SA1, SA2 on Service Operations Management on MM7 | Nokia | SWG3 |
| T2-020528 | CR 23.040 REL-5 TP-DCS values for SIM data download | Siemens | SWG3 |
| T2-020529 | LS to T3 on TP-DCS values for SIM data download | Siemens | SWG3 |
| T2-020530 | LS to T3, SA1 on MMS configuration information in the USIM | Siemens | SWG3 |
| T2-020531 | LS to T3, SA1 on Automatic bearer selection for MMS delivery and submission | Siemens | SWG3 |
| T2-020532 | CR 23.140 Rel-5 Automatic Bearer Selection for MMS | Siemens | SWG3 |
| T2-020533 | CR 23.140 Rel-5 Charged Party Indication on MM7 | Materna, Nokia, Teleca, Vodafone, Ericsson | SWG3 |

| T2-020534 | CR 23.140 REL-5 MM1-MM7 and MM4-MM7 header mapping | Ericsson | SWG3 |
|-----------|---|---|------|
| T2-020535 | CR 23.140 REL-5 MM7 stage 3 | Ericsson, Nokia, Comverse, Logica, Openwave | SWG3 |
| T2-020536 | CR 23.140 REL-5 Correction to MM7 Stage 2 on Address Visibility in Sender and Recipient IEs | SWG3#11 | SWG3 |
| T2-020537 | CR 23.140 REL-5 MM7 Interface - Message Distribution Indicator | AT&T Wireless | SWG3 |
| T2-020538 | Use cases for VAS - discussion doc | Telia | SWG3 |
| T2-020539 | LS to SA1, GSMA-SERG on Use cases for VAS | Telia | SWG3 |
| T2-020540 | Very draft basis for an MMS REL-6 Work Item Description | Siemens | SWG3 |
| T2-020541 | CR 23.040 R99 Clarification of the requirement for type 0 Short Messages | Vodafone Group, Eplus, mm02, Sonera | SWG3 |
| Γ2-020542 | CR 23.040 Rel-4 Clarification of the requirement for type 0 Short Messages | Vodafone Group, Eplus, mm02, Sonera | SWG3 |
| T2-020543 | CR 23.040 Rel-5 Clarification of the requirement for type 0 Short Messages | Vodafone Group, Eplus, mm02, Sonera, Telia | SWG3 |
| T2-020544 | CR 23.140 R'99 Encapsulation of a short message in a multimedia message | Alcatel | SWG3 |
| T2-020545 | CR 23.140 Rel-4 Encapsulation of a short message in a multimedia message | Alcatel | SWG3 |
| T2-020546 | CR 23.140 REL-5 Clarifications concerning the use of timestamp | SchlumbergerSema | SWG3 |
| T2-020547 | CR 23.140 REL-5 MM7 Interface - Message Distribution Indicator | AT&T Wireless | SWG3 |
| Г2-020548 | CR 23.140 REL-5 consistent terminology | Siemens | SWG3 |
| Г2-020549 | CR 23.140 REL-5 Store status in stage 2 features | Openwave | SWG3 |
| T2-020550 | CR 23.140 Rel-5 Encapsulation of a short message in a multimedia message | Alcatel | SWG3 |
| Γ2-020551 | CR 23.140 REL-5 Alignment of 23.140 with 26.140 | Siemens, Nokia | SWG3 |
| Γ2-020552 | CR 23.040 REL-5 corrections to WVG in EMS | Motorola, Bijitec | SWG3 |
| Γ2-020553 | CR 23.040 REL-5 clarifications to WVG in EMS | Motorola, Bijitec | SWG3 |
| Γ2-020554 | CR 23.040 REL-5 Websafe color palette in WVG in EMS | Motorola, Bijitec | SWG3 |
| Γ2-020555 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec | SWG3 |
| T2-020556 | Summary of key changes in T2-020552 and T2-020555 | Motorola, Bijitec | SWG3 |
| Г2-020557 | LS to SA4 on Transfer of Responsibility for MMS Formats and Codecs | Nokia | SWG3 |
| Γ2-020558 | withdrawn | withdrawn | SWG3 |
| Γ2-020559 | CR 23.140 Rel-5 Binary Encoding of MMS Connectivity Information for storage on the USIM | Siemens | SWG3 |
| T2-020560 | CR 23.140 REL-5 Additional information elements for the MM1 abstract messages | SchlumbergerSema, Teleca | SWG3 |
| T2-020561 | withdrawn | withdrawn | SWG3 |
| Г2-020562 | CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports | CMG | SWG3 |
| T2-020563 | 23.140 v5.2.0 clarifications | Telia | SWG3 |
| Г2-020564 | CR 23.140 REL-5 Message Size | Teleca, Openwave | SWG3 |
| Г2-020565 | CR 23.040 REL-5 Occurrence of the Reply Address Element | Siemens | SWG3 |
| T2-020566 | withdrawn | withdrawn | SWG3 |
| Γ2-020567 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec | SWG3 |
| T2-020568 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec | SWG3 |
| Γ2-020569 | LS to GSMA BARG CPWP and SMS SC cc SA5 on message size definition | Vodafone | SWG3 |
| Γ2-020570 | CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports | CMG | SWG3 |
| Γ2-020571 | preliminary draft MMS REL-6 Work Item Description | SWG3 | SWG3 |
| Γ2-020572 | LS to SA1 cc T on preliminary draft MMS REL-6 WID | Openwave | SWG3 |
| T2-020573 | LS to SA1 on IMS Messaging | Openwave, Comverse, SchlumbergerSema | SWG3 |
| T2-020574 | LS to SA3, SA1 on subscriber certificates | Comverse | SWG3 |
| T2-020575 | WID: Binary code execution feasibility study (revsied T2-020406) | TTPCom / Qualcomm | OP |
| T2-020576 | LS to T: Criteria's for selecting new classmarks (revised T2-020402) | SWG1 | OP |

| T2-020577 | Meeting Report SWG3#17 (revised T2-020461) | SWG3 chair | OP |
|-----------|--|---|----|
| T2-020578 | CR 23.040 R99 Clarification of the requirement for type 0 Short Messages (revised T2-020541) | Vodafone Group, Eplus, mm02, Sonera | OP |
| T2-020579 | CR 23.040 Rel-4 Clarification of the requirement for type 0 Short Messages (revised T2-020542) | Vodafone Group, Eplus, mm02, Sonera | OP |
| T2-020580 | CR 23.040 Rel-5 Clarification of the requirement for type 0 Short Messages (revised T2-020543) | Vodafone Group, Eplus, mm02, Sonera | OP |
| T2-020581 | LS to T: Criteria's for selecting new classmarks (revised T2-020576) | SWG1 | OP |
| T2-020582 | LS to SA1 cc SA2 on IMS Messaging | SWG3 | OP |
| T2-020583 | CR 23.140 REL-5 MM7 stage 3 (revised T2-020535) | Ericsson, Nokia, Comverse, Logica, Openwave | OP |
| T2-020584 | LS to SA5 cc CN5 on Charging Support for VASP MMS Connectivity (revised T2-020321) | SWG3 | OP |
| T2-020585 | not used | | |

Annex B Outgoing Documents

B.1 Change Requests submitted to TSG-T

The following CRs will be submitted to TSG-T#16 for approval:

"MExE" Change Requests

| Spec | CR | Rev | Rel | Subject | Cat | Vers- Curr | Vers- New | T2 Tdoc | Workitem |
|--------|-----|-----|-------|---|-----|---------------|--------------|-----------|--------------|
| 23.057 | 118 | - | Rel-6 | Restructuring of the MExE-specification | D | 5.0.0 | 6.0.0 | T2-020393 | MEXE6-ENHANC |

"Terminal Interfaces and Capabilities" Change Requests

| Spec | CR | Rev | Rel | Subject | Cat | Vers- | Vers- | T2 Tdoc | Workitem |
|--------|-----|-----|-------|---|-----|-------|-------|-----------|----------|
| 27.005 | 003 | - | R99 | Correction in description of +CNMA | F | 3.1.0 | 3.2.0 | T2-020438 | TEI |
| 27.005 | 004 | - | Rel-4 | Correction in description of +CNMA | Α | 4.1.0 | 4.2.0 | T2-020439 | TI-ATC |
| 27.007 | 085 | - | Rel-6 | Enhancement of AT command +CIND to indicate SMS rejection | В | 5.1.0 | 6.0.0 | T2-020429 | TEI6 |

"SMS/CBS/EMS" Change Requests

| Spec | CR | Rev | Rel | Subject | Cat | Vers- | Vers- | T2 Tdoc | Workitem |
|--------|-----|-----|-------|---|-----|-------|-------|-----------|-----------|
| 23.040 | 049 | - | Rel-5 | Clarification of bit value combinations within TP-PI | F | 5.3.0 | 5.4.0 | T2-020488 | TEI5 |
| 23.040 | 050 | - | Rel-5 | References to the TP-RD bit | F | 5.3.0 | 5.4.0 | T2-020490 | TEI5 |
| 23.040 | 051 | - | Rel-5 | TP-DCS values for SIM data download | F | 5.3.0 | 5.4.0 | T2-020528 | TEI5 |
| 23.040 | 052 | - | R99 | Clarification of the requirement for type 0 Short Messages | F | 3.8.0 | 3.9.0 | T2-020578 | TEI |
| 23.040 | 053 | - | Rel-4 | Clarification of the requirement for type 0 Short Messages | Α | 4.6.0 | 4.7.0 | T2-020579 | TEI4 |
| 23.040 | 054 | - | Rel-5 | Clarification of the requirement for type 0 Short Messages | С | 5.3.0 | 5.4.0 | T2-020580 | TEI5 |
| 23.040 | 055 | - | Rel-5 | Occurrence of the Reply Address Element | F | 5.3.0 | 5.4.0 | T2-020565 | TEI5 |
| 23.040 | 056 | - | Rel-5 | WVG Corrections and Clarifications | F | 5.3.0 | 5.4.0 | T2-020552 | MESS5-EMS |
| 23.040 | 057 | - | Rel-5 | WVG Corrections and Clarifications | F | 5.3.0 | 5.4.0 | T2-020553 | MESS5-EMS |
| 23.040 | 058 | - | Rel-5 | WVG Clarifications for websafe color | F | 5.3.0 | 5.4.0 | T2-020554 | MESS5-EMS |
| 23.041 | 009 | - | R99 | Update of references | F | 3.4.0 | 3.5.0 | T2-020512 | TEI |
| 23.041 | 010 | - | Rel-4 | Update of references | F | 4.2.0 | 4.3.0 | T2-020509 | TEI4 |

"MMS" Change Requests

| Spec | CR | Rev | Rel | Subject | Cat | Vers- | Vers- | T2 Tdoc | Workitem |
|--------|-----|-----|-------|--|-----|-------|-------|-----------|-----------|
| 23.140 | 065 | - | Rel-5 | Parameters for CDR creation related to VASP/VAS connectivity via MM7 | F | 5.2.0 | 5.3.0 | T2-020511 | MESS5-MMS |
| 23.140 | 066 | - | Rel-5 | Automatic Bearer Selection for MMS | В | 5.2.0 | 5.3.0 | T2-020532 | MESS5-MMS |
| 23.140 | 067 | - | Rel-5 | Charged Party Indication on MM7 | В | 5.2.0 | 5.3.0 | T2-020533 | MESS5-MMS |
| 23.140 | 068 | - | Rel-5 | MM1 - MM7 and MM4 - MM7 header mapping | В | 5.2.0 | 5.3.0 | T2-020534 | MESS5-MMS |
| 23.140 | 069 | - | Rel-5 | MM7 stage 3 | В | 5.2.0 | 5.3.0 | T2-020583 | MESS5-MMS |
| 23.140 | 070 | - | Rel-5 | Correction to MM7 Stage 2 on Address Visibility in Sender and Recipient IEs | F | 5.2.0 | 5.3.0 | T2-020536 | MESS5-MMS |
| 23.140 | 071 | - | R99 | Encapsulation of a short message (SMS) in a multimedia message (MMS) | F | 3.0.1 | 3.1.0 | T2-020544 | MMS |
| 23.140 | 072 | - | Rel-4 | Encapsulation of a short message (SMS) in a multimedia message (MMS) | А | 4.6.0 | 4.7.0 | T2-020545 | MMS |
| 23.140 | 073 | - | Rel-5 | Encapsulation of a short message (SMS) in a multimedia message (MMS) | Α | 5.2.0 | 5.3.0 | T2-020550 | MESS5-MMS |
| 23.140 | 074 | - | Rel-5 | MM1 and MM7 Interfaces: Message | В | 5.2.0 | 5.3.0 | T2-020547 | MESS5-MMS |

| | | | | Distribution Indicator. | | | | | |
|--------|-----|---|-------|--|---|-------|-------|-----------|-----------|
| 23.140 | 075 | - | Rel-5 | Consistent terminology | F | 5.2.0 | 5.3.0 | T2-020548 | MESS5-MMS |
| 23.140 | 076 | - | Rel-5 | Clarification of Persistent Network-based Storage: Store Status and Store Status Text chroughout MM1 Reference Point | | 5.2.0 | 5.3.0 | T2-020549 | MESS5-MMS |
| 23.140 | 077 | - | Rel-5 | Alignment of 3GPP TS 23.140 with 3GPP TS 26.140 | F | 5.2.0 | 5.3.0 | T2-020551 | MESS5-MMS |
| 23.140 | 078 | - | Rel-5 | Binary Encoding of MMS Connectivity Information for storage on the USIM | F | 5.2.0 | 5.3.0 | T2-020559 | MESS5-MMS |
| 23.140 | 079 | - | Rel-5 | Additional information elements for the MM1 abstract messages. | F | 5.2.0 | 5.3.0 | T2-020560 | MESS5-MMS |
| 23.140 | 080 | - | Rel-5 | Clarifications | F | 5.2.0 | 5.3.0 | T2-020563 | MESS5-MMS |
| 23.140 | 081 | - | Rel-5 | Definition of Message Size in a CDR | F | 5.2.0 | 5.3.0 | T2-020564 | MESS5-MMS |
| 23.140 | 082 | - | Rel-5 | Correction of incomplete/inconsistent MM4 interface responsibility allocation for delivery reports. | F | 5.2.0 | 5.3.0 | T2-020570 | MESS5-MMS |

For T2 email approval:

For the following CRs, it is planned to have a one week email discussion period starting immedeately after the meeting. After that, the CRs should go on a shortened e-approval period ending noon, Fri 31 May (12:00 GMT).

| T2-020567 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec |
|-----------|---|-------------------|
| T2-020568 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec |

B.2 Liaison Statements

The following LSs have been sent from T2#17:

| TDOC | Subject | Comments |
|-----------|---|------------------|
| T2-020323 | LS to SA1 on MMS Stage 1 Requirements for REL-5 and REL-6 | sent 14/04/2002 |
| T2-020367 | LS to SA1 on draft MMS Rel-6 WID | sent 14/04/2002 |
| T2-020394 | LS to SDR Forum: MExE contribution to the SDR Forum | sent 22/04/2002 |
| T2-020405 | LS to WAP Forum UAProf group on Adding a CLIPlatform tag to the UAProf schema | sent 22/05/2002 |
| T2-020434 | LS to SA5 on UEM & 32.802 | sent 18/05/2002 |
| T2-020435 | LS to SA1 on Priority Service | sent 22/02/2002 |
| T2-020440 | LS to SA2, SA1 on T2 Progress Report on GUP | sent 22/02/2002 |
| T2-020513 | LS to SA5, CN5 cc SA1, SA2 on JM SA5/CN5/T2 on VASP MMS charging | sent 14/04/2002 |
| T2-020527 | LS to SA5 cc CN5, SA1, SA2 on Service Operations Management on MM7 | sent 21/05/2002 |
| T2-020529 | LS to T3 on TP-DCS values for SIM data download | sent 21/05/2002 |
| T2-020530 | LS to T3, SA1 on MMS configuration information in the USIM | sent 21/05/2002 |
| T2-020531 | LS to T3, SA1 on Automatic bearer selection for MMS delivery and submission | sent 21/05/2002 |
| T2-020539 | LS to SA1, GSMA-SERG on Use cases for VAS | sent 22/05/2002 |
| T2-020557 | LS to SA4 on Transfer of Responsibility for MMS Formats and Codecs | sent 22/05/2002 |
| T2-020569 | LS to GSMA BARG CPWP and SMS SC cc SA5 on message size definition | sent 22/05/2002 |
| T2-020572 | LS to SA1 cc T on preliminary draft MMS REL-6 WID | sent 22/05/2002) |
| T2-020574 | LS to SA3, SA1 on subscriber certificates | sent 22/05/2002 |
| T2-020582 | LS to SA1 cc SA2 on IMS Messaging | sent 22/05/2002 |
| T2-020584 | LS to SA5 cc CN5 on Charging Support for VASP MMS Connectivity | sent 21/05/2002 |
| T2-020581 | LS to T: Criteria's for selecting new classmarks | sent 23/05/2002 |

B.3 Reports/Specifications submitted to TSG-T

No specifications/reports to be forwarded to TSG-T#16.

B.4 Other documents submitted to TSG-T

The following other documents were agreed to be submitted to TSG-T#16:

| TDOC | Subject |
|-----------|--|
| T2-020575 | WID: Binary code execution feasibility study |

Annex C: List of Participants

| Name | Organization | Status, partner | Phone | Fax | Email |
|------------------------|-------------------------------|-------------------|-------------------|-------------------|--------------------------------------|
| Mr. Miller Abel | MICROSOFT EUROPE SARL | 3GPPMEMBER (ETSI) | +1 425 707-6139 | +1 425 936-7329 | millera@microsoft.com |
| Mr. Ramin Afchar | VODAFONE Group Plc | 3GPPMEMBER (ETSI) | +49 211 820-2041 | +49 211 820-1701 | ramin.afchar@vodafone.com |
| Mr. Eskil Åhlin | ERICSSON L.M. | 3GPPMEMBER (ETSI) | +46 46 327 287 | +46 (40) 30 70 29 | eskil.ahlin@ausystem.com |
| Mr. Nicholas Alfano | RIM | 3GPPMEMBER (ETSI) | +1 604 739 1016 | +1 604 | nalfano@rim.net |
| Mr. Tim Ambrose | Hutchison 3G UK Limited | 3GPPMEMBER (ETSI) | +44 7866 601096 | +44 1628 765001 | Tim.Ambrose@Hutchison3G.com |
| Mr. Philippe Bellordre | ORANGE FRANCE | 3GPPMEMBER (ETSI) | +33 145 29 57 95 | +33 1 55 22 26 24 | philippe.bellordre@francetelecom.com |
| Mr. Srinivas Bharadwaj | Media Farm, Inc. | 3GPPMEMBER (ETSI) | +1 408 241 0039 | +1 408 241 0029 | srini@virtualpalmtop.net |
| Mr. Lars Brenk | TTPCom Ltd | 3GPPMEMBER (ETSI) | +45 9631 4646 | +45 9631 4647 | lsb@ttpcom.com |
| Mr. Richard Brook | SAMSUNG Electronics | 3GPPMEMBER (ETSI) | +44 1594 836646 | +44 1594 836646 | richardbrook39@aol.com |
| Mr. Wayne Carr | Intel Sweden AB | 3GPPMEMBER (ETSI) | +1 503 264 7555 | +1 503 264 6068 | wayne.carr@intel.com |
| Mr. Alan Chau | NOKIA UK Ltd | 3GPPMEMBER (ETSI) | +44 1252 86 7425 | +44 1252 865 693 | alan.chau@nokia.com |
| Mr. Dave Qing Chen | Bijitec Pte Ltd | 3GPPMEMBER (ETSI) | +86 21 5836 9048 | +86 21 5836 9049 | davechen@bijitec.com |
| Mr. Andrew Chow | XIRCOM, an Intel company | 3GPPMEMBER (ETSI) | +1 719 884 2335 | +1 719 548 9812 | andrew.chow@intel.com |
| Dr. Aaron Cohen | Intel Sweden AB | 3GPPMEMBER (ETSI) | +1 503 264 7844 | +1 503 264 9372 | aaron.m.cohen@intel.com |
| Mr. Tim Costello | mmO2 plc | 3GPPMEMBER (ETSI) | +44 1473 605 448 | +44 1473 623796 | tim.costello@o2.com |
| Mr. Jean André Demeure | SAGEM Group | 3GPPMEMBER (ETSI) | +33 1 30 73 3700 | | jean-andre.demeure@sagem.com |
| Mr. Ed Ehrlich | Nokia Telecommunications Inc. | 3GPPMEMBER (T1) | +1 972 894 4495 | +1 972 894 5525 | ed.ehrlich@nokia.com |
| Mr. Louis Finkelstein | MOTOROLA Ltd | 3GPPMEMBER (ETSI) | +1 847 576 4441 | +1 847 538 4593 | louisf@labs.mot.com |
| Mrs. Wendy Fong | HEWLETT-PACKARD France | 3GPPMEMBER (ETSI) | +1-(650) 857-4955 | +1-(650) 852-8040 | wendy_fong@hp.com |
| Mr. Peter Freitag | SIEMENS AG | 3GPPMEMBER (ETSI) | +49 89 722 46460 | +49 89 722 25167 | peter.freitag@siemens.com |

| Mr. Randall Grund | Motorola Inc. | 3GPPMEMBER (T1) | +1 847 523 0946 | | Randall.Grund@motorola.com |
|------------------------|------------------------------|---------------------|--------------------|--------------------|---------------------------------|
| Mr. Ian Harris | Teleca | 3GPPMEMBER (ETSI) | +44 1225 481 188 | +44 1225 481 199 | ian.harris@teleca.com |
| Mr. Koji Hiratsuka | NTT DoCoMo Inc. | 3GPPMEMBER (ARIB) | +81-468-40-3049 | +81-468-40-3732 | cordy@cet.yrp.nttdocomo.co.jp |
| Mr. Michael Ishizue | NTT DoCoMo Inc. | 3GPPMEMBER (ARIB) | +81-3-5156-1777 | +81-3-5156-0232 | ishizue@s1.nttdocomo.co.jp |
| Mr. Bo Johansson | ERICSSON L.M. | 3GPPMEMBER (ETSI) | +46 46 19 36 73 | +46 8 71 94 357 | bo.johansson@emp.ericsson.se |
| Mr. Paul Jolivet | DoCoMo Europe S.A. | 3GPPMEMBER (ETSI) | +33 1 56 88 30 30 | +33 1 56 88 30 45 | jolivet@docomo.fr |
| Mr. Hidetoshi Kambe | Mitsubishi Electric Co. | 3GPPMEMBER (ARIB) | +81 467 41 2985 | +81 467 41 2820 | hikam@csc.melco.co.jp |
| Mr. Junsik Kim | ETRI | 3GPPMEMBER (TTA) | +82 42 860 1089 | +82 42 860 5119 | junsik@etri.re.kr |
| Ms. Shuji Kinoshita | NTT DoCoMo Inc. | 3GPPMEMBER (ARIB) | +33 1 56 88 30 30 | +33 1 56 88 30 45 | kinoshitasy@nttdocomo.co.jp |
| Mr. Mikko Lantto | Elisa Communications Corp. | 3GPPMEMBER (ETSI) | +358 50 506 7004 | +358 50 8506 7004 | mikko.lantto@radiolinja.fi |
| Mr. Josef Laumen | SIEMENS AG | 3GPPMEMBER (ETSI) | +49 5341 906 2830 | +49 5341 906 2010 | josef.laumen@sal.siemens.de |
| Mr. Gwenael Le Bodic | ALCATEL S.A. | 3GPPMEMBER (ETSI) | +33 1 55 66 46 41 | +33 1 55 66 44 50 | Gwenael.le_bodic@alcatel.fr |
| Mr. Juergen Lehmann | SIEMENS AG | 3GPPMEMBER (ETSI) | +49 89 722 49947 | +49 98 722 913128 | juergen.lehmann@mch.siemens.de |
| Ms. Ileana Leuca | AT&T Wireless Services, Inc. | 3GPPMEMBER (T1) | +1-425-580-7900 | +1-425-580-6811 | ileana.leuca@attws.com |
| Mr. William Luciw | Openwave Systems (N.I.) Ltd | 3GPPMEMBER (ETSI) | +1 650 315 6042 | +1 650 941 4534 | bill.luciw@openwave.com |
| Mr. Laurence Lundblade | QUALCOMM EUROPE S.A.R.L. | 3GPPMEMBER (ETSI) | +1 858 658 3584 | + | llundblade@qualcomm.com |
| Dr. Brian Marchent | MATSUSHITA COMMUNICATION | N 3GPPMEMBER (ETSI) | +44 1635 875 580 | +44 1635 871 345 | brian.marchent@mci.co.uk |
| Ms. Nicola McGregor | NTT DoCoMo Inc. | 3GPPMEMBER (ARIB) | +81 468 40 3011 | +81 468 40 3732 | nicola@cet.yrp.nttdocomo.co.jp |
| Mr. Takehisa Mizuguchi | Mitsubishi Electric Co. | 3GPPMEMBER (ARIB) | +81 467 41 2981 | +81 467 41 2137 | Mizuguch@isl.melco.co.jp |
| Mr. Oshoma Momoh | MICROSOFT EUROPE SARL | 3GPPMEMBER (ETSI) | +1 425 882 8080 | +1 425 936 7329 | oshm@microsoft.com |
| Mr. Miraj Mostafa | NOKIA Corporation | 3GPPMEMBER (ETSI) | +358 40 572 9139 | +358 10 505 8215 | miraj.mostafa@nokia.com |
| Mr. Mitsuru Murata | NTT DoCoMo | 3GPPMEMBER (ETSI) | +81 468 40 3011 | +81 468 40 3732 | mmurata@cet.yrp.nttdocomo.co.jp |
| Mr. Padraig Murtagh | LOGICA ALDISCON | 3GPPMEMBER (ETSI) | +353 1 819 3400 | +353 1 819 3401 | murtaghp@logica.com |
| Dr. Peter Neumann | SIEMENS AG | 3GPPMEMBER (ETSI) | +49 89 72 23 67 18 | +49 89 72 24 88 72 | peter.neumann@mch.siemens.de |
| Mr. Timo Oikarinen | SONERA Corporation | 3GPPMEMBER (ETSI) | +358 40 5884011 | +358 42 5884011 | timo.oikarinen@sonera.com |
| | | | | | |

| Dr. Vasilis Polychronidis | Openwave Systems (N.I.) Ltd | 3GPPMEMBER (ETSI) | +1 425 638 8104 | +1 425 638 8100 | vasilis.polychronidis@openwave.com |
|---------------------------------|------------------------------|-------------------|-------------------|-------------------|-------------------------------------|
| Mrs. Volahanta Ramiaramanana | GEMPLUS Card International | 3GPPMEMBER (ETSI) | +33 4 42 36 45 28 | +33 4 42 36 41 21 | volahanta.ramiaramanana@gemplus.com |
| Mr. Friedhelm Rodermund | Mobile Competence Centre | | +33 4 92 94 43 24 | +33 4 92 38 52 34 | friedhelm.rodermund@etsi.fr |
| Mr. Thomas Rodestrand | TELIA AB | 3GPPMEMBER (ETSI) | +46 8 601 7437 | +46 8 601 7268 | thomas.x.rodestrand@telia.se |
| Mr. Pierfranco Rodi | TELECOM ITALIA S.p.A. | 3GPPMEMBER (ETSI) | +390112286139 | +390112286190 | pierfranco.rodi@tilab.com |
| Mr. Hiroshi Saito | Matsushita Communication | 3GPPMEMBER (ARIB) | +81 468 40 5440 | +81 468 40 5183 | hiroshi.saito@yrp.mci.mei.co.jp |
| Mr. Venson Shaw | AT&T Wireless Services, Inc. | 3GPPMEMBER (T1) | 425 828 1005 | | Venson.Shaw@aws.com |
| Mr. Gyungchul Sihn | ETRI | 3GPPMEMBER (TTA) | +82-42-860-6354 | + | neuro@etri.re.kr |
| Mr. Prem Sood | SHARP Corporation | 3GPPMEMBER (ARIB) | +1 360 834 8708 | +1 360 834 8696 | pls@sharplabs.com |
| Dr. Mark Staskauskas | QUALCOMM EUROPE S.A.R.L. | 3GPPMEMBER (ETSI) | +1 858 658 4595 | +1 858 658 5009 | mstaskau@qualcomm.com |
| Mr. Bokinakere Sundresh | RIM | 3GPPMEMBER (ETSI) | +44 1784 477465 | +44 1784 477455 | bsundresh@rim.net |
| Mr. Nak Woon Sung | ETRI | 3GPPMEMBER (TTA) | +82-42-860-4890 | +82-42-860-5119 | nwsung@etri.re.kr |
| Mr. Magnus Svensson | ERICSSON L.M. | 3GPPMEMBER (ETSI) | +46 70 684 57 70 | +46 46 194850 | magnus.svensson@ecs.ericsson.se |
| Mr. Kok Sen Tan | Matsushita Communication | 3GPPMEMBER (ARIB) | +0653958044 | +0652821344 | kstan@psl.com.sg |
| Mr. Henrik Thuvesson | TELIA AB | 3GPPMEMBER (ETSI) | +46 40 10 51 22 | +46 40 30 70 29 | henrik.b.thuvesson@telia.se |
| Mr. Seishi Tsukada | NTT DoCoMo Inc. | 3GPPMEMBER (ARIB) | +81 3 5156 1747 | +81 3 5156 0250 | tsukadas@nttdocomo.co.jp |
| Mr. Paul Voskar | NOKIA UK Ltd | 3GPPMEMBER (ETSI) | +44 1252 867427 | +44 1252 865693 | paul.voskar@nokia.com |
| Mr. Ville Warsta | NOKIA Corporation | 3GPPMEMBER (ETSI) | +358 7180 39614 | +358 7180 68020 | ville.warsta@nokia.com |
| Mr. Sang-Jin Yoon | ETRI | 3GPPMEMBER (TTA) | +82-11-9772-8313 | + | silverbk@chollian.net |

Total number of delegates: 64

Annex D: Report from SWG1 Execution Environment

T2-020381

Agenda Item: T2 Closing Plenary

Source: SWG1 Chair

Title: Report of SWG1

Document for: Approval

Executive Summary:

General:

24 delegates, 30 Tdocs, 5 output papers.

MEXE6-ENHANC Work Item:

- The restructuring of the MExE specification has been agreed upon.
- Sending an LS to WAP UAProf forum, asking them to create a CLIPlatform attribute.

MEXE5-SEC Work Item:

No work done.

The MExE group recommends, that the MExE security Analysis WID is being closed.

MEXE6-RTIF Work Item:

A long discussion and clarification process took place, identifying more specifically some of the work that needs
be done in this WID.

A draft technical report going into details with the topics raised, will be prepared for the next meeting.

Any Other Business:

- A new WID, "Binary execution feasibility study" was agreed.
- A presentation and discussion concerning a new WID called "Network Execution" took place. It was felt by the group that the WID did not belong in the MExE group. It was the groups recommendation, that the proposal should be presented for SA1, which then, during the 3GPP work item allocation process, will place the work item in the correct working group/sub working group (which might be MExE!).
- A presentation focussed on the security aspects of BREW was given.
- A presentation concerning more technical details about WIPI was given.
- An LS to the SDR forum explaining the work in the MExE group was agreed upon.
- An LS to T explaining the criteria's for new classmarks was drafted and agreed upon.
- New rapporteur of the 23.057 specification is Lars Brenk, TTPCom.

Future Meetings:

| Meeting | Date | Venue | Comment |
|---------|---------------------|-----------------------|---------|
| | | | |
| | | | |
| MEXE | June/July | No meeting identified | |
| T2#18 | 12-16 August 2002 | Velen, Germany | Materna |
| MEXE | September/October | No meeting identified | |
| T2#19 | 18-22 November 2002 | Korea | Samsung |

Output Change Requests:

| Tdoc | Subject | SOURCE |
|-----------|--|----------------------|
| T2-020393 | CR: Restructuring of the MExE specification | Ericsson |
| T2-020406 | WID: Binary code execution feasibility study | TTPCom / Qualcomm |

| | Qualcomm | |
|--|----------|--|
| | | |

Output Liaison Statements:

| Tdoc | Subject | SOURCE |
|-----------|--|------------|
| T2-020394 | LS to SDR: MExE contribution to the SDR Forum | MExE group |
| T2-020402 | LS to T: Criteria's for selecting new classmarks | MExE group |
| T2-020405 | LS to WAP Forum UAProf group | Microsoft |

Detailed Report:

Opening of the meeting

The Chairman (Lars Brenk, TTPCom) opened the meeting.

Approval of the draft agenda

| Tdoc | Subject | SOURCE |
|-----------|---------------------------|----------|
| T2-020380 | Agenda SWG1 MExE at T2#17 | Chairman |

Tdoc presented by Lars Brenk, Chairman.

Conclusion:

The agenda was agreed.

Introductions

Delegates introduced themselves, and are listed in the participants annex.

Call for IPR

The attention of the members of this Technical Specification Group is drawn to the fact **that 3GPP Individual Members have the obligation** under the IPR Policies of their respective Organizational Partners to **inform their respective** Organizational Partners of **Essential IPRs they become aware of**.

The members take note that they are hereby invited:

- To investigate in their company whether their company does own IPRs which are, or are likely to become Essential in respect of the work of the Technical Specification Group.
- To notify the Chairman, or the Director-General of their respective Organizational Partners, of all
 potential IPRs that their company may own, by means of the IPR Statement and the Licensing declaration
 forms.

Results of previous meetings

Meeting report

| Tdoc | Subject | SOURCE |
|------|---------|--------|
| | | |

No ad hoc meetings held since last T2.

E-mail activity

| Tdoc | Subject | SOURCE |
|-----------|---------------------------|----------|
| T2-020383 | e-mail approval status #4 | Chairman |

Tdoc presented by Lars Brenk, Chairman.

Conclusion:

Tdoc T2-020383 was noted.

Action Items and other issues

- Mike Smith to find a cleaning tool for Word documents, to remove bookmarks, etc
- Bo Johansson to create a new restructured version of the MExE specification from the 5.0 version.
- Ernest Woodward to lead an email discussion concerning the work in the MExE Security Analysis Activity WID.
- Nicola to lead a discussion on the email reflector (tdoc 85)
- Tobias to post information about new WAP download forum and draft an LS for email approval.
- Wendy Fong to post information and links concerning the JEFF format.

Action Items

| Tdoc | Subject | SOURCE |
|-----------|---|-----------|
| T2-020398 | Signed packages for installation of root certificates | Microsoft |

Tdoc T2-020398 presented by Miller Abel, Microsoft.

The outcome of the analysis in this tdoc shows, that other signed packages apart from JAR files to be used as containers for root certificates. For example JEFF or CAB formats.

Conclusion:

T2-020398 was noted.

Others

| Tdoc | Subject | SOURCE |
|------|---------|--------|
| | | |

No input.

Incoming LS

| Tdoc | Subject | SOURCE |
|------|---------|--------|
| | | |

No input.

MExE Security Analysis Activity

| Tdoc | Subject | SOURCE |
|------|---------|--------|
| | | |

No input.

MExE 22.057 contributions and change requests

| Tdoc | Subject | SOURCE |
|------|---------|--------|
| | | |

No input.

MExE 23.057 contributions and change requests

Security

| Tdoc | Subject | SOURCE |
|------|---------|--------|
| | | |

No input.

Non security

Restructuring of the MExE specification

| Tdoc | Subject | SOURCE |
|-----------|---|----------|
| T2-020382 | Restructuring of the MExE specification | Ericsson |
| T2-020393 | CR: Restructuring of the MExE specification | Ericsson |

Tdoc T2-020382 presented by Bo Johansson, Ericsson.

The content of T2-020382 was agreed upon and was transformed into a CR (tdoc T2-020393).

Conclusion:

T2-020382 was noted.

T2-020393 was agreed.

Others

| Tdoc | Subject | SOURCE |
|-----------|------------------------------|-----------|
| T2-020390 | LS to WAP Forum UAProf group | Microsoft |
| T2-020395 | LS to WAP Forum UAProf group | Microsoft |
| T2-020405 | LS to WAP Forum UAProf group | Microsoft |

Tdoc T2-020390 presented by Miller Abel, Microsoft.

The content of T2-020390 was agreed upon in principle.

Minor textual modifications were made and represented in T2-020395, which were finalized in T2-020405.

Conclusion:

T2-020390 was noted.

T2-020395 was noted.

T2-020405 was agreed.

MExE Run-Time independent Classmark

| Tdoc | Subject | SOURCE |
|-----------|---|--------|
| T2-020391 | Discussion Topics Towards a Requirements Analysis for a MExE Run- Time Independent Conformance Framework | Intel |

Tdoc T2-020391 presented by Aaron Cohen, Intel.

The document raised quite some questions, and a lengthy discussion took place. Below are the summarized comments to the questions.

- 1. Issues which runtime environments may need to address in order to be compliant with MExE device behavioural requirements and claim conformance to the MExE RTIF.
 - 1) It's easy to make security implementations runtime for VM's, not so easy for binary code. Binaries needs lots of versions, to be able to execute on different platforms, OS's and chips. A hardware semantic barrier between binary applications and core code could be one way forward. Maybe executing the application on a different chip than the core software executes on, with different code needed, so there is absolutely no way for the two types of code to interflict. Embedded VM's on chip makes the execution faster all the time. The security has always first priority in MExE, then comes performance speed and capability. The binary examples, the MExE group had had presentations from, have dealt with end-2-end security, but not so much with runtime execution security. The topic of application portability between different platforms were mentioned. How is untrusted code handled by binary execution environments. Untrusted applications are a key part of MExE. The screen only security area for applications was mentioned (basically a blanket NO-permission from the user for network activity).
 - 2) As manufacturer you can do what you want, concerning additional API's.
 - 3) Difficult to provide a list of API's that have security restrictions (dependent of which domain). Interesting for developers. Manufacturers may need to give some idea how the API's are implemented. MExE will not approve these lists for all new classmarks. It could become a recommendation.
 - 4) The minimum RSA key-bit-length is not mandated.
 - 5) One root certificates for all classmarks. There are not certificate trees for each classmark.
 - Jar files are not mandated for all classmarks. Maybe a secure independent transport format needs to be mandated.
 - 7) See 6).
 - 8) UAProf is needed for identifying the runtime support needed for new RTIF mappings. A scheme for how optional API's are identified is needed.
 - 9) A browser is the mean for application transfer mechanism.
 - 10) No API's need to be mandated for future RTIF mappings. What would the motivation be.
 - 11) See 10).
 - 12) It is recommended that the behaviour of non accessible API's are documented.

- 13) See 6).
- 14) The USIM specification defines the directory names for the certificates stored there.
- 15) It is recommended that it is documented how the security is maintained, if the security domains are not supported.
- 2. Issues that the platform management software may need to address in order to provide support for the RTIF.
 - 1) The user shall be notified for each network access.
 - 2) There was difficulties understanding why the start and end points of an application needs clarification.
 - 3) Icon usage is for example specified for java in the MExE spec.
 - 4) The UAProf is not stable yet, so how it is used is for future work.
 - 5) No need to mandated HTML browsers
 - 6) No need to mandate any further content types.
- 3. Issues in the MExE Service Environment (MSE) that may need to be resolved in order to provide a consistent runtime independent framework.
 - A consistent mechanism to correlate between capabilities, provisioning, delivery and application management is needed.
 - 2) The capability attributes could be based on URI.
 - 3) Archive formats is an area were work is needed.
 - 4) HTTP is not mandated.
 - 5) The MExE service environment is out of the scope of MExE.
 - 6) How does the handset distinguishes between two jar-files, belonging either to classmark 2 or 3.
 - 7) The server may request the handset through SyncML (looked at by UAProf), but since the UAProf is not stable, this might change.
 - 8) Core software download is allowed as long as the certificate allows it.
- 4. Other issues in the MExE specification that may need to be resolved in order to provide a well defined run-time independent framework.
 - 1) One classmark is still mandated to be supported. Might be changed.
 - 2) The only thing we could find was the minimum key-bit-length, that needs clarification.
 - 3) Archive formats needs more work.

A draft technical report going into details with the topics raised, will be prepared for the next meeting.

Conclusion:

T2-020391 was noted

Binary classmark investigation WID

| Tdoc | Subject | SOURCE |
|-----------|--|----------------------|
| T2-020388 | Binary classmark investigation WID | TTPCom / Qualcomm |
| T2-020406 | WID: Binary code execution feasibility study | TTPCom / Qualcomm |

Tdoc T2-020388 presented by Lars Brenk, TTPCom.

Tdoc T2-020406 presented by Lars Brenk, TTPCom.

Textual changes were made to T2-020388, to make it clear that the WID is about a feasibility study, and not the introduction of a new classmark.

It was felt that this WID does not overlap the RTIF WID.

Conclusion:

T2-020388 was noted.

T2-020406 was agreed.

| Tdoc | Subject | SOURCE |
|-----------|----------------------------------|-----------------|
| T2-020392 | Discussion document - classmarks | <u>Openwave</u> |

Tdoc T2-020392 presented by Lars Brenk, Chairman.

Conclusion:

T2-020392 was noted.

| Tdoc | Subject | SOURCE |
|-----------|------------------------|--------|
| T2-020403 | MExE feasibility study | MCC |

Placed as input documents for information.

Conclusion:

T2-020403 was noted.

| Tdoc | Subject | SOURCE |
|-----------|----------------|--------|
| T2-020404 | First MExE WID | MCC |

Placed as input documents for information.

Conclusion:

T2-020404 was noted.

Network Execution WID

| Tdoc | Subject | SOURCE |
|-----------|-------------------------------|------------|
| T2-020389 | Network Execution in MExE WID | Media Farm |

Tdoc T2-020389 presented by Srinivas Bharadwaj, Media Farm.

The following discussion clarified the term multimodality to mean enhanced MMI input/output features.

It was mentioned that the network execution work item might not belong under the MExE group.

It was the groups recommendation, that the proposal should be presented for SA1, which then, during the 3GPP work item allocation process, will place the work item in the correct working group/sub working group (which might be MExE!).

Conclusion:

T2-020389 was noted.

| Tdoc | Subject | SOURCE |
|-----------|-----------------------------------|------------|
| T2-020396 | Presentation of Network execution | Media Farm |

Tdoc T2-020396 presented by Srinivas Bharadwaj, Media Farm.

Tdoc T2-020396 presents reasons and use cases for the WID in T2-020389.

Conclusion:

T2-020396 was noted.

Presentations

| Tdoc | Subject | SOURCE |
|-----------|--------------------------------|----------|
| T2-020387 | BREW Presentation for MExE SWG | Qualcomm |

Tdoc T2-020387 presented by Laurence Lundblade, Qualcomm.

The presentation was focused mainly on the security aspects of BREW, and initiated a lengthy discussion. Some of the topics were, that BREW has its own security concepts, which must be aligned to MExE.

Issues were raised that the hardware memory protection is not enough to prevent a buffer overload attack, by overflowing the stack, or changing pointer values in the stack to point outside the dedicated area for the executing application.

The recall procedure of applications in BREW is very closed.

The untrusted area in MExE is mandated. An issue was raised how BREW would deal with untrusted applications.

It was mentioned, that one of the successes of i-mode, was that it allowed access to all the unofficial i-mode services as well, this way targeting the consumer market of applications, and encouraging application developers to create new applications.

A white paper may be needed to distinguish between what BREW is today, and what Qualcomm propose to add to the MExE standard.

Conclusion:

T2-020387 was noted.

| Tdoc | Subject | SOURCE |
|-----------|-------------------------|---------|
| T2-020400 | UE architecture picture | Siemens |

Tdoc T2-020400 presented by Peter Neumann, Siemens.

The tdoc pictures the device architecture, seen from Siemens point of view.

One of the suggestions from Siemens (in consistence with other leading manufacturers), was that it might be an idea to stop creating more specific classmarks, but create a last general classmark, which consists of a API created by the MExE group, which could be used by all future execution environment technologies.

Conclusion:

T2-020400 was noted.

| Tdoc | Subject | SOURCE |
|-----------|-------------------|--------|
| T2-020365 | WIPI presentation | ETRI |

Tdoc T2-020365 presented by Sang Jin Yoon, ETRI.

Some of the information that came out of the presentation and the following discussion were, that the first implementation of WIPI is for the ARM processor. It can download C/C++ and Java code, and its done in binary code!

The complete implementation takes up approximate 1 MB.

The Java version that is implemented in WIPI is not MIDP, but something alike (to avoid the licensing agreement from SUN).

Questions were raised concerning the security and how it is handled when talking about binary code.

The Java applications can be said to be secure, whereas the C/C++ applications can only be executed if they are from a trusted source.

3 handset models exist on the market today (Samsung and LG) with WIPI implementations.

Conclusion:

T2-020365 was noted.

Any other business

| Tdoc | Subject | SOURCE |
|-----------|---|------------|
| T2-020384 | MExE contribution to the SDR Forum | MExE group |
| T2-020394 | LS to SDR: MExE contribution to the SDR Forum | MExE group |

Tdoc T2-020384 presented by Lars Brenk, TTPCom.

The content of T2-020384 had been distributed and discussed on the reflector, and after correcting some minor grammar-correction and removal of a reference to a MExE white paper, the LS was updated in T2-020394 and agreed upon.

Conclusion:

T2-020384 was noted.

T2-020394 was agreed.

| Tdoc | Subject | SOURCE |
|-----------|------------------------------|-----------|
| T2-020385 | New MExE classmark questions | Chairman |
| T2-020397 | MExE answers | Microsoft |
| T2-020399 | MExE answers version 2 | Microsoft |

T2-020401 MExE answers version 3 MExE group

Tdoc T2-020385 presented by Lars Brenk, TTPCom.

Tdoc T2-020397 presented by Oshoma Momoh, Microsoft.

Tdoc T2-020399 presented by Oshoma Momoh, Microsoft.

Tdoc T2-020401 presented by Lars Brenk, TTPCom.

Tdoc T2-020385 raised a lot of questions concerning the working process of the MExE group. The questions have been answered in tdoc T2-020397, updated in T2-020399 and finalized in T2-020401.

During the lengthy discussion, a lot of different questions were raised.

The answers in T2-020401 are used as background material for the LS to T (T2-020402), explaining the criteria's for selecting new classmarks.

Conclusion:

T2-020385 was noted.

T2-020397 was noted.

T2-020399 was noted.

T2-020401 was noted.

| Tdoc | Subject | SOURCE |
|-----------|--|------------|
| T2-020402 | LS to T: Criteria's for selecting new classmarks | MExE group |

Tdoc T2-020402 presented by Lars Brenk, TTPCom.

Conclusion:

T2-020402 was agreed.

| Tdoc | Subject | SOURCE |
|-----------|----------------------|--------|
| T2-020313 | T2 specs status list | MCC |

Tdoc T2-020313 presented by Lars Brenk, TTPCom.

The rapporteur of the MExE specification 23.057 was the topic. The group would like the rapporteur to be a person that is present at the meetings.

The MExE chairman (Lars Brenk) has contacted the current rapporteur (Mark Cataldo) and Mark Cataldo agreed to resign as rapporteur.

New rapporteur of the 23.057 specification is Lars Brenk, TTPCom.

Conclusion:

T2-020313 was noted.

| Tdoc | Subject | SOURCE |
|-----------|---------------------------------------|--------------|
| T2-020315 | Summary of T#15 issues of T2 interest | T2 secretary |

Tdoc T2-020315 presented by Lars Brenk, TTPCom.

The topics concerning MExE were highlighted, and clarifications regarding the changes made by T to the RTIF WID were made clear.

The MExE group will ask, that the MExE security Analysis WID is being closed, due to lack of input and work done in the area.

Conclusion:

T2-020315 was noted.

Future meetings

Conferences with MExE relation

Strategically Deploying Wireless Java, 26th-28th June, Amsterdam, Netherlands

Surf to the 3GPP on-line meeting calendar (http://www.3gpp.org) for latest meeting and registration details.

Annex A – Complete Document List

APPROVED - OUTPUT TO T2

NOTED/APPROVED - NO OUTPUT TO T2

Meeting documents may be found at ftp://ftp.3gpp.org/TSG_T/WG2_Capability/TSGT2_17_Vancouver/Docs/

| Tdoc | Subject | SOURCE |
|-----------|---|----------------------|
| T2-020313 | T2 specs status list | MCC |
| T2-020315 | Summary of T#15 issues of T2 interest | T2 secretary |
| T2-020365 | WIPI presentation | ETRI |
| T2-020380 | Agenda SWG1 MExE at T2#17 | Chairman |
| T2-020381 | Report of SWG1 MExE at T2#17 | Chairman |
| T2-020382 | Restructuring of the MExE specification | Ericsson |
| T2-020383 | e-mail approval status #4 | Chairman |
| T2-020384 | LS to SDR: MExE contribution to the SDR Forum | MExE group |
| T2-020385 | New MExE classmark questions | Chairman |
| T2-020386 | Withdrawn | |
| T2-020387 | BREW Presentation for MExE SWG | Qualcomm |
| T2-020388 | Binary classmark investigation WID | TTPCom / Qualcomm |
| T2-020389 | Network Execution in MExE WID | Media Farm |
| T2-020390 | LS to WAP Forum UAProf group | Microsoft |
| T2-020391 | Discussion Topics Towards a Requirements Analysis for a MExE Run- Time Independent Conformance Framework | Intel |
| T2-020392 | Discussion document - classmarks | Openwave |
| T2-020393 | CR 23.057 Rel-6 Restructuring of the MExE specification | Ericsson |
| T2-020394 | LS to SDR: MExE contribution to the SDR Forum | MExE group |
| T2-020395 | LS to WAP Forum UAProf group | Microsoft |
| T2-020396 | Presentation of Network execution | Media Farm |
| T2-020397 | MExE answers | Microsoft |

| T2-020398 | Signed packages for installation of root certificates | Microsoft |
|-----------|---|----------------------|
| T2-020399 | MExE answers version 2 | Microsoft |
| T2-020400 | UE architecture picture | Siemens |
| T2-020401 | MExE answers version 3 | MExE group |
| T2-020402 | LS to T: Criteria's for selecting new classmarks | MExE group |
| T2-020403 | MExE feasibility study | MCC |
| T2-020404 | First MExE WID | MCC |
| T2-020405 | LS to WAP Forum UAProf group | Microsoft |
| T2-020406 | WID: Binary code execution feasibility study | TTPCom / Qualcomm |
| | | |
| | | |

Annex B - Participants List

| NAME | ORGANISATION | E-MAIL |
|---------------------|--|-----------------------------------|
| Lars Brenk | TTPCom Danmark (Chairman) | LSB@TTPCOM.COM |
| Nicola McGregor | NTT DoCoMo Inc. | Nicola@cet.yrp.nttdocomo.co.jp |
| Thomas Rodestrand | Telia | Thomas.X.Rodestrand@telia.se |
| Bo Johansson | Ericsson LM | Bo.Johansson@emp.ericsson.se |
| Timo Oikarinen | Sonera | Timo.oikarinen@sonera.com |
| Wendy Fong | Hewlett-Packard | wendy_fong@hp.com |
| Mark Staskauskas | Qualcomm | markstas@qualcomm.com |
| Tan Kok Sen | Matsushita Comm. Ind | kstan@psl.com.sg |
| Aaron Cohen | Intel Corporation | aaron.m.cohen@intel.com |
| Miller Abel | Microsoft Corporation | millera@microsoft.com |
| Friedhelm Rodermund | Mobile Competence Centre | friedhelm.rodermund@etsi.fr |
| Louis Finkelstein | Motorola | louisf@labs.mot.com |
| Srinivas Bharadwaj | Media Farm | srini@virtualpalmtop.net |
| Ed Ehrlich | Nokia Telecommunications Inc. | ed.ehrlich@nokia.com |
| Laurence Lundblade | Qualcomm | lgl@qualcomm.com |
| Gyung Chul Shin | ETRI | Neuro@etri.re.kr |
| Nak Woon Sung | ETRI | nwsung@etri.re.kr |
| Sang Jin Yoon | ETRI | silverbk@chollian.net |
| Tim Costello | mmO2 | tim.costello@o2.com |
| Paul Jolivet | DoCoMo Europe | jolivet@docomo.fr |
| Richard Brook | Samsung Electronics Research Institute | Richardbrook39@aol.com |
| Peter Neumann | Siemens | peter.neumann@mch.siemens.de |
| Oshoma Momoh | Microsoft Corporation | oshm@microsoft.com |
| Laurent Reynaud | France Telecom | Laurent.reynaud@francetelecom.com |

Annex E: Report from SWG2 UE Interfaces and Capabilties

3GPP TSG-T2 #17 Vancouver, BC, Canada 13-17 May 2002 T2-0200421

Agenda Item: T2 Closing Plenary

Source: SWG2 Chair

Title: Draft Report of SWG2 Vancouver Meeting#17

Document for: Approval

ES Executive Summary

Topics discussed at this meeting included, Generic User Profiles, User Equipment Management, AMR Codecs, Priority Services, UE Functionality Split, AT Commands, various IMS Liaison Statements and other logistics for future meetings, joint meetings, and meeting procedures.

General:

The meeting was opened by Mr. Prem Sood on 16:32, 13th May 2002 and the delegates were welcomed to this meeting. *Alan Chau of Nokia volunteered to be the secretary of this meeting.*

The proposed Agenda of the meeting in T2-020420 was approved.

Review of Progress on Action Items

Work Item 1828: AT Commands -

3 CRs from Siemens on the AT-Commands (27.007) and 27.005 were processed.

Work Item 2573: Terminal Local Model Enhancements

No input at this meeting.

Work Item xxxx: Generic User Profiles –

Presentations on the status of work for Generic User Profiles were given. A number of incoming LS's and docs were reviewed.

There was thorough discussion on the organization and conduct of the T2 work on the GUP. Preparation of a draft WID for the T2-only tasks is under preparation, and is pending the approval of a GUP WI split by SA1 and SA2. SWG2 decide that the T2 GUP work should be carried out in SWG2 meetings called with the dedicated objective of progressing the DDF-common objects work.

One Outgoing LS T2-020440 was approved.

Two meetings related to GUP work were approved – June 18-20 in Sweden hosted by Telia, and a proposed JM with SA5 in Tampere in the week of August 19-23.

Work Item xxxx: User Equipment Management –

A Joint Meeting with SA5 was held the week of April 2-4. Incoming LSs from SA5 and 32.802 were reviewed. T2-020434 response LS to SA5 with comments to TR 32.802 was approved.

Work Item 2563: UE Split –

SA3 LS was noted.

Other Items Executive Summary from SWG2 meeting:

AMR Codec, Tones

An incoming LS (Tdocs 428, 349, 010964) was reviewed.

IMS

Incoming LS (Tdocs 341, 355, 360, 329, 358, 333) were reviewed.

Documents were reviewed.

One Outgoing LS, T2-020435 on Priority Service was approved..

Future Meetings:

| Meeting | Date | Venue | Comment |
|--------------------|--|---------------|--------------------------------|
| SWG2 GUP | 18 th -19 th June 2002 | Sweden | Host Telia, location TBC |
| SWG2 #18 | Aug. 12-16, 2002 | Velen Germany | With T2 Meeting |
| JM with SA5 on GUP | Aug 19-23 | Tampere | TBC - Will be Proposed to SA5. |

Output Change Requests:

| TDoc | Title | Source | Comment |
|-----------|---|---------|---------|
| T2-020438 | CR 27.005 Rel-4 Correction in description of +CNM | Siemens | Agreed |
| T2-020439 | CR 27.005 R99 Correction in description of +CNM | Siemens | Agreed |
| T2-020429 | CR 27.007 Rel-6 Enhancement of AT command +CIND to indicate SMS rejection | Siemens | Agreed |

Output Liaison Statements:

| TDoc | Title | Source | Comment |
|-----------|--|--------|---------|
| T2-020440 | LS to SA2 & SA1 on GUP DDF progress report | SWG2 | Agreed |
| T2-020435 | Response LS to SA1 on Priority Service Feasibility Study TR | SWG2 | Agreed |
| T2-020434 | Reply LS Response to SA5 on UEM and TR 32.802 | SWG2 | Agreed |

Other documents for T2 Approval

| TDoc No. | Title | Source | Status |
|----------|-------|--------|--------|
| | | | |
| | | | |
| | | | |

ES Detailed Report

1. Opening of the meeting

The Chair of SWG2, Mr. Prem Sood, Sharp, opened the meeting at 04:32 pm on Monday May 13, 2002.

Alan Chau of Nokia volunteered to act as the meeting secretary.

The Chair welcomed everyone to Vancouver BC and thanked the North American Friends of 3GPP for hosting the meeting.

At the opening of SWG2 there were 15 attendees.

1.1. Approval of the proposed Agenda

<u>Document - T2-020420</u>

| TDoc No. | Title | Source | Status |
|-----------|---------------------------|------------|----------|
| T2-020420 | SWG2 draft meeting agenda | SWG2 Chair | Approved |

Presented by -

Chairman.

Resolution -

Approved.

1.2. Joint Meetings Schedule

None scheduled.

1.3. Review of previous Action Points

Tdoc Draft1 T2-020421

| AP Description | Assigned to | Status | Comments |
|---|---------------|-------------|-----------|
| Action 15.2, 15.3, 15.4, 15.5 to review documents related to Generic User Profiles. | All SWG2 | Due T2#17 | Continued |
| Action 16.1 to inform the SA#14 status of 3GPP-specific SIP client and access independence to the T2 email reflector. | Gunilla Bratt | | Closed |
| Action 16.2 to review TR22.941 in T2-020037 and provide comments | All SWG2 | Due T2#17 | Closed |
| Action 16.3 – Documents T2-020111, 112 postponed to circulation on the Reflector | GUP Chair | Due T2#17 | Closed |
| Action 16.4 – Draft a paper to address the architecture solution for MMS UICC portability and circulate on Reflector | I. Leuca | End of Feb. | Pending |
| | | | |
| | | | |
| | | | |
| | | | |

1.4. Appointment of Rapporteurs

No Rapporteur found for the TS 27.007/07.07 AT Command

Kevin Holoubek will take on the Rapporteurships for GUP DDF (23.241) and Common Objects (24.241).

2 Items for immediate discussion.

2.1 UMTS_AMR2 codec

Tdocs 428, 349, 010964

| TDoc No. | Title | Source | Status |
|-----------|---|-----------|--------|
| T2-020428 | TSG-T, TSG-SA Decision on UMTS_AMR2 codec | Sharp | Noted. |
| | LS from TSG-T on FORWARDED LS from SA4 on mandatory support of UMTS AMR2 in dual mode terminals | S4-020223 | Noted. |

Presented by - .

Prem Sood

<u>Discussion -</u>

Resolution -

For information only.

2.2 Generic User Profiles

Tdocs 425, 426, 427, 337, 332, 423, 433, 424, 353, 354, 356, 359, 363, 339, 362, 340

Document - T2-020xx

| TDoc No. | Title | Source | Status |
|-----------|--|------------------|-------------------------------|
| T2-020425 | TSG-T Decision on GUP Work | Т | Noted |
| T2-020426 | TSG-SA Decision on GUP work | SA | Noted |
| T2-020427 | GUP Work Organization e-mail March 26 | | Noted |
| T2-020433 | Summary of Joint GUP ad hoc in April | Joint GUP ad hoc | Noted |
| T2-020337 | LS from SA1 GUP time scales (To: SA; cc: T2) | SA1 | Noted |
| T2-020332 | LS from SA1 on Generic User Profile Stage 1 | SA1 | Noted |
| T2-020423 | | | withdrawn |
| T2-020424 | Report of Joint GUP ad hoc meeting 2-5 April, Cork Ireland | Joint GUP ad hoc | Noted |
| T2-020436 | LS on transfer of the Generic UsÿÿÿProfile Work | Joint GUP ad hoc | Noted |
| T2-020353 | Reply LS on "Relationship of GUP to Subscription Management" from T2 (T2-020114) | SA5 | Noted |
| T2-020354 | LS on co-ordination of data definitions, identified in GUP development | SA5 | Noted |
| T2-020356 | Response to LS on coordination of data definitions, identified in GUP development | CN4 | Noted with action 17.2. |
| T2-020359 | LS from SA2 on GUP work progress | SA2 | Noted |
| T2-020363 | LS from SA2 on GUP Work Item Description and DDF | SA2 | Noted. Draft WIE in 437 |
| T2-020339 | LS Reply to "Comments on UP-010141 and relationship of GUP to Subscription Management" | SA2 | Noted |
| T2-020362 | Reply to Liaison Statement on co-ordination of data definitions, identified in GUP development | CN5 | Noted |
| T2-020340 | LS Reply to "Status of the Generic User Profile Work" | SA2 | Noted and sent t |
| | | | the June SWG2 meeting to hand |

Discussion -

There was a discussion about forming a separate DDF-common object drafting group under SWG2.

SA plenary has mandated that no ad hoc group is allowed

It was suggested that there were two options:

- ❖ Dedicated separate group for DDF and common objects
- ❖ Under the umbrella of SWG2, the work will be handled directly by SWG2

Resolution -

It was agreed that GUP DDF and Common Object works would be carried out under SWG2 directly. We will propose to SA5 a joint meeting with them at their August meeting in Tampere.

Document - T2-020437

| TDoc No. | Title | Source | Status |
|-----------|---|--------|--------|
| T2-020437 | Proposed DRAFT WID for DDF and Common Objects | SWG2 | Noted |

Presented by -.

Kevin Holoubek.

<u>Discussion –</u>

This is a Proposed DRAFT WID for DDF and Common Objects.

Resolution -

The document is treated as an internal SWG2 document. The WID will not be sent to the T2#17 and T#16 for approval. It is targeted for approval at T2#18.

Document - T2-020440

| TDoc No. | Title | Source | Status |
|-----------|--|--------|--------|
| T2-020440 | LS to SA2 & SA1 on GUP DDF progress report | SWG2 | Agreed |

Presented by - .

Kevin Holoubek.

Discussion -

This is a reply LS informing SA2 the T2 status of the work on DDF and Common objects, TS's 23.241 and 24.241.

Telia offer to host a SWG2 meeting in June 18th -19th to start the DDF and common objects work.

Resolution -

The LS is agreed. The Meeting in June is agreed.

Meeting invitation will be sent out next week by Telia.

<u>Document – T2-020441</u>

| TDoc No. | Title | Source | Status |
|-----------|-----------------------|------------------|----------------------------|
| T2-020441 | GUP information model | Joint GUP ad hoc | Agreed in SWG2 internally. |

Presented by - .

Bo Johansson

Discussion -

This discussion document proposes an information model for Generic User Profile data to be used in TS 23.240 or TS 23.241.

Resolution -

This document is agreed internally within SWG2. The next meeting will decide how it should be incorporated into the corresponding specifications.

<u>Document - T2-020442</u>

| TDoc No. | Title | Source | Status |
|----------|-------|--------|--------|
| | | | |

| T2-020442 | Proposal of changes to 23.241 Annex B | Ericsson | Agreed in SWG2 |
|-----------|---------------------------------------|----------|----------------|
| | | | internally. |

Bo Johansson

<u>Discussion –</u>

This discussion document proposes changes in TS 23.241 AnnexB.

Resolution -

This document is agreed internally within SWG2.

<u>Document - T2-020443</u>

| TDoc No. | Title | Source | Status |
|-----------|-----------------------|--------|----------------------------|
| T2-020443 | 23.241 v0.3.0 updated | | Agreed in SWG2 internally. |

Presented by - .

Bo Johansson

Discussion -

This discussion document proposes changes to 23.241 v0.3.0. In section 4.1, the fighure 2 is not aligned with the information model. There are a number of typo errors.

Resolution -

This document is agreed internally within SWG2.

<u>Document – T2-020444</u>

| TDoc No. | Title | Source | Status |
|-----------|------------------------|----------|--------|
| T2-020444 | DDF files and examples | Ericsson | Noted |

Bo Johansson

Discussion -

This document contains the XML-schema files and XSLT-files, which are a part of the Data Description Framework (23.241) and some examples of data descriptions. This is mainly a collection of already presented material.

Resolution -

The purpose of this document is to let delegates to learn how DDF works.

<u>Document - T2-020445</u>

| ٦ | ΓDoc No. | Title | Source | Status |
|---|-----------|--|----------|--------|
| | Γ2-020445 | TS 24.241 V0.3.0 GUP Common Objects, Stage 3 | Ericsson | Noted |

Presented by - .

Bo Johansson

Discussion -

Resolution -

For information only.

<u>Document – T2-020446</u>

| TDoc No. | Title | Source | Status |
|-----------|---|----------|--------|
| T2-020446 | Work in Progress for the Joint GUP Ad-hoc | Ericsson | Noted |

Bo Johansson

Discussion -

Resolution -

For information only.

3.3 IMS

Tdocs 341, 355, 360, 329, 358, 333,

<u>Document – T2-020xx</u>

| TDoc No. | Title | Source | Status |
|-----------|---|--------|--------|
| T2-020341 | LS on Prefix allocation for IPv6 stateless address auto configuration | SA2 | Noted |
| T2-020355 | Response LS LS on Prefix allocation for IPv6 stateless address auto configuration | CN3 | Noted |
| T2-020360 | Response to the LS on "IPv6 update of stage 3 specifications" | SA2 | Noted |

Presented by -.

Prem Sood

Discussion -

Resolution -

For information only.

Document - T2-020xx

| TDoc No. | Title | Source | Status |
|-----------|--|--------|--------|
| T2-020329 | LS on ISIM for support of IMS | SA1 | Noted |
| T2-020358 | LS on the use of USIMs and ISIMs for IMS | SA3 | Noted |

| Presented by – . | |
|------------------|--|
|------------------|--|

Prem Sood

Discussion -

Resolution -

For information only.

<u>Document - T2-020333</u>

| TDoc No. | Title | Source | Status |
|-----------|----------------------------------|--------|--------|
| T2-020333 | LS on "sip compression" (cc: T2) | SA2 | Noted |
| | | | |

Presented by - .

Prem Sood

Discussion -

Resolution -

For information only.

3.4 UE Management

Tdocs 422, 342, 361

<u>Document – T2-020422</u>

| TDoc No. | Title | Source | Status |
|-----------|--|--------|--------|
| T2-020422 | Report for joint SA5 SWG-A and T2 SWG2 meeting on UEM in April Cork, Ireland | SA5 | Noted |

Presented by - .

Prem Sood

Discussion -

This report is for information only

<u>Document – T2-020342</u>

| TDoc No. | Title | Source | Status |
|----------|--|--------|--------|
| | Reply Liaison Statement on the User Equipment Management Feasibility Study (SA5's TR 32.802) | SA3 | Noted |

Presented by - .

Prem Sood

Discussion -

This LS is for information only and no action is required from T2.

SA3 acknowledge that it has a role in providing security solutions for UEM in Release 6 and will create a corresponding SA3 work item for the security building block that is proposed in clause 8 of the TR. SA3 would like to note that it may be possible to make use of security solutions developed by the MEXE group (TSG T2 SWG1) for securing the download of manufacturer software to the UE and for the secure configuration of the UE by the operator.

SA3 have not identified any major issues with the security aspects discussed in the TR. Therefore, SA3 have not identified any security-related changes would be required before the TR is presented to SA.

Document - T2-020361, 434

| TDoc No. | Title | Source | Status |
|-----------|---|--------|--------|
| T2-020361 | LS on UEM and TR 32.802 | SA5 | Noted |
| T2-020434 | Reply LS Response to SA5 on UEM and TR 32.802 | T2 | Agreed |

Presented by -.

Kevin Holoubek.

<u>Discussion –</u>

T2-020361 SA5 asks T2 group confirm to SA5 SWG-A by 19 May 2002 that TR 32.802 can be sent to TSG SA#16 for approval. If not, what changes need to be made to the TR before submitting it for approval?

T2-020434 This is a reply LS to SA5 with proposed changes on TR 32.802. Two areas of modification which T2 SWG2 would like to call attention are as follows ...

- Consistency in the use of "UE Manager" and "UEM Manager": all instances were changed to UE Manager. Note: the label "UEM Manager" was changed to "UE Manager" in Figure 4, although no change bars are indicated.
- Confusion concerning the value of the four columns "Customer Care", "Network Operations", "CRM", and "UE Manufacturer" in the Paragraph 4 table: the columns were removed. It was not clear why this information existed for some requirements and not for others, as well as the intention of the information. As such, it is suggested these columns be removed. Note: a confusing aspect of Paragraph 4 is that some of the requirements are given in table format, and some in outline format, though the reason for this is not understood. In some instances, it seems requirements may be duplicated and descriptions do not always contain consistent types of information. T2 SWG2 did not attempt to reconcile these differences, but want to call it to attention for future work.

Resolution -

The LS with proposed changes by SWG2 was agreed unanimously to be sent to SA5.

3.5 AT Commands

| TDoc No. | Title | Source | Status |
|-----------|---|---------|-----------------|
| T2-020429 | CR 27.007 Rel-6 Enhancement of AT command +CIND to indicate SMS rejection | Siemens | Agreed |
| T2-020430 | CR 27.005 Rel-5 Correction in description of +CNMA | Siemens | Replaced in 438 |
| T2-020431 | Explanations for CR to +CNMA | Siemens | Noted |
| T2-020438 | CR 27.005 Rel-4 Correction in description of +CNM | Siemens | Agreed |
| T2-020439 | CR 27.005 R99 Correction in description of +CNM | Siemens | Agreed |

Presented by - .

Jurgen Lehmann.

Discussion -

Resolution -

All CRs are agreed.

4.1 UE Functionality Split

Tdocs 344,

<u>Document - T2-020344</u>

| TDoc No. | Title | Source | Status |
|-----------|--|--------|--------|
| T2-020344 | LS on Security for UE functional split, reply to S1-020300 | SA3 | Noted |

Presented by - .

Prem Sood

Discussion -

AT&T reported that SA1 and SA3 had the joint UE F/S meeting. The security issues still have not been resolved with regard to the splitting call control between the MT and TE.

Resolution -

Noted.

4.2 Application and User Interaction (Terminal Local Model).

No input for this meeting.

4.3 Priority Service

Tdocs 331, 435,

<u>Document – T2-020331</u>

| TDoc No. | Title | Source | Status |
|-----------|---|--------|--------|
| T2-020331 | LS on Priority Service Feasibility Study TR (cc: T2) | SA1 | Noted |
| T2-020435 | Response LS to SA1 on Priority Service Feasibility Study TR | SWG2 | Agreed |

Ed Erlich.

Discussion -

This LS contains the SA1 Priority Service Feasibility Study TR for review and comments.

Resolution -

T2 has reviewed the draft Feasibility Study on Priority Service (TR22.950 V 1.0.0) and does not have any specific comments to provide. T2 note that the TR states that 'multimedia and non-circuit switched aspects of Priority Service have not been addressed in this feasibility study and are for further study'. T2 would like to be informed regarding any subsequent SA1 WI or Feasibility Study which would examine the use of Priority Service with MMS or SMS.

5. Review of WI's progress, SWG2 and T2 relevant items in 3GPP work plan.

Tdocs 318, 319

Document - T2-010

| TDoc No. | Title | Source | Status |
|-----------|----------------|--------|--------|
| T2-0200xx | 3GPP work plan | MCC | Noted |

| Presented by – . |
|---------------------|
| Friedhelm Rodermund |
| |
| Discussion – |
| |
| Resolution – |
| |
| Not reviewed. |
| |

6. Approval of Output Documents for T2 Approval.

| TDoc No. | Title | Source | Status |
|-----------|---|---------|--------|
| T2-020435 | Response LS to SA1 on Priority Service Feasibility Study TR | SWG2 | Agreed |
| T2-020438 | CR 27.005 Rel-4 Correction in description of +CNM | Siemens | Agreed |
| T2-020439 | CR 27.005 R99 Correction in description of +CNM | Siemens | Agreed |
| T2-020429 | CR 27.007 Rel-6 Enhancement of AT command +CIND to indicate SMS rejection | Siemens | Agreed |
| T2-020440 | LS to SA2 & SA1 on GUP DDF progress report | SWG2 | Agreed |
| T2-020434 | Reply LS Response to SA5 on UEM and TR 32.802 | SWG2 | Agreed |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

6.2 Meeting Report of this SWG2 Meeting

| T2-020421 | Report of T2 SWG2 #17 | |
|-----------|-----------------------|--|
| | | |

7. Deferred Items

No

8. Any Other Business

No

9. Future Meetings, Time Requirements

See Executive summary.

10 Close of the Meeting

The meeting was closed on Monday May 13 at 18:10.

To restart on Tuesday May 14 at 09:00am. Closed at 18:10 on Tuesday

To restart Wed at 09:00am. Closed at 6pm on Wednesday to restart at 09am Thursday.

Meeting adjourned at 16:36pm on Thursday May 16, 2002.

10.1. List of New Action Points added at this meeting

| AP Description | Assigned to | Status | Comments |
|---|-------------|-----------|----------|
| 17.1 Review 27.104 (v object) to see if it is still needed, and provide inputs if required | All | Due T2#18 | |
| 17.2 SWG2 GUP to consider implementing the CN4 recommendation on "Choice Construct" and generate a response when the action is planned. | SWG2 GUP | Due T2#18 | |
| 17.3 SWG2 Chair contact SA5 to arrnage the JM in August | SWG2 Chair | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Annex A List of all temporary documents

SWG2 WKG1 Document List

T2#17 Vancouver, BC. 12-15

COLOR CODE

APPROVED - OUTPUT TO T2

NOTED/APPROVED – NO OUTPUT TO T2

PENDING / ACTION

NOT REVIEWED AT THIS MEETING

NOT DISCUSSED YET

| TDOC | Subject | Source | SWG | Resolution |
|-----------|---|-----------|-------------|--------------------------------------|
| T2-020329 | LS from SA1 on ISIM for support of IMS | S1-020579 | SWG2 | Noted |
| T2-020331 | LS from SA1 on Priority Service Feasibility Study TR - draft | S1-020642 | OP, SWG2 | Noted |
| T2-020332 | LS from SA1 on Generic User Profile Stage 1 | S1-020660 | SWG2 | Noted |
| T2-020333 | LS from SA2 on "sip compression" | S2-020859 | SWG2 | Noted |
| T2-020337 | LS from SA1 on Generic User Profile (GUP) time scales | S1-020571 | SWG2 | Noted |
| T2-020339 | LS from SA2 on Comments on UP-010141 and relationship of GUP to Subscription Management | S2-020887 | SWG2 | Noted |
| T2-020340 | LS from SA2 on Status of the Generic User Profile Work | S2-020886 | SWG2 | Noted, forward to June Meeting |
| T2-020341 | LS from SA2 on Prefix allocation for IPv6 stateless address autoconfiguration | S2-020910 | SWG2 | Noted |
| T2-020342 | LS from SA3 reply on the User Equipment Management Feasibility Study | S3-020136 | SWG2 | Noted |
| T2-020344 | LS from SA3 reply on Security for UE functional split | S3-020166 | SWG2 | Noted |
| T2-020349 | LS (forwarded from TSG-T) from SA4 on mandatory support of UMTS AMR2 in dual mode terminals | TP-020057 | SWG2 | Noted |
| T2-020353 | LS from SA5 on Relationship of GUP to Subscription Management | S5-022009 | SWG2 | Noted |
| T2-020354 | LS from SA5 on co-ordination of data definitions, identified in GUP development | S5-022017 | SWG2 | Noted |
| T2-020355 | LS from CN3 on IPv6 update of stage 3 specifications | N3-020361 | SWG2 | Noted |
| T2-020356 | LS from CN4 on coordination of data definitions, identified in GUP development | N4-020463 | SWG2 | Noted with action to DDF ad-hoc |
| T2-020358 | LS from SA3 on the use of USIMs and ISIMs for IMS | S3-020167 | OP, SWG2 | Noted |
| T2-020359 | LS from SA2 on GUP work progress | S2-021513 | OP, SWG2 | Noted |
| T2-020360 | LS from SA2 on IPv6 update of stage 3 specifications | S2-021521 | SWG2 | Noted |

| T2-020361 | LS from SA5 on User Equipment Management Feasibility Study (TR 32.802) | S5-020433 | SWG2 | Draft LS & 32.802 in 434 |
|-----------|---|-----------------------|-------------|--------------------------|
| T2-020362 | LS from CN5 on co-ordination of data definitions, identified in GUP development | N5-020439 | SWG2 | Noted |
| T2-020363 | LS from SA2 on GUP Work Item Description and DDF | S2-021514 | SWG2 | Response LS |
| | | | | <mark>437</mark> |
| T2-020420 | Agenda SWG2#17 | SWG2 Chair | SWG2 | Approved. |
| T2-020421 | Meeting Report SWG2#17 | SWG2 Chair | SWG2 | AP's reviewed |
| T2-020422 | Report/agenda of Cork UEM-JM with SA5 | T2 JM Co- Chair | SWG2 | Noted |
| T2-020423 | Report/agenda of T2-GUP Cork Meeting | T2-GUP Chair | SWG2 | WITHDRAWN |
| T2-020424 | Report/agenda of UP-10 Cork Joint GUP-AH | GUP-AH Chair | SWG2 | Noted |
| T2-020425 | TSG-T Decision on GUP Work | SWG2 Chair | OP, SWG2 | Noted |
| T2-020426 | TSG-SA Decision on GUP work | SWG2 Chair | OP, SWG2 | Noted |
| T2-020427 | GUP Work Organization e-mail March 26 | SWG2 Chair | SWG2 | Noted |
| T2-020428 | TSG-T, SA Decision on UMTS_AMR2 codec | SWG2 Chair | SWG2 | Noted |
| T2-020429 | CR 27.007 Extention of +CIND | Siemens | SWG2 | Approved. Output to T2 |
| T2-020430 | CR 07.05/27.005 Correction of +CNMA | Siemens | SWG2 | Revised to 3438, 439 |
| T2-020431 | Explanation for CR to +CNMA | Siemens | SWG2 | Noted |
| T2-020432 | status of GUP work | Ericsson | SWG2 | Noted |
| T2-020433 | GUP Presentation | GUP-AH, UP- 020060 | SWG2 | Noted |
| T2-020434 | LS Response to SA5 on UEM & 32.802 | | SWG2 | Approved. Output to T2 |
| T2-020435 | LS Response to SA1 on Priority Service | | SWG2 | Approved. Ouput to T2 |
| T2-020436 | LS from GUP-AH UP-10 on Transfer of Work | UP-020053 | SWG2 | Noted |
| T2-020437 | Draft WID on T2 GUP work | Motorola | SWG2 | Noted |
| T2-020438 | CR 07.05/27.005 Correction of +CNMA REL 99 | | SWG2 | Approved. Output to T2 |
| T2-020439 | CR 07.05/27.005 Correction of +CNMA REL4 | | SWG2 | Approved. Output to T2 |
| T2-020440 | LS to SA2 T2 Progress Report to SA2 on GUP | | SWG2 | Approved. Output to T2 |
| T2-020441 | GUP Information Model | UP-020043 | SWG2 | Noted & Agreed. |
| T2-020442 | TS23.241 Updated Annex B | UP-020025 | SWG2 | Noted & Agreed |

| T2-020443 | TS23.241 version 0.3.0 updated | UP-020026 | SWG2 | Noted & Agreed |
|-----------|----------------------------------|-----------|------|-------------------|
| T2-020444 | DDF files and examples | UP-020027 | SWG2 | Noted |
| T2-020445 | TS24.241 | | SWG2 | Noted & Agreed |
| T2-020446 | GUP Work in Progress Information | | SWG2 | Noted |

E-MAIL

nicola@cet.yrp.nttdocomo.co.jp

Annex B List of Participants

ORGANIZATION

DELEGATE

| Prem Sood (Chair) | Sharp | pls@sharplabs.com |
|-----------------------|---------------------|---------------------------------|
| Alan Chau (Secretary) | Nokia | alan.chau@nokia.com |
| Bo Johansson | Ericsson | bo.johansson@emp.ericsson.se |
| Kevin Holoubek | Motorola | kevin.holoubek@motorola.com |
| Mitsuru Murata | NTT DoCoMo | mmurata@cet.yrp.nttdocomo.co.jp |
| Thomas | Telia AB | rolf.x.gustavsson@telia.se |
| Hidetoshi Kambe | Mitsubishi Electric | hikam@csc.melco.co.jp |
| Peter Neumann | Siemens AG | peter Neumann@mch.siemens.de |
| lleana Leuca | AT&T Wireless | ileana.leuce@attws.com |
| Venson Shaw. | AT&T Wireless | venson_shaw@hotmail.com |
| Richard Brook | Samsung | richard.brook@aol.com |
| Paul Voskar | Nokia | paul.voskar@nokia.com |
| Nick Alfano | RIM | nalfano@rim.net |
| Andrew Chow | Intel | andrew.chow@intel.com |
| Timo Oikarinen | Sonera | timo.oikarinen@sonera.com |
| Jurgen Lehmann | Siemens | ju.lehmann@siemens.com |
| Takehisa Mizuguchi | | mizuguchi@isl.melco.co.jp |

NTT DoCoMo

Nicola McGregor

Shuji Kinoshita NTT DoCoMo <u>kinosita@docomo.fr</u>

Henrik Thuvesson Telia henrik.b.thuvesson@telia.se

Wayne Carr Intel <u>wayne.carr@intel.com</u>

Annex F: Report from SWG3 Messaging

3GPP TSG-T WG2#17

T2-020577

Vancouver, BC, Canada $13^{th} - 17^{th}$ May 2002

Agenda Item: T2 Closing Plenary

Source: SWG3 Chair

Title: Report of SWG3

Document for: Approval

Executive Summary:

General:

34 delegates attended the SWG3 sessions on SMS, EMS, CBS and MMS at T2#17. A total number of 109 documents was processed, thereof 18 documents on SMS, 7 documents on EMS, and 81 documents on MMS. REL-5 of MMS specification 3G TS 23.140 was finalised.

3 MMS documents (LSs) and 2 CBS-related documents (CRs) were deferred to T2#17 closing plenary. Another 2 EMS-related documents (CRs) were posted to SWG3 email discussion with subsequent T2 e-approval.

10 MMS documents needed to be postponed to future meetings.

SMS:

7 CRs to 3G TS 23.040 on SMS were approved, T2-020488, T2-020490, T2-020528, T2-020541, T2-020542, T2-020543, T2-020565.

In addition a LS to T3 on TP-DCS values for SIM data download was agreed, T2-020529.

EMS:

EMS REL-5:

Three corrections and clarifications to WVG in EMS REL-5 were approved, T2-020552,

T2-020553, T2-020554.

Postponed EMS matters:

Two other REL-5 EMS CRs on WVG could not be concluded during the meeting and are postponed to a one-week SWG3 email discussion and subsequent shortened, one-week, T2 email approval: T2-020567 and T2-020568.

MMS:

MMS REL-5 finalisation:

During T2#17 the MM7 stage 3, the implementation of the connection of a VASP to an MMS Relay/Server was finalised.

Some MM7 stage 2 corrections resulted from the discussions on MM7 stage 3:

- Correction of address visibility
- MM1 / MM7 and MM4 / MM7 header mapping
- Update of list of possible CDR entries

New SA#15 approved REL-5 MMS stage 1 requirements analysed and implemented were needed:

Charged party indicator on MM7

Others:

- Message size definition as requested by BARG.
- Message distribution indicator
- Inclusion of MIME type for SMS encapsulation and alignment with MMS codec spec, 26.140
- Other corrections to the existing REL-5 specification

As a result 3G TS 23.140 REL-5 is now completed.

MMS REL-6:

Discussions of documents on MMS REL-6 matters had to be postponed due to lack of time. However, a preliminary draft WID, T2-020571, was created which is to be send for information to SA1 and T#16.

Postponed MMS matters:

Due to lack of time the following documents had to be postponed to the next meeting:

- MMS REL-4:
 - o T2-020522, T2-020522
- MMS REL-5:
 - o T2-020322, T2-020496
- MMS REL-6:
 - $\circ \quad \text{T2-020463, T2-020464, T2-020486, T2-020487, T2-020524, T2-020526}$

CBS:

Postponed CBS matters:

Due to lack of time CBS was not dealt with. The two CBS CRs, T2-020509 and T2-020512, are deferred to the T2#17 closing plenary.

Deferred Outbound LSs

Two LSs were planned to be send from T2#17 but could not be finalised during SWG3 sessions. These LSs,

T2-020569, T2-020572 are deferred to the T2#17 closing plenary.

T2-020573 was not discussed in SWG3 and is deferred to the T2#17 closing plenary.

Future Meetings:

| Meeting | Date | Venue | Comment |
|-------------|------|-------|--|
| JM SA1 / T2 | Tbd | Tbd | T2 identified an urgent need for a JM – JM is subject to SA1 confirmation; |
| | | | Scope of MMS REL-6 |

| T2#18 | 12-16 Aug 2002 | Velen, Germany | |
|-------|---|----------------------|------------------------------|
| | T2 Suggestion: Monday, 19 Aug 2002 - subject to SA5 confirmation | Tampere / Finland | Co-located with SA5 meeting; |
| | | | MMS REL-6 charging issues |
| T2#19 | 18-22 Nov 2002 | Korea | |

Output Change Requests:

SMS:

| Document # | Subject | Source | Comments |
|------------|--|---|-----------------------|
| T2-020488 | CR 23.040 REL-5 Clarification of bit value combinations within TP-PI | Logica, Siemens | |
| T2-020490 | CR 23.040 REL-5 References to the TP-RD bit | Siemens | |
| T2-020528 | CR 23.040 REL-5 TP-DCS values for SIM data download | Siemens | revision of T2-020489 |
| T2-020541 | CR 23.040 R99 Clarification of the requirement for type 0 Short Messages | Vodafone Group, Eplus, mm02, Sonera | revision of T2-020475 |
| T2-020542 | CR 23.040 Rel-4 Clarification of the requirement for type 0 Short Messages | Vodafone Group, Eplus, mm02, Sonera | revision of T2-020476 |
| T2-020543 | CR 23.040 Rel-5 Clarification of the requirement for type 0 Short Messages | Vodafone Group, Eplus, mm02, Sonera, Telia | revision of T2-020477 |
| T2-020565 | CR 23.040 REL-5 Occurrence of the Reply Address Element | Siemens | revision of T2-020491 |

EMS:

| Document # | Subject | Source | Comments |
|------------|---|----------------------|-----------------------|
| T2-020552 | CR 23.040 REL-5 corrections to WVG in EMS | Motorola, Bijitec | revision of T2-020492 |

| T2-020553 | CR 23.040 REL-5 clarifications to WVG in EMS | Motorola, Bijitec | revision of T2-020492 |
|-----------|---|----------------------|-----------------------|
| T2-020554 | CR 23.040 REL-5 Websafe color palette in WVG in EMS | Motorola, Bijitec | revision of T2-020492 |

MMS:

| Document # | Subject | Source | Comments |
|------------|---|---|-------------------------|
| T2-020468 | CR 23.140 Rel-5 Encapsulation of a short message in a multimedia message | Alcatel | |
| T2-020511 | CR 23.140 Rel-5 Parameters for CDR creation related to VASP/VAS connectivity via MM7 | Comverse | |
| T2-020532 | CR 23.140 Rel-5 Automatic Bearer Selection for MMS | Siemens | revision of T2-020484 |
| T2-020533 | CR 23.140 Rel-5 Charged Party Indication on MM7 | Materna, Nokia, Teleca, Vodafone, Ericsson | revised T2-020485 |
| T2-020534 | CR 23.140 REL-5 MM1-MM7 and MM4-MM7 header mapping | Ericsson | |
| T2-020535 | CR 23.140 REL-5 MM7 stage 3 | Ericsson, Nokia, Comverse, Logica, Openwave | revision of T2-020500 |
| T2-020536 | CR 23.140 REL-5 Correction to MM7 Stage 2 on Address Visibility in Sender and Recipient les | SWG3#11 | revision of T2-020478 |
| T2-020544 | CR 23.140 R'99 Encapsulation of a short message in a multimedia message | Alcatel | |
| T2-020545 | CR 23.140 Rel-4 Encapsulation of a short message in a multimedia message | Alcatel | |
| T2-020547 | CR 23.140 REL-5 MM7 Interface - Message Distribution Indicator | AT&T Wireless | revision of T2-020537 |
| T2-020548 | CR 23.140 REL-5 consistent terminology | Siemens | revision of T2-020479 |
| T2-020549 | CR 23.140 REL-5 Store status in stage 2 features | Openwave | resulted from T2-020479 |
| T2-020550 | CR 23.140 Rel-5 Encapsulation of a short message in a multimedia message | Alcatel | revision of T2-020468 |
| T2-020551 | CR 23.140 REL-5 Alignment of 23.140 with 26.140 | Siemens, Nokia | revision of T2-020480 |

| T2-020559 | CR 23.140 Rel-5 Binary Encoding of MMS Connectivity Information for storage on the USIM | Siemens | revision of T2-020521 |
|-----------|---|------------------------------|-----------------------|
| T2-020560 | CR 23.140 REL-5 Additional information elements for the MM1 abstract messages | Schlumberger Sema, Teleca | revision of T2-020505 |
| T2-020563 | 23.140 v5.2.0 clarifications | Telia | revision of T2-020504 |
| T2-020564 | CR 23.140 REL-5 Message Size | Teleca, Openwave | |
| T2-020570 | CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports | CMG | revision of T2-020562 |

Output Liaison Statements:

| Document # | Subject | Source | Comments |
|---------------|--|----------|-----------------------|
| T2-020321 | LS to SA5 on Charging Support for VASP MMS Connectivity | Comverse | reply-LS to T2-020346 |
| T2-020527 | reply-LS to SA5-SWGA on T2-020352 on Service Operations Management on MM7 | Nokia | |
| T2-020529 | Ls to T3 on TP-DCS values for SIM data download | Siemens | |
| T2-020530 | LS to T3 and SA1 on MMS configuration information in the USIM | Siemens | |
| T2-020531 | LS to T3 and SA1 on Automatic bearer selection for MMS delivery and submission | Siemens | |
| T2-020539 | LS to SA1 and GSMA-SERG on Use cases for VAS | Telia | |
| T2-020557 | reply-LS to T2-020338 on MMS codecs | Nokia | 1 |
| T2-020574 | reply-LS to SA3 on T2-020343 (subscriber certificates) | Comverse | revision of T2-020525 |

Tdocs deferred to T2#17 closing plenary:

CBS

| Document # | Subject | Source | Comments |
|---------------|--------------------------------------|--------|---------------------------|
| T2-020509 | CR 23.041 Rel-4 Update of references | Teleca | POSTPONED TO T2#17- CP |
| T2-020512 | CR 23.041 R99 Update of references | MCC | POSTPONED TO T2#17- CP |

Outbound LSs

| Document # | Subject | Source | Comments |
|------------|--|--|---------------------------|
| T2-020569 | LS-reply to T2-020325 to BARG and SA5 on message size definition | Vodafone | POSTPONED TO T2#17- CP |
| T2-020572 | LS to SA1 cc T on preliminary draft MMS REL- 6 WID | Openwave | POSTPONED TO T2#17-CP |
| T2-020573 | LS to SA1 on IMS Messaging | Openwave, Comverse, Schlumberger Sema | POSTPONED TO T2#17-CP |

Tdocs postponed to email debate / approval

| Document # | Subject | Source | Comments |
|---------------|---|----------------------|--|
| T2-020567 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec | revision of T2-020555; POSTPONED TO EMAIL DISCUSSION AND APPROVAL |
| T2-020568 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec | revision of T2-020555; POSTPONED TO EMAIL DISCUSSION AND APPROVAL |

Detailed Report:

General:

The Chairman, Josef Laumen (Siemens), welcomed delegates and Tim Ambrose (Hutchison 3G) was appointed as secretary

The Agenda was approved in T2-020460.

Publication of Soap Schema

This is important but not essential for REL-5 completion of 23.140 and will be completed as soon as a suitable URL can be determined.

Incoming liaisons

| Tdoc | Title | Source | Comment |
|----------|------------------------------------|-----------|---------|
| | | | |
| | | | |
| T2020325 | Message Volume Measurement Methods | BARG CPWP | |
| | | | |

Discussion:

Rami explained that this is a request for non-linear volume based billing but in a way that is common between operators.

Ileana said that is showed the difference between recording and billing. However, Rami maintained that all MMS R/Ss need to use the same method of size measurement. What is done with the data is not for this group. T2 needs to check that current CDR definition is adequate and do a change if necessary.

Conclusion:

Noted, this topic will discussed in greater dept later in the agenda,

| Tdoc | Title | Source | Comment |
|----------|---------------------------------|--------|---------|
| T2020327 | Digital Rights Management (DRM) | SA1 | |

Discussion:

There is nothing here for T2 to do. SA1 needs to define more clearly what is required of T2. This is big subject and will most likely require some joint meetings.

Apparently, the DRM stage 1 is approx 50% complete, but is not clear which other groups will be involved in stage 2/3 work, though was this is clearer, T2 should work closely with these groups.

Eskil said that T2 needs to be sensitive to the needs of the Market and we cannot wait for S1 to complete their work, - there are contributions ready for discussion this week that need to be seriously considered.

Rami explained that we need a means to encourage the distribution of content in a way that generates secure revenues. However, the use cases in the stage 1 do not so far include messaging.

Conclusion:

Noted. However, after this topic is discussed further a LS may be generated

| Tdoc | Title | Source | Comment |
|----------|----------------------------|--------|---------|
| T2020328 | Draft Push Service Stage 1 | SA1 | |

Discussion:

Delegates should read the spec in their own time and bring any comments to the meeting.

Rami pointed out that some aspects of the stage one are contradictory to MMS. Comverse will create an input paper (524)

Conclusion:

Noted.

| Tdoc | Title | Source | Comment |
|----------|---|--------|---------|
| | | | |
| T2020330 | Packet switched streaming service stage 1 | SA1 | |

Discussion:

Even though the LS was sent in Feb 02, we did not receive it!

Delegates should read the spec in their own time and bring any comments to the meeting.

Conclusion:

Noted.

| Tdoc | Title | Source | Comment |
|----------|--|--------|---------|
| T2020334 | SA2 reply on: "Draft Push Service Stage 1 | | |

Discussion:

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|------|--------------------------|--------|---------|
| 335 | 3GPP TSG SA WG 1 MMS SWG | SA1 | |

Discussion:

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|----------|----------------------------------|--------|---------|
| T2020336 | Support of "Recipient Party pays | SA1 | |

Discussion: This was discussed in Seattle. Ian Harris drafted an LS for this meeting.

Four positions were put forward in Seattle

- 1)No changes allowed to R5
- 2) Service code could be used
- 3) Service code not enough
- 4) MM1 needs updating to provide AOC.

This is a big debate and will be discussed later. T2 needs to agree on a common position before sending a response.

Conclusion: Noted, Proposed Reply in 322.

| Tdoc | Title | Source | Comment |
|-----------|--|--------|---------|
| T2-020338 | transfer from T2 to SA4 of responsibility for MMS formats and codecs | SA4 | |

Discussion: Rami pointed out that we are not complying with the requirement to have SDP information attached the notification in 26.233 as this was deferred to release 6. He also questioned whether the use of SA4 AAC was valid as the market generally uses MP3. As most users have MP3 players and content comes in SA4 AAC format, transcoding will be required. Ville and Ian recommended that comments on choice of Codec should be confined to SA4. It was questioned what is the relationship PSS server entity and the MMS server.

Conclusion: Noted, Miraj will check on requests and we will then decide if an answer is required

| Tdoc | Title | Source | Comment |
|-----------|--|--------|---------|
| T2-020343 | reply on support for subscriber certificates | SA3 | |

Discussion: Should be something to think about for R6 and security issues surrounding VASPs

Conclusion: Noted, Rami will create a simple response asking to be kept informed on the matter.

| Tdoc | Title | Source | Comment |
|-----------|----------------------------|--------|---------|
| | | | |
| | | | |
| T2-020345 | Draft Push Service Stage 1 | SA5 | |
| | | | |

Discussion:

| Tdoc | Title | Source | Comment |
|-----------|------------------|--------|---------|
| | | | |
| | | | |
| T2-020350 | 3GPP SA1 MMS SWG | SA5 | |
| | | | |

| ъ. | | | • | |
|--------------------|------|-----|-----|----|
| Di | COL | 166 | חוי | m |
| $\boldsymbol{\nu}$ | 3C L | 100 | U | и. |

Conclusion: Noted. Questions will be covered via LS's already agreed to be generated.

| Tdoc | Title | Source | Comment |
|-----------|--|--------|---------|
| T2-020346 | charging support for VAS MMS Connectivity Interface | SA5 | |

Discussion: Discussed in Seattle, Rami has produced response in 321- This will be discussed later

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|-------------------------------------|--------|---------|
| | | | |
| | | | |
| T2-020351 | VASP MMS Connectivity joint meeting | SA5 | |
| | | | |

Discussion:

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|-----------------------|--------|---------|
| T2-020352 | VASP MMS Connectivity | SA5 | |

Discussion: Ville expressed concern that SA5 has already started on MMS aspects before holding a joint meeting. This might lead to confusion. Ville volunteered to create an appropriate response in 527

| Tdoc | Title | Source | Comment |
|------|-------|--------|---------|
| | | | |
| | | | |

| T2- | 020357 | Complement to the Answer LS on | CN4 |
|-----|--------|-----------------------------------|-----|
| | | MSISDN Address resolution for MMS | |
| | | using MAP operations | |
| | | | |

Discussion: Already discussed in Seattle, but no changes are required in 23.140

Conclusion: Noted

SMS:

| Tdoc | Title | Source | Comment |
|-----------|--|-----------------------------|--|
| T2-020470 | Clarification of the requirement for type 0 Short Messages | E-Plus, MM02, Vodafone,) | (Sonera, Telefonica also supporting this) |

Discussion: Background info to following CRs to 03.40

Conclusion: noted

| Tdoc | Title | Source | Comment |
|-----------|--|-----------------------------|--|
| T2-020471 | CR 03.40 Ph2 (Cat. F) Clarification of the requirement for type 0 Short Messages | E-Plus, MM02, Vodafone,) | (Sonera, Telefonica also supporting this) |

Discussion: Ian explained that 'may' was put in the spec for discarding type 0 because it would be possible to find out the availability of a mobile without the user knowing, possibly violating their privacy. It was thought that then note in the CR is unusual and possibly misleading. Rami thought that this is a new feature and not an essential correction and should not be introduced in a earlier releases. Nokia was unhappy that this change should be applied in this way and should only be included in release 5. Ian agreed that that was a valid thing to introduce, it just needs to be done in a different way, i.e. in a future release. However, Ramin was unhappy to restrict this to release 5 as such terminals will not be available for a long time. There will be an off-line discussion to try and overcome the deadlock.

| Tdoc | Title | Source | Comment |
|------|-------|--------|---------|
| | | | |
| | | | |

| T2-020472 T2-020474 | CR 03.40 Ph2 (Cat. F) Clarification of the requirement for type 0 Short Messages | E-Plus, MM02, Vodafone | Mirrors to 471 |
|------------------------|--|---------------------------|----------------|
| T2-020475 | | | |
| T2-020476 | | | |
| T2-020477 | | | |

Discussion:

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|--|--------------------|---------|
| T2-020488 | CR 23.040 REL-5 Clarification of bit value combinations within TP-PI | Siemens, Logica | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|--|---------|---------|
| T2-020489 | CR 23.040 REL-5 TP-DCS values for SIM data download | Siemens | |

Discussion: Ian explained that this area was for SIM data download and only 8 bit data were envisaged, so he has no problem with removing the term '8 bit'. There is an Asian requirement to use 16 bit messages for UCS/2. Peter and Ian will get together to update the CR and send an LS to T3

Conclusion: Noted – to be revised in 528 – LS in 529

| Tdoc | Title | Source | Comment |
|-----------|--|---|--|
| T2-020543 | Clarification of the requirement for type 0 Short Messages | E-Plus Mobilfunk, mmO2, Vodafone Group, Sonera, AT&T Wireless | Revised 471 for R5 Telia also support this CR |

87

Discussion: There may some procedural problems with this as it essentially a new feature and not a correction. Ian is concerned that existing applications expecting to use type 0 may not work with release 5.

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|--|---|---------------------|
| T2-020541 | Clarification of the requirement for type 0 Short Messages | E-Plus Mobilfunk, mmO2, Vodafone Group, Sonera, AT&T Wireless | Revised 471 fro R99 |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|--|---|--------------------|
| T2-020542 | Clarification of the requirement for type 0 Short Messages | E-Plus Mobilfunk, mmO2, Vodafone Group, Sonera, AT&T Wireless | Revised 471 for R4 |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|--------|---------|
| T2-020529 | LS to T3 on TP-DCS values for SIM data download | SWG3 | |

Discussion: To include CR 528,

Conclusion: Approved.

| Tdoc | Title | Source | Comment |
|-----------|--|---------|-------------|
| T2-020528 | CR 23.040 REL-5 TP-DCS values for SIM data download | Siemens | Revised 489 |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|---------|---------|
| T2-020490 | CR 23.040 REL-5 References to the TP-RD bit | Siemens | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|--|---------|---------|
| T2-020491 | CR 23.040 REL-5 Occurrence of the Reply Address Element | Siemens | |

Discussion: Gwenael wants "only" at the end of the sentence. Revised in 565

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|--|---------|---------|
| T2-020565 | CR 23.040 REL-5 Occurrence of the Reply Address Element | Siemens | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|--------|---------|
| T2-020507 | Destination mailbox full TP-Failure- Cause | CMG | |

Discussion:

Conclusion: Withdrawn

EMS:

| Tdoc | Title | Source | Comment |
|-----------|--|----------------------|---------|
| T2-020492 | CR 23.040 REL-5 WVG Corrections and Clarifications | Motorola, Bijitec | |

Discussion: This appears to be a two type of changes, bug fixes and enhancements which should probably be split into two CRs.

Siemens asked why WVG version has been changed to 0001. Bijitec explained that previously, version what not included. Version is important and version 1 should be used for this release. However, Nokia did not want the version to be changed. Josef proposed that only a correction CR be produced as an enhancement CR may not be accepted. Bijitec maintained that this CR does not represent new features and are only essential clarifications and corrections to implement the agreed feature set from the Sophia meeting. Ian felt that separate CRs are needed to make it clear what the changes are about . Nokia complained that this CR was late and proposed that new versions of the CR should be postponed to the next T2. Ian reminded everyone that EMS has limited window of opportunity and so things should not be delayed. It was agreed to have an off-line discussion.

Conclusion: Noted – new revisions to be reviewed later in the meeting.

| Tdoc | Title | Source | Comment |
|-----------|----------------------|--------------|---------|
| T2-020510 | EMS feature overview | T2 Secretary | |

Discussion: A few comments made about accuracy of the data – Friedhelm asked that delegates should send corrections to him.

| Tdoc | Title | Source | Comment |
|-----------|---|----------------------|---------|
| T2-020556 | Summary of key changes in T2-020552 and T2-020555 | Motorola, Bijitec | |

Discussion:

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|----------------------|---------|
| T2-020552 | CR 23.040 REL-5 corrections to WVG in EMS | Motorola, Bijitec | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|----------------------|---------|
| T2-020553 | CR 23.040 REL-5 corrections and clarifications to WVG | Motorola, Bijitec | |

Discussion: Paul argued that the version number should not be specified in the WVG header because there will no need to have future version of EMS. Bijitec thought it is useful for situations where the EMS data is used outside of messaging. Paul argued that other media types don't have version number, but this is not true, e.g. MPEG has version number so that the rendering application know how to decode the data. Randy pointed out that Nokia have already agreed to the field being present. The CR is only adding a note to the already agreed field.

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|----------------------|---------|
| T2-020554 | CR 23.040 REL-5 Websafe color palette in WVG in EMS | Motorola, Bijitec | |

Discussion: Siemens accept the changes but cannot confirm that the colour palette number array is correct.

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|----------------------|---------|
| T2-020555 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec | |

Discussion: Magnus is not happy with this CR has there appears to be a number of new features. Paul has the same opinion. Bijitec disagree because adding the angle is not a new feature as it only makes it consistent with the rest of the spec.

The animation section is there to ensure that same animation features are present. Magnus suggested that an email discussion should take place as Ericsson experts are not present in the meeting. Ian questioned the commitment of companies to support EMS and suggested that ways could be found to overcome these issues. It is a sad fact that EMS has probably missed its opportunity to make an impact on the market because of past difficulties. Ian and Friedhelm saw no problem that this CR could be presented to T if it was accepted via email approval. It was agreed to create two separate CRs for each change. Email discussion should start today, followed by an official email approval period. Josef explained that if this CR is indeed a new feature then it cannot be approved. However, Ian interpreted T ruling on EMS as guidelines and if it is sensible to add a new feature then we should not be prevented from doing so. Bijitec maintained that these changes are essentially not new features and only improve the consistency of the specification and efficiency of the implementation. Brian asked if this change is not approved then there will be potential problems with message size; Bijitec confirmed this to be the case. Nokia and Ericsson objected to the CR. It was finally agreed to deal with issue via email. Final version needs to be sent to Friedhelm by Sunday 26th May. Email approval will then run till Fri 31 May 12:00 GMT. New versions in 567 and 568.

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|----------------------|---------|
| T2-020554 | CR 23.040 REL-5 Web safe colour palette in WVG in EMS | Motorola, Bijitec | |

Discussion:

Conclusion: approved

MMS Finalisation of Release 5

| Tdoc | Title | Source | Comment |
|-----------|--|--------|-------------------------------|
| T2-020515 | CR 22.140 REL-5 - MMS support of both MSISDN and e-mail addressing schemes (SP-020055 CR-11) | S1 | Check to see impact on 23.140 |

Discussion:

Conclusion: Noted – no need for changes to 23.140

| Tdoc | Title | Source | Comment |
|-----------|---|--------|-------------------------------|
| T2-020516 | CR 22.140 REL-5 - MMS configuration information in the USIM (SP-020055 CR-13) | S1 | Check to see impact on 23.140 |

Discussion: Magnus asked what it the issuer? This is the operator. Ileana thought that this CR is just aligning stage 1 and 2. Josef proposed to create a LS to T3 and S1 (530) on possible work that might be needed. Miraj pointed out that we have specified more than just configuration parameters, e.g. storage of notifications.

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|--------|-------------------------------|
| T2-020517 | CR 22.140 REL-5 - Support of charging models in MMS (SP-020193) | S1 | Check to see impact on 23.140 |

Discussion: This may have impact on 23.140. Ian has created an LS to address this and there are other related contribution to be debated later. The feature "Recipient pays for receipt of messages from a VASP when there is a commercial agreement between the Recipient and the VASP", will be debated later

Conclusion: Impact to be discussed later.

| Tdoc | Title | Source | Comment |
|-----------|------------------------------------|---------------|-------------------------------|
| | | | |
| | | | |
| T2-020518 | CR 22.140 REL-5 - Automatic bearer | T-Mobile, | Check to see impact on 23.140 |
| | selection for MMS delivery and | Vodafone | |
| | submission (SP-020195) | Group, Orange | |
| | | 1, | |

Discussion: Rami indicated that this is a new feature – can we allow this now for R5? Josef said that we should try and implement this before June. If not, the stage1 will have to be modified. Rami also pointed out that these fields are not present in the USIM and will be need to be implemented. It was thought that the SMS and USSD bearers mentioned should be deleted. Rami also thought that the wording excluded the possibility for storing the parameters on the terminals. LS to be sent to T3 and T1

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|--|---------|---------|
| T2-020467 | CR 23.140 REL-6 MMS end-to-end security services using S/MIME and USIM | Gemplus | |

Discussion: None

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|---------|---------|
| T2-020484 | CR 23.140 Rel-5 Automatic Bearer Selection for MMS | Siemens | |

Discussion: Rami agreed that the CR is needed, but he does not think that a requirement can put on the UE in the MMS spec and should be re-worded. Vasilis pointed out that users should be able to avoid using CSD when roaming in order to avoid high call charges, but this is not in the stage1. Ileana suggested that an LS should be sent to S1 to point out the roaming case for bearer selection for release 6. As it was difficult to come up with agreed wording, a small group will work off-line to produce a new version in 532

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|--|---|---------|
| T2-020485 | CR 23.140 Rel-5 Charged Party Indication on MM7 | Materna, Nokia, Teleca, Vodafone, Ericsson | |

Discussion: Rami explained that this CR is potentially <u>dangerous</u>! It would allow a malicious VASP to indicate that the recipient should pay when in fact they should not! However Vodafone pointed out that an operator will only allow a VASP to reverse charge if there is contract between the operator and VASP. Any inappropriate usage by the VASP would then come under the commercial agreement between the VASP and the operator.

Furthermore, Rami is concerned that a malicious VASP could claim that there is a commercial agreement between it and the recipient that is unknown to the operator. However, Ian pointed out that as the MMS R/S is under the control of the operator and is in a good position to avoid the potential difficulties raised. Rami will make these points in the LS to SA5.

Conclusion: Noted - Updated and Approved in T2-020533

Finalisation of MM7

| Tdoc | Title | Source | Comment |
|------|-------|--------|---------|
| | | | |
| | | | |

| T2-020514 | SWG3#11 agreed MM7 stage 3 design | Agreed principles from Seattle | |
|-----------|-----------------------------------|--------------------------------|--|
| | principles | | |

Discussion: It was pointed out that Error handling in the proposed CRs is different – it is now done via SOAP fault report and includes a transaction ID.

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|----------|---------|
| T2-020500 | CR 23.140 REL-5 MM7 stage 3 endorsed by SWG3#11 | Ericsson | |

Discussion: Josef checked that outstanding actions will be included in the updated version of the CR.

It was pointed out that the URL from where the SOAP schema can retrieved needs to be defined.

Rami asked when the structure of the service code will be decided. Jerry sent out some options – Nokia prefers option 2. An off-line group will decide. Marina asked for confirmation that the XML schema will be both in the spec annex and at the URL; it will.

This CR will be updated in 535

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|--------|---------|
| T2-020478 | CR 23.140 REL-5 Correction to MM7 Stage 2 on Address Visibility in Sender and Recipient IEs | SWG3 | |

Discussion: A few comments were received on the new text with on-line editing. Updated and approved in 536

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|--------|----------------|
| T2-020469 | Clarifications on attaching multimedia message content to MM7 Stage 3 CR | Nokia | Discussion doc |

Discussion: Vasilis suggested that a Multipart/mixed example should also be included. Comments will be reflected in 535.

| Tdoc | Title | Source | Comment |
|-----------|--|--------|---------|
| T2-020493 | CR 23.140 Rel-5 inclusion of previously sent field to MM7 | Nokia | |

Discussion: Padraig stated that he is not sure that we should be providing this info to VASPs. Eskil and Rami has similar doubts. Ville, said a postcard service might use this or filtering applications and as it is an optional field it can do no harm to have it. Rami said there are no good use cases. Ville stated that he could not see any reason why it should not be there as it there is other reference points. There followed a very long discussion, illustrated on the flip chart. Rami stated that he can't get consensus with himself on this feature!!!! Due to lack of time is was agreed to discuss this further for release 6

Conclusion: REJECTED

| Tdoc | Title | Source | Comment |
|-----------|---|--------|---------|
| T2-020494 | CR 23.140 REL-5 MM7 Interface – Message Distribution Indicator | ATW | |

Discussion: Rami says he has sympathy with the problem here but there are no stage 1 requirements for this. His second concern is that in some jurisdictions it may be illegal to prevent to transfer content. Thirdly it requires a change to MM1. Fourth, there may be a better way to do this by the MMS R/S detecting the owner of forwarded content and generating an appropriate CDR. Padraig, agrees with this in general, but is concerned that R/S is now become a distribution control point and that goes beyond the original idea of just providing an indication to the user. Eskil thought that we need at least a basic mechanism for release 5. Ian suggested that user will easily defeat these kinds of mechanisms, so it would be best to simply indicate to the user with a message saying "please do not copy this". Magnus likes the mechanism for the content provider to a standard way of indicating protected content. Ville said that an indication to the user could be supplied in MM body, for example, in the subject field and thereby will be independent of the transport protocol. Josef felt that by the time R5 MM1 is completed in the WAP forum, 3GPP DRM solution may be available. Ileana thought that EMS could be more successful than MMS as EMS already has this protection flag and insisted that content providers will not be a happy to work with MMS if such a mechanism is provided. Ville thought that for a short term solution it would be better to have the indication in the message body.

Eventually there was an indicative vote as follows.

1. info element in MM7_submit.REQ

ii.
$$no - 0$$

iii. abstentions – 7

2.) info element in MM1_notific.REQ

iii. abstentions - 9

Therefore Ileana will produce a new CR (537) that will require a Boolean value (yes/no) message distribution indicator (informational only) that applies to the whole message.

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|------------------------------------|--------|---------|
| T2-020503 | Use cases for VAS - discussion doc | Telia | |

Discussion: Eskil thought that use case 9 in nothing to do with VASPs. Similarly use case 10 is not related to VASP. Rami suggested that LS should be sent to GSMA on VASP use cases. Henrik suggested that this document should be discussed via email for a few weeks before sending to SA1/GSMA to give them some suggestions on requirement creation.

Conclusion: Noted

OTHER RELEASE 5 MMS

| Tdoc | Title | Source | Comment |
|-----------|--|---------|---------|
| T2-020468 | Encapsulation of a short message (SMS) in a multimedia message (MMS) | Alcatel | |

Discussion: This is approved for release 5 – new version 550 to update cover sheet. Some discussion surrounded the need to apply the same CR to R4 and R99. Eventually it was agreed to do the same change for R99 and R4, in 544 and 545.

| Tdoc | Title | Source | Comment |
|-----------|--|---------|---------|
| T2-020479 | CR 23.140 REL-5 consistent terminology | Siemens | |

Discussion: Various comments made and new version will be created in 548. Bill will update store status text in a separate CR in 549.

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|----------------|---------|
| T2-020480 | Alignment of 3GPP TS 23.140 with 3GPP TS 26.140 | Siemens, Nokia | |

Discussion: Various comments and correction received. An email from Kevin Holley was read out, but delegates thought it had no impact on the CR. Randy asked what the process should be to include formatted text for MMS. Josef suggested that a new section in 23.140 could be added with a note saying that SA4 spec would define the precise format. There was a lot of discussion on SA4 responsibilities and who is actually responsible for what MMS supports. A new version will created in 551.

Conclusion: Endorsed

| Tdoc | Title | Source | Comment |
|-----------|-----------------------------|---------|-------------------------|
| T2-020481 | MMS Message Size Definition | Siemens | PowerPoint presentation |

Discussion: Vasilis has reservations about excluding the SMIL part, it would be better to take the whole MIME encapsulated payload. Josef explained that the SMIL size depends upon the terminal implementation and will vary from manufacturer to manufacturer. Magnus, thinks that is very important and we need a clear definition of message size and he supports excluding the SMIL part. Ericsson terminals will show the message size during creation and it easier to exclude the SMIL part. Ileana suggested that the message size should come from the terminal or the VASP and NOT the MMS R/S as this will add a large overhead. Paolo agreed that a uniform method is agreed here in T2 and not SA5. Additionally, we must consider not just the attachment part of the message, but the whole message. If it is excluded there will be problems, we need to include the presentation and attachments. Ian stated that size is important – it will be possible for hackers to send free information e.g. in the notification. The most costly part of message transmission is across the air interface and we need to be very careful that message size reflects this need. Ian suggested that message size needs to be defined in absolute size and not broad categories (e.g. small, medium, large). Eskil is worried that the MMS R/S will become a bottleneck if it has to do a lot of exact counting. He suggested that it should just include the attachments and take the PDU as the basis. Marina wants the PDU as the basis. Ville agrees with most of the comments – no dissecting of messages should be done. Rami thinks that the whole message size should be taken into account, and people should be free to deduct parts as required. Ericsson suggested that the size of each part of the MIME object could be used in message size calculation. However, Josef said that there is big problem to calculate the message size during message creation and this proposal would not help. Vasilis stated that it must be possible to estimate fairly accurately the size of the SMIL part should be. Additionally an MM has the RCF822 headers as well as the message part and the only way to calculate the whole message size if after the WSP encoding is completed. Ian maintained that nothing should be excluded from the count to prevent people sending messages inside the subject field for free. Operators are free to subtract whatever they like in their billing systems. Ileana

emphasized the difference between recording and billing. When you send a parcel in the post, the whole package is included in the charging. Gwenael, thought it is possible to accurately calculate the whole message size. However, he is concerned that this is being closely coupled to the current implementation of MM1. When we have alternative MM1 implementations the message size calculations will be invalid. Rami maintained that we should focus on the whole size of the message in a consistent way. Josef added though, that we also need to be able to display the size of the message during creation. Vasilis thinks that the operator should not have to depend on the UE for accurate billing.

Ian questioned how forwarding without downloading without be billed. Answer: size will be in the notification.

After much further debate no conclusion could be reached – discussion will continue in a ad hoc group.

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|---------|------------------|
| T2-020521 | CR 23.140 Rel-5 Binary Encoding of MMS Connectivity Information for storage on the USIM | Siemens | Updated from 499 |

Discussion: Small editorials and minor changes done on-line new version Approved in 559

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|--|---------|---------|
| T2-020465 | CR 23.140 Rel-5 Status text in the MM1_delivery_report.REQ | Materna | |

Discussion: Eskil and Ville, thinks that this is a new feature and should not be in R5.

Conclusion: Rejected

| Tdoc | Title | Source | Comment |
|-----------|---|---------|---------|
| T2-020466 | CR 23.140 Rel-5 information field in notification | Materna | |

Discussion: Ville said that this does not match any stage 1 requirement. Eskil says that this a new feature and should not be included in R5.

Conclusion: Rejected

| Tdoc | Title | Source | Comment |
|-----------|---|------------------------------|---------|
| T2-020505 | CR 23.140 REL-5 Additional information elements for the MM1 abstract messages | Schlumberger Sema, Teleca | |

Discussion: Eskil said that there is nothing here that not already in the WAP specifications. However, there is a problem with the version number mapping. Padraig asked whether this CR is just their to align 3GPP to WAP specs? Marina maintained that the most important reason for the CR was to add the transaction ID. Miraj, explained that the reason these information elements were omitted was because all messages had to include them and this was explained in the text. Ileana supports the CR because it adds clarity and consistency.

It was agreed to approve the CR with changes agreed during the discussion assuming that 506 is approved. Revised in 560

Conclusion: Endorsed

| Tdoc | Title | Source | Comment |
|-----------|---|------------------------------|---------|
| T2-020506 | CR 23.140 REL-5 Acknowledgements for the unconfirmed transactions | Schlumberger Sema, Teleca | |

Discussion: Vasilis thinks that 8.1.7.1 and 8.1.7.2 are not consistent. Magnus explained that if a message is sent to 20 recipients with delivery reports, it would generate a lot of signalling. Rami is worried about backward compatibility. Marina answered by saying that the version is always known. Ian explained that the most vulnerable path is over the radio path. Without the responses, there is not assurance that massages are received. The extra traffic problem should not be problem. Good implementations should not be upset by unknown fields and should ignore unexpected data. Ville cannot support this CR as their will be backwards compatibility, underlying protocols should be relied upon to deliver reliably and this a new feature which should not be added for R5. Josef was concerned that if a user is roaming, it might be very expensive to get 20 delivery reports! Rami insisted that this is not a new feature. Ian maintained that without this CR, there is a big hole in the protocol and with the changes there is no value in having the deliver report requests. Eskil thought that if you really want to ensure reliability you could use a WAP confirmed push.

Conclusion: REJECTED

| Tdoc | Title | Source | Comment |
|-----------|--------------------------------|--------|---------|
| | | | |
| | | | |
| T2-020508 | MMS timezones - discussion doc | | |
| | | | |

Discussion: See 546 for related CR.

| Tdoc | Title | Source | Comment |
|-----------|---|---------------------------------|---------|
| T2-020546 | CR 23.140 R5 Clarifications concerning the use of timestamp | Teleca, SchlumbergerS ema | |

Discussion: Josef expressed that this CR should be Cat F as it included lots of new features. Two separate CRs are required. Ian explained that if the UE can set the time and the R/S can override it will cause lots of difficulties and potentially some serious problems. Rami agreed with the spirit of the changes, but these are all new features. Padraig supports the clarification of timezone but not the other changes. Ian insisted that this CR fixes fundamental problems. Josef said that if this is cat F then it should also apply to earlier releases. It was agreed to not discuss this CR at this meeting put to postpone discussion to the next meeting. The authors will revise the contents according to comments received. Rami objected to the contents of the CR but did not want to go into a debate today. There will be an email discussion on this CR, hopefully with a updated CR presented to the next T2 meeting.

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|----------|---------|
| T2-020511 | Parameters for CDR creation related to VASP/VAS connectivity via MM7 | Comverse | |

Discussion: Ville was concerned about transaction id. Josef told Ville that this annex will be used by SA5 for their work Ian suggested that the term "reverse charging" should be revised. The CR was agreed with some on-line edits

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|----------|---------|
| T2-020534 | CR 23.140 REL-5 MM1 - MM7 and MM4 - MM7 header mapping | Ericsson | |

Discussion: Eskil objected to his own CR as it impossible to map MM7 to MM4. MM7 to MM4 mapping should be postponed, but the MM7-> MM1 should be retained. Ville suggested that this should be an informative annex as it is not clear what the effect on service behaviour will be.

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|------|-------|--------|---------|
| | | | |

| T2-020544 | CR 23.140 R 99 Encapsulation of a | Alcatel | |
|-----------|-------------------------------------|---------|--|
| | short message (SMS) in a multimedia | | |
| | message (MMS) | | |
| | | | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|--|---------|---------|
| T2-020545 | CR 23.140 R 4 Encapsulation of a short message (SMS) in a multimedia message (MMS) | Alcatel | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|---------|---------|
| T2-020550 | CR 23.140 R5 Encapsulation of a short message (SMS) in a multimedia message (MMS) | Alcatel | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|--|--------|---------|
| T2-020496 | CR 23.140 REL-5 Consistent use of RFC2822 | CMG | |

Discussion:

Conclusion: Postponed

| Tdoc | Title | Source | Comment |
|-----------|--|--------|---------|
| T2-020497 | CR 23.140 REL-5 FQDN in RFC822 fields on MM4 | CMG | |

Discussion: Ville has some problems with this. Ville explained that when user A send a message to user B with E.164 in a different operator, MM4 has to add the domain name which should be stripped off when sent to the recipient. Vasilis did not agree with stripping domains. The To and

From field are not used for routing. CMG argued that the reply to a message needs the FQDN. It was agreed to add the CC: field. Ericsson agree with the CR but need to study RFC 822 in more detail. This will be discussed further offline. Revised in 561 – corrections to MM4 reply addressing.

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|--------|---------|
| T2-020498 | CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports | CMG | |

Discussion: The first change is already incorporated later on in the section and is not needed. The second change needs some updating. Revised in 562

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|--------|-------------|
| T2-020562 | CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports | CMG | Revised 498 |

Discussion: Online changes and revised in 570

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---|--------|-------------|
| T2-020570 | CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports | CMG | Revised 562 |

Discussion: Online changes and revised in 570

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---------------------------------|--------|---------|
| T2-020504 | CR 23.140 REL -5 clarifications | Telia | |

Discussion: Generally agreed but needs some updates are needed. Josef and Henrik will work on this for the next meeting. Revised version 563

| Tdoc | Title | Source | Comment |
|-----------|--|---|-----------------|
| T2-020547 | CR to 23.140 Stage 2. MM1 and MM7 Interfaces: Message Distribution Indicator | AT&T Wireless Services, Schlumberger Sema | Revised version |

Discussion: Long and protracted discussion about the precise wording! Ville insisted that this cat B, i.e. addition of new feature – this may be an issue for closing plenary.

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|---------------------------------|---------|
| T2-020535 | MM7 stage 3 endorsed by SWG3#11 and updated with corrections and new schema | Ericsson, Nokia, Comverse | |

Discussion: Gwenael has concerns about the <env:Header> syntax as it does not appear in the SOAP specification. Sam will explain off-line.

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|----------------|---------|
| T2-020551 | Alignment of 3GPP TS 23.140 with 3GPP TS 26.140 | Siemens, Nokia | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|-------|--------|---------|
| | | | |
| | | | |
| T2-020558 | | | |

Discussion:

Conclusion: Withdrawn

| Tdoc | Title | Source | Comment |
|-----------|---------------------------------|--------|---------|
| | | | |
| | | | |
| T2-020563 | CR 23.140 REL -5 clarifications | Telia | |
| | | | |

Discussion: Some editorials and agreed.

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|------------------------------|---------|
| T2-020560 | CR 23.140 REL-5 Additional information elements for the MM1 abstract messages | Schlumberger Sema, Teleca | |

Discussion: Ville didn't want to have new fields in MM1_retrieve.REQ as the current stage3 WAP spec does not have these new mandatory fields. Ian felt that these fields are needed to avoid problems and keep consistency of operation at the application layer. Josef felt that this is not needed in the current implementation so why have it? Ian complained that everything is being driven by what WAP can or cannot do and that WAP is dictating what is in the 3GPP spec and if we proceed with an alternative to WAP in the future we will get into further problems. However, Ville thought whatever stage 3 protocol was used for MM1 you would get the same problem e.g. IMAP 4. Randy suggested that we keep the fields in stage2 and that WAP simply ignores them if they are not needed. Ian insisted that a correct application protocol should have unambiguous association between requests and responses. Josef disagrees and that the desired effect is already achieved in the current system. Padraig said that the CR is going beyond simply matching requests and responses – it effectively linking sets of transactions together. Rami has sympathy with Ian's arguments but it is too late in the day to introduce this. Josef explained that with a synchronous protocol you do not need transaction id. Ian maintained that we should not assume that messaging applications use synchronous methods as they are quite likely to be asynchronous. Rami thinks that this should be postponed to R6. Ileana wants stage 2 to be generic and independent of stage 3.

After extensive discussion and further online revision the document was approved

Conclusion: Approved.

| Tdoc | Title | Source | Comment |
|-----------|--|---------|-------------|
| T2-020548 | CR 23.140 REL-5 consistent terminology | Siemens | Revised 479 |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|----------|------------------|
| T2-020549 | CR 23.140 Persistent Storage Status Text | Openwave | Derived from 479 |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---------------------|--------|---------|
| T2-020564 | Message size in CDR | Telica | |

Discussion: Ian found it difficult to find a suitable place for the definition. Rami thought that it could be in an informative annex. Ville is happy about the wording, just unsure of the location. Vasilis warned everyone that there may be a significant differences in size for the message when it is submitted or retrieved even without transcoding. Paolo will create an LS to SA5 to inform them about this new definition message size.

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|---------|-------------|
| T2-020532 | CR 23.140 Rel-5 Automatic Bearer Selection for MMS | Siemens | Revised 484 |

Discussion: Henrik questioned what happens if two different applications have simultaneous requirements for different bearers? Which get priority? Josef felt it was down to terminal implementation. Ileana felt that T3 will solve this problem. This CR should be sent to T3

Conclusion: Approved

MMS Release 6 Work Item Description

It was agreed that a draft WID would be created this week and sent to T plenary for information

| Tdoc | Title | Source | Comment |
|-----------|-------------------------|--------|---------|
| | | | |
| | | | |
| T2-020540 | Draft MMS Release 6 WID | | |
| | | | |

Discussion: This is Josef's initial draft based upon email discussions and postponed items from R5. It was agreed that a simpler list is needed. Delegates brainstormed ideas to make up a list if areas. Vasilis will work on the draft and sort all the items to generic categories. When completed the list will be sent to SA1.

Rami proposed to have a joint ad hoc meeting to develop new MMS requirements. Ville pointed out that the WID is not the definitive list of requirements and its contents should be easy to understand and generic. Ian finds the list very useful in explaining to T plenary the amount of work facing T2 on MMS. Vasilis made the point that we should not try a predict what we can and cannot achieve for release6, just lets get on with the work.

It was agreed to send this draft WID to SA1 and T plenary for information. Revised version in 571. LS in 572 to send this to SA1.

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|-------------------------------------|--------|---------|
| | | | |
| | | | |
| T2-020571 | Preliminary Draft MMS Release 6 WID | SWG3 | |
| | | | |

Discussion:

Conclusion: Noted

Outgoing Liaisons

| Tdoc | Title | Source | Comment |
|-----------|----------------------------|----------|---------|
| T2-020321 | LS to SA5 on VASP charging | Comverse | |

Discussion: Ville pointed out that comments made in Seattle have not been included.

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|--------------------------------------|--------|---------|
| | | | |
| | | | |
| T2-020527 | LS to SA5 on service management | | |
| 12 020027 | and to place our ser vice management | | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|--------------------------------------|--------|---------|
| T2-020525 | LS to SA3 on Subscriber Certificates | | |

Discussion: new version in 574

Conclusion: Noted

| Tdoc | Title | Source | Comment |
|-----------|---------------------------------------|--------|---------|
| T2-020530 | LS on MMS configuration to T3 and SA1 | | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|--------|---------|
| T2-020531 | LS on Automatic bearer selection for MMS delivery and submission to T3 | | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|--------|---------|
| | | | |
| T2-020539 | LS on Use cases for MMS VAS to SA1, GSM-A SERG/TWG | | |

Discussion:

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|-----------|---|--------|---------|
| T2-020557 | LS on Transfer from T2 to SA4 of Responsibility for MMS Formats and Codecs to SA4 | | |

Discussion: Rami (Comverse) commented that Streaming is not described clearly in the present 23.140. It should be cleared.

Conclusion: Approved

| Tdoc | Title | Source | Comment |
|--------|-------|--------|---------|
| | | | |
| | | | |
| T2-020 | LS on | | |
| | | | |

| _ | | | | • | | |
|----|-----|-----|-----|--------------|---|---|
| 11 | isa | 111 | CCI | \mathbf{n} | n | • |
| | | | | | | |

Conclusion:

Future meetings:

| Tdoc | Title | Source | Comment |
|-----------|------------------------------------|---------|---------|
| | | | |
| | | | |
| T2-020483 | Meeting planning for MMS Release 6 | Siemens | |
| | | | |

Discussion:

Conclusion: Noted; It was agreed to plan future ad hoc meetings (1 between every T2 plenary) in advance for REL-6. Moreover, an urgent need for a JM with SA1 to fix the scope and requirements for REL-6 was identified. Suitable dates for these meetings need to be defined offline.

Annex A – Complete Document List

Colour coding:

PROCESSED COMPLETELY (e.g. approved) - OUTPUT TO T2

PROCESSED COMPLETELY (e.g. noted/approved) – NO OUTPUT TO T2

PENDING / ACTION

ACTIVELY POSTPONED AFTER DISCUSSION

NOT DISCUSSED YET

| Document # | Subject | Source | Status within SWG3 | Comments |
|---------------|---|-------------------------|--------------------------|---|
| T2-020321 | LS to SA5 on Charging Support for VASP MMS Connectivity | Comverse | approved | reply-LS to T2- 020346 |
| T2-020322 | LS to SA1 on charging MMS models | Teleca | postponed | result of T2- 020517 (SA#15 approved stage 1 CR) |
| T2-020323 | LS to SA1 on MMS Stage 1 Requirements for REL-5 and REL-6 | Nokia | approved | T2 approved at T2#17 OP; reply-LS to T2-020335 |
| T2-020325 | LS from BARG CPWP and SMS SC on Message Volume Measurement Methods | CPWP Doc 020/02 rev3 | noted | |
| T2-020327 | LS from SA1 on Digital Rights Management (DRM) | S1-020493 | noted | |
| T2-020328 | LS from SA1 on revised "Draft Push Service Stage 1" | S1-020543 | noted | |
| T2-020330 | LS from SA1 on Packet switched streaming service stage 1 TS for release 5 | S1-020605 | noted | |
| T2-020334 | LS from SA2 reply on: "Draft Push Service Stage 1" | S2-020868 | noted | |
| T2-020335 | LS from SA1 on 3GPP TSG SA WG 1 MMS SWG | S1-020518 | noted | reply-LS in T2- 020323 |

| | SWG | | | 020323 |
|-----------|---|------------|-----------|---------------------------------------|
| T2-020336 | LS from SA1 on Support of "Recipient Party pays" | S1-020519 | noted | reply-LS in T2- 020322; |
| T2-020338 | LS from SA4 about transfer from T2 to SA4 of responsibility for MMS formats and codecs | S4-010196 | noted | |
| T2-020343 | LS from SA3 reply on support for subscriber certificates | S3-020163 | noted | reply-LS in T2- 020525 |
| T2-020345 | LS from SA5 reply on: "Draft Push Service Stage 1" | S5-020045 | noted | |
| T2-020346 | LS from SA5 reply on: "Liaison Statement on charging support for VAS MMS Connectivity Interface" | S5-020196 | noted | reply-LS in T2- 020321; |
| T2-020350 | LS from SA5 on on 3GPP SA1 MMS SWG | S5-024033 | noted | reply-LS in T2- 020322; |
| T2-020351 | LS from SA5 on VASP MMS Connectivity joint meeting | S5-020322 | noted | reply-LS in T2- 020321; |
| T2-020352 | LS from SA5 on VASP MMS Connectivity | S5-022007 | noted | reply/LS in T2- 020527; |
| T2-020357 | LS from CN4 Complement to the Answer LS on MSISDN Address resolution for MMS using MAP operations | N4-020512 | noted | |
| T2-020367 | LS to SA1 on draft MMS REL-6 WID | Siemens | approved | T2 approved at T2#17 OP |
| T2-020460 | Agenda SWG3#17 | SWG3 chair | approved | |
| T2-020461 | Meeting Report SWG3#17 | SWG3 chair | open | |
| T2-020462 | draft meeting report SWG3 MMS meeting, Seattle | SWG3 chair | approved | APPROVED at T2#17-OP |
| T2-020463 | MMS end-to-end security services | GEMPLUS | postponed | |
| T2-020464 | CR 23.140 REL-6 MMS end-to-end security services using S/MIME and USIM | GEMPLUS | postponed | |
| T2-020465 | CR 23.140 Rel-5 Status text in the MM1_delivery_report.REQ | Materna | rejected | |
| T2-020466 | CR 23.140 Rel-5 information field in notification | Materna | rejected | |
| T2-020467 | CR 23.140 Rel-5 reverse charging on MM7 | Materna | noted | revised in T2- 020485 |
| T2-020468 | CR 23.140 Rel-5 Encapsulation of a short message in a multimedia message | Alcatel | approved | |
| T2-020469 | Clarifications on attaching multimedia message content to MM7 Stage 3 CR | Nokia | endorsed | To be reflected in the MM7 stage 3 CR |

| T2-020470 | Clarification of the requirement for type 0 Short | Vodafone | noted | |
|-------------------|--|---------------------------|-----------|----------------|
| 12 020470 | Messages | Group, Eplus, | Hoted | |
| | S . | mm02 | | |
| TO 000474 | CD 02 40 Db2 (Cat. E) Clarification of the | Vadatasa | | |
| T2-020471 | CR 03.40 Ph2 (Cat. F) Clarification of the requirement for type 0 Short Messages | Vodafone Group, Eplus, | noted | |
| | requirement for type o orion messages | mm02 | | |
| | | 1111102 | | |
| T2-020472 | CR 03.40 R96 (Cat. A) Clarification of the | Vodafone | noted | |
| | requirement for type 0 Short Messages | Group, Eplus, | | |
| | | mm02 | | |
| T2-020473 | CR 03.40 R97 (Cat. A) Clarification of the | Vodafone | noted | |
| | requirement for type 0 Short Messages | Group, Eplus, | | |
| | 1 21 9 | mm02 | | |
| TO COOKE 4 | | | | |
| T2-020474 | CR 03.40 R98 (Cat. A) Clarification of the | Vodafone | noted | |
| | requirement for type 0 Short Messages | Group, Eplus, mm02 | | |
| | | 1111102 | | |
| T2-020475 | CR 23.040 R99 (Cat. A) Clarification of the | Vodafone | noted | revised in T2- |
| | requirement for type 0 Short Messages | Group, Eplus, | | 020541 |
| | | mm02 | | |
| T2-020476 | CR 23.040 Rel-4 (Cat. A) Clarification of the | Vodafone | noted | revised in T2- |
| 12-020470 | requirement for type 0 Short Messages | Group, Eplus, | noted | 020542 |
| | requirement for type o enort weedsages | mm02 | | 020042 |
| | | | | |
| T2-020477 | CR 23.040 Rel-5 (Cat. A) Clarification of the | Vodafone | noted | revised in T2- |
| | requirement for type 0 Short Messages | Group, Eplus, | | 020543 |
| | | mm02 | | |
| T2-020478 | CR 23.140 REL-5 Correction to MM7 Stage 2 | SWG3#11 | noted | revised in T2- |
| | on Address Visibility in Sender and Recipient | | | 020536; |
| | IEs | | | |
| T2-020479 | CD 22 140 DEL E consistent terminalegy | Siemens | notod | revised in T2- |
| 12-020479 | CR 23.140 REL-5 consistent terminology | Siemens | noted | 020548 and T2- |
| | | | | 020549 and 12- |
| | | | | 020010 |
| T2-020480 | CR 23.140 REL-5 Alignment of 23.140 with | Siemens, | endorsed | revised in T2- |
| | 26.140 | Nokia | | 020551 |
| T2-020481 | Definition of message size in MMS (discussion | Siemens | noted | |
| . 2 020 101 | document) | 0.01110110 | | |
| | · · | | | |
| T2-020482 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020483 | Moeting planning for MMS DEL 6 (discussion | Siemens | noted | |
| 12-020463 | Meeting planning for MMS REL-6 (discussion document) | Siemens | noted | |
| | dodinont) | | | |
| T2-020484 | CR 23.140 Rel-5 Automatic Bearer Selection | Siemens | noted | revised in T2- |
| | for MMS | | | 020532 |
| T2-020485 | CR 23.140 Rel-5 Charged Party Indication on | Materna, | noted | revised in T2- |
| 12-020465 | MM7 | Nokia, Teleca, | noted | 020533 |
| | | Vodafone, | | 020000 |
| | | Ericsson | | |
| | | | | |
| T2-020486 | CR 23.140 Rel-6 User Prompt Identifier | Ericsson | postponed | |
| | The state of the s | | - 20.100 | |

| T2-020487 | MMS end-to-end security services : use cases | Orange | postponed | |
|-----------|---|------------------------------|-----------|---------------------------|
| T2-020488 | CR 23.040 REL-5 Clarification of bit value combinations within TP-PI | Logica, Siemens | approved | |
| T2-020489 | CR 23.040 REL-5 TP-DCS values for SIM data download | Siemens | noted | revised in T2- 020528; |
| | | | | LS to T3 in T2- 020529 |
| T2-020490 | CR 23.040 REL-5 References to the TP-RD bit | Siemens | approved | |
| T2-020491 | CR 23.040 REL-5 Occurrence of the Reply Address Element | Siemens | noted | revised in T2- 020565 |
| T2-020492 | CR 23.040 REL-5 WVG Corrections and Clarifications | Bijitec | noted | |
| T2-020493 | CR 23.140 Rel-5 inclusion of previously sent field to MM7 | Nokia | rejected | |
| T2-020494 | CR 23.140 REL-5 MM7 Interface - Message Distribution Indicator | AT&T Wireless | noted | revised in T2- 020537 |
| T2-020495 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020496 | CR 23.140 REL-5 Consistent use of RFC2822 | CMG | postponed | |
| T2-020497 | CR 23.140 REL-5 FQDN in RFC822 fields on MM4 | CMG | noted | |
| T2-020498 | CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports | CMG | noted | revised in T2- 020562 |
| T2-020499 | CR 23.140 Rel-5 Binary Encoding of MMS Connectivity Information for storage on the USIM | Siemens | noted | revised in T2- 020521 |
| T2-020500 | CR 23.140 REL-5 MM7 stage 3 endorsed by SWG3#11 | Ericsson | noted | revised in T2- 020535 |
| T2-020501 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020502 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020503 | Use cases for VAS - discussion doc | Telia | noted | revised in T2- 020538 |
| T2-020504 | 23.140 v5.2.0 clarifications | Telia | noted | revised in T2- 020563 |
| T2-020505 | CR 23.140 REL-5 Additional information elements for the MM1 abstract messages | Schlumberger Sema, Teleca | endorsed | revised in T2- 020560 |
| T2-020506 | CR 23.140 REL-5 Acknowledgements for the unconfirmed transactions | Schlumberger Sema | rejected | |
| T2-020507 | withdrawn | withdrawn | withdrawn | withdrawn |

| T2-020508 | MMS timezones - discussion doc | Teleca | noted | revised in T2- |
|-----------|--|--------------|-----------|---------------------------|
| | | | | 020546 |
| T2-020509 | CR 23.041 Rel-4 Update of references | Teleca | postponed | POSTPONED TO T2#17-CP |
| T2-020510 | EMS feature overview | T2 secretary | noted | |
| T2-020511 | CR 23.140 Rel-5 Parameters for CDR creation related to VASP/VAS connectivity via MM7 | Comverse | approved | |
| T2-020512 | CR 23.041 R99 Update of references | MCC | postponed | POSTPONED TO T2#17-CP |
| T2-020513 | LS-reply to T2-020351 on JM SA5/CN5/T2 on MMS charging | Siemens | approved | T2 approved at T2#17 OP; |
| | | | | reply-LS to T2- 020351 |
| T2-020514 | SWG3#11 agreed MM7 stage 3 design principles | SWG3#11 | noted | |
| T2-020515 | CR 22.140 REL-5 - MMS support of both MSISDN and e-mail addressing schemes (SP-020055 CR-11) | SA1 | noted | |
| T2-020516 | CR 22.140 REL-5 - MMS configuration information in the USIM (SP-020055 CR-13) | SA1 | noted | LS in T2-020530 |
| T2-020517 | CR 22.140 REL-5 - Support of charging | SA1 | noted | LS in T2- |
| | models in MMS (SP-020193) | | | 020322; |
| T2-020518 | CR 22.140 REL-5 - Automatic bearer selection for MMS delivery and submission (SP-020195) | | noted | LS in T2-020531 |
| T2-020519 | SWGB#27bis_Service Charging_Report | S5-024046 | noted | Noted at T2#17- OP |
| T2-020520 | Generic Approach for UPI in MMS | Siemens | noted | revised in T2- 020526 |
| T2-020521 | CR 23.140 Rel-5 Binary Encoding of MMS Connectivity Information for storage on the USIM | Siemens | noted | revision of T2- 020499 |
| | OSIIVI | | | revised in T2- 020559 |
| T2-020522 | CR 23.140 REL-4 Mandatory MM1_retrieve.RES | Siemens | postponed | |
| T2-020523 | LS to SA5, WAP MMDC on REL-4 mandatory MM1_retrieve.RES | Siemens | postponed | |
| T2-020524 | Discussion of stage 1 push specification | Comverse | postponed | |
| T2-020525 | reply-LS to SA3 on T2-020343 (subscriber certificates) | Comverse | noted | revised in T2- 020574 |
| T2-020526 | Generic Approach for UPI in MMS | Siemens | postponed | revision of T2- 020520 |

| | | | | 020520 |
|-----------|---|---|----------|---|
| T2-020527 | reply-LS to SA5-SWGA on T2-020352 on Service Operations Management on MM7 | Nokia | approved | |
| T2-020528 | CR 23.040 REL-5 TP-DCS values for SIM data download | Siemens | approved | revision of T2- 020489 |
| T2-020529 | Ls to T3 on TP-DCS values for SIM data download | Siemens | approved | |
| T2-020530 | LS to T3 and SA1 on MMS configuration information in the USIM | Siemens | approved | |
| T2-020531 | LS to T3 and SA1 on Automatic bearer selection for MMS delivery and submission | Siemens | approved | |
| T2-020532 | CR 23.140 Rel-5 Automatic Bearer Selection for MMS | Siemens | approved | revision of T2- 020484 |
| T2-020533 | CR 23.140 Rel-5 Charged Party Indication on MM7 | Materna, Nokia, Teleca, Vodafone, Ericsson | approved | revised T2- 020485 |
| T2-020534 | CR 23.140 REL-5 MM1-MM7 and MM4-MM7 header mapping | Ericsson | approved | |
| T2-020535 | CR 23.140 REL-5 MM7 stage 3 | Ericsson, Nokia, Comverse, Logica, Openwave | approved | revision of T2- 020500 |
| T2-020536 | CR 23.140 REL-5 Correction to MM7 Stage 2 on Address Visibility in Sender and Recipient IEs | SWG3#11 | approved | revision of T2- 020478 |
| T2-020537 | CR 23.140 REL-5 MM7 Interface - Message Distribution Indicator | AT&T Wireless | noted | revision of T2- 020494 revised in T2- 020547 |
| T2-020538 | Use cases for VAS - discussion doc | Telia | noted | revision of T2- 020503 |
| T2-020539 | LS to SA1 and GSMA-SERG on Use cases for VAS | Telia | approved | |
| T2-020540 | Very draft basis for an MMS REL-6 Work Item Description | Siemens | noted | |
| T2-020541 | CR 23.040 R99 Clarification of the requirement for type 0 Short Messages | Vodafone Group, Eplus, mm02, Sonera | approved | revision of T2- 020475 |

| T2-020542 | CR 23.040 Rel-4 Clarification of the requirement for type 0 Short Messages | Vodafone Group, Eplus, mm02, Sonera | approved | revision of T2- 020476 |
|-----------|---|---|-----------|----------------------------|
| T2-020543 | CR 23.040 Rel-5 Clarification of the requirement for type 0 Short Messages | Vodafone Group, Eplus, mm02, Sonera, Telia | approved | revision of T2- 020477 |
| T2-020544 | CR 23.140 R'99 Encapsulation of a short message in a multimedia message | Alcatel | approved | |
| T2-020545 | CR 23.140 Rel-4 Encapsulation of a short message in a multimedia message | Alcatel | approved | |
| T2-020546 | CR 23.140 REL-5 Clarifications concerning the use of timestamp | Schlumberger Sema | noted | revision of T2- 020508 |
| T2-020547 | CR 23.140 REL-5 MM7 Interface - Message Distribution Indicator | AT&T Wireless | approved | revision of T2- 020537 |
| T2-020548 | CR 23.140 REL-5 consistent terminology | Siemens | approved | revision of T2- 020479 |
| T2-020549 | CR 23.140 REL-5 Store status in stage 2 features | Openwave | approved | resulted from T2-020479 |
| T2-020550 | CR 23.140 Rel-5 Encapsulation of a short message in a multimedia message | Alcatel | approved | revision of T2- 020468 |
| T2-020551 | CR 23.140 REL-5 Alignment of 23.140 with 26.140 | Siemens, Nokia | approved | revision of T2- 020480 |
| T2-020552 | CR 23.040 REL-5 corrections to WVG in EMS | Motorola, Bijitec | approved | revision of T2- 020492 |
| T2-020553 | CR 23.040 REL-5 clarifications to WVG in EMS | Motorola, Bijitec | approved | revision of T2- 020492 |
| T2-020554 | CR 23.040 REL-5 Websafe color palette in WVG in EMS | Motorola, Bijitec | approved | revision of T2- 020492 |
| T2-020555 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec | noted | revision of T2- 020492; |
| T2-020556 | Summary of key changes in T2-020552 and T2-020555 | Motorola, Bijitec | noted | |
| T2-020557 | reply-LS to T2-020338 on MMS codecs | Nokia | approved | |
| T2-020558 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020559 | CR 23.140 Rel-5 Binary Encoding of MMS Connectivity Information for storage on the USIM | Siemens | approved | revision of T2- 020521 |
| T2-020560 | CR 23.140 REL-5 Additional information elements for the MM1 abstract messages | Schlumberger Sema, Teleca | approved | revision of T2- 020505 |

| T2-020561 | withdrawn | withdrawn | withdrawn | withdrawn |
|---|--|--|---|--|
| T2-020562 | CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports | CMG | noted | revision of T2- 020498; |
| | | | | revised in T2- 020570 |
| T2-020563 | 23.140 v5.2.0 clarifications | Telia | approved | revision of T2- 020504 |
| T2-020564 | CR 23.140 REL-5 Message Size | Teleca, Openwave | approved | |
| T2-020565 | CR 23.040 REL-5 Occurrence of the Reply Address Element | Siemens | approved | revision of T2- 020491 |
| T2-020566 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020567 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec | postponed | revision of T2- 020555; |
| | | | | POSTPONED TO EMAIL DISCUSSION AND APPROVAL |
| T2-020568 | CR 23.040 REL-5 refinements to WVG in EMS | Motorola, Bijitec | postponed | revision of T2- 020555; |
| | | | | POSTPONED TO EMAIL DISCUSSION AND APPROVAL |
| | | | | |
| T2-020569 | LS-reply to T2-020325 to BARG and SA5 on message size definition | Vodafone | postponed | POSTPONED TO T2#17-CP |
| T2-020569 T2-020570 | | Vodafone CMG | postponed | |
| | message size definition CR 23.140 REL-5 Correction of responsibility | | | TO T2#17-CP revision of T2- |
| T2-020570 | message size definition CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports preliminary draft MMS REL-6 Work Item | CMG SWG3 | approved | TO T2#17-CP revision of T2- |
| T2-020570 T2-020571 | message size definition CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports preliminary draft MMS REL-6 Work Item Description LS to SA1 cc T on preliminary draft MMS REL- | CMG SWG3 | approved noted | TO T2#17-CP revision of T2- 020562 POSTPONED |
| T2-020570 T2-020571 T2-020572 | message size definition CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports preliminary draft MMS REL-6 Work Item Description LS to SA1 cc T on preliminary draft MMS REL-6 WID | CMG SWG3 Openwave Openwave, Comverse, Schlumberger | approved noted postponed | TO T2#17-CP revision of T2- 020562 POSTPONED TO T2#17-CP POSTPONED |
| T2-020570 T2-020571 T2-020572 T2-020573 | message size definition CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports preliminary draft MMS REL-6 Work Item Description LS to SA1 cc T on preliminary draft MMS REL-6 WID LS to SA1 on IMS Messaging reply-LS to SA3 on T2-020343 (subscriber | CMG SWG3 Openwave Openwave, Comverse, Schlumberger Sema | noted postponed postponed | TO T2#17-CP revision of T2- 020562 POSTPONED TO T2#17-CP POSTPONED TO T2#17-CP |
| T2-020570 T2-020571 T2-020572 T2-020573 | message size definition CR 23.140 REL-5 Correction of responsibility for MM4 delivery reports preliminary draft MMS REL-6 Work Item Description LS to SA1 cc T on preliminary draft MMS REL-6 WID LS to SA1 on IMS Messaging reply-LS to SA3 on T2-020343 (subscriber certificates) | CMG SWG3 Openwave Openwave, Comverse, Schlumberger Sema Comverse | approved noted postponed postponed approved | TO T2#17-CP revision of T2- 020562 POSTPONED TO T2#17-CP POSTPONED TO T2#17-CP revision of T2- 020525 |

| T2-02057 | 3 unused | unused | unused | unused |
|----------|----------|--------|--------|--------|
| T2-02057 | unused | unused | unused | unused |
| T2-02058 | unused | unused | unused | unused |
| T2-02058 | 1 unused | unused | unused | unused |
| T2-02058 | 2 unused | unused | unused | unused |
| T2-02058 | unused | unused | unused | unused |
| T2-02058 | unused | unused | unused | unused |
| T2-02058 | unused | unused | unused | unused |
| | | | | |

Annex B - Participants List

| Name | Organisation represented | Phone | Email |
|----------------------------|----------------------------|-------------------|-------------------------------------|
| | | | |
| Josef Laumen | Siemens AG | +49 5341 906 2830 | Josef.laumen@siemens.com |
| Pierfranco Rodi | Telecom Italia Spa | +39 011 2286139 | Pierfranco.rodi@tilab.com |
| Rami Neudorfer | Comverse | +972 3 765 5996 | Rami.neudorfer@comverse.com |
| William Luciw | Openwave Systems | +1 650 315 6042 | bill.luciw@openwave.com |
| Tim Ambrose | Hutchison3G | +44 07866 601096 | Tim.Ambrose@hutchison3g.com |
| Michael Ishizue | NTT DoCoMo | +81 3 5156-1777 | Ishizue@s1.nttdocomo.co.jp |
| Seishi Tsukada | NTT DoCoMo | +81 3 5156-1747 | tsukadas@nttdocomo.co.jp |
| Brian Marchent | Matsushita Communications | +44 1635 875580 | Brian.marchent@mci.co.uk |
| Hiroshi Saito | Matsushita Communications | +81 468405440 | Hiroshi.Saito@yrp.mci.mei.co.jp |
| Henrik Thuvesson | Telia AB | +46 70 598 51 22 | Henrik.b.thuvesson@telia.se |
| Wayne Carr | Intel Sweden | +1 503 264 7555 | wayne.carr@intel.com |
| Ian Harris | Teleca | +44 7785 360000 | Ian.harris@teleca.com |
| Padraig Murtagh | Logica Mobile Networks | +353 1 819 3400 | MurtaghP@logica.com |
| Manu Chatterjee | Motorola | +1.650.318.3286 | Manu.Chatterjee@Motorola.com |
| Ramin Afchar | Vodafone Group Plc | +49 211 820 2041 | Ramin.afchar@vodafone.com |
| Paolo Franzoi | Vodafone Omnitel | +39 348 2331149 | Paolo.franzoi@omnitelvodafone.it |
| Mikko Lantto | Elisa Communication Corp. | +358 50 506 7004 | Mikko.lantto@radiolinja.fi |
| Randall Grund | Motorola | +1.847.523.0946 | Randall.Grund@motorola.com |
| Jean-Andre Demeure | Sager Group | +33.1.3073.3700 | Jean-andre.demeure.@sagem.com |
| Peter Freitag | Siemens | +49.89.722.46460 | Peter.Freitag@siemens.com |
| Bok Sundresh | Research In Motion | +44 1784 477 465 | bsundresh@rim.net |
| Philippe Bellordre | Orange | +33 1 45 29 57 95 | Philippe.bellordre@francetelecom. |
| Volahanta Ramiaramanana | GEMPLUS Card International | +33 4 42 36 45 28 | Volahanta.ramiaramanana@gemplus.com |
| Gwenael Le Bodic | Alcatel | +33 1 55 66 46 41 | Gwenael.le_bodic@alcatel.fr |
| Ileana Leuca | AT&T Wireless | +1-425-580-7900 | Ileana.leuca@attws.com |
| Tim Costello | mmO2 | +44 7715 485989 | tim.costello@o2.com |

| Ville Warsta | Nokia Corporation | +358 7180 39614 | Ville.Warsta@nokia.com |
|-----------------------|-------------------|-----------------|--|
| Miraj Mostafa | Nokia Corporation | | Miraj.mostafa@nokia.com |
| Paul Voskar | Nokia UK | +44 1252867430 | Paul.voskar@nokia.com |
| Magnus Svensson | Ericsson | +46 706845770 | Magnus.svensson@sonyericsson.c om |
| Eskil Åhlin | Ericsson | | |
| Samuel De Hoyos | Ericsson | | |
| Kristian Andaker | Microsoft Corp. | +1 425 443 1085 | kristand@microsoft.com |
| Vasilis Polychronidis | Openwave Systens | +1 425 503 6676 | vasilis.polychronidis@openwave.c om |