## IANA - BACKGROUND DOCUMENT

Since the early 1970s, the networking protocols that would later define the Internet required a list of identifiers --numbers and names-- to be published. This list was originally maintained by Dr. John Postel, of the Information Sciences Institute at the University of Southern California (USC), on an informal basis and as an unwritten component of a contract with the U.S. Department of Defense's Advanced Research Project Agency (DARPA).

It was not until 1990, when <u>RFC1060</u> used the term "Internet Assigned Numbers Authority (IANA)", to refer to the tasks involved in making and publishing this list.

During the 1990s, IANA evolved into assigning, managing and supervising three types of network identifiers: protocol parameters, IP addresses, and domain names. As the Internet experienced increased growth, IANA assignments became more critical and hence the need emerged to formalize these functions into contracts.

In 1992, <u>RFC1366</u> began the establishment of the Regional Internet Registry (RIR) system, to coordinate IANA's numeric IP address function according to broad geographical areas. In 1994, IANA publicly recognized <u>APNIC</u> as the IP address registry for Asia-Pacific, by delegating IPv4 blocks of addresses.

In 1996, IANA and other organizations led efforts to propose a memorandum of understanding to transfer the management of the Domain Name System (DNS), from one backed by the U.S. government, to one that would be private and international.

In 1997, President Clinton's administration named the Department of Commerce the lead U.S. governmental agency to <u>support efforts</u> for the management of the DNS to become private.

After a series of public consultations, in June 1998, the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce published a <u>policy statement</u> called "Management of Internet Names and Addresses", commonly referred as the "White Paper". In this policy statement, the NTIA proposed to enter into agreement with a new non-for-profit corporation to administer policy for the DNS.

In September 1998, as a response to NTIA's policy statement, private parties incorporated ICANN in California (U.S.) as a non-for-profit public benefit corporation. Subsequently, in November 1998, NTIA entered into a <a href="mailto:memorandum of understanding">memorandum of understanding</a> (MoU) with ICANN to jointly develop the mechanisms to transfer DNS management to the private sector.

The MoU between NTIA and ICANN ran for approximately 8 years. In 2006, the efforts of the Department of Commerce and ICANN to transition the management of the DNS to the private sector, changed into a Joint Project Agreement with a series of commitments and affirmation of responsibilities. The Joint Project Agreement expired in 2009. It was

replaced with a long-standing Affirmation of Commitments, which recognized that the coordination of the Internet's domain name and addressing system (DNS) is performed globally by a private sector led organization.

In 2000, NTIA accepted a proposal by ICANN to assume the IANA functions formerly performed by the USC under a contract with DARPA and entered into the first <u>IANA</u> <u>functions contract</u> with ICANN. The functions specified in this original contract were:

- 1. Coordination of the assignment of technical protocol parameters.
- 2. Administrative functions associated with root management.
- 3. Allocation of IP address blocks.
- 4. Other services.

Since 2000, ICANN has performed the IANA functions, on behalf of the U.S. government, through a contract with NTIA. This contract has been amended, extended and renewed over the years. The <u>current version</u> of the IANA contract, awarded by NTIA in July 2012, defines the following functions:

- 1. Coordination of the assignment of technical protocol arameters including the management of the address and routing parameter area (ARPA) TLD.
- 2. The administration of certain responsibilities associated with the Internet DNS root zone management, namely:
  - a. Root Zone File Change Request Management
  - b. Root Zone "WHOIS" Change Request and Database Management
  - c. Delegation and Redelegation of a Country Code Top Level-Domain (ccTLD)
  - d. Delegation and Redelegation of a Generic Top Level Domain (gTLD)
  - e. Root Zone Automation
  - f. Root Domain Name System Security Extensions (DNSSEC) Key Management
  - g. Customer Service Complaint Resolution Process (CSCRP)
- 3. The allocation of Internet numbering resources.
- 4. Other services related to the management of the ARPA and INT top-level domains (TLDs).

This contract is due to expire in September 30, 2015 and includes two two-year renewal options up to 2019. However, in March 2014, NTIA announced its intent to transition the IANA functions to the "global multistakeholder community", as the final phase of the privatization of the DNS as outlined by the U.S. government since 1997. In this announcement, NTIA asked ICANN to develop a proposal with broad community support to transition the role played by NTIA in the management of the DNS.