Internet Assigned Numbers Authority

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Author Note

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Since 1998, there had been a process in place about identifying and naming the internet users in the United States. From that time till 2016, the contract of assigning the numbers to internet users was between the United States Department of Commerce Telecommunications and Information Administration (NTIA) and the Internet Corporation for Assigned Names and Numbers (ICANN). After the official expiry of the contract between the NTIA and ICANN, in 2014, the NTIA initiated the final step to privatize the internet assigned number system, by asking ICANN, to call for proposals from the internet stakeholder community. This was the initiation of the transition period, of a decade long agreement between the two departments of the United States government. Prior to terminating this contract, the contract for assigning the domain names was with the Californian based non- Profit Company, which shows the United States government commitment to privatize the internet assigning numbers authority.

With the invention of the individual domain system of networking, the United States government has wanted to decentralize the system of domain naming, and for this reason, after 2016, it wanted that the private sector and not the government sector must take the lead in bringing up the internet domain name system (Q and A on IANA Stewardship Transition | National Telecommunications and Information Administration n.d.). The ICANN initiated a formal process for transferring the rights to new bodies. In doing so, in 2014, it developed a formal proposal which was intended to bring ease in selecting a new authority that will perform the function of domain naming. In designing this process of transmitting the new contract, the ICANN, held that it intends to support and enhance the multistate holder model. The expansion of multistate holder environment creates ease in ensuring competition and develop the interest of new IT giants to this. The ICANN, also initiated this process, since it believed that the stability, security and resilience might not get compromised at any given time. It also assures the openness of the internet (Stewardship of IANA Functions Transitions to Global Internet Community as Contract with U.S. Government Ends n.d.).

Internet Assigned Numbers Authority (IANA) is a complex set of interdependent technical and artificial functions which helps in promoting the efficient functions of the internet domain. The IANA functions are not limited to assigning different individual domains to each user, rather it promotes the operability of the internet domain as well. However, many people classify the functions of IANA in three major areas which are as follow

* Collaborating with the internet protocol systems and parameters
* Processing and manipulating the change requests of internet users
* Allocating the internet numbering resources

But the role of NTIA is different from that of IANA, which is more of the clerical nature (Understanding the IANA Functions 2014). NTIA’s role is limited to assessing whether the IANA protocols are based on established policies or not. NTIA looks after the root zones which includes and are not limited to file maintaining, their implementation and establishing future policies.

The root zone which is taken care of by the NTIA is an authoritative registry which enables mentioning the names and addresses of each domain. NTIA does not look for the operational mechanism and the numbering functions. As these, both roles does not conform to the clerical category of the work and therefore, NTIA avoids falling to this category (Understanding the IANA Functions 2014). Some other functions and role of NTIA include the coordination of assignments and technical protocols by the engineering task force of the Internet. It also takes care of the certain responsibilities which are associated with the internet protocol parameters, these parameters also include managing the root zone and time management. The registration of the allotted numbers and the registries of the internet are also carried by the NTIA. Different other services related to.INT and.ARPA is also overlooked by the NTIA.

Changing the stewardship of the domain naming system might not affect the end-user, however, it signals major changes about the internet regulations. The US government dependency on the private sector in the wake of internet security, however, will increase. The stakeholders involved in this situation recognize the importance of such changes, and therefore, among the business stakeholder, there is major support for the stewardship change. For such reason, the Support Letter in 2016 was issued by these stakeholders. As different stakeholders like Amazon, Google, Hewlett, Dell and Facebook etc. are the co-signatories, therefore, in this way, this could affect the end-user. There are different organizations who have held support for this transition since they believe that such a transition can mark renewed changes in the internet industry. These organizations see this from the lenses of consumer behaviour since they believe that end-user guarantees must always be taken care of.

From an end-user perspective, such changes might not bring enormous changes to internet usage and its applicability. As most of the consumers are not aware of the technicalities involve and even don’t care about their identity over different platforms. In the domain of internet services and their security, change of stewardship might bring some changes. As the government is planning to handover the right of stewardship in the ownership of the private sector, therefore, the securities might get enhanced. The private sector might employ different new sources to enhance the security of internet usage. Under all such changes, the private sector will endeavour to introduce a new mechanism to strengthen network probability while increasing the numbers of consumers. Considering such reasons, following the implementation of the stewardship agreement NTIA have requested the ICANN to complete the implementation status.

# References:

“Q and A on IANA Stewardship Transition | National Telecommunications and Information Administration.” https://www.ntia.doc.gov/other-publication/2016/q-and-iana-stewardship-transition-0 (January 2, 2020).

“Stewardship of IANA Functions Transitions to Global Internet Community as Contract with U.S. Government Ends.” https://www.icann.org/news/announcement-2016-10-01-en (January 2, 2020).

“Understanding the IANA Functions.” 2014. *Internet Society*. https://www.internetsociety.org/blog/2014/10/understanding-the-iana-functions/ (January 2, 2020).