9 July 2015 - Statement of Work and Scope for History and Technical Analysis of the Naming Scheme used for Individual Root Servers

Work Assignment:

The RSSAC wishes to make a recommendation relating to the naming scheme used for individual root servers. Thus, it requests Joe Abley to lead a work party to produce "History and Technical Analysis of the Naming Scheme used for Individual Root Servers", with adherence to RSSAC caucus procedures. Suzanne Woolf is also appointed as the RSSAC shepherd for this work.

Scope:

The document will:

- Document the technical history of the names assigned to individual root servers since the creation of the Root Server System;
- 2) Consider changes to the current naming scheme, in particular whether the names assigned to individual root servers should be moved into the root zone from the ROOT-SERVERS.NET zone;
- 3) Consider the impact on the priming response of including DNSSEC signatures over root server address records;
- 4) Perform a risk analysis, and
- 5) Make a recommendation to root server operators, root zone management partners, and ICANN on whether changes should be made, and what those changes should be.

Deliverable:

The *final draft* of the document entitled "History and Technical Analysis of the Naming Scheme used for Individual Root Servers".

Date of Delivery:

Final draft submitted to the RSSAC no later than **October 1**st, **2015**. Submission prior to the deadline is welcome.

Guidelines:

The RSSAC requests Joe Abley to report progress on this work to RSSAC as appropriate. In the event that the deadline will not be realized, Joe Abley should inform RSSAC immediately and provide details of the work that cannot be completed by the deadline.

RSSAC support staff will assist the working party deliberation of the work, including setting up mailing list for the work party, arranging and supporting regular teleconference calls, taking notes of meetings, drafting background materials of the work, if needed.

Background:

The Domain Name System (DNS) is supported by Root Servers which serve the root zone. Individual Root Servers were once named according to choices made by individual Root Server Operators, but were subsequently renamed under the ROOT-SERVERS.NET domain for technical reasons relating to the size of the priming response. Today, the ROOT-SERVERS.NET zone is delegated to the Root Servers.

The root zone was signed using DNS Security Extensions (DNSSEC) in July 2010. The ROOT-SERVERS.NET zone was not signed as part of that exercise, and remains unsigned to date.

Reference:

Job Abley, Risks and Benefits of DNSSEC in the Root-Servers.NET Zone, 2011