



Liaison Statement to 3GPP TSG CN WG4 on DNS top level domains

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High Level Document Summary:

This document contain an LS to 3GPP TSG CN WG4 on the DNS top level domains used in documents under CN4's control; specifically 3GPP TS 23.003 and 3GPP TS 29.060.

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3GPP TSG CN WG4 Meeting #21
Bangkok, Thailand, 27th – 31st October 2003

??-03xxxx

Title: LS on DNS domains used in 3GPP
Response to: LS (NP-030440) on "DNS domains used in 3GPP TS 23.003" from 3GPP TSG CN plenary
Release: Rel-5 onwards

Source: GSMA IREG – PACKET working party
To: 3GPP TSG CN, 3GPP TSG CN WG4
Cc: 3GPP TSG CN WG1

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Attachments: None.

1. Overall Description:

Introduction

The GSMA IREG PACKET working party thanks 3GPP TSG CN for their response LS in NP-030440 asking GSMA IREG to review and provide comments on the attached change request to the Rel-5 version of 3GPP TS 23.003. The GSMA IREG PACKET working party was asked by GSMA IREG to perform this review and a conference call took place on the 16th October 2003.

Discussion

During the conference call companies needed to better understand the exact intended use of the domain name ".3gppnetwork.org". Specifically, whether this domain name is to be used only on the private inter-PLMN GPRS backbone (known as the GRX) or whether it should be used to service requests from the public Internet. Therefore discussions took place evaluating the advantages and disadvantages of both alternatives.

i) Assuming that the ".3gppnetwork.org" domain name will be used only on the private GRX

The only advantage that GSMA IREG PACKET can see with using this domain name is that it is publicly routable and that if any requests get leaked to the public Internet (through mis-configuration of nodes on the GRX), they will do no harm and get routed to their destination e.g. a dedicated DNS server (where they will get dropped) as opposed to burdening the load on the Internet root DNS servers. It is considered that by following the recommended guidelines in IREG design documents the chance of this leakage happening is very small. If it did happen the implication is that a key service would not work due to lack of DNS name resolution and so the fault would quickly be tracked down and fixed by network support staff. GPRS has been in operation for over three years and if there had been any major problems they would have manifested themselves by now while the GRX and GPRS implementations were immature.

There are a number of key disadvantages of using the ".3gppnetwork.org" domain name. With ".gprs" already in use, either the ".3gppnetwork.org" domain needs to be run in parallel or ".gprs" needs to be phased out. If run in parallel there is a risk to customer service due to discrepancies when maintaining two parallel sets of DNS data (both ".gprs" and ".3gppnetwork.org"). If ".gprs" is phased out there is the cost of change and the likelihood of disrupting working customer services due to mistakes when changing DNS data (if it isn't broken don't fix it). Plus there is the need to run two parallel sets of data during the transition period, with the risks already described.

ii) Assuming that the ".3gppnetwork.org" domain name will be used on the public internet

GSMA IREG PACKET identified that currently only the IP Multimedia Subsystem (IMS) is specified to use the ".3gppnetwork.org" domain. This occurs for registration purposes when an ISIM is not available.

Based on this assumption, the only advantage that GSMA IREG PACKET could see would be to allow a SIP client which does not have access to an ISIM (and therefore creates a temporary private ID and temporary public ID) to be able to access the IMS through another network as an alternative to the General Packet Radio Service (GPRS) such as WLAN via the public Internet.

Since a part of the temporary private ID and temporary public ID contains the full IMSI, GSMA IREG PACKET has some reservations about ensuring confidentiality due to the very sensitive data contained in the IMSI.

Conclusion

Based on the discussion above, GSMA IREG PACKET cannot see any strong, valid reason why an *additional* domain name should be supported and paid for on the GRX by the GSMA (for the GRX's root DNS server) and all of its member GSM operators (for their local DNS servers).

Currently, the ".gprs" domain name is used by all GSM-GPRS/UMTS operators, and it is "up and running" today. The ".3gppnetwork.org" domain name is intended only for future, i.e. not yet deployed, IMS services.

2. Actions:

To 3GPP TSG CN and 3GPP TSG CN WG4 groups.

ACTION: GSMA IREG PACKET working party asks 3GPP TSG CN and 3GPP TSG CN WG4 groups to make the necessary changes to use only the ".gprs" domain name for all current and future services that require inter-PLMN only DNS resolution, for reasons stated above.

3. Date of Next GSMA IREG PACKET Meeting:

PACKET #16 6th November 2003