Question(s): 3/20	Geneva, 4-15 September 2017

CONTRIBUTION

Source:	American Registry for Internet Numbers (ARIN), RIPE Network Coordination Centre (RIPE NCC)	
Title:	ARIN Views on Draft Recommendation Y.IPv6RefModel	
Purpose:	Discussion	
Contact:	Einar Bohlin Policy Analyst Government Affairs and Public Policy ARIN	Tel: +1.703.227.9867 E-mail: einarb@arin.net
Contact:	Marco Hogewoning External Relations Officer Technical Advisor	Tel: +31 6 31 90 25 31 E-mail: marcoh@ripe.net

Keywords:	Internet of Things (IoT); Reference Model; IPv6 Addressing Plan; Regional Internet Registry (RIR); Network Operator Group; Internet Number Resource Policy;
Abstract:	The reference model that is contained in the proposed draft recommendation is unproven, and, this topic would be more appropriately discussed at the RIR/Network Operator Groups where the IPv6 technical experience and expertise resides.

Discussion

The "Proposed Consolidated Draft Recommendation Y.IPv6RefModel "Reference Model of IPv6 Addressing Plan for Internet of Things Deployment"" (TD 325) appears intended to provide an ITU-T method for deploying IPv6 addresses on an IoT network. The Regional Internet Registries (RIRs) and the respective communities they serve are responsible for the development of IPv6 Internet Number Resource Policy.

To ensure the security, stability and resilience of the Internet, and to avoid inconsistencies with established policies and systems that have been deployed over several decades, it is imperative that the development of Internet Number Resource Policy remains with the RIRs and their respective communities.

RIR Internet Number Resource Policy is developed in an open, bottom up, multistakeholder environment (e.g., governments, industry, academia, and individuals). The RIRs are recognized as the relevant and sole forum for Internet Number Resource Policy development, which provides stability and certainty for the interests of all number resource holders and users.

ARIN has identified a number of issues with the Proposed Consolidated Draft Recommendation Y.IPv6RefModel "Reference Model of IPv6 Addressing Plan for Internet of Things Deployment," including:

- Assumptions regarding IPv6 initial allocation policy and possible consequences

- Unproven argument for network addressing
- Lack of use cases that align with the proposed IoT addressing plan
- No material or financial cost/benefit analysis

With no comprehensive documented research to support the proposed deployment model, no stakeholder contributions, and given the issues identified above, the adoption of this Draft Recommendation could preclude or needlessly delay future study and research of more advantageous deployment models.

These issues should be addressed in forums such as RIR and Network Operator Groups, where the expertise, deployment experience, and most importantly, the responsibility for number policy, reside. Proposals of this nature should be introduced for discussion inside the open processes of any one of the RIRs that provide an open platform for discussion and review by any interested technical experts with extensive operational experience with IPv6. There are long-standing mechanisms in place for both regional and global review of IPv6 number policy inside these communities. Further, the topics of IPv6 and IoT have already been discussed by these communities, are being discussed, and will continue to be discussed and acted upon as new operational experience is gained.

The matters discussed in this Draft Recommendation would benefit from input and participation from a broader stakeholder community, which includes technical experts, practitioners, and users and that can only be effectively achieved within the RIR and Network Operator Groups, whose work should not be duplicated.

_____