Independent Research & Development (IR&D):
Entering Project Data into the Defense Innovation Marketplace
(updated 11/01/2014)

Individual Project Data Entered in 5 Simple Steps

The following instructions describe the individual inputs that will be requested, the data type, and the length of allowed responses. It is suggested you compile all the information prior to entering your project, as the Marketplace does not currently allow the data to be saved for later completion.

Step 1: Enter your Organization PIN

1) What is a PIN? Upon request and verification of a CAGE code, companies will be issued a unique and secure personal identification number (PIN). This PIN is required to enter your IR&D project data into the system. Visit https://www.defenseinnovationmarketplace.mil/input/irad/requestpin.htm to request a PIN. (Note: These PINS are updated every January.)

Step 2: Enter IR&D Project Information

2) Project Title [required] – Enter the title of your IR&D project. For consistency, please use the same project title reported to DCAA. (***240 Alpha Numeric Characters)***

3) Fiscal Year [required] – Enter your organization's Fiscal Year for this project. ***(4 Numeric Characters)***

4) Project Number – Enter the unique identifier your firm uses to track this IR&D project. For consistency, please use the same project number reported to DCAA ***(30 Alpha Numeric Characters)***

5) Status of Effort [required] – Three options to choose from. If new effort: "New Start;" if previously reported: "Follow On; if finished: "Complete".

6) Approximate Expenditure [required] – Approximate dollars to be spent in the next Fiscal year. For example, $8 Million would be entered as 8000000. ***(9 Numeric Characters)***

7) Primary Communities of Interest (COI) Area and Subarea [required] – (DROP DOWN MENU) Select the more relevant Community of Interest Area and Subarea for your primary entry. You may also select a secondary Community of Interest Area and Subarea. (APPENDIX A) ******UPDATED IN Nov 2014******

8) Targeted DoD Organization(s) – (DROP DOWN MENU) Select the applicable DoD Organization(s) this project would most likely benefit. (APPENDIX B) ******UPDATED IN 2014******

9) Technology Readiness Levels (TRL) [required] – The TRL is a measure used to evaluate the maturity of evolving technologies (materials, components, devices, etc.) before that technology is incorporated into a system or subsystem. (DROP DOWN MENU) Select the anticipated TRL for your project at the end of the year. (APPENDIX C)

Step 3: Enter IR&D Project Summary

10) Project Summary [required] – Provide a 1-2 sentence summary of your project to be used as a snapshot description included in search results. ***(Up to 2,000 Alpha Numeric Characters)***

11) Keyword(s) [required] – Use words that best characterize the project – the more specific, the better. Think about the keywords your DoD customer would use to search for your project. A keyword can consist of a single word or a phrase with several words. ***(Up to 250 Alpha Numeric Characters)***

12) Project Description and/or Project Documents [required] – You may enter technical data directly into the Project Description section or upload files to the Project Documents section. You must enter information into at least one of these sections. ***(Up to 10,000 Alpha Numeric Characters)***

If entering data directly, it should be a concise description of your project and technical approach. It could include answers to the following questions:

- What problem are you trying to solve?
- What is new about your approach?
- If you succeed, what difference will it make?
- What will it provide in terms of new capabilities for the Department of Defense?

If you are uploading files, PDF and Microsoft Office file types are preferred. Classified attachments are not permitted. If your attachment contains company proprietary data, you must mark it as such in the document. ***(UP TO 5 Attachments; MAX 15 MG Bytes Each)***

Step 4: Provide Us with Your Information

14) Your Contact Information [required] – Enter the PIN Holder's first and last name, phone number, and e-mail address.

15) Technical Contact(s) [required] – Enter the first and last name, phone number, and e-mail address of any Technical Point(s) of Contact who can discuss this project with interested DoD users. You may list up to five contacts.

Step 5: Review Your Entry and Submit

Appendix A – Communities of Interest Areas (and Sub-Areas)

COI	COI sub-area
Advanced Electronics	
	Electronic Materials
	Electronics Integration
	Electro-optics
	Nanoelectronics and Microelectronics
	Radio Frequency (RF) Components
Air Platforms	
	Aircraft Power and Thermal Management
	Fixed Wing Vehicles
	Gas Turbine Engines
	High Speed/Hypersonics
	Rotary Wing Vehicles/Future Vertical Lift
	Unmanned Aircraft Systems (UAS)
Autonomy	
	Human/Autonomous System Interaction and Collaboration
	Machine Perception, Reasoning and Intelligence
	Scalable teaming of Autonomous Systems
	Test, Evaluation, Validation, and Verification
Biomedical	
	Biomedical Informatics, Computational Biology, Simulation and Training
	Clinical and Rehabilitative Medicine
	Combat Casualty Care
	Environmental Toxicology and Chemical Countermeasures
	Health Information Systems and Technology
	Medical Radiological Defense
	Military Infectious Diseases and Biological Countermeasures
	Military Operational Medicine

Command, Control, Communications, Computers, and Intelligence (C4I)	
	Advanced Computing / Software Development
	HCI for Decision Making
	Information Collection / Management
	Networks and Communications
	Synthesis / Analytics / Decision Tools
Counter IED	
	Counter IED
Counter Weapons of Mass Destruction (WMD)	
	Anticipate and Prepare
	Deny and Defeat WMD Threats and Terrorism
	Enhance Strategic Deterrent
	Protect the Force
Cyber Security	
	Agile Operations
	Assuring Effective Missions
	Embedded, Mobile, and Tactical System
	Modeling, Simulation, and Experimentation
	Resilient Infrastructure
	Trust Foundations
Electronic Warfare/Electronic Protection	
	Devices and Materials
	Electronic Protection (EP) Technologies
	Electro-Optical/Infrared (EO/IR) Technologies
	Integrated/Networked Technologies
	Radio Frequency (RF) Technologies
Energy and Power Technologies	
	Electromechanical conversion
	Energy storage
	Power distribution and control
	Power generation / energy conversion
	Thermal transport and control
Engineered Resilient Systems (ERS)	
	Collaborative Analysis and Decision-making
	Conceptual and Computational Representation
	Data-driven Tradespace
	Tool Architecture and Integration

Ground and Sea Platforms	
	Advanced Design
	Maintainability
	Mobility
	Modularity
	Survivability
	Unmanned Platforms
Human Systems	
	Personnel, Training, and Leader Development
	Protection, Sustainment, and Physical Performance
	Social, Cultural, and Behavioral Understanding
	System Interfaces and Cognitive Processing
Materials and Manufacturing Processes	
	Civil Engineering
	Environmental Quality
	Manufacturing Technology for Affordability
	Materials/Processes for Survivability and Life Extension
Sensors and Processing	
	Acoustic, Seismic and Magnetic
	Electro-optic and infrared (EO/IR) sensors
	Radio Frequency (RF) sensors
Space	
	Command and Control
	Intelligence, Surveillance and Reconnaissance
	Missile Warning and Attack Assessment
	Position, Navigation and Timing (PNT)
	Satellite Communications
	Satellite Operations
	Space Access
	Space Control
	Space Environmental Monitoring

Weapons Technologies	
	Guidance/Navigation and Control
	High Energy Lasers
	Integrated Guided Weapon Demonstrators
	Modeling, Simulation and Test Infrastructure
	Ordnance
	Propulsion
	RF Weapons
	Undersea Weapons
Other	
	Battlespace Environments - Lower Atmosphere Environments
	Battlespace Environments - Ocean Battlespace Environments
	Battlespace Environments - Space/Upper Atmosphere Environments
	Battlespace Environments - Terrestrial Environments
	Modeling and Simulation Technology
	Sustainment

Appendix B – Targeted DoD Organizations

DoD Organization	ACRONYM
Air Force	USAF
Army	DA
Assistant Secretary of Defense for Logistics and Material Readiness	ASDLM
Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs	ASDNC
Assistant Secretary of Defense for Operational Energy Plans and Programs	ASDOE
Assistant Secretary of Defense for Research and Engineering	ASDRE
Defense Advanced Research Projects Agency	DARPA
Defense Commissary Agency	DeCA
Defense Intelligence Agency	DIA
Defense Logistics Agency	DLA
Defense Security Cooperation Agency	DSCA
Defense Security Service	DSS
Defense Technical Information Center	DTIC
Defense Threat Reduction Agency	DTRA
Defense Technology Security Administration	DTSA
Missile Defense Agency	MDA
National-Geospatial Intelligence Agency	NGIA
National Security Agency	NSA
Navy	DN
United States Marine Corps	USMC
U.S. Africa Command - AFRICOM	USAFRICOM
U.S. Central Command - CENTCOM	USCENTCOM
U.S. Northern Command - NORTHCOM	USNORTHCOM
U.S. Pacific Command - PACOM	USPACOM
U.S. Southern Command - SOUTHCOM	USSOCOM
U.S. Special Operations Command - SOCOM	USSOUTHCOM
U.S. Strategic Command - STRATCOM	USSTRATCOM
U.S. Transportation Command - TRANSCOM	USTRANSCOM
Walter Reed Army Institute of Research	WRAIR
Other	Other

Appendix C - Technical Readiness Level

Technology Readiness Level	Description
1. Basic principles observed and reported	Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Example might include paper studies of a technology's basic properties.
2. Technology concept and/or application formulated	Invention begins. Once basic principles are observed, practical applications can be invented. The application is speculative and there is no proof or detailed analysis to support the assumption. Examples are still limited to paper studies.
3. Analytical and experimental critical function and/or characteristic proof of concept	Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.
4. Component and/or breadboard validation in laboratory environment	Basic technological components are integrated to establish that the pieces will work together. This is "low fidelity" compared to the eventual system. Examples include integration of 'ad hoc' hardware in a laboratory.
5. Component and/or breadboard validation in relevant environment	Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so that the technology can be tested in a simulated environment. Examples include 'high fidelity' laboratory integration of components.
6. System/subsystem model or prototype demonstration in a relevant environment	Representative model or prototype system, which is well beyond the breadboard tested for TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high fidelity laboratory environment or in simulated operational environment.
7. System prototype demonstration in an operational environment	Prototype near or at planned operational system. Represents a major step up from TRL 6, requiring the demonstration of an actual system prototype in an operational environment, such as in an aircraft, vehicle or space. Examples include testing the prototype in a test bed aircraft.
8. Actual system completed and 'flight qualified' through test and demonstration	Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation of the system in its intended weapon system to determine if it meets design specifications.
9. Actual system 'flight proven' through successful mission operations	Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation. In almost all cases, this is the end of the last "bug fixing" aspects of true system development. Examples include using the system under operational mission conditions.