

3GPP
Technical Specification Group Core Networks
Meeting #3, Yokohama, 21-23 April 1999

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Joint TSG-CN3/SMG3 WPD
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Source: TSG-CN3 Convenor

Title: Report of the TSG-CN3 #2

1. Opening the Meeting

The second TSG-CN3 meeting took place on 17th and 18th of March. The meeting was opened by the Convenor, Norbert Klehn (Siemens). The draft agenda (doc. 114) was extended by two items (7.3 Facsimile; 7.4 Other technical issues) and agreed. Available documents were registered and assigned to agenda items.

2. Reports

The Convenor presented the report from the last meeting TSG-CN3#1 (doc. 160) and the Terms of Reference (doc. 168). He explained the changes that were necessary due to decisions of the Plenary of the Joint SMG3/CN meeting in Sophia Antipolis and of the TSG-CN#2 meeting in Ft. Lauderdale. These decisions are:

- TSG-CN3 has to deal only with interworking issues toward fixed networks, but not with interworking between different core networks of the IMT-2000 family.
- The GPRS Tunnelling Protocol (GTP) and the GSM 09.60 remain in the prime responsibility of TSG-CN2 (SMG3 WPC). TSG-CN3 gets a second responsibility for the interface data that have to be transported by the GTP.

The report of the TSG-CN#2 meeting (doc. 168) and the results of the TSG Chairmen elections were presented for information. The Terms of Reference of CN1 (doc. 170) and TSG-CN2 (doc. 171) were presented for information to clarify the work split within CN.

3. Technical Work

3.1 Assumption of GSM Specifications

It was reported that TSG-CN has explained the willingness to accept the responsibility for Release '99 Work Items and GSM specifications listed in document 104.

The following documents were presented for information in order to clarify the status of the handling and the use of UMTS specifications:

- Doc. 161 lists UMTS specifications and addressees where the specifications will be handed over to in 3GPP.
- Doc. 162 explains the numbering scheme of SMG UMTS specification series.
- Doc. 163 contains a Liaison Statement from TSG-SA that proposes to use UMTS 22.00 and 23.20 for the purpose of technical co-ordination among TSGs and WGs.

- Doc. 165 contains a Liaison Statement from TSG-SA that informs on the approval of baseline specifications and reports of service definitions for UMTS.

It was clarified that none of the existing UMTS specifications will be handed over to TSG-CN3. TSG-CN3 will have the second responsibility for UMTS 22.45 (Facsimile).

3.2 Facsimile

Erik Colban (Ericsson), rapporteur of technical report UMTS 22.45 “Study on the Provision of Facsimile Services in UMTS and GSM”, presented this study in document 180. Starting with critics of the existing solutions for facsimile services in GSM, the study provides IP based solutions for the provision of the facsimile service in UMTS and GSM. It presents a store-and-forward (based on ITU-T T.37) and a real-time solution (based on ITU-T T.38).

A long discussion took place on the possibility of real-time solutions in PLMNs. The most important facts can be summarised as follows:

- Paolo diTria (CSELT) doubt the T.38 based solution because of time constraints of the T.30 protocol. Further, it was mentioned that T.38 provides rather a store-and-forward solution than a real-time one because of TCP/IP based transmissions in the Internet.
- Later in the meeting, Bill Pechey (Xircom) presented ITU Information on real-time IP Fax (doc. 190) containing result on trials for session-based facsimile over public Internet. The trials show that facsimile over the Internet can be a viable real-time service. It was doubt again, whether these results can be applied to UMTS because of different conditions (round-trip delay via the radio interface) compared to fixed networks. However, it was clarified that a T.38 based solution is a real-time one based on the definition given in document 190.
- Andrew Meredith (Motorola) argued that real-time facsimile should be possible in UMTS and GPRS when Voice over IP can be provided and the provision of Voice over IP is an approved requirement. Paolo diTria (CSELT) responded that the human ear accepts more delay than the T.30 facsimile protocol and Graham Heaton (Vodafone) doubt that GPRS is able to support real-time services.

Erik Colban (Ericsson) will investigate this problem and will present more information in the next meeting. Further, document 180 was revised in document 194 by some minor improvements.

A Liaison Statement (doc. 270) was received from TSG-SA1 requiring the specification of a real-time non-transparent group 3 facsimile service. The related Change Request to the Requirement Specification UMTS 22.00 is contained in document 271.

Some concerns raised up with respect to the requirements, e.g.

- that service requirements are merged with technology requirements
- that the existing study (i.e. UMTS 22.45) already provides a real-time and a store-and-forward solution
- that the new requirement installs a second real-time solution that has to be standardised in UMTS whereas the IP based solutions presented in UMTS 22.45 do not need any standardisation in UMTS.

These concerns are summarised in a Liaison Statement (doc. 186) back to TSG-SA1 and also to TSG-T2, that takes over the responsibility for UMTS 22.45.

Document 128 was presented for information. It contains a Liaison Statement from SMG4 to TSG-SA1 with copy to TSG-SA2 related to the same issue. *[Secretary's note: This document was later revised several times in SMG4 plenary. The final output is contained in document 241.]*

Following the request of TSG-SA1 to standardise a real-time non-transparent facsimile service, Junichirou Hagiwara (NTT DoCoMo) presented a proposal for a circuit switched mode voice band data and facsimile service protocol contained in doc. 115. This approach is based on GSM 03.46. It was clarified in the discussion

- that facsimile is a widespread used service in Japan (200.000 users)
- that such a service is needed to connect the existing facsimile subscriber and
- that it is necessary to connect T.30 facsimile devices.

It was clarified that a Work Item Description Sheet is needed that has to be sent via TSG-CN to TSG-SA1 and TSG-SA2 for approval. In parallel to this, the technical work can start in order to not delay the work. First results are already expected to the next meeting. Further, a clarification on the requirements is expected from TSG-SA1 as requested in the Liaison Statement in document 186.

3.3 Other Technical Issues

3.3.1 GPRS Interworking with ISDN/PSTN

A Liaison Statement recently sent by SMG4 GPRS to SMG12 asking for support related to an H.323 approach for modem and ISDN interworking was responded by SMG12 in document 93. However, the main issue could not be solved, SMG12 has adopted the Work Item in their Liaison Statement. The Work Item is now moved to TSG-CN3 which will continue with the work. This was responded to SMG12 in a new Liaison Statement contained in document 187.

3.3.2 Service Control (CAMEL) support for GPRS / ISDN interconnect services

Peter Mason (BT) presented document 235 that proposes a new Work Item for "Service Control (CAMEL) support for GPRS / ISDN interconnect services". Other groups may be affected by this new Work Item. So, a Liaison Statement was sent to TSG-SA1, TSG-SA2, TSG-CN, SMG1, SMG6 and SMG6 GPRS to ask for consideration and for help in making this proposal a formal Work Item (doc. 188 revised in doc. 193, with doc. 191, a revision of 235, attached).

3.3.3 SMG AAE (Applications and Automatic Execution Workshop)

A Liaison Statement was received from SMG AAE (doc. 198). This was already discussed in SMG4 GPRS. A response (doc. 189) produced by this group was presented by Graham Heaton (Vodafone) in TSG-CN3 because this part of the work of SMG4 GPRS was handed over to TSG-CN3. This document was revised in doc. 192 and agreed in TSG-CN3. It will be send as a Liaison Statement to the workshop.

3.3.4 Link and Adaptation Layers in UMTS Phase 1

A Liaison Statement received from SMG12 (doc. 97) was already discussed and answered by SMG4 (doc. 182). Both of the documents were presented in TSG-CN3 for information and noted.

3.3.5 Asynch-to-Synch HDLC Service for Circuit Switched Data

Erik Colban (Ericsson) presented a proposal for an asynch-to-synch HDLC service for circuit switched data (doc. 184). There was support for this proposal in the meeting and it was agreed that the work on this needs a Work Item. A Work Item description sheet is expected for the next meeting.

3.3.6 Transcoder for Mobile Multimedia Services

A Liaison Statement from TSG-SA1 to TSG-T2, TSG-SA2 and TSG-SA4 was handed over to TSG-CN3 by TSG-T2 (doc.272). This Liaison Statement asks for support concerning the location of the transcoder for Mobile Multimedia services which converts different protocols (i.e. between H.320 and H.324M). Some delegates expressed their preference to have these protocol converters at the same location as the IWF. However, a final decision has to be made by TSG-SA2. This group was already addressed in the Liaison Statement. So, this document was only noted. No further action is required by TSG-CN3 at this stage.

3.4 Work Items

SMG4 GPRS inherits two existing Work Items to TSG-CN3 that have to be finalised:

- GPRS Interworking with ISDN and PSTN
- Access to ISPs and Intranets in GPRS Phase 2 - Wireless/Remote Access to LANs (R99)

Another Work Item has to be co-ordinated with other groups, the work split has to be defined for:

- Service Control (CAMEL) support for GPRS / ISDN interconnect services

Work Item description sheets are expected for the next meeting for:

- Real-time non-transparent facsimile
- An asynch-to-synch HDLC service for circuit switched data

Another Work Item on parameters for bearer and teleservices for the provision of the PIAFS service (32 and 64 kbit/s) was presented in the CN3#1 meeting. Here more information were requested by CN3 to endorse the Work Item. It has also be checked whether this Work Item could be incorporated in another one with a broader scope.

Other Work Items have to be checked whether TSG-CN3 has to contribute.

4. Organisational Issues

4.1 Election

The elections of Chairman and Vice-Chairmen were hold by Friedhelm Rodermund (ETSI). Norbert Klehn (Siemens) was elected as Chairman of TSG-CN3 per acclamation because he was the only candidate. There were no candidates for Vice-Chairmen. Delegates were invited to bring candidatures to the next meeting.

A secretary has not been assigned to TSG-CN3. So during the meeting, this function was performed by the Convenor himself. When necessary the TSG-T2's secretary, Friedhelm Rodermund (ETSI), gave support.

4.2 Working Methods

Based on the documents 168 and 169 the following working methods were agreed by the meeting:

- There will be common meetings between SMG3 WPD and TSG-CN3. The meeting time will be divided in a GSM part and a UMTS part depending on the work load. The GSM part is not dedicated to ETSI delegates only, it is open for all delegates. A division will be done in order to give delegates the possibility to make their special travel arrangements if they do not want to participate in the GSM part.
- It was agreed to use MS Word version 8 (Office 97) for all future work.
- Low paper/electronic regime was agreed, but LAN connectivity is not required.
- It was agreed to work in one group and not to install Subworking Groups for the time being.
- It was agreed to provide documents on the 3GPP Server 3 week days before the meeting. This will not be considered as an ultimate deadline. It is up to the Chairman to decide on the handling of document received later.
- It was decided not to have mid-week to mid-week meetings. Meetings starting on Monday will not begin before 10:00.

The meeting was informed on

- TSG-SA1 (service definition) and TSG-SA2 (system architecture) responsibilities
- the co-ordination role of TSG-SA
- the willingness of TSG-CN to overtake the responsibility for GSM specifications that also applies for TSG-CN3
- that the WGs are allowed to liase directly with other 3GPP WGs and any other 3GPP Partner Organisation and
- that the rules for liase to bodies outside ETSI and 3GPP is under discussion.

4.3 Meeting Schedule

The meeting agreed the following schedule based on a proposal presented by the Convenor in doc. 126:

Meeting	Date	Host
TSG-CN3#3	13-15 April, 1999	Chairman to check whether a meeting in Sophia Antipolis is possible to collocate with TSG-CN2 <i>[Secretary's note: It is possible.]</i>
TSG-CN3#4	10-12 May, 1999	no host, try to collocate with TSG-CN1
TSG-CN3#5	14-18 June, 1999	NEC, Abiko, Japan
TSG-CN3#6	13-17 September, 1999	no host
TSG-CN3#7	19-21 October, 1999	no host
TSG-CN3#8	29 Nov -03 Dec, 1999	no host

5. Any other business

The Convenor thanked Nortel for hosting the meeting and the delegates which made it possible to make progress in work and to bring TSG-CN3 on the way.

6. Participants List

	name	company	org. partner	email address
1	ALLEN Nik	Nortel Networks	ETSI	Error! Bookmark not defined.
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24	SAWAI Kouichi	NTT DoCoMo	ARIB	Error! Bookmark not defined.
25	SCHLANGER Gary	AT&T	T1	Error! Bookmark not defined.
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29	TOTH Stefan	Ericsson	ETSI	stefan.toth@erv.ericsson.se
30	VIDALIS Antonis	Bosch Telecom Danmark	ETSI	vidalis.antonis@dk.bosch.com

7. List of Documents

7.1 List of Input Documents

DOC	Subject	Source
T2-99093	LS from SMG12 to SMG4 on Interworking issues for GPRS phase 2	SMG12
T2-99097	LS from SMG12 to SMG4 on Link and Adaptation Layers on UMTS Phase 1	SMG12
T2-99104	LS from TSG-CN on on WIs and TS's for specs (work transfer)	TSG-CN
T2-99114	Draft Agenda CN3	CN3 Convenor
T2-99115	Proposal for the Voice-Band Data and FAX Services Protocol	NTT DoCoMo
T2-99126	Proposed WG3 meeting schedule	CN3 Convenor
T2-99128	Draft LS on Fax to SA1 (cc:SA2) (rev. of T2-99127)	SMG4 IWF
T2-99129	Candidate Chair / Vice-Chair of the TSG CN WG3, Norbert Klehn	Siemens
T2-99134	Procedure for election of TSG CN3 Chairman & Vice Chairman	3GPP support
T2-99160	Report of the TSG-CN-WG3	TSG-CN-WG3
T2-99161	Listing of ETSI SMG UMTS Deliverables, Reports and Description documents for	ETSI Secretariat
T2-99162	Brief explanation of the numbering scheme of the SMG UMTS specification	ETSI 3GPP
T2-99163	LS to TSGS-CN, RAN, T on the proposal to use UMTS 22.00 and 23.20 for the	TSG-SA
T2-99164	Results of TSG elections	3GPP support
T2-99165	LS to TSG-CN, RAN, T on Approval of Baseline Specifications	TSG SA
T2-99166	Proposed Terms of Reference and Dependencies to Other Groups	WG CN3
T2-99167	Development of a 3G Call Control model & protocol(s) to standardize the	TSG CN
T2-99168	Report of TSG-CN #2	TSG-CN
T2-99169	LS from TSG-CN : Answer on LS on Service Development Process	TSG-CN
T2-99170	Proposed guidelines for 3GPP TSG-CN-WG1 Work	TSGN WG1
T2-99171	Terms of Reference for TSG-N WG2	TSG-N WG2
T2-99180	TR 22.45 Study on provision of facsimile services in GSM and UMTS (rev. of Tv0.1.0	Rapporteur
T2-99182	LS to SMG12 on Link and Adaptation Layers in UMTS phase 1 (rev. of T2-99181)	SMG4 IWF
T2-99184	Proposal for an asynch-to-synch HDLC service for CS data	Ericsson
T2-99185	withdrawn	Ericsson
T2-99186	LS to SA1 and SA2 on real time fax	CN3
T2-99187	LS to SMG12 on Interworking issues for GPRS phase 2	SMG4
T2-99188	LS on WI for Service control (CAMEL) support for GPRS PSTN / ISDN interconnect	CN3
T2-99189	LS: Reply to LS from SMG AAE	SMG4
T2-99190	ITU-Information on Real-Time IP Fax	Xircom
T2-99191	Prop. WI for Service control (Camel) support for GPRS ISDN/PSTN IW	SMG4
T2-99192	LS: Reply to LS from SMG AAE (rev. of 189)	CN3
T2-99193	LS on WI for Service control (CAMEL) support for GPRS PSTN / ISDN interconnect	SMG4
T2-99194	TR 22.45 Study on provision of facsimile services in GSM and UMTS (rev. of Tv0.1.0	Rapporteur
T2-99195	Report of CN3#2	Convenor
T2-99198	LS from SMG AAE (Applications and Automatic Execution Workshop)	SMG AAE
T2-99235	Proposed Work Item Description for Service control (CAMEL) support for GPRS	BT
T2-99270	LS from SA1 on Real time fax services	SA1
T2-99271	CR on 22.00 on Requirements for Voice-Band Data & FAX services	NTTDoCoMo

T2-99272	LS on Transcoder for Mobile Multimedia Services	SA1

7.2 List of Output Documents

DOC	Subject	Source
T2-99186	LS to SA1 and SA2 on real time fax	TSG-CN3
T2-99187	LS to SMG12 with copy to SMG3 WPD on Interworking issues for GPRS phase 2	SMG4 GPRS / TSG-CN3
T2-99191	Prop. WI for Service control (Camel) support for GPRS ISDN/PSTN IW (attachment to T2-99193)	SMG4 GPRS / TSG-CN3
T2-99192	LS: Reply to LS from SMG AAE (with T2-99198 attached)	TSG-CN3
T2-99193	LS on WI for Service control (CAMEL) support for GPRS PSTN / ISDN interconnect services (with doc. T2-99191 attached)	TSG-CN3