

UNITED STATES OFFICE OF  
**GOVERNMENT ETHICS**



Preventing Conflicts of Interest  
in the Executive Branch

**Internet Protocol Version 6 (IPv6)  
Implementation Plan**

**Information Technology Division**

September 2021

## 1.0 Review Dates

The Chief Information Officer or his designee must approve any exception to this plan or related procedures.

### Document Version Control

Version Number	Created By	Edited By		Date	Description of changes
1.0	<i>Ty Cooper</i>	<i>Ty Cooper</i>		<i>2021-09-24</i>	Initial version

## 2.0 APPROVAL

This policy is effective on the date signed below.

*Ty Cooper*

*2021-09-24*

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Ty Cooper, CISSP, CSCP  
Chief Information & Cybersecurity Officer

\_\_\_\_\_  
Date

## 3.0 OVERVIEW

Established by the Ethics in Government Act (October 26, 1978), the United States Office of Government Ethics (OGE) leads and oversees the executive branch ethics program which is at work every day in more than 130 agencies. The executive branch ethics program works to prevent financial conflicts of interest to help ensure government decisions are made free from personal financial bias.

This document, which applies to Internet Protocol Version 6 (IPv6), sets forth OGE's plan for IPv6 deployment and implementation. This plan complies with the requirements for completing the operational deployment of IPv6 as well as capturing considerations for transitioning from the current dual-stack IPv4/IPv6 environment in accordance with the Office of Management and Budget (OMB) Memorandum M-21-07 requirements. It defines the governance and support for the ongoing use and future development of IPv6. The Information Technology Division (ITD) is responsible for this plan.

The main advantages of IPv6 are:

- Expanded addressing capability,
- Security extensions for authentication and privacy,
- Flow labeling capability,
- Improved efficiency in routing and packet handling,
- Support for auto-configuration and plug-and-play capabilities,
- Support for embedded IP security,
- Elimination of the need for Network Address Translation (NAT),
- Support for widely deployed routing protocols,
- Network efficiency and bandwidth conservation, and
- Transition and interoperability mechanisms that allow users to deploy IPv6 incrementally.

## 4.0 REFERENCES AND AUTHORITIES

This Policy is written in accordance with OMB Memo M-21-07, *Completing the Transition to Internet Protocol Version 6 (IPv6)*, signed November 19, 2020.

## 5.0 PLAN

No later than the end of Fiscal Year (FY) 2023, all new networked OGE information systems will IPv6-enabled at the time of deployment (the use of IPv6 is "turned on" for production use). This commitment reflects OGE's strategic intent to phase out the use of IPv4 for all systems. This plan describes the agency's transition process and includes appropriate milestones and actions.

### IPv6 Project Team

OGE has established a primary IPv6 governance project team that assesses, prioritizes, and approves requirements that will meet the IPv6 standards. The team, designated as an Agency-wide integrated project team, consists of acquisition, policy, technical, and cybersecurity stakeholders. The group facilitates the IPv6 pilot system and all related activities. Continuous monitoring will be leveraged to support the IPv6 pilot deployment and to identify requirements needed to develop an implementation

plan. All transition activities from dual-stack IPv4/IPv6 to full IPv6 must meet OMB-defined timelines and established Agency IT governance, including enterprise risk management. The group determines further recommendations on IPv6 hardware and software requirements as appropriate.

### IPv6 Infrastructure Implementation

This plan includes the update of the Agency's information resource management (IRM) strategic plan with transition details that provide direction regarding processes for new procurements.

OGE's IT budget accommodates a four year technology refresh cycle. The next IT refresh is scheduled for FY 2022. To ensure compliance with FAR regulations, OGE utilizes the services of a shared service provider (Treasury's Bureau of Fiscal Services) to handle external acquisitions. OGE will collaborate with the Bureau of Fiscal Services (BFS) to ensure that hardware, software, and services procured in the FY 2022 IT Refresh Project meet or exceed the milestones identified in OMB Memo M-21-07.

OGE will include appropriate IPv6 requirements language in Procurement Request (PRs) and Advanced Procurement Plan (APP).

#### **OGE Action Items**

- a. OGE will work with Contracting Officer (CO) at BFS to ensure appropriate IPv6 requirements language is included in Statement of Work (SOWs), Request for Proposal (RFPs) and awarded contracts.
- b. OGE will notify the CO of all contract specifications that do not meet IPv6 compliance requirements.

#### **Milestones:**

OGE plans to meet or exceed the following milestones identified in OMB Memo M-21-07:

- a. At least 20% of IP-enabled assets on the OGE network are operating in IPv6-only environments by the end of FY 2023;
- b. At least 50% of IP-enabled assets on the OGE network are operating in IPv6-only environments by the end of FY 2024;
- c. At least 80% of IP-enabled assets on the OGE network are operating in IPv6-only environments by the end of FY 2025; and
- d. Identify and justify Federal information systems that cannot be converted to use IPv6 and provide a schedule for replacing or retiring these systems (if any).

### Ensuring Adequate Security

OGE shall establish plans to fully support IPv6 services in IT security plans, enterprise architecture, and acquisitions. All systems that support network operations and/or enterprise security services shall be IPv6-capable and operate in IPv6-only environments. OGE shall monitor and manage compliance with all applicable Federal guidance and leverage industry best practices, as appropriate, to secure the deployment and operation of IPv6 networks. All security and privacy policy assessments, authorizations, and monitoring processes shall address the production use of IPv6 in Federal information systems.

## Contact

For further information about this policy, please send inquiries to the U.S. Office of Government Ethics, Information Technology Division, Chief Information Officer, at [ContactOGE@oge.gov](mailto:ContactOGE@oge.gov).