National Aeronautics and
Space Administration
Washington, DC 20546

Procurement Information Circular

PIC 14-03

April 16, 2014

CLASS DEVIATION TO NFS 1839 AND 1852, RESTRICTIONS ON ACQUIRING MODERATE- OR HIGH-IMPACT INFORMATION TECHNOLOGY SYSTEMS

PURPOSE: To provide procurement guidance on and a class deviation to NFS 1839, Acquisition of Information Technology, for the purpose of implementing the restrictions on acquiring moderate- or high-impact information technology (IT) systems using FY 2014 appropriations.

BACKGROUND: Section 515 of the Consolidated and Further Continuing Appropriations Act, 2014, Public Law 113-76, enacted January 7, 2014, provides:

(a) None of the funds appropriated or otherwise made available under this Act may be used by the Departments of Commerce and Justice, the National Aeronautics and Space Administration, or the National Science Foundation to acquire a high-impact or moderate-impact information system, as defined for security categorization in the National Institute of Standards and Technology's (NIST) Federal Information Processing Standard Publication 199, ''Standards for Security Categorization of Federal Information and Information Systems'' unless the agency has—

> (1) Reviewed the supply chain risk for the information systems against criteria developed by NIST to inform acquisition decisions for high-impact and moderate-impact information systems within the Federal Government;
> (2) Reviewed the supply chain risk from the presumptive awardee against available and relevant threat information provided by the Federal Bureau of Investigation and other appropriate agencies; and
> (3) In consultation with the Federal Bureau of Investigation or other appropriate Federal entity, conducted an assessment of any risk of cyber-espionage or sabotage associated with the acquisition of such system, including any risk associated with such system being produced, manufactured, or assembled by one or more entities identified by the United States Government as posing a cyber threat, including but not limited to, those that may be owned, directed, or subsidized by the People's Republic of China.

(b) None of the funds appropriated or otherwise made available under this Act may be used to acquire a high-impact or moderate impact information system reviewed and assessed under subsection (a) unless the head of the assessing entity described in subsection (a) has—

> (1) Developed, in consultation with NIST and supply chain risk management experts, a mitigation strategy for any identified risks;

(2) Determined that the acquisition of such system is in the national interest of the United States; and
(3) Reported that determination to the Committees on Appropriations of the House of Representatives and the Senate.

Compliance with section 515 is a responsibility of the NASA Chief Information Officer (CIO). The CIO has verified the procedures developed for compliance with section 516 in Public Law 113- 6 also satisfy the requirements of section 515 in Public Law 113-76. A class deviation is required because the procedures developed by the CIO rely on information derived from the contract clause and provision.

This class deviation applies to FY 2014 funding to acquire high-impact or moderate-impact IT systems. Note: FY 2013 funding contained similar, but not identical, funding restrictions that were implemented by the class deviation in PIC 13-04. Contracting officers must continue to comply with PIC 13-04 when using FY 2013 funds to acquire an IT system.

GUIDANCE: This class deviation sets forth procedures and provides a solicitation provision and a contract clause necessary to gather the information the CIO requires in order to review the supply chain risk for acquisitions of moderate- or high-impact IT systems. The guidance in this PIC supplements current IT security requirements of FAR 39.101(d), NFS 1804.470-2, IT Security Requirements; NPD 2810.1, NASA Information Security Policy; and NPR 2810.1, Security of Information Technology. Contracting Officers (CO) and purchase cardholders shall not obligate FY 2014 funds to acquire a high-impact or moderate-impact information system without following the procedures described in this PIC.

The following definitions apply:

"Acquire" means procure with appropriated funds by and for the use of NASA through purchase or lease.

"Information Technology (IT) System" means the combination of hardware components, software, and other equipment to make a system whose core purpose is to accomplish a data processing need such as the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data. IT systems include ground systems in support of flight hardware. IT systems do not include—

(i) Systems acquired by a contractor incidental to a contract and not directly charged to the contract, such as a contractor's payroll and personnel management system;
(ii) Systems that do not process NASA information, i.e., any data which is collected, generated, maintained, or controlled on behalf of the Agency;
(iii) Imbedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, are not information technology systems;
(iv) Services in support of IT systems, such as help desk services; or
(v) Flight hardware, which includes aircraft, spacecraft, artificial satellites, launch vehicles, balloon systems, sounding rockets, on-board instrument and technology demonstration systems, and equipment operated on the International Space Station; as well as prototypes, and engineering or brass boards created and used to

test, troubleshoot, and refine air- and spacecraft hardware, software and procedures.

"High impact information system" means a system for which the loss of confidentiality, integrity, or availability could be expected to have a severe or catastrophic adverse effect on organizational operations, organizational assets, or individuals. A "severe or catastrophic adverse effect" means the loss of confidentiality, integrity, or availability might: (i) cause a severe degradation in or loss of mission capability to an extent and duration that the organization is not able to perform one or more of its primary functions; (ii) result in major damage to organizational assets; (iii) result in major financial loss; or (iv) result in severe or catastrophic harm to individuals involving loss of life or serious life threatening injuries."

"Moderate impact information system" means a system for which the loss of confidentiality, integrity, or availability could be expected to have a serious adverse effect on organizational operations, organizational assets, or individuals. A "serious adverse effect" means the loss of confidentiality, integrity, or availability might: (i) cause a significant degradation in mission capability to an extent and duration that the organization is able to perform its primary functions, but the effectiveness of the functions is significantly reduced; (ii) result in significant damage to organizational assets; (iii) result in significant financial loss; or (iv) result in significant harm to individuals that does not involve loss of life or serious life threatening injuries.

ACTIONS REQUIRED BY CONTRACTING OFFICERS AND PURCHASE CARDHOLDERS:

1. Review of Purchase Requests

(a) All purchase requests for IT systems funded with FY 2014 appropriations shall be reviewed by the Center CIO or the Headquarters Operations CIO to determine if the purchase has a System Security Plan (SSP) that includes a FIPS-199 for a moderate- or high-impact information system, as defined by the National Institute of Standard and Technology (NIST).

(b) If the acquisition is for a moderate- or high-impact IT system, purchase cardholders and contracting officers shall not acquire the IT system unless it is:

(1) Listed on the NASA OCIO's Assessed and Cleared IT List; or

(2) NASA Form (NF) 1823, Request for Investigation Form, has been approved by the NASA Information Technology Security Division within the Office of the Chief Information Officer.

The Assessed and Cleared IT List is available at Section-516-Documents. The NF 1823 is available in the NASA Forms Library at http://itcd.hq.nasa.gov/eforms.html.

(c) If the moderate- or high-impact IT system funded with FY 2014 appropriations does not meet the requirements listed in (b) (1) or (2), the procedures in paragraph two below shall be followed.

2. Request for Proposals, Quotations, or Invitation for Bids

When issuing a request for proposals, quotations, or invitation for bids, to acquire moderate- or high-impact IT systems using FY 2014 funds, the contracting officer shall insert the provision at 1852.239-71, Review of the Offeror's Information Technology Systems Supply Chain. The provision requires the apparently successful offeror to provide information required by the NASA CIO to make a supply chain risk assessment. The CO may modify the provision to request any additional information the NASA CIO deems necessary in order to complete the risk assessment or to require offerors other than just the successful offeror to provide the information. Before making award under a solicitation to acquire moderate- or high-impact IT systems using FY 2014 funds, the CO shall amend the solicitation to include the provision.

3. Review of Offers

For moderate- or high-impact IT systems to be funded with FY 2014 appropriations, the CO shall provide the successful apparent offeror's IT systems information to the NASA CIO for the review. The NASA CIO has established a shared mailbox, hq-section-516@mail.nasa.gov, for coordination and communications of this information. The CO shall make no award unless the NASA CIO has reviewed and approved the IT systems offered and determined that the purchase complies with the requirements of Section 515.

4. Modification of Contracts

If NASA will be acquiring moderate- or high-impact IT systems under ~~an existing~~ contract using FY 2014 funds, then the clause at 1852.239-72, Information Technology System Supply Chain Review, shall be incorporated into the contract. The CO may modify the clause to request any additional information the NASA CIO deems necessary in order to complete the risk assessment. The CO shall forward the Contractor's information to the NASA CIO. A shared mailbox, hq-section-516@mail.nasa.gov, is established for coordination and communications of this information. The NASA CIO will assess the supply chain risk and determine that the acquisition complies with the requirements of Section 515. Only moderate- or high-impact IT systems so approved shall be provided under the contract.

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1852.239-71 Review of the Offeror's Information Technology Systems Supply Chain

As prescribed in paragraph two of this PIC, the contracting officer shall insert following provision:

REVIEW OF THE OFFEROR'S INFORMATION TECHNOLOGY SYSTEMS SUPPLY CHAIN (APR 2014) (DEVIATION)

(a) Definitions –

"Acquire" means procure with appropriated funds by and for the use of NASA through purchase or lease.

"Information Technology (IT) System" means the combination of hardware components, software, and other equipment to make a system whose core purpose is to accomplish a data processing need such as the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data. IT systems include ground systems in support of flight hardware. IT systems do not include—

(i) Systems acquired by a contractor incidental to a contract and not directly charged to the contract, such as a contractor's payroll and personnel management system;

(ii) Systems that do not process NASA information, i.e., any data which is collected, generated, maintained, or controlled on behalf of the Agency.

(iii) Imbedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation;

(iv) Services in support of IT systems, such as help desk services; or

(v) Flight hardware, which includes aircraft, spacecraft, artificial satellites, launch vehicles, balloon systems, sounding rockets, on-board instrument and technology demonstration systems, and equipment operated on the International Space Station; as well as prototypes, and engineering or brass boards created and used to test, troubleshoot, and refine air- and spacecraft hardware, software and procedures.

(b) Section 515 of the Consolidated and Further Continuing Appropriation Act, 2014 (Pub. L.113-76), requires NASA's Chief Information Officer (CIO) to review the supply chain risk of cyber-espionage or sabotage before the Agency acquires any high-impact or moderate-impact IT system. The NASA CIO will use the security categorization in the National Institute of Standards and Technology's (NIST) Federal Information Processing Standard Publication 199, ''Standards for Security Categorization of Federal Information and Information Systems'' to determine whether an IT system is high-impact or moderate-impact.

(c) The apparent successful offeror shall provide the following information for all IT systems offered:

(1) A brief description of the item(s);

(2) Vendor/manufacturer's company name and address; and

(3) If known, manufacturer's web site, and Commercial and Government Entity (CAGE) code.

(d) The Contracting Officer will provide the information referenced in paragraph (c) to the NASA CIO. Section 515 only allows NASA to acquire IT systems approved by the NASA CIO. NASA must reject any IT system the CIO deems to be a high impact or moderate impact unless it is determined the acquisition is in the national interest of the United States. The Government reserves the right to make this decision, without any further explanation to the Offeror. The Contracting Officer will advise the Offeror if any IT systems are not approved and may provide the Offeror an opportunity to revise its proposal.

(End of provision)

1852.239-72, Information Technology System Supply Chain Risk Assessment

As prescribed in paragraph four of this PIC, the contracting officer shall insert the following clause:

INFORMATION TECHNOLOGY SYSTEM SUPPLY CHAIN RISK ASSESSMENT (APR 2014) (DEVIATION)

(a) Definitions –

"Acquire" means procure with appropriated funds by and for the use of NASA through purchase or lease.

"Information Technology (IT) System" means the combination of hardware components, software, and other equipment to make a system whose core purpose is to accomplish a data processing need such as the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data. IT systems include ground systems in support of flight hardware. IT systems do not include—

(i) Systems acquired by a contractor incidental to a contract and not directly charged to the contract, such as a contractor's payroll and personnel management system;

(ii) Systems that do not process NASA information, i.e., any data which is collected, generated, maintained, or controlled on behalf of the Agency.

(iii) Imbedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation;

(iv) Services in support of IT systems, such as help desk services; or

(v) Flight hardware, which includes aircraft, spacecraft, artificial satellites, launch vehicles, balloon systems, sounding rockets, on-board instrument and technology demonstration systems, and equipment operated on the International Space Station; as well as prototypes, and engineering or brass boards created and used to test, troubleshoot, and refine air- and spacecraft hardware, software and procedures.

(b) Section 515 of the Consolidated and Further Continuing Appropriation Act, 2014 (Pub. L.113-76), requires NASA's Chief Information Officer (CIO) to review the contractor's supply chain for the risk of cyber-espionage or sabotage before acquiring any high-impact or moderate-impact IT systems. The NASA CIO will use the security categorization in the National Institute of Standards and Technology's (NIST) Federal Information Processing Standard Publication 199, ''Standards for Security Categorization of Federal Information and Information Systems'' to determine whether an IT system is high-impact or moderate-impact.

(c) The Contractor shall provide the following information for any IT system proposed to be provided:

(1) A brief description of the item(s);

(2) Vendor/manufacturer's company name and address; and

(3) If known, manufacturer's web site, and Commercial and Government Entity (CAGE) code.

(d) The Contracting Officer will provide the information referenced in paragraph (b) to the NASA CIO which will assess the risk of cyber-espionage or sabotage and make a determination if the acquisition of such system is in the national interest. Section 515 only allows NASA to acquire IT systems approved by the OCIO. NASA must reject any IT system the NASA CIO

deems to be high impact or moderate impact unless it is determined the acquisition is in the national interest of the United States. The Government reserves the right to make this decision, without any further explanation to the Contractor. The Contracting Officer will advise the Contractor when any IT system represents an unacceptable risk to national security and may provide the Contractor with an opportunity to submit an alternative IT system.

(e) The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts involving the development or delivery of any information technology system.

(End of clause)

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PROVISION AND CLAUSE CHANGES: One provision, 1852.239-71, Review of the Offeror's Information Technology Systems Supply Chain (Deviation), and one clause, 1852.239-72, Information Technology System Supply Chain Risk Assessment (Deviation), are added as a result of this policy.

EFFECTIVE DATE: This class deviation is effective as dated and remains in effect for all expenditures of FY 2014 appropriations on moderate- or high-impact IT systems.

HEADQUARTERS CONTACT: For questions concerning IT security policy and procedures, contact Willie Crenshaw, at (202) 358-0947 or willie.d.crenshaw@nasa.gov. For questions concerning procurement of IT systems under this PIC, contact Marilyn E. Chambers on (202) 358-5154 or marilyn.chambers@nasa.gov.

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