Considerations of Using Unique Local Addresses
(draft-ietf-v6ops-ula-usage-considerations-02)

Bing Liu, Sheng Jiang
IETF 99@Prague, July 2017
Reminder

• *draft-ietf-v6ops-ula-usage-recommendations-00* adopted in May 2013

• *draft-ietf-v6ops-ula-usage-considerations-00* reshaped in Feb 2016

• Before ietf98, WG chair asked peoples’ opinion on:
  1) continue to work on the draft with an eye toward publication in 2017
  2) or allow the draft to expire

• And the conclusion was:
  - Continue as an Informational document
    (milestone: Nov 2017)
  - Attempt to find some set of considerations upon which the WG can agree
Summarized comments around ietf98

• Comments form Victor Kuarsingh
  – Suggested to condense the document to concentrate on the three deployment models:
    1) Isolated networks (potential valid ULA-only use case)
    2) Multi-addressed (ULA+GUA, potential valid)
    3) Internet connected (ULA+NPTv6, harmful choice)

• Comments from Tim Chow
  – Condense the document to find the minimum set of messages to include in the document to achieve that consensus to publish
Summarized comments around ietf98

• Comments form **Joel Jaeggli**
  – “the presence of npt6 or indeed any form of ula-only deployment, save perhaps for ephemeral private networks is a bright line not to be crossed”

• Comments from **Lorenzo Colitti**
  – “not willing to see this document published without strong language recommending against ULA+NPTv6”

• Comments form **Brian Carpenter**
  – “ULAs just work in simple scenarios, but running with multiple prefixes should be standard practice for IPv6 so we need to tie down the loose ends”
  – “ULAs are basically harmless domestic animals. (ULA+) NPTv6 is a Frankenstein monster, of course” 😊
Content of the 02 version

1. Introduction ................................................................. 2
2. Requirements Language .................................................. 3
3. General Considerations For Using ULAs ............................. 3
   3.1. Do Not Treat ULA Equal to RFC1918 ......................... 3
   3.2. Using ULAs in a Limited Scope ................................. 4
4. Analysis and Operational Considerations for Scenarios Using
   ULAs ............................................................................ 4
   4.1. ULA-only in Isolated Networks ................................. 4
   4.2. ULA+PA in Connected Networks .............................. 5
   4.3. ULA-Only in Connected Networks ........................... 7
   4.4. Some Specific Use Cases ....................................... 8
      4.4.1. Special Routing ........................................... 8
      4.4.2. Used as Identifier ...................................... 8
   4.5. IPv4 Co-existence Considerations ........................... 9
5. Security Considerations ................................................. 9

Largely condensed the content
On “ULA-Only in Connected Networks” (Section 4.3)

- “This document does not consider ULA+NPTv6/Proxy as a good choice for normal cases. Rather, this document considers ULA+PA (Provider Aggregated) as a better approach to connect to the global network when ULAs are expected to be retained.”
Next Step

• Request more reviews
  – Thanks *Brian Carpenter* for the throughout review

• Move forward to WGLC
  – Make a 03 version based on potential future comments
  – Request WGLC
Comments?

Thank you!

IETF99@Prague