

Draft T2#16 Report V 0.3 (2002-02)

**3rd Generation Partnership Project (3GPP);
Technical Specification Group Terminals (TSG-T);
Working Group 2 Mobile Terminal Services and Capabilities;
Draft Meeting Report
T2#16
Sophia Antipolis, France, 11-15 February 2002**



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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. Friedhelm RODERMUND (ETSI MCC) welcomed the delegates on behalf of the ETSI who hosted the meeting.

Since Ian HARRIS had changed companies, his continuation as T2 chairman had to be confirmed by T2. The letter of support from his new company Teleca Ltd. was provided **T2-020253**. The chairman asked if there were any objections to carrying him on in his role as T2 chairman until the end of his terms of office. No objections were expressed and therefore Ian HARRIS will continue as T2 chairman until the end of his term of office.

1.2 Approval of the agenda and schedule

The agenda and schedule in **T2-020002** were agreed.

1.3 Notification of IPR Obligations

The chairman made the call for IPRs. **T2-020003** 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#15, Cancun, 26-30 November 2001 (**T2-020001**) was approved.

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

ftp://www.3gpp.org/TSG_T/WG2_Capability/TSMT2_15/Report

1.5 Reports from other groups

1.5.1 TSG T

A summary of issues of T2 interest from T#14 meeting held in Kyoto, 12 -14 December 2001 was presented by Friedhelm RODERMUND in **T2-020006**:

* All T2 CRs were approved.

- * The LS from T2 to TSG-T, TSG-SA and TSG-CN about UE Functionality Split Relating to the IMS (TP-010238) was noted and the issue was discussed further at TSG-SA.
- * The LS from T2 to CN1 and SA4 in response to LS from CN1 on UMTS_AMR2 Dual-Mode Operation (TP-010239) was noted.
- * Concerns were expressed by Openwave and AT&T Wireless Services regarding the decision of T2 on the MMS MM1.
- * An LS from TSG-T to the WAP Forum (TP-010296) proposes that in order to facilitate closer links with the WAP Forum MMS group, they are invited to make a presentation on their work at the next TSG-T meeting.
- * TP-010263 contains a draft WI on MExE testing. Some concerns were raised about defining testing before MExE has done the ongoing transformation work. The concerns were noted and T1 and T2 were requested to take this into account when a final WI is presented. The draft WI was noted.
- * TP-010281 contains a revised Work Item Description (WID) for MExE Security Analysis Activity. It was noted that some of the milestones listed needed to be checked. It was also noted that some of the work may be ready in time for inclusion into Rel-5, but other parts were likely to be available for Rel-6. The WID was approved. T2 was requested to present the project plan (as listed in the milestones).
- * A discussion took place on incorporating guidelines on holding joint ad hoc meetings into the 3GPP working procedures. In the light of an increasing number of ad hoc / joint meetings between the WGs/SWGs of TSG-T and other bodies, it was felt that there was a danger that they may be ineffective, if they are not properly prepared and the results are not recorded and distributed to all who need them. The issue was forwarded to the TSG leader groups meeting.

Below is a list of all the documents submitted from T2 to TSG-T #14. You will find the T#14-docs on the server under ftp://ftp.3gpp.org/TSG_T/TSG_T/TSGT_14/docs/.

- * TP-010266 T2 status report for information
- * TP-010267 Draft meeting report T2#15 (including the Cancun joint meeting reports) for information
- * TP-010268 MExE CRs for approval
- * TP-010269 UE Interface and Capabilities CRs for approval
- * TP-010280 Messaging CRs for approval
- * TP-010281 WID MExE Security for approval
- * LSs from T2 to/cc TSG-T:
- * TP-010238 LS from T2 to TSG-T "UE Functionality Split Relating to the IMS"
- * TP-010239 LS from T2 to CN1, SA4 cc: TSG-T "UMTS_AMR_2"

The draft TSG-T#14 meeting report can be found in **T2-020007**.

The specifications updated after T#13 can be found at:

ftp://www.3gpp.org/Specs/2001_09

Ed EHRlich reported from some side discussions held at the recent SA meeting resulting in an understanding that "ad hoc" meetings are not 3GPP meetings because they are not defined in the 3GPP working procedures. He proposed that the T2 structure gets in line with this view either now or in May when something might have to be enforced. Prem SOOD proposed that T2 adopts some general principles that all information regarding a joint meeting is distributed in advance to all sponsoring groups and the meeting reports will be sent to the sponsoring groups and all docs are stored so that they are easily accessible for everybody. Peter NEUMANN stressed that joint meetings have to be agreed by the involved groups. Gunilla

BRATT identified problems with the horizontal way of working in 3GPP. No conclusions were made for the moment.

Gunilla BRATT reported from a discussion on conformance testing held at TSG-T (**T2-020257**).

1.5.2 TSG SA

Gunilla BRATT gave a brief summary of the SA#14 meeting regarding issues which are of interest to T2. Some questions came up on the vote regarding MMS MM1. As a reply it was explained how T2 tried to avoid the vote. Ian HARRIS repeated some background info regarding the reasons for having the vote. For IMS subsystem for Rel-5, CN identified a strong risk that some of the docs will not be ready in the Rel-5 timeframe. Regarding the UMTS AMR_2 Codec, GERAN expressed their preference on the use of the GSM-EFR codec for legacy reasons. It was reported that there is now a link regarding IETF dependencies from the 3GPP web page. Only five IETF work items are essential in regard to the Rel-5 timeframe. Currently it seems that 3GPP is getting a lot of support and there is a good chance that the IETF work will be ready in Rel-5. Tim AMBROSE highlighted the dependency on WAP Forum work for MMS.

The draft meeting report of TSG SA meeting #14 Kyoto, 17 - 20 December 2001 was available in **T2-020008**.

1.5.3 TSG T2 SWG1

No SWG1 meeting took place since the last T2 meeting.

1.5.4 TSG T2 SWG2

No SWG2 meeting took place since the last T2 meeting.

1.5.5 TSG T2 SWG3 EMS ad hoc

Arthur GIDLOW reported from the EMS ad hoc#3 meeting which was held in Paris, 16th – 18th January 2002. The report can be found in **T2-020133**. The report was agreed.

Although this was one of the intentions, the meeting could not agree on one of the three proposals for vector graphics. Regarding polyphonics, a CR from Alcatel appeared at the ad hoc meeting. Other parties did not have a chance to review it beforehand. Therefore, no progress was made on this. A discussion took place on UDH in CBS.

1.5.6 TSG T2 SWG3 MMS ad hocs

Josef LAUMEN reported from the MMS ad hoc meetings SWG3#9 and SWG3#10 held in Paris 14-18, and 21-25 January 2002. The reports can be found in **T2-020138** and **T2-020139**.

He thanked Rami NEUDORFER for chairing SWG3#9 during his absence. There is a basis for MM7 stage 2 available now. Still there are several contributions missing e.g. MM1 implications. It was agreed to base MM7 stage 3 on SOAP 1.1. There is another alternative to base MM7 on OSA for Rel-6. MM7 stage 2 framework parts like authorisation and authentication and MM7 stage 3 are still open. A base doc exists as the working assumption for persistent storage. Josef LAUMEN proposed to complete as many issues at this meeting as possible and to focus on other issues apart from MM7 stage 3. This was agreed as the working assumption of this meeting.

After the MMS meetings, several LSs were e-approved. Some of the emails sent out did not stick to the rules for e-approval e.g. the end of approval period was not clearly identified. The T2 secretary clarified that the default e-approval period is 2 weeks. The T2 chairman can decide on exceptions. T2 SWG1 has an e-approval procedure which includes the distinction between comment and approval period, and regular status reports. So far, T2 is following some basic rules for e-approval described in 21.900 "3GPP Working Methods". Friedhelm RODERMUND volunteered to create a document describing the T2 e-approval process in detail.

1.5.7 Joint T3/T2 SWG3 MMS meeting on USIM aspects

Ian HARRIS reported from the T3/T2 SWG3 MMS meeting on USIM aspects held on the 11th of January, 2002 in Sophia Antipolis, France.

Further discussion is needed regarding what happens when the available UICC capacity for MMS notifications is full. More details on the meeting's outcome can be found in the report **T2-020209**.

1.5.8 T2 GUP ad hoc

Gunilla BRATT (Ericsson) reported from T2 GUP (Generic User Profile) ad hoc and the GUP joint meeting 5-8 February in Sophia Antipolis. The report was not available yet for the opening plenary.

Some progress on the two docs under T2's responsibility 23.241 and 24.241 was made. Interdependencies of data like GPRS and WAP settings were discussed. CN4 confirmed that they have adopted for the Cx interface user profile the approach proposed by the GUP ad hoc in 23.241. A response output LS (T2-020256, to be discussed in SWG2 fist) has been created.

In the joint GUP ad hoc there was a discussion on terminology and architecture regarding "user", "subscriber" etc. From ETSI STF180 Human Factors a contribution was presented regarding Universal Communication Identifiers. Input form SA5 on Subscription management was reviewed. Three output docs were created for this meeting.

For the first week of April another joint GUP ad hoc meeting is planned at the same location as SA5. It might include also a T2 GUP ad hoc. Ian HARRIS raised concerns about the way the GUP work is currently organized. Gunilla BRATT proposed to ask TSG-T for guidance how this should be handled. Maybe a new working group in SA is required for data modelling and other GUP related issues.

1.5.9 T1

The T2 SWG1 chairman Lars BRENK reported that he will attend the next T1 to present the first draft of a MExE test case.

1.5.10 SA3

A WI on subscriber certificates has been provisionally approved. Only provisionally because it was not quite clear what was the content which the subscriber certificates were going to address. SA3 plans to do some clarifications this week and they might come back with a revised WI. Alignments are needed regarding what are the requirements on the terminal for MExE, DRM, and security support of subscription management.

1.5.11 SA5

Prem SOOD announced that TR 32.802 User Equipment Management Feasibility Study will be further looked at in SWG2.

1.5.12 IETF

Ileana LEUCA reported that there are some requirements regarding terminals supporting IPv6. T2 was not exposed so far regarding IPv6 requirements. . A presentation of IETF dependencies was made available for information in **T2-020258**.

1.5.13 WAP Forum

Soeren THOMSEN reported from the ongoing MMS work at the last week's WAP meeting. WAP MMS version 1.1 which is corresponding to MMS Rel-4 is almost complete. It seems that the WAP Forum will start work working on Rel-5 at their next meeting in April this year. Rel-5 completion is scheduled for the end of 2002.

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.3gpp.org/TSG_T/WG2_Capability/TSMT2_16_SophiaAntipolis/Docs

1.7 Incoming Liaison Statements:

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

T2-020037 is an LS from SA1 on Focus of TR 22.941. It was felt that there was no time to review TR 22.941 at this meeting again. TR 22.941 was reviewed by SWG3 a while ago and an LS with comments was fed back into SA1. The LS was noted.

T2-020249 is an LS from SA3 on Configuration of ciphering. 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:

T2-020205 is an LS to SA1 about UDH in CBS. Ville WARSTA did not agree to the statement "3GPP T2 notes that if CBS messages with some DCS values implies the fact that the message has a User Data Header structure, it suggests that all Information Elements defined in TS 23.040 (formerly GSM 03.40) could also be carried inside that structure." He proposes that SWG3 further discusses the LS. Some delegates doubt if the LS was necessary at all. The LS was not agreed and forwarded to SWG3 for further consideration.

T2-020254 is an LS to S3, S4, S5, N1, N4, N5, T3 cc S1, S2 on coordination of data definitions, identified in GUP development. The proposal is to have a single group responsible for the coordination of the data definitions, whilst noting that the actual data definition work is the responsibility of the respective working groups, where the relevant expertise resides. The addressed groups are invited to indicate a general agreement to the concept of unifying the Data Descriptions (e.g. using GUP as a starting point), and the generation of a common DDF for 3GPP. Vasilis POLYCHRONIDIS requested that more information be brought to SWG3 about the implications on MMS. Because most of the GUP works relates to Rel-6 it was felt that this should not be discussed at this SWG3 meeting. SWG2/SWG3 need to look at this jointly at the next T2 meeting. The question was raised if the user profile is automatically updated if one changes their SIM card? This is part of the high-level service requirement discussions lead by SA1 but not decided yet. The LS was agreed.

T2-020255 is an LS to S1, TSG-SA cc TSG-CN, TSG-T on GUP/DDF timescales. The LS suggest changing the timescales which were proposed by SA1. Prem SOOD expressed concerns that T2 should not send this LS with proposed changes to the schedule to a Work Item which is owned by SA1. Gunilla BRATT reported that it might be beneficial to have an own work item on the data decryption structure. Friedhelm RODERMUND reminded the meeting that every change of time schedules should be reflected in the GUP WID. It was agreed that the LS should only get sent to SA1. The LS was agreed with a few more minor changes.

1.9 3GPP Work Plan

The latest version of the 3GPP work plan was available in **T2-020009**. All WGs are requested to review and update the work plan at each meeting. The T2 SWGs were asked to do so.

1.10 Other opening plenary issues

1.10.1 Specs to be upgraded to Rel-5

T2-020043 lists T2 TSs/TRs which don't exist yet for Rel-5. For some of the documents CRs might be approved at this T2#16 meeting. For the remaining documents an explicit upgrade decision is required during the T2#16 closing plenary. Companies were asked to think about which of the docs should be upgraded to Rel-5. Decisions to be made at the closing plenary.

1.10.2 Important reminders

Friedhelm RODERMUND reminded the meeting about the existence of 21.900 3GPP working methods and 21.801 3GPP Drafting Rules. He stressed the importance of using meaningful titles for CRs and reminded delegates not to redistribute revised documents using the same tdoc numbers. Also renaming of distributed documents must be avoided. The chairman asked the SWG chairmen to use the new SWG report template.

1.10.3 Presentation: Global Regulatory Activity in Software Download

Mike CHARTIER (Intel) made a presentation on Global Regulatory Activity in Software Download. The slides can be found in **T2-020048**.

EC's Telecommunication Conformity Assessment and Market Surveillance Committee's (TCAM), the advisory committee chartered by the R&TTE Directorate, has created an SDR workgroup. MExE is consistently cited as the leading security framework for software downloads. MExE can meet the needs of regulators as well as industry. At the moment there are no holes in MExE identified but later during the year some requirements might be identified. At the moment, the SDR Forum asks MExE to keep them updated on their work.

T2-020049 is a response requested to an FCC inquiry on methods for the security and authentication of radio software.

1.10.4 Presentation: Wireless Gaming Engine

Gael ROSSET (TTPCom) made a presentation on TTPCom's Wireless Game Engine (WGE). The slides can be found in **T2-020062**. The WGE will be proposed as a MExE classmark.

This is an alternative to Java gaming (Java lacks performance when used in gaming applications). A demo was given showing what kind of games are possible on existing phones with this gaming engine. No additional hardware is required. Different layers of security are inherent. Processing power and not having a graphic card are huge problems in the realization of games on small devices. The WGE APIs are openly available.

Are there standard methods to download compiled code to phones from different manufactures? That's one of the goals in including this in the MExE standard. It was clarified that the download mechanism is not based on the ones described by GSMA M-Services.

2 Subgroup Meetings

Between T2 opening and closing plenary, four sub group sessions (SWG1, SWG2, SWG3 (SMS, EMS, CBS), SWG3 (MMS)) 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#16 meeting are reported in the following clauses 3 and 4.

3 Closing Plenary

3.1 Results SWG1 Execution Environment

SWG1 chairman Lars BRENK (TTPCom) presented the SWG1 report in **T2-020051**. The report can be found in Annex D. **T2-020291** is a presentation of the results of the SWG1 session.

Several CRs were created for cleaning-up and clarification for both TS 22.057 and TS 23.057, concerning spelling, terminology, abbreviations, references and clarifications. Common Language Infrastructure (CLI) has been added as a fourth MExE classmark. ORPK storage is no longer mandated in the ME. It was stressed that the MExE specification is NOT unstable. The work that is going on is enhancing and clarification work. The content of the security section and the classmark sections has not been changed for a long time. Work on a total restructuring of the MExE specification has started, and will be the very first task in Rel-6. No work was done on the MExE Security Analysis work item. Presentations were made by TTPCom about WGE and by Texas Instruments about STIP. A very simple MExE conformance test was presented for the MExE group for information, and will be presented as a CR to T1 next week.

T2-020054 is a CR to 23.057 Rel-5 adding ARPK (Administrator Root Public Key) to the abbreviation list. The CR was agreed.

T2-020070 is a CR to 23.057 Rel-5 updating several references. The CR was agreed.

T2-020073 is a CR to 23.057 Rel-5 replacing the term MExE application with MExE executable. The CR was agreed.

T2-020078 is a CR to 23.057 Rel 5 changing the URLs for the CLDC/MIDP references. The CR was agreed.

T2-020079 is a CR to 22.057 Rel 5 updating several references. The CR was endorsed to be sent to SA1.

T2-020083 is a CR to 22.057 Rel 5 correcting checking mistakes in 22.057. The CR was endorsed to be sent to SA1.

T2-020086 is a WID proposing a MExE Run-Time Independent Classmark. Paul VOSKAR expressed concerns about approving the WID without getting any feedback from SA1 first. Lars BRENK reported that an LS from SA1 was received a while ago asking if response and advice is needed from SA1. SWG1 felt that this was not necessary. The WID was agreed.

T2-020087 is a WID proposing MExE Release 6 enhancements. The question was raised about what work is done in terminal management because SWG2 is also involved. One of the results of the SA5's UE report will be that they propose T2 to lead the terminal management effort e.g. look into SyncML and see how this can support terminal management. The WID was agreed.

T2-020088 is a CR to 22.057 Rel 5 replacing the term MExE application with MExE executable. The CR was endorsed to be sent to SA1.

T2-020089 is a CR to 23.057 Rel-5 introducing the changes to the security parts of the specification related to the introduction of the new MExE Classmark 4. The CR was agreed.

T2-020285 is a CR to 23.057 Rel-5 introducing the MExE Classmark 4 which is based on CLI, the Common Language Infrastructure. Friedhelm RODERMUND reminded delegates that TSG-T is only interested in changes to the existing specification and not in information about changes to the previous CR on the CR cover sheet. The CR was agreed.

T2-020286 is a CR to 23.057 Rel-5 adding MSISDN to the security table as accessible user private data. The CR was agreed.

T2-020287 is a CR to 23.057 Rel-5 making storage of ORPK in ME optional. The CR was agreed.

T2-020288 is a CR to 23.057 Rel-5 on the interpretation of user control. Implementation details concerning the user interface are removed by this CR. Friedhelm RODERMUND pointed out that one word, as summary for change is normally not quite sufficient. The CR was agreed.

T2-020289 is a CR to 23.057 Rel 5 to specify more explicitly the MExE executable definition. The CR was agreed.

T2-020290 is a CR to 23.057 Rel-5 removing unused abbreviations. The CR was agreed.

T2-020294 is the cover LS for the three MExE stage 1 CRs to be sent to SA1. The word “agreed” was changed to “endorsed” because T2 cannot agree stage 1 CRs. The LS was agreed as **T2-020296**.

T2-020292 is an LS to the WAP download group which still has to be created. It will be sent for e-discussion and e-approval.

SWG1 does not like the term “MExE light” which has been used quite frequently for some time. The term is not used within SWG1 and they think that this term is misleading. However, SWG1 will continue the work to make the specification more readable and easier to implement.

3.2 Results SWG2 Terminal Interfaces

The SWG2 report in **T2-020121** was presented by SWG2 chairman Prem SOOD (Sharp). The report can be found in Annex E.

Topics discussed at this meeting included UE Functionality Split, AT Commands, Application and User Interaction (Terminal Local Model), Generic User Profiles, User Equipment Management, AMR Codecs, Data Synchronization, and various Liaison Statements.

T2-020093 is a R97 CR to 07.10 correcting the incorrect explanation of length indicator bit. **T2-020094** is the corresponding CR for 07.10 R98. **T2-020095** is the corresponding CR for 27.010 R99. **T2-020096** is the corresponding CR for 27.010 Rel-4. The set of CRs was agreed.

T2-020104 is a R99 CR on 27.007 aligning the abstract architecture with the General UMTS Architecture specification 23.101. Corrections are made to use the correct terms ME, MT, TA and UE. A reference to 23.101 is added. **T2-020105** is the corresponding CR for Rel-4. **T2-020098** is the corresponding CR for Rel-5. The set of CRs was agreed.

T2-020120 is a R99 CR to 27.901 on alignment of UE architecture with 23.101. **T2-020119** is the corresponding CR for Rel-4. The CRs were agreed.

T2-020102 is a Rel-4 CR to 23.227 on alignment of UE architecture with 23.101. **T2-020103** is the corresponding CR for Rel-5. The CRs were agreed.

T2-020115 is an LS to TSG-T cc S1, S2, joint GUP Ad Hoc on coordination of GUP requirements. The LS was agreed.

T2-020117 is an LS Reply to SyncML Initiative’s responses to T2’s questions. Paul VOSKAR reported that the SyncML specification became available this week and it would have been too late for SWG2 to review it. He will provide it to SWG2 for review. The LS was agreed.

T2-020114 is an LS to SA5, SA1 on relationship of GUP to subscription management. The LS was agreed.

T2-020116 is an LS to SA5 response to UEM Feasibility Study (TR 32.802). It includes an annex with comments on UE Management Technical Feasibility. T2 proposes a joint meeting with T2 SWG2 which could be co-located with the SA5 Meeting in Cork on April 2-5, 2002. The LS was agreed.

T2-020256 is an LS to CN4 on Cx Interface User Profile. The LS was agreed.

It was reported that the work item “vObjects & other constructs” will be merged with the User Profiles WI, and will be deleted as a separate WI.

3.3 Results SWG3 Messaging

The report of SWG3 was presented in **T2-020131** by Josef LAUMEN. It can be found in Annex F.

3.3.1 SMS/CBS/EMS

There were two different proposals presented on **Vector Graphics** at the opening of the meeting, but as a result of extensive discussion and behind-the-scenes activity, the companies behind these proposals were able to reach a compromise, and a single CR was eventually agreed by SWG3. **T2-020236** is the CR to 23.040 Rel-5 on Wireless Vector Graphics in EMS. WVG (Wireless Vector Graphics) provides a scalable and animated picture capability for EMS with high efficiency for message size by utilising a combination of compression technologies. WVG also provides Character Size drawing capability for EMS, which allows complex Asian language messages to be handwritten and displayed efficiently. Two errors were detected. The CR was revised to **T2-020301** and agreed.

There were two different proposals also for **Polyphonics**, and again, after extensive discussion, a compromise was reached and agreed in principle. Unfortunately insufficient time remained for the CR to be produced, and the interested parties undertook to prepare it in time for the T2#16 closing plenary. **T2-020238** is the CR to 23.040 Rel-5 on the introduction of polyphony media format for EMS. Two mistakes were detected. In E.13 a "may not" was changed to "might not" and a reference was added (Octet 8..n SMF as defined in [38], [40]). The CR was revised to **T2-020302** and agreed.

The chairman expressed special thanks to all companies who contributed to the success in these areas by hard work and their wish and ability to compromise.

T2-020225 is a CR to 23.040 R99 on MO-SMS duplicate message response. Friedhelm RODERMUND will remove the document embedded into the CR cover sheet's "reason for change". **T2-020226** is the corresponding CR to Rel-4. **T2-020227** is the corresponding CR to Rel-5. The CRs were agreed.

T2-020229 is a CR to 23.040 introducing a subaddressing scheme for SMS. This allows the sharing of a single SMSC access for the hosting of multiple two-way SMS/EMS applications. The CR was agreed.

T2-020230 is a CR to 23.040 adding an alternate reply address element. The CR was agreed.

T2-020237 is a CR to 23.040 introducing an Extended Object Data Request Command. The CR was agreed.

T2-020231 is a CR to 23.038 on User Data Header support over CB. It was noted that changes to this CR have not been seen by SWG3. The CR was therefore not agreed at the meeting. Friedhelm RODERMUND will put the CR on shortened e-approval for one week.

3.3.2 MMS

3.3.2.1 MMS REL-4

T2-020141 is a CR to 23.140 correcting the SMTP-address encoding. The CR was agreed.

T2-020150 is a CR to 23.140 correcting the MIME Content-Type Message format on MM4. The CR was agreed.

T2-020154 is a CR to 23.140 Rel-4 correction of the forwarding feature. The Usage of the Date and Time Information Elements and the Sender Address IE are clarified for the message forwarding use case. The CR was agreed.

3.3.2.2 MMS REL-5

SWG3 has finalised work on the stage 2 part of MMS REL-5. I.e. the functionality for MMS REL-5 is complete. No additional functionality will be inserted for MMS REL-5 after T2#16 (including MM7).

Outstanding work for MMS REL-5 is on the stage 3 description of the MM7 reference point, i.e., the detailed implementation of the connection of an MMS Relay/Server to a VASP. MM7 stage 3 finalization can be achieved with one additional ad hoc according to SWG3's understanding.

Hence, SWG3 requests to delay the REL-5 freeze of 3GPP TS 23.140 until T2#17 and T#16, respectively.

T2-020293 is the Work Item Submission Form for MMS Rel-5. Friedhelm RODERMUND explained that this document should give TSG-T information on what is missing in MMS Rel-5, when we expect to deliver it, and why T2 thinks it is important to have the missing part still for Rel-5. The document was agreed.

T2-020140 is a CR to 23.140 correcting the SMTP-address encoding. The CR was agreed.

T2-020144 is a CR to 23.140 introducing SMTP Service Extensions over MM4. The CR was agreed.

T2-020145 is a CR to 23.140 on MM4 Forward Routing Failure. The CR was agreed.

T2-020146 is a CR to 23.140 clarifying Existing Request Status Codes over MM4. The CR was agreed.

T2-020148 is a CR to 23.140 on Delivery Report Definition Correction. The CR was agreed as cat. F.

T2-020149 is a CR to 23.140 adding VASP to the abbreviation section. The CR was agreed as cat. F.

T2-020151 is a CR to 23.140 correcting the MIME Content-Type Message format on MM4. The CR was agreed.

T2-020155 is a CR to 23.140 Correction of MM1 Addressing. The CR was agreed.

T2-020156 is a CR to 23.140 correcting the forwarding feature. The CR was agreed.

T2-020157 is a CR to 23.140 on the detection of duplicate MMs. The CR was agreed.

T2-020158 is a CR to 23.140 on a Submission Description Enhancement regarding the time stamp. The CR was agreed.

T2-020161 is a CR to 23.140 adding a reference to 3GPP TS 32.235. The CR was agreed.

T2-020162 is a CR to 23.140 terminal capability negotiation. The CR was agreed.

T2-020211 is a CR to 23.140 specifying the recipient MSISDN address resolution mechanism including MNP considerations. The CR was agreed.

T2-020215 is a CR to 23.140 improving reply-charging consistency. The CR was agreed.

T2-020219 is a CR to 23.140 on support of Reply-Charging in MM7. VASP is added as an originator of Reply-charge request and recipient of Reply message. The CR was agreed.

T2-020261 is a CR to 23.140 defining VASP-related CDR generation. The CR was agreed.

T2-020262 is a CR to 23.140 introducing Persistent Networked-Based Storage Functions. It was agreed to delete in the reason for change everything except the first paragraph and tick the CN box. The CR was agreed.

T2-020263 is a CR to 23.140 on Functional Description and Abstract Messages for MM7 realization. The CR was agreed.

T2-020265 is a CR to 23.140 Storage of MMS parameters on the USIM. The CR was agreed.

T2-020270 is a CR to 23.140 on MM1-MM4 header mapping. The CR was agreed.

T2-020271 is a CR to 23.140 incorporating editorial changes. The CR was agreed.

T2-020272 is a CR to 23.140 providing correction to Call Data Records definitions. The CR was agreed.

T2-020274 is a CR to 23.140 on MM1 addressing formats. The CR was revised to **T2-020297** because some text was marked as deleted by mistake. The CR was agreed.

T2-020275 is a CR to 23.140 adding reference point MM8 to the billing system. The CR was agreed.

T2-020277 is a CR to 23.140 on MM7 addressing. The CR was agreed.

T2-020278 is a CR to 23.140 on clarification about Streaming in MMS. The CR was agreed.

T2-020279 is a CR to 23.140 on clarifications on responsibilities of MMS User Agent and MMS Relay/Server. The CR was agreed.

3.3.2.3 MMS REL-6:

Due to lack of time SWG3 has not produced a WID for MMS REL-6 yet nor discussed any REL-6 documents. However, continuing the work on MMS for REL-6 is seen to be very important. The following topics have been identified as potential work items for MMS REL-6:

- MM3: MMS Relay/Server – External Servers
- MM6: MMS Relay/Server – MMS User Databases
- Charging Enhancements (MM8, Reverse charging, Prepaid charging)
- Investigate GUP Interdependencies
- Investigate the Relationship between MMS and IMS
- Enhanced Streaming Support

3.3.2.4 Liaison Statements and other MMS business

T2-020217 is an LS to GSMA BARG on Billing and Network aspects Concerning MMS Interworking. T2 asks GSMA IREG group experts to participate next T2 meeting and give a presentation of GRX. The LS was agreed.

T2-020273 is an LS to SA1 on user privacy on MM7. The LS was agreed.

T2-020276 is an LS to SA3 on MM7 Security mechanisms. Friedhelm RODERMUND commented that it seems out of sequence to send an LS asking them for comments on an already approved CR. The LS was revised to **T2-020298** and agreed.

T2-020264 is an LS to T3 on a reply to T3 on MMS related changes for Rel-4. The LS was agreed.

T2-020299 is an LS to SA1, T3, on MMS provisioning and data consistency. The chairman reminded that T2 does not send LSs to its SWGs. The LS was revised to **T2-020300** and agreed.

The following LSs assigned to SWG3 could not be dealt with during the SWG3 session because of lack of time:

T2-020259 is an LS from GSMA on the MMS standardization of Presentation Language. The LS was noted by T2.

T2-020280 is an LS from SA1 on MMS Presentation Language. Josef LAUMEN thinks that the action in this LS is for SA4 only. He reported that SA4 is working on this issue. The LS was noted.

T2-020281 is an LS from SA1 on Confirmation of OSA Support for VASP MMS Connectivity. The LS was noted.

T2-020282 is an LS from WAP Forum RESPONSE TO THE LS ON CO-OPERATIVE WORKING. The LS was noted.

A separate SWG3 MMS meeting is scheduled for 3 ½ days during week of 29th April – 3rd May Seattle / USA (ATTWS).

Josef LAUMEN proposed to have a joint SWG2/SWG3 meeting during T2#17 on the relationship of MMS and GUP.

Regarding the work plan update, Josef LAUMEN reported that 95% of the MMS work is considered as completed. As reported above, MM7 stage 3 is missing.

4 Future meeting schedule

| Meeting | Date | Location | Host |
|--------------------------------|------------------|-----------------------|--------------------------|
| T#15 | 6 - 8 March 2002 | Korea | |
| T2 GUP ad hoc | 2- 5 April 2002 | Cork | Motorola |
| joint T2 GUP/SA5 SWG-A | 3 April | Cork | Motorola |
| joint T2 SWG2/SA5 SWG-A on UEM | 3- 4 April 2002 | Cork | Motorola |
| T2-SWG3#11 | 29 April – 2 Mai | Seattle / USA | ATTWS |
| T2#17 | 13-17 May 2002 | North America | American Friends of 3GPP |
| T#16 | 5 - 7 June 2002 | Marco Island, Florida | American Friends of 3GPP |
| T2#18 | 12-16 Aug 2002 | Velen, Germany | Materna |
| 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 |

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

T2-020043 lists all specs which don't exist in Rel-5 so far. It was decided that all specifications/reports will be upgraded to Rel-5 except 3GPP TR 27.903 "Discussion of synchronization standards". The purpose of this document was to evaluate different existing synchronization standards. One of them (SyncML) was chosen afterwards and incorporated into 27.103 "Wide Area Network Synchronization". It was therefore felt that 27.903 was not needed anymore.

Josef LAUMEN asked if there was any feedback from SWG2 regarding **T2-020252**, which is an LS to GUP on UICC exchange. Gunilla BRATT reported that the decision on the LS was that Ileana LEUCA would propose some text to be sent to the reflector.

6 Close of the Meeting

Ian HARRIS thanked all delegates and the subgroup chairmen for their contributions and work at this meeting. The meeting was very successful since a lot of controversial issues had been solved and most of the work for Rel-5 was completed. He thanked ETSI for hosting the meeting, and he expressed special thanks to Marie-Noëlle GIRARD, Friedhelm RODERMUND and all the ETSI people involved for arranging the meeting. It was noted that the wireless LAN worked in an extremely stable fashion.

Annex A List of all temporary documents

| TDOC | Subject | Source | SWG |
|-----------|--|-----------------|--------------|
| T2-020001 | Draft Meeting Report T2#15, Cancun, 26-30 November 2001 | T2 secretary | OP |
| T2-020002 | Draft Agenda T2#16 | T2 chairman | OP |
| T2-020003 | IPR guidance | MCC | OP |
| T2-020004 | T2 specs status list | MCC | OP |
| T2-020005 | 3GPP meeting calendar | MCC | CP |
| T2-020006 | Summary of T#14 issues of T2 interest | T2 secretary | OP |
| T2-020007 | Draft Report of TSG-T meeting #14 Kyoto, 12 -14 December 2001 | T secretary | OP |
| T2-020008 | Draft Report of TSG SA meeting #14 Kyoto, 17 - 20 December 2001 | SA secretary | OP |
| T2-020009 | 3GPP work plan | MCC | all SWGs |
| T2-020010 | withdrawn | | |
| T2-020011 | LS from SA1 on Draft stage 1 TS for Packet Switched Streaming Service | S1-011241 | SWG3 |
| T2-020012 | LS from SA2 on Confirmation of OSA Support for VASP MMS Connectivity | S2-013589 | SWG3 |
| T2-020013 | LS from SA2 on on "Address Resolution in MMS" | S2-013600 | SWG3 |
| T2-020014 | LS from SA3 on VASP MMS connectivity | S3-010698 | SWG3 |
| T2-020015 | LS from SA4 on Extended Streaming Service | S4-010660 | SWG3 |
| T2-020016 | LS from SA4 on Introduction Of UMTS_AMR_2 into R99 UE's | S4-010693 | SWG2 |
| T2-020017 | LS from SA4 on SA4 activity on 2D vector graphics formats | S4-010695 | SWG3 |
| T2-020018 | LS from SA5 on VASP MMS Connectivity | S5-010750 | SWG3 |
| T2-020019 | LS from SERG on MMS addressing | SERG | SWG3 |
| T2-020020 | LS from SERG on MMS addressing scheme | SERG | SWG3 |
| T2-020021 | LS from SyncML Forum: Responses to T2's Follow-Up Questions | SyncML Forum | SWG2 |
| T2-020022 | LS from SA2 on IMS identifiers and ISIM and USIM | S2-013599 | SWG2 |
| T2-020023 | LS from GUP joint ad hoc on Status of the Generic User Profile Work | UP-010128 | SWG2 |
| T2-020024 | LS from GUP joint ad hoc on Release of In-Process Stage 1 Specification to SA1 for Review and Continuing Development | UP-010129 | SWG2 |
| T2-020025 | LS from SA4 about transfer from T2 to SA4 of responsibility for MMS formats and codecs | S4-010699 | SWG3 |
| T2-020026 | LS from SA5 on Impacts of Subscriber and Equipment Trace | S5-020013 | OP/SWG2 |
| T2-020027 | withdrawn (LS from SA5 replaced by T2-020031) | | - |
| T2-020028 | withdrawn (LS from SA5 replaced by T2-020032) | | - |
| T2-020029 | LS from SA5 on Draft stage 1 TS for Packet Switched Streaming Service | S5-020044 | SWG3 |
| T2-020030 | LS from SA2 on Prefix allocation for IPv6 stateless address autoconfiguration | S2-020326 | OP/SWG2 |
| T2-020031 | withdrawn (LS from SA5 replaced by T2-020243) | S5-020016 | - |
| T2-020032 | withdrawn (LS from SA5 replaced by T2-020240) | S5-020017 | - |
| T2-020033 | LS to Wap Forum about UDH in CBS | SWG3 | - |
| T2-020034 | LS to SA1 on UDH over CBS feature | Swapcom | SWG3 |
| T2-020035 | LS to GSMA IREG cc SA2, GSMA SerG on routing of MMS traffic via MM4 | SWG3 | - |
| T2-020036 | LS from T1 on SMS testing | T1-010551 | SWG3 |
| T2-020037 | LS from SA1 on Focus of TR 22.941 | SA1 (TP-010235) | OP |
| T2-020038 | LS to SA5 cc CN5, SA2, SA1 on VASP MMS Connectivity | SWG3 | - |
| T2-020039 | LS from CN4 on Cx User Profile | N4-020197 | T2-GUP, SWG2 |
| T2-020040 | LS from CN1 Reply to Liaison Statement on Configuration of ciphering | N1-020444 | OP, SWG3 |
| T2-020041 | LS from CN2 "Reply to LS on VASP MMS Connectivity" | N2-020145 | SWG3 |
| T2-020042 | LS from CN4: reply to MSISDN Address resolution for MMS using MAP operations | N4-020187 | SWG3 |
| T2-020043 | T2 specs to be upgraded to Rel-5 | MCC | OP |
| T2-020044 | LS from SA1 on Response to S1-020045 LS on UE functionality split from T2. | S1-020244 | SWG2 |
| T2-020045 | LS from SA1 on Reply to GSM-A SerG Liaison statement on "Operator Requirements: Push Services Stage 1" | S1-020280 | SWG3 |
| T2-020046 | LS from SA1 on IMS Security requirements | S1-020300 | SWG2 |
| T2-020047 | LS to SA5 cc SA1 on charging support for VAS MMS Connectivity Interface | SWG3 | - |
| T2-020048 | Presentation: Global Regulatory Activity in Software Download | Intel | OP/SWG2 |

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| T2-020049 | RESPONSE REQUESTED TO FCC INQUIRY ON METHODS FOR THE SECURITY AND AUTHENTICATION OF RADIO SOFTWARE | Intel | OP |
| T2-020050 | agenda SWG1 MExE at T2#16 | Chairman | SWG1 |
| T2-020051 | report of SWG1 MExE at T2#16 | | SWG1 |
| T2-020052 | WID MExE Release 6 enhancements | Chairman | SWG1 |
| T2-020053 | WID MExE Wireless Game Engine | TTPCom | SWG1 |
| T2-020054 | CR 23.057 Rel-5 Adding ARPK to the abbreviation list | TTPCom | SWG1 |
| T2-020055 | TSG-T#14 issues related to T2 | Chairman | SWG1 |
| T2-020056 | Table of content for new certificate and PKI TS | Vodafone | SWG1 |
| T2-020057 | Classmark 4 security | Microsoft | SWG1 |
| T2-020058 | Classmark 4 non-security | Microsoft | SWG1 |
| T2-020059 | CLI Security model presentation | Microsoft | SWG1 |
| T2-020060 | .NET and web services with devices whitepaper | Microsoft | SWG1 |
| T2-020061 | Wireless Game Engine (WGE) presentation general | TTPCom | SWG1 |
| T2-020062 | Wireless Game Engine (WGE) presentation mini | TTPCom | SWG1 |
| T2-020063 | 23057-440 Restructured Specification version 1 | Ericsson | SWG1 |
| T2-020064 | MExE Run-Time Independent Classmark WID | Intel | SWG1 |
| T2-020065 | Presentation on the MExE Run-Time Independent Classmark WID | Intel | SWG1 |
| T2-020066 | CR 23.057 Rel-5 Updating the references | TTPCom | SWG1 |
| T2-020067 | CR 23.057 Rel-5 Adding MSISDN to the security table | TTPCom | SWG1 |
| T2-020068 | Response from MCC to tdoc T2-011139 regarding references | Chairman | SWG1 |
| T2-020069 | Capability negotiation test in a MExE device | TTPCom | SWG1 |
| T2-020070 | CR 23.057 Rel-5 Updating the references | TTPCom | SWG1 |
| T2-020071 | ORPK in ME | Ericsson | SWG1 |
| T2-020072 | Interpretation of user control | Ericsson | SWG1 |
| T2-020073 | CR 23.057 Rel-5 Replacing MExE application with MExE executable. | TTPCom | SWG1 |
| T2-020074 | CR 23.057 Rel 5 Specify more explicitly the MExE executable definition | TTPCom | SWG1 |
| T2-020075 | CR 22.057 Rel 5 Spell checking in 22.057 | TTPCom | SWG1 |
| T2-020076 | CR 22.057 Rel 5 Updating the references | TTPCom | SWG1 |
| T2-020077 | CR 22.057 Rel 5 Replacing MExE application with MExE executable | TTPCom | SWG1 |
| T2-020078 | CR 23.057 Rel-4 Changing the urls for the CLDC/MIDP references | Hewlett-Packard | SWG1 |
| T2-020079 | CR 22.057 Rel-5 Updating the references | TTPCom | SWG1 |
| T2-020080 | MEXE J2ME Interoperability Event | ETSI | SWG1 |
| T2-020081 | presentation STIP | Texas Instruments | SWG1 |
| T2-020082 | Withdrawn | | SWG1 |
| T2-020083 | CR 22.057 Rel 5 Spell checking in 22.057 | TTPCom | SWG1 |
| T2-020084 | Actual Wireless Game Engine (WGE) presentation general | TTPCom | SWG1 |
| T2-020085 | Template for discussions on the commercial viability of MExE | DoCoMo | SWG1 |
| T2-020086 | WID MExE Run-Time Independent Classmark | Intel | SWG1 |
| T2-020087 | WID MExE Release 6 enhancements | Chairman | SWG1 |
| T2-020088 | CR 22.057 Rel 5 Replacing MExE application with MExE executable | TTPCom | SWG1 |
| T2-020089 | Classmark 4 security | Microsoft | SWG1 |
| T2-020090 | agenda SWG2 at T2#16 | | SWG2 |
| T2-020091 | report of SWG2 at T2#16 | | SWG2 |
| T2-020092 | withdrawn | | SWG2 |
| T2-020093 | CR to 07.10 v6.4.0 "Incorrect explanation of length indicator bit" | Samsung | SWG2 |
| T2-020094 | CR to 07.10 v7.1.0 "Incorrect explanation of length indicator bit" | Samsung | SWG2 |
| T2-020095 | CR to 27.010 v3.3.0 "Incorrect explanation of length indicator bit" | Samsung | SWG2 |
| T2-020096 | CR to 27.010 v4.1.0 "Incorrect explanation of length indicator bit" | Samsung | SWG2 |
| T2-020097 | CR to 23.227 R5 align text with UE FS | Sierra Wireless Inc. | SWG2 |
| T2-020098 | CR to 27.007 R5 Alignment of architecture with 23.101 | Ericsson | SWG2 |
| T2-020099 | CR to 27.901 R99 Alignment of architecture with 23.101 | Ericsson | SWG2 |
| T2-020100 | CR to 27.901 R4 Alignment of architecture with 23.101 | Ericsson | SWG2 |

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| T2-020101 | withdrawn | | SWG2 |
| T2-020102 | CR to 23.227 R4 Alignment of architecture with 23.101 | Ericsson | SWG2 |
| T2-020103 | CR to 23.227 R5 Alignment of architecture with 23.101 | Ericsson | SWG2 |
| T2-020104 | CR to 27.007 R99 Alignment of architecture with 23.101 | Ericsson | SWG2 |
| T2-020105 | CR to 27.007 R4 Alignment of architecture with 23.101 | Ericsson | SWG2 |
| T2-020106 | Report of SA1-SWG-UE-FS Meeting, January 13, 2002 Phoenix Arizona | S1-020242 | SWG2 |
| T2-020107 | Report on Service Requirements for UE-FS TR22.944v101 | S1-020243 | SWG2 |
| T2-020108 | TS TS 23.241 | T2 GUP ad hoc | SWG2 |
| T2-020109 | TS TS 24.241 | T2 GUP ad hoc | SWG2 |
| T2-020110 | Report of GUP #7 Cancun | T2-GUP | SWG2 |
| T2-020111 | Report of T2-GUP #1 | GUP Joint AH | SWG2 |
| T2-020112 | Report of GUP #9 Sophia | GUP Joint AH | SWG2 |
| T2-020113 | GUP AH Response to LS from SA5 in T2-020243 | GUP Joint AH | SWG2 |
| T2-020114 | LS to SA5, SA1 on relationship of GUP to Subscription Management Response to T2-020243 | NTT-DoCoMo, Sharp, x x | SWG2 |
| T2-020115 | LS to TSG-T cc SA1, SA2, Joint GUP Ad Hoc: Proposal for Coordination of GUP-Related Work | NTT-D, x, x,x, | SWG2 |
| T2-020116 | LS to SA5: Response to T2-020240 on UEM TR32.802 | P. Neumann | SWG2 |
| T2-020117 | LS to SyncML Initiative on DevMan protocol | Kevin Holoubek | SWG2 |
| T2-020118 | Data Description Framework Files and Tools | T2-GUP | SWG2 |
| T2-020119 | CR to 27.901 R4 Alignment of architecture with 23.101 | Ericsson | SWG2 |
| T2-020120 | CR to 27.901 R99 Alignment of architecture with 23.101 | Ericsson | SWG2 |
| T2-020121 | SWG2 report | | SWG2 |
| T2-020122 | not used | | SWG2 |
| T2-020123 | not used | | SWG2 |
| T2-020124 | not used | | SWG2 |
| T2-020125 | not used | | SWG2 |
| T2-020126 | not used | | SWG2 |
| T2-020127 | not used | | SWG2 |
| T2-020128 | not used | | SWG2 |
| T2-020129 | not used | | SWG2 |
| T2-020130 | agenda SWG3 at T2#16 | | SWG3 |
| T2-020131 | report of SWG3 at T2#16 | | SWG3 |
| T2-020132 | CR 23.140: MM7 Stage 3 definition | Comverse | SWG3 |
| T2-020133 | EMS ad-hoc #3 meeting report | One2one | SWG3 |
| T2-020134 | CR 23.040 Subaddressing | Swapcom | SWG3 |
| T2-020135 | CR 23.030 Alternate return address | Swapcom | SWG3 |
| T2-020136 | CR 23.038 Support of UDH in CBS | Swapcom | SWG3 |
| T2-020137 | 23.040 R99: Change handling of SMS message type 0 | Cellpoint | SWG3 |
| T2-020138 | Draft Report of SWG3#09 | SWG3#09 chair | SWG3 |
| T2-020139 | Draft Report of SWG3#10 | SWG3 chair | SWG3 |
| T2-020140 | Correction on the SMTP-address address encoding (Release 5) | Openwave | SWG3 |
| T2-020141 | Correction on the SMTP-address address encoding (mirror - Release 4) | Openwave | SWG3 |
| T2-020142 | CR editorial Changes | Materna | SWG3 |
| T2-020143 | CR Recipient MSISDN address Resolution | MMS#9 | SWG3 |
| T2-020144 | Introduction of SMTP Service Extensions over MM4 | Ericsson | SWG3 |
| T2-020145 | MM4 Forward Routing Failure | Ericsson | SWG3 |
| T2-020146 | Clarification of Existing Request Status Codes over MM4 | Ericsson | SWG3 |
| T2-020147 | MM7 Transaction ID requirement | Materna | SWG3 |
| T2-020148 | Delivery Report Definition Correction | Nokia | SWG3 |
| T2-020149 | VASP Abbreviations | Nokia | SWG3 |
| T2-020150 | Correction on the MIME Content-Type Message format on MM4 (Release 4) | Openwave | SWG3 |
| T2-020151 | Correction on the MIME Content-Type Message format on MM4 (Release 5) | Openwave | SWG3 |
| T2-020152 | Functional Description and Abstract Messages for MM7 realization | Comverse | SWG3 |
| T2-020153 | Correction of Support for Addressing formats on the MM1 Interface | KPN | SWG3 |
| T2-020154 | CR to 23.140 Rel-4 correction of the forwarding feature | Siemens | SWG3 |

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| T2-020155 | Correction of MM1 Addressing | Nokia | SWG3 |
| T2-020156 | CR to 23.140 Rel-5 correction of the forwarding feature | Siemens | SWG3 |
| T2-020157 | CR 23.140 REL-5 Reject Duplicates | Logica | SWG3 |
| T2-020158 | CR 23.140 Rel-5: Submission Description Enhancement | Siemens | SWG3 |
| T2-020159 | CR 23.140 REL-5 reply charging consistency | Gemplus | SWG3 |
| T2-020160 | MM1-MM4 header mapping | Ericsson | SWG3 |
| T2-020161 | CR 23.140 REL-5 adding reference to 32235 | Siemens | SWG3 |
| T2-020162 | CR 23140-510 terminal capability negotiation | Siemens | SWG3 |
| T2-020163 | Persistent Networked-Based Storage Functions | Openwave | SWG3 |
| T2-020164 | Commentary of Persistent Network based Storage Functions | Openwave | SWG3 |
| T2-020165 | SNAP (draft-shapira-snap-00) | Comverse | SWG3 |
| T2-020166 | MM3 principles document (T2-011106, T2M010130) | Comverse | SWG3 |
| T2-020167 | Sending Messages to Non-MMS Recipients | Comverse | SWG3 |
| T2-020168 | Qualified retrievals | Openwave | SWG3 |
| T2-020169 | CR 23140 REL-5 Clarifications on responsibilities of MMS User Agent and MMS Relay/Server | Siemens | SWG3 |
| T2-020170 | CR 23.140 REL-5 addressing by unqualified name on MM1 | KPN, Comverse, Openwave | SWG3 |
| T2-020171 | LS on Billing and Network aspects Concerning MMS Interworking | Nokia | SWG3 |
| T2-020172 | CR 23.140 REL-5 on clarification of MMS specification interdependencies | Siemens | SWG3 |
| T2-020173 | CR 23.040 Rel-5 MIDI profile for EMS | Alcatel | SWG3 |
| T2-020174 | ? | Alcatel | SWG3 |
| T2-020175 | CR 23.140 REL-5 Storage of MMS parameters on the USIM | Gemplus | SWG3 |
| T2-020176 | Comments on draft CR 23.140 T2M020083 - Functional Description and Abstract Messages for MM7 realization | Nokia | SWG3 |
| T2-020177 | Comments on draft CR 23.140 T2M020089 - Persistent Network-based Storage Functions | Nokia | SWG3 |
| T2-020178 | CR 23.140: Clarification about Streaming in MMS | Nokia | SWG3 |
| T2-020179 | SP-Midi based EMS Polyphonic Melody Format | Ericsson, Nokia, Motorola | SWG3 |
| T2-020180 | CR 23.040 R99: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011025) | NTT DoCoMo | SWG3 |
| T2-020181 | CR 23.040 Rel-4: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011026) | NTT DoCoMo | SWG3 |
| T2-020182 | CR 23.040 Rel-5: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011027) | NTT DoCoMo | SWG3 |
| T2-020183 | CR 23.040 Extended Object Data Request Cmd | Motorola | SWG3 |
| T2-020184 | CR 23.040 Short Codes | Motorola | SWG3 |
| T2-020185 | CR23.040 Polyphony format for EMS | Motorola | SWG3 |
| T2-020186 | Polyphony supplemental info | Motorola | SWG3 |
| T2-020187 | CR23.040 Vector Graphics Proposal | Motorola | SWG3 |
| T2-020188 | Vector Graphics Benchmarks | Motorola | SWG3 |
| T2-020189 | Vector Graphics Supplementary Info | Motorola | SWG3 |
| T2-020190 | Discussion: Concatenated SMs and Replace Short Message feature | Siemens | SWG3 |
| T2-020191 | CR 23.040 Rel-5: Concatenated SMs with Replace Short Message PID | Siemens | SWG3 |
| T2-020192 | CR 23.040 Rel-5 Vector Graphics Format for EMS | Ericsson, Nokia, ZOOMON | SWG3 |
| T2-020193 | SVG Tiny_CVG Test Results | Ericsson, Nokia, ZOOMON | SWG3 |
| T2-020194 | GSMA TWG Support Letter for CR "handling of SMS message type 0 | Eplus | SWG3 |
| T2-020195 | MM7 Stage 3 Principles | Logica | SWG3 |
| T2-020196 | CR 23.140: Reply-ID for MM7 and other usage | Siemens | SWG3 |
| T2-020197 | CR 23.140 Rel-5: Clarification of MMS specification interdependencies | Siemens | SWG3 |
| T2-020198 | LS to SA1 about UDH in CBS | Swapcom | SWG3 |
| T2-020199 | Input Statement from Bijitec | Bijitec | SWG3 |
| T2-020200 | CR to 32.235 - MMS Charging specification inconsistency corrections | Nokia | SWG3 |
| T2-020201 | CR to 23.140 - MM7 addressing | Nokia | SWG3 |
| T2-020202 | CR to 23.140 - Support of Reply-Charging in MM7 | Nokia | SWG3 |

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| T2-020203 | CR to 23.140 - Annex C - Call Data Records | Nokia | SWG3 |
| T2-020204 | CR 23.040 Replace Type and Concatenated Messages | CMG | SWG3 |
| T2-020205 | LS to SA1 about UDH in CBS | Swapcom | SWG3 |
| T2-020206 | LS to SA2 on MMS OSA Functionality | Comverse | SWG3 |
| T2-020207 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | SWG3 |
| T2-020208 | selection of vector graphics for ems | EMC2 | SWG3 |
| T2-020209 | report of the joint T2/T2 MMS USIM meeting | | SWG3 |
| T2-020210 | vector graphics comparison | One2One | SWG3 |
| T2-020211 | CR 23.140 Recipient MSISDN address Resolution | Openwave | SWG3 |
| T2-020212 | CR 31.102 Rel-5 Introduction of MMS files and procedures | Siemens | SWG3 |
| T2-020213 | agenda SWG3 Messaging at T2#16 | SWG3 chair | SWG3 |
| T2-020214 | VAS use cases document | Telia | SWG3 |
| T2-020215 | CR 23.140 REL-5 reply charging consistency | Gemplus | SWG3 |
| T2-020216 | CR 23.140 - MM7 addressing | Nokia | SWG3 |
| T2-020217 | LS to GSMA BARG, IREG, TADIG, SA5 cc GSA SERG, WAP Forum on Billing and Network aspects Concerning MMS Interworking | Nokia | SWG3 |
| T2-020218 | Comments on draft CR 23.140 T2M020083 - Functional Description and Abstract Messages for MM7 realization | Nokia | SWG3 |
| T2-020219 | CR 23.140 - Support of Reply-Charging in MM7 | Nokia | SWG3 |
| T2-020220 | withdrawn | withdrawn | SWG3 |
| T2-020221 | Selection of vector graphics for ems | EMC2 | SWG3 |
| T2-020222 | SVG Compatibility with WVG | Motorola | SWG3 |
| T2-020223 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | SWG3 |
| T2-020224 | Discussion on the support of MIDI in EMS | Alcatel | SWG3 |
| T2-020225 | CR 23.040 R99: MO-SMS duplicate message response (revised T2-011025) | NTT DoCoMo | SWG3 |
| T2-020226 | CR 23.040 Rel-4: MO-SMS duplicate message response (revised T2-011026) | NTT DoCoMo | SWG3 |
| T2-020227 | CR 23.040 Rel-5: MO-SMS duplicate message response (revised T2-011027) | NTT DoCoMo | SWG3 |
| T2-020228 | CR 23.040 Extended Object Data Request Cmd | Motorola | SWG3 |
| T2-020229 | CR 23.040 Subaddressing | One2one, Jinny, Swapcom | SWG3 |
| T2-020230 | CR 23.040 Alternate return address | One2one, Jinny, Swapcom | SWG3 |
| T2-020231 | CR 23.038 Support of UDH in CBS | Magic4, CMG, Swapcom | SWG3 |
| T2-020232 | Ericsson Motorola Bijitec Joint Session on Vector Graphics | Ericsson Motorola Bijitec | SWG3 |
| T2-020233 | FW mma-swg RE When will SP-MIDI become available | Ericsson | SWG3 |
| T2-020234 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | SWG3 |
| T2-020235 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | SWG3 |
| T2-020236 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | SWG3 |
| T2-020237 | CR 23.040 Extended Object Data Request Cmd | Motorola | SWG3 |
| T2-020238 | CR23.040 Polyphonic Extended Objects | Pending | SWG3 |
| T2-020239 | unused | Unused | SWG3 |
| T2-020240 | LS from SA5 on User Equipment Management Feasibility Study (SA5's TR 32.802) | S5-020027 | SWG2 |
| T2-020241 | LS from T3 on UE functionality split | T3-020079 | SWG2 |
| T2-020242 | LS from T3 on Status of the Generic User Profile Work | T3-020141 | T2-GUP, SWG2 |
| T2-020243 | LS from SA5: Comments on UP-010141 and relationship of GUP to Subscription Management | S5-020028 | T2-GUP, SWG2 |
| T2-020244 | LS from T3 on ISIM for support of IMS | T3-020139 | SWG2 |
| T2-020245 | LS to SA2, GSMA SerG cc GSMA IREG, GSMA EC, GSMA MSIG, GSMA E2E on Address Resolution in MMS | SWG3 | - |
| T2-020246 | LS from T3 on Provisioning of Application Access Parameters | T3-020142 | SWG3 |
| T2-020247 | LS from T3 on MMS related changes for Rel-4 | T3-020148 | SWG3 |
| T2-020248 | LS from SA3 on IMS identifiers and ISIM and USIM | S3-010647 | SWG2 |

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| T2-020249 | LS from SA3 on Configuration of ciphering | S3-010675 | OP |
| T2-020250 | LS to GSMA IREG & SERG on email/MSISDN addressing support | SWG3 | |
| T2-020251 | LS to SA4, cc SA1 on transfer of responsibility of MMS media formats and codecs | SWG3 | |
| T2-020252 | LS to GUP on UICC exchange | SWG3 | SWG2 |
| T2-020253 | Support letter for T2 chairman | Teleca Ltd. | OP |
| T2-020254 | LS to S3, S4, S5, N1, N4, N5, T3 cc S1, S2 on coordination of data definitions, identified in GUP development | T2 GUP ad hoc | OP |
| T2-020255 | LS to S1 on GUP/DDF timescales | T2 GUP ad hoc | OP |
| T2-020256 | LS to CN4 on Cx User Profile | Ericsson | |
| T2-020257 | Conformance Testing | TSG-T | OP |
| T2-020258 | presentation of IETF dependancies | AT&T | OP |
| T2-020259 | LS from GSMA on the MMS standardisation of Presentation Language | GSMA | SWG3 |
| T2-020260 | CR 23.140 on authentication on MM7 | Materna, Openwave, Ericsson | SWG3 |
| T2-020261 | CR 23.140 REL-5 VASP-related CDR generation | Siemens | SWG3 |
| T2-020262 | CR 23.140 Persistent Networked-Based Storage Functions | Openwave | SWG3 |
| T2-020263 | CR 23.140 REL-5 - Functional Description and Abstract Messages for MM7 realization | Comverse, Materna | SWG3 |
| T2-020264 | LS to T3 cc T, SA1 on MMS related changes for Rel-4 | Siemens | SWG3 |
| T2-020265 | CR 23.140 REL-5 Storage of MMS parameters on the USIM | Gemplus | SWG3 |
| T2-020266 | LS to SA1, T3 and T2-SWG1 on UE data consistency | ATTWS | SWG3 |
| T2-020267 | External MIME body use case | Motorola | SWG3 |
| T2-020268 | MM7 addressing clarification | Nokia | SWG3 |
| T2-020269 | CR 23.140 REL-5 Alignment of 23140 with 26140 | Siemens | SWG3 |
| T2-020270 | CR 23.140 MM1-MM4 header mapping | Ericsson | SWG3 |
| T2-020271 | CR 23.140 editorial Changes | Materna | SWG3 |
| T2-020272 | CR 23.140 - Annex C - Call Data Records | Nokia | SWG3 |
| T2-020273 | LS to SA1 on user privacy on MM7 | Nokia | SWG3 |
| T2-020274 | CR 23.140 REL-5 addressing by unqualified name on MM1 | KPN, Comverse, Openwave | SWG3 |
| T2-020275 | CR 23.140 REL-5 reference point MM8 to billing system | Materna, Nokia, Comverse | SWG3 |
| T2-020276 | LS to SA3 on MM7 Security mechanisms | Openwave | SWG3 |
| T2-020277 | CR 23.140 - MM7 addressing | Nokia | SWG3 |
| T2-020278 | CR 23.140: Clarification about Streaming in MMS | Nokia | SWG3 |
| T2-020279 | CR 23.140 REL-5 Clarifications on responsibilities of MMS User Agent and MMS Relay/Server | Siemens | SWG3 |
| T2-020280 | LS from SA1 on MMS Presentation Language | S1-020203 | SWG3 |
| T2-020281 | LS from SA1 on Confirmation of OSA Support for VASP MMS Connectivity | S1-020470 | SWG3 |
| T2-020282 | LS from WAP Forum RESPONSE TO THE LS ON CO-OPERATIVE WORKING (TP-010296) | WAP WAG MMDC | SWG3 |
| T2-020283 | CR 23.041 Rel-4: Update of references | Teleca Ltd. | |
| T2-020284 | not used | | |
| T2-020285 | Classmark 4 non-security | Microsoft | SWG1 |
| T2-020286 | CR 23.057 Rel-5 Adding MSISDN to the security table | TTPCom | SWG1 |
| T2-020287 | CR 23.057 Rel-5 ORPK in ME | Ericsson | SWG1 |
| T2-020288 | CR 23.057 Rel-5 Interpretation of user control | MExE group | SWG1 |
| T2-020289 | CR 23.057 Rel 5 Specify more explicitly the MExE executable definition | TTPCom | SWG1 |
| T2-020290 | CR 23.057 Rel-5 updated abbreviation list | Microsoft | SWG1 |
| T2-020291 | closing plenary presentation | MExE chair | SWG1 |
| T2-020292 | LS to WAP down load group on | Materna | SWG1 |
| T2-020293 | work item submission form for MMS | MMS rapporteur | CP |
| T2-020294 | LS to SA1 covering three 22.057 CRs | TTPCom | SWG1 |
| T2-020295 | LS to SA1, T3, T2 SWG1 on data consistencies | AT&T | CP |
| T2-020296 | LS to SA1 covering three 22.057 CRs | TTPCom | CP |
| T2-020297 | CR 23.140 REL-5 addressing by unqualified name on MM1 | KPN, Comverse, Openwave | CP |

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| T2-020298 | LS to SA3 on MM7 Security mechanisms | Openwave | CP |
| T2-020299 | LS to SA1, T3, T2 SWG1, SWG2 on data provisioning consistencies | AT&T | CP |
| T2-020300 | LS to SA1, T3, joint GUP meeting on data provisioning consistencies | AT&T | CP |
| T2-020301 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | CP |
| T2-020302 | CR 23.040 Polyphonic Extended Objects | T2 | CP |
| T2-020303 | assigned for revised T2-020231 but not used (CR 23.038 Support of UDH in CBS) | | |
| T2-020304 | CR 23.040 Subaddressing | One2one, Jinny, | |

Annex B Outgoing Documents

B.1 Change Requests submitted to TSG-T

The following CRs will be submitted to TSG-T#15 for approval:

"MExE" Change Requests

| Spec | CR | Rev | Rel | Subject | Cat | Vers-Curr | Vers-New | T2 Tdoc | Workitem |
|--------|-----|-----|-------|--|-----|-----------|----------|-----------|-------------|
| 23.057 | 107 | | Rel-5 | Adding ARPK to the abbreviation list | F | 4.4.0 | 5.0.0 | T2-020054 | MEXE-ENHANC |
| 23.057 | 108 | | Rel-5 | Updating the references | F | 4.4.0 | 5.0.0 | T2-020070 | MEXE-ENHANC |
| 23.057 | 109 | | Rel-5 | Replacing MExE application with MExE executable | F | 4.4.0 | 5.0.0 | T2-020073 | MEXE-ENHANC |
| 23.057 | 110 | | Rel-4 | Changing the urls for the CLDC/MIDP references | F | 4.4.0 | 4.5.0 | T2-020078 | MEXE-ENHANC |
| 23.057 | 111 | | Rel-5 | Classmark 4 non-security | B | 4.4.0 | 5.0.0 | T2-020285 | MEXE-ENHANC |
| 23.057 | 112 | | Rel-5 | Classmark 4 security | B | 4.4.0 | 5.0.0 | T2-020089 | MEXE-ENHANC |
| 23.057 | 113 | | Rel-5 | Adding MSISDN to the security table | F | 4.4.0 | 5.0.0 | T2-020286 | MEXE-ENHANC |
| 23.057 | 114 | | Rel-5 | Making storage of ORPK in ME optional | F | 4.4.0 | 5.0.0 | T2-020287 | MEXE-ENHANC |
| 23.057 | 115 | | Rel-5 | Interpretation of user control | F | 4.4.0 | 5.0.0 | T2-020288 | MEXE-ENHANC |
| 23.057 | 116 | | Rel-5 | Specify more explicitly the MExE executable definition | F | 4.4.0 | 5.0.0 | T2-020289 | MEXE-ENHANC |
| 23.057 | 117 | | Rel-5 | Remove unused abbreviations | F | 4.4.0 | 5.0.0 | T2-020290 | MEXE-ENHANC |

"Terminal Interfaces and Capabilities" Change Requests

| Spec | CR | Rev | Rel | Subject | Cat | Vers-Curr | Vers-New | T2 Tdoc | Workitem |
|--------|------|-----|-------|---|-----|-----------|----------|-----------|----------|
| 07.10 | A025 | | R97 | Incorrect explanation of length indicator bit | F | 6.4.0 | 6.5.0 | T2-020093 | TEI |
| 07.10 | A026 | | R98 | Incorrect explanation of length indicator bit | A | 7.1.0 | 7.2.0 | T2-020094 | TEI |
| 27.010 | 007 | | R99 | Incorrect explanation of length indicator bit | A | 3.3.0 | 3.4.0 | T2-020095 | TEI |
| 27.010 | 008 | | Rel-4 | Incorrect explanation of length indicator bit | A | 4.1.0 | 4.2.0 | T2-020096 | TEI4 |
| 27.007 | 082 | | R99 | Alignment of UE architecture with 23.101 | F | 3.10.0 | 3.11.0 | T2-020104 | TEI |
| 27.007 | 083 | | Rel-4 | Alignment of UE architecture with 23.101 | A | 4.3.0 | 4.4.0 | T2-020105 | TI-ATC |
| 27.007 | 084 | | Rel-5 | Alignment of UE architecture with 23.101 | A | 5.0.0 | 5.1.0 | T2-020098 | TEI5 |
| 27.901 | 001 | | R99 | Alignment of UE architecture with 23.101 | F | 3.0.0 | 3.1.0 | T2-020120 | TEI |
| 27.901 | 002 | | Rel-4 | Alignment of UE architecture with 23.101 | A | 4.0.0 | 4.1.0 | T2-020119 | TEI4 |
| 23.227 | 005 | | Rel-4 | Alignment of UE architecture with 23.101 | F | 4.1.0 | 4.2.0 | T2-020102 | TLM |
| 23.227 | 006 | | Rel-5 | Alignment of UE architecture with 23.101 | A | 5.0.0 | 5.1.0 | T2-020103 | TLM5 |

"SMS/CBS/EMS" Change Requests

| Spec | CR | Rev | Rel | Subject | Cat | Vers-Curr | Vers-New | T2 Tdoc | Workitem |
|--------|-----|-----|-------|--------------------------------------|-----|-----------|----------|-----------|-----------|
| 23.040 | 041 | | Rel-5 | Wireless Vector Graphics in EMS | B | 5.2.0 | 5.3.0 | T2-020301 | MESS5-EMS |
| 23.040 | 042 | | Rel-5 | Polyphonic Extended Object | B | 5.2.0 | 5.3.0 | T2-020302 | MESS5-EMS |
| 23.040 | 043 | | R99 | MO-SMS duplicate message response | F | 3.7.0 | 3.8.0 | T2-020225 | TEI |
| 23.040 | 044 | | Rel-4 | MO-SMS duplicate message response | A | 4.5.0 | 4.6.0 | T2-020226 | TEI4 |
| 23.040 | 045 | | Rel-5 | MO-SMS duplicate message response | A | 5.2.0 | 5.3.0 | T2-020227 | TEI5 |
| 23.040 | 046 | | Rel-5 | Subaddressing scheme for SMS | B | 5.2.0 | 5.3.0 | T2-020229 | TEI5 |
| 23.040 | 047 | | Rel-5 | Alternate Reply Address Element | B | 5.2.0 | 5.3.0 | T2-020230 | TEI5 |
| 23.040 | 048 | | Rel-5 | Extended Object Data Request Command | C | 5.2.0 | 5.3.0 | T2-020237 | MESS5-EMS |

"MMS" Change Requests

| Spec | CR | Rev | Rel | Subject | Cat | Vers-Curr | Vers-New | T2 Tdoc | Workitem |
|--------|-----|-----|-------|---|-----|-----------|----------|-----------|-----------|
| 23.140 | 034 | | Rel-4 | Correction on the SMTP-address encoding | F | 4.5.0 | 4.6.0 | T2-020141 | MMS |
| 23.140 | 035 | | Rel-4 | Correction on the MIME Content-Type Message format on MM4 | F | 4.5.0 | 4.6.0 | T2-020150 | MMS |
| 23.140 | 036 | | Rel-4 | Correction of the Forwarding Feature | F | 4.5.0 | 4.6.0 | T2-020154 | MMS |
| 23.140 | 037 | | Rel-5 | Correction on the SMTP-address address encoding | A | 5.1.0 | 5.2.0 | T2-020140 | MESS5-MMS |
| 23.140 | 038 | | Rel-5 | Introduction of SMTP service extensions over MM4 | B | 5.1.0 | 5.2.0 | T2-020144 | MESS5-MMS |
| 23.140 | 039 | | Rel-5 | MM4 forward routing failure | B | 5.1.0 | 5.2.0 | T2-020145 | MESS5-MMS |
| 23.140 | 040 | | Rel-5 | Clarification of existing request status codes over MM4 | B | 5.1.0 | 5.2.0 | T2-020146 | MESS5-MMS |
| 23.140 | 041 | | Rel-5 | Delivery report definition correction | F | 5.1.0 | 5.2.0 | T2-020148 | MESS5-MMS |
| 23.140 | 042 | | Rel-5 | VASP abbreviation | F | 5.1.0 | 5.2.0 | T2-020149 | MESS5-MMS |
| 23.140 | 043 | | Rel-5 | Correction on the MIME Content-Type Message format on MM4 | A | 5.1.0 | 5.2.0 | T2-020151 | MESS5-MMS |
| 23.140 | 044 | | Rel-5 | Correction of addressing on MM1_Submit.REQ | F | 5.1.0 | 5.2.0 | T2-020155 | MESS5-MMS |
| 23.140 | 045 | | Rel-5 | Correction of the Forwarding Feature | A | 5.1.0 | 5.2.0 | T2-020156 | MESS5-MMS |
| 23.140 | 046 | | Rel-5 | Detection of duplicate MMS | F | 5.1.0 | 5.2.0 | T2-020157 | MESS5-MMS |
| 23.140 | 047 | | Rel-5 | Submission Description Enhancement regarding the IE "Date and Time" | F | 5.1.0 | 5.2.0 | T2-020158 | MESS5-MMS |
| 23.140 | 048 | | Rel-5 | Adding a reference to 3GPP TS 32.235 | F | 5.1.0 | 5.2.0 | T2-020161 | MESS5-MMS |
| 23.140 | 049 | | Rel-5 | Terminal Capability Negotiation | B | 5.1.0 | 5.2.0 | T2-020162 | MESS5-MMS |
| 23.140 | 050 | | Rel-5 | Recipient MSISDN address resolution | B | 5.1.0 | 5.2.0 | T2-020211 | MESS5-MMS |
| 23.140 | 051 | | Rel-5 | Reply-charging bug fixes | F | 5.1.0 | 5.2.0 | T2-020215 | MESS5-MMS |
| 23.140 | 052 | | Rel-5 | Support of Reply-Charging in MM7 | B | 5.1.0 | 5.2.0 | T2-020219 | MESS5-MMS |
| 23.140 | 053 | | Rel-5 | VASP-related CDR generation | B | 5.1.0 | 5.2.0 | T2-020261 | MESS5-MMS |
| 23.140 | 054 | | Rel-5 | Persistent Networked-Based Storage Functions | B | 5.1.0 | 5.2.0 | T2-020262 | MESS5-MMS |
| 23.140 | 055 | | Rel-5 | Functional Description and Abstract Messages for MM7 realization | B | 5.1.0 | 5.2.0 | T2-020263 | MESS5-MMS |
| 23.140 | 056 | | Rel-5 | MMS UA behaviour with respect to handling MMS parameters on the USIM | B | 5.1.0 | 5.2.0 | T2-020265 | MESS5-MMS |
| 23.140 | 057 | | Rel-5 | MM1 <-> MM4 header mapping | B | 5.1.0 | 5.2.0 | T2-020270 | MESS5-MMS |
| 23.140 | 058 | | Rel-5 | Editorial changes | D | 5.1.0 | 5.2.0 | T2-020271 | MESS5-MMS |
| 23.140 | 059 | | Rel-5 | Correction to Call Data Records definitions | F | 5.1.0 | 5.2.0 | T2-020272 | MESS5-MMS |
| 23.140 | 060 | | Rel-5 | MM1 addressing formats | C | 5.1.0 | 5.2.0 | T2-020297 | MESS5-MMS |
| 23.140 | 061 | | Rel-5 | Reference point MM8 to billing system | B | 5.1.0 | 5.2.0 | T2-020275 | MESS5-MMS |
| 23.140 | 062 | | Rel-5 | MM7 Addressing | B | 5.1.0 | 5.2.0 | T2-020277 | MESS5-MMS |
| 23.140 | 063 | | Rel-5 | Clarification about Streaming in MMS | F | 5.1.0 | 5.2.0 | T2-020278 | MESS5-MMS |
| 23.140 | 064 | | Rel-5 | Clarifications on responsibilities of MMS User Agent and MMS Relay/Server | F | 5.1.0 | 5.2.0 | T2-020279 | MESS5-MMS |

For T2 email approval:

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| T2-020231 | CR 23.038 Support of UDH in CBS | Magic4, CMG, Swapcom |
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B.2 Liaison Statements

The following LSs were e-approved and sent following the T2 SWG3 MMS meeting held in Paris:

| TDOC | Subject | Comments |
|-----------|---|------------------|
| T2-020035 | LS to GSMA IREG cc SA2, GSMA SerG on routing of MMS traffic via MM4 | e-approved, sent |

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|-----------|--|---------------------------|
| | | 31/01/02 |
| T2-020038 | LS to SA5 cc CN5, SA2, SA1 on VASP MMS Connectivity | e-approved, sent 05/02/02 |
| T2-020047 | LS to SA5 cc SA1 on charging support for VAS MMS Connectivity Interface | e-approved, sent 06/02/02 |
| T2-020245 | LS to SA2, GSMA SerG cc GSMA IREG, GSMA EC, GSMA MSIG, GSMA E2E on Address Resolution in MMS | e-approved, sent 06/02/02 |
| T2-020250 | LS to GSMA IREG & SERG on email/MSISDN addressing support | e-approved, sent 12/02/02 |
| T2-020251 | LS to SA4, cc SA1 on transfer of responsibility of MMS media formats and codecs | e-approved, sent 12/02/02 |
| T2-020252 | LS to GUP on UICC exchange | e-approved, sent 12/02/02 |

The following LS was e-approved and sent following the T2 SWG3 EMS meeting held in Paris:

| TDOC | Subject | Comments |
|-----------|----------------------------------|---------------------------|
| T2-020033 | LS to Wap Forum about UDH in CBS | e-approved, sent 07/02/02 |

The following LSs have been sent from T2#16:

| TDOC | Subject | Comments |
|-----------|---|-----------------|
| T2-020114 | LS to SA5, SA1 on relationship of GUP to Subscription Management Response to T2-020243 | sent 18/02/2002 |
| T2-020115 | LS to TSG-T cc SA1, SA2, Joint GUP Ad Hoc: Proposal for Coordination of GUP-Related Work | sent 18/02/2002 |
| T2-020116 | LS to SA5: Response to T2-020240 on UEM TR32.802 | sent 18/02/2002 |
| T2-020117 | LS to SyncML Initiative on DevMan protocol | sent 18/02/2002 |
| T2-020217 | LS to GSMA BARG, IREG, TADIG, SA5 cc GSA SERG, WAP Forum on Billing and Network aspects Concerning MMS Interworking | sent 18/02/2002 |
| T2-020254 | LS to S3, S4, S5, N1, N4, N5, T3 cc S1, S2 on coordination of data definitions, identified in GUP development | sent 12/02/2002 |
| T2-020255 | LS to S1 on GUP/DDF timescales | sent 12/02/2002 |
| T2-020256 | LS to CN4 on Cx User Profile | sent 18/02/2002 |
| T2-020264 | LS to T3 cc T, SA1 on MMS related changes for Rel-4 | sent 18/02/2002 |
| T2-020273 | LS to SA1 on user privacy on MM7 | sent 18/02/2002 |
| T2-020296 | LS to SA1 covering three 22.057 CRs | sent 18/02/2002 |
| T2-020298 | LS to SA3 on MM7 Security mechanisms | sent 18/02/2002 |
| T2-020300 | LS to SA1, T3, joint GUP meeting on data provisioning consistencies | sent 18/02/2002 |

B.3 Reports/Specifications submitted to TSG-T

No specifications/reports to be forwarded to TSG-T#15.

B.4 Other documents submitted to TSG-T

The following other documents were agreed to be submitted to TSG-T#15:

| TDOC | Subject |
|-----------|---|
| T2-020086 | WID MExE Run-Time Independent Classmark for approval |
| T2-020087 | WID MExE Release 6 enhancements for approval |
| T2-020293 | work item submission form for MMS |

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. Eskil Åhlin | AU-SYSTEM | 3GPPMEMBER (ETSI) | +46 46 327 287 | +46 (40) 30 70 29 | eskil.ahlin@ausystem.com |
| Mr. Simon Allen | MOTOROLA Ltd | 3GPPMEMBER (ETSI) | +44 1256 790841 | +44 1256 790609 | wcsa03@email.mot.com |
| Mr. Tim Ambrose | Hutchison 3G UK Limited | 3GPPMEMBER (ETSI) | +44 7866 601096 | +44 1628 765001 | Tim.Ambrose@Hutchison3G.com |
| Mr. Jerome Azema | TEXAS Instruments | 3GPPMEMBER (ARIB) | +33493222207 | +33493222824 | j-azema@ti.com |
| Mr. Alan Baldwin | ERICSSON L.M. | 3GPPMEMBER (ETSI) | +44 1256 774592 | +44 1256 864576 | alan.baldwin@eml.ericsson.se |
| Mr. Menno Bangma | KPN NV | 3GPPMEMBER (ETSI) | +31-6-53-72-53-89 | +31-70-4464952 | m.r.bangma@kpn.com |
| Mr. Philippe Bellordre | ORANGE FRANCE | 3GPPMEMBER (ETSI) | +33 145 29 57 95 | +33 1 55 22 26 24 | philippe.bellordre@francetelecom.com |
| Dr. Gunilla Bratt | ERICSSON L.M. | 3GPPMEMBER (ETSI) | +46 46 193 729 | +46 46 193 216 | gunilla.bratt@emp.ericsson.se |
| 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. Stephan CASTAGNET | NEC Technologies (UK) LTD | 3GPPMEMBER (ETSI) | +33 1 49 07 20 81 | +33 1 49 07 20 01 | stephan.castagnet@mdc.nec.fr |
| Mr. Philippe Charbonnier | SAGEM Group | 3GPPMEMBER (ETSI) | +33 1 40 70 83 32 | +33 1 40 70 8321 | scscharb@IMAGINET.FR |
| Mr. Mike Chartier | Intel Sweden AB | 3GPPMEMBER (ETSI) | +01 480 554-9274 | mike.s.chartier@intel.com | |
| Mr. Manu Chatterjee | MOTOROLA INDIA ELECTRONICS LT | 3GPPMEMBER (ETSI) | +1.650.858.6131 | +1.650.494.1143 | Manu.Chatterjee@motorola.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 | TTC | 3GPPORG_REP (TTC) | +86 21 5836 9048 | +86 21 5836 9049 | davechen@bijitec.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 623794 | tim.costello@bt.com |
| Mrs. Samuel De Hoyos | Ericsson Inc. | 3GPPMEMBER (T1) | + 1 516 677 4308 | +1 516 677 1111 | samuel.dehoyos@am1.ericsson.se |

| | | | | | |
|---------------------------|-------------------------------|-------------------|-------------------|-------------------|-----------------------------------|
| Mr. Ed Ehrlich | Nokia Telecommunications Inc. | 3GPPMEMBER (T1) | +1 972 894 4495 | +1 972 894 5525 | ed.ehrlich@nokia.com |
| Mrs. Wendy Fong | HEWLETT-PACKARD France | 3GPPMEMBER (ETSI) | +1-(650) 857-4955 | +1-(650) 852-8040 | wendy_fong@hp.com |
| Mr. Paolo Franzoi | OMNITEL | 3GPPMEMBER (ETSI) | +39 348 2331149 | +39 0125 624727 | paolo.franzoi@omnitelvodafone.it |
| Mr. Peter Freitag | SIEMENS AG | 3GPPMEMBER (ETSI) | +49 89 722 46460 | +49 89 722 25167 | peter.freitag@mch.siemens.de |
| Mrs. Marina Galentovsky | SEMA GROUP TELECOMS | 3GPPMEMBER (ETSI) | +1 905 782 5249 | +1416 497 9349 | MGalentovsky@toronto.sema.slb.com |
| Mr. Pascal Gaulin | CELLON FRANCE S.A.S | 3GPPMEMBER (ETSI) | +33 2 4341 1385 | +33 2 4318 4946 | pascal.gaulin@philips.com |
| Mr. Tobias Georg | Materna GmbH | 3GPPMEMBER (ETSI) | +49 231 55998338 | +49 231 5599140 | Tobias.Georg@materna.de |
| Mr. Arthur Gidlow | One 2 One Personal Comm. Ltd | 3GPPMEMBER (ETSI) | +44 7 956 203 496 | +44 958 881 795 | arthur.gidlow@one2one.net |
| Mr. Randall Grund | MOTOROLA S.A. | 3GPPMEMBER (ETSI) | +1 847 523 0946 | | Randall.Grund@motorola.com |
| Mr. Rolf Gustavsson | TELIA AB | 3GPPMEMBER (ETSI) | +46 8 6017 435 | +46 8 601 7268 | rolf.x.gustavsson@telia.se |
| Mr. Ian Harris | Teleca | 3GPPMEMBER (ETSI) | +44 1225 481 188 | +44 1225 481 199 | ian.harris@teleca.com |
| Mr. Kevin J. Holoubek | Motorola Inc. | 3GPPMEMBER (T1) | +1 847 523 5024 | +1 847 523 1810 | CFNE43@email.mot.com |
| Mr. Michael Ishizue | NTT DoCoMo Inc. | 3GPPMEMBER (ARIB) | +81-3-5156-1777 | +81-3-5156-0232 | ishizue@s1.nttdocomo.co.jp |
| Ms. Daksha Ishwarlal | TTPCom Ltd | 3GPPMEMBER (ETSI) | +65 226 5250 | +65 226 5395 | Daksha.Ishwarlal@ttpcom.com |
| Mr. Kevin Jackson | TeleCommunication Systems | 3GPPMEMBER (ETSI) | +1 410 295 1993 | +1 410 295 1941 | JacksonK@telecomsys.com |
| 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. Barry Jones | EMC2 | 3GPPMEMBER (ETSI) | +44 1925 230534 | +44 1925 230177 | barry.jones@temc2.com |
| Mr. Hidetoshi Kambe | Mitsubishi Electric Co. | 3GPPMEMBER (ARIB) | +81 467 41 2985 | +81 467 41 2820 | hikam@csc.melco.co.jp |
| Miss Athanasia Karapoulou | COSMOTE S.A. | 3GPPMEMBER (ETSI) | +30106177963 | +30106177441 | akarapoul@cosmote.gr |
| Mr. Pieter Keijzer | CMG | 3GPPMEMBER (ETSI) | +31302103333 | +31302103461 | pieter.keijzer@cmg.nl |
| Mr. Shigenori Kino | Mitsubishi Electric Co. | 3GPPMEMBER (ARIB) | +81 467 41 2184 | +81 467 41 2137 | kino@isl.melco.co.jp |
| Mrs. Carole Koch | GEMPLUS Card International | 3GPPMEMBER (ETSI) | +33 442364644 | +33 442364121 | carole.koch@gemplus.com |
| 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 |

| | | | | | |
|----------------------------|------------------------------|-------------------|--------------------|-----------------------------|-------------------------------------|
| Ms. Ileana Leuca | AT&T Wireless Services, Inc. | 3GPPMEMBER (T1) | +1-425-580-7900 | +1-425-580-6811 | ileana.leuca@attws.com |
| Mr. Alex Linde | M@gic4 Ltd | 3GPPMEMBER (ETSI) | +44 1925 286321 | +44 1925 286333 | alex.linde@magic4.com |
| Mr. Ulf Lindgren | ERICSSON L.M. | 3GPPMEMBER (ETSI) | +4646 193297 | +4646 193455 | ulf.lindgren@emp.ericsson.se |
| Mr. Marcus Lohmüller | E-PLUS Mobilfunk | 3GPPMEMBER (ETSI) | +49 211 448 4901 | +49 211 448 4046 | marcus.lohmueLLer@eplus.de |
| Dr. Brian Marchent | MATSUSHITA COMMUNICATION | 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. Brendan McKenna | Jinny Software Ltd | 3GPPMEMBER (ETSI) | +353 1 8872610 | +353 1 8872692 | brendan.mckenna@JINNY.IE |
| Mr. Thibaud Mienville | ORANGE FRANCE | 3GPPMEMBER (ETSI) | +33 1 45 29 57 63 | +33 1 45 29 66 43 | Thibaud.Mienville@francetelecom.com |
| Mr. François MILLET | SAGEM Group | 3GPPMEMBER (ETSI) | +33 1 34 24 60 81 | +33 1 34 86 58 | francois.millet@sagem.com |
| Ms. Rosella Mossotto | TELECOM ITALIA S.p.A. | 3GPPMEMBER (ETSI) | +39 33 56 33 77 64 | +39 06 39 00 90 33 | rmossotto@mail.tim.it |
| Mr. Miraj Mostafa | NOKIA Corporation | 3GPPMEMBER (ETSI) | +358 40 572 9139 | +358 10 505 8215 | miraj.mostafa@nokia.com |
| Mr. Masutada Mouri | NTT DoCoMo | 3GPPMEMBER (ETSI) | +81 3 5156 1490 | +81 3 5156 0204 | m-mouri@cet.yrp.nttdocomo.co.jp |
| Mr. Mitsuru Murata | NTT DoCoMo Inc. | 3GPPMEMBER (ARIB) | +81 468 40 3013 | +81 468 40 3725 | mmurata@cet.yrp.nttdocomo.co.jp |
| Mr. Pdraig Murtagh | LOGICA ALDISCON | 3GPPMEMBER (ETSI) | +353 1 819 3400 | +353 1 819 3401 | murtaghp@logica.com |
| Mr. Rami Neudorfer | Comverse Network Systems | 3GPPMEMBER (ETSI) | +972 3 765 5996 | +972 3645 2855 | rami.neudorfer@comverse.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. Azadeh Pourjanaki | ERICSSON L.M. | 3GPPMEMBER (ETSI) | +46 46 23 25 48 | +46 46 19 37 77 | azadeh.pourjanaki@ecs.ericsson.se |
| Mrs. Volahanta Ramiamanana | GEMPLUS Card International | 3GPPMEMBER (ETSI) | +33 4 42 36 45 28 | +33 4 42 36 41 21 | volahanta.ramiamanana@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. Gael Rosset | TTPCom Ltd | 3GPPMEMBER (ETSI) | +45 9631 4642 | +45 9631 4647 | Gael.Rosset@TTPCOM.COM |
| Mr. Michael Rowe | MOTOROLA SEMICONDUCTOR ISRA | 3GPPMEMBER (ETSI) | +01-650-8589-6016 | +01 650-494-1146 | michael.rowe@motorola.com |
| Mr. Hiroshi Saito | Matsushita Communication | 3GPPMEMBER (ARIB) | +81 468 40 5440 | +81 468 40 5183 | hiroshi.saito@yrp.mci.mei.co.jp |

| | | | | | |
|---------------------------|------------------------------|-------------------|-------------------|-------------------------|---------------------------------|
| Mr. Rob Schmersel | CELLPOINT SYSTEMS AB | 3GPPMEMBER (ETSI) | +46 8 633 27 32 | +46 8 35 87 90 | rob.schmersel@cellpoint.com |
| Mr. Fabrice Segura | SWAPCOM | 3GPPMEMBER (ETSI) | +33 4 37 37 69 69 | +33 4 37 37 69 99 | fsegura@swapcom.fr |
| Mr. Venson Shaw | AT&T Wireless Services, Inc. | 3GPPMEMBER (T1) | 425 828 1005 | venson-shaw@hotmail.com | |
| Mr. Brad Sipes | ZoomON AB | 3GPPMEMBER (ETSI) | +46 70 305 77 70 | +46 8 693 77 77 | bradley.sipes@zoomon.com |
| Mr. Michael Smith | MICROSOFT EUROPE SARL | 3GPPMEMBER (ETSI) | +1 425 703 5830 | +1 425 936 7329 | mdsmith@microsoft.com |
| 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. Alan Stebbens | Openwave Systems (N.I.) Ltd | 3GPPMEMBER (ETSI) | +1.805.886.8886 | +1.818.464.6943 | alan.stebbens@openwave.com |
| Mr. Christian Steinweg | Materna GmbH | 3GPPMEMBER (ETSI) | +49 231 5599-8697 | +49 (231) 5599 140 | christian.steinweg@materna.de |
| Mr. Michael Stoim | Vodafone D2 GmbH | 3GPPMEMBER (ETSI) | +49 211 533 2894 | +49 211 533 3804 | michael.stoim@d2vodafone.de |
| Mr. Magnus Svensson | ERICSSON L.M. | 3GPPMEMBER (ETSI) | +46 70 684 57 70 | +46 46 194850 | magnus.svensson@ecs.ericsson.se |
| Mr. kimiwada Takako | NTT DoCoMo Inc. | 3GPPMEMBER (ARIB) | +81 3 5563 7241 | +81 3 5563 7269 | |
| Mr. Mengting Tang | Matsushita Communication | 3GPPMEMBER (ARIB) | +65 5505326 | +65 2821344 | mttang@psl.com.sg |
| Dr. Stephan Tassart | STMicroelectronics | 3GPPMEMBER (ETSI) | +33 1 47 40 75 75 | +33 1 47 40 79 10 | tassart@art.alcatel.fr |
| Mr. Soeren Thomsen | MOTOROLA A/S | 3GPPMEMBER (ETSI) | 1 817 245 2316 | 1 817 245 2065 | soeren.thomsen@motorola.com |
| Mr. Henrik Thuveesson | TELIA AB | 3GPPMEMBER (ETSI) | +46 40 10 51 22 | +46 40 30 70 29 | henrik.b.thuveesson@telia.se |
| Mr. Petri Timonen | NOKIA Corporation | 3GPPMEMBER (ETSI) | +358 9 511 23797 | +358 9 51123660 | Petri.Timonen@nokia.com |
| Mrs. Olga Tomé | ERICSSON L.M. | 3GPPMEMBER (ETSI) | +46 46 19 40 34 | +46 46 23 16 50 | olga.tome@emp.ericsson.se |
| Mr. Seishi Tsukada | NTT DoCoMo Inc. | 3GPPMEMBER (TTC) | +81 3 5156 1747 | +81 3 5156 0250 | tsukadas@nttdocomo.co.jp |
| Ms. Isabelle Valet-Harper | MICROSOFT EUROPE SARL | 3GPPMEMBER (ETSI) | +1 650 693 2809 | +1 650 693 2005 | isavh@microsoft.com |
| Mr. Vinod Valloppillil | Openwave Systems (N.I.) Ltd | 3GPPMEMBER (ETSI) | +1 650 480 7268 | +1 650 480 8100 | vinod.valloppillil@openwave.com |
| Mr. Paul Voskar | NOKIA UK Ltd | 3GPPMEMBER (ETSI) | +44 1252 867430 | +44 1256 865065 | paul.voskar@nokia.com |
| Mr. Ville Warsta | NOKIA Corporation | 3GPPMEMBER (ETSI) | +358 7180 39614 | +358 7180 68020 | ville.warsta@nokia.com |

Total number of delegates: 93

Annex D: Report from SWG1 Execution Environment

Agenda Item: T2 Closing Plenary

Source: SWG1 Chair

Title: Report of SWG1

Document for: Approval

Executive Summary:

General:

21 delegates, 43 tdocs, 16 output papers.

MEXE-ENHANC Work Item:

Lots of cleaning and clarification CR's for both 22.057 and 23.057, concerning spelling, terminology, abbreviations, references and clarifications.

CLI has been added as a fourth classmark.

An ORPK storage is no longer mandated in the ME.

The MEXE specification is NOT unstable. The work that is going on is enhancing and clarification work. The content of the security section and the classmark sections have not changed in a long time now.

Work on a total restructuring of the MEXE specification has started, and will be the very first task in release 6.

MEXE-SEC Work Item:

No work done.

Any Other Business:

New release 6 WID for general MExE enhancements.

New release 6 WID for runtime independent classmark.

We had another presentation of the WGE by TTPCom and a presentation about STIP by Texas Instruments.

We accomplished all our action points from the last meeting and have now made a new list of action points.

A very simple MExE conformance test was presented for the MExE group for information, and will be presented as a CR to T1 next week.

Future Meetings:

| Meeting | Date | Venue | Comment |
|---------|---------------------|---------------------------------|------------------------|
| T2#17 | 13-17 May 2002 | West coast of North America (?) | No host identified yet |
| T2#18 | 12-16 August 2002 | Germany (?) | No host identified yet |
| T2#19 | 18-22 November 2002 | | No host identified yet |

Output Change Requests:

| TDoc | Title | Source | Comment |
|-----------|--|--------|---------|
| T2-020054 | CR 23.057 Rel-5 Adding ARPK to the abbreviation list | TTPCom | |
| T2-020070 | CR 23.057 Rel-5 Updating the references | TTPCom | |
| T2-020073 | CR 23.057 Rel-5 Replacing MExE application with MExE executable. | TTPCom | |

| | | | |
|-----------|--|------------|--|
| T2-020078 | CR 23.057 Rel 5 Changing the urls for the CLDC/MIDP references | HP | |
| T2-020079 | CR 22.057 Rel 5 Updating the references | TTPCom | |
| T2-020083 | CR 22.057 Rel 5 Spell checking in 22.057 | TTPCom | |
| T2-020086 | WID MExE Run-Time Independent Classmark | Intel | |
| T2-020087 | WID MExE Release 6 enhancements | Chairman | |
| T2-020088 | CR 22.057 Rel 5 Replacing MExE application with MExE executable | TTPCom | |
| T2-020089 | CR 23.057 Rel-5 Classmark 4 security | Microsoft | |
| T2-020285 | CR 23.057 Rel-5 Classmark 4 non-security | Microsoft | |
| T2-020286 | CR 23.057 Rel-5 Adding MSISDN to the security table | TTPCom | |
| T2-020287 | CR 23.057 Rel-5 ORPK in ME | Ericsson | |
| T2-020288 | CR 23.057 Rel-5 Interpretation of user control | MExE group | |
| T2-020289 | CR 23.057 Rel 5 Specify more explicitly the MExE executable definition | TTPCom | |
| T2-020290 | CR 23.057 Rel-5 updated abbreviation list | Microsoft | |

Output Liaison Statements:

None.

Detailed Report:

Opening of the meeting

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

Approval of the draft agenda

| Tdoc | Subject | SOURCE |
|-----------|---------------------------|----------|
| T2-020050 | Agenda SWG1 MExE at T2#16 | Chairman |
| | Agreed | |

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.

Registration of input documents

Meeting documents may be found at ftp://ftp.3gpp.org/TSG_T/WG2_Capability/TSGT2_16_SophiaAntipolis/Docs/

Results of previous meetings

Meeting report

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

No ad hoc meetings held since last T2.

E-mail activity

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

No documents were required for email approval since the last MExE meeting.

Action Items and other issues

A quick walk through of the status of the different action points from the Cancun meeting was made:

- **Lars Brenk to contact Tim Wright - (for Tdoc 651 Ericsson presentation) to scope out a new TS and raise in SA3 at their next meeting (October). Get a response sent from SA3 to the MExE October meeting.**
- **Microsoft (for Mike Smith) - to provide an explanation of the CLI security model, for future MExE meeting (before end 2002).**
- **Nicola Sugimoto - to produce templates for the MExE business model.**
- **Microsoft to post answers on reflector.**
- **Microsoft to merge tdoc 1130 into tdoc 926.**
- **Ernest Woodward to start an Email discussion regarding run-time independent classmark**
- **Bo Johansson to start an Email discussion regarding the interpretation of user control**
- **Bo Johansson to start an Email discussion regarding mandatory items made optional**
- **Lars Brenk to send tdoc 1139 to the reflector and Friedhelm**

1. Contacted Tim Wright, who promised to submit an input paper.
2. CLI security input paper created and submitted
3. Business model template created and presented
4. CLI answers posted on the reflector
5. 1130 and 926 Tdocs merged
6. Email discussion concerning run-time independent classmark started
7. Email discussion on interpretation of user control started
8. Email discussion on mandatory items started
9. Mail to Friedhelm sent and answer received

Action Items

| Tdoc | Subject | SOURCE |
|-----------|---|----------|
| T2-020056 | Table of content for new certificate and PKI TS | Vodafone |

Tdoc not available.

| | | |
|-----------|---|----------|
| T2-020068 | Response from MCC to tdoc T2-011139 regarding references Noted | Chairman |
|-----------|---|----------|

Tdoc presented by Lars Brenk, Chairman.

The tdoc was a response from ETSI concerning a bunch of questions raised at the previous meeting. Some follow up questions were made at this meeting.

Is it possible to make T2 tests for classmark 2/3, when SUN have the license agreement that they have. The answer to a similar question is apparently being considered in T3 right now.

Apparently there are a lot of independent CLDC/MIDP test suites available, which doesn't need license agreements from SUN.

Also the term 'fair and reasonable' conditions were discussed. The MExE group cannot define what is fair and reasonable. That is up to 3GPP.

But the MExE group can decide which specifications they want to reference.

Conclusion:

Tdoc T2-020068 was noted.

Other Issues

A new version of the MExE specification (23.057) has been provided. MCC ran a report style check on the specification between version 4.2.0 and 4.3.0, and changed a lot of definitions to include notes instead of using more than one line. No problem here.

Furthermore they by accident removed a lot of URL's from the reference section as well. We now have them back in version 4.4.0 :-)

Others

| Tdoc | Subject | SOURCE |
|-----------|--|----------|
| T2-020055 | TSG-T#14 issues related to T2 Noted | Chairman |

Tdoc presented by Lars Brenk, Chairman.

Concerns from the MExE group that the general opinion is, that the MExE specification is unstable. The content of the MExE specification is stable (and has been for a long time).

The current initiatives is just to make the specification more readable, not change the content.

Conclusion:

Tdoc T2-020055 was noted.

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 |
|-----------|--|--------|
| T2-020075 | CR 22.057 Rel 5 Spell checking in 22.057 Updated in T2-020083 | TTPCom |
| T2-020083 | CR 22.057 Rel 5 Spell checking in 22.057 Updated from T2-010075 Agreed | TTPCom |

Tdocs presented by Lars Brenk, TTPCom.

The new spelling was reviewed online and the results were updated in tdoc T2-020083.

Conclusion:

Tdoc T2-020075 was noted.

Tdoc T2-020083 was agreed.

| | | |
|-----------|---|--------|
| T2-020079 | CR 22.057 Rel 5 Updating the references Agreed | TTPCom |
|-----------|---|--------|

Tdoc presented by Lars Brenk, TTPCom.

Conclusion:

Tdoc T2-020079 was agreed.

| | | |
|-----------|---|--------|
| T2-020077 | CR 22.057 Rel 5 Replacing MExE application with MExE executable Noted | TTPCom |
| T2-020088 | CR 22.057 Rel 5 Replacing MExE application with MExE executable Agreed | TTPCom |

Tdocs presented by Lars Brenk, TTPCom.

The mentioning of applet was removed online and the results were updated in tdoc T2-020088.

Conclusion:

Tdoc T2-020077 was noted.

Tdoc T2-020088 was agreed.

MExE 23.057 contributions and change requests

Security

CLI

| Tdoc | Subject | SOURCE |
|-----------|--|-----------|
| T2-020057 | Classmark 4 security Updated in T2-020089 Noted | Microsoft |
| T2-020089 | Classmark 4 security Updated from T2-020057 Agreed | Microsoft |

Tdocs presented by Mike Smith, Microsoft.

Minor details updated online and represented in tdoc T2-020089.

Conclusion:

Tdoc T2-020057 was noted.

Tdoc T2-020089 was agreed.

| | | |
|-----------|---------------------------------|-----------|
| T2-020059 | CLI Security model presentation | Microsoft |
|-----------|---------------------------------|-----------|

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|--|-------|--|
| | Noted | |
|--|-------|--|

Tdoc presented by Miller Abel, Microsoft.

CLI source code screening procedures presented.

CLI verification load is spread out, so that something appears off device, something on device, before executing an application, before calling a function and before accessing variables.

CLI strong name is a test to check that it is the right dll that is used, but can also be used to make sure that only certain programs use a certain dll.

CLI makes it possible to granulate the security sessions.

If not all functions on the call stack have the right permissions, a security exception is thrown.

For a CLI-MExE implementation, 800-900 K is approximately needed

Conclusion:

Tdoc T2-020059 was noted.

Others

| Tdoc | Subject | SOURCE |
|-----------|--|--------|
| T2-020067 | CR 23.057 Rel-5 Adding MSISDN to the security table Updated in 286 Noted | TTPCom |
| T2-020286 | CR 23.057 Rel-5 Adding MSISDN to the security table Updated from 67 Agreed | TTPCom |

Tdocs presented by Lars Brenk, TTPCom.

The MSISDN was moved to another place in the security table online and the result was updated in tdoc T2-020286.

Conclusion:

Tdoc T2-020067 was noted.

Tdoc T2-020286 was agreed.

| | | |
|-----------|------------|----------|
| T2-020071 | ORPK in ME | Ericsson |
|-----------|------------|----------|

| | | |
|-----------|----------------------------|----------|
| | Noted | |
| T2-020287 | CR 23.057 Rel-5 ORPK in ME | Ericsson |
| | Agreed | |

Tdocs presented by Bo Johansson, Ericsson.

Tdoc T2-020071 was a discussion document that lived up to its name. The old IMSI situation with identifying the operator ID was explained.

The proposal was to remove the mandating of the ORPK in the ME, by either removing it totally or making it optional. Tdoc T2-020287 was drafted online, and makes the ORPK storage in the ME optional.

It is recognised that this does not solve the security issues that have been identified, but it makes it possible for manufacturers to omit the implementation, and that way make more secure devices.

Conclusion:

Tdoc T2-020071 was noted.

Tdoc T2-020287 was agreed.

| | | |
|-----------|--|------------|
| T2-020072 | Interpretation of user control | Ericsson |
| | Noted | |
| T2-020288 | CR 23.057 Rel-5 Interpretation of user control | MExE group |
| | Agreed | |

Tdocs presented by Bo Johansson, Ericsson.

Tdoc T2-020071 was a discussion document, and tdoc T2-020288 was the CR that was drafted online as a output of the discussion.

Conclusion:

Tdoc T2-020072 was noted.

Tdoc T2-020288 was agreed.

| | | |
|-----------|--|--------|
| T2-020073 | CR 23.057 Rel-5 Replacing MExE application with MExE executable. | TTPCom |
| | Agreed | |

Tdoc presented by Lars Brenk, TTPCom.

Conclusion:

Tdoc T2-020073 was agreed.

Non security

CLI

| Tdoc | Subject | SOURCE |
|-----------|---|-----------|
| T2-020058 | Classmark 4 non-security Updated in 285 Noted | Microsoft |
| T2-020285 | Classmark 4 non-security Updated from 58 Agreed | Microsoft |

Tdocs presented by Mike Smith, Microsoft.

Minor details updated online and represented in tdoc T2-020285.

Conclusion:

Tdoc T2-020058 was noted.

Tdoc T2-020285 was agreed.

| | | |
|-----------|---|-----------|
| T2-020060 | .NET and web services with devices white paper Noted | Microsoft |
|-----------|---|-----------|

Tdoc presented by Mike Smith, Microsoft.

Short overview of the white paper was given by Mike Smith. Further .NET information and white papers can be found on gotdotnet.com.

Conclusion:

Tdoc T2-020060 was noted.

Restructuring of the MExE specification

| Tdoc | Subject | SOURCE |
|-----------|---|----------|
| T2-020063 | 23057-440 Restructured Specification version 1 Noted | Ericsson |

Tdoc T2-020063 was presented by Bo Johansson, Ericsson.

The tdoc was created using a Perl script, that automatically restructures the MExE specification.

It was agreed to, at this meeting, only look at the table of content and the new order of the sections and not concentrate on for example the header style.

The restructuring is done to present the classmark independent content first, so that chapters do not move around the specification when a new classmark is added. Also it would help in making new classmark CRs, since the relevant changes to change the specification is collected in a few sections, which again will make it possible to deliver a kind of standard way of delivering new classmarks for approval.

A CR is needed to clean the specification for unnecessary bookmarks and automatic section numbering.

The following procedure was agreed:

1. Create the release 5 version 5.0.
2. Use the Perl script on the version and distribute it on the reflector, with track changes on only section numbers, references and changed section header text.
3. Use the new created specification as an 'unofficial' baseline for CR's, concerning the textual changes.
4. At the next T2 meeting (US), present the restructured specification for T2-approval as a version 6.0 version, but not present any further CRs.
5. At the following T2 meeting (Germany), present the postponed CRs from the last T2 meeting, together with new CR's.

Conclusion:

Tdoc T2-020063 was noted.

Others

| Tdoc | Subject | SOURCE |
|-----------|---|----------|
| T2-020052 | WID MExE Release 6 enhancements Updated in 87 Noted | Chairman |
| T2-020087 | WID MExE Release 6 enhancements | Chairman |

| | | |
|--|---------------------------|--|
| | Updated from 52 Agreed | |
|--|---------------------------|--|

Tdocs presented by Lars Brenk, Chairman.

Tdoc T2-020052 was updated on-line and represented in tdoc T2-020087.

Conclusion:

Tdoc T2-020052 was noted.

Tdoc T2-020087 was agreed.

| | | |
|-----------|--|--------|
| T2-020054 | CR 23.057 Rel-5 Adding ARPK to the abbreviation list Agreed | TTPCom |
|-----------|--|--------|

Tdoc presented by Lars Brenk, TTPCom.

Conclusion:

Tdoc T2-020054 was agreed.

| | | |
|-----------|---|--------|
| T2-020070 | CR 23.057 Rel-5 Updating the references Agreed | TTPCom |
|-----------|---|--------|

Tdoc presented by Lars Brenk, TTPCom.

Conclusion:

Tdoc T2-020070 was agreed.

| | | |
|-----------|---|--------|
| T2-020074 | CR 23.057 Rel 5 Specify more explicitly the MExE executable definition Updated in 289 Noted | TTPCom |
| T2-020289 | CR 23.057 Rel 5 Specify more explicitly the MExE executable definition Updated from 74 Agreed | TTPCom |

Tdocs presented by Lars Brenk, TTPCom.

The definition in tdoc T2-020074 was slightly updated online in tdoc T2-020289.

Conclusion:

Tdoc T2-020074 was noted.

Tdoc T2-020289 was agreed.

| | | |
|-----------|--|----|
| T2-020078 | CR 23.057 Rel 4 Changing the urls for the CLDC/MIDP references | HP |
| | Agreed | |

Tdoc presented by Wendy Fong, HP.

Discussion took place and it was made clear that ETSI looks at URLs as a informative pointer for a possible way of finding the requested information, not a definite way.

The new URLs in the CR makes a reference to a place on the web that apart from pointing to the specifications mentioned, also provides more info on the topics.

Conclusion:

Tdoc T2-020078 was agreed.

| | | |
|-----------|----------------------------------|------|
| T2-020080 | MExE J2ME Interoperability Event | ETSI |
| | Noted | |

Tdoc presented by Friedhelm Rodermund, ETSI MCC.

An important event, to make sure that J2ME applications are working on all handsets. Companies are invited to participate!

Conclusion:

Tdoc T2-020080 was noted.

| | | |
|-----------|---|-----------|
| T2-020290 | CR 23.057 Rel-5 updated abbreviation list | Microsoft |
| | Agreed | |

Tdoc presented by Mike Smith, Microsoft.

Removing unused abbreviations from the abbreviation list.

Conclusion:

Tdoc T2-020290 was agreed.

MExE Run-Time independent Classmark

| Tdoc | Subject | SOURCE |
|-----------|--|--------|
| T2-020064 | MExE Run-Time Independent Classmark WID Updated in 86 | Intel |
| T2-020086 | MExE Run-Time Independent Classmark WID Updated from 64 Agreed | Intel |

Tdocs presented by Aaron Cohen, Intel.

Tdoc T2-020064 was updated on-line and represented in tdoc T2-020086.

Conclusion:

Tdoc T2-020064 was noted.

Tdoc T2-020086 was agreed.

| | | |
|-----------|--|-------|
| T2-020065 | Presentation on the MExE Run-Time Independent Classmark WID Noted | Intel |
|-----------|--|-------|

Tdoc presented by Aaron Cohen, Intel.

MExE shall not be the delaying factor in introducing new technologies and providing them with a MExE compliant security framework.

If the run-time independent classmark becomes a reality, what will then be the definition of a MExE device and MExE application.

Comments concerning the general parts of the specification could be made more general and useable for other non-MExE parties were raised. Not just looking at for example application download, but content in general. Shall the technologies, that make use of the run-time independent security framework, be publicly available as well?

How shall technologies using the run-time independent framework be recognised by the server. Will it still be required to make a CR to the MExE group to get an 'attribute-value'?

Conclusion:

Tdoc T2-020065 was noted.

MExE Wireless Game Engine Classmark

| Tdoc | Subject | SOURCE |
|-----------|--|--------|
| T2-020053 | WID MExE Wireless Game Engine Noted | TTPCom |

Tdoc T2-020053 presented by Lars Brenk, TTPCom.

Changes were requested to let the WID reflect the security ramifications.

Remarks concerning the content negotiation not being able to handle CPU types were raised.

It was made clear that the new classmark would only apply to the APIs, not the TTPCom implementation of the WGE-engine, and therefore the new classmark would not be for ARM chips only.

Concerns were raised, if WGE is 'real' MExE classmark material, and that this would open the door to a lot of new specialised technologies, which is apparently not in the 'spirit' of the MExE future.

Concerns for allowing binary runtime environments into standardisation.

Discussion connecting the runtime independent classmark WID and the WGE WID took place.

None of the present companies/delegates would at this time support the WGE WID.

Conclusion:

Tdoc T2-020053 was noted.

| | | |
|-----------|---|--------|
| T2-020061 | Wireless Game Engine (WGE) presentation general Noted | TTPCom |
| T2-020084 | Actual Wireless Game Engine (WGE) presentation general Noted | TTPCom |

Tdoc T2-020061 withdrawn and replaced by T2-020084

Tdoc T2-020084 presented by Gael Rosset, TTPCom.

The Wireless Game Engine (WGE) was presented for the MExE group with both hardware and PC demos.

During the presentation lots of technical questions were raised and answered, the business model was questioned, storage problems and security issues in particular raised and answered.

Concerns were raised to the fact that TTPCom was right now the only certification house for the applications.

Also concerns regarding the source code screening were raised.

Concerns were also raised to begin working on a classmark, that has only one company as a bottleneck for application certification.

Part of the possible WGE classmark standardisation work could include looking into making standardised source code screening procedures and application certification procedures.

It was made clear that the SDK and all the API specifications are free to be downloaded from the TTPCom website.

Conclusion:

Tdoc T2-020061 was noted.

Tdoc T2-020084 was noted.

Presentations

| Tdoc | Subject | SOURCE |
|-----------|---|--------|
| T2-020081 | STIP presentation (Small Terminal Interoperability Platform) Noted | TI |

Tdoc presented by Jerome Azema, Texas Instruments.

STIP sits on top of a Java virtual machine. The size of the STIP code is approximately 100K. STIP is based on open and royalty free specifications.

Longer discussion regarding the new JEFF format from the J-consortium, which is a better Java compression than JAR files. The JEFF format is intended for resource limited devices. The JEFF format is for executable Java files and needs a special JEFF-KVM.

STIP would maybe look into becoming a classmark in MExE and use the MExE security framework.

Conclusion:

Tdoc T2-020081 was noted.

Review of agreed output documents and action items

Output documents

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

No input.

New Action items

- 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.

Any other business

| Tdoc | Subject | SOURCE |
|-----------|--|--------|
| T2-020069 | Capability negotiation test in a MExE device | TTPCom |
| | Noted | |

Tdocs presented by Lars Brenk, TTPCom.

It is intended by the chairman to present the content of T2-020069 as a CR to the next T1 meeting, 21-22 February.

The presented document follows the T1 specification structure.

The test case is missing the case where the handset sends a URL, that contains a place on the net where the attributes can be fetched from.

Also comments were received

- that wanted the test to be fully automatic
- that wanted our own MExE test document, not just a chapter in a over 2000 page long T1 doc.
- who is making the work. Commitment is needed from companies.
- to clearly state to T1 that this is just an example of a test case.

Conclusion:

Tdoc T2-020069 was noted.

| | | |
|-----------|--|--------|
| T2-020085 | Template for discussions on the commercial viability of MExE | DoCoMo |
| | Noted | |

Tdoc presented by Lars Brenk, Chairman.

Conclusion:

Tdoc T2-020085 was noted.

Annex A – Complete Document List

APPROVED - OUTPUT TO T2

NOTED/APPROVED – NO OUTPUT TO T2

| TDoc | Title | Source | Comment |
|-----------|---|-----------|---------------|
| T2-020050 | Agenda SWG1 MExE at T2#16 | Chairman | |
| T2-020051 | Report of SWG1 MExE at T2#16 | Chairman | This tdoc |
| T2-020052 | WID MExE Release 6 enhancements | Chairman | |
| T2-020053 | WID MExE Wireless Game Engine | TTPCom | |
| T2-020054 | CR 23.057 Rel-5 Adding ARPK to the abbreviation list | TTPCom | |
| T2-020055 | TSG-T#14 issues related to T2 | MCC | |
| T2-020056 | Table of content for new certificate and PKI TS | Vodafone | Not available |
| T2-020057 | Classmark 4 security | Microsoft | |
| T2-020058 | Classmark 4 non-security | Microsoft | |
| T2-020059 | CLI Security model presentation | Microsoft | |
| T2-020060 | .NET and web services with devices white paper | Microsoft | |
| T2-020061 | Wireless Game Engine (WGE) presentation general | TTPCom | |
| T2-020062 | Wireless Game Engine (WGE) presentation mini | TTPCom | |
| T2-020063 | 23057-440 Restructured Specification version 1 | Ericsson | |
| T2-020064 | MExE Run-Time Independent Classmark WID | Intel | |
| T2-020065 | Presentation on the MExE Run-Time Independent Classmark WID | Intel | |
| T2-020066 | Withdrawn | | |
| T2-020067 | CR 23.057 Rel-5 Adding MSISDN to the security table | TTPCom | |
| T2-020068 | Response from MCC to tdoc T2-011139 regarding references | Chairman | |
| T2-020069 | Capability negotiation test in a MExE device | TTPCom | |
| T2-020070 | CR 23.057 Rel-5 Updating the references | TTPCom | |
| T2-020071 | ORPK in ME | Ericsson | |

| | | | |
|-----------|--|------------|--|
| T2-020072 | Interpretation of user control | Ericsson | |
| T2-020073 | CR 23.057 Rel-5 Replacing MExE application with MExE executable. | TTPCom | |
| T2-020074 | CR 23.057 Rel 5 Specify more explicitly the MExE executable definition | TTPCom | |
| T2-020075 | CR 22.057 Rel 5 Spell checking in 22.057 | TTPCom | |
| T2-020076 | Withdrawn | | |
| T2-020077 | CR 22.057 Rel 5 Replacing MExE application with MExE executable | TTPCom | |
| T2-020078 | CR 23.057 Rel 4 Changing the urls for the CLDC/MIDP references | HP | |
| T2-020079 | CR 22.057 Rel 5 Updating the references | TTPCom | |
| T2-020080 | MExE J2ME Interoperability Event | ETSI | |
| T2-020081 | STIP presentation (Small Terminal Interoperability Platform) | TI | |
| T2-020082 | Withdrawn | | |
| T2-020083 | CR 22.057 Rel 5 Spell checking in 22.057 | TTPCom | |
| T2-020084 | Actual Wireless Game Engine (WGE) presentation general | TTPCom | |
| T2-020085 | Template for discussions on the commercial viability of MExE | DoCoMo | |
| T2-020086 | MExE Run-Time Independent Classmark WID | Intel | |
| T2-020087 | WID MExE Release 6 enhancements | Chairman | |
| T2-020088 | CR 22.057 Rel 5 Replacing MExE application with MExE executable | TTPCom | |
| T2-020089 | Classmark 4 security | Microsoft | |
| T2-020285 | Classmark 4 non-security | Microsoft | |
| T2-020286 | CR 23.057 Rel-5 Adding MSISDN to the security table | TTPCom | |
| T2-020287 | CR 23.057 Rel-5 ORPK in ME | Ericsson | |
| T2-020288 | CR 23.057 Rel-5 Interpretation of user control | MExE group | |
| T2-020289 | CR 23.057 Rel 5 Specify more explicitly the MExE executable definition | TTPCom | |
| T2-020290 | CR 23.057 Rel-5 updated abbreviation list | Microsoft | |

Annex B - Participants List

| •NAME | ORGANISATION | E-MAIL |
|---------------------|--|--|
| Lars Brenk | TTPCom Danmark (Chairman) | LSB@TTPCOM.COM |
| Nicola Sugimoto | 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 |
| Mike Smith | Microsoft | mdsmith@microsoft.com |
| Shigenori Kino | MITSUBISHI ELECTRIC | kino@isl.melco.co.jp |
| Carole Koch | Gemplus | carole.koch@gemplus.com |
| Daksha Ishwarlal | TTPCom Singapore | Daksha.ishwarlal@tppcom.com |
| Gael Rosset | TTPCom Danmark | Gael.rosset@tppcom.com |
| Mark Staskauskas | QUALCOMM | markstas@qualcomm.com |
| Jason Tang Mengting | Panasonic Singapore Laboratories Pte Ltd | Mttang@psl.com.sg |
| Aaron Cohen | Intel Corporation | aaron.m.cohen@intel.com |
| Tobias Georg | MAterna GmbH | Tobias.georg@materna.de |
| Paul Jolivet | DoCoMo Europe | jolivet@docomo.fr |
| Pascal Gaulin | Philips Consumer Communications | pascal.gaulin@philips.com |
| Miller Abel | Microsoft Corporation | millera@microsoft.com |
| Ileana Leuca | AT&T Wireless Services | ileana.leuca@attws.com |
| Friedhelm Rodermund | Mobile Competence Centre | friedhelm.rodermund@etsi.fr |
| Jerome Azema | Texas Instruments | j-azema@ti.com |

Annex E: Report from SWG2 UE Interfaces and Capabilities

3GPP TSG-T2 #16
Sophia Antipolis, France
11-17 Feb 2002

T2-0200121

Agenda Item: T2 Closing Plenary

Source: SWG2 Chair

Title: Report of SWG2 SOPHIA Meeting#16

Document for: Approval

ES Executive Summary

Topics discussed at this meeting included UE Functionality Split, AT Commands, Application and User Interaction (Terminal Local Model), Generic User Profiles, User Equipment Management, AMR Codecs, Data Synchronization, various Liaison Statements and other logistics for future meetings, ad hoc meetings, and meeting procedures.

General:

The meeting opened by Mr. Prem Sood on 16:10 11th Feb 2002 and welcomed delegates. Alan Chau (Nokia) volunteered to be the secretary of this meeting.

Agenda of the meeting in T2-020090 was approved.

Review of Progress on Action Items

Work Item 1828: AT Commands –

CRs from Ericsson on the AT-Commands were processed.

Work Item 1831: vObjects & other constructs –

Will be merged with User Profiles WI, and deleted as a separate WI.

Work Item 2573: Terminal Local Model Enhancements

Several CRs on 23.227 Application and User Interaction were processed

Work Item xxxx: Generic User Profiles –

Presentations on the status of work for Generic User Profiles was given. A number of incoming LS's and 32.140 were received. Three Outgoing LS's 114, 115, 256 were approved.

An LS to SyncML initiative 117 was approved.

Work Item xxxx: User Equipment Management –

Incoming LSs from SA5 and 32.802 was reviewed. One outgoing T2-020116 response LS to SA5 with comments to TR 32.802 and proposal for a joint meeting in April was approved.

Work Item 2563: UE Split –

A number of LS's were received. Changes proposed by T2 were agreed in Phoenix. SA1 is taking over the ownership of TR 22.944.

Other Items Executive Summary from SWG2 meeting :**AMR Codec, Tones**

An incoming LS was reviewed.

IMS

Incoming LS's were reviewed.

Future Meetings:

| Meeting | Date | Venue | Comment |
|------------------|--|-------|----------|
| T2-GUP | 2 nd - 5 th April 2002 | Cork | |
| Joint T2/SA5 UEM | 2 nd - 5 th April 2002 | Cork | Proposed |
| GUP SWG2 #17 | May 13-17, 2002 | TBD | |

Output Change Requests:

| TDoc | Title | Source | Comment |
|-----------|---|----------|-----------|
| T2-020093 | R97 CR to 07.10 v6.4.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-020094 | R98 CR to 07.10 v7.1.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-020095 | R99 CR to 27.010 v3.3.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-020096 | Rel-4 CR to 27.010 v4.1.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-011104 | R99 CR on 27.007 Alignment of UE architecture with 23.101 | Ericsson | Approved |
| T2-011105 | Rel-4 CR on 27.007 Alignment of UE architecture with 23.101 | Ericsson | Approved |
| T2-011098 | Rel-5 CR on 27.007 Alignment of UE architecture with 23.101 | Ericsson | Approved |
| T2-020120 | R99 CR to 27.901 Alignment of UE architecture with 23.101 | Ericsson | Approved. |
| T2-020119 | Rel-4 CR to 27.901 Alignment of UE architecture with 23.101 | Ericsson | Approved. |
| T2-020102 | Rel-4 CR to 23.227 Alignment of UE architecture with 23.101 | Ericsson | Approved. |

| TDoc | Title | Source | Comment |
|-------------|---|---------------|----------------|
| T2-020103 | Rel-5 CR to 23.227 Alignment of UE architecture with 23.101 | Ericsson | Approved. |

Output Liaison Statements:

| TDoc | Title | Source | Comment |
|-------------|---|---------------|----------------|
| T2-020115 | LS to TSG-T on coordination of GUP requirements | SWG 2 | Approved. |
| T2-020117 | LS Reply to SyncML Initiative's Responses to T2's Questions | SWG 2 | Approved |
| T2-020114 | LS to S5 & S1 on Relationship of GUP to Subscription Management | SWG 2 | Approved |
| T2-020116 | LS to S5 response to 240 UEM Feasibility Study (TR 32.802) | SWG 2 | Approved |
| T2-020256 | LS to CN4 on Cx Interface User Profile | SWG2 | Approved |

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 04.10pm on Monday February 11, 2002. Alan Chau (Nokia) volunteered to act as the meeting secretary. The Chair welcomed everyone to Sohpia Antiplois and thanked MCC for hosting the meeting. At the opening of SWG2 there were 15 attendees.

1.1. Approval of the proposed Agenda

Document – T2-020090

| TDoc No. | Title | Source | Status |
|-----------------|---------------------------|---------------|-----------------|
| T2-020090 | SWG2 draft meeting agenda | SWG2 Chair | Approved |

Presented by – Chairman

The first item of business was to approve the meeting agenda. Discussion of meeting logistics and timing of discussions for various agenda items with respect to individuals who must be in other meeting during the week and would like to be present for specific items on the agenda.

Discussion –

A few documents from the T2 GUP ad hoc were added to the agenda.

Resolution –

T2-020090 Agenda for SWG2 approved.

1.2. Joint Meetings Schedule

None Scheduled

1.3. Review of previous Action Points

Tdoc Draft1 T2-020091

| AP Description | Assigned to | Status | Comments |
|--|--------------------|---------------|-----------------------------------|
| Action 15.1: the rapporteur (Olga) is asked to review 23.227 for consistent usage of the terms UE, and ME. | Olga Tome | Due T2#16 | Action taken in CRs Tdoc 102, 103 |
| Action 15.2, 15.3, 15.4, 15.5 to review documents related to Generic User Profiles. | All SWG2 | Due T2#16 | Continue to T2#17 meeting in May. |
| | | | |
| | | | |
| | | | |

Reviewed and approved above Action Points from the previous SWG2 meeting in Cancun.

T2-020091 (this report) to be approved at the end of the meeting.

The meeting was adjourned 18:15 on 11th Feb.

1.4. Appointment of Rapporteurs (TS 27.007/07.07 AT Command)

2 Items for immediate discussion.

T2-020040 LS from SA5 with version 1.0.2 UEM TR 32.802 asks T2 to comment the TR by 24th Feb. The chairman ask delegates to review the documents to prepare for discussions.

3.1 UE Functionality Split

| TDoc No. | Title | Source | Status |
|-----------------|---|---------------|---------------|
| T2-020044 | LS from SA1 to T2-SWG2 on UE-FS Response to T2-011171 and S1-020243 | S1-020244 | Noted. |

Presented by – .

Ileana Leuca, AT&T.

Discussion –

S1 SWG UE Functionality Split meeting in Phoenix agreed the following changes to TR 22.944;

- Changed section 6.2 to read

Given that Mobility management function (see section 6.3.1) shall be functionally located on the MT the responsibility for integrity of all relevant security-related identities (IMEI, IMSI, TMSI, etc.) must rest with the MT.

- Based on S1-020241, Section 6.1 item 4 has been modified to read,

A generic API for access to capabilities provided by an MT (TE) towards a TE (MT) across Operating Systems must be provided.

Further, the location of IMS call control is under review and other 3GPP working groups are being consulted on the feasibility for locating the IMS call control at the TE in Release 5 (see Tdoc S1-020245)

| TDoc No. | Title | Source | Status |
|-----------------|--|---------------|---------------|
| T2-020106 | Report of SA1 SWG UE-Split Feasibility Study in Phoenix (Unofficial) | S1-020242 | Noted |
| T2-020107 | TR 22.944v1.0.1 Updates from SA1 UE-FS Phoenix Meeting | S1-020243 | Noted |
| T2-020241 | T3 LS on UE-Split (cc: T2) | T3 | Noted. |
| T2-020046 | SA1 LS on IMS security requirements (cc: T2) | S1-020300 | Noted. |

3.2 Generic User Profiles

Document – T2-020023

| TDoc No. | Title | Source | Status |
|-----------------|---|---------------|---------------|
| T2-020023 | LS from GUP joint ad-hoc on Status of the Generic user Profile work | UP-010128 | Noted |

Presented by –

Gunilla Bratt, Ericsson.

Discussion –

Resolution –

Noted

| TDoc No. | Title | Source | Status |
|-----------------|--|---------------|---------------|
| T2-020024 | LS from GUP joint ad-hoc on Release of In-Process Stage 1 Specification to SA1 for Review and Continuing Development | UP-010129 | Noted |

| TDoc No. | Title | Source | Status |
|-----------------|--------------------------------------|---------------|------------------------|
| T2-020110 | Report of GUP joint ad-hoc in Cancun | UP-010146 | Noted, for information |

| | | | |
|--|--|--|-------|
| | | | only. |
|--|--|--|-------|

| TDoc No. | Title | Source | Status |
|-----------------|---|---------------|---------------|
| T2-020243 | LS from SA5 on Comments on UP-010141 and relationship of GUP to Subscription Management | S5-020028 | Noted |
| T2-020114 | Response LS to S5 & S1 on Relationship of GUP to Subscription Management | SWG 2 | Approved. |

T2-020114 asks SA5 to kindly consider defining the Requirements for Subscription management in a phased manner, with Essential minimal requirements in the first phase, and keeping them separate from Additional Requirements.

T2 asks SA1 to kindly consider the Coordination of Requirements for GUP-related activities between WG's and to generate a set of Minimum Co-ordinated Requirements for items such as GUP and related areas with some overlap such as Subscription Management

| TDoc No. | Title | Source | Status |
|-----------------|-----------------------|---------------|---------------|
| T2-020113 | Reply LS to T2-020243 | UP-020018 | Noted |

| TDoc No. | Title | Source | Status |
|-----------------|--|---|---------------|
| T2-020115 | Proposed LS to TSG-T on coordination of GUP requirements | NTT DoCoMo, Sharp, Motorola, Mitsubishi | Approved. |

Presented by – .

Prem Sood

Discussion –

This LS propose that T2 requests TSG-T to bring the following ACTIONS to TSG-SA for consideration by SA1 and SA2:

- ❖ To Request S1 group to kindly consider the points about the roles of the working groups involved in, and affected by, the GUP work.
- ❖ To Request S1 group to kindly develop coordinated realistic requirements for all groups.

Resolution –

Sent to T2 closing plenary for approval.

| TDoc No. | Title | Source | Status |
|-----------|---|--------|-------------------------------|
| T2-020254 | LS on coordination of data definitions, identified in GUP development | T2 GUP | Noted and approved in the OP. |

| TDoc No. | Title | Source | Status |
|-----------|----------------------------------|--------|-------------------------------|
| T2-020255 | LS to SA1 on GUP/DDF time scales | T2 GUP | Noted and approved in the OP. |

| TDoc No. | Title | Source | Status |
|-----------|--|---------|--------|
| T2-020252 | LS on MMS availability and USIM/UICC portability | T2 SWG3 | Noted |

AT&T Wireless is asked to draft a paper to address the architecture solution by end of Feb and circulating on the email reflector.

| TDoc No. | Title | Source | Status |
|-----------|--|--------------|-----------|
| T2-020256 | LS to CN4 on Cx Interface User Profile | T2-GUP Chair | Approved. |

Presented by – .

Gunilla Bratt, Ericsson, T2-GUP Chair

Resolution –

Sent to T2 closing plenary for approval.

3.3 Data Synchronization, SyncML

Document – T2-020021

| TDoc No. | Title | Source | Status |
|-----------------|--|-----------------------|---------------|
| T2-020021 | LS from The SyncML Initiative: "Responses to T2 Follow-up questions" | The SyncML Initiative | Noted. |
| T2-020117 | LS Reply to SyncML Initiative's Responses to T2's Questions | SWG 2 | Approved |

Presented by – .

Presented by Gunilla Bratt.

Discussion –

Kevin (Motorola) drafts a response LS (117) back to SyncML

Resolution –

T2-020117 sent to T2 for approval.

3.4 UE Management, Terminal Capability

| TDoc No. | Title | Source | Status |
|-----------------|--|---------------|---------------|
| T2-020240 | LS UEM Feasibility Study (SA5's TR 32.802) | S5-020027 | Noted. |
| T2-020116 | LS to S5 response to 240 UEM Feasibility Study (TR 32.802) | SWG 2 | Approved |

Presented by – .

Chair Prem Sood presented.

Discussion –

The current view in the TR has a rather simplistic approach, which assumes a user has a One Sim card and one mobile.

A prioritization of the requirements is needed for Rel-6 and post Rel-6

T2 is not convinced that all features in the TR are not demonstrated to be feasible.

A joint meeting or workshop with SA5 would be useful to address the issues

The SA5 TR seems to be focusing the feasibility on service rather than on the feasibility of the technical implementations.

A number of requirements is missing

Detailed requirements are missing.

Stage 2 and 3 are not feasible for R6.

No terminal capability mapping into the plan for R6 feasibility

The service and implementation feasibility need to be further established.

Resolution –

T2-020116 sent to T2 for approval.

Document – T2-020026

| TDoc No. | Title | Source | Status |
|-----------------|---|---------------|---------------|
| T2-020026 | SA5 LS on Impacts of Subscriber and Equipment Trace | SA5 | Noted. |

Resolution –

Noted.

No possible impacts identified to T2 work items. Members of T2 are encouraged to discuss any impacts over the email reflector if there is any concerns over this work for the T2 work item.

3.5 AT Commands

Tdocs [1181](#), [1182](#), 98, 104, 105

Document – T2-01181

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

| | | | |
|-----------|---|----------|----------|
| T2-011104 | R99 CR on 27.007 Alignment of UE architecture with 23.101 | Ericsson | Approved |
| T2-011105 | Rel-4 CR on 27.007 Alignment of UE architecture with 23.101 | Ericsson | Approved |
| T2-011098 | Rel-5 CR on 27.007 Alignment of UE architecture with 23.101 | Ericsson | Approved |

Presented by – .

Olga Tomé

Discussion –

Corrections made to terms used in 27.007: ME, MT, TA and UE. The term ME has been replaced by MT, and MS by UE, where applicable. UE abbreviation added. Reference to 23.101 added.

Resolution –**3.6 Application and User Interaction (Terminal Local Model).****Tdocs 97, 101, 102, 103**

| TDoc No. | Title | Source | Status |
|-----------------|---|-----------------|---------------|
| T2-020097 | CR to 23.227 to Align text with UE FS | Sierra Wireless | Noted & Reje |
| T2-020102 | Rel-4 CR to 23.227 Alignment of UE architecture with 23.101 | Ericsson | Approved. |
| T2-020103 | Rel-5 CR to 23.227 Alignment of UE architecture with 23.101 | Ericsson | Approved. |

Presented by – .

Perm Sood (T2-020097), Olga Tomé (T2-020102-3)

Discussion –

Ericsson and Telia have a number of concerns over the CR in T2-020097:

1. Given that TR.22.944 is a technical report, it does not have any normative status in 3GPP, it is therefore inappropriate to substitute a Requirement in a Specification by a reference to a TR.
2. TR.22.944 does not address the requirements on USAT local link

Resolution –

SWG2 chairman will inform Sierra Wireless the status of the CR.

4.1 AMR Codec, Tones**Document – T2-020016**

| TDoc No. | Title | Source | Status |
|-----------------|---|---------------|---------------|
| T2-020016 | LS from SA4: "Introduction of UMTS_AMR_2 into R99 UE's" | S4--010693 | Noted. |

Presented by –

Prem Sood

Discussion –

This LS is replied to Tdoc T2-011178 / S4-010675 (LS Response to LS from CN1 on UMTS_AMR2 Dual-Mode Operation). SA4 inform T2 that as the inclusion of UMTS_AMR_2 in R99 affects the R99 dual mode UMTS & GSM terminals (not the single mode UMTS terminals), it is important that all working groups take action as soon as possible to update their specifications.

Resolution –**4.2 IMS.**

| TDoc No. | Title | Source | Status |
|-----------------|---|---------------|---------------|
| T2-011231 | LS from SA3 on IMS Identifiers and ISIM and UIM | S3-010647 | Noted |
| T2-020022 | LS on IMS identifiers and ISIM and USIM | S2-013599 | Noted. |

| | | | |
|-----------|--|-----------|---------------|
| T2-020037 | LS on Focus of TR 22.941 | S1-011322 | Noted with ac |
| T2-020244 | T3 LS on ISIM for support of IMS | T3-020139 | Noted. |
| T2-020030 | S2 LS on "Prefix allocation for IPv6 stateless address auto configuration" | S2-020326 | Noted. |

Presented by –

Prem Sood presented this LS.

Discussion –

This LS is for information.

SA#14 ask Gunilla Bratt to inform T2 that the SIP client runs on the TE must be 3GPP-specific SIP client and the current requirement does not address the access independence requirement.

T2-020030: The group have examined the impacts to the T2 work, there should be no impact to the AT Command. It was however stated that it may have some impacts to the GUP work. T2 GUP is asked to examine the issue.

Resolution –

Resolved at the December SA plenary meeting.

4.3 Other CRs to SWG2 docs

| TDoc No. | Title | Source | Status |
|-----------------|---|---------------|---------------|
| T2-020093 | R97 CR to 07.10 v6.4.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-020094 | R98 CR to 07.10 v7.1.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-020095 | R99 CR to 27.010 v3.3.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-020096 | Rel-4 CR to 27.010 v4.1.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-020099 | R99 CR to 27.901 Alignment of UE architecture with 23.101 | Ericsson | Replaced by |

| | | | |
|-----------|---|----------|-------------|
| T2-020100 | Rel-4 CR to 27.901 Alignment of UE architecture with 23.101 | Ericsson | Replaced by |
| T2-020119 | Rel-4 CR to 27.901 Alignment of UE architecture with 23.101 | Ericsson | Approved. |
| T2-020120 | R99 CR to 27.901 Alignment of UE architecture with 23.101 | Ericsson | Approved. |

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

Document – T2-010

| TDoc No. | Title | Source | Status |
|-----------------|----------------|---------------|---------------|
| T2-020009 | 3GPP work plan | MCC | Noted |

Presented by –

Friedhelm Rodermund

Discussion –

Vobjects (TS 27.104)

Terminal Local Model Rel-5: 100%

GUP Rel-6

❖ Stage 2 23.241: 40%

❖ Stage 3 24.241: 5%

Resolution –

6. Approval of Output Documents for T2 Approval.

| TDoc No. | Title | Source | Status |
|-----------------|---|---------------|---------------|
| T2-020115 | Proposed LS to TSG-T on coordination of GUP requirements | SWG2 | Approved. |
| T2-020093 | R97 CR to 07.10 v6.4.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-020094 | R98 CR to 07.10 v7.1.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-020095 | R99 CR to 27.010 v3.3.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-020096 | Rel-4 CR to 27.010 v4.1.0 "Incorrect explanation of length indicator bit" | Samsung | Approved. |
| T2-011104 | R99 CR on 27.007 Alignment of UE architecture with 23.101 | Ericsson | Approved |
| T2-011105 | Rel-4 CR on 27.007 Alignment of UE architecture with 23.101 | Ericsson | Approved |
| T2-011098 | Rel-5 CR on 27.007 Alignment of UE architecture with 23.101 | Ericsson | Approved |
| T2-020120 | R99 CR to 27.901 Alignment of UE architecture with 23.101 | Ericsson | Approved. |
| T2-020119 | Rel-4 CR to 27.901 Alignment of UE architecture with 23.101 | Ericsson | Approved. |
| T2-020102 | Rel-4 CR to 23.227 Alignment of UE architecture with 23.101 | Ericsson | Approved. |
| T2-020103 | Rel-5 CR to 23.227 Alignment of UE architecture with 23.101 | Ericsson | Approved. |
| T2-020117 | LS Reply to SyncML Initiative's Responses to T2's Questions | SWG 2 | Approved |
| T2-020114 | LS to S5 & S1 on Relationship of GUP to Subscription Management | SWG 2 | Approved |
| T2-020256 | LS to CN4 on Cx Interface User Profile | SWG2 | Approved |
| T2-020116 | LS to S5 response to 240 UEM Feasibility Study (TR 32.802) | SWG 2 | Approved |

7. Deferred Items

8. Any Other Business

9. Future Meetings, Time Requirements

See Executive summary.

10 Close of the Meeting

The meeting was closed on Monday Feb 11 at 18:15.

To restart on Tuesday Feb 12 at 09:00 am. Closed at 18:00 on Tuesday

To restart Wed at 09:00am. Closed at 06.15 pm on Wednesday to restart at 09:00am Thursday. Meeting adjourned at 01:00pm on Thursday Feb 14, 2002.

10.1. List of New Action Points added at this meeting

| 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 | | |
| Action 16.2 to review TR22.941 in T2-020037 and provide comments | All SWG2 | Due T2#17 | |
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Annex A List of all temporary documents

SWG2 Final Document List

T2#16 Sophia, Feb. 11-15

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 | OUTCOME |
|-----------|--|-----------|----------|----------------------|
| T2-011181 | CR 27.007 Rel-4: alignment of UE architecture description to 23.101 | Ericsson | SWG2 | Noted. Replaced b |
| T2-011182 | CR 27.007 Rel-99: alignment of UE architecture description to 23.101 | Ericsson | SWG2 | Noted. Replaced b |
| T2-011231 | LS from SA3 on IMS identifiers and ISIM and USIM SEE 020022 | S3-010647 | SWG2 | Noted. |
| T2-011255 | LS from SA5 on User Equipment Management (UEM) | S5-010722 | SWG2 | Noted. Revised in T2 |
| T2-020009 | 3GPP work plan | MCC | all SWGs | Revised |

| | | | | |
|-----------|--|----------------------|--------------|-------------------------------------|
| T2-020016 | LS from SA4 on Introduction Of UMTS_AMR_2 into R99 UE's | S4-010693 | SWG2 | Noted |
| T2-020021 | LS from SyncML Forum: Responses to T2's Follow-Up Questions | SyncML Forum | SWG2 | Noted. Response L117 |
| T2-020022 | LS from SA2 on IMS identifiers and ISIM and USIM | S2-013599 | SWG2 | Noted |
| T2-020023 | LS from GUP joint ad hoc on Status of the Generic User Profile Work | UP-010128 | SWG2 | Noted |
| T2-020024 | LS from GUP joint ad hoc on Release of In-Process Stage 1 Specification to SA1 for Review and Continuing Development | UP-010129 | SWG2 | Noted |
| T2-020026 | LS from SA5 on Impacts of Subscriber and Equipment Trace | S5-020013 | OP/SWG2 | Noted. No cross-im with SWG2 WIs id |
| T2-020030 | LS from SA2 on Prefix allocation for IPv6 stateless address autoconfiguration | S2-020326 | OP/SWG2 | Noted. No impact t Review GUP |
| T2-020037 | LS from SA1 on Focus of TR 22.941 | SA1 (TP-010235) | OP | Noted with action i review |
| T2-020039 | LS from CN4 on Cx User Profile | N4-020197 | T2-GUP, SWG2 | Noted |
| T2-020044 | LS from SA1 on Response to S1-020045 LS on UE functionality split from T2. | S1-020244 | SWG2 | Noted |
| T2-020046 | LS from SA1 on IMS Security requirements | S1-020300 | SWG2 | Noted |
| T2-020048 | Presentation: Global Regulatory Activity in Software Download | Intel | OP/SWG2 | Noted |
| T2-020090 | agenda SWG2 at T2#16 | | SWG2 | Approved. Output t |
| T2-020091 | Draft Report of SWG2 at T2#16 | | SWG2 | Replaced by 121 |
| T2-020093 | CR to 07.10 v6.4.0 "Incorrect explanation of length indicator bit" | Samsung | SWG2 | X Approved. Output |
| T2-020094 | CR to 07.10 v7.1.0 "Incorrect explanation of length indicator bit" | Samsung | SWG2 | X Approved. Output |
| T2-020095 | CR to 27.010 v3.3.0 "Incorrect explanation of length indicator bit" | Samsung | SWG2 | X Approved. Output |
| T2-020096 | CR to 27.010 v4.1.0 "Incorrect explanation of length indicator bit" | Samsung | SWG2 | X Approved. Output |
| T2-020097 | CR to 23.227 R5 align text with UE FS | Sierra Wireless Inc. | SWG2 | Not Approved. Not Rejected |
| T2-020098 | CR to 27.007 R5 Alignment of architecture with 23.101 | Ericsson | SWG2 | Approved. Output t |
| T2-020099 | CR to 27.901 R99 Alignment of architecture with 23.101 | Ericsson | SWG2 | Noted. Replaced b |
| T2-020100 | CR to 27.901 R4 Alignment of architecture with 23.101 | Ericsson | SWG2 | Noted. Replaced b |
| T2-020102 | CR to 23.227 R4 Alignment of architecture with 23.101 | Ericsson | SWG2 | Approved. Output t |
| T2-020103 | CR to 23.227 R5 Alignment of architecture with 23.101 | Ericsson | SWG2 | Approved. Output t |
| T2-020104 | CR to 27.007 R99 Alignment of architecture with 23.101 | Ericsson | SWG2 | Approved. Output t |
| T2-020105 | CR to 27.007 R4 Alignment of architecture with 23.101 | Ericsson | SWG2 | Approved. Output t |
| T2-020106 | Report of SA1-SWG-UE-FS Meeting, January 13, 2002 Phoenix Arizona | S1-020242 | SWG2 | Noted |
| T2-020107 | Report on Service Requirements for UE-FS TR22.944v101 | S1-020243 | SWG2 | Noted |
| T2-020108 | TS TS 23.241 | T2 GUP ad hoc | SWG2 | Noted |

| | | | | |
|------------|---|------------------------|--------------|--------------------------------|
| T2-020109 | TS TS 24.241 | T2 GUP ad hoc | SWG2 | Noted |
| T2-020110 | Report of GUP #7 Cancun | T2-GUP | SWG2 | Noted |
| T2-020111 | Report of T2-GUP #1 | GUP Joint AH | SWG2 | Postponed to Refle |
| T2-020112 | Report of GUP #9 Sophia | GUP Joint AH | SWG2 | Postponed to Refle |
| T2-020113 | GUP AH Response to LS from SA5 in T2-020243 | GUP Joint AH | SWG2 | Noted |
| T2-020114 | Liaison Statement on Relationship of GUP to Subscription Management Response to T2-020243 | NTT-DoCoMo, Sharp, x x | SWG2 | Approved. Output t |
| T2-020115 | Proposal for Coordination of GUP-Related Work | NTT-D, x, x,x, | SWG2 | Approved. Output t |
| T2-020116 | LS to SA5 - Response to T2-020240 on UEM TR32.802 | P. Neumann | SWG2 | Approved. Output t |
| T2-020117 | LS to SyncML initiative Response to T2-020021 | Kevin Holoubek | SWG2 | Approved. Output t |
| T2-020118 | Data Description Framework Files and Tools | T2-GUP | SWG2 | Noted |
| T2-020119 | CR to 27.901 R4 Alignment of architecture with 23.101 | Ericsson | SWG2 | Repl 100. Approve Output to T2 |
| T2-020120 | CR to 27.901 R99 Alignment of architecture with 23.101 | Ericsson | SWG2 | Repl 099. Approve Output to T2 |
| T2-0200121 | Report of SWG2 at T2#16 | | SWG2 | Approved. Output t |
| T2-020240 | LS from SA5 on User Equipment Management Feasibility Study (SA5's TR 32.802) | S5-020027 | SWG2 | Noted.. Response |
| T2-020241 | LS from T3 on UE functionality split | T3-020079 | SWG2 | Noted |
| T2-020242 | LS from T3 on Status of the Generic User Profile Work | T3-020141 | T2-GUP, SWG2 | Noted |
| T2-020243 | LS from SA5: Comments on UP-010141 and relationship of GUP to Subscription Management | S5-020028 | T2-GUP, SWG2 | Noted |
| T2-020244 | LS from T3 on ISIM for support of IMS | T3-020139 | SWG2 | Noted |
| T2-020248 | LS from SA3 on IMS identifiers and ISIM and USIM | S3-010647 | SWG2 | Noted |
| T2-020252 | LS to GUP on UICC exchange | SWG3 | SWG2 | Noted with action a |
| T2-020254 | LS to S3, S4, S5, N1, N4, N5, T3 cc S1, S2 on coordination of data definitions, identified in GUP development | T2 GUP ad hoc | OP | Noted |
| T2-020255 | LS to S1, TSG-SA cc TSG-CN, TSG-T on GUP/DDF timescales | T2 GUP ad hoc | OP | Noted |
| T2-020256 | LS to CN4 on Cx Interface User Profile | T2-GUP Chair | | Approved. Output f approval |

Annex B List of Participants

| DELEGATE | ORGANIZATION | E-MAIL |
|-----------------------|---------------------|--|
| Prem Sood (Chair) | Sharp | pls@sharplabs.com |
| Alan Chau (Secretary) | Nokia | alan.chau@nokia.com |
| Olga Tomé | Ericsson | olga.tome@emp.ericsson.se |
| Kevin Holoubek | Motorola | kevin.holoubek@motorola.com |
| Mitsuru Murata | NTT DoCoMo | mmurata@cet.yrp.nttdocomo.co.jp |
| Michael Stoim | Vodafone D2 | nmichael.stoim@vodafone.de |
| Rolf Gustavsson | Telia AB | rolf.x.gustavsson@telia.se |
| Gunilla Bratt | Ericsson | gunilla.bratt@emp.ericsson.se |
| Masutada Mouri | NTT DoCoMo | m-mouri@cet.yrp.nttdocomo.co.jp |
| Hidetoshi Kambe | Mitsubishi Electric | hikam@csc.melco.co.jp |
| Peter Neumann | Siemens AG | peter Neumann@mch.siemens.de |
| Ileana Leuca | AT&T Wireless | ileana.leuce@attws.com |
| Venson Shaw. | AT&T Wireless | venson_shaw@hotmail.com |
| Pascal Gaulin | Cellon France | epascal.gaulin@philips.com |
| Randall Grund | Motorola | randall.grund@motorola.com |
| Markus Lohmuller | E-Plus | markus.lohmuller@eplus.de |

Annex F: Report from SWG3 Messaging

Agenda Item: T2 Closing Plenary

Source: SWG3 Chair

Title: Report of SWG3 at T2#16

Document for: Approval

Executive Summary:

SMS:

Interoperability: A CR 23.040 (T2-020237) was agreed to assist with interoperability of services to terminals supporting different EMS features.

Addressing: A CR 23.040 (T2-02029) was agreed which allows part of a TPDU address field to be used as a sub-address.

Another CR 23.040 concerning addressing (T2-020230) was agreed, defining an Alternate Return Address element for use in the UDH.

Duplicate messages in MO-SMS: A correction was agreed to be necessary to the specification of the response from an SC, in the case of a duplicate short message. The correction is needed to R99, Rel-4 and Rel-5 versions of 23.040. (T2-020225, T2-020226, T2-020227).

Replace type messages and concatenated SMS: The combination of these features appears to be undefined in the present specification. There was a proposed CR which would prevent such a combination, but delegates felt there may be an emerging need for replace functionality with concatenated messages, so the matter is deferred for further consideration.

Type 0 message handling: An LS from GSMA Terminals Working Group proposes to make it mandatory for Type 0 messages to be discarded, instead of optional as at present. Terminal manufacturers requested time to check the implications, so the matter is deferred. It was felt that any eventual CR should be a Rel-5 correction, and should not apply to earlier releases.

CBS:

Support of UDH: A CR 23.038 (T2-020231) was presented to correct the misalignment of 23.038 with the WAP Forum intended support of UDH and 8-bit data. The technical solution was agreed, however some delegates felt that a list of supported (or unsupported) IEs should be added. This study could not be completed before the end of the meeting due to lack of time.

A proposed draft LS to SA1 on this topic (T2-020205) was seen not to be needed and was therefore rejected.

| Tdoc | Title | Source | Comment |
|-----------|---------------------------------|----------------------|--------------------------------|
| T2-020231 | CR 23.038 Support of UDH in CBS | Magic4, CMG, Swapcom | Needs to be discussed in T2 CP |

EMS:

The principal work items were Vector Graphics and Polyphonics

Vector Graphics: There were two different proposals presented at the opening of the meeting, but as a result of extensive discussion and behind-the-scenes activity, the companies behind these proposals were able to reach a compromise, and a single CR was eventually agreed (T2-020236) without any objections raised.

Polyphonics: Again there were two different proposals, and again, after extensive discussion, a compromise was reached and agreed in principle. Unfortunately insufficient time remained for the CR to be produced, and the interested parties undertook to prepare it in time for the T2#16 closing plenary.

The completion of work on these two features is a major achievement for EMS in Rel-5, involving considerable effort by several companies.

| Tdoc | Title | Source | Comment |
|-----------|--------------------------------------|--------------|--|
| T2-020238 | CR23.040 Polyphonic Extended Objects | NEC, Alcatel | PENDING agreed in principle final CR to be produced for T2#16 CP |

MMS:

MMS REL-4:

3 corrections to REL-4 of 23.140 have been approved by SWG3.

MMS REL-5:

28 changes to REL-5 of 23.140 have been approved by SWG3 on address resolution/MNP, enhancements of MM4, MM7 stage 2, persistent storage, USIM aspects of MMS, MMS charging, header mapping, detection of duplicated messages, terminal capability negotiation and addressing on MM1.

SWG3 has finalised work on the stage 2 part of MMS REL-5. I.e. the functionality for MMS REL-5 is complete. No additional functionality will be inserted for MMS REL-5 after T2#16 (including MM7).

Outstanding work for MMS REL-5 is on the stage 3 description of the MM7 reference point, i.e., the detailed implementation of the connection of an MMS Relay/Server to a VASP. MM7 stage 3 finalization can be achieved with one additional ad hoc according to SWG3's understanding.

Hence, SWG3 kindly requests to delay the REL-5 freeze of 3GPP TS 23.140 until T2#17 and T#16, respectively.

MMS REL-6:

Due to lack of time SWG3 has not produced a WID for MMS REL-6 yet nor discussed any REL-6 documents. However, continuing the work on MMS for REL-6 is seen to be very important. The following topics have been identified as potential work items for MMS REL-6:

- MM3: MMS Relay/Server – External Servers
- MM6: MMS Relay/Server – MMS User Databases
- Charging Enhancements (MM8, Reverse charging, Prepaid charging)
- Investigate GUP Interdependencies
- Investigate the Relationship between MMS and IMS
- Enhanced Streaming Support

Others:

Postponed documents:

The following **incoming LSs** could not be dealt with during SWG3-MMS sessions:

T2-020259, T2-020280, T2-020281, T2-020282

The following documents are postponed to the SWG3 ad hoc on finalization of **MM7 stage 3 REL-5**:

T2-020132, T2-020195

The following REL-5 CR is **pending** prior SA approval of 26.140 (MMS codecs) for REL-5:

T2-020269

The following documents are postponed to **post-REL-5**:

T2-020165, T2-020166, T2-020167, T2-020168, T2-020172, T2-020197, T2-020214, T2-020267

Two drafts for outgoing LSs could not be discussed due to lack of time. These are

T2-020264 and T2-020266.

| Tdoc | Title | Source | Comment |
|-----------|--|---------|-----------|
| T2-020264 | LS-reply to T3 on MMS related changes for Rel-4 | Siemens | postponed |
| T2-020266 | LS to SA1, T3 and T2-SWG1 on UE data consistency | ATTWS | postponed |

Actions:

A list of actions items, related to post-REL5 MMS work, can be found in Annex A.

Future Meetings:

| Meeting | Date | Venue | Comment |
|--------------|---|--------------------------|--|
| T2-SWG3#11 | 3 ½ days during week of 29th April – 3rd Mai | Seattle / USA (ATTWS) | Scope: Finalisation MM7 stage 3 for MMS REL-5 Start: Monday at 2 pm and End: Thursday 4 pm or Start: Tuesday at 2 pm and End: Friday 4 pm |
| T2#17 | 13-17 May 2002 | Tbd | |
| T2#18 | 19-23 Aug 2002 | Tbd | |

Output Change Requests from SWG3-EMS/SMS/CBS sessions:

| Tdoc | Title | Source | Comment |
|-----------|---|------------|---------|
| T2-020225 | CR 23.040 R99: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011025) | NTT DoCoMo | |

| | | | |
|-----------|--|------------------------------------|--|
| T2-020226 | CR 23.040 Rel-4: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011026) | NTT DoCoMo | |
| T2-020227 | CR 23.040 Rel-5: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011027) | NTT DoCoMo | |
| T2-020229 | CR 23.040 Subaddressing | One2one, Jinny, Swapcom | |
| T2-020230 | CR 23.040 Alternate return address | One2one, Jinny, Swapcom | |
| T2-020236 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | |
| T2-020237 | CR 23.040 Extended Object Data Request Cmd | Motorola | |

Output Change Requests from SWG3-MMS sessions:

Release 4:

| Tdoc | Title | Source | Comment |
|-----------|---|----------|---------|
| T2-020141 | CR 23.140 Correction on the SMTP-address address encoding (mirror - Release 4) | Openwave | |
| T2-020150 | CR 23.140 Correction on the MIME Content-Type Message format on MM4 (Release 4) | Openwave | |
| T2-020154 | CR 23.140 Rel-4 correction of the forwarding feature | Siemens | |

Release 5:

| Tdoc | Title | Source | Comment |
|-----------|---|----------|---------|
| T2-020140 | CR 23.140 Correction on the SMTP-address address encoding (Release 5) | Openwave | |
| T2-020144 | CR 23.140 Introduction of SMTP Service Extensions over MM4 | Ericsson | |
| T2-020145 | CR 23.140 MM4 Forward Routing Failure | Ericsson | |
| T2-020146 | CR 23.140 Clarification of Existing Request Status Codes over MM4 | Ericsson | |
| T2-020148 | CR 23.140 Delivery Report Definition Correction | Nokia | |
| T2-020149 | CR 23.140 VASP Abbreviations | Nokia | |

| | | | |
|-----------|---|--------------------------------|--|
| T2-020151 | CR 23.140 Correction on the MIME Content-Type Message format on MM4 (Release 5) | Openwave | |
| T2-020155 | CR 23.140 Correction of MM1 Addressing | Nokia | |
| T2-020156 | CR 23.140 Rel-5 correction of the forwarding feature | Siemens | |
| T2-020157 | CR 23.140 REL-5 Reject Duplicates | Logica | |
| T2-020158 | CR 23.140 Rel-5: Submission Description Enhancement | Siemens | |
| T2-020161 | CR 23.140 REL-5 adding reference to 32235 | Siemens | |
| T2-020162 | CR 23.140 v510 terminal capability negotiation | Siemens | |
| T2-020211 | CR 23.140 Recipient MSISDN address Resolution | Openwave | |
| T2-020215 | CR 23.140 REL-5 reply charging consistency | Gemplus | |
| T2-020219 | CR 23.140 - Support of Reply-Charging in MM7 | Nokia | |
| T2-020261 | CR 23.140 REL-5 VASP-related CDR generation | Siemens | |
| T2-020262 | CR 23.140 Persistent Networked-Based Storage Functions | Openwave | |
| T2-020263 | CR 23.140 REL-5 - Functional Description and Abstract Messages for MM7 realization | Comverse, Materna | |
| T2-020265 | CR 23.140 REL-5 Storage of MMS parameters on the USIM | Gemplus | |
| T2-020270 | CR 23.140 MM1-MM4 header mapping | Ericsson | |
| T2-020271 | CR 23.140 editorial Changes | Materna | |
| T2-020272 | CR 23.140 - Annex C - Call Data Records | Nokia | |
| T2-020274 | CR 23.140 REL-5 addressing by unqualified name on MM1 | KPN, Comverse, Openwave | |
| T2-020275 | CR 23.140 REL-5 reference point MM8 to billing system | Materna, Nokia, Comverse | |
| T2-020277 | CR 23.140 - MM7 addressing | Nokia | |
| T2-020278 | CR 23.140: Clarification about Streaming in MMS | Nokia | |
| T2-020279 | CR 23.140 REL-5 Clarifications on responsibilities of MMS User Agent and MMS Relay/Server | Siemens | |

Output Liaison Statements from SWG3-EMS/SMS/CBS sessions:

None

Output Liaison Statements from SWG3-MMS sessions:

| Tdoc | Title | Source | Comment |
|-------------|--|---------------|--|
| T2-020035 | LS to GSMA IREG cc SA2, GSMA SerG on routing of MMS traffic via MM4 | SWG3 | outcome SWG3#9 / 10 T2 approved via email |
| T2-020038 | LS to SA5 cc CN5, SA2, SA1 on VASP MMS Connectivity | SWG3 | outcome SWG3#9 / 10 T2 approved via email |
| T2-020047 | LS to SA5 cc SA1 on charging support for VAS MMS Connectivity Interface | SWG3 | outcome SWG3#9 / 10 T2 approved via email |
| T2-020217 | LS to GSMA BARG on Billing and Network aspects Concerning MMS Interworking | Nokia | revision of T2-020171 |
| T2-020245 | LS to SA2, GSMA SerG cc GSMA IREG, GSMA EC, GSMA MSIG, GSMA E2E on Address Resolution in MMS | SWG3 | outcome SWG3#9 / 10 T2 approved via email |
| T2-020250 | LS to GSMA IREG & SERG on email/MSISDN addressing support | SWG3 | outcome SWG3#9 / 10 T2 approved via email |
| T2-020251 | LS to SA4, cc SA1 on transfer of responsibility of MMS media formats and codecs | SWG3 | outcome SWG3#9 / 10 T2 approved via email |
| T2-020252 | LS to GUP on UICC exchange | SWG3 | outcome SWG3#9 / 10 T2 approved via email |
| T2-020273 | LS to SA1 on user privacy on MM7 | Nokia | |
| T2-020276 | LS to SA3 on MM7 Security mechanisms | Openwave | |

Detailed Report of SWG3-EMS/SMS/CBS sessions:

General:

Meeting Opening - (Tuesday)

Arthur opened the meeting and welcomed all the delegates. He stressed that he thought that EMS was not a competitor to MMS, believing that EMS would help MMS by educating end users. He asked manufacturers to heed the advice of service providers, content providers and manufacturers. Paul Voskar asked that delegates focus on the technical issues only.

A brief discussion about the agenda was held; the main question being whether to focus on vector graphics or polyphonic melodies first. It was decided that vector graphics discussion be held first.

Ian Harris stepped in to chair the meeting since Arthur Gidlow felt sick and had to leave the meeting. Ian stated that he'd welcome any suggestions on the

Wednesday

Arthur resumed the meeting. It was decided that the group focus on some of the SMS issues, prior to engaging on the polyphonic sounds work.

Thursday

Polyphonic sounds and the last few CR's were on the agenda for the final day.

SMS -Interoperability:

| Tdoc | Title | Source | Comment |
|-----------|--|----------|----------------------|
| T2-020183 | CR 23.040 Extended Object Data Request Cmd | Motorola | Revised as T2-020228 |

Discussion:

Randall presented the CR

Peter questioned a sentence within the body of the document dealing with the reply path, Randall agreed that the sentence could be deleted.

Conclusion:

Revised as T2-020228

| Tdoc | Title | Source | Comment |
|-----------|--|----------|----------------------|
| T2-020228 | CR 23.040 Extended Object Data Request Cmd | Motorola | Revised as T2-020237 |

Conclusion:

Revised as T2-020237

| Tdoc | Title | Source | Comment |
|-----------|--|----------|---------|
| T2-020237 | CR 23.040 Extended Object Data Request Cmd | Motorola | Agreed |

Conclusion:

Agreed

SMS - Addressing:

| Tdoc | Title | Source | Comment |
|-----------|-------------------------|-------------------------------|----------------------|
| T2-020134 | CR 23.040 Subaddressing | One2one, Jinny, Swapcom | Revised as T2-020229 |

Discussion:

Fabrice presented the CR

Ian asked why two symbols * and # are being used, since this means that any future developments in this area would be prevented. He suggested using only a single symbol. Ian suggested using the # symbol.

Gwenael asked whether this change applies to all types of numbers including international number. Fabrice answered that it applies to all numbers. Ian pointed out that alphanumeric addressing could cause problems. A discussion took place on whether alphanumeric addressing was actually logged or used in the network, and the implications of this mechanism. It was suggested that this CR should not apply to TON Alphanumeric.

Randall asked about the implications of this, expressing concern that this allowed world-wide "solicitations". Barry explained that it was already the case that you can receive unsolicited SMS messages. Randall asked whether operators felt that this left users open to abuse. Ian and arthur answered that this would not make the situation any worse.

Peter asked about whether this introduces a conflict with reply mechanisms, Ian pointed out that this change would not make any existing issues any worse.

A few typographical errors were pointed out.

Conclusion:

Revised as T2-020229

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

| | | | |
|-----------|-------------------------|-------------------------------|--------|
| T2-020229 | CR 23.040 Subaddressing | One2one, Jinny, Swapcom | Agreed |
|-----------|-------------------------|-------------------------------|--------|

Conclusion:

Agreed

| Tdoc | Title | Source | Comment |
|-----------|------------------------------------|-------------------------------|----------------------|
| T2-020135 | CR 23.040 Alternate return address | One2one, Jinny, Swapcom | Revised as T2-020230 |

Discussion:

Fabrice presented this CR.

Ian questioned whether the note on potential abuse of this mechanism would draw attention, thus making the note self defeating. Paul re-iterated this and together with Ian suggested a modification, removing the first sentence means that the word "abuse" does not appear in 23.040 and therefore does not draw attention to the potential problem.

Arthur questioned the use of the word concatenated stating that it was probably redundant. Peter asked that a sentence be added that recommend using this IE within the first SM. Randall agreed.

A comment was made that the classification in the IEI table be changed to SMS control, No repeatability. Freidhelm asked that the change marks be tidied up.

A long discussion took place on the security implications of this feature. Alex asked whether abuse could be limited by screening at the SC. Ian expressed serious concern about this CR since it circumvents security measures in place, however he stated that he could see real value for this in providing good services for users. The general feeling was that delegates were concerned about security, but saw the benefit of services using this feature.

Conclusion:

Revised as T2-020230

| Tdoc | Title | Source | Comment |
|-----------|------------------------------------|-------------------------------|---------|
| T2-020230 | CR 23.040 Alternate return address | One2one, Jinny, Swapcom | Agreed |

Conclusion:

Agreed

SMS - Duplicate messages:

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

| | | | |
|-----------|--|------------|----------------------|
| T2-020180 | CR 23.040 R99: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011025) | NTT DoCoMo | Revised as T2-020225 |
|-----------|--|------------|----------------------|

| Tdoc | Title | Source | Comment |
|-----------|--|------------|----------------------|
| T2-020181 | CR 23.040 Rel-4: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011026) | NTT DoCoMo | Revised as T2-020226 |

| Tdoc | Title | Source | Comment |
|-----------|--|------------|----------------------|
| T2-020182 | CR 23.040 Rel-5: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011027) | NTT DoCoMo | Revised as T2-020227 |

Discussion:

Arthur presented these CR's.

The were some header sheet and editorial modifications to fix a few problems with these CR's

Conclusion:

Revised as T2-020225, T2-020226, T2-020227

| Tdoc | Title | Source | Comment |
|-----------|--|------------|---------|
| T2-020225 | CR 23.040 R99: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011025) | NTT DoCoMo | Agreed |

| Tdoc | Title | Source | Comment |
|-----------|--|------------|---------|
| T2-020226 | CR 23.040 Rel-4: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011026) | NTT DoCoMo | Agreed |

| Tdoc | Title | Source | Comment |
|-----------|--|------------|---------|
| T2-020227 | CR 23.040 Rel-5: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011027) | NTT DoCoMo | Agreed |

Conclusion:

Agreed

SMS - Replace type message for concatenated message:

| Tdoc | Title | Source | Comment |
|-----------|--|--------|--------------------------------------|
| T2-020204 | CR 23.040 Replace Type and Concatenated Messages | CMG | Noted, e-mail discussion required |

Discussion:

Pieter (CMG) presented this CR.

Alan asked about the phrase "Irrational behaviour", it was pointed out that this is used elsewhere in the specification. Peter pointed out an error on the cover sheet.

Several delegates had differing opinions on how this feature should or could work when used in conjunction with concatenated messages.

Conclusion:

The document was noted, an e-mail discussion on this issue shall be conducted

SMS - Others:

| Tdoc | Title | Source | Comment |
|-----------|--|--------|---------|
| T2-020194 | GSMA TWG Support Letter for CR "handling of SMS message type 0 | Eplus | |

Discussion:

This is LS from GSMA TWG stating support for the CR below.

Alan said that the implications of changing may to shall in a standard was quite significant, adding that Ericsson could not support this. Paul agreed, and stated that Nokia could not support this. Other terminal manufacturers agreed with the sentiment that this was not in the interests of mobile manufacturers.

Ian questioned the need for this change since he believed that the MMI should be an area for competition.

Arthur asked how to solve the problem and suggested some possible solutions, several delegates suggested that the matter be discussed on the e-mail reflector before the next meeting.

Conclusion:

Document Noted

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

| | | | |
|-----------|---------------------------------------|-----------|--|
| T2-020137 | Change handling of SMS message type 0 | Cellpoint | |
|-----------|---------------------------------------|-----------|--|

Discussion:

The chairman opened the CR to show the delegates, to try and aid the discussion of the above LS.

Gwenael pointed out that the CR is to Rel-99. There was concern that changes to a previous release are hard to accept because of the implications on backward compatibility.

Conclusion:

Document Noted

CBS - UDH over CBS:

| Tdoc | Title | Source | Comment |
|-----------|---------------------------------|----------------------|----------------------|
| T2-020136 | CR 23.038 Support of UDH in CBS | Magic4, CMG, Swapcom | Revised as T2-020231 |

Discussion:

Fabrice presented this CR

It was suggested that perhaps a table be drawn up to show which UDH elements are acceptable in CBS.

Conclusion:

To be Revised as T2-020231 and will be discussed in T2 closing plenary before it can be agreed

| Tdoc | Title | Source | Comment |
|-----------|---------------------------------|----------------------|----------|
| T2-020231 | CR 23.038 Support of UDH in CBS | Magic4, CMG, Swapcom | To T2 CP |

Discussion:**Conclusion:**

| Tdoc | Title | Source | Comment |
|-----------|----------------------------|---------|----------------------|
| T2-020198 | LS to SA1 about UDH in CBS | Swapcom | Revised as T2-020205 |

Discussion:

The LS was briefly discussed.

It was suggested some modifications be made

Conclusion:

Revised as T2-020205 – T2-020205 later seen as un-necessary so was withdrawn

CBS - Others:

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

Discussion:

Conclusion:

EMS - vector graphics:

General Discussions

After presentation of the two CR's and supporting information. Ian suggested that we weigh up the two main arguments, one of byte size, the other of compatibility with MMS. Alan pointed out that inter-domain transfer (no just MMS) was a strength of the CVG format. Manu responded that both formats could be converted to CVG.

The issue of future proofing was raised together with compatibility, it was pointed out that SVG is a working assumption in SA4.

Arguments resolved around the standardisation and round trip conversion motorola presented document T2-020222 (initially without a 3GPP header). Items discussed on this issue are noted with that document in this section.

Peter Neuman suggested that we could standardise two proposals. Ian disagreed strongly stating that a technical sound solution would only arise in the case of a single codec. Ed asked this again and Ian said that operators stated in Paris they did not want multiple codecs.

A show of hands indicated which companies supported which proposal, Only Ericsson, Nokia and ZoomOn supported the CVG proposal. There was very widespread support for the WVG proposal.

Ed commented that the correct way of doing this would have been the SA1 route. Barry responded that he agreed that the SA1 route would have been best, but there is a WID for EMS that includes Vector graphics.

Ian asked about the position of the various companies and whether they wanted to risk having any vector graphics in EMS, since that was possible if the issues went to a vote. Ericsson and Nokia stated their companies position with regard to the vector graphics issue.

The meeting was closed early on Tuesday to allow the interested parties, Bijitec, Motorola, Ericsson and Nokia to consult each other and experts within their companies to try to arrange a compromise.

Wednesday

Paul made a statement regarding Nokia's updated position. They favour a dual decoder solution. Peter asked about the number of extended object code point identifiers. It was stated that there would probably be two identifiers. Ian asked for clarification of whether the CVG proposal is implementable, ZoomOn responded that it was.

Alcatel and Motorola did not agree that a two codec solution should be sought. Brian stated that MCI support the bijitec proposal. NEC also stated they did not wish to have two decoders.

Ericsson stated that they would much prefer the two codec solution, but that they would be able to support a single codec solution with some modifications.

A discussion took place on the issues involved in a dual decoder solution. There was no consensus on a solution.

Arthur asked for an indication of support for the possible outcomes. Nokia stated that they prefer the dual decoder solution. Ian asked whether it would be worth finding out which companies support a dual codec solution.

A discussion was held on four possible proposals. There was little support for Option C. Concerns were expressed that Discussions on Option B could still end up with a dual codec proposal.

A – Original WVG proposal

B – Modified WVG Single Codec

C – Dual Decoder

D – WVG + Code point assigned for MMS

Gunilla asked about the three codec proposal in Paris, and why the situation appears to have changed since. It was stated that a multiple codec solution was rejected in Paris.

Randall suggested that delegates leave the meeting to discuss and progress alternative B.

Arthur asked how many delegates wished to have a vote on Friday if required :

18 were in favour, 3 were against.

Thursday

After some lengthy debates off-line there is a vector graphics solution agreed by all parties. See T2-020234.

Manu presented the changes to the original WVG CR agreed by all parties the changes are summarised in T2-0202

The agreed CR is T2-020236

Manu thanked Nokia and Ericsson for their co-operation on the vector graphics issue.

| Tdoc | Title | Source | Comment |
|-----------|------------------------------------|----------|---------|
| T2-020189 | Vector Graphics Supplementary Info | Motorola | |

Discussion:

Dave Chen presented the document.

The proposal is a combined proposal between Motorola Lexicus and Bijitec. Arthur congratulated two previous rival proposals on co-operation.

Brad sipes asked about the meaning of “complex animation”. Dave answered that complex meant timestamp based as opposed to cycle based animation. Manu Chaterjee offered to rewrite the discussion document

Concern was expressed about the arrival of new information, and the focus on the size of the format. Comments were made that after the Paris Ad-hoc no new procedure for submitting new information was agreed upon.

Conclusion:

Noted

| Tdoc | Title | Source | Comment |
|-----------|-----------------------------------|----------|----------------------|
| T2-020187 | CR23.040 Vector Graphics Proposal | Motorola | Revised as T2-020207 |

Discussion:

This document was not discussed since it a modified version was available

Conclusion:

Revised as T2-020207

| Tdoc | Title | Source | Comment |
|-----------|------------------------------------|------------------------------------|----------------------|
| T2-020207 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | Revised as T2-020223 |

Discussion:

Dave Chen presented this CR

Alan asked why items such as chat and other tagged text were present in a proposal that attempted to address Vector graphics. Manu said that it was because applications outside the domain of EMS could implement chat.

A brief discussion took place about the scope of the CR including items such as tagged text, game moves, and chat. Some delegates argued that vector graphics was being polluted by these things, others commented

Peter asked about aspect ratios, Dave responded that aspect ratios increment by multiples of 4:3

Peter asked about why the WVG is not part of extended object, and that this would prevent sending of objects greater than 128 octets. Barry commented that the objects would need to be added to the table in appendix E. Dave added that character size objects would be desirable in the IEI table.

Brad Sipes asked about the byte sizes when the object is transmitted as an IE or an extended object type.

Gwenael pointed out that compression can only be applied to an extended object.

Conclusion:

Noted

| Tdoc | Title | Source | Comment |
|-----------|----------------------------|----------|---------|
| T2-020188 | Vector Graphics Benchmarks | Motorola | Noted |

Discussion:**Conclusion:**

Noted

| Tdoc | Title | Source | Comment |
|-----------|---------------------------|-------------------------------|---------|
| T2-020193 | SVG Tiny_CVG Test Results | Ericsson, Nokia, ZOOMON | |

Discussion:

Brad Sipes presented the document.

Barry stated that he had worked out there was an average 51% extra bytes including the Bee and Flower test file (Barry thought this file was an anomaly anyway). Excluding the Bee and flower case the CVG format was on average 69% bigger in terms of bytes than the comparative MVG files. Brad pointed out that the document makes no claim about byte size, but reflects number of short messages.

Paul Voskar agreed that the Bee and flower case could be ignored since it was an anomaly.

Azadeh pointed out that previously operators had concentrated on SM's stating that they felt 2-3 SM's was required. Ian pointed out that byte size was important to operators. Dave agreed that both SM comparison and byte comparisons were valid.

Fabrice backed Barry's figures of 69% adding that in SM terms the CVG proposal was on average 23% bigger. Brad questioned these figures stating that he believed the difference was 39%. There was a request made to check the figures over lunch. Ulf commented that the compression algorithm together with the content carried can affect the number of SM's used. Result 78.75% difference in byte size, SM difference is 50%.

Ian commented that the strength of the proposal did not lie in the table, but in other parts, he believed that there was no technical strength in the document. Alan disagreed stating that there was technical merit in having only a single codec (MMS and EMS) from a handset manufacturers point of view.

Conclusion

Noted

| Tdoc | Title | Source | Comment |
|-----------|--|-------------------------------|---------|
| T2-020192 | CR 23.040 Rel-5 Vector Graphics Format for EMS | Ericsson, Nokia, ZOOMON | |

Discussion:

Brad Sipes presented this CR.

Brad stated that CR is essentially the same as before with a few typographical errors fixed, and some placeholders.

Ian asked what changes had been made since previous revisions of the document, Brad couldn't highlight the exact areas, but stated that it would be possible to obtain that information if necessary.

Dave queried the feature set of this proposal, highlighting certain features that he felt to be too complex for an EMS proposal. Paul commented that EMS itself was now quite feature rich, and that this proposal was still valid.

Manu asked about the non-mandatory features of the proposal. Brad pointed out that Manu's concerns could be incorporated.

Barry asked about the references within the document, stating that several references appeared to point to sections that did not exist, or did explain the issues that they were supposed to.

Conclusion:

Noted

| Tdoc | Title | Source | Comment |
|-----------|----------------------------|---------|---------|
| T2-020210 | Vector Graphics Comparison | One2one | |

Discussion:

Ian Harris presented the document (on behalf of Arthur Gidlow).

Ian invited comments on the proposals, he suggested that there were differences in both physical structure and colour. Alan suggested that the colour maybe to do with bitmap depth of colour, and that it was probably not relevant.

Barry asked some specific questions about some of the images, it was pointed out that both sets of images are human reproduced copies of the original and NOT transcoded versions. Alex pointed out that both sets of images are acceptable within tolerances. Barry agreed that both sets of images were acceptable within tolerances.

Barry asked about round trip conversion. There was some confusion over the mechanism of the methodology used in the CVG proposal. Brad pointed out that new SVG source files were made which were subsequently transcoded into CVG.

It was stated by a number of delegates that the quality of the two formats is similar, and that one format is just bigger than another. Others disagreed, some felt that a particular format was better than the other, although there was no consensus on which one.

Conclusion:

Noted

| Tdoc | Title | Source | Comment |
|-----------|--------------------------------------|--------|----------------------|
| T2-020208 | Selection of vector graphics for ems | EMC2 | Revised as T2-020221 |

Discussion:

Barry presented the document.

Ian commented about the revised figures comparing in percentage terms the two proposals. Barry said that he would revise the document with the new figures (78.75% difference in byte size, SM difference is 50%). Paul stated that he did not feel that the document was helpful since it just contained information that was available elsewhere previously, and that he felt there were some serious omissions.

Conclusion:

Revised as T2-020221

| Tdoc | Title | Source | Comment |
|-----------|----------------------------|----------|---------|
| T2-020222 | SVG Compatibility with WVG | Motorola | Noted |

Discussion:

Motorola presented this document without a header etc.

They were advised of the procedure regarding headers and document numbering. Alan asked how this indicated compatibility with SVG. Manu explained that many of the primitives used in CVG are included in MVG, those that were not could be added in an extended object. The document here provides the background.

A discussion revolved around compatibility with SVG but no consensus could be reached, several delegates felt it was important that the group choose a standard based solution, others felt that the solution need not be standards based.

Conclusion:

Noted

| Tdoc | Title | Source | Comment |
|-----------|------------------------------|---------|---------|
| T2-020199 | Input Statement from Bijitec | Bijitec | Noted |

Discussion:**Conclusion:**

Noted

EMS - polyphonics:Thursday

Ulf updated the group on the situation regarding polyphonic melodies. Ulf stated that Tom White has said that the SP-Midi specification needs some minor editorial changes. Ulf presented a mail from Tom White (President of the MMA) that stated the specification would be publicly available in “two to three weeks at most”.

Ericsson confirmed they had sent an apology about sending Alcatel documents to the MMA.

A long discussion took place on the benefits of SP-Midi MIP messages within the content. There was no agreement from several of the manufacturers.

Ian asked whether it was possible for an SP-Midi file to be rendered down to general midi. Randall suggested that it should be possible to transcode SP-Midi into Midi on the terminal.

Brendan said that he felt that there were three manufacturers that wanted SP-Midi, and two that did not.

Fabrice argued that scalability was not in the interest of EMS. Nokia and Ericsson disagreed strongly.

Barry stated that he thought that some guidelines for content were required.

At the end of the meeting it was agreed in principle to make some minor modifications to the SP-MIDI format file to address concerns of Alcatel and NEC. The agreement was that alcatel and NEC would produce a new CR T2-020238 based on SP-MIDI and that it could be agreed during the closing plenary.

| Tdoc | Title | Source | Comment |
|-------------|--------------------------------------|---------------|----------------|
| T2-020173 | CR 23.040 Rel-5 MIDI profile for EMS | Alcatel, NEC | Noted |

Discussion:

CR was reviewed, several issues were voiced.

Only 2 changes to this CR - section E 13.4.2 and section E 13.2. Are some informative guidelines for creation of polyphonic sounds.

- note from CR - terminal is only expected to support 6 notes, but can transport and encode more than this.
- debate over whether the encoding is optimal in terms of compression ratio
- debate over the transparency and how reliable the encoding is when converted back to MIDI - 'note-off' (duration) bit is not transported - agree that the encoded file is not always accurately coded back into MIDI.

Conclusion:

Noted

| Tdoc | Title | Source | Comment |
|-----------|-----------------------------------|----------|---------|
| T2-020185 | CR23.040 Polyphony format for EMS | Motorola | Noted |

Discussion:

CR was reviewed, several issues were voiced.

Simple changes to this CR - the important change is the addition of an Informative Annex detailing optimisation guidelines for developers and content providers of MIDI melodies.

- discussion between the delegates on the mechanics and techniques detailed in both CR's
- debate on interoperability of SP-MIDI
- debate on the acceptance of MIDI support in devices, and whether the issue here is the transport of the content.
- note - terminal manufacturers support MIDI, so the issue is how to reduce the transport
- note - guidelines are implemented at the point of composition.
- Simon says - are content providers willing to sacrifice some transport efficiency (~10%) in order to gain access to the vast library of MIDI files.
- comment - peer to peer message compression is difficult

There followed a discussion comparing the methods and technology in the two CR's. Some of the points raised are highlighted above

Conclusion:

Noted

| Tdoc | Title | Source | Comment |
|-----------|-----------------------------|----------|---------|
| T2-020186 | Polyphony supplemental info | Motorola | Noted |

Discussion:

Overview of the discussion paper.

- Alcatel question on hardware considerations, the transcoding between SMS types, and the availability of S-MIDI hardware. -> Motorola reply that MIDI is already supported by four manufacturers present.
- debate over mandatory inclusion of compression in the handset for peer to peer message transfer - a CR to 23.040 may be required.

Other spontaneous discussion around various points, included:

Note that Alcatel encoding was not viewed as true MIDI. Compare to the 7-bit GSM alphabet which omits some characters in the name of efficiency, but is still acceptable in the context.

Alcatel objected vehemently to Ericsson inputting documents into MMA
But the input was not an LS from 3GPP.

Conclusion:

Noted

| Tdoc | Title | Source | Comment |
|-----------|--|---------|---------|
| T2-020224 | Discussion on the support of MIDI in EMS | Alcatel | Noted |

Discussion:

- the concerns raised in this document have already been discussed earlier in the proceedings.

issue identified by Alcatel: freeze the state of SP-MIDI

- note - SP-MIDI is available to implement - draft SP-MIDI spec is made available to SA4 (note - one parameter is missing)

issue identified by Alcatel: compression in handset

- Alcatel want all terminals to have compression for peer to peer transport
- Motorola and Siemens will check if compression is available in the terminal.
- Ericsson intend to support compression on all outgoing messages from terminals.
- note - Magic4 support compression for all outbound messages from handsets.

Conclusion:

Noted

| Tdoc | Title | Source | Comment |
|-----------|--------------------------------------|--------------|---------|
| T2-020238 | CR23.040 Polyphonic Extended Objects | NEC, Alcatel | |

Discussion:

Conclusion:

Pending. Principle agreed; final CR to be produced before T2#16 CP.

Detailed Report of SWG3-MMS sessions:

Reports from other Meetings:

| TDoc | Title | Source | Comment |
|-----------|---|---------------|---------|
| T2-020209 | DRAFT Report from T2-T3 joint Ad Hoc – MMS/USIM aspects | AT&T Wireless | |

Discussion:

Conclusion: All open issues in the report are covered by existing action points, document is noted.

Comverse gave a short oral presentation of what happened during the GSMA ad-hoc on MMS:

SWG3 is considered a “bottle neck” in standardisation of MMS. Several MMS items are identified as high priority by GSMA, e.g. ENUM, SMIL and SMS/MMS interoperability. Non-linear charging models are considered by GSMA, i.e. not having a direct proportion between the size of an MM and what is charged for sending it.

Input Liaison Statements:

| Tdoc | Title | Source | Comment |
|-----------|---|--------|--|
| T2-020011 | Liaison Statement on Draft stage 1 TS for Packet Switched Streaming Service | SA1 | SA1 informs T2 and several other groups about their ongoing work to create a stage 1 description for PSS. The goal is to conclude this is at SA#15. Document noted, Comverse (Rami) to check the content off line. |
| T2-020029 | Draft stage 1 TS for Packet Switched Streaming Service | SA5 | SA5 acknowledges the stage 1 work on PSS and request further requirements from SA1. There is no action required from T2, the document is noted |
| T2-020036 | SMS testing | T1 | Document already handled by EMS ad-hoc. |
| T2-020040 | Reply to Liaison Statement on Configuration of ciphering | CN1 | Document to be handled by SMS/EMS group. |
| T2-020041 | Reply to LS on VASP MMS Connectivity | CN2 | CN2 informs that a pre-paid solution for MMS needs to involve CAMEL. No need for action now but probably in rel-6, document noted. |

| | | | |
|-----------|--|------|--|
| T2-020042 | Answer Liaison Statement on MSISDN Address resolution for MMS using MAP operations | CN4 | Feedback on the proposal to use MAP operations for MSISDN address resolution. There is no perfect way of achieving address resolution with IMSI. The least undesirable way of doing it is to use SEND-ROUTING-INFO-FOR-SM. CN4 also proposes to possibly define a new MAP operation, but that is rejected by SWG3. SWG3 realises that using MAP for address resolution has problems, ENUM is the preferred and long term solution and it will be defined in full detail by SA2. The MAP approach is kept as an annex to 23.140. It was concluded that the MAP approach needs to be appended with the requirement to set the priority bit in the Send-SRI operation. Document is noted. Openwave to create an updated CR on address resolution, tdoc T2-020211. |
| T2-020045 | Reply to GSM-A SerG Liaison statement on "Operator Requirements: Push Services Stage 1" | SA1 | SA1 acknowledges that requirements to push from SerG have been incorporated in the push stage 1 specification. No action required by T2, document noted. |
| T2-020246 | IMS Security requirements | SA1 | No action required for T2, document is noted |
| T2-020247 | MMS related changes for Rel-4 | T3 | T3 has defined parameters for MMS Rel-4 to be stored on the USIM. Some debate on what exactly is required to do by T2. It is concluded that being able to use a Rel-4 USIM for a Rel-5 MMS User Agent is beneficial. A response LS is to be sent back to T3 to endorse their changes to Rel-4, see tdoc T2-020264 |
| T2-020259 | MSIG Members Statement to 3GPP SA4 and T2 regarding the MMS standardisation of Presentation Language | GSMA | Not handled (yet) |
| T2-020280 | Liaison Statement on MMS Presentation Language | SA1 | Not handled (yet) |
| T2-020281 | LS reply to: " Liaison Statement on Confirmation of OSA Support for VASP MMS Connectivity." | SA1 | Not handled (yet) |

Several incoming LS that were handled at previous MMS ad-hoc were noted without being discussed again.

REL-4 corrections:

| TDoc | Title | Source | Comment |
|-----------|---|----------|--|
| T2-020141 | Correction on the SMTP-address encoding | Openwave | Corrects a small error on the format of SMTP address. Approved at the previous MMS ad-hoc. |

Discussion:

3GPP

Conclusion: approved

| TDoc | Title | Source | Comment |
|-------------|---|---------------|--|
| T2-020150 | Correction on the MIME Content-Type Message format on MM4 | Openwave | Removes a content type that does not exist. Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-------------|--------------------------------------|---------------|--------------------------------------|
| T2-020154 | Correction of the forwarding feature | Siemens | Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

REL-5 corrections:

| TDoc | Title | Source | Comment |
|-------------|---|---------------|---|
| T2-020140 | Correction on the SMTP-address address encoding | Openwave | Mirror of T2-020141. Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-------------|---|---------------|---|
| T2-020151 | Correction on the MIME Content-Type Message format on MM4 | Openwave | Mirror of T2-020150. Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-------------|--|---------------|--------------------------------------|
| T2-020155 | Correction of addressing on MM1_Submit.REQ | Nokia | Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-------------|--------------------------------------|---------------|---|
| T2-020156 | Correction of the forwarding feature | Siemens | Mirror to T2-020154. Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-------------|------------------------------------|---------------|---|
| T2-020158 | Submission description enhancement | Siemens | Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-------------|--|---------------|---|
| T2-020159 | CR 23.140 REL-5 Reply-charging bug fixes | Gemplus | Approved at the previous MMS ad-hoc. |

Discussion: Slight change of wording proposed by Nokia.

Conclusion: Noted, updated version in T2-020215 approved.

Address resolution / MNP:

| TDoc | Title | Source | Comment |
|-------------|-------------------------------------|---------------|---|
| T2-020143 | Recipient MSISDN address resolution | MMS ad-hoc #9 | Approved at the previous MMS ad-hoc. See also incoming LS from CN4, tdoc T2-020042. |

Discussion: Needs to be updated with the priority bit in Send-SRI always set.

Conclusion: Agreed in principle. Noted, updated version in T2-020211.

| TDoc | Title | Source | Comment |
|-----------|-------------------------------------|----------|------------------------------|
| T2-020211 | Recipient MSISDN address resolution | Openwave | revised version of T2-020143 |

Discussion: Should or shall ENUM be supported? The conclusion is that ENUM should be supported since there may be some unclarity on when an ENUM solution could be deployed even in a private address space between operators.

Conclusion: approved

MM4: enhanced interworking issues:

| TDoc | Title | Source | Comment |
|-----------|---|----------|--------------------------------------|
| T2-020144 | Introduction of SMTP service extensions | Ericsson | Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-----------|-----------------------------|----------|--------------------------------------|
| T2-020145 | MM4 forward routing failure | Ericsson | Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-----------|--|----------|--------------------------------------|
| T2-020146 | Clarification of existing request status codes | Ericsson | Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

MM7 Stage 2 issues:

| TDoc | Title | Source | Comment |
|-------------|--------------------------------|---------------|---|
| T2-020147 | MM7 Transaction ID requirement | Materna | Adds a sentence about using transaction ID over MM7. Approved at the previous MMS ad-hoc. |

Discussion: The proposed sentence does not fit where it is inserted.

Conclusion: Noted, Materna to ensure that it is included in the general MM7 stage 2 description.

| TDoc | Title | Source | Comment |
|-------------|----------------------------|---------------|--------------------------------------|
| T2-020148 | Delivery report correction | Nokia | Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-------------|-------------------|---------------|--|
| T2-020149 | VASP abbreviation | Nokia | Adds "VASP" to the abbreviation list. Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-------------|--|---------------|--|
| T2-020152 | Functional description and abstract messages for MM7 realization | Comverse | This is the working assumption that came out of the MMS ad-hoc #9. |

Discussion:

Conclusion: Endorsed as working assumption.

| TDoc | Title | Source | Comment |
|-------------|--|---------------|----------------|
| T2-020206 | LS to SA2 on OSA support for VASP MMS Connectivity | Comverse | |

Discussion: Concerns expressed by H3G that with OSA an alternative MM7 interface would be introduced for Rel-6. Unclear what influence OSA will have on Rel-6, premature to start discussing it at this point.

Conclusion: Rejected

| TDoc | Title | Source | Comment |
|-----------|----------------|--------|--|
| T2-020201 | MM7 addressing | Nokia | Mandates that MM7 shall support E.164 addresses. |

Discussion: Concerns expressed that e-mail addresses also shall be supported, decided that e-mail addresses shall also be supported. Unclear about the address hiding. Confusion between what is transport layer address and what is used for the application layer. Distinction required between terminated and originated VASP addresses.

Conclusion: Stage 2 needs to be completed before dealing with addressing again. Document noted, revised version in T2-020216 pending the result of the MM7 stage 2 framework description.

| TDoc | Title | Source | Comment |
|-----------|--|--------|---|
| T2-020176 | Nokia comments to T2M020083 – Functional Description and Abstract Messages for MM7 realization | Nokia | Editorial corrections and clarifications to the MM7 stage 2 working assumption. Addition of reply-charging over MM7. MM7 Replace deleted. |

Discussion: Long discussions on several topics.

Discussion about whether the Relay/Server is allowed to delete delivery reports in case of VASP failure, it is concluded that the Relay/Server may delete delivery report after expiry.

Agreed that a definition of originator and recipient VASP is required.

Unclear how difficult it would be to enable the “send via VASP” use case, it certainly implies changes to MM1. Converse to clarify that issue.

Concerns about making the recipient address conditional in MM7 Submit, it is kept as mandatory.

Concerns about deleting MM7 replace, there is a stage 1 requirement that covers MM7 replace. Unfortunate user experiences may however occur if the properties of a replaced MM change after a notification is sent. The conclusion is that all IE:s that may be conveyed in the notification are excluded from MM7 Replace.

Conclusion: Document noted, revised version in T2-020218

| TDoc | Title | Source | Comment |
|-----------|----------------------------------|--------|--|
| T2-020202 | Support of Reply-Charging in MM7 | Nokia | Clarifies the service behaviour for reply-charging over MM7. |

Discussion: Some changes to the language to follow standardization terms proposed and accepted.

Conclusion: Document noted, revised version in T2-020219 approved.

| TDoc | Title | Source | Comment |
|-----------|----------------------------------|---------|--|
| T2-020196 | Reply-ID for MM7 and other usage | Siemens | Introduces the “in-reply-to” feature where a reply MM can be matched to a previously submitted MM. |

Discussion: Concerns are expressed where the requirement for this feature is coming from, especially when it is introduced so close to the finalisation of rel-5.

Some delegates believe that the link-ID is separate to the in-reply-to, the link-ID does not go to the MMS User Agent. A user can decide from context what a received MM is reply to.

Conclusion: Document rejected, postponed to rel-6.

| TDoc | Title | Source | Comment |
|-----------|-----------------------|-----------------------------|---------|
| T2-020260 | Authentication on MM7 | Ericsson, Materna, Openwave | |

Discussion: Draft version updated on-line

Comments to also include a public-private key authentication mechanism.

Concerns that the level of detail actually is a stage 3 description.

SWG3 agrees that for rel-5 HTTP mechanisms are to be used for authentication.

Conclusion: The document is noted, to be used for inclusion into T2-020263.

| TDoc | Title | Source | Comment |
|-----------|----------------|--------|------------------------------|
| T2-020216 | MM7 Addressing | Nokia | Revised version of T2-020201 |

Discussion: Draft version updated on-line

Concerns expressed for the short code definition, it should be alphanumeric and supported over MM1 also.

Note added to enable user privacy, i.e. that the MMS Relay/Server may hide the user's address with a code.

The term "Service provider specific addresses" is removed in favor of "short code".

Conclusion: The document is noted, revised version in T2-020277. LS to be sent to SA1 concerning user privacy on MM7, see tdoc T2-020273.

| TDoc | Title | Source | Comment |
|-----------|------------------------------|--------|---|
| T2-020268 | MM7 Addressing clarification | Nokia | Presentation to clarify MM7 addressing. |

Discussion: Draft version updated on-line

Discussion on what layer the different addresses belong, transport or application. It is concluded that the VAS address is removed from MM7 deliver.

Conclusion: Noted, used as basis for addressing description in T2-020216.

| TDoc | Title | Source | Comment |
|-----------|--|--------|------------------------------|
| T2-020218 | Nokia comments to T2M020083 – Functional Description and Abstract Messages for MM7 realization | Nokia | Revised version of T2-020176 |

Discussion: Several Alterations were made on-line to the draft tdoc.

Conclusion: The document is noted, to be used as starting point for T2-020263.

| TDoc | Title | Source | Comment |
|-----------|--|-------------------|--|
| T2-020263 | Functional description and abstract messages for MM7 realization | Comverse, Materna | The stage 2 description of MM7 (based on T2-020260 and T2-020218). |

Discussion: Draft version updated on-line

Conclusion: approved

| TDoc | Title | Source | Comment |
|-----------|----------------|--------|---|
| T2-020277 | MM7 addressing | Nokia | Updates T2-020216 to also include the case with automatic address hiding. |

Discussion: Draft version updated on-line

Clarification that user privacy is not the only reason to do addressing hiding over MM7.

Amendment that the sender address field may be empty, not only coded.

Conclusion: approved

| TDoc | Title | Source | Comment |
|-----------|----------------|--------|---|
| T2-020273 | Privacy on MM7 | Nokia | Outgoing LS to SA1 with T2-020277 attached. |

Discussion:

Conclusion: approved

| TDoc | Title | Source | Comment |
|-----------|-------------------------------|----------|---|
| T2-020276 | LS on MM7 security mechanisms | Openwave | Outgoing LS to SA4 with T2-020263 attached. |

Discussion:

Conclusion: approved

Network based mailbox model in MMSE (persistent storage):

| TDoc | Title | Source | Comment |
|-----------|--|----------|--|
| T2-020163 | Persistent Network-based Storage Functions | Openwave | Working assumption on persistent storage from previous MMS ad-hoc. |

Discussion:**Conclusion:** noted

| TDoc | Title | Source | Comment |
|-----------|--|----------|---------------------|
| T2-020164 | Commentary on Persistent Network-based Storage Functions | Openwave | discussion document |

Discussion:**Conclusion:** noted

| TDoc | Title | Source | Comment |
|-----------|---|--------|---|
| T2-020177 | Corrections and enhancements to Persistent Storage Draft CR | Nokia | Modifications and clarifications to the working assumption of persistent storage (T2-020163). Introduces a separate forward transaction for MMBox. |

Discussion: SWG3 agreed that most of the editorials and clarifications are correct.

Concerns raised about having two separate forwarding transactions. The reasoning is to quickly being able to determine where a MM is currently stored. Some concerns are raised that having two separate transactions would increase complexity in terminal. The conclusion of SWG3 is to keep it as one transaction and that the separation may be elaborated in WAP Forum stage 3 description.

Conclusion: The document is noted, revised version in T2-020262.

| TDoc | Title | Source | Comment |
|-----------|--|----------|-------------------------------|
| T2-020262 | Persistent Network-based Storage Functions | Openwave | Revised version of T2-020177. |

Discussion: The draft version was updated online.

Editorial corrections.

Clarification added that MM7 Cancel can not be performed after a notification is sent. Clarification that information elements that are mandatory in the notification can not be replaced.

Conclusion: approved**USIM and USAT aspects of MMS:**

| TDoc | Title | Source | Comment |
|------|-------|--------|---------|
|------|-------|--------|---------|

| | | | |
|-----------|--|---------|--|
| T2-020212 | CR 31.102 Rel-4 Introduction of MMS files and procedures | Siemens | CR to 31.102 presented here for information. |
|-----------|--|---------|--|

Discussion:**Conclusion:** Noted

| TDoc | Title | Source | Comment |
|-----------|---|------------------|---------|
| T2-020175 | CR 23.140 REL-5 Storage of MMS parameters on the USIM | Gemplus, Siemens | |

Discussion: The document was thoroughly discussed line by line.

Concerns were raised about the relation between OTA terminal management and MMS parameters on the USIM. An LS will be sent to SWG1 and SA1 inquiring on potential conflict between USIM and OTA provisioned MMS parameters, see tdoc T2-020266.

Interested parties will investigate the implications of persistent storage to this CR.

Conclusion: The document is noted, the revised version in tdoc T2-020265 is approved.**MMS charging:**

| TDoc | Title | Source | Comment |
|-----------|-----------------------------|---------|---------|
| T2-020261 | VASP-related CDR generation | Siemens | |

Discussion: Draft document updated on-line.

Serious concerns about making a recommendation for the Relay/Server to collect CDR for MM7 operation resulted in an informal show of hands:

10 in favour

3 against

8 abstains

The wording is made softer to suit everybody.

Conclusion: approved

| TDoc | Title | Source | Comment |
|-----------|--------------------------------------|---------|---------|
| T2-020161 | Adding a reference to 3GPP TS 32.235 | Siemens | |

Discussion:**Conclusion:** approved

| TDoc | Title | Source | Comment |
|-----------|---|--------|---------|
| T2-020203 | Correction to Annex X Call Data Records | Nokia | |

Discussion: Alterations made on-line.

The MM7 Service code added as a separate bullet even if some delegates considered it as a Charging Indicator.

Conclusion: Revised version in tdoc T2-020272 is approved.

| TDoc | Title | Source | Comment |
|-----------|--|--------|--------------------------------------|
| T2-020200 | MMS Charging specification inconsistency corrections | Nokia | Updates the SA5 specification 32.235 |

Discussion: Concerns expressed about keeping duration of storage and duration of transmission (used e.g. for streaming).

Nokia is encouraged to take this CR to SA5.

Conclusion: Noted

| TDoc | Title | Source | Comment |
|-----------|-----------------------------|--------|--------------------------|
| T2-020217 | LS to GSMA on MMS charging. | Nokia | Outgoing LS to GSMA BARG |

Discussion: Draft version is discussed and modified off-line.

Conclusion: approved

| TDoc | Title | Source | Comment |
|-----------|---------------------------------------|--------------------------|---|
| T2-020275 | Reference point MM8 to billing system | Comverse, Materna, Nokia | Adds a reference point to the billing system. |

Discussion: Concerns were raised what values this adds. The reasoning is that the reference point is required for the SA5 specifications.

Conclusion: approved

Header mapping (Support for MMDC):

| TDoc | Title | Source | Comment |
|------|-------|--------|---------|
|------|-------|--------|---------|

| | | | |
|-----------|----------------------------|----------|--------------------------------------|
| T2-020160 | MM1 <-> MM4 header mapping | Ericsson | Approved at the previous MMS ad-hoc. |
|-----------|----------------------------|----------|--------------------------------------|

Discussion: Some corrections made on line.

Conclusion: Revised version in T2-020270 is approved.

Duplicate messages :

| TDoc | Title | Source | Comment |
|-----------|-------------------|--------|--------------------------------------|
| T2-020157 | Reject Duplicates | Logica | Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

Outstanding CR on terminal capability negotiation:

| TDoc | Title | Source | Comment |
|-----------|---------------------------------|---------|--------------------------------------|
| T2-020162 | Terminal capability negotiation | Siemens | Approved at the previous MMS ad-hoc. |

Discussion:

Conclusion: approved

MM1 Addressing:

| TDoc | Title | Source | Comment |
|-----------|---|--------|--|
| T2-020153 | Correction of support for addressing formats on the MM1 interface | KPN | Makes it mandatory to handle both MSISDN and e-mail type addresses over MM1. |

Discussion:

Conclusion: noted, included in T2-020274

| TDoc | Title | Source | Comment |
|-----------|---|---------------------------------|---------|
| T2-020170 | Correction of support for addressing formats on the MM1 interface | KPN, Comverse, Openwave Systems | |

Discussion: The title and several other things are wrong with the cover sheet, agreed.

The service behavior part of the CR needs to be removed to a separate section. Comverse does not object to this, but sees no need for it.

Clause 2 and 3 needs to switch order.

Off-line discussion.

Conclusion: Document noted, revised version in T2-020274

| TDoc | Title | Source | Comment |
|-----------|------------------------|---------------------------------|---|
| T2-020274 | MM1 addressing formats | KPN, Comverse, Openwave Systems | Revised version of T2-020170 and includes T2-020153 |

Discussion: Draft document updated on-line.

Concerns raised about having “shall” in informative text, it is changed to “should”.

Concerns raised by Motorola that the content of the CR is stage 3, not stage 2.

Conclusion: approved

MM7 Stage 3 issues:

All documents postponed.

MM3: interworking with external messaging systems (e.g. with e-mail systems):

All documents postponed to rel-6.

Streaming:

| Tdoc | Title | Source | Comment |
|-----------|--------------------------------------|--------|---------------------------|
| T2-020178 | Clarification about streaming in MMS | Nokia | Adds an informative annex |

Discussion: Concerns that the SDP file can also be retrieved with the RTSP DESCRIBE method, that concern is not valid since 26.234 states that a presentation must be present.

Conclusion: Revised version in tdoc T2-020278 is approved.

Others:

| Tdoc | Title | Source | Comment |
|-----------|-------------------|---------|---|
| T2-020142 | Editorial changes | Materna | Shuffles sections and corrects some wording bugs. |

Discussion: Concerns about making it more difficult to keep the specification consistent if the orders of the sections are altered. Comment added to MCC.

Conclusion: Document noted, revised version in T2-020271 is approved.

| TDoc | Title | Source | Comment |
|-----------|---|---------|---------|
| T2-020269 | Alignment of 3GPP TS 23.140 with 3GPP TS 26.140 | Siemens | |

Discussion: Concerns that 23.140 can not refer to an unfinished specification, which is in principle correct.

The MCC secretary (Mr Friedhelm Rodermund) explained that this CR shall be considered a category F CR.

Conclusion: Pending the approval of TS 26.140 by SA, T2-020269 is postponed to the next T2 plenary where it will be resubmitted as a category F CR.

| Tdoc | Title | Source | Comment |
|-----------|---|---------|---------|
| T2-020169 | Clarifications on responsibilities of MMS User Agent and MMS Relay/Server | Siemens | |

Discussion: Point raised that changing to a more formal language will make the text normative. Since there are several items in section 5.2 that are not further explained, SWG3 agrees that such items should not be listed as if they may be supported.

Conclusion: The revised version in T2-020279 is approved

Annex A – MMS Action Item List of SWG3

| MMS Action Item | Responsible Person | T2#16 Status | Result / comment |
|---|------------------------------------|--------------|---|
| MMS option tables (T2M010140) to become 2 CRs as informative annex for rel-4 and rel-5 – interdependencies between features to be identified | Tim, Hutchison3G | open | Outstanding item. (Outstanding issue from SWG3#8) |
| Clarify prepaid vs. status text in either option table in T2M010140, spec or both | Petri, Nokia | open | Waiting for the options tables. (Outstanding issue from SWG3#8) |
| T2M010142 (VAS use cases) to be maintained as living document | Henrik, Telia | open | Ongoing / Permanent. T2-020214 |
| Via email: Discussion of T2-011017 – depends on feedback from LS to IREG | Eskil | open | Not done. Eskil is waiting for the feedback from IREG. |
| Provide the CR on additional MNP solution | Aram, CMG | open | Not done. The CR has to be created if CMG decides to do so. |
| CR resolving the following problem: when the recipient's address is in an email format, the MMS Relay/Server can not distinguish between MMS Relay/Server and MTA. | Soeren, Motorola | open | Not done. |
| CR to 22.140, section 5.4, on addressing. | Kieran, Logica | open | Updating the Distribution List was postponed for Release 6. Ask SA1 to reflect the changes accordingly. |
| Investigate the issues associated with the distribution of the MMs to multiple recipients (on MM1, MM3, MM4, MM7). | Padraig (Logica), Rami (Comverse). | open | Provide the input offline. Email discussion. |
| Discuss in the Release 6 restructuring of the specification. In relation to the T2M020052 CR (E2E behaviour). | Rami (Comverse) | open | Future work. |
| Revise the MM7 CR : if notification is not sent then the cancellation will not work | Rami, Comverse | open | |
| Add the use case of sending the MMs by VAS. Add all MM1 submit parameters to MM7 submit, etc. | Rami, Comverse | open | REL-6 |
| new use cases for "VAS use cases" permanent document ? - to be checked | Rami, Henrik | open | |
| discussion paper on problem with the size indication in the notification | Ville, Nokia | open | |
| MM7 email discussion: 7. "Original recipient" address ! 1. recipient UA should see originator UA as Sender Address/"From" 1. additional X-MMS_send_MM_via_VASP_address: ..." field in MM1_submit.REQ 2. "X-MMS_Original_recipient" address | Rami, Comverse | open | Email discussion |
| MIME registration: initiate registration process | Gwenael | open | |

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| CR to fix the notification service behaviour when memory capacity exceeded (on terminal/USIM/...) | Magnus | open | T2#16: REL-6 issue |
| user prompt in MMS | Magnus | open | |
| CR on "via VASP" in MM1_submit.REQ and MM7 impact (look also at reply-charging + via VASP) | Rami, Josef | open | REL-6 |
| CR REL-6 on MM1/MM7 header mapping | Eskil | open | |
| lead email discussion and subsequent email approval of LS-reply to T3 on MMS related changes for Rel-4 (T2-020264) | Josef | open | |
| lead email discussion and subsequent email approval of LS to SA1, T3 and T2-SWG1 on UE data consistency (T2-020266) | Ileana | open | |

Annex B – Complete Document List of SWG3

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

| tdoc# | Subject | Source | status | comments |
|--------------|---|-----------------|---------------|--------------------|
| T2-020009 | 3GPP work plan | MCC | noted | |
| T2-020011 | LS from SA1 on Draft stage 1 TS for Packet Switched Streaming Service | SA1 (S1-011241) | noted | |
| T2-020012 | LS from SA2 on Confirmation of OSA Support for VASP MMS Connectivity | SA2 (S2-013589) | noted | |
| T2-020013 | LS from SA2 on on “Address Resolution in MMS” | SA2 (S2-013600) | noted | |
| T2-020014 | LS from SA3 on VASP MMS connectivity | SA3 (S3-010698) | noted | |
| T2-020015 | LS from SA4 on Extended Streaming Service | SA4 (S4-010660) | noted | |
| T2-020017 | LS from SA4 on SA4 activity on 2D vector graphics formats | SA4 (S4-010695) | noted | |
| T2-020018 | LS from SA5 on VASP MMS Connectivity | SA5 (S5-010750) | noted | |
| T2-020019 | LS to S2 & T2 on MMS addressing | SERG | noted | |
| T2-020020 | LS to T2 on MMS addressing scheme. | SERG | noted | |
| T2-020025 | LS about transfer from T2 to SA4 of responsibility for MMS formats and codecs | SA4 (S4-010699) | noted | |
| T2-020029 | LS from SA5 on Draft stage 1 TS for Packet Switched Streaming Service | SA5 (S5-020044) | noted | |
| T2-020033 | LS to Wap Forum about UDH in CBS | Swapcom | approved | outcome SWG3-EMS#3 |

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| | | | | T2 approved via email |
| T2-020034 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020035 | LS to GSMA IREG cc SA2, GSMA SerG on routing of MMS traffic via MM4 | SWG3 | approved | outcome SWG3#9 / 10 T2 approved via email |
| T2-020036 | LS from T1 on SMS testing | T1 (T1-010551) | noted | |
| T2-020038 | LS to SA5 cc CN5, SA2, SA1 on VASP MMS Connectivity | SWG3 | approved | outcome SWG3#9 / 10 T2 approved via email |
| T2-020040 | LS from CN1 Reply to Liaison Statement on Configuration of ciphering | N1-020444 | noted | |
| T2-020041 | LS from CN2 "Reply to LS on VASP MMS Connectivity" | CN2 (N2-020145) | noted | |
| T2-020042 | LS from CN4: reply to MSISDN Address resolution for MMS using MAP operations | CN4 (N4-020187) | noted | |
| T2-020045 | LS from SA1 on Reply to GSM-A SerG Liaison statement on "Operator Requirements: Push Services Stage 1" | SA1 (S1-020280) | noted | |
| T2-020047 | LS to SA5 cc SA1 on charging support for VAS MMS Connectivity Interface | SWG3 | approved | outcome SWG3#9 / 10 T2 approved via email |
| T2-020130 | agenda SWG3 Messaging at T2#16 | SWG3 chair | noted | revised in T2-020213 |
| T2-020131 | report of SWG3 Messaging at T2#16 | SWG3 chair | open | |
| T2-020132 | CR 23.140: MM7 Stage 3 definition | Comverse | postponed | Input for finalisation of REL-5 MM7 stage 3 |
| T2-020133 | EMS ad-hoc #3 meeting report | One2one | approved | Approved in T2#16 OP |
| T2-020134 | CR 23.040 Subaddressing | One2one, Jinny, Swapcom | noted | Revised as T2-020229 |
| T2-020135 | CR 23.040 Alternate return address | One2one, Jinny, Swapcom | noted | Revised as T2-020230 |
| T2-020136 | CR 23.038 Support of UDH in CBS | Magic4, CMG, Swapcom | noted | Revised as T2-020231 |
| T2-020137 | CR 23.040 Change handling of SMS message type 0 | Cellpoint | noted | |
| T2-020138 | Draft Report of SWG3#09 | SWG3#09 chair | approved | T2M020003 approved in T2 OP |
| T2-020139 | Draft Report of SWG3#10 | SWG3 chair | approved | T2M020004 approved in T2 OP |
| T2-020140 | CR 23.140 Correction on the SMTP-address address | Openwave | approved | T2M020008 |

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| | encoding (Release 5) | | | |
| T2-020141 | CR 23.140 Correction on the SMTP-address address encoding (mirror - Release 4) | Openwave | approved | T2M020009 |
| T2-020142 | CR 23.140 editorial Changes | Materna | noted | T2M020042 revised in T2-020271 |
| T2-020143 | CR 23.140 Recipient MSISDN address Resolution | MMS#9 | noted | T2M020054 revised in T2-020211 |
| T2-020144 | CR 23.140 Introduction of SMTP Service Extensions over MM4 | Ericsson | approved | T2M020065 |
| T2-020145 | CR 23.140 MM4 Forward Routing Failure | Ericsson | approved | T2M020066 |
| T2-020146 | CR 23.140 Clarification of Existing Request Status Codes over MM4 | Ericsson | approved | T2M020067 |
| T2-020147 | CR 23.140 MM7 Transaction ID requirement | Materna | noted | T2M020074 refected in T2-020263 |
| T2-020148 | CR 23.140 Delivery Report Definition Correction | Nokia | approved | T2M020076 |
| T2-020149 | CR 23.140 VASP Abbreviations | Nokia | approved | T2M020080 |
| T2-020150 | CR 23.140 Correction on the MIME Content-Type Message format on MM4 (Release 4) | Openwave | approved | T2M020081 |
| T2-020151 | CR 23.140 Correction on the MIME Content-Type Message format on MM4 (Release 5) | Openwave | approved | T2M020082 |
| T2-020152 | CR 23.140 Functional Description and Abstract Messages for MM7 realization | Comverse | endorsed | T2M020083 revised in T2-020263 |
| T2-020153 | CR 23.140 Correction of Support for Addressing formats on the MM1 Interface | KPN | noted | T2M020092 T2-020274 |
| T2-020154 | CR 23.140 Rel-4 correction of the forwarding feature | Siemens | approved | T2M020094 |
| T2-020155 | CR 23.140 Correction of MM1 Addressing | Nokia | approved | T2M020095 |
| T2-020156 | CR 23.140 Rel-5 correction of the forwarding feature | Siemens | approved | T2M020096 |
| T2-020157 | CR 23.140 REL-5 Reject Duplicates | Logica | approved | T2M020097 |
| T2-020158 | CR 23.140 Rel-5: Submission Description Enhancement | Siemens | approved | T2M020098 |
| T2-020159 | CR 23.140 REL-5 reply charging consistency | Gemplus | noted | T2M020104 revised in T2-020215 |
| T2-020160 | CR 23.140 MM1-MM4 header mapping | Ericsson | noted | T2M020106 revised in T2-020270 |
| T2-020161 | CR 23.140 REL-5 adding reference to 32235 | Siemens | approved | T2M020113 |
| T2-020162 | CR 23.140 v510 terminal capability negotiation | Siemens | approved | T2M020115 |

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| T2-020163 | CR 23.140 Persistent Networked-Based Storage Functions | Openwave | noted | T2M020089 revised in T2-020262 |
| T2-020164 | Commentary of Persistent Network based Storage Functions | Openwave | noted | T2M020112 |
| T2-020165 | SNAP (draft-shapira-snap-00) | Comverse | postponed | postponed to REL-6 |
| T2-020166 | MM3 principles document (T2-011106, T2M010130) | Comverse | postponed | postponed to REL-6 |
| T2-020167 | Sending Messages to Non-MMS Recipients | Comverse | postponed | postponed to REL-6 |
| T2-020168 | CR 23.140 Qualified retrievals | Openwave | postponed | postponed to REL-6 |
| T2-020169 | CR 23.140 REL-5 Clarifications on responsibilities of MMS User Agent and MMS Relay/Server | Siemens | noted | T2M020101 revised in T2-020279 |
| T2-020170 | CR 23.140 REL-5 addressing by unqualified name on MM1 | KPN, Comverse, Openwave | noted | T2M020105 revised in T2-020274 |
| T2-020171 | LS on Billing and Network aspects Concerning MMS Interworking | Nokia | noted | T2M020108 revised in T2-020217 |
| T2-020172 | CR 23.140 REL-5 on clarification of MMS specification interdependencies | Siemens | postponed | postponed to REL-6 |
| T2-020173 | CR 23.040 Rel-5 MIDI profile for EMS | Alcatel, NEC | noted | |
| T2-020174 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020175 | CR 23.140 REL-5 Storage of MMS parameters on the USIM | Gemplus | noted | revised in T2-020265 |
| T2-020176 | Comments on draft CR 23.140 T2M020083 - Functional Description and Abstract Messages for MM7 realization | Nokia | noted | revised in T2-020218 |
| T2-020177 | Comments on draft CR 23.140 T2M020089 - Persistent Network-based Storage Functions | Nokia | noted | |
| T2-020178 | CR 23.140: Clarification about Streaming in MMS | Nokia | noted | revised in T2-020278 |
| T2-020179 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020180 | CR 23.040 R99: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011025) | NTT DoCoMo | noted | Revised as T2-020225 |
| T2-020181 | CR 23.040 Rel-4: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011026) | NTT DoCoMo | noted | Revised as T2-020226 |
| T2-020182 | CR 23.040 Rel-5: Editorial correction and clarification 9.2.3.6 and 9.2.3.25 (revised T2-011027) | NTT DoCoMo | noted | Revised as T2-020227 |
| T2-020183 | CR 23.040 Extended Object Data Request Cmd | Motorola | noted | Revised as T2-020228 |
| T2-020184 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020185 | CR23.040 Polyphony format for EMS | Motorola | noted | |
| T2-020186 | Polyphony supplemental info | Motorola | noted | |

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| T2-020187 | CR23.040 Vector Graphics Proposal | Motorola | noted | Revised as T2-020207 |
| T2-020188 | Vector Graphics Benchmarks | Motorola | noted | |
| T2-020189 | Vector Graphics Supplementary Info | Motorola | noted | |
| T2-020190 | withdrawn | withdrawn | withdrawn | |
| T2-020191 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020192 | CR 23.040 Rel-5 Vector Graphics Format for EMS | Ericsson, Nokia, ZOOMON | noted | |
| T2-020193 | SVG Tiny_CVG Test Results | Ericsson, Nokia, ZOOMON | noted | |
| T2-020194 | LS from GSMA TWG Support Letter for CR "handling of SMS message type 0 | GSMA TWG | noted | |
| T2-020195 | MM7 Stage 3 Principles | Logica | postponed | Input for finalisation of REL-5 MM7 stage 3 |
| T2-020196 | CR 23.140: Reply-ID for MM7 and other usage | Siemens | rejected | postponed to REL-6 |
| T2-020197 | CR 23.140 Rel-5: Clarification of MMS specification interdependencies | Siemens | postponed | postponed to REL-6 |
| T2-020198 | LS to SA1 about UDH in CBS | Swapcom | noted | revision of T2-020034 revised in T2-020205 |
| T2-020199 | Input Statement from Bijitec | Bijitec | noted | |
| T2-020200 | CR 32.235 - MMS Charging specification inconsistency corrections | Nokia | noted | |
| T2-020201 | CR 23.140 - MM7 addressing | Nokia | noted | revised in T2-020216 |
| T2-020202 | CR 23.140 - Support of Reply-Charging in MM7 | Nokia | noted | revised in T2-020219 |
| T2-020203 | CR 23.140 - Annex C - Call Data Records | Nokia | noted | revised in T2-020272 |
| T2-020204 | CR 23.040 Replace Type and Concatenated Messages | CMG | noted | e-mail discussion required |
| T2-020205 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020206 | LS to SA2 on MMS OSA Functionality | Comverse | rejected | |
| T2-020207 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | noted | Revised as T2-020223 |
| T2-020208 | selection of vector graphics for ems | EMC2 | noted | |
| T2-020209 | Report of joint T2/T3 on USIM aspects of MMS | ATTWS | noted | |
| T2-020210 | Vector Graphics Comparison | One2one | noted | |
| T2-020211 | CR 23.140 Recipient MSISDN address Resolution | Openwave | approved | revised T2-020143 / T2M020054 (which was agreed at SWG3#9) |

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| T2-020212 | CR 31.102 Rel-5 Introduction of MMS files and procedures | Siemens | noted | |
| T2-020213 | agenda SWG3 Messaging at T2#16 | SWG3 chair | approved | revision of T2-020130 |
| T2-020214 | VAS use cases document | Telia | postponed | postponed to REL-6 |
| T2-020215 | CR 23.140 REL-5 reply charging consistency | Gemplus | approved | revision of T2-020159 |
| T2-020216 | CR 23.140 - MM7 addressing | Nokia | noted | revision of T2-020201 revised in T2-020277 |
| T2-020217 | LS to GSMA BARG on Billing and Network aspects Concerning MMS Interworking | Nokia | approved | revision of T2-020171 |
| T2-020218 | Comments on draft CR 23.140 T2M020083 - Functional Description and Abstract Messages for MM7 realization | Nokia | endorsed | revision of T2-020176 revised in T2-020263 |
| T2-020219 | CR 23.140 - Support of Reply-Charging in MM7 | Nokia | approved | revised T2-020202 |
| T2-020220 | withdrawn | withdrawn | withdrawn | withdrawn |
| T2-020221 | Selection of vector graphics for ems | EMC2 | noted | |
| T2-020222 | SVG Compatibility with WVG | Motorola | noted | |
| T2-020223 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | noted | Revised as T2-020234 |
| T2-020224 | Discussion on the support of MIDI in EMS | Alcatel | noted | |
| T2-020225 | CR 23.040 R99: MO-SMS duplicate message response (revised T2-011025) | NTT DoCoMo | approved | |
| T2-020226 | CR 23.040 Rel-4: MO-SMS duplicate message response (revised T2-011026) | NTT DoCoMo | approved | |
| T2-020227 | CR 23.040 Rel-5: MO-SMS duplicate message response (revised T2-011027) | NTT DoCoMo | approved | |
| T2-020228 | CR 23.040 Extended Object Data Request Cmd | Motorola | noted | Revised as T2-020237 |
| T2-020229 | CR 23.040 Subaddressing | One2one, Jinny, Swapcom | approved | |
| T2-020230 | CR 23.040 Alternate return address | One2one, Jinny, Swapcom | approved | |
| T2-020231 | CR 23.038 Support of UDH in CBS | Magic4, CMG, Swapcom | approved | |
| T2-020232 | Ericsson Motorola Bijitec Joint Session on Vector Graphics | Ericsson Motorola Bijitec | noted | |
| T2-020233 | FW mma-swg RE When will SP-MIDI become available | Ericsson | noted | |

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| T2-020234 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | noted | Revised as T2-020235 |
| T2-020235 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | noted | Revised as T2-020236 |
| T2-020236 | CR 23.040 Vector Graphics Proposal | Bijitec, Motorola and others | approved | |
| T2-020237 | CR 23.040 Extended Object Data Request Cmd | Motorola | approved | |
| T2-020238 | CR23.040 Polyphonic Extended Objects | Pending | pending | agreed in principle final CR to be produced for T2#16 CP |
| T2-020239 | unused | Unused | unused | |
| T2-020245 | LS to SA2, GSMA SerG cc GSMA IREG, GSMA EC, GSMA MSIG, GSMA E2E on Address Resolution in MMS | SWG3 | approved | outcome SWG3#9 / 10 T2 approved via email |
| T2-020246 | LS from T3 on Provisioning of Application Access Parameters | T3 (T3-020142) | noted | |
| T2-020247 | LS from T3 on MMS related changes for Rel-4 | T3 (T3-020148) | noted | |
| T2-020250 | LS to GSMA IREG & SERG on email/MSISDN addressing support | SWG3 | approved | outcome SWG3#9 / 10 T2 approved via email |
| T2-020251 | LS to SA4, cc SA1 on transfer of responsibility of MMS media formats and codecs | SWG3 | approved | outcome SWG3#9 / 10 T2 approved via email |
| T2-020252 | LS to GUP on UICC exchange | SWG3 | approved | outcome SWG3#9 / 10 T2 approved via email |
| T2-020259 | LS from MSIG to SA4 and T2 regarding the MMS standardisation of Presentation Language | GSMA MSIG | postponed | |
| T2-020260 | CR 23.140 on authentication on MM7 | Materna, Openwave, Ericsson | endorsed | revised in T2-020263 |
| T2-020261 | CR 23.140 REL-5 VASP-related CDR generation | Siemens | approved | |
| T2-020262 | CR 23.140 Persistent Networked-Based Storage Functions | Openwave | approved | revision of T2-020163 |
| T2-020263 | CR 23.140 REL-5 - Functional Description and Abstract Messages for MM7 realization | Comverse, Materna | approved | revision of T2-020152, T2-020218 and T2-020260 |
| T2-020264 | LS-reply to T3 on MMS related changes for Rel-4 | Siemens | postponed | for email discussion and approval |
| T2-020265 | CR 23.140 REL-5 Storage of MMS parameters on the | Gemplus | approved | revision of T2-020175 |

| USIM | | | | |
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| T2-020266 | LS to SA1, T3 and T2-SWG1 on UE data consistency | ATTWS | postponed | for email discussion and approval |
| T2-020267 | External MIME body use case | Motorola | postponed | postponed to REL-6 |
| T2-020268 | MM7 addressing clarification | Nokia | noted | |
| T2-020269 | CR 23.140 REL-5 Alignment of 23140 with 26140 | Siemens | postponed | Subject to prior SA approval of 26.140 REL-5 |
| T2-020270 | CR 23.140 MM1-MM4 header mapping | Ericsson | approved | revision of T2-020160 |
| T2-020271 | CR 23.140 editorial Changes | Materna | approved | revision of T2-020142 |
| T2-020272 | CR 23.140 - Annex C - Call Data Records | Nokia | approved | revision of T2-020203 |
| T2-020273 | LS to SA1 on user privacy on MM7 | Nokia | approved | |
| T2-020274 | CR 23.140 REL-5 addressing by unqualified name on MM1 | KPN, Comverse, Openwave | approved | revision of T2-020170 |
| T2-020275 | CR 23.140 REL-5 reference point MM8 to billing system | Materna, Nokia, Comverse | approved | |
| T2-020276 | LS to SA3 on MM7 Security mechanisms | Openwave | approved | |
| T2-020277 | CR 23.140 - MM7 addressing | Nokia | approved | revision of T2-020216 |
| T2-020278 | CR 23.140: Clarification about Streaming in MMS | Nokia | approved | revision of T2-020178 |
| T2-020279 | CR 23.140 REL-5 Clarifications on responsibilities of MMS User Agent and MMS Relay/Server | Siemens | approved | revision of T2-020169 |
| T2-020280 | LS from SA1 on MMS Presentation Language | SA1 (S1-020203) | postponed | |
| T2-020281 | LS reply from SA1 on: "Liaison Statement on Confirmation of OSA Support for VASP MMS Connectivity." | SA1 (S1-020470) | postponed | |
| T2-020282 | LS from WAP MMDC to T cc T2 Response to the LS on co-operative working | WAP MMDC (TP-010296) | postponed | |

Annex C - Participants List of SWG3-EMS/SMS/CBS sessions

| Name | Organisation represented | Phone | Email |
|-----------------------|------------------------------|-------------------|--|
| Alan Baldwin | Ericsson | +44 1256 774592 | alan.baldwin@eml.ericsson.se |
| Azadeh Pourjanaki | Ericsson | +46 46 23 15 48 | azadeh.pourjanaki@ecs.ericsson.se |
| Ulf lindgren | Ericsson | +46 46193297 | Ulf.lindgren@emp.ericsson.se |
| Julien Laz | Digiplug | +33 1 42 47 84 10 | Julien.laz@digiplug.com |
| Mr. Peter Freitag | SIEMENS AG | +49 89 722 46460 | peter.freitag@siemens.com |
| Gwenael Le Bodic | ALCATEL France | +33 1 55 66 46 41 | Gwenael.le_bodic@alcatel.fr |
| Thomas Picard | ALCATEL France | +33 1 55 66 34 09 | Thomas.picard@alcatel.fr |
| Barry Jones | EMC ² | +44 7767335882 | Barry.jones@temc2.com |
| Mr. Randall Grund | Motorola Inc. | +1 847 523 0946 | Randall.Grund@motorola.com |
| Pieter Keijzer | CMG | +31 30 210 3333 | Pieter.keijzer@cmg.nl |
| Michael Rowe | Motorola, Lexicus Division | +01 650 858 6016 | Michael.rowe@motorola.com |
| Peter Neumann | SIEMENS AG | +49 89 722 36718 | Peter.Neumann@siemens.com |
| Mr. Ian Harris | Teleca | +44 7785 360000 | ian.harris@teleca.co.uk |
| Fabrice Segura | Swapcom | +33672284011 | Fsegura@swapcom.fr |
| Mr. Paul Voskar | NOKIA UK Ltd | +44 1252 867430 | Paul.voskar@nokia.com |
| Mr. Arthur Gidlow | One 2 One Personal Comm. Ltd | +44 1206330900 | Arthur.gidlow@one2one.co.uk |
| Mr. Stephan Castagnet | NEC Technologies (UK) LTD | +33 1 49 07 20 81 | Stephan.castagnet@mdc.nec.fr |
| Mr. Manu Chatterjee | Motorola, Lexicus Division | +1 650 858 6131 | Manu.chatterjee@motorola.com |
| Tim Costello | mmO2 | +447715485989 | Tim.costello@o2.com |
| Ed Ehrlich | Nokia | +19728944495 | Ed.ehrlich@nokia.com |
| Brendan McKenna | Jinny Software | +353 872253333 | Brendan.mckenna@jinny.ie |
| Brian Marchent | Matsushita | +44 1635871466 | Brian.marchent@mci.co.uk |
| Brad Sipes | ZoomOn | +46703057770 | Bradley.sipes@zoomon.com |
| Dave Chen | Bijitec | +862158369048 | Dave.chen@bijitec.com |
| Thibaud mienville | France Telecom | +33145295763 | Thibaud.mienville@francetelecom.c |

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| | | | om |
| Alex Linde | Magic4 | +441925286521 | Alex.linde@magic4.com |

Annex D - Participants List of SWG3-MMS sessions

| Name | Organisation represented | Phone | Email |
|------------------------|--|------------------|--|
| Eskil Åhlin | AU System | +4646327287 | eskil.ahlin@ausystem.com |
| Sam DeHoyos | Ericsson Inc | + 1516 677 4308 | sam-dehoyos@am1.ericsson.se |
| Magnus Svensson | Ericsson LME | | magnus.svensson@ecs.ericsson.se |
| Menno Bangma | Royal KPN N.V. | +31653725389 | M.R.Bangma@kpn.com |
| François Millet | Sagem Group | +33 1 34346081 | Francois.millet@sagem.cm |
| Josef Laumen | Siemens AG | +4953419062830 | Josef.laumen@siemens.com |
| Petri Timonen | Nokia Corporation | +358405543377 | Petri.timonen@nokia.com |
| Ville Warsta | Nokia Corporation | +358718039614 | Ville.warsta@nokia.com |
| Miraj Mostafa | Nokia Corporation | +35871804853 | Miraj.mostafa@nokia.com |
| Christian Steinweg | Materna GmbH | +4923155998697 | Christian.Steinweg@materna.de |
| Henrik Thuvesson | Telia AB | +46705985122 | Henrik.b.thuvesson@telia.se |
| Rossella Mossotto | Telecom Italia S.p.A. | +39335301924 | rmossotto@mail.tim.it |
| Volahanta Ramiarmanana | Gemplus Card International | +33442364528 | Volahanta.ramiaramanana@gemplus.com |
| Samuel De Hoyos | Ericsson | +1 516 677 4308 | Sam-dehoyos@am1.ericsson.se |
| Paolo Franzoi | Omnitel Vodafone | +39 348 2331149 | paolo.franzoi@omnitelvodafone.it |
| Soeren Thomsen | Motorola A/S | +1-817-245-2316 | Soeren.Thomsen@motorola.com |
| Seishi Tsukada | NTT DoCoMo | +81-3-5256-1747 | tsukadas@nttdocomo.co.jp |
| Michael Ishizue | NTT DoCoMo | +81-3-5156-1777 | ishizue@s1.nttdocomo.co.jp |
| Hiroshi Saito | Matsushita Communication | +8146840540 | Hiroshi.Saito@yrp.mci.mei.co.jp |
| Maina Galentovsky | SchlumbergerSema Telecoms | +1 905 782 52 49 | mgalentovsky@toronto.sema.slb.com |
| Tim Ambrose | Hutchison3G | +44 7866 601096 | Tim.Ambrose@hutchison3g.com |
| Menno Bangma | Royal KPN N.V. | +316-53725389 | M.R.Bangma@kpn.com |
| Padraig Murtagh | Logica Mobile Networks | +353 1 819 3400 | MurtaghP@logica.com |
| Richard Brook | Samsung Electronics Research Institute | +44 7776 181555 | Richardbrook39@aol.com |
| Ileana Leuca | AT&T Wireless | +1425-580-7900 | Ileana.leuca@attws.com |
| Alan Stebbens | Openwave Systems, Inc. | +1.805.886.8886 | Alan.stebbens@openwave.com |

| | | | |
|-----------------------|------------------------------|-------------------|--|
| Vasilis Polychronidis | Openwave Systems, Inc. | +425.503.6676 | Vasilis.polychronidis@openwave.com |
| Vinod Valloppillil | Openwave Systems, Inc | +1.650.480.7268s | Vinod.valloppillil@openwave.com |
| Rami Neudorfer | Comverse | +97237655996 | Rami.neudorfer@comverse.com |
| Brendan McKenna | Jinny Software Ltd. (Acotel) | +35318872610 | brendan.mckenna@jinny.ie |
| Philippe.Bellordre | Orange France | +33 1 45 29 57 95 | Philippe.Bellordre@francetelecom.com |
| Kevin Jackson | Telecommunication Systems | +1 4102951993 | Jacksonk@telecomsys.com |
| Rami Neudorfer | Comverse | +972 3 765 5996 | rami.neudorfer@comverse.com |
| Athanasia Karapouliou | Cosmote | +30106177963 | Akarapoul@cosmote.gr |
| Timo Oikarinen | Sonera Corporation | +358405884011 | Timo.oikarinen@sonera.com |