CENTR's Comments
on IANA's DNS Root Zone Glue Policy

30th January 2007

The Council of European National Top Level Domain Registries, CENTR, thanks for the opportunity offered to comment on IANA's "DNS Root Zone Glue Policy".

These comments make use of the nomenclature introduced by the document "DNS Glue RR Survey and Terminology Clarification" [1].

The current "wide" glue policy in the root zone has some drawbacks that could be avoided if introducing a "narrow" one:
- It increases the number of glue records.
- It increases the number of human administrative interactions.
- It makes more difficult to keep synchronized the glue in the root with its authoritative source in the DNS.

A significant number of TLDs has used a "narrow" glue policy themselves for many years. Yet in order to introduce a "narrow" policy in the root, it would be necessary to conduct appropriate experiments in a testbed environment. CENTR looks forward to continuing the discussion on the best glue policy to adopt in the light of the outcome of any experiments to that matter.

If the "wide" policy is to be maintained, it would be sensible to acquire the glue addresses from their authoritative source in the DNS upon a request of change in the root zone.
- If there is a verifiable chain of trust via DNSSEC [2] up to the address(es) of the nameserver of delegation, these records are properly authenticated and intact and can be registered in the root zone as glue without further action, provided all other prerequisites are fulfilled.
- If the chain of trust cannot be verified (this will be the most usual case for the time being), today's mechanism of notification to all administrative and technical contacts of the affected TLDs should be triggered. However, a lack of response by these parties after a certain time threshold should be interpreted as a silent consent to a change. A dissenting answer from any of the affected TLDs within the aforementioned time window would require, like today, a manual review and clarification of the situation.

If a "narrow" policy is to be introduced, then a TLD manager registering glue in the root zone would be the only party allowed to make changes to it

afterwards. By definition, those glue records will always be within her TLD. Attempts to register or to update address records that are not located within the delegated domain the requester is responsible for should lead to a failure of the root zone change request.

In both scenarios ("wide" and "narrow" policy), if the name server names in the root zone change request are not resolvable, that request must fail as per the tests defined in [3]. It is also a prerequisite in both scenarios for the address record(s) included in the root zone change request to match the DNS records in the authoritative delegated zone, otherwise the change request must fail.

[1] http://www.ietf.org/internet-drafts/draft-koch-dns-glue-clarifications-02.txt, work in progress
[2] RFCs 4033-4035
[3] http://www.icann.org/announcements/announcement-18aug06.htm