



ACQUISITION,  
TECHNOLOGY  
AND LOGISTICS

THE UNDER SECRETARY OF DEFENSE

3010 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3010

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MEMORANDUM FOR SERVICE ACQUISITION EXECUTIVES  
ASSISTANT SECRETARY OF DEFENSE FOR RESEARCH AND  
ENGINEERING  
DIRECTOR, OFFICE OF SMALL BUSINESS PROGRAMS  
DIRECTOR, DEFENSE ADVANCED RESEARCH PROJECTS  
AGENCY  
DIRECTOR, DEFENSE THREAT REDUCTION AGENCY  
DIRECTOR, DEFENSE LOGISTICS AGENCY  
DIRECTOR, NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY  
DIRECTOR, DEFENSE INFORMATION SYSTEMS AGENCY  
DIRECTOR, MISSILE DEFENSE AGENCY  
DIRECTOR, JOINT SCIENCE AND TECHNOLOGY OFFICE FOR  
CHEMICAL AND BIOLOGICAL DEFENSE  
DIRECTOR, DEFENSE MICROELECTRONICS ACTIVITY  
U.S. SPECIAL OPERATIONS COMMAND (ATTN: ACQUISITION  
EXECUTIVE  
DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR  
MANUFACTURING AND INDUSTRIAL BASE POLICY

SUBJECT: Rapid Innovation Fund FY 2012 Implementation Guidelines

The National Defense Authorization Act for Fiscal Year 2012, section 4201, Public Law 112-81, and the Consolidated Appropriations Act, 2012, Public Law 112-74, provide the Department of Defense with funds to facilitate the rapid insertion of innovative technology into military systems and programs.

The attached document details the Department's goals for use of the Rapid Innovation Fund (RIF) appropriation and provides guidance for RIF implementation and reporting. The goals reflect the Department's emphasis on rapid, responsive acquisition and engagement of small, innovative businesses in solving defense problems.

My point of contact is Mr. Dan Cundiff, OASD (Research and Engineering), at 571-372-6807 or dan.cundiff@osd.mil.

  
Frank Kendall

Attachment:  
As stated  
cc:  
USD(C)

## **Defense Research and Development Rapid Innovation Fund (RIF) FY 2012 Goals and Implementation Guidelines**

**RIF Goal:** Stimulate innovative technology from small businesses that resolve operational challenges or other critical national security needs and transition the technology into defense acquisition programs.

### **RIF Implementation Guidelines:**

- **Organization:**

- Representatives appointed by the Military Department Service Acquisition Executives (SAEs), the Assistant Secretary of Defense for Research and Engineering (ASD(R&E)), and the Director, Office of Small Business Programs (OSBP), will establish RIF processes that support the Department's goals and meet the guidelines outlined in this Attachment.
  - ASD(R&E) will coordinate RIF activities among the Military Departments and OSBP.
  - OSBP will represent the interests of the Defense Agencies (listed in Enclosure 1) and assist Washington Headquarters Services (WHS) in preparing a common RIF solicitation.

- **Source Selection Process:**

- Solicitation of Technical Proposals:
  - The Military Departments and OSBP will use Broad Agency Announcements (BAAs) to solicit technical proposals.
    - For efficiency purposes, the Military Departments and OSBP may combine efforts to publish a single, common BAA through WHS.
    - The BAA(s) will include:
      - The operational challenge areas or other critical national security needs.
      - A reference to the four thrust areas as identified in the Senate Armed Services Committee Report (112-26) to accompany S. 1253, the National Defense Authorization Act for Fiscal Year 2012, page 50 (Enclosure 2).
    - The BAA(s) will be open for 60 days.

- The Military Departments, ASD(R&E), and OSBP will use similar processes for proposal submission and award determination, to include standardized evaluation criteria.
- Evaluation of Technical Proposals:
  - Component Program Executive Officers (PEOs) or Program Managers (PMs) will:
    - Conduct the evaluations of the technical proposals and provide recommendations to the Source Selection Authority (SSA).
    - Ensure at the time proposals are evaluated that an approach is identified to speed insertion of proposed technologies or applications into the defense acquisition program.
  - The SAEs will appoint a SSA to review the PEO or PM recommendations and select the proposals that will be funded.
  - The Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) will appoint the SSA for the organizations listed at Enclosure 1.
    - In a combined solicitation that represents the interests of the Military Departments and the organizations listed at Enclosure 1, the SAE-appointed SSA remains responsible to select the projects to be funded using their respective RIF funds.
    - The USD(AT&L)-appointed SSA shall only select projects to be funded by the Defense-wide RIF funds.
  - The following source selection criteria are RIF-specific and should be applied:
    - Projects address innovative technology that resolve operational challenges or other critical national security needs and have a demonstration path into a defense acquisition program, including, but not limited to, capabilities that:
      - Accelerate or enhance a military capability;
      - Reduce the development, acquisition, sustainment, or lifecycle costs of defense acquisition programs or fielded systems;
      - Reduce technical risk;
      - Improve the timeliness and thoroughness of test and evaluation outcomes.
    - Projects can be completed within 24 months from award; and
    - Total project cost does not exceed \$3 million.

- Selection preference shall be given to small business proposals that address the above criteria. Awards to other than small businesses firms are allowed but only after the SSA determines the award is superior to proposals received from a small business.
- Awards:
  - Contracts, cooperative agreements, and other transactions agreements are allowed for purposes of issuing RIF awards.
  - The Military Departments and OSBP RIF processes shall include procedures to preclude a single firm from receiving multiple RIF awards for equivalent technical proposals.
  - All proposers will be notified by the Military Department or Agency contracting activity on the action taken on their proposals within 15 business days of SSA decisions.
- Transition and Implementation:
  - Pursuant to Department of Defense priorities to expedite the transition of innovative technology into Programs of Record and apply the results of small business innovation:
    - Component PEOs or PMs will ensure at the time proposals are evaluated that an approach, assuming successful outcome of the RIF project, has been identified to speed insertion of proposed technologies or applications into the defense acquisition program.
    - Contracting officers may utilize existing procurement authorities to expedite further development, production, and fielding of successful RIF outcomes.
      - FY 2011 and FY 2012 contracts issued for RIF may contain options for further research, testing, Low-Rate Initial Production, or production to be funded by programs of record.
- **RIF Funding:**
  - Subject to reprogramming approval, funds released for RIF awards are \$50 million each for Army, Navy, Air Force, and Defense-wide (OSBP).
    - FY 2012 funds can only be used for awards to merit-based proposals received in response to the FY 2012 BAAs.

- Military Departments and OSBP may expend up to 3 percent of the RIF-appropriated funds for program management and administrative expenses.
- **RIF Reports:** ASD(R&E) will be responsible for the preparation and completion of all congressionally mandated reports regarding RIF implementation and awards. The Military Departments and OSBP representatives will support data collection for the report preparation.
  - The Military Departments and OSBP will track all awards to project completion to assess RIF program effectiveness.
- **Waivers to Implementation Guidelines:** The USD(AT&L) is the waiver authority for deviations from the implementation guidelines and for the selection of technical proposals that exceed the 24-month or \$3-million criteria. Submit waiver requests through ASD(R&E).

## **Defense Agencies**

*Participation is voluntary*

- U.S. Special Operations Command
- Missile Defense Agency
- Defense Threat Reduction Agency
- Defense Logistics Agency
- Defense Information Systems Agency
- National Geospatial Intelligence Agency
- Joint Science and Technology Office for Chemical and Biological Defense
- Defense Advanced Research Projects Agency
- Defense Microelectronics Activity
- Other Defense Organizations with Critical National Needs

**Senate Armed Services Committee, Report 112-26  
(As Supplemented by OSD(AT&L) Requirements)**

Defense research and development Rapid Innovation Program science and technology thrust areas. The committee recommended allocation of RIF, as follows:

- **Enhancing Energy Security and Independence.** For technologies that will improve energy efficiency, enhance energy security, and reduce the Department's dependence on fossil fuels through advances in traditional and alternative energy storage, power systems, renewable energy production and more energy efficient ground, air, and naval systems. Examples of capabilities include: sensors, communications and software needed to collect energy consumption information at point of use across the deployed force (e.g., fuel consumption measurement systems for vehicles), platforms, and various devices in contingency bases; technologies that reduce the size and weight of thermal management systems on-board vehicles and platforms; modeling and simulation technologies that examine the effect of energy demand and improvements on operations and integrate power and thermal systems on-board vehicles and platforms; hybrid energy storage, with high energy and power density power systems for autonomous air, ground, and undersea systems; and energy capture and conversion technologies for low power sensors, electronics, micro-autonomous systems.
  
- **Developing Advanced Materials.** For investment in a broad range of materials technologies, both organic and inorganic, that can provide enhanced performance in extreme environments; enhanced strength and reduced weight for the spectrum of applications from aerospace to lighter Warfighter loads; enhanced survivability of ground, air, and naval systems; and tailored physical, optical, and electromagnetic properties for a wide variety of the challenging environments and unique properties demanded of military systems. Such materials could include advanced metals and alloys, advanced composites and hybrid materials, engineered nanomaterials, and alternatives for critical and strategic materials. Investments can address new techniques for manufacturing and processing of materials, including advancements in forming, joining, and shaping. Examples of other capabilities include: methods that enable accelerated discovery, development, performance prediction and certification of materials and systems; development of viable, environmentally benign alternative technologies to extract ore, reduce metal from the ore, or to recover critical elements from scrap and waste; predictive tools for affordable and efficient structural health management and of military assets; materials supporting both structure and propulsion in space access applications; and materials that improve the performance and fuel efficiency of air-breathing engines. Investments can further address materials and processes research directed toward extending the life of components in defense service, in accelerating insertion of novel or newly tailored materials, or in decreasing sustainment costs of defense systems.
  
- **Improving Manufacturing Technology and the Industrial Base.** For increased investment in advanced and innovative manufacturing technologies across the spectrum of

applications to significantly compress design to production time cycles, reduce cost, minimize waste and energy consumption, and improve producibility as well as product quality and reliability. Based on coordination with the Office of the Deputy Assistant Secretary of Defense for Manufacturing and Industrial Base Policy, needed manufacturing technology advances include: advanced joining techniques (e.g., composite bonding, friction stir welding, and laser welding) for shipbuilding, aviation and combat vehicle programs; flexible automation and advanced robotics to improve the yield of critical parts; techniques for ballistic survivability that satisfies performance, cost, and weight goals for both Soldier and weapon system armor; additive manufacturing to fabricate parts in a layer-by-layer fashion directly from a digital design; manufacturing for portable power such as fuel cells; and secure network applications that provide for secure protocol transfer, integrated data sharing, and protection of intellectual property.

- **Advancing Microelectronics.** Increased investment in the development of resilient advanced microprocessors, application-specific integrated circuits, field programmable gate arrays, printed circuit boards, photonics devices, and other related electronics components for the next generation of military and intelligence systems.