SG20-C569-R1

STUDY GROUP 20

Original: English

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CONTRIBUTION

Source:	American Registry for Internet Numbers (ARIN)
Title:	Regarding the draft recommendation "Y.IPv6RefModel"
Purpose:	Proposal

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Keywords:	IPv6; RIR; subnetting; IP address; IoT
Abstract:	Some IoT deployments are not using IP addresses for IoT devices, and a cookie cutter approach is not appropriate. Y.IPv6RefModel should be closed.

The draft recommendation Y.IPv6RefModel includes the following:
1. IPv4 is finite and virtually depleted.
2. IPv6 is nearly infinite.
3. IoT will be big.
4. IoT needs IP addresses and therefore must use IPv6.
5. A proposed model in which the network is divided into 4 equal parts and all the IoT devices are placed in the third part.

Points 1, 2 and 3 are facts.

Point 4 is an assumption. Some IoT deployments will make use of IP addresses, and some will not. IoT network operators will determine their requirements. This article describes a large scale IoT deployment where the IoT devices do not use IP addresses:

> https://www.theregister.co.uk/2017/09/25/sigfox_no_ip_ergo_secure_wnd_uk/

Point 5 is a cookie cutter, one-size-fits-all approach for IPv6 deployments. Feedback from the operator community explained why this is a bad idea. However, documents like "IPv6 Subnetting" available from the operator community could be helpful to those considering IPv6 deployments:

> http://nabcop.org/index.php/IPv6_Subnetting

ARIN continues to assert that IP network deployments are within the purview of network operators. This draft recommendation should be closed.

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