3GPP TSG CN Plenary Meeting #23 **NP-040043**
10th – 12th March 2003 Phoenix, USA.

Source: TSG CN WG4

Title: Liaison statements after CN#22

Agenda item: 6.4.1

Document for: INFORMATION

Tdoc	Tdoc Title	LS to	LS cc	LS Attachment
N4-040243	Reply LS on issues related to SNA Access Information	GERAN	SA2	
N4-040245	Reply LS on call hold requirement for CS multimedia	SA1	SA2, CN1, CN3, T2, SA4	
N4-040247	Reply LS to S3-040187(N4-040240) on use of authentication re-attempt IE	SA3	CN1	
N4-040260	LS on mapping of cause codes for no radio resources available and for load higher in target cell.	RAN3	GERAN	N4-040172
N4-040262	LS on Relationship between 3GPP and Liberty Alliance related to GUP work	CN, SA	SA2. SA3, SA5, T2	
N4-040263	LS (S5-044046) on LS on diameter application Id from SA5	SA5		
N4-040290	LS on WLAN UE identity format and resolution	GSMA IREQ	CN plenary	N4-040289
N4-040323	LS on Service Identity in the MO-LR Procedure	SA2		
N4-040351	LS on the use of GTP for WLAN-GPRS interworking	SA2	CN3	
N4-040352	LS on Requirements for transfer of GAA-User-Profile	SA3		
N4-040353	LS on identifying MMS Enabled devices and MMS Capabilities of those devices	SA2, T2		
N4-040354	LS on Routing of Emergency Calls based on Geographical Coordinates	SA, CN	SA1, SA2	

3GPP TSG CN WG4 Meeting #22 ***N4-040243***
Atlanta, USA, 16th – 20th February 2004

Title: Reply LS on issues related to SNA Access Information
Response to: LS (N4-040034, GP-032816) on issues related to SNA Access Information from GERAN.

Source: CN4
To: GERAN
Cc: SA2

Contact Person:
Name: Jari Jansson
Tel. Number: +358 40 5550719
E-mail Address: jari.jansson@nokia.com

---

1. Overall Description:

CN4 thanks GERAN on their liaison statement concerning the issues related to SNA Access Information. CN4 has investigated the issues and would like to give following comments:

- *TSG GERAN WG2 would like to request whether the proposal described in GP-032609 about how to encode of the SNA Information IE when included in the HANDOVER REQUEST / COMMON ID BSSMAP messages is obeying the regular TSG CN WG4 principles for protocols design.*

It is the understanding of CN4 that the proposal described in GP-032609 is obeying the regular CN4 principles for protocol design.

- *TSG GERAN WG2 would like TSG CN WG4 to comment on the issue of SNA Access Information exceeding the available space in the HANDOVER REQUEST message and on the proposed solution to overcome it (separate sending in COMMON ID message).*

CN4 does not see any reasons to comment against the proposed solution described in GP-032609.

- *TSG GERAN WG2 would also like to be informed whether there is any essential reason why the mapping between Iu Release Request and Clear Request messages is missing in 3GPP TS 29.010, or if it rather needs to be included.*

CN4 thanks GERAN for pointing out the issue related to the missing Cause Code mapping in 3GPP TS 29.010. CN4 does not see any essential reason why this mapping is missing from 3GPP TS 29.010 and it is the opinion of CN4 that this mapping between Iu Release Request and BSSMAP Clear Request needs to be added to 3GPP TS 29.010. It is the intention of CN4 to make a corrective CR on this issue for the next CN4 meeting and that corrective CR would also include the mapping of the newly introduced BSSMAP Cause Code Access Restricted Due to Shared Networks.

2. Actions:

To GERAN group.

ACTION: CN4 asks GERAN group to note the comments given by CN4 on the issues related to SNA Access Information.

3. Date of Next CN4 Meeting:

CN4 #23	10th – 14th May 2004	Zagreb, CROATIA
CN4 #24	16th – 20th August 2004	Sophia Antipolis, FRANCE

3GPP TSG CN WG4 Meeting #22 ***N4-040245***
Atlanta, USA, 16th – 20th February 2004

Title: Reply LS on call hold requirement for CS multimedia
Response to: LS (N4-040044, S1-040240) on call hold requirement for CS multimedia from SA1.

Source: CN4
To: SA1
Cc: SA2, CN1, CN3, T2, SA4

Contact Person:
Name: Dan Warren, Nortel Networks
Tel. Number: +44 (0)1628 431098
E-mail Address: dlwarren@nortelnetworks.com

---

1. Overall Description:

CN4 thanks SA1 for their LS on Call Hold Requirements for CS Multimedia (S1-040240).

CN4 reviewed the CR attached to the LS (S1-040123) and advises against the approval of this CR at this time. The CR reflects one small part of the possible work on this subject, but CN4 feels that there would need to be consideration across a number of other working groups to determine whether the development of the mechanisms required to place CS multimedia calls on hold is realistically achievable and what those mechanisms should be. At a minimum, the work would need to include SA2, CN3 and T2 as well as possibly CN1 and SA4.

For that reason, CN4 believes it would be better for SA1 to prepare a Work Item Description for the work on this subject in order to correctly track associated work in other groups.

2. Actions:

To SA1 group.

ACTION: CN4 asks SA1 group to note the recommendations given on the CR SA1 has sent to CN4 (S1-040123) and to prepare a WID to track the introduction of this feature which reflects the wider scope of the changes that may be needed to complete this work. CN4 also recommends that other groups are consulted on possible mechanisms for implementing this feature.

3. Date of Next CN4 Meeting:

CN4 #23	10th – 14th May 2004	Zagreb, CROATIA
CN4 #24	16th – 20th August 2004	Sophia Antipolis, FRANCE

3GPP TSG CN WG4 Meeting #22 **N4-040247**
Atlanta, USA, 16th – 20th February 2004

Title: **Reply LS to S3-040187(N4-040240) on use of authentication re-attempt IE**
Release: **Rel-6**
Work Item: **Security**

Source: **TSG CN4**
To: **TSG SA3**
Cc: **TSG CN1**

Contact Person:
Name: Toshiyuki Tamura
Tel. Number: +81-4-7185-7167
E-mail Address: tamurato@aj.jp.nec.com

Attachments: **None**

---

1. Overall Description:

CN4 thanks SA3 for their LS response (S3-040187) regarding to the use of the 'Re-attempt' parameter in the Authentication Failure Report (AFR) Service.

CN4 understand that the serving network sets the Re-attempt to “true” if the second authentication described in the following cases failed.

- Authentication with (P-)TMSI failed in MS (reject cause 'MAC failure') and new authentication procedure (re-attempt) is taken because an IMSI obtained by the followed IDENTITY REQUEST procedure does not match to the original IMSI that linked with (P-)TMSI. See TS 24.008 section 4.3.2.6 c) [Case 1]

- Authentication failed in MS (reject cause 'GSM authentication unacceptable') and new authentication procedure (re-attempt) is taken after MSC obtains UMTS authentication vectors from HLR. See TS 24.008 section 4.3.2.6 c) [Case 2]

- Authentication failed in MS (reject cause 'synch failure') and new authentication procedure (re-attempt) is taken after MSC obtains new authentication vectors from HLR for re-synchronisation. See TS 24.008 section 4.3.2.6 c) [Case 3]

- SRES mismatches with (P-)TMSI in VLR(SGSN) and new authentication procedure (re-attempt) is taken because an IMSI obtained by the followed IDENTITY REQUEST procedure does not match to the original IMSI that linked with (P-)TMSI. See TS 23.012 section 4.1.2.2 Procedure Authenticate_VLR, and TS 23.018 section 7.1.2.6 Procedure Authenticate_VLR [Case 4]

2. Discussion

In order to document whole information described above into 3GPP specifications, CN4 concluded as follows.

For the case 4, CN4 can provide necessary updates regarding to the 'Re-attempt' parameter handling in both TS 23.012 and TS 23.018.

However for the case 1 through 3, CN4 do not believe that TS 24.008 is the right place to specify the use of 'Re-attempt' parameter since this specification basically specifies the radio interface Layer 3 protocol between terminal and core network.

As the conclusion, CN4 concluded that TS 33.102 is the best fit place to describe over all handling of the ‘Re-attempt' parameter for the Authentication Failure Report (AFR) Service.

3. Actions

To SA3 group.

ACTION: CN4 would like SA3 to update TS 33.102 (REL6) with the information described in the section 1 in this liaison.

4. Date of Next CN4 Meeting

CN4 #23	10th – 14th May 2004	Zagreb
CN4 #24	16th – 20th August 2004	Sophia Antipolis

3GPP TSG CN WG4 Meeting #22 ***N4-040260***
Atlanta, USA, 16th – 20th February 2004

Title: LS on mapping of cause codes for no radio resources available and for load higher in target cell.

Source: CN4
To: RAN3
Cc: GERAN

Contact Person:
Name: phil hodges
Tel. Number: +61404069546
E-mail Address: philip.hodges@ericsson.com

Attachments: N4-040172

---

1. Overall Description:

A discussion paper (enclosed) tdoc N4-040172 was discussed at CN4 which raised concerns over the current mapping of cause codes for the cases:

i) Handover Failure ("Traffic load in target cell higher than in the source cell")
ii) Relocation Failure ("No Radio Resources available in target cell")

These are points 3 and 4 in the discussion paper. The proposal to change these particular mappings due to the current mappings being misleading was not agreed by all parties in CN4 as the proposal maps between relative load/congestion and specific congestion. One proposal was that RAN3 could introduce new cause codes for these cases.

2. Actions:

To RAN3 group.

ACTION: CN4 kindly asks RAN3 to comment on the proposal and if they believe new cause codes should be created for this instead (and if so please inform us at the completion this change) or if there is a more appropriate mapping for these causes.

3. Date of Next CN4 Meeting:

CN4 #23	10th – 14th May 2004	Zagreb, CROATIA
CN4 #24	16th – 20th August 2004	Sophia Antipolis, FRANCE

3GPP TSG CN WG4 Meeting #22 ***N4-040262***
Atlanta, USA, 16th – 20th February 2004

Title: LS on Relationship between 3GPP and Liberty Alliance related to GUP work
Release: Release 6.
Work Item: Generic User Profile

Source: CN4
To: CN Plenary, SA Plenary
Cc: SA2, SA3, SA5, T2

Contact Person:
Name: Dan Warren
Tel. Number: +44 (0)1628 431098
E-mail Address: dlwarren@nortelnetworks.com

---

1. Overall Description:

Within CN4's considerations of proposals for Stage 3 work on GUP, a proposal has been made to reuse the work of the Liberty Alliance. The proposal is to reference Liberty Alliance documentation within TS 29.240 (GUP stage 3), but also to extend the work of Liberty Alliance to meet the Stage 2 GUP requirements. For example, the Liberty Alliance Data Services Template includes the definition of commands that would fit with the SA2 defined commands 'Query' and 'Modify' within TS 23.240. However, no Liberty Alliance commands exist that fit with 'Create' or 'Notify'. The proposal presented to CN4 would extend the Data Services Template work of Liberty Alliance in a way, compatible with existing Liberty Alliance specs, to include these commands, and also would include the possibility of a 'cut and paste' of parts of the Liberty Alliance documentation into an Annex of TS 29.240.

However, Liberty Alliance specifications include in their content, the following text;-

> 'This specification document has been prepared by Sponsors of the Liberty Alliance. Permission is hereby granted to use the document solely for the purpose of implementing the Specification. **No rights are granted to prepare derivative works of this Specification. Entities seeking permission to reproduce portions of this document for other uses must contact the Liberty Alliance to determine whether an appropriate license for such use is available.**
>
> Implementation of certain elements of this Specification may require licenses under third party intellectual property rights, including without limitation, patent rights. The Sponsors of and any other contributors to the Specification are not, and shall not be held responsible in any manner, for identifying or failing to identify any or all such third party intellectual property rights. This Specification is provided "AS IS", and no participant in the Liberty Alliance makes any warranty of any kind, express or implied, including any implied warranties of merchantability, non-infringement of third party intellectual property rights, and fitness for a particular purpose. Implementers of this Specification are advised to review the Liberty Alliance Project's website (<http://www.projectliberty.org/>) for information concerning any Necessary Claims Disclosure Notices that have been received by the Liberty Alliance Management Board.'

If there is no formal relationship between 3GPP and Liberty Alliance which would allow reproduction and/or extension of Liberty Alliance specifications, the proposal of taking the Liberty Alliance drafts into CN4 specs and/or extending them for 3GPP specific uses would not be permitted under the terms of this statement. Therefore, CN4 asks if any such relationship between 3GPP and Liberty Alliance exists, or if not whether one could be established. CN4 notes that a formal Liaison Statement relationship between 3GPP and Liberty Alliance exists.

Another question is the ability of 3GPP members to participate in and access Liberty Alliance information relevant to the use of their protocols in 3GPP. Liberty Alliance is a 'semi-closed' organisation, and several large 3GPP member companies are not members of Liberty Alliance. It may be that the Liberty Alliance could develop their protocols to support 3GPP requirements. In this case what arrangements are required and available to allow 3GPP members to contribute and follow the work?

Taking these points into consideration, CN4 would prefer the working relationship between 3GPP and Liberty Alliance to allow the following working practices;-

- Selective reference of Liberty Alliance specifications in 3GPP documentation.
- Liberty Alliance consideration of 3GPP requirements via company contributions in Liberty Alliance.
- Extension of Liberty Alliance specifications where they fail to meet the requirements of 3GPP.

In the worst case, 3GPP groups may need to reproduce and modify Liberty Alliance specifications, should the work of Liberty Alliance diverge from the requirements of 3GPP.

CN4 also notes that the adoption of Liberty Alliance specifications in CN4 documents would potentially require 3GPP member companies to pay for licenses to implement the GUP protocols that rely on Liberty Alliance specifications. How should the licensing of IPR owned by the Liberty Alliance be handled? Again, CN4 would like to know if any relevant agreement exists.

For your information, CN4 specifically would intend to re-use the work covered in the following Liberty Alliance specifications for GUP work;-

- Liberty ID-WSF Data Services Template Specification v1.0-23
- Liberty ID-WSF SOAP Binding Specification v1.0-08
- Liberty ID-WSF Discovery Service Specification v1.0-09
- Liberty Alliance Project utility schema
- Liberty Metadata Description and Discovery Specification v1.0-10
- Liberty ID-WSF Security Mechanisms Specification v1.0-21

It should be noted that in some cases, these documents refer out to further Liberty Alliance specifications for some of their detail.

Within the stage 2 work on GUP, the requirement for interworking to Liberty Alliance is included in 23.240. It would be useful for a similar reciprocal requirement to be placed on the Liberty Alliance work to interwork to 3GPP GUP.
CN4 is also aware that the work of Liberty Alliance is being considered for re-use by other groups. The groups that CN4 is aware of are copied on this LS.

2. Actions:

To CN plenary, SA plenary groups.

ACTION: CN4 asks CN and SA groups to clarify the nature of the formal relationship (if any) between 3GPP and Liberty Alliance in general, and with regard to the specific concerns expressed above covering:

1) The use of Liberty Alliance specification text in 3GPP

2) Access to Liberty Alliance documents and ability to contribute to Liberty Alliance work relevant to 3GPP

3) IPR implications of using Liberty Alliance standards in 3GPP.

3. Date of Next CN4 Meeting:

CN4 #23	10th – 14th May 2004	Zagreb, CROATIA
CN4 #24	16th – 20th August 2004	Sophia Antipolis, FRANCE

3GPP TSG CN WG4 Meeting #22 ***N4-040263***
Atlanta, USA, 16th – 20th February 2004

Title: LS on
Response to: LS (S5-044046) on LS on diameter application Id from SA5.
Release: Rel-6
Work Item: IMS

Source: CN4
To: SA5
Cc: -

Contact Person:
Name: Maria-Carmen Belinchon
Tel. Number: +34 91 339 3535
E-mail Address: maria.carmen.belinchon@ericsson.com

Attachments:

---

1. Overall Description:

CN4 thanks SA5 for their LS on diameter application Id.

CN4 has discussed this week how to control all Diameter-based applications within 3GPP in order to avoid overlappings and misalignments.

According to the approved proposal N4-040118, a new TS shall be provided from Rel-6 onwards to document:

- the AVP codes and the general definitions of the corresponding AVPs,
- the allocation of the command codes within the range 300-313 with a reference to the originator TS of each command's ABNF,
- the values of the Experimental-Result-Code AVP with their corresponding descriptions,
- the Application-Ids given by IANA to all 3GPP Diameter-based applications

This TS shall be under CN4 responsibility since it is our understanding that it shall contain protocol details and most of the Diameter based applications are under CN4 umbrella.

It is the intention to provide such a TS for the next CN4 meeting.

The described agreement implies that whenever any Diameter-based application detects the need for a new command code or AVP, the concerned WG shall apply to CN4 for the allocation of such command codes or AVPs.

2. Actions:

To SA5 group.

ACTION: CN4 asks SA5 group to take the above into consideration and request the needed command codes and AVPs as described in this LS. CN4 also asks SA5 to inform CN4 of the Application-Id assigned by IANA for the charging IMS application.

3. Date of Next CN4 Meeting:

CN4 #23	10th – 14th May 2004	Zagreb, CROATIA
CN4 #24	16th – 20th August 2004	Sophia Antipolis, FRANCE

3GPP TSG CN WG4 Meeting #22 ***N4-040290***
Atlanta, USA, 16th – 20th February 2004

Title: LS on WLAN UE identity format and resolution

Source: 3GPP TSG CN WG4
To: GSMA IREG
Cc: CN Plenary

Contact Person:
Name: Emmanuel Gay
Tel. Number: +33 (0)145295583
E-mail Address: emmanuel.gay@francetecom.com

Attachments: N4-040289 – CR "WLAN access parameters moved from TS 24.234 to TS 23.003"

CN4 kindly request guidance from GSMA/IREG on the format of WLAN UE identities and their resolution.
1. Overall Description:

At 3GPP CN4 #22, the need of a WLAN UE identity has been identified. This identity is used to identify the user during the authentication process (see below). It will be used between the WLAN Access Network operator and the 3GPP visited or home network that is directly connected to this WLAN Access Network. It was proposed to define this address in 3GPP TS 23.003, which specifies the format of the addresses used in 3GPP networks. Please note that the WLAN Access Network operator is not necessarily a 3GPP operator.

Here is the format proposed in the attached CR:

> The WLAN UE identity shall take the form of an NAI, which can be a "Root NAI" or a "Decorated NAI". This NAI shall have the form of username@realm. This identity is built by the WLAN UE and the 'username' part is derived from the IMSI.
>
> The "Root NAI" is used when the user wants to access his Home Network directly or when the user has no information on which 3GPP Network is directly connected to the WLAN Access Network. In the case of a "Root NAI", the realm, called "Home Network Realm" has been defined to identify the Home network. The format is proposed to be in form of "wlan.mnc<MNC>.mcc<MCC>.3gppnetwork.org" where mnc and mcc values are derived from the IMSI. They both are 3 digit long: a zero is added at the beginning of the mnc or mcc if its length is 2 digits in the IMSI.
>
> The result will be a Root NAI of the form:
> "0<IMSI>@wlan.mnc<MNC>.mcc<MCC>.3gppnetwork.org", for EAP AKA authentication and
> "1<IMSI>@wlan.mnc<MNC>.mcc<MCC>.3gppnetwork.org", for EAP SIM authentication
>
> The "Decorated NAI" is used when the user wants to access his Home Network through a specific Visited Network. The "Decorated NAI" is for further study and will include the VPLMN identity.

The NAI shall be used in **authentication procedure** by the WLAN UE (in all cases), the WLAN AN AAA infrastructure (in all cases), the VPLMN 3GPP AAA Proxy (in the roaming case), and the HPLMN 3GPP AAA Server (in all cases):

Step 1: The WLAN AN shall resolve (e.g. by a local DNS resolution) the NAI realm received from the WLAN UE in order to forward the authentication request to the 3GPP AAA Server in the right HPLMN (or to the 3GPP AAA Proxy in the right VPLMN in the roaming case).
This resolution in the WLAN AN is not detailed in 3GPP specifications because the WLAN Access Network's behaviour is not in the scope of 3GPP, but CN4 understanding is that the DNS resolution (if any) has to be local at WLAN level and cannot make use of the GRX because the WLAN AN does not have access to the DNS Servers on the GRX.

Step 2: In the roaming case, when the 3GPP AAA Proxy in the VPLMN received the authentication request from the WLAN AN, the VPLMN has to resolve the Home realm of the received NAI in order to find the 3GPP AAA Server in the right HPLMN.
In this case, CN4 understanding is that this DNS resolution can be handled through the GRX (as the VPLMN is a 3GPP operator and the domain used is 3gppnetwork.org). Furthermore, for security reasons, the VPLMN may have to check that the WLAN operator is allowed to send such a DNS query.

2. Actions:

To GSMA:

3GPP CN4 kindly asks GSMA IREG to:

1. Assess the WLAN user identity format proposed in the attached CR (Tdoc N4-040289) and feedback to 3GPP TSG CN WG4 on whether this is acceptable .

2. confirm the CN4 understanding on the access of GRX DNS hierarchy for the address resolution (cf steps 1 and 2 above).

3. CN4 has conditionally approved the CR on WLAN user identity, the condition being the endorsement of the CR by GSMA. The final approval will take place at CN plenary depending on GSMA response. Consequently, CN4 ask GSMA to send their LS response directly to CN group with CN4 in copy (next CN plenary is planned for 10-12 June).

3. Date of Next CN4 Meeting:

CN4 #23	10th – 14th May 2004	Zagreb, CROATIA
CN4 #24	16th – 20th August 2004	Sophia Antipolis, FRANCE

3GPP TSG-CN WG4 Meeting #22 **Tdoc N4-040323**
Atlanta, USA, 16th – 20th February 2004

Title: LS on Service Identity in the MO-LR Procedure
Response to: LS (S2-040454) on Service Identity in the MO-LR Procedure from SA2
Release: Rel-6
Work Item: LCS2

Source: CN4
To: SA2
Cc:

Contact Person:
Name: Robert Jaksa
Company: Huawei Technologies
Tel. Number: +1 972-509-5599, ext. 2245
E-mail Address: rjaksa@futurewei.com

Attachments:

---

1. Overall Description:

CN4 thank SA2 for its LS on Service Identity in the MO-LR procedure. As requested, CN4 have investigated the support of this feature in stage 3. Stage 3 currently does not support this feature, but it is achievable in the 3GPP release 6 time frame.

2. Actions:

None.

3. Date of Next TSG-CN4 Meetings:

CN4 Meeting #23	10th – 14th May 2004	Zagreb, Croatia.
CN4 Meeting #24	16th – 20th August 2004	Sophia Antipolis, France.

3GPP TSG CN WG4 Meeting #22 ***N4-040351***
Atlanta, USA, 16th – 20th February 2004

Title: LS on the use of GTP for WLAN-GPRS interworking
Response to: LS (N4-040058/S2-040466) on the use of GTP for WLAN-GPRS interworking from SA2
Release: Rel-6
Work Item: WLAN-GPRS Interworking

Source: CN4
To: SA2
Cc: CN3

Contact Person:
Name: Anna Jernryd
Tel. Number: +46 31 747 2197
E-mail Address: anna.jernryd@ericsson.com

Attachments: -

---

1. Overall Description:

CN4 would like to thank SA2 for the liaison statement on "Use of GTP for WLAN-GPRS interworking". To CN4's current understanding a solution requiring no changes to existing GGSNs and to GTP could be feasible. However there are still a number of issues that require further study. The requirement to leave current GGSNs and GTP unchanged poses a number of interworking issues as described below that need to be considered at the PDG and the WLAN UE if SA2 should decide to standardise this Gn' based solution.

Please find CN4's detailed answers to SA2's questions below:

1. The PDG may not be able to supply an MSISDN in the PDP Context procedures in all cases. Will a GGSN be able to handle PDP Contexts without the MSISDN, e.g. the Create PDP Context Request message? What consequences or side effects may that have for the 3G services that the WLAN UE accesses?

    - ⇨ No, according to TS 29.060, sub clause 7.3.1, the MSISDN shall be included in the primary Create PDP Context Request (but not in the Secondary PDP Context Request). Hence, the MSISDN must be provided by the PDG.
    - ⇨ If the MSISDN is not provided there will be interoperability problems with existing GSNs. The MSISDN is used for authentication purposes, i.e. if not provided a re-authentication will most likely have to be done on the application level. The MSISDN is forwarded in Radius accounting messages over the Gi interface to a Radius server. In the Radius server the MSISDN is used to map an IP address to the associated MSISDN. This is a common operator practice to enable charging for applications in the service networks.

2. Does CN4 see any other issues in the parameter usage such as in the example above?

    - ⇨ MSISDN (see TS 29.060, sub clause 7.7.33): See above
    - ⇨ Routeing Area Information (see TS 29.060, sub clause 7.7.3): The MCC and MNC of the VPLMN should be passed in the RAI IE to enable simple position (i.e. MCC/MNC) based billing and to enable the HPLMN to restrict certain content to certain countries depending on that country's legal requirements. Note that the requirement to be aware of basic position information also holds true of the conventional architecture – PDG will anyway need to get this information from the VPLMN.
    - ⇨ Charging Characteristics (see TS 29.060, sub clause 7.7.23): If a certain charging profile should be applied in GGSN the Charging Characteristics IE may be included. In that case this information needs to be available in the PDG. How the PDG gets this information is FFS.
    - ⇨ End-user-address (see TS 29.060, sub clause 7.7.27): This IE must be provided in the Create PDP Context Request message. CN4 also believe that the assignment of the remote IP

address should be done from pool of IP address belonging to the GGSN/Radius server or at least “address range coordinated” with those to enable correct routing on Gi.

- ⇨ Protocol Configuration Options (see TS 29.060, sub clause 7.7.31): If it is beneficial for the WLAN UE, the PCO IE may optionally be used to pass application specific parameters, e.g. related to VPN, IMS, etc., between the WLAN UE and GGSN.

3. Given that only one PDP Context should be sufficient for a WLAN UE, would it be acceptable to use fixed values on parameters such as NSAPI?

    - ⇨ In GPRS/UMTS, the NSAPI is an integer value between 5 and 15 (values 0-4 reserved), which, together with the IMSI, uniquely identifies a PDP context. It is selected by the UE at the start of the PDP context activation procedure from the list of remaining available values. It is then placed in all L3-SM and GTP messages related to this PDP context.
    - ⇨ In the WLAN-GPRS interworking case, the PDG does not have any knowledge of which NSAPIs have already been selected by the UE for already active PDP contexts (via SGSN). Therefore in the new WLAN capable UEs an NSAPI needs to be reserved for WLAN, i.e. an NSAPI that cannot be used by the UE. This reserved NSAPI is to be used only by the WLAN PDG.
    - ⇨ If only one PDP Context is needed, the NSAPI can be given a reserved, fixed value which will be used by the PDG. To CN4’s understanding, this is sufficient for scenario 1 to 3. However for scenario 4 and 5 we foresee problems with handover between GPRS and WLAN which require further study.

4. If there will be no QoS support in Rel-6 of the WLAN-GPRS interworking standard, would a fixed setting of the QoS parameters (e.g. Background QoS class; maximum bit rate 2 Mbps; etc) in the Create PDP Context Request message be an acceptable and working solution?

    - ⇨ Yes, setting the QoS parameters to a fixed value is possible.

5. Since parallel simultaneously active WLAN and GPRS sessions are allowed e.g. for a dual access UE, will the GGSN be able to handle PDP Contexts with the same IMSI (and possibly the same MSISDN) but belonging to different “SGSN’s” (i.e. one GPRS SGSN and one WLAN PDG)?

    - ⇨ Yes. The GGSN does not see any difference if it has several primary PDP contexts with same IMSI to one SGSN or several SGSNs. However it is possible that some operators may not wish to allow this.

6. For a PDG that “emulates” the GTP protocol, would it be possible to define a “minimum set” of GTP messages that a PDG would be required to support? Which messages would such a minimum set include?

    - ⇨ Yes. Such a minimum set would typically consist of the following messages:
      Create PDP Context Request/Response, Update PDP context Request/Response, Delete PDP Context Request/Response, Error Indication and Version Not supported (to be future proof)

7. The Gn’ reference point may introduce packet flows of higher bit rates into the GGSN when accessing 3GPP PS Services. Does the current GGSN architecture, in CN4’s view, put any unnecessary capacity constraints for allowing these higher bit rate flows?

    - ⇨ This should not be an issue rather an implementation matter.

2. Actions:

None

3. Date of Next CN4 Meeting:

CN4 #23	10th – 14th May 2004	Zagreb, CROATIA
CN4 #24	16th – 20th August 2004	Sophia Antipolis, FRANCE

3GPP TSG CN WG4 Meeting #22 ***N4-040352***
Atlanta, USA, 16th – 20th February 2004

Title: LS on Requirements for transfer of GAA-User-Profile
Release: 6
Work Item: GAA

Source: CN4
To: SA3

Contact Person:
Name: Dan Warren, Nortel Networks
Tel. Number: +44 (0)1628 431098
E-mail Address: dlwarren@nortelnetworks.com

---

1. Overall Description:

Whilst working on the protocol design for Generic Authentication Architecture (GAA) and Generic Bootstrapping Architecture (GBA), concerns have been raised within CN4 with regard to the requirements included in the SA3 stage 2 documentation for GAA (specifically TS 33.220), which states that the GAA-User-Profile be sent from HSS to BSF and from BSF to NAF.

It was noted that the Bootstrapping of a subscriber and subsequent authentication of that subscriber to multiple NAFs is achieved without reference to the content of the GAA-User-Profile and that the BSF does not add anything to the GAA-User-Profile. It was further noted that the GAA-User-Profile is not generic, in that it contains different information dependent upon which NAF it is being sent to, and is also not transporting information related to GAA authentication mechanisms.

CN4 would like SA3 to clarify what the relationship between the GAA-User-Profile and GAA in general is, and why it is included within the scope of GAA and GBA.

2. Actions:

To SA3 group.

ACTION: CN4 asks SA3 group to provide CN4 with the reasoning for the inclusion of GAA-User-Profile in GAA messages and explain the relationship between the content of the GAA-User-Profile and the functions of Bootstrapping, before CN4 concludes the GAA protocol design.

3. Date of Next CN4 Meeting:

CN4 #23	10th – 14th May 2004	Zagreb, CROATIA
CN4 #24	16th – 20th August 2004	Sophia Antipolis, FRANCE

3GPP TSG CN WG4 Meeting #22 ***N4-040353***
Atlanta, USA, 16th – 20th February 2004

Title: LS on identifying MMS Enabled devices and MMS Capabilities of those devices

Response to: LS (S2-040364/N4-040054) on identifying MMS Enabled devices and MMS Capabilities of those devices.

Release: Rel6

Work Item: MMS6

Source: CN4

To: SA2, T2

Cc:

Contact Person:
Name: phil hodges
Tel. Number: +61404069546
E-mail Address: philip.hodges@ericsson.com

Attachments:

---

1. Overall Description:

CN4 thank SA2 for their LS on identifiying the MMS enabled devices and associated MMS capabilities of a user's device.

CN4 is currently standardising the stage 2 and stage 3 aspects to support ADD function – to provide the Device Management System with a subscribers IMEISV in order to identify if it has a new terminal and thus triggering the DMS to re-configure the terminal. It is CN4's belief that this function which is being further specified in OMA may be used in conjunction with IMEI analysis to determine if MMS is enabled and also provide the MMS capabilities.

CN4 acknowledges that the IMEI alone is not enough to detect if a terminal can use MMS, however it can be used to indicate that the UE does *not* support MMS (i.e. if a user has changed to a non-MMS capable device the delievery method can be updated to 'legacy'). Later on when devices support OMA DM the DMS has 2-way communication with the device and will be able to detect if the device is MMS capable and configured for that. The IMEI is used in DMS to detect which provisioning protocol (OTA / WAP CP / OMA DM) to use for configuring the devices. If the terminal supports MMS or not is also depending on if the DMS has sent MMS provisioning information to the device or not.

Thus as this functionality will be provided by the DMS by the OMA DM protocol CN4 believes that no further solution should be provided by the CN in addtion to the current scope of the ADD support.

2. Actions:

ACTION:

none

3. Date of Next CN4 Meeting:

CN4 #23	10th – 14th May 2004	Zagreb, CROATIA
CN4 #24	16th – 20th August 2004	Sophia Antipolis, FRANCE

3GPP TSG CN WG4 Meeting #22 ***N4-040354***
Atlanta, USA, 16th – 20th February 2004

Title:	LS on Routing of Emergency Calls based on Geographical Coordinates
Response to:	LS (S2-040456, N4-040056) on Routing of Emergency Calls based on Geographical Coordinates from SA2.
Work Item:	LCS, LCS2
Source:	CN4
To:	SA, CN
Cc:	SA1, SA2

Contact Person:
Name: Dan Warren
Tel. Number: +44 (0)1628 431098
E-mail Address: dlwarren@nortelnetworks.com

---

1. Overall Description:

At CN4 #22, CN4 handled liaison statement S2-040456 in which SA2 indicated that changes had been made to reflect the R6 changes for Routing of Emergency Calls based on Geographical Co-ordinates back into stage 2 documentation for R99, R4 and R5, in line with the decision taken at SA plenary #22.

In that LS, SA2 requested that CN4 make changes to reflect the R6 changes to 29.002 back into R99, R4 and R5 versions of that specification. CRs to do this were presented at CN4 #22, but could not be approved because of problems with compatibility in the protocol design brought about by the prior inclusion of the R6 changes. This means that implementation of changes to R99, R4 and R5 would result in particularly poor protocol design (involving the addition of a number of dummy parameters), or would require significant change to R6 29.002 (moving the flag to indicate allocation of NA-ESRK by LCZTF to be included in the PCS extension container), or both. Regardless of which of these options had been selected, CN4 did not have sufficient time to prepare these changes in time for the #23 plenary meetings where the stage 2 changes would be approved.

2. Actions:

To CN, SA group.

CN4 asks CN and SA to note the current status of the work in CN4.

3. Date of Next CN4 Meeting:

CN4 #23	10th – 14th May 2004	Zagreb, CROATIA
CN4 #24	16th – 20th August 2004	Sophia Antipolis, FRANCE