“An Internet Transition Plan”
RFC 5211

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October 2008
Problem

🌟 Worldwide highly decentralized transition
🌟 Many different states of individual site’s IPv6 readiness:
  ▶ Planning
  ▶ Experimentation
  ▶ Trial / Preproduction
  ▶ Production
🌟 No standard method to represent readiness
🌟 High potential for mismatched expectations
Problem (cont)

- No entity has the ability to establish global transition schedule
- Informally, transition timeline requirements can be extrapolated from IPv4 utilization trends and forecast
- Possible need to achieve consensus on schedule of IPv6 Internet-wide expectations
An Internet Transition Plan

- Three Phase Approach
  - Preparation
  - Transition
  - Post-Transition

- Establish expectations for each phase
- Completely voluntary compliance
Preparation Phase

Service Providers SHOULD offer pilot IPv6-based Internet Service to their Internet customers.

Organizations SHOULD arrange for IPv6-based Internet connectivity for any Internet-facing servers (e.g. web, email, and domain name servers).

Organizations MAY provide IPv6-based Internet connectivity to internal user communities.
Service Providers MUST offer IPv6-based Internet Service to their Internet customers.

Organizations MUST arrange for IPv6-based Internet connectivity for any Internet-facing servers (e.g. web, email, and domain name servers). Internet-facing IPv6 servers SHOULD be treated as production by the organization, and SHOULD be treated as production by other Internet organizations.

Organizations SHOULD provide IPv6-based Internet connectivity to their internal user communities, and provide IPv6 internal supporting servers (e.g. DNS, DHCP).
Post-Transition Phase

Service Providers MUST offer IPv6-based Internet Service to their Internet customers. IPv6-based Internet Service SHOULD be via native IPv6 network service.

Organizations MUST arrange for IPv6-based Internet connectivity for any Internet-facing servers (e.g. web, email, and domain name servers). Internet-facing IPv6 servers MUST be treated as production by the organization, and SHOULD be treated as production by other Internet organizations.

Organizations SHOULD provide IPv6-based Internet connectivity to internal user communities, and provide IPv6 internal supporting servers (e.g. DNS, DHCP)
Additional Details

★ Each phase includes a proposed time period
  ▶ Preparation Till Jan 2010
  ▶ Transition Jan 2010 to Dec 2011
  ▶ Post-Transition Dec 2011 onward

★ Each phase includes statements regarding use of transition mechanisms versus “native IPv6”
Questions?

► Thank you!