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Reply to Attn of: Office of the Chief Information Officer

FROM: Agency Chief Information Officer
TO: Distribution
SUBJECT: Complete Transition to Internet Protocol version 6 (IPv6)

In accordance with the [Office of Management and Budget \(OMB\) Memorandum 21-07 \(M-21-07\)](#), all new NASA information systems must be Internet Protocol version 6 (IPv6) enabled (turned on for production use) at the time of deployment. Migrating to an IPv6-only environment will allow NASA to align itself with the Federal government's strategic intent to deliver its information services, operate its networks, and access the services of others using only IPv6 capabilities.

Agencies must comply with this requirement by the start of Fiscal Year (FY) 2023. NASA intends to phase out the use of IPv4 for all current NASA systems as soon as practical and to meet the milestones laid out by M-21-07. The phase out includes ensuring at least 80% of IP-enabled assets on NASA networks are operating in IPv6-only environments by the end of FY 2025.

This memorandum designates the IPv6 Transition Manager, Barbara Schleckser, as the lead of NASA's IPv6 Integrated Project Team (IPT) to coordinate these transition actions. The IPv6 IPT is responsible for developing and overseeing the overall IPv6 transition plan. The transition plan will include strategies, acquisitions, processes, status, and milestones for the transition. In support of the mandate, system owners shall ensure system documentation details plans for transitioning to IPv6 and that these plans align with the Agency's overall IPv6 Implementation Plan. This requirement applies to all new and existing systems.

The IPv6 Transition IPT is charged with meeting the following requirements:

1. Designate an agency wide IPv6 IPT (including acquisition, policy, and technical members), or other governance structure, within 45 days of issuance of this memorandum (this requirement was completed on 1/4/2021)¹;

¹ The IPT will govern and enforce IPv6 efforts. Contact Barbara Schleckser regarding team membership or other inquiries.

2. Issue and make available on the agency's publicly accessible website, an agency-wide IPv6 policy NLT 5/18/2021;
3. Identify opportunities for IPv6 pilots. Complete at least one pilot of an IPv6-only operational system by the end of FY 2021 and report the results of the pilot to OMB upon request by OMB;
4. Develop an IPv6 implementation plan by the end of FY 2021 and update the Information Resources Management (IRM) Strategic Plan;
5. Work with external partners to identify all systems that interface with networked Federal information systems and develop plans to migrate all such network interfaces to the use of IPv6; and
6. Complete the upgrade of public and external facing servers and services (e.g., web, email, DNS, and ISP services) and internal client applications that communicate with public Internet services and supporting enterprise networks to operationally use native IPv6.

Jeffrey M. Seaton
Agency Chief Information Officer

Reference:

- a. OMB M-21-07, Completing the Transition to Internet Protocol Version 6 (IPv6)
- b. NAII – Completing the Transition to Internet Protocol Version 6 (IPv6)