

SECTION J-2 CONTACT ATTACHMENTS
ATTACHMENT (12) SBIR INSERTION PLAN

**Defense Integrated Military Human Resources System
(Personnel and Pay) (DIMHRS (Pers/Pay))**

Management Capability and Approach

Appendix A10

**Small Business Innovative Research (SBIR)
Insertion Plan**

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SECTION 1

1.0 Introduction and Background

The Defense Integrated Military Human Resource System (Personnel/Pay) (DIMHRS (Pers/Pay)) is an automated information system that will integrate and modernize all military personnel and pay data collection and processing capabilities in accordance with Department of Defense (DoD) requirements. DIMHRS (Pers/Pay) will consolidate DoD field-level personnel and pay business processes into a standard single point of entry system to collect, store, forward, and report personnel and pay data. DIMHRS (Pers/Pay) will support military personnel and pay offices worldwide and incorporate Active, Reserve, and National Guard personnel in garrisoned and deployed forces. Limited support will also be provided for Retired personnel, family members, and designated civilians during military operations.

This Small Business Innovative Research (SBIR) Insertion Plan addresses how SBIR technology will be incorporated into DIMHRS subsystems to meet current and future needs. The Northrop Grumman Information Technology (IT) approach is comprehensive, facilitates the insertion of SBIR technology into DIMHRS, and is based on documented success in transitioning research and development (R&D) innovations into operational use.

Section 1.0, Introduction and Background, provides an overview of how SBIR technology will be integrated into DIMHRS subsystems and introduces the process to be used and our IT capabilities.

Section 2.0, Competitive Sourcing of SBIRs, addresses how we will competitively source SBIRs for insertion into DIMHRS. As such, we address how our Technology Change Management (TCM) process will intersect with our Subcontract Management process to acquire new technologies for integration into DIMHRS. Additionally, the link between competitive sourcing of SBIRs and the Small Business Subcontract Management Plan is also discussed.

Section 3.0, DIMHRS (Pers/Pay) Subsystems Offering Opportunities for Technology Insertion, identifies relevant subsystems for SBIR insertion. This includes both current and future SBIR programs that are candidates for technology insertion into DIMHRS subsystems.

Section 4.0, Adaptability Through Features Such as an Open System Architecture, addresses how the DIMHRS solution proposed by us is adaptable to promote insertion of SBIR technology. Additionally, this section addresses how we will evaluate each candidate SBIR program for adaptability prior to recommendation for insertion into DIMHRS.

Section 5.0, Technology Upgrade Cycles, addresses natural opportunities for insertion of SBIR technology with minimum disruption to DIMHRS. It also addresses these opportunities in terms of planned releases and builds along with the natural technology upgrade cycles required for DIMHRS hardware and software applications.

As shown in Figure 1-1, we reviewed current DoD SBIR programs and published SBIR success stories and identified potential SBIR candidates for insertion into DIMHRS subsystems. Due to their timeline for availability, Phase II SBIR programs and published SBIR success stories show the most promise for meeting current DIMHRS needs. Since agency-specific topic areas and Phase I SBIR programs may be at least 2 years from completion, these show the most promise for future technology insertion into DIMHRS. We will also participate in future SBIRs by identifying and recommending to the Joint Program Management Office (JPMO) DIMHRS topic areas for Space and Naval Warfare (SPAWAR) consideration. Additionally, we will incorporate into DIMHRS any Phase II or SBIR success story that is approved and funded for insertion into DIMHRS.

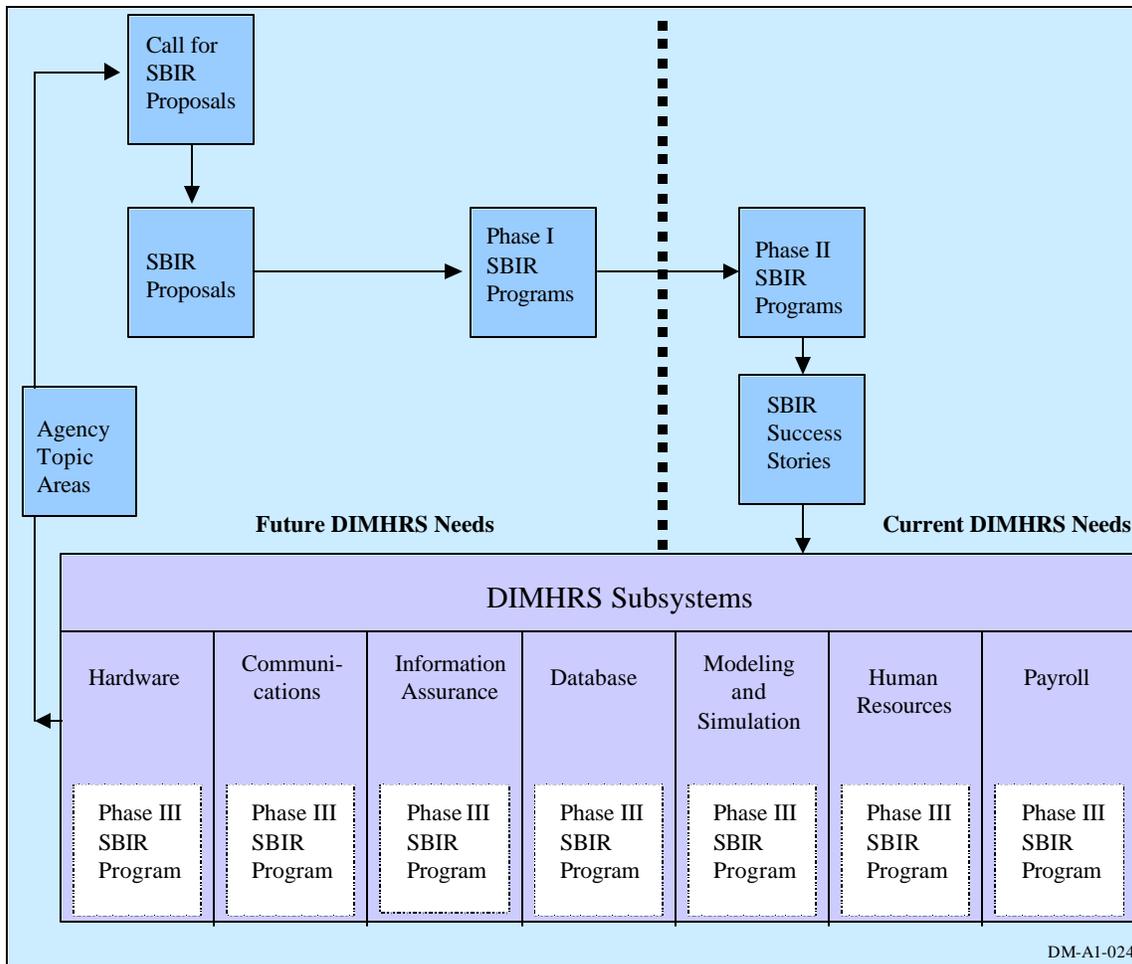


Figure 1-1. Our SBIR plan maximizes use of existing SBIR technology innovations and provides a vehicle for identifying future SBIR needs.

As illustrated in Figure 1-2, we will use our industry-recognized TCM approach to identify, monitor, evaluate, select, plan, and insert SBIR technology into DIMHRS subsystems. We have used this approach successfully to evolve systems with a minimum of disruption for a myriad of customers including the Naval Air Systems Command, Air Force Material Command, United States Strategic Command, Army Personnel Command, Wright Patterson Air Force Base, Federal Systems Integration and Management Center, Air Force Electronic Systems Center, Missile Defense Agency, Department of Justice, DoD, Bureau of Indian Affairs, Federal Bureau of Investigation, National Weather Service, and numerous commercial clients such as VISA and MasterCard.

Technology identification and monitoring, as illustrated in Figure 1-2, involves analyzing the technology needs and reviewing DIMHRS requirements and SBIR programs and topic areas to ascertain SBIR candidates for eventual insertion into DIMHRS subsystems. It also involves distilling the massive amount of promising technologies into the significant few that will have the most impact on DIMHRS. From this, a list of DIMHRS key technology areas and SBIR candidates are developed. The technology-monitoring portion of this process operates continually to ensure the latest technology products and innovations are tracked for future consideration for DIMHRS.

	Technology Identification and Monitoring	Technology Evaluation and Selection	Technology Planning	Technology Insertion
Inputs	<ul style="list-style-type: none"> External technology forecasts DIMHRS requirements Funded SBIR programs 	<ul style="list-style-type: none"> DIMHRS technology taxonomy SBIR candidates Future DIMHRS needs 	<ul style="list-style-type: none"> Trade study for each SBIR candidate Recommended SBIR candidates 	<ul style="list-style-type: none"> Approved SBIR Insertion Plan and costs
Processes	<ul style="list-style-type: none"> Analyze external forecasts Analyze DIMHRS requirements ID DIMHRS key technology areas ID technology trends ID DIMHRS subsystems Map SBIR candidates to subsystems ID future SBIR needs 	<ul style="list-style-type: none"> Submit future SBIR needs to JPMO DIMHRS Develop evaluation criteria Weigh evaluation criteria Evaluate SBIR candidates Document trade study Recommend SBIR candidates for insertion 	<ul style="list-style-type: none"> Develop and revise SBIR Insertion Plan Present SBIR Insertion Plan and costs for Government approval 	<ul style="list-style-type: none"> Oversee development of SBIR technology Integrate SBIR technology into DIMHRS subsystem(s)
Outputs	<ul style="list-style-type: none"> DIMHRS technology taxonomy SBIR candidates Future DIMHRS needs 	<ul style="list-style-type: none"> Trade study for each SBIR candidate Recommended SBIR candidates 	<ul style="list-style-type: none"> Approved SBIR Insertion Plan and costs 	<ul style="list-style-type: none"> SBIR technology successfully inserted into DIMHRS subsystems

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Figure 1-2. Our industry-recognized TCM process ensures SBIR technology contributes to solving major gap issues not addressed by COTS.

As detailed in Figure 1-2, technology evaluation and selection involves balancing technology risk and reward to select the SBIR technologies most suited for insertion into DIMHRS subsystems. This involves developing evaluation criteria, assigning a weight for each evaluation criteria, and evaluating each candidate to determine the best-suited ones for technology insertion into DIMHRS. Upon approval and funding by JPMO DIMHRS, we will utilize this process to evaluate proposed SBIR candidates.

Once these SBIR insertion candidates are evaluated and approved for funding, we will develop a SBIR Insertion Plan for these candidates. This is the Technology Planning portion of the process, illustrated in Figure 1-2, where the SBIR Insertion Plan is either developed or revised to address the resources, responsibilities, schedule, and strategy for inserting approved SBIR candidates into DIMHRS subsystems.

The Technology Insertion portion of the process integrates the approved SBIR candidates into relevant DIMHRS subsystems. This involves the integration of the SBIR technology and ensures proper testing or regression testing is done prior to each build or release of the affected Useable Asset (UA). It also ensures necessary end-user training is conducted and appropriate support is provided to the end users.

As illustrated in Figure 1-3, we have a proven track record in transitioning innovations from the laboratory into operational use. This is evidenced by our success stories in integrating innovative technology into operational environments and evolving innovative proof-of-concepts into additional contractual work. These successes have come from our Independent Research and Development (IR&D) and Contract Research and Development (CR&D) programs. The following subparagraphs describe some of our success stories.

IR&D Project	Technical/Functional Area	Successful Integration
Situation Awareness Generic Environment (SAGE)™	Common Object Request Broker Architecture (CORBA) and Distributed Systems – Legacy Application Wrapping	Government Computer-Based Patient Record (GCPR) – DoD and Bureau of Indian Affairs
Imaged Document Optical Correlation and Conversion System (IDDOCS)	Optical Correlation and High-Speed Search and Retrieval	Army Research Laboratory Army Communications and Electronics Command (CECOM)
Security Kinetix™	Information Assurance and Intrusion Detection	Army CECOM Joint Battlespace Infosphere Distributed Testbed (JBI-DT)
PReCis™	Information Assurance and Security Logging, Auditing, and Archiving Tool	Adapted to multiple customer environments
AIDE™	Information Assurance and Intrusion Detection and Correlation Tool	Ringneck Console installed at 10 DoD locations
Event Manager Toolkit	Generic Mechanism for Construction of Cooperating Architectures	AWIPS, USAOPTEC’s TEP Builder, and DIA’s DITDS

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Figure 1-3. We have a proven track record in developing and integrating adaptable innovations.

A portion of our Situation Awareness Generic Environment (SAGE)™ R&D effort was utilized as the basis for the winning distributed systems approach to an architecture for the Government Computer-Based Patient Record (GCPR) contract. The approach divides the task of solving a problem over many different computers. The Common-Object Request Broker Architecture (CORBA) allows computers to cooperate regardless of their location, programming languages, or operating systems. CORBA also can “wrap” legacy systems so they function like modern object software. GCPR, an on-going contract with the DoD and Bureau of Indian Affairs, provides a framework to share patient records electronically. COTS software is integrated into this framework to provide functionality as soon as it becomes available.

The Imaged Document Optical Correlation and Conversion System (IDDOCS), originally funded as an IR&D program, provides optical correlation and high-speed search and retrieval capabilities. Following the initial IR&D effort, IDDOCS was subsequently funded through a classified government agency, and currently the Army Research Laboratory funds the program as a follow-on contract.

Security Kinetix, originally funded as an IR&D program, enhances capabilities of COTS products by providing “strike-force” intrusion detection. Following initial funding, Security Kinetix was transitioned into a Cooperative Research and Development Agreement (CRADA) with the Army’s Communications and Electronics Command (CECOM). Most recently, it was identified as a technology for integration into the Joint Battlespace Infosphere Distributed Testbed (JBI-DT) environment. The Army Research Laboratory currently funds the program.

As detailed in Figure 1-3, PReCis™ is an automated security logging, auditing, and archiving tool that was first developed under IR&D funding. This tool continues to be sold and integrated into multiple customer environments.

AIDE™, an intrusion attack detection and correlation tool originally developed under the Advanced Concepts Technology Demonstration (ACTD) program, was successfully spun off into its own commercial company called Ringneck Technologies, Inc. The Ringneck console has been transitioned to 10 permanent DoD locations.

Lastly, the Event Manager Toolkit, one of the capabilities that emerged from the Tools for Knowledge Acquisition (TKA) IR&D Program, provides a generic mechanism to construct cooperating architectures. The toolkit was used on follow-on CR&D efforts, including IW⁴D II and CIKB and became a standard for Rome Laboratory's IPAS 2000 R&D efforts including GIP, TAS, IIPLESE, and CKBA. This toolkit was subsequently used in other IR&D efforts including DPS, ICASE, and HYROS. It was successfully integrated into the Defense Intelligence Agency (DIA) Defense Information Threat Data System (DITDS). The United States Army Operational Test and Evaluation Command (USAOPTEC) TEP Builder, and the National Weather Service Automated Weather Interactive Processing System (AWIPS) contracts.

Successfully transitioning innovative technology can be a daunting task. We have the track record to identify, evaluate, plan, transition, and integrate SBIR technology into DIMHRS subsystems.

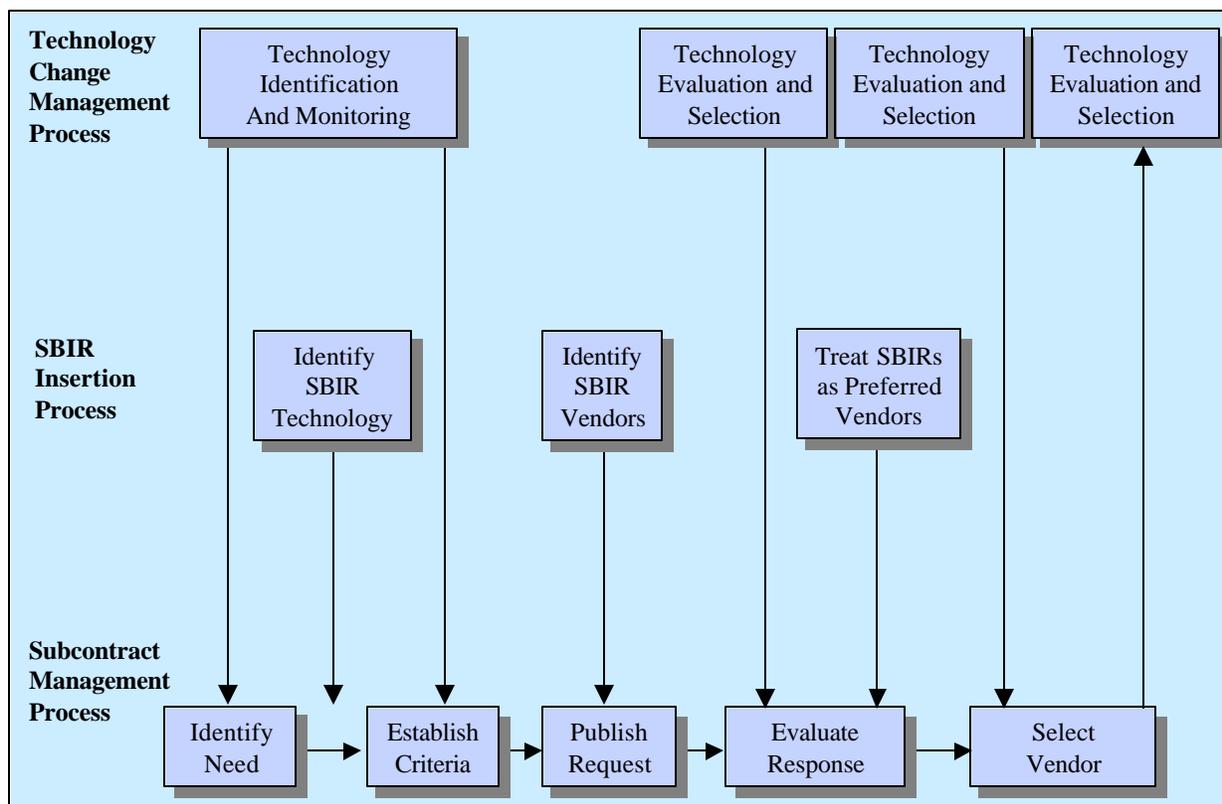
SECTION 2

2.0 Competitive Sourcing of SBIRs

To promote competition to the maximum extent possible, we based our approach on an industry-recognized TCM process coupled with execution of our Subcontract Management and Small Business Subcontract Management Plan.

As described in our subcontract management approach detailed in Section 4.0 of the Program Management Plan (PMP), we have a systematic approach for managing any subcontracts, including SBIR-related contracts. Since SBIR programs are set aside for small businesses, our Small Business Subcontract Management Plan located in Volume XI will also play an important role in the competitive sourcing of SBIRs.

Figure 2-1 depicts the interrelationship of our TCM process and our subcontract management process. As shown in Figure 2-1, we will identify a SBIR need, establish criteria to meet the need, publish a request, and evaluate responses.



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Figure 2-1. Our process ensures competitive sourcing of SBIR candidates.

To ensure competitive sourcing of SBIRs as illustrated in Figure 2-1, we will identify SBIR technology, identify SBIR vendors, and treat those vendors as preferred. To identify SBIR technology, we will review the Navy and other DoD agency SBIR topic area lists, Phase I SBIR programs, Phase II SBIR programs, and success stories to determine whether the need has been identified, is in the process of being developed, or has been satisfied by an existing SBIR program. If the need is new for the program, we will forward this to the DIMHRS JPMO for review and potential referral to SPAWAR. If the need is in the process of being satisfied through a SBIR program, we will identify existing SBIR vendors and send

them a request for a proposal. Then we will evaluate proposal responses and forward them to the DIMHRS Program Manager for approval. Approved programs will be funded and readied for insertion into the appropriate DIMHRS subsystems.

Current DIMHRS needs will be best satisfied by existing Phase II or SBIR success stories because these technologies are closest to readiness for insertion into DIMHRS. Upon Government approval, selected Phase II programs would be funded as Phase III SBIR programs. Future DIMHRS needs will be satisfied best through review of the agency topic area lists and existing Phase I programs. Identified promising technologies would be forwarded to the DIMHRS Government Program Manager so the interest could be relayed to SPAWAR for further funding.

SECTION 3

3.0 DIMHRS (Pers/Pay) Subsystems Offering Opportunities for Technology Insertion

We carefully reviewed more than 600 existing SPAWAR, Navy, or other DoD SBIR programs, narrowed these to 22 candidates, and identified 4 current and 2 future SBIR finalist programs for insertion into DIMHRS subsystems. Figure 3-1 lists the finalist SBIR programs and the applicable DIMHRS subsystems.

As depicted in Figure 3-1, the seven subsystems for DIMHRS include hardware, communications, information assurance, database, modeling and simulation, payroll, and human resources. We selected these subsystems by reviewing the proposed architecture and the major applications to be integrated for DIMHRS. For each of the subsystems, we identified the relevant current and future technologies, which were utilized as a starting point for identifying applicable SBIR programs. Once an initial list of SBIR candidates was constructed, we scrutinize these candidates for readiness and currency. This was accomplished by reviewing the Phase II award and completion dates. SBIR candidates that would meet current DIMHRS needs were identified as those programs that were either in Phase II or were a current SBIR success story. SBIR technologies for future DIMHRS needs were selected by reviewing the applicable technology areas for each of the subsystems and the SPAWAR, Navy, and other DoD topic area lists; Phase I SBIR programs; or Phase II programs that were recently awarded. Each of the initial candidates were then verified for their relevancy to DIMHRS. As illustrated in Figure 3-1, subsystems that offer opportunities for SBIR technology insertion include communications, information assurance, modeling and simulation, payroll, and human resources.

3.1 Relevance to DIMHRS (Pers/Pay) Goals of Proposed Subsystems for Technology Insertion

Figure 3-2 details the DIMHRS (Pers/Pay) goals, the relevance of these goals to DIMHRS subsystems, and the relevant SBIR insertion candidates. As illustrated in Figure 3-2, all of the DIMHRS subsystems collectively support the DIMHRS (Pers/Pay) goals. A few of the goals, such as a single, integrated database and empowering service members, are heavily supported by DIMHRS subsystems such as database, human resources, payroll, communications, and hardware. Additionally, as shown in Figure 3-2, all SBIR insertion candidates contribute to all of the DIMHRS goals.

3.2 Degree Proposed Subsystems for Technology Insertion Promote Competition

As illustrated on Figure 3-1, the communications, information assurance, modeling and simulation, payroll, and human resources are the subsystems that are projected to have SBIR technology integrated into them. As there are many small businesses currently in the SBIR program that are working on technologies that are relevant to these subsystems, competition for DIMHRS-specific SBIR programs should be healthy. Additionally, we will utilize our subcontract management approach to ensure competition is fair and open.

3.3 Subsystems to be Competitively Awarded

As illustrated in Figure 3-1, all current candidate SBIR programs have already been selected through a competitive SBIR process. Future candidate SBIR programs would be competitively awarded as described previously in Section 2.0, Competitive Sourcing of SBIRs. The figure also illustrates the subsystems that are projected to receive technology for integration including communications, information assurance, modeling and simulation, payroll, and human resources. We do not anticipate awarding a subcontract for an entire subsystem. As described in the subcontract management approach found in Section 4.0 of the PMP, subcontractors on our team will be fully integrated.

Subsystems	Technology Areas	Current SBIR	Future SBIR
Hardware	<ul style="list-style-type: none"> • Workstations • Servers • Operating Systems <ul style="list-style-type: none"> - AIX - NT and 2000 • Mobile Devices • Handheld Appliances 		
Communications	<ul style="list-style-type: none"> • Storage Area Networks • Wireless • Protocols <ul style="list-style-type: none"> - LDAP • Satellite • Multi-Mode • Location-Based Computing • Disconnected Node 	3	5 and 6
Information Assurance	<ul style="list-style-type: none"> • Intrusion Detection • Public Key Infrastructure (PKI) • Smart Cards • Authentication • Data Aggregation 	1	
Database	<ul style="list-style-type: none"> • Data Warehousing • Data Marts • Multiple Masters • Object Technology • Legacy Data Migration • DB2 		
Modeling and Simulation	<ul style="list-style-type: none"> • Architecture Modeling • Communications Modeling • Education and Pay 	2	
Payroll	<ul style="list-style-type: none"> • Web Services (J2EE) • Enterprise Application Integration • Business Process Execution Language • Business Process Management • Global XML Architecture • Industry-Specific XML Standards • Human Computer Interface • PeopleSoft • Rational 	4	
Human Resources	<ul style="list-style-type: none"> • Web Services (J2EE) • Enterprise Application Integration • Business Process Execution Language • Business Process Management • Global XML Architecture • Industry-Specific XML Standards • Human Computer Interface • PeopleSoft • Rational 	4	
Candidate SBIRs	<ol style="list-style-type: none"> 1. Data Mining Technologies for Proactive Detection, Computer Forensics, and Active Response of Security Violations in Large Information Systems 2. Emerging Technologies for Large Complex Systems 3. Multi-Agent System for Network Resource Availability 4. Multi-View Collaborative Engineering Environment 5. Smart Active Networks for Mobile Wireless Devices 6. Advanced Personal Communicator 		DM-A10-019

Figure 3-1. Many opportunities exist for current and future insertion of SBIR technology into DIMHRS subsystems.

DIMHRS (Pers/Pay) Goals	Relevant DIMHRS Subsystems	Relevant SBIR Insertion Candidates
Single, integrated Human Resources System for Personnel and Pay functionality.	All	1 to 6
Support approximately 3.1 million military personnel from all of the military services. 2.5 million personnel may require pay servicing at any given time. Projected expansion of personnel supported is 33% during mobilization.	All	1 to 6
Collect, store, pass, process, and report personnel and pay data for military personnel. Collect, process, and report data on military dependents, DoD-sponsored civilian, and designated foreign contingency, wartime, and non-combatant evacuation operations.	All	1 to 6
Single, integrated database for personnel and payroll and is common to all services. Required service-specific practices not re-engineered will be incorporated into DIMHRS.	All; especially Database, Human Resources, and Payroll	All, especially 4
Empower service members to better manage their own personnel information. Facilitates service members ability to access their personnel and pay information via self-service methods without visiting Personnel or Pay Office.	All; especially Human Resources, Payroll, Communications, and Hardware	All, especially 3, 4, 5, and 6
<p>Provide system that will effectively and efficiently:</p> <ul style="list-style-type: none"> - Manage and pay service members at all times - Meet changing operational conditions and requirements - Support full range of personnel life-cycle activities - Provide a one-stop administrative support capability - Provide single one-time data entry - Generate standard and ad-hoc reports - Reduce administrator, operator, and user workload - Support DoD-specific requirements (e.g., special categories of pay and allowances, retroactive pay processing, timely reaction to mandated personnel and pay changes, and service-unique pay functionality where required). 	All	1 to 6
<p>SBIR Insertion Candidates:</p> <ol style="list-style-type: none"> 1. Data Mining Technologies for Proactive Detection, Computer Forensics, and Active Response of Security Violations in Large Information Systems 2. Emerging Technologies for Large Complex Systems 3. Multi-Agent System for Network Resource Availability 4. Multi-View Collaborative Engineering Environment 5. Smart Active Networks for Mobile Wireless Devices 6. Advanced Personal Communicator <p style="text-align: right;">DM-A10-020</p>		

Figure 3-2. The direct relationship of DIMHRS (Pers/Pay) goals to subsystems and SBIR candidates reduces the need for custom code.

SECTION 4

4.0 Adaptability Through Features Such as an Open System Architecture

As illustrated in Figure 4-1, we have proposed a DIMHRS architecture that is based on open systems. Features of our proposed solution include component-based system design, solutions based on open system standards, and adaptive long-range technology planning. As also listed in Figure 4-1, the benefits of our solution include easier insertion of new technology, flexibility of payroll and human resource applications, tailorable to meet DIMHRS needs, and adaptive long-range technology planning to accommodate advances in technology that could be integrated into DIMHRS.

Thus, the proposed architecture is comprised of hardware and software that facilitates the integration and addition of new technology. This architecture consists of open system standards and frameworks such as Defense Information Infrastructure Common Operating Environment (DII COE), Java 2 Platform, Enterprise Edition™ (J2EE™), Joint Technical Architecture (JTA), and Java Messaging Service. Component-based system design and development facilitates the maintenance of applications.

4.1 Degree Proposed Technology Insertion Is Adaptable

Each proposed SBIR innovation considered for insertion into DIMHRS will be carefully reviewed using a systematic process for features such as adaptability. This ensures that the innovations selected are easily integrated into DIMHRS subsystems. As with our proposed architecture, candidate SBIR programs will be evaluated for compliance with open system standards and frameworks, reliance on proprietary hardware or software, and a component-based or object-based design and application development process. Each of these criteria will provide valuable clues as to how tailorable each proposed SBIR candidate is and how difficult these may be to maintain. Thus, the degree the proposed SBIR candidate is adaptable is an important consideration prior to recommendation for integration into DIMHRS.

Features	Benefits
<ul style="list-style-type: none"> • Open architecture 	<ul style="list-style-type: none"> • Easier insertion of new technology
<ul style="list-style-type: none"> • Component-based system design 	<ul style="list-style-type: none"> • Flexibility of payroll and human resources applications
<ul style="list-style-type: none"> • Solution based on open systems standards and frameworks <ul style="list-style-type: none"> – DII COE – J2EE – JTA – Java messaging service 	<ul style="list-style-type: none"> • Tailorability to meet DIMHRS needs
<ul style="list-style-type: none"> • Adaptive long-range technology planning 	<ul style="list-style-type: none"> • Adaptive planning accommodates advances in technology that could be integrated into DIMHRS

DM-A10-018

Figure 4-1. Adaptability of system promotes integration of SBIR Technology.

SECTION 5

5.0 Technology Upgrade Cycles

There are two distinct opportunities for insertion of SBIR technology into DIMHRS subsystems with minimum disruption. One is to integrate SBIR technology prior to a scheduled build or release of each UA. The other opportunity for insertion of SBIR technology into DIMHRS is during natural hardware or software upgrade cycles. As illustrated in Figure 5-1, we have provided a roadmap of technology upgrade cycles for DIMHRS. These present an additional opportunity for inserting SBIR programs into DIMHRS in the least obtrusive manner. Since there are a number of builds and a release for each UA and many natural hardware and software upgrade cycles for DIMHRS, there is ample opportunity to insert SBIR technology into DIMHRS on a regular basis.

5.1 Relevance of Technology Upgrade Cycles to DIMHRS (Pers/Pay) Program Goals

For DIMHRS, there are two distinct types of technology upgrade cycles. The first type follows the DIMHRS development schedule and includes the scheduled builds and releases for each UA. As illustrated in Figure 5-1, the second type of technology upgrade cycle is concerned with upgrading DIMHRS architectural components and software development applications.

Since the DIMHRS scheduled builds and releases for each UA will be completed in the first two years of the contract, all the DIMHRS (Pers/Pay) goals previously illustrated in Figure 3-2 will be relevant to this type of technology upgrade cycle. Additionally, the second type of technology upgrade cycle, as shown in Figure 5-1, is also relevant to all the DIMHRS (Pers/Pay) goals. As illustrated in Figure 5-1, beginning around the end of year two, core applications, tools, and architecture components such as PeopleSoft, PeopleTools, the database, hardware, the network, and other components of the architecture will be at a natural point for technology upgrade.

Technology	Example	Upgrade Frequency	Impact	Opportunities for SBIR Insertion
PeopleSoft	PS 8.4 to PS9.N	2 to 3 years	Major	Manage upgrade process Convert customizations Legacy interface automation
PeopleTools	PT 8.4.1 to PT 8.4.2	2 to 3 years	Moderate to Low	Leverage new capabilities
Database	DB2 upgrades	2 to 3 years	Major to Moderate	Information assurance Database integration with PeopleSoft Data conversion
Hardware	Server upgrades Workstation upgrades	2 years	Moderate to Low	Modeling and simulation
Operating System	HPUX upgrades	3 to 5 years	Moderate to Low	Verification
Network	Browser upgrades	2 years	Moderate to Low	Verification
Other	Wireless devices	1 to 2 years	Low	Information assurance Verification

DM-A11-017

Figure 5-1. DIMHRS builds and releases, coupled with technology upgrade cycles, provide ample opportunities for SBIR technology insertion with minimal disruption.

ATTACHMENT 1—LIST OF ACRONYMS

LIST OF ACRONYMS

ACTD	Advanced Concepts Technology Demonstration
AWIPS	Automated Weather Interactive Processing System
CECOM	Communications and Electronics Command
CORBA	Common-Object Request Broker Architecture
COTS	Commercial off the Shelf
CRADA	Cooperative Research and Development Agreement
CR&D	Contract Research and Development
DIA	Defense Intelligence Agency
DII COE	Defense Information Infrastructure Common Operating Environment
DIMHRS	Defense Integrated Military Human Resources System
DITDS	Defense Information Threat Data Systems
DoD	Department of Defense
GCPR	Government Computer-Based Patient Record
IDDOCS	Imaged Document Optical Correlation and Conversion System
IR&D	Independent Research and Development
IT	Information Technology
JBI-DT	Joint Battlespace Infosphere-Distributed Testbed
JPMO	Joint Program Management Office
JTA	Joint Technical Architecture
J2EE	Java 2 Platform, Enterprise Edition
Pers/Pay	Personnel/Pay
PKI	Public Key Infrastructure
PMP	Program Management Plan
R&D	Research and Development
SAGE	Situation Awareness Generic Environment
SBIR	Small Business Innovative Research
SPAWAR	Space and Naval Warfare
TCM	Technology Change Management
TKA	Tools for Knowledge Acquisition
UA	Useable Asset
USAOPTEC	United States Army Operational Test and Evaluation Command