3GPP TSG_CN#7 **NP-000043**
ETSI SMG3 Plenary Meeting #7,
Madrid, Spain
13th – 15th March 2000

Agenda item: **5.3.1**

Source: **TSG_N WG3**

Title: **All LSs sent from CN3 since TSG_N#6**

Introduction:

This document contains all LS sent from CN3 since TSG_N#6. These include:-

DOC N3-00	Subject	To	Cc	Attachment	Sent
0089	LS requesting verification of 27 series specifications	T2			3/3/00
0117	BEARER MODIFICATION WITHOUT PRE-NOTIFICATION	S1	S2		3/3/00
0104	Additional impacts on Q.931	CN_ITU-T Ad Hoc, SPAN-5	TSG_N, N1		3/3/00
0105	V.34 modem, user rate 33.6 kbit/s, NT	S1			3/3/00
0114	Lower User Rates in UMTS for Circuit Switched Data Services	S1			3/3/00
0091	Maximum size of N-PDU	N1	S2 R2		3/3/00
0092	Push service	S1	S2		3/3/00
0093	Deletion of X.25 and Work Item of Interworking with ISDN / PSTN	S1 S2	T2		3/3/00
0094	Answer to the Liaison statement on PPP Encapsulation (S2-99C43)	S2	R2	N3-99469, N3-99470	3/3/00
0095	Clarification of necessity of registration Interworking profile for activation on PS domain" in response to S1-991068	S1	S2	S2-000298	3/3/00
0101	Vocabulary for 3GPP Specifications (PS)	S1	R2		3/3/00
0125	Vocabulary for 3GPP Specifications (CS)	S1	R2		9/3/00

3GPP TSG-CN3 / ETSI SMG3 WPD
Meeting #8, Sophia Antipolis, France
28th February – 3rd March 2000.

Tdoc N3-000089

Title: **LS requesting verification of 27 series specifications**

To: **3GPP T WG2**

Source: **3GPP N WG3**

Contact Person: Erik Colban
email: Erik.A.Colban@ericsson.no
Work tel: +47 66 84 18 44

N3 would like to draw T2's attention to TSs 27.001, 27.002 and 27.003. Although these specifications deal with protocols between the UE and the CN, which is the reason why N3 is maintaining them, they also contain descriptions that are internal to the UE. Examples of such are references to the UE reference model, references to the classification of TE into TE0, TE1 and TE2 and MT into MT0, MT1 and MT2, and protocols between the TE, TA and MT.

N3 understands that the application of the UE model (23.101) and MS model (04.02), the usage of the terms UE and MS, the interfaces between TA and MT have been discussed in T2. Therefore, N3 requests T2 to verify related issues in the above-mentioned specifications and to provide comments and propose corrections in order to achieve alignment of the 27 series.

N3 would like to draw special attention to the following sections:

Section	Issue
TS 27.001	
Section 2	Some references are only relevant for the TE-TA interface. As a result of the GSM R99 service cleanup, some of these references may have become obsolete. Also, new references may need to be added. In particular, should V.25 ter still be referenced?
Section 4	Entire section.
8.1.2.2, 8.1.2.3, 8.2.2.2	Still supported?
Annex A, Table B.5,	Which "signalling access protocols" are still needed after the GSM R99 cleanup. Why are these signalled to the CN? I.440/I.450 do not exist anymore on the ITU-T web site. A pointer to Q.920/Q.930 is given instead. Which should be the default value?
Sections B.1.2 and B.1.3	Verify settings of signalling access protocol for all tables.
TS 27.002	
Section 1.1	Same as for 27.001, Section 2
Section 2	Same as for 27.001, Section 4
Sections 3.1.2, 3.4.2, 4.1.1	Still supported in GSM?
Section 3.3	Anything new? V.28 still supported?
Section 3.4, 4.2.2,Tables 3 and 4,Section 5	This is mostly "UE internal". Please verify.
TS 27.003	
Section 2	Same as for 27.001, Section 2

Section 3.1	Same as for 27.001, Section 4
Sections 4.1.2-3, 4.2.2-3, 5.1.2	Still supported in GSM?
Section 4.2.1	Same as 27.002, Section 3.3
Section 4.3, 6, 7	Same as for 27.002, Section 3.4, 4.2.2,Tables 3 and 4,Section 5

Any other comments are also welcome.

N3 would like T2 to base their comments on the latest versions of TS 27.001, 27.002, 27.003, which will be available shortly after TSGN#7, i.e., end of March 2000.

3GPP TSG-CN3 / ETSI SMG3 WPD
Meeting #8, Sophia Antipolis, France
28th February – 3rd March 2000.

Tdoc N3-000091

Source: **TSG CN3**

To: **TSG CN1**

Cc: **TSG SA2, TSG RAN2**

Title: **Response to LS (N1-99F55) on Maximum size of N-PDU**

TSG CN3 would like to thank TSG CN1 for their Liaison Statement on Maximum size of N-PDU. TSG CN3 has studied the increase of 1500 to 1502 octets for the PDP type PPP and has concluded that there is no impact on their specifications for the R reference point (27.060) and the Gi interface (29.061).

TSG CN3 have accepted that TSG SA2 may consider increasing the maximum N-PDU size for release 2000 or later releases and TSG CN3 will consider the impact on their specifications 27.060 and 29.061 at that time.

3GPP TSG-CN3 / ETSI SMG3 WPD
Meeting #8, Sophia Antipolis, France
28th February – 3rd March 2000.

Tdoc N3-00092

Title: **LS on Push service in Response to S1-(99)1061**

Source: **TSG_CN WG3**

To: **TSG S1**

Cc: **TSG S2**

In the current specifications, one solution to "push" data to a GPRS terminal is provided through the Network Requested PDP Context Activation procedure described in 23.060. A further example of push services is also available today without IP addressing by deploying WAP over SMS over GPRS.

Nevertheless, the Network Requested PDP Context Activation procedure – as specified today - is only possible with static IP addressing.

TSG_CN WG3 will be happy to investigate technical solutions to allow push service with dynamic IP addressing when the required services are defined.

3GPP TSG-CN3 / ETSI SMG3 WPD
Meeting #8, Sophia Antipolis, France
28th February – 3rd March 2000.

Tdoc N3-000093

Source: **TSG CN3**

To: **TSG SA1, TSG SA2**

Cc: **TSG T2**

Title: **GPRS - Deletion of X.25 and Work Item of Interworking with ISDN / PSTN**

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1) Deletion of X.25 in GPRS

TSG CN3 would like to thank TSG SA1 for their liaison statement informing TSG CN3 that X.25 was not to be supported in release '99. Accordingly TSG CN3 has raised CR's to delete X.25 from 27.060 and 29.061. These CR's will be presented to TSG CN plenary #7 in Madrid in March.

As part of this deletion exercise TSG CN3 would like to inform TSG T2 that they have deleted the AT command references of the GPRS +CGCLPAD (configure PAD) in 27.060.

2) Deletion of Work Item Interworking With ISDN / PSTN

TSG CN3 would take this opportunity to inform TSG SA1 that TSG CN3 have deleted the work item of Interworking to ISDN / PSTN. It should however be noted that the PDP type OSP was first developed to support both the IHOSS and interworking to ISDN / PSTN services. IHOSS was completed for release '98 but interworking to ISDN / PSTN was not.

TSG CN3 has noted that the IHOSS service and PDP type OSP is still supported in 22.060 and 23.060, and therefore TSG CN3 has left the IHOSS service and PDP type OSP in their 27.060 and 29.061 specifications for release '99.

TSG CN3 would kindly ask TSG SA1 whether the IHOSS service and PDP type OSP should be deleted. It is now TSG CN3's view that there are no applications / services requiring the use of IHOSS and OSP, and would therefore recommend these be deleted.

3GPP TSG-CN3 / ETSI SMG3 WPD
Meeting #8, Sophia Antipolis, France
28th February – 3rd March 2000.

Tdoc N3-000094

Source: **TSG CN3**
Title: **Answer to the Liaison statement on PPP Encapsulation (S2-99C43)**
To: **TSG SA2**
Cc: **TSG RAN2**

CN3 would like to thank SA2 for the liaison statement (S2-99C43) on PPP Encapsulation.

CN3 confirms that the L2 framing, described in RFC 1662, will not be transferred on the air interface. L2 framing will only be used between MT/TE. This has further been clarified with CRs toward 27.060 and 29.061, CRs 007 (N3-99469) and 003 (N3-99470) attached, which were approved at the CN plenary #6.

Furthermore, we confirm your concerns about the removal of echo request messages.

3GPP TSG-CN3 / ETSI SMG3 WPD **Tdoc N3-000095**
Meeting #8, Sophia Antipolis, France
28th February – 3rd March 2000.

Title:	LS on clarification of necessity of registration Interworking profile for activation on PS domain" in response to S1-991068	
Source:	TSG_CN WG3	
To:	TSG_SA WG1	
Cc:	TSG_SA WG2	
Contact Person:	Name:	Paul Jones
	E-mail Address:	paul.jones@vads.vodafone.co.uk

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1 REQUESTED ACTION(S)

1.1 TSG_SA WG1 - <NONE> - no action required, for Information only.

1.2 TSG_SA WG2 - <NONE> - no action required, for Information only.

2 DETAILS AND DESCRIPTION

2.1 Reference(s): LS S1-991068, LS S2-000298

2.2 Description

TSG_CN WG3 thanks TSG_SA WG1 for their Liaison Statement which states:

" S1 would like to ask S2 and CN3 to confirm that it is possible to activate a connection to a special external IP network using an APN without the need to have a user-specific interworking profile pre-registered in PS domain network."

TSG_CN WG3 also thanks TSG_SA WG2 for their Liaison Statement which states:

" SA2 is happy to confirm that it is possible for the user to activate connections to non-preconfigured external networks by using non-subscribed Access Point Names (APN's)."

3 CN3'S RESPONSE TO S2-000298

3.1 S2-000298 - SA2's response to this LS

CN3 would like to agree with the comments made in Liaison Statement S2-000298

4 CN3'S RESPONSE TO S1-991068

CN3 would like to make some comments on this LS:

4.1 The term "Registration"

CN3 would like to take this opportunity (for the sake of clarity) to point out a number of uses of the term "registration", including: "Network Registration", "External Network Registration" and "Specific User Registration"

- "Network Registration"

This term could refer to the process whereby a specific 'subscriber' is given access to an APN, with or with out the need for subscription in that PLMN, OR to the GPRS attach procedure.

- "External Network Registration"

Any external network that connected to a subscriber through one of the Gi reference points will have a specified registration and/or authentication process associated with it (though it could involve neither). This "registration" is a property of that network, NOT the GPRS network, and therefore "out of scope".

- "Specific User Registration"

CN3 do not understand this term. CN3 believe that if it refers to 'subscribed APNs' that term should be used (as described in 23.060).

4.2 Explanation of the 'wildcard' in a subscribers subscription record, and it's role in "subscription-less context activation".

If the 'wildcard' is included within the subscribers subscription record (i.e. in the HLR) the SGSN will request activation of the requested APN to a GGSN attached to the external network specified by that APN. It will signal to the GGSN that this was a "NON-subscribed" APN. If the GGSN decides that this is appropriate for this APN, it will allow the context activation. Whilst the basis for this decision is NOT specified by the GPRS specifications, it is likely that the GGSN will keep lists of APN's that are appropriate for this type of activation.

4.3 CN3 can confirm the following:

"It is possible to activate a connection to a special external IP network using an APN without the need to have a user-specific interworking profile pre-registered in PS domain network." (quoted from S1-991068)."

4.4 CN3 would also like to disagree with the following comment in S1-991068:

"A user can connect to an external data network without specific registration to that network "

CN3 believes that the statement "in that network" appears to refer to the "external network registration", which CN3 believes is beyond the scope of PS domain specification.

5 ATTACHMENTS

S2-000298: SA WG2 - Response to the Liaison Statement on clarification of necessity of registration

3GPP TSG-CN3 / ETSI SMG3 WPD **Tdoc N3-000101**
Meeting #8, Sophia Antipolis, France
28th February – 3rd March 2000.

Title:	LS on "Vocabulary for 3GPP Specifications"	
Source:	TSG_CN3	
To:	TSG_SA1	
Cc:	TSG_RAN2	
Contact Person:	Name:	Graham Heaton
	E-mail Address:	grahamh@brandcomms.com

Requested Action(s)

TSG_SA 1 - Incorporation of CN3 Abbreviations into 3GPP TS 21.905

TSG_RAN2 - <NONE> - no action required, for Information only.

Details and Description

Description

TSG_CN3 (Packet Switched sub-group) has reviewed 27.060 and 29.061 for 3GPP specification abbreviations and have included in this liaison statement a list of abbreviations to be included in 29.105. When this is complete CN3 will raise CR's to delete the abbreviations in their specifications of 27.060 and 29.061 and incorporate a reference to 29.105.

ABBREVIATIONS

27.060 and 29.061 Abbreviations ALREADY in EITHER 21.905 & 25.990

GPRS	General Packet Radio Service
GSN	GPRS Support Node
IP	Internet Protocol
LLC	Logical Link Control
MAC	Medium Access Control
ME	Mobile Equipment
MS	Mobile Station
PDU	Protocol Data Unit
PS	Packet Switched
PTM	Point To Multipoint

27.060 and 29.061 Abbreviations NOT in EITHER 21.905 & 25.990 that should be global

APN	Access Point Name
BG	Border Gateway
CHAP	Challenge Handshake Authentication Protocol
DHCP	Dynamic Host Configuration Protocol
DNS	Domain Name System
GGSN	Gateway GPRS Support Node
GTP-U	GPRS Tunnelling Protocol for user plane
HDLC	High Level Data Link Control
ICMP	Internet Control Message Protocol
IETF	Internet Engineering Task Force

IHOSS	Internet Hosted Octet Stream Service
IPv4	Internet Protocol version 4
IPv6	Internet Protocol version 6
ISDN	Integrated Services Digital Network
ISP	Internet Service Provider
LA	Location Area
LAN	Local Area Network
LNS	L2TP Network Server
LAPB	Link Access Protocol Balanced
LCP	Link Control Protocol
MCML	Multi-Class Multi-Link PPP
MIP	Mobile IP
MP	Multilink PPP
MT	Mobile Termination
MTU	Maximum Transfer Unit
NAI	Network Access Identifier
NCP	Network Control Protocol
OSP	Octet Stream Protocol
OSP:IHOSS	Octet Stream Protocol for Internet Hosted Octet Stream Service
PAD	Packet Assembler/Disassembler
PAP	Password Authentication Protocol
PDCP	Packet Data Convergence Protocol
PDN	Packet Data Network
PDP	Packet Data Protocol , e.g., IP, X.25 or PPP
PHF	Packet Handler Function
PPP	Point-to-Point Protocol
PTP	Point To Point
PVC	Permanent Virtual Circuit
RA	Routing Area
RADIUS	Remote Authentication Dial In User Service
SGSN	Serving GPRS Support Node
SMDS	Switched Multimegabit Data Service
SNDCP	SubNetwork Dependent Convergence Protocol
TE	Terminal Equipment
TCP	Transmission Control Protocol
TEID	Tunnel End-point Identifier
TFT	Traffic Flow Template
UDP	User Datagram Protocol

3GPP TSG-CN3 / ETSI SMG3 WPD **Tdoc N3-000104**
Meeting #8, Sophia Antipolis, France,
28th February – 3rd March 2000

Source: **TSG-CN WG3**

Title: **LS on additional impacts on Q.931**

To: **TSG-CN Ad Hoc ITU-T, ETSI SPAN WG 5**

CC: **TSG-CN, TSG-CN WG1**

Contact:
Erik Colban
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Work tel: +47 66 84 18 44

N3 would like to inform Ad hoc ITU-T and ETSI SPAN 5 about a potential problem if ITU-T Q.931 is updated.

Background

Due to the introduction of new services requiring new point codes for the BC and LLC IE, as they are defined in Q.931, N3 has decided to update references for the LLC IE and ISDN BC IE from ETS 300 102-1 (12/90) and ETS 300 102-1/A2 (10/93) to Q.931.

The change of these references carries one problem related to the modem type field (octet 5d) of these IE. In fact, different code points are used to define the same modem types, as specified in the following tables:

Modem type (octet 5d) (Extract from Q.931 (05/98); this is identical to ETS 300 102-1/A2)

Bits 6 5 4 3 2 1	
0 0 0 0 0 0 through 0 0 0 1 0 1	National use
0 1 0 0 0 1	Recommendation V.21
0 1 0 0 1 0	Recommendation V.22
0 1 0 0 1 1	Recommendation V.22 bis
0 1 0 1 0 0	Recommendation V.23
0 1 0 1 0 1	Recommendation V.26
0 1 0 1 1 0	Recommendation V.26 bis
0 1 0 1 1 1	Recommendation V.26 ter
0 1 1 0 0 0	Recommendation V.27
0 1 1 0 0 1	Recommendation V.27 bis
0 1 1 0 1 0	Recommendation V.27 ter
0 1 1 0 1 1	Recommendation V.29
0 1 1 1 0 0	Recommendation V.32
0 1 1 1 0 1	Recommendation V.34
1 0 0 0 0 0 through 1 0 1 1 1 1	National use

1 1 0 0 0 0	
through	User specified
1 1 1 1 1 1	
All other values reserved	

Modem type (octet 5d) (Extract from ETS 300 102-1 (12-90))

ETS 300 102-1 requirement:

Bits 6 5 4 3 2 1	
0 0 0 0 0 0	Reserved
0 0 0 0 0 1	V.21
0 0 0 0 1 0	V.22
0 0 0 0 1 1	V.22 bis
0 0 0 1 0 0	V.23
0 0 0 1 0 1	V.26
0 0 0 1 1 0	V.26 bis
0 0 0 1 1 1	V.26 ter
0 0 1 0 0 0	V.27
0 0 1 0 0 1	V.27 bis
0 0 1 0 1 0	V.27 ter
0 0 1 0 1 1	V.29
0 0 1 1 0 0	V.32
0 0 1 1 0 1	V.35
1 0 0 0 0 0	
through	Reserved for national use.
1 1 1 1 1 1	
All other values reserved.	

For several years, the GSM technical specifications have referred to ETS 300 102-1/A2, which uses the same code points as Q.931 for the encoding of modem types. In order to be backward compatible, ETS 300 102-1 has also been supported. This has not caused any problems, as the set of code points used by each are disjoint. Since ETS 300 102-1/A2 and Q.931 are compatible wrt to modem type coding, changing references from the ETS to Q.931 does not introduce new problems. However, if Q.931 in the future assigns new modem type values to those code points that are used by ETS 300 102-1 (12/90), an ambiguity will be introduced.

Proposal

As Q.931 has currently assigned the meaning ‘National use’ to values 000000 through 000101, it is proposed to assign the meaning ‘National use’ also to values 000110 through 001101.

References

[1] ETS 300 102-1 (December 1990)
Integrated Services Digital network (ISDN); User-network interface layer 3 Specifications for basic call control

[2] Q.931 (05/98)
ITU-T Series Q: Switching and Signalling
Digital subscriber Signalling System No. 1 – Network layer

ISDN user-network interface layer 3 specification for basic call control

[3] ETS 300 102-1 / A2, (October 1993)
Integrated Services Digital network (ISDN); User-network interface layer 3 Specifications for basic call control

3GPP TSG-CN3 / ETSI SMG3 WPD **Tdoc N3-000105**
Meeting #8, Sophia Antipolis, France,
28th February – 3rd March 2000

Source: **TSG-CN WG3**

Title: **LS on V.34 modem, user rate 33.6 kbit/s, NT**

To: **TSG S WG1**

Contact:
Erik Colban
Erik.A.Colban@ericsson.no
Work tel: +47 66 84 18 44

TSG N WG3 has reviewed the latest version of 3G TS 22.002 v. 3.2.0. It is N3's opinion that the user rate 33.6 for NT interworking with 3.1 kHz should not be in Section 3.1.1. N3 proposes to remove the corresponding row of the table.

The reason is that this service is already covered by the last row of the table, i.e., by auto bauding.

3GPP TSG-CN3 / ETSI SMG3 WPD
Meeting #8, Sophia Antipolis, France
28th February – 3rd March 2000.

Tdoc N3-000114

Title: **LS on Lower User Rates in UMTS for Circuit Switched Data Services**

Source: **TSG CN WG3**

To: **TSG SA WG1**

Contact Person:

Name: **Norbert Klehn (Chairman TSG CN WG3)**
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1. Overall Description:

In recent month a lot of activities have been taken place in order to remove unneeded services from GSM R99. Among others, it was decided by TSG SA WG1 to delete the single Bearer Services BS 21 – 26 and BS 31 –34. However, the user rates (300 – 9600 bit/s) are provided in the scope of the General Bearer Services BS 20 or 30, respectively. TSG CN WG3 supports the provision of these user rates in GSM. However, for UMTS the requirements for these lower user rates (i.e. user rates less than 9600 bit/s) should be reviewed. For transparent services it was already agreed that only user rates higher than 14.4 kbit/s have to be supported. But what about the user rates for non-transparent services?

TSG CN WG3 would like to raise up the question whether in UMTS only user rates of 9,6 kbit/s and higher should be supported for non-transparent services.

TSG CN WG3 has contributed to the specification of such services as circuit switched multimedia, PIAFS and FTM. This work has shown that only user rates including and higher than 28,8 kbit/s have been required for those services.

Further, the provision of 28,8 or 33,6 kbit/s by V.34 modems is a widely available and used technique in PSTNs. In ISDNs 64 kbit/s are available.

However, TSG CN WG3 sees also the need to support user rates less than 9,6 kbit/s towards the fixed network for dedicated situations (e.g. there might be old modems in operation) or applications (e.g. new standards for devices supporting communication of disabled people) need the provision of lower user rates.

TSG CN WG3's opinion is that these user rates need not to be supported in the PLMN, but towards the fixed network only. Using non-transparent data services, the user rates in the PLMN and in the fixed network may differ because of flow control mechanisms used for these services. Lower user rates in the fixed network can be mapped to 9,6 kbit/s in the PLMN using an RAB for 14,4 kbit/s.

For interworking with ISDN (UDI/RDI) this means, that mobile terminated calls can be supported. For interworking with PSTN (3,1 kHz audio) this means, that mobile originated as well as mobile terminated calls can be supported using the autobauding function of the modems in the MSC/IWF which allows a negotiation of any user rate with the remote modem connected to the PSTN.

This approach avoids the implementation of these lower user rates within the PLMN towards the Mobile Station. Also the development of new Radio Access Bearers needed for the lower user rates can be avoided. It also reduces the effort needed to provide handover between GSM and UMTS. Further it takes into consideration the market situation.

TSG CN WG3 would like to emphasise that the request for these lower user rates within the PLMN towards the MS would require standardisation work not only in CN but also in RAN groups. So, it is very unlikely that this work can be finished in R99.

2. Requested Actions:

TSG CN WG3 kindly asks TSG SA WG1 to consider the proposal, to support user rates less than 9,6 kbit/s as indicated above. In detail this means that the user rates 300, 1200, 2400 and 4800 bit/s towards the fixed network

- will only be provided for BS 20 non-transparent for mobile terminated calls (3,1 kHz audio and UDI/RDI) and mobile originated calls (3,1 kHz audio)
- will not be provided for BS 20 transparent (already agreed by TSG SA WG1)
- will not be provided for BS 30 transparent (already agreed by TSG SA WG1) and non-transparent .

3GPP TSG-CN3 / ETSI SMG3 WPD
Meeting #8, Sophia Antipolis, France
28th February – 3rd March 2000.

Tdoc N3-000117

Title: **LS on BEARER MODIFICATION WITHOUT PRE-NOTIFICATION in Response to S1- 991034**

Source: **TSG_CN WG3**

To: **TSG S1**

Cc: **TSG S2**

Contact Person:

Name: **Norbert Klehn**
E-mail Address: **Norbert.Klehn@icn.siemens.de**
Tel. Number: +49 (30) 386 29090

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1. Overall Description:

TSG_N WG3 thanks TSG_WG S1 for their **LS S1-991034** on Bearer Modification without pre-notification.

TSG_N WG3 has now a clearer view on the requirements for Bearer Modification without pre-notification. No requirements were detected that seem to be technically impossible.

TSG_N WG3 appreciates a workitem description sheet for Bearer Modification without pre-notification for R00 from TSG_S WG1 or interested companies.

3GPP TSG-CN3 / ETSI SMG3 WPD
Meeting #8, Sophia Antipolis, France
28th February – 3rd March 2000.

Tdoc N3-000125

Title: **LS on *Terminology in 3GPP specifications*. Comments to 3G TR 21.905 and 3G TR 21.990 and input for 3G TR 21.905.**

Source: **TSG_CN3**

To: **TSG_S1, TSG_RAN2.**

Cc:

Contact Person:

Name: **Rune W Wiik**
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Tel. Number: +(47) 66 84 16 85

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1. General comments:

TSG_CN3 appreciates the work done on Terminology by both TSG_S1 and TSG_RAN2.

TSG_CN3 would like to inform TSG_S1 that at our meeting in Sophia Antipolis 28th February - 3rd March 2000 some of our specifications were reviewed for Definitions, Abbreviations and Symbols. Tables are included in this liaison statement listing those terms TSG_CN3 at present requests to be included in 3G TR 21.905.

TSG_CN3 intends in the future to raise CRs in order to reflect in all of the specifications under the domain of TSG_CN3 the existence of 3G TR 21.905.

It should be noted, however, that in addition to 3G TR 21.905 and 3G TS 25.990 also GSM 01.04 is referenced in 3GPP specifications. This means that there will be three documents on terms and definitions relevant to the UMTS standardization work.

In order to avoid possible confusion in the future it is TSG_CN3 's opinion that the TSG-RAN document on "Vocabulary", 3G TS 25.990 should be merged with 3G TR 21.905 into one document.

Furthermore it is also proposed to copy all UMTS relevant abbreviations in GSM 01.04 into 3G TR 21.905 so that references to GSM 01.04 in UMTS specifications can be deleted.

2. Definitions to be included in 3G TR 21.905:

Term	Definitions currently in use by TSG CN3	Comments and or Actions expected by TSG_S1
basic MSisdn	The MSisdn stored in VLR for a visiting mobile subscriber.	The definition of this term is written for the need of TSG_CN3. However, a new general definition of **"basic MSisdn"** is recommended.
bearer capability information	Specific information defining the lower layer characteristics required within the network.	TSG_CN3 sees that a rephrasing of this term is needed as these words are used in different combinations. It is therefore proposed to split this term into the following two terms: - **bearer capability** - **information element**. New definitions of these terms are therefore required.
(DIGITAL) connection	A concatenation of (digital) transmission channels or (digital) telecommunication circuits, switching and other functional units set up to provide for the transfer of (digital) signals between two or more points in a telecommunication network to support a single communication.	TSG_CN3 requests TSG_S1 to exchange the current definition of **"connection"** in 3G TR 21.905 with the definition used by TSG_CN3 as this definition is considered more accurate.

EDGE channel	A general term referring to channels based on 8PSK modulation; i.e. TCH/F28.8, TCH/F32.0, and TCH/F43.2	The definition of this term is written for the need of TSG_CN3. However, a new general definition of **"EDGE channel"** is recommended.
frame check sequence	A field of redundant information based on a cyclic code, used for error detection	TSG_CN3 requests TSG_S1to include TSG_CN3 's current definition of **"frame check sequence"** in 3G TR 21.905
higher layer compatibility information	Information defining the higher layer characteristics of the terminal	TSG_CN3 sees that a rephrasing of this term is needed as these words are used in different combinations. It is therefore suggested to split this term into the following two terms: - **higher layer compatability** - **(information element)** TSG_CN3 proposes to adopt TSG_CN3 's current definition of **"higher layer compatability"**.
lower layer compatabilityin formation	Information defining the lower layer characteristics of the terminal	TSG CN3 sees that a rephrasing of this term is needed as these words are used in different combinations. It is therefore suggested to split this term in to the following two terms: - **lower layer compatability** - **(information element)** TSG_CN3 proposes to adopt TSG_CN3 's current definition of **"lower layer compatability"**.
non-transparent	In PLMN data transmission, a configuration where at layer 2, protocol information of the fixed network is mapped on RLP elements, and vice versa.	TSG_CN3 asks TSG_S1 to include our definition of "**non-transparent**" in 3G TR 21.905
transparent	In PLMN data transmission, a configuration where at layer 2 (and also at the layers above) no protocol conversion takes place	TSG_CN3 asks TSG_S1 to include our definition of "**transparent**" in 3G TR 21.905
Out of band	Information exchanged via an associated or non-associated signalling link e.g. SS No7.	TSG_CN3 asks TSG_S1 to include our definition as a definition of "**Out of band**" in 3G TR 21.905.
In-band	No definition exists in TSG_CN3 specifications of this term today.	TSG_CN3 sees that a definition of **"In-band"** is required in 3G TR 21.905.
progress indicator	Information supplied to indicate to the terminal that network interworking has taken place.	This is an ISDN term.TSG_CN3 sees that a definition of **"progress indicator"** is required in 3G TR 21.905.
protocol identifier	Information defining the specific protocols utilized for the support of data transfer by a terminal.	TSG_CN3 sees that a definition of "**protocol identifier"** is required in 3G TR 21.905.
Visited MSC	The MSC which is responsible for handling calls involving the mobile. In the description of inter-MSC handover in GSM 03.09 this is the MSC referred to as "MSC-A" (controlling MSC).	TSG_CN3 sees that a definition of "**Visited MSC"** is required in 3G TR 21.905.
visited PLMN	That GSM PLMN on which the mobile subscriber is roamed to when leaving his home PLMN (HPLMN) and logged-in there.	TSG_CN3 sees that a definition of "**visited PLMN"** is required in 3G TR 21.905.
Home PLMN	No separate definition is used by TSG_CN3	TSG_CN3 sees that a definition of "**home PLMN"** is required in 3G TR 21.905.
Home MSC	No separate definition is used by TSG_CN3	TSG_CN3 sees that a definition of "**home MSC "** is required in 3G TR 21.905.

3. Abbreviations to be included in 3G TR 21.905:

Abbreviation	Full text
3GPP	3rd Generation Partnership Project
AAL2	ATM Adaptation Layer 2
ADPCM	Adaptive Differential Pulse Code Modulation
AIUR	Air Interface User Rate
ATM	Asynchronous Transmission Mode
BC	Bearer Capability
BER	Bit Error Rate
BLER	Block Error Rate
BORE	Bit Oriented Relay Entity
BS	Base Station
BS	Basic Service (group)
BS	Bearer Service
BSS	Base Station System
BSSMAP	Base Station System Management Application Protocol
CALL CONF	Call Confirm
CALL PROC	Call Proceed
CE	Connection Element
CN	Core Network
CONNACK	Connect Acknowledgement
CORE	Character Oriented Relay Entity
CRC	Cyclic Redundancy Check (3 bit)
CS	Circuit Switched
CT	Circuit
CT105	Interchange Circuit 105 as per CCITT V.24
CT106	Interchange Circuit 106 as per CCITT V.24
CT107	Interchange Circuit 107 as per CCITT V.24
CT108.2	Interchange Circuit 108/2 as per CCITT V.24
CT109	Interchange Circuit 109 as per CCITT V.24
CT114	Interchange Circuit 114 as per CCITT V.24
CT115	Interchange Circuit 115 as per CCITT V.24
DCE	Data Communication Equipment
DSS1	Digital Subscriber Signalling No1
DTE	Data Terminal Equipment
DTX	Discontinuous Transmission
EDGE	Enhanced Data for GSM Evolution
EN	European Norm
ETR	ETSI Technical Report
ETS	European Telecommunication Standard (ETSI)
ETSI	European Telecommunications Standards Institute
FCS	Frame Check Sequence (HDLC, LAPB)
FEC	Forward Error Correction
FR	Full Rate
FTM	Frame Tunneling Mode
GBS	General Bearer Service
GMSC	Gateway Mobile-services Switching Centre
GSM	Global System for Mobile communications
GSTN	General Switched Telephone Network
HDLC	High level Data Link Control
HLC	Higher Layer Compatibility
HLR	Home Location Register
HMSC	Home MSC
HR	Half Rate
HSCSD	High Speed Circuit Switched Data
ICM	In Call Modification
IE	Information Element
IEC	International Electrotechnical Commission

IETF	Internet Engineering Task Force
IFP	Interface Protocol
IrDA	Infrared Data Association
IrPHY	Infrared PHYsical layer
ISDN	Integrated Services Digital Network
ISO	International Organization for Standardization
ISUP	ISDN User Part (of signalling system No.7)
ITC	Information Transfer Capability
ITU	International Telecommunication Union
ITU-T	ITU Telecommunication Standard Sector ??
IWF	Interworking Function
L2R	Layer 2 Relay
L2RBOP	L2R Bit Oriented Protocol
L2RCOP	L2R Character Oriented Protocol
LAPB	Link Access Protocol Balanced
LAPDm	Link Access Protocol on the Dm channel
LE	Local Exchange
LLC	Lower Layer Compatibility
MAP	Mobile Application Protocol
MAP	Mobile Application Part
ME	Mobile Equipment
MO	Mobil Originated
MS	Mobile Station
MSC	Mobile Services Switching Centre
MSISDN	Mobile Station International ISDN Number
MSRN	Mobile Station Roaming Number
MT	Mobile Terminated
MT	Mobile Termination
MTM	Mobile-To-Mobile (call)
NIC	Network Independent Clocking
NT	Non-transparent
NT	Network Termination
NTP	Non-transparent protocol
NUP	National User Part (SS7)
OACSU	Off-Air-Call-Set-Up
OSI	Open Systems Interconnection
PABX	Private Automatic Branch eXchange
PAD	Packet Assembler/Disassembler
PCH	Paging Channel
PCMCIA	Personal Computer Memory Card International Association
PDU	Protocol Data Unit
PHS	Personal Handyphone System
PIAFS	PHS Internet Access Forum Standard
PLMN	Public Land Mobile Network
PPP	Point to Point Protocol
PPP	Point-to-Point Protocol
PSDN	Packet Switched Data Network
PSPDN	Packet Switched Public Data Network
PSTN	Public Switched Telephone Network
QoS	Quality of Service
RA1	Rate adaptation step 1
RA2	Rate adaptation step 2
RAB	Radio Access Bearer
RDI	Restricted Digital Information
RFC	Request for Comments
RLC	Radio Link Control
RLP	Radio Link Protocol
RNL	Radio Network Layer
RNR	Receive Not Ready

RR	Receive Ready
RX	Receive
SAP	Service Access Point
SAP	Signalling Access Protocol
SDL	Specification Description Language
SDU	Service Data Unit
SS No.7	Signalling System No.7
SSCS	Service Specific Convergence Sublayer
T	Transparent
TA	Terminal Adaptor
TAF	Terminal Adaption Function
TCH	Traffic Channel
TCH/F14.4	A full rate date TCH (14.4 kbit/s)
TCH/F28.8	A full rate date TCH (28.8 kbit/s)
TCH/F43.2	A full rate date TCH (43.2 kbit/s)
TCH/F	A full rate TCH
TCH/F4,8	A full rate date TCH (4,8 kbit/s)
TCH/F9,6	A full rate data TCH (9,6 kbit/s)
TE	Terminal Equipment
TS	Technical Specification
TS	Teleservice
TSG	Technical Specification Group
TSG	Technical Specification Group
TUP	Telephone User Part (of Signalling System No.7)
TX	Transmit
UDI	Unrestricted Digital Information
UE	User Equipment
UIMI	User Initiated Modification Indicator
UMTS	Universal Mobile Telecommunications System
UP	User Plane
USIM	Universal Subscriber Identity Module
UTRAN	UMTS Terrestrial Radio Access Network
VLR	Visitor Location Register
VMSC	Visited MSC
VPLMN	Visited PLMN
WAIUR	Wanted AIUR

4. Actions:

To TSG S1:

ACTION: TSG_CN3 asks **TSG_S1** to consider the Definitions and/or proposals above for integration into 3G TR 21.905:

To TSG S1:

ACTION: TSG_CN3 asks **TSG_S1** to consider the Abbreviations and Symbols listed in this liaison statement for integration into 3G TR 21.905:

Cc: TSG RAN2

INFO: TSG_CN3 asks **TSG_RAN2** *to accept this liaison statement as a response to their request for comments to 3G* TR 25.990.