

ETSI SMG#29  
Miami, 23-25. June 1999  
Agenda Item: 6.3

draft SMG P-99-431

3-GPP TSG\_SA  
Miami, 21-23. June 1999  
Source: Harald Dettner/Franco Settimo  
Date: 20 June 1999

Tdoc SP-99320

**Status report of SMG3/TSG\_CN  
to  
SMG#29 and TSG\_SA#4**



**SMG3**

**TSG\_CN**



**Abstract:**

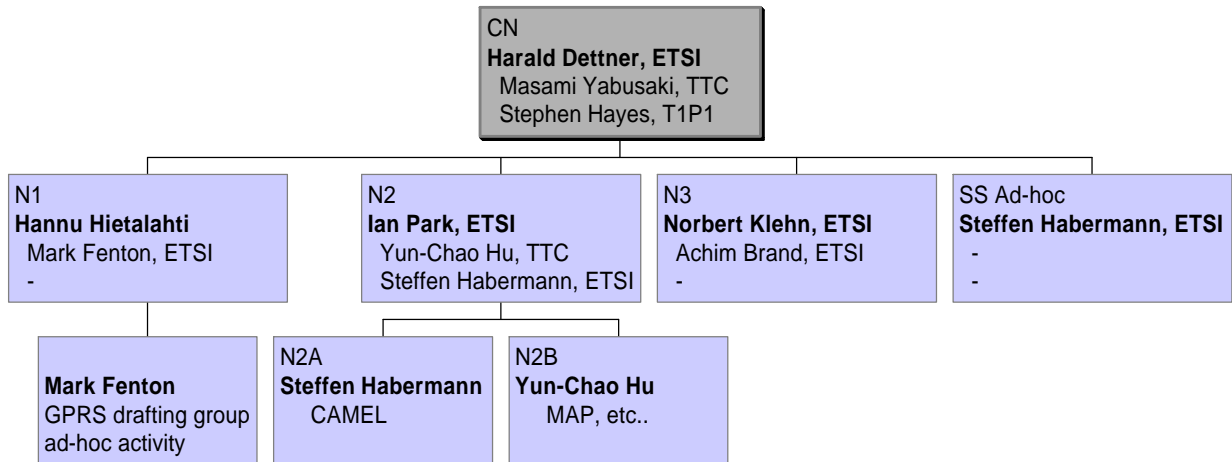
This document gives an overview of the status of the work within TSG\_CN/SMG3 until June 1999 especially concentrating on the activities in the last 3 months (March – June'99).

## Contents of status report to SMG#29/TSG\_SA#4

<b>ABSTRACT:</b> .....	<b>1</b>
<b>1 GENERAL</b> .....	<b>3</b>
<b>2 RECENT ACTIVITIES</b> .....	<b>4</b>
<b>2.1 Plenary Meetings</b> .....	<b>4</b>
<b>2.2 Working Party meetings, Ad-hoc group meetings, Joint meetings</b> .....	<b>4</b>
<b>2.3 CRs, LSs and specifications from SMG3/TSG_CN</b> .....	<b>4</b>
2.3.1 CRs related to Phase 2.....	4
2.3.2 CRs related to Release 96, 97, and 98.....	4
2.3.4 Specification for information .....	12
2.3.5 Specification for approval .....	12
2.3.6 Liaisons, external Relations.....	12
2.3.7 Special issues to be highlighted .....	12
<b>3 STATUS OF THE TECHNICAL SPECIFICATIONS / ACTIVITIES IN WORKING GROUPS</b> .....	<b>14</b>
<b>3.1 General</b> .....	<b>14</b>
<b>3.2 Radio interface L3 signalling &amp; GPRS (TSG_CN N1)</b> .....	<b>14</b>
3.2.1 Phase 2.....	14
3.2.2 Release 96 and Release 97 .....	14
3.2.3 Release 98.....	15
3.2.4 Release 99.....	15
<b>3.3 Network part (TSG_CN WG N2/ SMG3 WP-C)</b> .....	<b>16</b>
3.3.1 Phase 2 / Release '95.....	16
3.3.2 Release 96, Release 97, Release 98 .....	16
3.3.3 Release '99.....	17
<b>3.4 Network Interwork for Data / Bearer Services (SMG3-WP-D / TSG_CN N3)</b> .....	<b>17</b>
<b>3.5 Supplementary services part (SMG3-WPB / TSG_CN Nss)</b> .....	<b>18</b>
<b>3.6 PCS1900 Harmonisation</b> .....	<b>20</b>
<b>4 FUTURE WORK</b> .....	<b>20</b>
<b>4.1 General</b> .....	<b>20</b>
<b>4.2 Work Items Activities</b> .....	<b>20</b>
<b>4.3 Future meeting schedule</b> .....	<b>23</b>
<b>ANNEX A</b> .....	<b>24</b>

## 1 General

The workstyle between SMG3 and 3GPP TSG\_CN is an almost complete joint-meeting philosophy.



The chairpersons are "identical" for SMG3 and TSG\_CN. And the working groups. Elections were conducted during SMG3 plenary 28.th May for the SMG3 "shadow" organisation. The officials are with this:

SMG3-Chair	Harald Dettner, Siemens	elected 06/98
SMG3-Vicechair	Ian Park, Vodafone	re-elected 05/99
WP-A	Hannu Hietalahti, Nokia	until 03/00
WP-B	Steffen Habermann	no candidate, SH volunteers to continue until E/99
WP-C	Ian Park, Vodafone	re-elected 05/99
WP-D	Norbert Klehn, Siemens	elected 05/99

-- WP-D in charge of interworking for data/bearer services + GPRS aspects was transferred from SMG4 to SMG3 at SMG#28.

-- No working party subgroups are defined within the SMG3 environment.

The current support by MCC is not sufficient, only Franco Settimo and Istvan Kocsi are available. For the future 4 MCC members in total are envisaged and committed.

- Most of the specifications are identified as common specifications
- Only minor work areas identified as "GSM only" so far.

All other work is done in the joint activity.

Further work is needed to refine on these principles.

Work concentrated in the beginning of '99 on completion and corrections of Release '98, meanwhile work on R'99 WI's is well in progress.

Clarification on the R'99 WI's is ongoing but not completed.

Exceptional is GPRS (R'97) with still many CRs.

Everybody strives hard to meet the tough 3GPP timescale.

## 2 Recent activities

### 2.1 Plenary Meetings

Several plenary session has been held in the period (March-June'99):

02-04 March TSG\_CN#2, Ft. Lauderdale  
 21-23 April TSG\_CN#3, Yokohama  
 25-27/28 May TSG\_CN#4/SMG3 plenary, Sophia Antipolis, hosted by ETSI  
 Electronic approval especially of some WP-A/N1 output was conducted during the week 7 - 11 June'99

### 2.2 Working Party meetings, Ad-hoc group meetings, Joint meetings

Several working Groups and ad-hoc sessions have been held in the period (March-June):

N1: 18-19 Feb ??  
 22-25 March??  
 26-29 April Sophia Antipolis  
 1-4 June Sophia Antipolis  
 N2 16-18 Feb Sophia Antipolis  
 22-26 March Paris??  
 13-16 April N2A Sophia Antipolis, partly with SPS CAMEL  
 27-29 April N2B Tokyo, NEC  
 17-21 May N2 Edinburgh, Nortel  
 N3 16-18 Feb London, BT  
 15-19 March Sophia ?  
 14-18 June Abiko, NEC  
 Nss 4-7 May Vienna, Siemens

ad-hoc HO/cell-selection

9-10 June Sophia Antipolis.

### 2.3 CRs, LSs and specifications from SMG3/TSG\_CN

The following list with CRs is sorted per GSM Work Item:

#### 2.3.1 CRs related to Phase 2

none

#### 2.3.2 CRs related to Release 96, 97, and 98

The following CRs were approved by SMG3/TSG\_CN:

#### Work item: ASCI Phase1

WI	SPEC	CR	PH	REV	VERS	SUBJECT	CAT	NEW_VER	STC_DOC
ASCI	04.69	A007	R96	2	5.2.0	Coding of Call Reference IE	F	5.3.0	N1-99168
ASCI	04.68	A009	R96	2	5.2.0	Coding of Call Reference IE	F	5.3.0	N1-99167

#### Work item: ASCI Phase2

SMG	Tdoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
s29	3C99-469	09.02	A206		R97	6.3.0	Use of E-interface	D	ASCI Phase 2
s29	N2-99227	09.02	A209		R98	7.0.0	Use of E interface	A	ASCI Phase 2

NP99-195

## Work item: CAMEL Phase1

SMG	Tdoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
s29	N2-99640	09.78	A073		R96	5.6.0	Interworking with Q.1218 and ETSI Core INAP	F	CAMEL Phase 1

NP99-196

SMG	Tdoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
s29	NP99-244	03.78	A		R96	5.7.0	Health warning on MSC address in Initial DP	D	CAMEL Phase 1

NP99-244

## Work item: CAMEL Phase2

SMG #	Tdoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
s29	N2-99649	03.16	A032	1	R97	6.3.0	Missing SS-CSI in description of CAMEL Subscription Information	F	CAMEL Phase 2
s29	N2-99498	03.18	A047		R97	6.3.0	Notification of call forwarding to the gsmSCF	F	CAMEL Phase 2
s29	N2-99589	03.18	A048		R98	7.0.0	Notification of call forwarding to the gsmSCF	A	CAMEL Phase 2
s29	N2-99343	03.78	A085	2	R97	6.3.0	Various corrections	F	CAMEL Phase 2
s29	N2-99338	03.78	A100	1	R97	6.3.0	Clarification on the scope of CAMEL Capability Handling parameter	F	CAMEL Phase 2
s29	N2-99458	03.78	A102		R97	6.3.0	Refining trigger criteria at DP2, due to the introduction of North American Equal Access	F	CAMEL Phase 2
s29	N2-99638	03.78	A106	2	R97	6.3.0	Notification of call forwarding to the gsmSCF	F	CAMEL Phase 2
s29	N2-99630	03.78	A105		R97	6.3.0	Correction of gsmSDL; return to idle after ACR	F	CAMEL Phase 2
s29	N2-99310	03.78	A099		R97	6.3.0	Reporting of O/T_Abandon DP when caller clears during O/T_Busy, O/T_No_Answer or Route_Select_Failure EDP-R.	F	CAMEL Phase 2
s29	3C99-480	03.78	A083		R97	6.3.0	Inclusion of Activity Test IF between gsmSCF & gsmSRF and gsmSCF and assistSSF	F	CAMEL Phase 2
s29	3C99-275	03.78	A074		R97	6.3.0	Inclusion of Alerting Pattern in Provide Roaming Number (PRN) Information Flow..	F	CAMEL Phase 2
s29	N2-99225	03.78	A075	1	R97	6.3.0	Dialled Number String Format	F	CAMEL Phase 2
s29	N2-99238	03.78	A084	1	R97	6.3.0	Correction of USSD Information flows	F	CAMEL Phase 2
s29	N2-99244	03.78	A076	2	R97	6.3.0	Handling of AC/ACR in DP Busy, DP No Answer and DP Route Select	F	CAMEL Phase 2
s29	N2-99217	03.78	A070	1	R97	6.3.0	Inclusion of Subscriber Activity Information Flow	A	CAMEL Phase 2
s29	N2-99223	03.78	A092		R97	6.3.0	Correction of CAMEL Phase interworking with Call Forwarding	F	CAMEL Phase 2
s29	N2-99255	03.78	A093		R97	6.3.0	Renaming of Call Active Variable	F	CAMEL Phase 2
s29	N2-99576	03.78	A103		R97	6.3.0	Introduction of MSISDN Parameters in Process Unstructured SS request information flow	F	CAMEL Phase 2
s29	N2-99590	03.79	A011	1	R97	6.0.0	Notification of call forwarding to the gsmSCF	F	CAMEL Phase 2
s29	N2-99591	03.79	A012		R98	7.0.0	Notification of call forwarding to the gsmSCF	A	CAMEL Phase 2
s29	N2-99569	03.82	A004	2	R97	6.0.0	Modifications to call forwarding due to CAMEL Phase 2	D	CAMEL Phase 2
s29	N2-99270	09.02	A213	1	R97	6.3.0	Introduction of MSISDN in USSD operation	C	CAMEL Phase 2
s29	N2-99643	09.02	A235	1	R97	6.3.0	Modification of the O-CSI ASN1 structure	F	CAMEL Phase 2
s29	3C99-479	09.02	A207		R97	6.3.0	Clarification in ASN.1 encoding of O-CSI and T-CSI.	F	CAMEL Phase 2
s29	N2-99269	09.02	A215		R98	7.0.0	Introduction of MSISDN in USSD operation	C	CAMEL Phase 2
s29	N2-99233	09.02	A211		R98	7.0.0	Clarification in ASN.1 encoding of O-CSI and T-CSI	A	CAMEL Phase 2
s29	N2-99650	09.02	A237	1	R98	7.0.0	Modification of the O-CSI ASN1 structure	A	CAMEL Phase 2
s29	N2-99344	09.78	A058	3	R97	6.3.0	Various corrections	F	CAMEL Phase 2
s29	N2-99593	09.78	A068	1	R97	6.3.0	Notification of call forwarding to the gsmSCF	F	CAMEL Phase 2
s29	N2-99639	09.78	A072	1	R97	6.3.0	Interworking with Q.1218 and ETSI Core INAP	F	CAMEL Phase 2
s29	3C99-481	09.78	A057		R97	6.3.0	Inclusion of Activity Test IF between gsmSCF & gsmSRF and gsmSCF and assistSSF	F	CAMEL Phase 2
s29	3C99-407	09.78	A055		R97	6.3.0	Corrections	F	CAMEL Phase 2
s29	N2-99334	09.78	A065		R97	6.3.0	Removal of redundant reference	D	CAMEL Phase 2
s29	N2-99239	09.78	A042	3	R97	6.3.0	SCCP	F	CAMEL Phase 2

NP99-198, 230 and 241

## Work item: CAMEL, different interpretation of MSC address in CF case.

SMG	Tdoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
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## Status report of SMG3/TSG\_CN to SMG#29 and TSG\_SA#4 June 1999

S29	NP99-244	03.78	A		R96	5.7.0	Health warning on MSC address in Initial DP	D	CAMEL Phase 1
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NP99-244

S29	N2-99646	03.78	A104	3	R97	6.3.0	MSC address in Initial DP	F	CAMEL Phase 2
S29	N2-99647	09.78	A070	1	R97	6.3.0	MSC address in the InitialDP operation	F	CAMEL Phase 2

NP99-198

See Annex A for explanation.

## Issue: 03.03 SSN value re-allocation and fault corrections

SMG #	Tdoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
S29	NP99-163	03.03			R96	5.1.0	Correction of VBS/VGCS reference	F	ASCI
S29		03.03			R97	6.2.0	Correction of VBS/VGCS reference	F	ASCI
S29		03.03			R98	7.0.0	Correction of VBS/VGCS reference	F	ASCI
S29		23.003			"R99"	3.0.0	Correction of VBS/VGCS reference	F	ASCI
S29		03.03	A026	1	R97	6.3.0	SSN reallocation for CAP, allocation for gsmSCF, SIWF, GGSN, SGSN	A	CAMEL, SIWF,LCS, GPRS
S29	NP99-222	03.03	A027	1	R98	7.0.0	SSN reallocation for CAP, allocation for gsmSCF, SIWF, GGSN, SGSN, SMLC and GMLC	A	CAMEL, SIWF,LCS, GPRS
S29		23.003	A002	1	R99	3.0.0	SSN reallocation for CAP, allocation for gsmSCF, SIWF, GGSN, SGSN, SMLC and GMLC	A	CAMEL, SIWF,LCS, GPRS

The CR against R'96 was not approved a discussion on transition technique instead started. R'96 and R'97 might be affected.

## Work item: CTS

TDOC	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT
NP99-209	04.56	A003		R98	7,0,0	Inclusion of a L1 header to the Immediate Assignment messages	F
NP99-209	04.56	A004		R98	7,0,0	Addition of a new message providing RR parameters to the MS	F
NP99-209	04.56	A005		R98	7,0,0	Clarification of the Frequency hopping definition procedure	F
NP99-209	04.56	A006		R98	7,0,0	Replacement of the Alive Check Request message by a Paging Request	F
NP99-209	04.56	A007		R98	7,0,0	Clarification to the use of hopping or non-hopping CTSARCH	F
NP99-209	04.56	A008		R98	7,0,0	Clarification to the use of the status field	F

Endorsement of these SMG2 produced CRs

WI	SPEC	CR	PH	REV	VERS	SUBJECT	CAT	NEW_VER	STC_DOC
CTS	04.56	A001	R98		7.0.0	Inclusion of parameters in the Attachment Accept Procedure	F	7.1.0	N1-99078
CTS	04.56	A002	R98	1	7.0.0	clarification to the reattach procedure	F	7.1.0	N1-99169

## Work item: CCBS

SMG #	Tdoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
S29	N2-99249	09.02	A203	1	R97	6.3.0	Adding of MAP_DELIMITER_req to the Status report operation	F	CCBS
S29	N2-99250	09.02	A212		R98	7.0.0	Adding of MAP_DELIMITER_req to the Status report operation	A	CCBS

NP99-199

WI	SPEC	CR	PH	REV	VERS	SUBJECT	CAT	NEW_VER	STC_DOC
CCBS	04.08	A507	R97	1	6.3.0	Clarification to CCBS T334 timer	F	6.4.0	N1-99164

## Work item: MSP

SMG #	Tdoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
S29		03.97					Reorganisation of Content		MSP

## Work item: MSP

SMG #	Tdoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
s29	N2-99282	03.66	A001	1	R98	7.0.0	Alignment between 03.66 Part 1 and Part 4 description of call related functionality	F	MNP
s29	N2-99283	03.66	A002	1	R98	7.0.0	Editorial clarifications and alignments	D	MNP
s29	N2-99284	03.66	A003	1	R98	7.0.0	Routeing conventions in a portability Cluster	F	MNP
s29	N2-99671	03.66	A004	1	R98	7.0.0	Adding of MNP-indicator to the SRI ack	F	MNP
s29	N2-99672	03.66	A005		R98	7.0.0	Correction on Number Portability	F	MNP
s29	N2-99677	09.02	A204	3	R98	7.0.0	Adding of MNP-indicator to the SRI ack	A	MNP

NP99-204

## Work item: GPRS

## CN tdoc NP99-200, NP-210 and electronic approval

STC DOC	SPEC	CR	REV	PHAS	VERS	SUBJECT	CAT
N1-99354	03.20	A011	4	R97	6.3.0	Correction of the handling of the Ciphering Key Sequence Number (CKSN)	F
N1-99269	03.22	A031	1	R97	6.1.0	Correction to delayed PLMN selection	F
N1-99181	03.60	A114		R97	6.3.0	Selection Mode consistency between 09.60 and 03.60	F
N1-99268	03.60	A112	2	R97	6.3.1	correction of the handling of cksn in the attach procedure	F
N1-99369	03.60	A115	1	R99	6.3.1	Clarification to the PDP-type PPP	B
N1-99212	04.08	A509	1	R97	6.3.0	SM-STATUS msg. Response to unknown msg type	F
N1-99054	04.08	A525		R97	6.3.0	Deactivation of READY timer	F
N1-99096	04.08	A581		R97	6.3.0	Usage of GMM cause codes	F
N1-99207	04.08	A527	1	R97	6.3.0	Description of cause codes in network initiated detach	F
N1-99211	04.08	A573	1	R97	6.3.0	Completion of error handling for session management	F
N1-99226	04.08	A511	2	R97	6.3.0	Cleaning up on text in general, and especially on attempt counters, PDP	F
N1-99230	04.08	A659		R97	6.3.0	MS reachable timer	F
N1-99231	04.08	A645		R97	6.3.0	Conditional IE GPRS CKSN in Authentication and ciphering procedure	F
N1-99238	04.08	A635		R97	6.3.0	GMM Mobile station identity	F
N1-99245	04.08	A517	2	R97	6.3.0	Correction of the handling of the Ciphering Key Sequence Number (CKSN)	F
N1-99247	04.08	A523	2	R97	6.3.0	Ready Timer handling in suspend state	F
N1-99254	04.08	A629	1	R97	6.3.0	'GPRS services and non-GPRS services not allowed': the behaviour of the MS.	F
N1-99257	04.08	A647		R97	6.3.0	Correction of the SM message collision cases through PDP address	F
N1-99258	04.08	A519	3	R97	6.3.0	Correction of the SM message collision with equal TI to an active PDP context	F
N1-99260	04.08	A631	1	R97	6.3.0	Maximum length of Access point name and Protocol configuration options IEs	F
N1-99261	04.08	A633	1	R97	6.3.0	Clash between READY time deactivation and Force to Standby Procedure	F
N1-99262	04.08	A577	2	R97	6.3.0	Subsequent GMM substate and attach attempt counter	F
N1-99265	04.08	A655		R97	6.3.0	Correcting mistakes introduced via CR's 385, 415, 425,441 in v6.3.0 editing	F
N1-99271	04.08	A461	3	R97	6.3.0	Usage of the combined routing area update procedure	F
N1-99355	04.08	A657	1	R97	6.3.0	Editorials, and correcting the A&C REQUEST plus INFORMATION messages	F
N1-99356	04.08	A476	2	R97	6.3.0	P-TMSI is introduced in the Paging request messages and in the Mobile identity	F
N1-99172	04.64	A055	1	R97	6.3.0	Discarding outstanding LL-DATA-REQ in the case of LLC re-establishment	F

NP99-210

_TDOC	SPEC	CR	REV	PHAS	VERS	SUBJECT	CAT	WORKITEM
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## Status report of SMG3/TSG\_CN to SMG#29 and TSG\_SA#4 June 1999

N1-99547	03.03	A020	1				Correction to the MNC length		PCS Harmo.
N1-99549	03.03	A021					LS + CR 'Definition of escape PLMN code'		SoLSA
N1-99573	03.22	A032	2				PLMN Selection for GPRS mobiles		GPRS
N1-99442	03.60	A118	1	R97	6.3.0		Information Storage		GPRS
N1-99443	03.60	A119	1	R97	6.3.0		Clarification of the null routeing area		GPRS
N1-99454	03.60	A107	2	R97	6.3.0		Improving the user data loss less inter SGSN RA update		GPRS
N1-99466	03.60	A117					SGSN Failure		GPRS
N1-99572	03.60	A120	2				Circuit Switched and Packet Switched priority handling		GPRS
N1-99592	03.60	A116	2				Tunnelling of non-GSM Messages		GPRS
N1-99596	03.60	A130					MSISDN in GGSN		GPRS
N1-99598	03.60	A132					Mean throughput classes		GPRS
N1-99475	04.07	A024					Inter SGSN RA Update		GPRS
N1-99419	04.08	A669					Conditional IE Errors		GPRS
N1-99429	04.08	A677					Definition of the PDP address IE		GPRS
N1-99430	04.08	A679					Deactivation of PDP contexts in case of GPRS detach		GPRS
N1-99438	04.08	A683					Usage of cause code #10 implicitly detached		GPRS
N1-99452	04.08	A587	2				Gs interface failure		GPRS
N1-99453	04.08	A675					Abnormal case in the MS when changing cell while trying to attach		GPRS
N1-99457	04.08	A481	1				Improving the user data loss less inter SGSN RA update		GPRS
N1-99463	04.08	A653	2				Reactivation of PDP contexts		GPRS
N1-99464	04.08	A555	2				New DEREGISTERED 'suspended' state		GPRS
N1-99465	04.08						Clarification of release procedure upon PDP context deactivation		GPRS
N1-99471	04.08	A515	4				Correction to the handling of subscribed QoS values		GPRS
N1-99476	04.08	A665					Correction of PDP type		GPRS
N1-99478	04.08	A637	3				Initial synchronisation after READY timer negotiation		GPRS
N1-99480	04.08	A651	4				Paging with IMSI		GPRS
N1-99493	04.08	A583					Old P-TMSI/TLLI handling		GPRS
N1-99553	04.08	A681	1				Improved SM messages error handling for non-semantically mandatory IE errors		GPRS
N1-99556	04.08	A585	5				GMM-MM co-ordination in the case of combined GMM specific procedures		GPRS
N1-99559	04.08	A639	2				Usage of GMM update status U2		GPRS
N1-99588	04.08	A582	5				MS Radio Access Capability IE		GPRS
N1-99604	04.08	A687					Transfer of the LSA Information to the MS		GPRS
N1-99609	04.08	A584	3				MS Radio Access Capability IE		GPRS
N1-99574	04.08	A685	1				TMSI requested by the MSC trough the Gs interface		GPRS
N1-99606	04.08	A673	4				Change of network operation mode		GPRS
N1-99404	04.64	A057					Number of retransmissions		GPRS
N1-99413	04.64	A061					Differentiating between layer3 and LLC initiated procedures		GPRS
N1-99434	04.64	A059	2				XID collision corrections		GPRS
N1-99455	04.64	A054	2				Improving the user data loss less inter SGSN RA update		GPRS
N1-99459	04.64	A064	2				Procedure for use of the poll bit and introduction of timer TN1-99201		GPRS
N1-99460	04.64	A058	2				Frame reject procedures		GPRS
N1-99490	04.64	A067					Correction of the behaviour of LLC in Standby state		GPRS
N1-99557	04.64	A068	1				Discarding too long U and UI frames		GPRS
N1-99593	04.64	A070	2				Tunnelling of non-GSM Messages		GPRS
N1-99456	04.65	A038	1				Improving the user data loss less inter SGSN RA update		GPRS
N1-99462	04.65	A039	1				XID collision corrections		GPRS
N1-99558	09.18	A026	1				TMSI requested by the MSC trough the Gs interface		GPRS

"Electronic approval"

SMG #	TDoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
s29	N2-99620	03.07	A006	1	R97	6.1.0	GPRS restoration procedures	F	GPRS
s29	N2-99254	03.15	A007	1	R97	6.0.0	Corrections to text to introduce barring of SMS calls for GPRS	F	GPRS
s29	N2-99560	09.02	A230		R97	6.3.0	Correction to the Purge MS "Detailed procedure in the HLR"	F	GPRS
s29	N2-99628	09.02	A231		R98	7.0.0	Correction to the Purge MS "Detailed procedure in the	F	GPRS



## Status report of SMG3/TSG\_CN to SMG#29 and TSG\_SA#4 June 1999

							HLR"		
s29	N2-99259	09.10	A009		R97	6.0.1	GPRS Reject causes	F	GPRS
s29	N2-99513	09.60	A056	2	R97	6.3.0	Mandatory SGSN Context Acknowledge message	F	GPRS
s29	N2-99627	09.60	A067		R98	7.0.0	Mandatory SGSN context acknowledgement	A	GPRS
s29	N2-99624	09.60	A064		R98	7.0.0	APN to be transferred in the PDP context at inter SGSN RA update	A	GPRS
s29	N2-99668	09.60	A047	2	R97	6.3.0	Replacing the V(R) transfer mechanism with the N-PDU number transfer mechanism in routing area update	F	GPRS
s29	N2-99622	09.60	A063		R98	7.0.0	Mandatory info in MM Context IE	A	GPRS
s29	N2-99626	09.60	A065		R98	7.0.0	Consistency on implemented CRs from SMG#28	A	GPRS
s29	N2-99669	09.60	A066		R98	7.0.0	Replacing the V(R) transfer mechanism with the N-PDU number transfer mechanism in routing area update	A	GPRS
s29	N2-99660	09.60	A062		R98	7.0.0	Removal of changes in PDP context establishment and restoration	A	GPRS
s29	N2-99621	09.60	A057	1	R97	6.3.0	Mandatory info in MM Context IE	F	GPRS
s29	N2-99623	09.60	A058	1	R97	6.3.0	APN to be transferred in the PDP context at inter SGSN RA update	F	GPRS
s29	N2-99625	09.60	A059	1	R97	6.3.0	Consistency on implemented CRs from SMG#28	F	GPRS
s29	N2-99629	09.60	A061	1	R97	6.3.0	Removal of changes in PDP context establishment and restoration	F	GPRS
s29	3C99-493	09.60	A052		R98	7.0.0	Clarification of ambiguous/superfluous information	F	GPRS
s29	3C99-494	09.60	A053		R97	6.3.0	Timer handling in GTP	F	GPRS
s29	3C99-495	09.60	A054		R98	7.0.0	Timer handling in GTP	A	GPRS
s29	N2-99253	09.60	A055	1	R98	7.0.0	Codepoint for PDP type OSP:IHOSS	B	GPRS
S29	NP-99225	09.60	A068		R97	6.1.0	MSISDN in the Create PDP Context Request	C	GPRS
S29	NP-99226	09.60	A069		R98	7.0.0	MSISDN in the Create PDP Context Request	A	GPRS

NP99-200, NP99-225, NP99-226

WI	SPEC	CR	PH	REV	VERS	SUBJECT	CAT	NEW_VER	STC_DOC
GPRS	04.08	A505	R97		6.3.0	'GPRS services not allowed' cause in the ATTACH REJECT (combined case).	F	6.4.0	N1-99034
GPRS	04.08	A467	R97	2	6.3.0	Multiple ATTACH REQUEST attempts and GMM-common procedures: abnormal cases on the network side	F	6.4.0	N1-99184
GPRS	04.08	A469	R97	2	6.3.0	Introduction of the A&C reference number in the AUTHENTICATION AND CIPHERING REQUEST AND RESPONSE message	F	6.3.0	N1-99182
GPRS	04.64	A051	R97	1	6.3.0	GSM 04.64 CR A051r1 Signalling SAPI Information Field Length	F	6.4.0	N1-99141
GPRS	04.64	A055	R97	1	6.3.0	Discarding outstanding LL-DATA-REQ in the case of LLC re-establishment	F	6.4.0	N1-99172
GPRS	09.10	A009	R97		6.0.1	GPRS Attach Reject Cause when 'IMSI unknown'	F	6.1.0	N1-99035
GPRS	09.18	A024	R97	1	6.3.0	Clarification of the null RA and other corrections	F	6.4.0	N1-99176

**Work item: GPRS / Internet Hosted Octet Stream****CN-tdoc: NP99-211**

TDOC	SPEC	CR	REV	PHAS	VERS	SUBJECT	CAT
N1-99321	04.08	A701		R98	7.0.0	GPRS Internet Hosted Octet Stream Service (IHOSS)	B

**Work item: GPRS / PDP Type – Unstructured Octet Stream (UOS)****CN-tdoc: NP99-214**

STC_DOC	SPEC	CR	RE	PHA	VERS	SUBJECT	CAT
N1-99322	03.60	A104	1	R98	6.3.1	Octet Stream Protocol and Internet-Hosted Octet Stream Service	F

**CRs presented by N3 on GPRS and miscellaneous:**

S4-98p614	CR to 07.60 GPRS for PDP type Internet Hosted Octet Stream Service (IHOSS) (R '98)
S4-98p615	CR to 09.61 GPRS for PDP type Internet Hosted Octet Stream Service (IHOSS) (R '98)
S4-98p619	CR to 07.60 for PPP type PDP (R '98)

## Status report of SMG3/TSG\_CN to SMG#29 and TSG\_SA#4 June 1999

S4-98p621	CR to 09.61 for PPP type PDP (R '98)

T2-99254	CR to 07.60 v6.2.1 (release '97) to remove AT commands	WI:GPRS, CAT: D
T2-99255	CR to 07.60 (release '97) to correct an error in the +CGAUTO command	WI: GPRS, CAT: F

NP99-221 history-status SMG4 approved not fwd to SMG# yet reapproved SMG3/CN  
In SMG P99-058

**Work item: SIM Application Toolkit (SAT)**  
**CN-tdoc: NP99-212**

_TDOC	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT
N1-99163	03.22	A030	3	R97	6.1.0	EF <sub>IMSI</sub> changes via Data Download or SIM Toolkit applications	B

**Work item: TEI**  
**CN-tdoc: NP99-213**

_TDOC	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
N1-99361	04.07	A023	1	R97	6.2.1	Inconsistency in definition of comprehension required IEs	F	TEI
N1-99554	04.07	A025				Inconsistency in definition of comprehension required IEs		TEI
N1-99360	04.08	A571	1	R97	6.3.0	Inconsistency in definition of comprehension required IEs	F	TEI
N1-99103	04.08	A591				Inconsistency in definition of comprehension required IEs	F	TEI

SMG #	TDoc	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
s29	N2-99517	09.02	A220		R96	5.12.0	VBS data	D	TE&I
s29	3C99-468	09.02	A205		R97	6.3.0	Alignment with 04.80	F	TE&I
s29	N2-99518	09.02	A221		R97	6.3.0	VBS data	A	TE&I
s29	3C99-667	09.02	A233		R97	6.3.0	Corrections of mapping from MAP service to TC service	F	TE&I
s29	N2-99519	09.02	A222		R98	7.0.0	VBS data	A	TE&I
s29	N2-99461	09.02	A224	1	R98	7.0.0	Introduction of Data Missing error to the Resume Call Handling	F	TE&I
s29	N2-99676	09.02	A234		R98	7.0.0	Corrections of mapping from MAP service to TC service	A	TE&I
s29	3C99-206	09.02	A186	3	R98	7.0.0	Introduction of UUS service to Resume Call Handling	B	TE&I

Tdoc NP99-208

**Work item: 04.08-Split (AS - NAS specific part for R'99 – UMTS)**  
**CN-tdoc: NP99-220**

TDOC	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT
N1-99302	04.08	A567	1	R99	7.0.1	Split of 04.08 in RR and CN parts	F
N1-99303	04.08	A611	1	R99	7.0.1	Split of 04.08 in RR and CN parts	F
N1-99304	04.08	A613	1	R99	7.0.1	Split of 04.08 in RR and CN parts	F
N1-99305	04.08	A515	1	R99	7.0.1	Split of 04.08 in RR and CN parts (Section 7, "L3 stage2")	F

**Work item: PCS1900 Harmonisation**

_TDOC	SPEC	CR	REV	PHASE	VERS	SUBJECT	CAT	WORKITEM
N1-99547	03.03	A020	1			Correction to the MNC length		PCS Harmo.
N2b99514	03.03	A025		R98	7.0.0	Harmonisation of the MNC-length, correction of CR A019r1	F	PCS-Harmo.
N2b99583	09.02	A229		R97	6.3.0	Removal of 3-digit MNCs	F	PCS Harmo.
N2b99515	09.02	A218		R98	7.0.0	Introduction of 3-digit MNC correction	A	PCS Harmo.



Outcome of the "electronical approval"

### 2.3.4 Specification for information

none

### 2.3.5 Specification for approval

Title: Draft DEN/SPS-03053-1 V0.5.1 (1999-03-15)  
Intelligent Network (IN);  
IN Capability Set 1 (CS1) extension;  
Intelligent Network Application Protocol (INAP);  
Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 2; Part 1: Protocol specification

**Tdoc SMG P99-**

Title: Draft DEN/SPS-03053-2 V0.5.0 (1999-03-15)  
Intelligent Network (IN);  
IN Capability Set 1 (CS1) extension;  
Intelligent Network Application Protocol (INAP);  
Customised Applications for Mobile network Enhanced Logic (CAMEL) Phase 2;  
Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification

**Tdoc SMG P99-**

The various reports on

- GLR
- Super Charger
- Turbo-Charger
- pre-Paging
- Classmark separation
- Out-of-band-control
- etc

are meanwhile approved by SMG3/TSG\_CN, but are not presented here, since of transient value only.

### 2.3.6 Liaisons, external Relations

Various minor LS were sent directly by the working groups.

Beside joint activity with SPS→SPAN for the production of CAMEL specifications no "relation" with other "external" groups exist.

### 2.3.7 Special issues to be highlighted

**Support:** The support arrangements are at present not sufficient. Franco Settimo supports N2 and the MAP subgroup and in parallel the Plenary in this critical transition phase towards 3GPP UMTS. Istvan Kocsi support the CAMEL Group and assists the Supplementary Service Group.

No support is available for N1 where with the split of 04.08 immediate support is needed to get 04.08 asap up to date. After Johan Peterson left MCC Alain Sultain assisted temporarily but now is back to S2/ SA.

Also no support is available for N3/WP-D and last but not least the function of PvdA to have the overall control over SMG3 is not served by others. This leads to not optimal maintained databases for CRs, specifications etc even though the currently available MCC colleagues do their very best.

For the near future 4 MCC colleagues are envisaged and committed by MCC leader and will start work soon. It is then a question of training and good relations within MCC to have a steep learning curve to get them on board rapidly.

**Approval principles:** The Approval principle in SMG3 and TSG\_CN are different although both meetings are joint. Approval of a CR in TSG\_CN means approval by 3GPP on the other hand approval by SMG3 needs further on approval by ETSI SMG plenary.

The consequence of approval here and non-approval there leads to deviation of the specifications. SMG is asked for guidance on this aspect.

Is SMG going to approve immediately also R'99 3G CR's as they form basis of GSM Release '99, at least perspective of SMG3 (TSG\_CN)?

#### **Specifications.**

1) With the split of 04.08 in a GSM radio part and the radio independent part now almost all Specs are transferred to TSG\_CN for maintenance and evolution. Only the SS-interworking specifications GSM to ETSI-ISDN will remain in SMG.

Nevertheless some detailed corrections are needed depending on further analysis.

2) The new CR-Regime and version management to take on board the R'98 / 3GPP baseline specification creation is under discussion and elaboration with MCC.

3) To SMG#29 not all necessary CRs against all versions are presented because not yet produced. It needs clarified who has to produce the respective CRs, MCC, the working group, not needed (only duplicated cover sheet)?

#### **Specification transfer:**

So far only identified to be not in the joint SMG3/TSG\_CN group are the specifications concerning GSM/PLMN to ETSI ISDN SS interworking. For maintenance of these Specs and respective joint activities together with SPAN SMG3 WP-B has to be kept active.

In General the transfer of the specifications needs some refinement and checking but the above outlined area is currently the only one where SMG3 activity is yet identified.

**Hosts:** The hosting situation improved slightly with the creation of 3GPP. Several meetings are now hosted outside the classic ETSI terrain.

**Meeting Frequency:** The frequency of meetings is rather high and does not allow much digestion time within the companies between meetings.

**CAMEL Phase 3:** Work is progressing, working assumptions how to handle GPRS and non-call related traffic in general are established.

**GPRS:** The amount of CRs is still very high and binds lot of resources in the working groups. A proposal to "take out of service" rel'97 of GPRS (esp. 04.08) and concentrate on correcting R'98 only found no support. Other means are currently not identified.

## **3 Status of the technical specifications / Activities in Working Groups**

### **3.1 General**

The part of the Phase 2 (Release 95) technical specifications under the responsibility of SMG3 are considered as stable. For Release 96 only very few CRs are presented most of them to cater for better compatibility with following releases.

#### **The officials / Chairperson:**

SMG3-Chair	TSG_CN	Harald Dettner, Siemens	elected 06/98
SMG3-Vicechair		Ian Park, Vodafone	re-elected 05/99

Status report of SMG3/TSG\_CN to SMG#29 and TSG\_SA#4 June 1999

WP-A	N1	Hannu Hietalahti, Nokia	until 03/00
WP-B	Nss	Steffen Habermann	no candidate, SH volunteers to cont. until E/99
WP-C	N2	Ian Park, Vodafone	re-elected 05/99
WP-D	N3	Norbert Klehn, Siemens	elected 05/99

The officials / Support team:

SMG3-Chair	TSG_CN	Franco Settimo
WP-A	N1	none (temp. Alain Sultan)
WP-B	Nss	Istvan Kocsi
WP-C	N2	Franco Settimo (MAP) Istvan Kocsi (CAMEL)
WP-D	N3	none

Especially with the maintenance of the older versions of the specifications this amount is not sufficient

**3.2 Radio interface L3 signalling & GPRS (TSG\_CN N1)**

**3.2.1 Phase 2**

none

**3.2.2 Release 96 and Release 97**

**GPRS:** This time again several CRs are forwarded, all with corrections to GPRS Release 97.

The areas for corrections are:

- PDP types PPP and OSP (IHOS),
- CKSN handling,
- P-TMSI handling usage,
- SM message handling,
- GMM Procedures,
- PLMN selection procedure,
- handling of QoS values,

...

Several CRs require associated CRs against 03.60 for alignment, these are "non-architectural" and since that do not need S2 activity.

Clarifications on class B Mobiles. The reaction of an MS on CS paging when in GPRS communication is FFS and needs guidance from S1/S2.

**CTS:** CRs on 04.56 produced by SMG2 were reviewed and endorsed.

**3.2.3 Release 98**

**LCS:** Joint activity with T1P1.5 took place for the production of LCS specification material.

The specifications xy.71, especially 04.71 were reviewed and commented and resp. CRs to Core specifications 04.07, 04.08 and 09.08 were produced, approval by email is pending.

**SoLSA:** CRs on Transfer of LSA information to the MS and SoLSA capability indication in Classmark IE were produced.

**3.2.4 Release 99**

**GPRS/TOM:** Initiated by SMG12/S2 study on Tunneling of non-GSM Messages (TOM) is done in initial

initiative from UWCC. CRs for 03.60, 04.60,04.64 and 09.18 were approved.

#### 04.08 Split/

Separation of RR and "radio-independent" parts in 04.08

One of the prerequisites for transfer of 04.08 was the split to not transfer the "GSM-radio" to 3GPP but only the MM/CC/SM part of the spec.

This work is now completed according to the below outlined principle.

CONTENTS	CURRENT LOCATION	Release 99 SPEC NUMBER	FUTURE EVOLUTION
Skeleton 04.08 for list of references	04.08	04.08	Can be deleted when references from outside 04.08 are updated
RR part of 04.08	04.08 ch. 3, 8, 9,10	04.xx	GSM RAN specification that lives on in ETSI
CN part of 04.08	04.08 ch. 4,5,6,8,9,10	24.xx	Common CN specification that lives on in 3GPP
Section 7 of 04.08	04.08 ch. 7	23.xx	L3 Stage 2 for 3GPP

For R'99 UMTS work started on the following areas:

#### Multimedia Call

proposal for Bearer Modification discussed.

#### Multicall

proposal for a new IE "bearer Identifier" under discussion.

Because of the close interactions with RAN a joint meeting is called end for June.

#### MS Classmark issue

A working assumption is agreed on how to split the classmark in the RAN and CN part.

It is agreed that CN shall specify which CM to use to allow possible configuration of GSM BSS or UTRAN (UTRAN, BRAN,...)

#### GSM/UMTS interworking

The consequences of the S2 decision to remove LLC for UMTS are analysed with their impact on SM/GMM. The issue needs further discussion with S2.

#### Bearer Capabilities for UMTS

As working assumption it is agreed to have similar BC for GSM and UMTS and to extend with new IE's if needed the exhausted BC coding. Inter system HO will have to be considered.

#### Turbo-Charger

This WI was agreed to study a new traffic reduction concept which proposes to install a routing function between the AN and the CN (MSC/VLR and SGSN). Gain would be that no VLR-HLR LupD is needed on VLR change in such a "cluster area".

#### L3 Message Segmentation.

This WI proposes a generic mechanism to transport long L3 message information. Problems were already experienced for R'98 with the "long-FWD-to-Numbers". For such cases this WI helps in future. Eventually also for the new security requirements.

### 3.3 Network part (TSG\_CN WG N2/ SMG3 WP-C)

The maintenance of older versions of the specifications still requires some time. Nevertheless activities for Rel'99 work items take more and more of the meeting capacities.

The amount of corrective changes to CAMEL Ph2 is much however SMG3/CN believe the changes presented here are necessary for the proper operation of CAMEL phase 2.

CAMEL is meanwhile the only work item Subworking Group N2A deals with and continues to make progress on CAMEL Ph3.

For the T1P1.5 driven WI on Location Services (LCS) several CRs were refined and communicated back to T1P1.5 to complete the WI for SMG#29.

The WI on PCS 1900 harmonisation and the the special aspect of 3 digit MNC is now completed.

#### SSN:

A long story comes to its end. A couple of SSNs from a range of network specific SSN values is reserved for GSM/UMTS applications. The request from Japan to change the CAP SSN to another value is now accepted and CRs are for approval. Under discussion is now a transition strategy on how to change from the old SSN value to the n new one (for this it is proposed to allow for a period both SSNs in parallel). This is also the reason why a proposed R'96 CR was not accepted.

The work for Release'99 concentrated so far on technical feasibility reports on Gateway Location Register, Pre-paging mechanism and Super-Charger.

The technical feasibility report for out-of-band transcoder control is not ready for assessment now but the proponents are confident to provide it mid July to start work on the specifications for completion end '99

#### 3.3.1 Phase 2 / Release'95

No CRs to Phase 2.

#### 3.3.2 Release 96, Release 97, Release 98

##### Approval process for CAMEL Phase 2 delta specifications on ETSI IN CS-1

SPS3 have produced, under contract from SMG, delta specifications (protocol specification and PICS proforma) against ETSI IN CS-1. These have been approved by SPS and TSG\_CN/SMG3 and they are presented in documents P99-..... and P99- for approval by SMG #29.

After approval by SMG, the public enquiry process can begin. CN/SMG3 recommends to SMG #29 that the same procedure is used to resolve the public enquiry comments as was used for the equivalent CAMEL phase 1 specifications: SMG gives a mandate to a joint SPS/SMG public enquiry resolution meeting (which would be held collocated with an SPS3 meeting) to resolve the public enquiry comments and send the specifications for voting, without submitting the voting version of the specifications to SMG for further approval.

#### 3.3.3 Release '99

##### CAMEL Phase 3:

Work is in progress and N2A is now exclusively charged with CAMEL activities.

##### GLR

Gateway Location Register is a WI proposed by Japan. The idea is to install in a given PLMN an entity between VLR's and HPLMN-HLR which acts as a regional "remote HLR". Goal and purpose of this optional element is to reduce the VLR-HLR mobility related traffic.

Long (heated) debates took place in several meetings on the pros and cons of this proposal which ended with the approval of a feasibility report.

On the question of specification work for GLR it was decided not to progress work in 3GPP but leave it to the proponents of the region to continue work outside 3GPP. Later that material might be presented to 3G and



incorporated in/added to the 3G-specs on decision of TSG\_CN plenary.

### **Super Charger**

This WI holds another concept to reduce the traffic volume for subscriber data download to VLR. Work on this item is entirely endorsed and will continue.

Note: The work item "**Turbo-Charger**" was reviewed but finally fwd to N1 for further analysis. Both concepts can coexist.

### **Pre-paging**

This mechanism will not be used in its first phase for detection of busy status. Elaborate more.

### **Multicall**

Work has started but clarification is needed hence the joined workshop is welcome by N2.

### **Authentication**

The requirement from S3/SMG10 on the new UMTS authentication vector with the parameters RAND, XRES, CK, IK and AUTN was analysed. Since all parameters have variable length problems are envisaged in the area:

- MAP and GTP message length
- SCCP limitations (blue/ white-book)
- Relation to radio interface limitations.

Liaison with S3 and N1 is started to clarify and solve these issues.

## **3.4 Network Interwork for Data / Bearer Services (SMG3-WP-D / TSG\_CN N3)**

### **Circuit switched data streamlining for GSM R'99**

The activity initiated by SMG1 is supported some detailed questions are forwarded to SMG1 for clarification. CRs to specifications in the domain of WP-D/N3 will be studied after approval of the SMG1 CRs by SMG plenary.

### **Clarification on RLP**

On request of SMG7 clarification for the interpretation of 04.22 were given.

### **EDGE**

Several CRs for circuit switched EDGE were produced and fwd to SMG4 to present all the bundle to plenary waiting the decision of SMG2 on the channel codings. Therefore, a LS was sent to SMG4 indicating this fact.

### **UMTS Terminal Capabilities**

On request of T2 (Liaison) the definition of terminal capabilities for UMTS was discussed and the result fed back to T2

### **Call Control and Session Management**

TSG-S2 has sent a Liaison Statement to TSG-CN1 with copy to TSG-CN3 et al. concerning the UMTS call control and session management. TSG-CN1 is requested to make some decisions concerning CC/SM.

N3 needs to be involved in this discussion because

- some of N3 Work Items depends on the decisions made by TSG-CN1 and
- not only CC/SM is relevant for handover between GSM and UMTS, but also traffic channel matters.

### **Fax**

*Real-time NT Facsimile based on GSM 03.46*

This option to provide NT Fax was introduced on strong request from the Japanese side. Even though the European camp is rather sceptic on this approach the work on 03.46 CR production will continue.

*Real-time Facsimile based on ITU-T T.38*

Supplementary information on T.38 delays was provided in order to assess whether T.38 is suitable in a

mobile context.

### Work items in N3

#### GPRS Interworking with ISDN/PSDN

At the moment two alternatives exist for the provision of this service, an OSP based and an H.323 based solution. The H.323 based solution has preferences. It was clarified in the discussion that further progress depends on actions in other groups

#### Access to ISPs and Intranets – Wireless/Remote access to LANs

The goal of this WI is to provide an end-to-end DHCP between MS and GGSN. Contributions are expected for the next meetings in order to make progress.

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

(will be handed over to N2 as prime responsible)

#### Real-time Fax (based on non-transparent Fax as in GSM 03.46) in UMTS/IMT2000

#### Real-time Facsimile based on ITU-T T.38

#### Study on provision of facsimile services in GSM and UMTS

(handed over to T2 as prime, N3 has still secondary responsibility)

#### An asynchronous to synchronous HDLC service in GSM and UMTS

Open issues on this WI are related

- to questions of Flow Control between the radio interface link and the fixed network link,
- signalling needs and
- the protocol stack architecture.

#### Circuit switched Bearers in UMTS

(to be created on TSG\_S1 initiative)

#### Parameters for bearer and teleservices for PIAFS services

Clarification is ongoing whether this proposed WI might be absorbed by the general WI on MM/CC on UMTS.

### **3.5 Supplementary services part (SMG3-WPB / TSG\_CN Nss) CAMEL Phase 2 interactions with Call Forwarding**

CR 03.82-A004r7 on Modifications to call forwarding due to CAMEL Phase 2 was developed together with TSG CN WG2. This CR was approved in TSG CN SS ad hoc.

### **Multiple Subscriber Profile**

For Phase 1 of MSP the Stage 2 specification was approved at SMG#28. Since MSP Phase 1 implementation is based on CAMEL Phase 2 capabilities, some discussions about the structure of the stage 2 specification took place. It was agreed that the additional functions needed in the HLR to support MSP are separated from the informative service description. The CR on 03.97 is approved by SMG3/CN.

For MSP Phase 2 it was agreed that implementation will be based on CAMEL Phase 3. An assessment of the needed capabilities for support of MSP in CAMEL Phase 3 was done. The new requirements were collected in a document, which was forwarded to TSG CN WG2 for further treatment. These new requirements mainly focus on enhanced interactions of CAMEL with standardised supplementary services. Further decision is expected in TSG CN WG2.

## **Follow Me**

The stage 1 of Follow Me was reviewed during the meeting. It is proposed to specify in Release 99 a generic mechanism for "Remote Control" instead of a dedicated supplementary service. This comment will be considered by the Rapporteur. It was stated that an e-mail discussion in TSG SA/SMG1 is expected on this issue. No Stage 2 work was done so far.

## **Calling Name Presentation**

There is still a work item for Release 99 on Euro CNAP. It was asked during the meeting whether there is support for this feature amongst the participating delegations. No support was expressed. Therefore TSG CN endorsed the proposal to remove this Work Item from the Work Item list. It was identified that there is no support for Euro CNAP in SMG1 as well.

## **USSD Enhancements**

GSM 02.90, version 8.0.0 (USSD stage 1) contains requirements for an application mode for USSD. It is not clear to TSG CN SS ad hoc what are the additional requirements to the core network compared to the existing "MMI mode" of USSD. A LS to SMG4 and TSG T2 asks for guidance.

## **28 digit Forwarded-to number**

GSM 02.82, version 8.0.0 (Call Forwarding stage 1) contains a requirement for a 28 digit Forwarded-to number. Current Call Forwarding services support 15 digit forwarded-to numbers only. Co-operation with TSG CN WG2 is needed for finalisation of the work within Release 99. However there is no rapporteur for this work item for the time being.

## **GLR**

The draft technical report for the GLR was reviewed during the meeting with respect to the supplementary service impact. Especially CCBS handling was studied. A proposed new section on CCBS impact was prepared and approved after the meeting and was incorporated by the rapporteur in the GLR technical report.

## **Pre-paging**

The Pre-paging technical report was reviewed during the meeting with respect to the supplementary service impact. The scope of Pre-paging considers that the busy state of the terminating subscriber shall be covered by pre-paging. Impact on Call Forwarding, Call Waiting and CCBS is expected, if this concept is agreed. However, it is a working assumption in TSG CN WG2 that the busy error in the PRN will not be supported for pre-paging.

## **Multicall**

The stage 1 specification of Multicall (TS 22.135) and a draft technical report for Multicall was reviewed during the meeting. Concerns related to the concept of the stage 1 specification on "shared bearers" for supplementary service handling were raised. It is proposed to de-couple the Multicall Feature from supplementary service handling to identify the basic requirements for Multicall. A LS to TSG SA1 and SMG1 provides comments on Multicall.

## **3.6 PCS1900 Harmonisation**

On MNC length 2 or 3 digits a few CRS were approved in the CN working groups. The WI is seen as completed from SMG3 / TSG\_CN perspective.

## 4 Future work

### 4.1 General

The alignment process of what forms Rel'99 is not complete even though CN has now several assumptions on what to do for Release'99. The following list shows the WI's where CN working groups are engaged.

### 4.2 Work Items Activities

Note: A ➔ Active – work in progress in WG (development or maintenance)  
 D ➔ Dormant – in the responsibility of the WG, but no work in progress  
 No entry is shown for WIs which are completed or deleted

Release	WI Title	Date due SMG approval	N1 task	N2 task	N3 task	N_SS task	WI Status
98	GSM - Cordless Telephony System (CTS)	S28	A				completed
98	Harmonization of the PCS1900 Standards with the GSM Base Specification	S28	A	A		A	completed
98	Support of Localized Service Area (SoLSA)	s29	A	A			On-going
98	Modem and ISDN interworking for GPRS	s29					on-going
98	Access to ISPs and Intranets in GPRS Phase 2 – Separation of GPRS Bearer Establishment and ISP Service Environment Setup (R98)	s29					on-going
98	Connecting an octet stream to a port on an Internet host (R98)	s29	A				on-going
98	Unstructured octet stream GPRS PDP Type (R98)	s29	A				on-going
98	Tandem Free Operation of speech codecs in Mobile-to-Mobile Calls (MMCs) in band (including AMR)	s29					on-going
98	GSM Mobile Number Portability (EURO) MNP	S29		A			On-going
98	Mobile Station Execution Environment (MExE)	s29					On-going
98	Location Services (LCS)	s29	A	A			On-going
98	Adaptive Multi-Rate (AMR)	s29	A				On-going
99	Call Forwarding Enhancements (CFE)	s31				D	On-going, No requirements
99	USSD Enhancements	S28	A???			D	On-going
99	Support for real time services in the Packet domain for GSM/GPRS/UMTS R99	s31	D				on-going
99	Study on Combined GSM and Mobile IP Mobility Handling in UMTS IP CN	S31	D				On-going
99	MExE Release 99	S31					on-going
99	Enhanced QoS Support in GPRS	s31	D				on-going
99	GPRS Mobile IP Interworking	s31					on-going
99	Access to ISPs and Intranets in GPRS Phase 2 – Wireless/Remote Access to LANs (R99)	S31			A		on-going
99	Fraud Information Gathering System applied to GPRS	S31		D			on-going
99	Charging and Billing for GPRS – Pre-Paid	S31		A			on-going
99	Charging and Billing for GPRS – Advice of Charge	S31					on-going
99	Follow Me	s31				A	On-going
99	GPRS - Point-To-Multipoint Services	S31					on-going
99	BSS co-ordination of Radio Resource allocation for class A GPRS services - GSM Radio Access (R99)	S31					on-going
99	Virtual Home Environment	S31		A			On-going
99	UMTS Numbering, Addressing and Identities	S31					On-going
99	New Access Network to Core Network (BSS-NSS) interface	S31	D				on-going
99	UMTS Core based on ATM Transport	S31					On-going
99	Charging and Billing for GPRS – Hot Billing	S31					on-going
99	UMTS Open Service Architecture	S31					On-going
99	IP-in-IP tunneling in GPRS backbone for UMTS, phase 1	S31					On-going
99	End to End UMTS QoS Management	S31	D				On-going

## Status report of SMG3/TSG\_CN to SMG#29 and TSG\_SA#4 June 1999

99	BSS co-ordination of Core Network Resource allocation for class A GPRS services -GSM-UMTS Core Network (R99)						on-going
99	GPRS phase 2 for PCS1900	s31					on-going
99	Multiple Subscriber Profile (MSP) based on CAMEL ph. 3	s31		A		A	on-going
99	Tandem Free Operation of speech codecs in Mobile-to-Mobile Calls (MMCs) : out-band	s31		A			on-going
99	Immediate Service Termination (IST) : CAMEL free solution	s31		A			on-going
99	GSM on 450 MHz Frequency Band	s31					on-going
99	Specification of a bearer independent protocol for SAT applications to exchange data over the GSM network	s31					on-going
99	SS7 Security	s31					on-going
99	MS and Network-Resident Execution Environments (MS/N-RExE)	s31					on-going
99	UMTS Charging & Billing	S31					On-going
99	General Packet Radio Service Phase 2 (GPRS) - network part	s31	D				On-going
99	Service Continuity and Provision of VHE via GSM/UMTS	S31					On-going
99	Advanced Addressing	S31					On-going
99	Enhanced Data rates for GSM Evolution (EDGE) - NSS Part	s31	A				On-going
99	General Packet Radio Service Phase 2 (GPRS) - radio part	s31					On-going
99	Architecture of the GSM-UMTS Platform	S31					on-going
99	Enhanced Data rates for GSM Evolution (EDGE) - BSS Part	s31					On-going
99	Automatic Establishment of Roaming Relations	S31					On-going
99	Architecture overview of the GSM-UMTS System	S31					on-going
99	CAMEL Phase 3	S31		A			on-going
99	MS Antenna Test Method	s31					On-going
99	Noise Suppression for AMR speech codec	S31					tbd
Tbd	Calling Name Presentation - Euro (CNAP-EU)	tbd				D	to be deleted
Tbd	Support of Operator Specific Services (SOOS) when roaming	tbd					= CAMEL
Tbd	Technical Enhancements/improvements for phase 2	tbd					Never ending
	The Gateway Location Register			(A)			
99	Pre-paging for GSM R99			A			
99	Out-of-band transcoder control			A			
99	Multicall		A	A		A	
99	Separating RR and MM specific parts of the MS CM		A				
99	Synchronous-to-Asynchronous HDLC service					A	
99	Real-time non-transparent FAX (Enhancement of 03.46) in UMTS/IMT2000					A	
99	Real-time Facsimile based on ITU-T T.38					A	
99	GPRS Interworking with ISDN/PSDN					A	
99	Study on provision of facsimile services in GSM and UMTS					(A)	
>99	Service Control (CAMEL) support for GPRS / ISDN interconnect services			?			
99	Circuit switched Bearers in UMTS					A	
99	Parameters for bearer and teleservices for PIAFS services					A	

### 4.3 Future meeting schedule

<b>N1 - Dates</b>	<b>Subject</b>	<b>Host</b>	<b>Place</b>
29/6-1/7	TSGN1 meeting #5	Nokia	Oulu, Finland
16-20/8	TSGN1 meeting #6	Ericsson	Oxford, UK (TBC)
13-17/9	TSGN1 meeting #7	Fujitsu	Japan
26-29/10	TSGN1 meeting #8	NTT DoCoMo	Japan
30/11-3/12	TSGN1 meeting #9	host needed	
11-14/1/00	TSGN1 meeting #10	host needed	

#### **N2 Meetings**

23 – 24 /6, Issy-les-Moulineaux, France (France Télécom) – N2A joint with SPS3 on CAMEL issues;  
19 – 23 /7, Gotland, Sweden (Telia Mobile);  
13 – 17 /9, Abiko, Japan (NEC);  
19 – 20 /10, Ireland (Telecom Eireann) - N2A joint with SPS3 on CAMEL issues;  
15 – 19 /11, no host yet.

#### **N3 Meetings**

Date	Meeting	Host
14-18 /6, 1999	TSG-CN3#4	NEC, Abiko, Japan
13-17 /9, 1999	TSG-CN3#5	no host
19-21 /10, 1999	TSG-CN3#6	no host
29-03 /12, 1999	TSG-CN3#7	no host

## ANNEX A

**3GPP TSG CN/ETSI SMG3**  
**Sophia Antipolis, France**  
**25 – 28 May, 1999**

Source: SMG3/SMG3 WPC Chairmen

Title: Defining the MSC Address in the Initial DP message for CAMEL phases 1 & 2

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SMG3 WPC have identified that the information carried in the parameter "MSC address" of the Initial DP message from the gsmSSF to the gsmSCF is not reliable for the case where a call has been forwarded. Some implementers have interpreted the existing text in GSM 03.78 to mean the address of the forwarding MSC, but others have interpreted it to mean the address of the GMSC. This difference is significant for the case where a call has been forwarded from the destination VMSC (e.g. for forwarding on Busy or No Reply).

For CAMEL phase 1, it was seen as unacceptable to impose a requirement for retrospective change on some implementers by making the text define unambiguously which MSC address should be used to populate the "MSC address" parameter. SMG3 therefore endorsed an editorial CR (CR 03.78-A???) for CAMEL phase 1, to add a warning to service designers that the information in the "MSC address" parameter for the call forwarding case is reliable only of the implementation of the gsmSSF which sent the Initial DP message is known.

For CAMEL phase 2, SMG3 decided that for the case of call forwarding at the destination VMSC both addresses (GMSC and forwarding MSC) should be made available to the service logic. Accordingly, SMG3 endorsed CRs (CR 03.78-A104r3 and CR 09.78-A070r1) for CAMEL phase 2, to define an additional parameter in the Initial DP message for the call forwarding case. This parameter carries the GMSC address. The existing "MSC address" parameter is clearly specified to carry the address of the forwarding MSC for the call forwarding case. The text defining the content of the "Call Reference Number" parameter has also been revised to specify more clearly the identity of the MSC which allocates the Call Reference Number used to populate this parameter.

It was recognised that two ways could be defined to populate the two parameters which carry MSC addresses for the call forwarding case; either way would require a late change for some implementations. There was a fairly even division between manufacturers whose implementations are not affected and those whose implementations are affected, so the choice of the CRs which are presented for approval was based on other technical criteria.

**SMG3 regard it as essential that the ambiguity in the existing text of GSM 03.78 for CAMEL phase 2 is removed.** Therefore if SMG cannot approve CR 03.78-A104r3 and CR 09.78-A070r1 it will be necessary to draft and approve CRs for the alternative approach, in which the "MSC address" parameter carries the GMSC address for the call forwarding case, and a new parameter is introduced to carry the address of the forwarding MSC.