

## **A Comprehensive Guide to JPEO Funding**

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In the complex ecosystem of defense and homeland security, the Joint Program Executive Office for Chemical, Biological, Radiological, and Nuclear Defense (JPEO-CBRND) holds a distinct role. This specialized office under the Department of Defense (DoD) focuses on safeguarding the United States military and its allies against the most hazardous types of threats—those emanating from chemical, biological, radiological, and nuclear sources. Understanding the background and history of JPEO-CBRND offers a nuanced insight into how the defense sector collaborates across multiple agencies and disciplines to ensure national security.

### **History of JPEO**

The early roots of JPEO can be traced back to the post-World War II era when the world had already witnessed the devastating effects of chemical and nuclear weapons. However, the formal establishment of JPEO took place much later, in 2003, following a series of national and global events that escalated the urgency for an integrated defense mechanism against CBRN threats.

The events of 9/11, the anthrax scare, and the increasing discourse on weapons of mass destruction catalyzed the need for a dedicated office to address these challenges. Subsequently, the Joint Program Executive Office for Chemical and Biological Defense (JPEO-CBD) was established to consolidate separate Army and Navy programs focused on chemical and biological defense into a single, joint office. As JPEO-CBD's scope expanded over the years to include radiological and nuclear threats, the office's name was updated in 2018 to JPEO-CBRND.

### **Mandate and Objectives**

JPEO-CBRND is a joint services office accountable for the development, acquisition, distribution, and deployment of CBRN defense systems and capabilities. The core objectives of JPEO-CBRND are:

1. To research and develop detection technologies that can identify CBRN threats accurately and promptly.
2. To create protective gear and equipment that safeguard military personnel from exposure to harmful agents.
3. To devise medical solutions that can neutralize the impact of CBRN exposure.
4. To offer logistical support and training to military units in handling CBRN scenarios.
5. To coordinate with other agencies like the Biomedical Advanced Research and Development Authority (BARDA), the National Institute of Allergy and Infectious Diseases (NIAID), and Health and Human Services (HHS) for integrated responses to public health emergencies that may involve CBRN elements.

### **Major Programs and Initiatives**

Over the years, JPEO-CBRND has spearheaded various programs to counter CBRN threats. Some of the most notable are:

- Joint Service General Purpose Mask (JSGPM): A program aimed at providing advanced respirators that offer improved protection, durability, and ease of use.
- Joint Biological Point Detection System (JBPDSS): An integrated system designed to detect and identify airborne biological agents.

- Chemical Biological Medical Systems (CBMS): Focused on medical countermeasures, this program explores vaccines, antidotes, and treatments against CBRN threats.
- Chemical Demilitarization Program: A program tasked with safely destroying the U.S. chemical weapons stockpile in compliance with international agreements like the Chemical Weapons Convention.
- Defense CBRN Response Force (DCRF): A highly trained and specialized military force prepared to respond to domestic CBRN incidents.

### **Inter-Agency Collaborations**

JPEO-CBRND collaborates with several federal agencies and departments, both within and outside the DoD. This includes partnerships with the Department of Energy (DOE) on radiological and nuclear defense matters, HHS for medical countermeasures, and the Department of Homeland Security (DHS) for ensuring civilian safety. The collaborations extend to industry partners and academic institutions that contribute cutting-edge research and innovation.

### **Evolution and Future Directions**

Over the years, JPEO-CBRND has continually evolved to adapt to new types of threats and technological advancements. The rise of non-state actors and the democratization of technology have made the CBRN landscape even more complex. As a result, JPEO-CBRND has increased its focus on agile procurement processes, rapid prototyping, and closer collaboration with the tech industry and academia.

The future of JPEO-CBRND looks poised to delve into AI-driven analytics, robotics for hazard detection and neutralization, and nanotechnology for advanced protective gear. As global threats continue to evolve, so will the mandate and capabilities of JPEO-CBRND, ever adapting to offer robust defense mechanisms against CBRN hazards.

JPEO-CBRND remains a critical component of the U.S. defense infrastructure. Its history and evolution showcase the commitment of the United States to protect not only its military forces but also its populace from a broad spectrum of existential threats. As new challenges emerge, the role of JPEO-CBRND will continue to expand, necessitating innovative approaches, multidisciplinary collaborations, and a steadfast focus on safeguarding national security.

### **How is JPEO Funded?**

JPEO-CBRND is a critical component of America's defense infrastructure. Responsible for protecting military forces and the civilian populace from CBRN threats, its activities are diverse, complex, and costly. Given the life-or-death stakes involved in its mission, understanding the funding mechanisms that sustain JPEO-CBRND can offer insights into how resources are allocated in the realm of national defense. This guide aims to delve into the intricate financial structures that support JPEO-CBRND's operations.

1. Federal Budget Allocations – The most straightforward source of funding for JPEO-CBRND comes from the federal budget, specifically under the DoD budget. The DoD, like all federal agencies, undergoes an annual budgeting process that involves a proposal from the executive branch, scrutiny from Congress, and eventual approval. The budget allocates specific funding to various initiatives, programs, and offices under the DoD, including JPEO-CBRND.

Typically, the funding earmarked for JPEO-CBRND is outlined under broader budget categories such as research & development (R&D), procurement, and operations & maintenance. Each of

these categories has sub-allocations for specific projects and initiatives that JPEO-CBRND manages.

2. Congressional Appropriations – In addition to the annual federal budget, JPEO-CBRND can also receive funds through specific congressional appropriations. These appropriations can either be regular appropriations that happen yearly or "supplemental" appropriations, which may be approved in cases of emergency or heightened national security threats.

Congressional appropriations often come with stipulations, directing how the funds should be spent. This means that while JPEO-CBRND receives a significant chunk of its funding from Congress, it also needs to adhere to specific guidelines and reporting requirements that ensure transparency and accountability.

3. Inter-Agency Collaborations – Given the cross-functional nature of JPEO-CBRND's work, it often collaborates with other federal agencies like the DOE, HHS, and DHS. These collaborations can also include financial contributions or shared funding for joint initiatives.

For example, when working on medical countermeasures against biological threats, JPEO-CBRND may collaborate with agencies like BARDA or NIAID, pooling financial and intellectual resources for mutual goals.

4. Industry Partnerships and Contracts – JPEO-CBRND frequently partners with private companies in the defense, technology, and healthcare sectors for R&D, procurement of materials, and service delivery. These partnerships often involve the use of contracts that are financed through the federal funding received by JPEO-CBRND.

The contracting mechanism allows JPEO-CBRND to flexibly allocate funds for specific projects, drawing from a diverse pool of expertise in the private sector. Contracts can range from fixed-price to cost-plus arrangements, depending on the complexity and risk associated with the project.

5. Special Grants and Programs – There are also specialized grants and programs that JPEO-CBRND can apply for, both internally within the DoD and externally. These grants are usually project-specific and can cover a wide array of topics, from basic research to the development of new detection technologies or protective gear.
6. Reallocation and Reassignment of Funds – In dynamic threat landscapes, flexibility is crucial. JPEO-CBRND has the authority to reallocate funds based on evolving needs and priorities. However, significant reallocations often require approval from higher-ups in the DoD or even Congress, depending on the amount and the nature of the reallocation.

### **Auditing and Accountability**

Given the significant amounts of taxpayer money involved, the funding and expenditures of JPEO-CBRND are subject to stringent auditing practices. Agencies like the Government Accountability Office (GAO) and the DoD's Inspector General regularly review financial statements and project outcomes to ensure funds are being used effectively and responsibly.

### **Future Trends in Funding**

As threats evolve, so too does the need for more advanced and varied CBRN defense mechanisms. This inevitably impacts the funding requirements for JPEO-CBRND. The growing awareness of non-traditional and asymmetrical warfare, as well as the use of CBRN materials by non-state actors, is likely

to influence future budget allocations. As technology advances, new avenues for public-private partnerships may also emerge, offering alternative funding mechanisms for JPEO-CBRND.

The funding of JPEO-CBRND is a multifaceted process involving a myriad of sources, from federal budgets and congressional appropriations to inter-agency collaborations and private sector contracts. As the agency continues to adapt to emerging CBRN threats, its funding mechanisms will undoubtedly evolve. Understanding these funding streams is critical not only for policy analysts and decision-makers but also for the general public, given the vital role JPEO-CBRND plays in national security. The more transparent and accountable the funding process, the more effectively JPEO-CBRND can carry out its mission to protect against some of the most dangerous threats to human life and safety.

### **What does JPEO fund?**

JPEO-CBRND serves a critical role in equipping the United States military and its allies with the capabilities needed to defend against CBRN threats. Given the multifaceted and complex nature of these threats, the organization's portfolio of funded programs is equally diverse. Below, we explore the various aspects that JPEO-CBRND funds, ranging from research initiatives to technology procurement and public-private partnerships.

1. **Early Detection Systems** – One of the primary mandates of JPEO-CBRND is to fund the R&D of early detection systems. These systems are designed to quickly and accurately identify CBRN agents, thereby facilitating timely countermeasures. Programs such as JBPDS and the Joint Chemical Agent Detector (JCAD) fall under this category.
2. **Protective Gear and Suits** – The development of sophisticated protective gear is crucial for the safety of military personnel and first responders. JPEO-CBRND invests in the development of suits, masks, and gloves designed to provide maximum protection with minimal impact on mobility and performance. JSGPM is an example of such a program.
3. **Decontamination Solutions** – Decontaminating personnel and equipment effectively after CBRN exposure is a critical challenge. JPEO-CBRND funds the development of decontamination solutions and systems that are both effective and environmentally safe.
4. **Medical Countermeasures** – JPEO-CBRND invests heavily in medical research to develop vaccines, antidotes, and treatments for CBRN agents. In collaboration with agencies like BARDA and NIAID, they fund initiatives aimed at creating new drugs or adapting existing ones to treat CBRN-induced illnesses.
5. **Vaccines** – The organization supports the development of vaccines for diseases that could be weaponized, such as anthrax or smallpox. This involves not just scientific research but also the complex logistics of mass production and distribution.
6. **Antidotes and Treatments** – Equally important are antidotes and treatments for chemical and radiological poisoning. JPEO-CBRND funds the development of fast-acting antidotes that can be easily administered in the field.
7. **Training Programs** – Effective response to CBRN events depends not just on equipment and medicine but also on the skill level and preparedness of the personnel involved. JPEO-CBRND allocates funding for specialized training programs. These cover a broad range of scenarios, from basic CBRN awareness to advanced operational courses.
8. **Procurement** – JPEO-CBRND is also responsible for the procurement of essential materials and technologies. This includes not just the end products of R&D but also interim solutions that can be quickly deployed.

9. Stockpiling – Strategic stockpiling of essential materials, including protective gear, medical supplies, and decontamination agents, is a key activity that JPEO-CBRND funds. These stockpiles are designed to be rapidly deployable in case of an emergency.
10. Equipment Upgrades – Given the rapid pace of technological advancement, staying ahead means constant upgrades. JPEO-CBRND allocates funds for upgrading existing systems and technologies to ensure they meet current operational requirements.
11. Public-Private Partnerships – JPEO-CBRND engages in public-private partnerships to leverage the expertise and resources of the private sector. Through contractual agreements, it funds collaborative R&D projects, technological innovations, and even manufacturing processes.
12. Inter-Agency Collaborations – Funding is also directed toward collaborative projects with other federal agencies. These projects usually involve a combination of resources, including finances, personnel, and intellectual property.
13. Monitoring and Oversight – While not a program per se, the organization allocates funds for internal oversight mechanisms to ensure that all initiatives are progressing as planned. This includes funds for evaluations, audits, and compliance checks in alignment with federal regulations.
14. Future Investments – JPEO-CBRND continuously evaluates the threat landscape and emerging technologies to determine future funding priorities. For example, the agency is increasingly interested in funding initiatives that leverage new technologies like AI and Internet of Things (IoT) for CBRN defense. Such technologies could include AI-driven simulation models for predicting the spread of chemical agents or IoT sensors for real-time threat monitoring.

The scope of what JPEO-CBRND funds is vast, encompassing R&D, procurement, training, and collaborative projects. Through strategic funding allocations, the agency aims to build a comprehensive CBRN defense system that not only neutralizes existing threats but also anticipates future challenges. Given the evolving nature of CBRN threats, the organization's funding priorities are dynamic and subject to frequent reassessment. As new challenges emerge, JPEO-CBRND will continue to allocate its financial resources to programs, research, and innovations that protect both military personnel and the broader public from CBRN dangers.

### **How does JPEO execute Procurement?**

To execute its mission effectively, JPEO-CBRND relies on a multitude of products, services, and technologies, many of which are obtained through procurement. This section aims to provide an in-depth explanation of the procurement processes and strategies employed by JPEO-CBRND.

### **The Basics of Federal Procurement**

Federal procurement is a standardized process governed by numerous laws, regulations, and guidelines. The Federal Acquisition Regulation (FAR) serves as the primary rulebook for federal procurement, including that of DoD under which JPEO-CBRND falls. Additionally, the Defense Federal Acquisition Regulation Supplement (DFARS) provides DoD-specific instructions.

### **Pre-Solicitation Phase**

- Needs Assessment – Before initiating any procurement process, JPEO-CBRND conducts an exhaustive needs assessment to define the specifications of the products or services required. This often involves input from multiple stakeholders, including subject matter experts, end-users, and other federal agencies.

- Market Research – Simultaneously, market research is conducted to identify potential suppliers, assess market trends, and estimate costs. This helps JPEO-CBRND understand what solutions are available and at what price points.
- Procurement Strategy Development – Based on the needs assessment and market research, a procurement strategy is developed. This outlines the procurement method, evaluation criteria, and timelines.

### **Solicitation Phase**

- Request for Information (RFI) – In some cases, an RFI is released to gather more information from potential suppliers. This is a non-binding process used to refine the agency's requirements.
- Request for Proposal (RFP) – The RFP is the core document released during the solicitation phase. It includes detailed specifications of the product or service required, terms and conditions, and evaluation criteria. Suppliers respond to RFPs with proposals outlining how they can meet the requirements, along with pricing information.
- Source Selection – Proposals are evaluated based on pre-determined criteria, which may include technical capability, past performance, and price. Sometimes multiple rounds of negotiations occur before selecting the final contractor.

### **Contract Award Phase**

Contract Types – JPEO-CBRND utilizes different types of contracts depending on the complexity and nature of the procurement. Common types include:

- Fixed-Price Contracts: The price is fixed and is not subject to change unless the scope of work changes.
- Cost-Reimbursable Contracts: The contractor is reimbursed for allowable costs. These contracts are often used for R&D projects.
- Time-and-Materials Contracts: These are used when it is not possible to estimate the duration and cost accurately.

### **Contract Award**

Once a contractor is selected, a contract is awarded, and work begins. The contract includes all the terms and conditions, deliverables, timelines, and payment details.

### **Post-Award Phase**

- Performance Monitoring – JPEO-CBRND closely monitors the performance of the contractor against the defined parameters in the contract. This involves regular reporting, inspections, and audits.
- Modifications and Amendments – Contract modifications may occur if there are changes in the scope of work, timelines, or other critical elements. These are formally documented and require mutual agreement.
- Contract Closeout – After the successful delivery of products or completion of services, the contract is closed out. This involves a final audit, payment settlement, and performance evaluations.

## Special Considerations for JPEO-CBRND

- National Security Implications – Given that JPEO-CBRND deals with highly sensitive and critical defense capabilities, national security considerations often influence procurement strategies. This may involve special clearance requirements for contractors or restricted RFPs that are only open to contractors with specific qualifications.
- Collaboration with Other Agencies – JPEO-CBRND often engages in joint procurement efforts with other federal agencies like BARDA, NIAID, or even international partners. These collaborative efforts sometimes have their own unique sets of rules and guidelines.
- Innovation and Emerging Technologies – Due to the rapid evolution of CBRN threats, JPEO-CBRND is always on the lookout for innovative solutions. Procurement strategies are often designed to attract cutting-edge technologies, which might involve special incentives or funding mechanisms.

The procurement process at JPEO-CBRND is a multifaceted endeavor governed by a maze of regulations, requirements, and strategies. The organization employs a rigorous and methodical approach to ensure that it acquires the most effective and reliable products and services for its mission-critical objectives. The emphasis is not just on obtaining the best value for money but also on ensuring that the procured items meet the highest standards of quality, reliability, and security. Given the complexity and sensitivity of the work JPEO-CBRND engages in, its procurement strategies are constantly evolving to adapt to new challenges and opportunities.

## The Application Process for JPEO Funding

If you are interested in obtaining funding from JPEO-CBRND, you will need to understand the intricacies of the application process, which this guide aims to elucidate.

### Preliminary Considerations

- Eligibility Criteria – Before beginning the application, it is essential to know whether your organization, project, or program fits within JPEO-CBRND's areas of interest. Funding is usually allocated to organizations, researchers, or companies that are aligned with JPEO-CBRND's strategic goals.
- Types of Funding – JPEO-CBRND provides different types of funding, such as:
  - Research Grants
  - Development Contracts
  - Cooperative Agreements
  - Public-Private Partnerships
- Sources of Information – To stay updated on available opportunities, regularly check:
  - The Federal Business Opportunities website (FedBizOpps)
  - The JPEO-CBRND website
  - Grants.gov
  - DoD Announcements

## Steps to Apply for JPEO-CBRND Funding

**Step 1: Initial Research and Preparation** – The first step is to conduct thorough research on what JPEO-CBRND is currently looking to fund. This involves:

- Reviewing past awards

- Studying any Broad Agency Announcements (BAAs) or RFPs
- Understanding the organizational goals of JPEO-CBRND

### **Step 2: Consultation and Pre-Solicitation**

Sometimes JPEO-CBRND holds pre-solicitation conferences, informational webinars, or other events to provide information about upcoming funding opportunities. Attending these can offer valuable insights into what the agency is looking for and help you tailor your application accordingly.

### **Step 3: Proposal Development**

Once you identify an opportunity that aligns with your expertise, the next step is to develop your proposal. From a technical perspective, this often involves:

- Objectives and Scope – Provide a detailed outline of the objectives, including short-term and long-term goals. Include the scope of work, methodologies, and milestones.
- Technical Approach – Describe the technical approach, including research methods, materials to be used, and potential challenges and solutions.
- Qualifications and Expertise – Include resumes or CVs of all key personnel, highlighting experience relevant to the project. Also, list any subcontractors or collaborators, explaining their roles.

Financial requirements for proposals can often include the following:

- Budget Outline – Develop a comprehensive budget detailing all potential costs, including:
  - Personnel Salaries
  - Equipment
  - Travel Expenses
  - Overhead

Each line item should be justified to demonstrate its necessity to the project.

- Funding and Cost Matching – Some JPEO-CBRND opportunities require cost-matching, meaning you may need to secure a portion of the project's total cost from other sources. Clearly indicate if this applies to your project and how you intend to meet this requirement.
- Financial Capability Statements – Especially for private companies, a statement of financial capability may be required to ensure that the organization has the financial stability to manage the grant or contract.
- Indirect Costs and Fee Structure – For contracts, the fee structure and any indirect costs like administrative expenses must be clearly detailed. This usually requires a separate financial proposal that accompanies the technical proposal.

### **Step 4: Submission**

Follow the guidelines stipulated by the BAA, RFP, or other solicitation documents for submission. This often involves submitting through an online portal, though some opportunities might require a physical submission.

### **Step 5: Peer Review and Evaluation**



After the deadline for proposal submission, the received proposals are typically reviewed by a panel of experts. This peer review process assesses the scientific merit, feasibility, and alignment with JPEO-CBRND's strategic goals.

### **Step 6: Notifications and Feedback**

Successful applicants are notified and often proceed to the negotiation phase to finalize contracts, cooperative agreements, or grant terms. Unsuccessful applicants usually receive feedback on why their proposals were not selected, which can be helpful for future applications.

### **Step 7: Award and Commencement**

Upon successful negotiations, the award is formalized through a contract or grant agreement. The project then transitions into the execution phase, which often involves periodic reviews and reporting to JPEO-CBRND.

### **Key Tips for a Successful Application**

1. **Alignment with JPEO-CBRND Goals:** Ensure that your project directly addresses the objectives and priorities laid out by JPEO-CBRND.
2. **Clear Objectives:** Clearly state what the project aims to achieve, how it will be done, and how success will be measured.
3. **Budget Justification:** Provide a detailed and well-justified budget that aligns with the project's objectives.
4. **Collaboration:** Demonstrate how your project could benefit from or contribute to other initiatives, including those led by other government agencies or international partners.
5. **Compliance:** Adhere strictly to all submission guidelines, deadlines, and formatting rules to ensure your application is not disqualified on technicalities.

Securing funding from JPEO-CBRND is a competitive and rigorous process that requires a well-prepared, robust proposal in alignment with the agency's mission and objectives. Being thorough in your initial research, meticulous in proposal development, and vigilant in adhering to all guidelines can significantly increase the odds of your application being successful. The funding landscape is dynamic, so staying informed and engaged is crucial for capitalizing on opportunities as they arise.

If your company is considering applying for JPEO funding, EverGlade Consulting is the right partner to help make that goal a reality. EverGlade Consulting is a national consulting firm connecting public sector needs with private sector solutions. We offer services ranging from Pursuit, Proposal and Post-Award support to comply with federal regulations at agencies including BARDA, ASPR, NIH, DTRA, JPEO, DOD, DOE, and DARPA.

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