

Internet Service Providers and Connectivity Providers Constituency (ISPCP)

Awareness of the Digital Object Architecture within ICANN

1 February 2017

Dear ICANN Board members

Over the past couple of years members of the ISPCP have been aware of the debates within various organisations over the future use of the Digital Object Architecture (DOA). Some of our members have also participated in a number of those discussions. For instance within the ITU-T sector, where DOA has been actively promoted by certain countries, primarily Russia, China, most of the Arab States and recently a number of African countries. It's viewed by them as the solution to resolving the relationship between various numbering and identification requirements that will emerge with the rapid introduction of the Internet of Things (IoT). In addition the ITU have also actively been promoting DOA as a potential counter measure to deal with the growth of counterfeit equipment. Recently we have seen DOA promoted within numerous ITU Study Groups including SG's 11 (Protocols and Test Specifications), SG17 (Security) and SG20 (IoT and Applications and Smart Cities).

Digital Object Architecture (DOA) was initially introduced in the mid-1990's as a way of being able to identify and direct users to resources online, no matter how those resources may be relocated between servers or within file structures.

However DOA was not embraced by the Internet community in the same way as the DNS. The IETF published three informational RFCs documenting the DOA (RFC 3650, 3651, 3652) in 2003, but did not adopt DOA as an Internet standard. A niche version of the DOA, called Digital Object Identifiers (DOI), found acceptance within the publishing community and was adopted by the ISO as its standard, ISO 26324:2012, Information and documentation – Digital object identifier system.

At the recent ITU World Telecommunications Standardisation Assembly (WTSA) held in Tunisia in November 2016 DOA dominated much of the discussion. It placed those countries that support the initiatives being pursued within the ITU (referred to above) in direct opposition to those who are currently fiercely opposed to that approach from both technical and political perspectives.

A number of organisations have also produced position papers on DOA such as the W3C Technical Architecture Group <https://www.w3.org/blog/TAG/2016/11/01/the-tags-concerns-about-the-digital-object-architecture-and-the-web/>

In preparation for WTSA the Internet Society also produced a paper that provided an excellent overview of DOA whilst also expressing their concerns.

<http://www.internetsociety.org/doc/overview-digital-object-architecture-doa>

There have also been numerous articles appearing in trade publications such as CircleID that provide an insight in to some of the background and developments around DOA.

It has become apparent that the level of debate taking place has now brought DOA to the attention of many different players within the Internet eco-system. Although the subject of much discussion, both from a technical and political standpoint, there is clear evidence that in many cases there is a lack of understanding of what DOA really represents. Some people even speak of DOA as a replacement DNS, which it certainly is not.

Whilst it is clearly not ICANN's role to become involved in, or comment on work taking place within other organisations, ICANN does have a responsibility to ensure that its own multi-stakeholder community are aware of issues that are viewed by some to have the potential to impact its core responsibilities, whether that is a correct reflection of the situation, a misunderstanding, or merely a myth.

The ISPCP bring this issue the attention of the ICANN Board with a request that the Board considers how best to work with its involved stakeholders and the technical community to raise awareness of DOA and ensure that the community has a true, factual understanding of the situation and its relationship to ICANN.

The ISPCP are willing to engage with and support ICANN staff on this matter as required.

Regards

Tony Holmes

Chairman ISPCP Constituency.