



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, DC 20240

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Department of the Interior Acquisition Policy Release (DIAPR) 2012- 09

Subject: Internet Protocol Version 6 (IPv6)

Reference: Federal Acquisition Regulation (FAR) Part 11, *Describing Agency Needs*

- 1. Purpose:** This DIAPR addresses the necessary contracting actions to procure Internet Protocol version 6 (IPv6) compliant networkable equipment (workstations, routers, firewalls, and other equipment).
- 2. Effective Date:** Upon signature.
- 3. Expiration Date:** No expiration unless superseded or canceled.
- 4. Background and Explanation:**

Computers and other devices use the Internet Protocol (IP) to communicate over a network. Each network device requires a unique IP address. In early 2011, the Internet Cooperation for Assigned Names and Numbers (ICANN) assigned the last available pool of IP version 4 (IPv4) addresses. IPv6 replaces IPv4 and has almost an unlimited number of addresses.

Some vendors have not implemented IPv6 with the same functionality as IPv4. To address this issue, the National Institute of Standards and Technology (NIST) developed the U.S. Government v6 Profile (USGv6) and defined it in the NIST Special Publication 500-267 (NIST SP 500-267). The publication can be found online at <http://w3.antd.nist.gov/usgv6/index.html>.

NIST 500-267 groups information technology equipment into three categories: hosts, routers, and network protection devices. Hosts include devices such as personal computers, printers, scanners, or other end-point devices. Routers are devices such as switches, network routers, Wide Area Network accelerators, load balancers, and other infrastructure-related equipment that transport IP traffic. Pure layer 2 switches are excluded as routers, unless they are or will be managed by the Enterprise Services Network. Network protection devices help enforce IP security policy and include firewalls, intrusion detection/prevention systems, proxies, and sniffers.

NIST 500-267 recommends the use of an IPv6 profile document to specify IPv6 requirements to a vendor. The vendor should supply a Supplier's Declaration of Conformance (SDOC) to prove their product meets the IPv6 requirements.

FAR Part 11.002(g) states the requirements documents for IT equipment using IP must include reference to the appropriate technical capabilities defined in the USGv6 Profile (NIST Special Publication 500-267) and the corresponding declarations of conformance defined in the USGv6 Test Program. Any exceptions to the use of IPv6 require the Office of the Chief Information Officer to provide written approval. Sufficient details supporting the waiver must be included in the request, e.g., prohibitive cost or scheduling conflicts.

5. Action Required: Contracting Officers will:

(a) Verify that the Statement of Work/Performance Work Statements for IT purchases contain an IPv6 statement of requirements and/or IPv6 profile documentation, and if not included, will coordinate with the customer and the Bureau Assistant Director for Information Resources (ADIR) to include it.

(b) Insert the clause, **Internet Protocol (June 2012)**, Attachment A, in section H of solicitations and awards when acquiring information technology products or services unless a waiver is provided.

(c) Ensure that the IPv6 requirements are included as a part in all technical evaluations, whether small or large purchases, e.g., Vendor SDOC or some other IPv6 compliance statement

Charge card holders that procure IT hardware should also verify IPv6 capability by asking the vendor if equipment provided is IPv6 compliant. If not, the item cannot be purchased.

6. Additional Information:

For technical questions, please contact Stu Mitchell of the Office of the Chief Information Officer, at 540-370-1867 or stu_mitchell@ios.doi.gov. For acquisition matters, please contact Brigitte Meffert of the Office of Acquisition and Property Management at 202-254-5514 or brigitte_meffert@ios.doi.gov.



Debra E. Sonderman, Director
Office of Acquisition and Property Management
and Senior Procurement Executive

Attachment

PRESCRIPTION: Insert the following clause in section H of solicitations/awards when acquiring information technology (IT) products or services [FAR 11.002(g), 12.202(e), and 39.101(e)] above the micro-purchase threshold.

H.*[insert ¶ no.]*. **INTERNET PROTOCOL version 6 (June 2012)**

(a) Any system hardware, software, firmware and/or networked component (voice, video or data) developed, procured, or acquired in support and/or performance of this contract shall be capable of transmitting, receiving, processing, forwarding and storing digital information across system boundaries utilizing system packets that are formatted in accordance with commercial standards of Internet Protocol (IP) version 6 (IPv6) as set forth in the USGv6 Profile (NIST Special Publication 500-267) and corresponding declarations of conformance defined in the USGv6 Test Program. In addition, this system shall maintain interoperability with IPv4 systems and provide at least the same level of performance and reliability capabilities of IPv4 products.

(b) Specifically, any new IP product or system developed, acquired, or produced must:

(1) Interoperate with both IPv6 and IPv4 systems and products, and

(2) Have available contractor/vendor IPv6 technical support for development and implementation and fielded product management.

(c) As IPv6 evolves, the Contractor commits to upgrading or providing an appropriate migration path for each item developed, delivered or utilized at no additional cost to the Government. The Contractor shall retrofit all non-IPv6 capable equipment, as defined above, that is fielded under this contract with IPv6 capable equipment, at no additional cost to the Government.

(d) The contractor shall provide technical support for both IPv4 and IPv6.

(e) Any system or software must be able to operate on networks supporting IPv4, IPv6 or one that supports both.

(f) Any product whose non-compliance is discovered and made known to the Contractor within one year after acceptance shall be upgraded, modified or replaced to bring it into compliance at no additional cost to the Government.

(End of clause)