

**Comments at the Meeting of the
Advisory Committee on International Communications and Information Policy (ACICIP)
U. S. Department of State
December 16, 2016**

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I would like to clarify, briefly, a misunderstanding that has emerged in recent months concerning a technology created by the Corporation for National Research Initiatives ("CNRI") over two decades ago. Known as the Digital Object Architecture ("DO Arch"), it provides a general approach to managing information in digital form in the Internet and elsewhere. I think it is important to correct this going forward.

On a number of occasions at international meetings, particularly over the last year, the United States delegation has asserted that this is proprietary technology; presumably CNRI's proprietary technology. This is inaccurate. A similar assertion was made in the mid-1980s about the Internet, namely that it was CNRI's proprietary technology. In the latter case, it took the U.S. Congress appropriating funds to the group in question to study the impact of the Internet on the nation to cause this assertion to dissipate.

Many other concerns have been expressed by the U.S. delegation at the ITU concerning the digital object technology. Like the Internet, it was also developed with funding from the U.S. Government, in particular DARPA, but also other agencies as well. Starting with the Library of Congress, over the years CNRI has worked with and is working with various parts of the U.S. Government to assist them in understanding and using the technology, including the U.S. Department of Defense and National Library of Medicine. The approach was also supported in the late 1990s by around 45 commercial entities working as part of the Cross-Industry Working Group; and the report on [*Managing Access to Digital Information: An Approach Based on Digital Objects and Stated Information*](#) is available today.

The overall architecture is in the public domain, and anyone is free to use it. CNRI and others have developed reference software implementations of key components of the DO Arch; and those developed by CNRI are available open source in the Internet. CNRI still provides services for many of the digital library systems around the globe; and other parties now provide services for publishers, movie studios and cable TV industry. The technology is also being deployed to identify large data sets for the research community; and pilot projects in other areas (e.g. the financial industry) are underway. Finally, the Research Data Alliance, which was established by the United States, European Union and Australia in 2013, has adopted many attributes of the DO Arch in its work. Users thus have a growing choice of organizations to deal with for services and/or software.

It was CNRI's original goal to make this work available in the public interest, which was also the original intent of DARPA, and, subsequently, other organizations such as NSF and NIST. Just as the Internet is not a proprietary technology of CNRI, but rather available to all in the public interest, the DO Arch is not a proprietary technology either, but rather a logical follow-on to the existing Internet capabilities for managing information in digital form and is available to all. The DO Arch is compatible with the current Internet and offers one of many competing alternative technologies going forward. In my view, the future of the Internet depends on innovation as well as competition for the best ideas. This overall approach has stood us well over our history.