



System of Systems Security Integration (SOSSEC)

Current Situation

Coordinated Homeland Defense (HLD)/Homeland Security (HLS) operations and effective resource sharing demand integrated and interoperable system of systems solutions that support agile, "sense and respond" security and defense capabilities cutting across organizational boundaries and spanning broad geographic areas. System of systems integration enables the timely access to shared sensitive information across all levels, maximizing capabilities to recognize, protect against, prevent, respond to, and mitigate the effects of terrorist attacks as well as manage and coordinate remediation and recovery efforts. SOSSEC provides this essential element of integration, weaving together individual HLD/HLS projects and solutions into a cooperative, inter-networked System of Systems.

A Comprehensive Strategy

The SOSSEC initiative draws upon the unique technological, programmatic, and organizational capabilities of the Department of Defense and its partners in Industry and Academia, working in close collaboration with civilian organizations at all levels to meet critical Homeland Defense challenges. The SOSSEC strategy is centered around four major elements:

- A flexible, inherently evolutionary Enterprise Architecture, based on the Federal Enterprise Architecture Framework (FEAF) and exploiting commercial standards and practices. This permits "loose" integration of individual capabilities, employing potentially diverse systems and technologies, while preserving essential information sharing and collaboration among diverse communities and across a full operational spectrum. The architecture mirrors and complements the Global Information Grid, and effectively integrates people, processes, information, and technology for maximum effect.
- A program plan that achieves early critical mass of integrated capabilities. Spiral development of regional capabilities, punctuated by a series of demonstrations at key milestones, will establish momentum, facilitate and encourage continual expansion of the integration process, and provide a natural path for migration of pilot programs to full implementation.
- An operational model that facilitates cooperation among "federated", yet independent, developers and stakeholders responsible for the individual participating programs.

- A joint marketing and outreach campaign to ensure effective application of resources and the incorporation of additional SOSSEC participants to ensure meeting HLD/HLS goals and objectives.

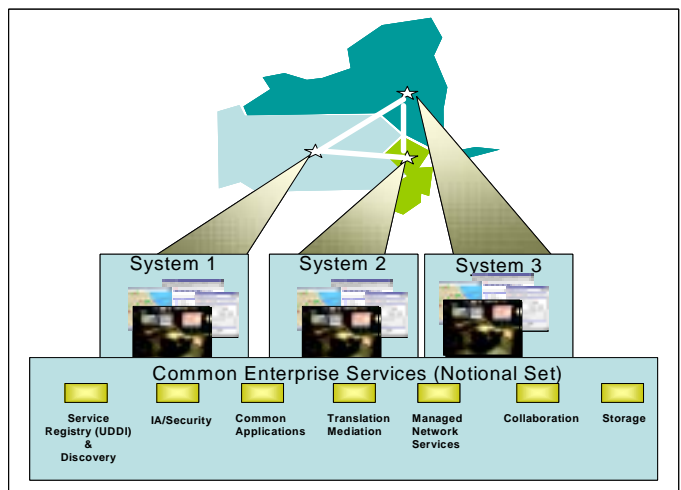
Forging an Integrated Security Grid

Linking individual projects together within an effective integration framework expands the capacity to address terrorist attacks or other disasters having regional or inter-regional impact. Collaboration and cooperation is enabled horizontally, between geographically dispersed peer organizations and vertically, between local, state, regional, and federal organizations. Both horizontal and vertical dimensions are critically needed to prepare for and respond to large scale events. These essential capabilities are addressed in addition to the original individual project goals. The results are greater, more enduring impacts on security and preparedness, higher return on investment, and a clear path for establishment of fully-funded follow-on implementation and operations programs at local, state, and federal levels.

Multiple Benefits

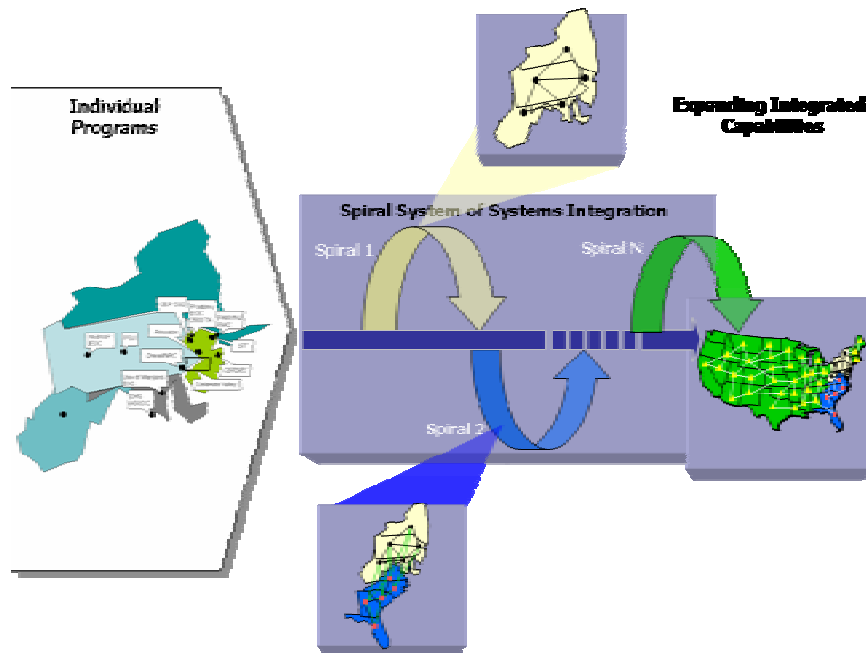
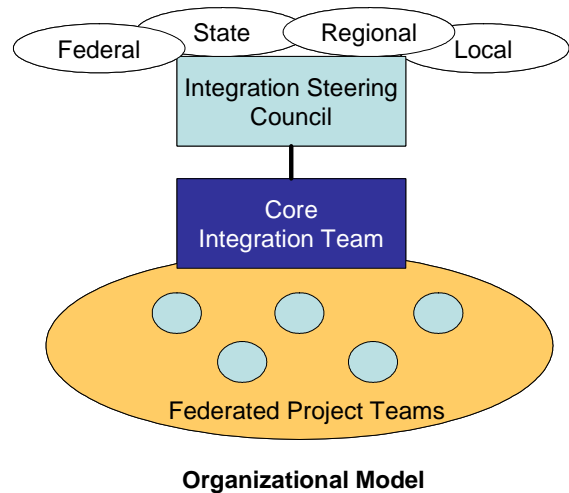
Successful execution of the SOSSEC initiative delivers significant benefits to multiple stakeholders:

- Military Services gain enhanced warfighting and force protection capabilities through readily replicated security solutions.
- HLD / HLS Practitioners (e.g., emergency managers, first responders, planners, and follow-on support organizations) gain new levels of operational capabilities to anticipate, protect against, and respond to emergencies resulting from terrorist actions or natural or man-made disasters.



Integrated Systems Supported by
Common Enterprise Services

- Dual-Use: Military and civilian users receive an economic benefit by using state-of-the-art technology at significantly reduced costs.
- Enhanced training and preparedness: The ongoing integration process, including conducting demonstrations and training readiness exercises, accelerates identification and adoption of best practices and best of breed technologies.
- Industry and Academia benefit from broader exposure and operational application of their products, technologies, and concepts, deeper understanding of operational requirements, and an expanded network of partnerships and alliances to support business and research interests.
- Government Agencies and Political Leadership gain benefit from a greater return on investments made in participating programs. As critical mass is achieved, and the integrated regional SOSSEC expands, the transition of pilot/demonstration projects to major, programmed implementation is greatly facilitated.
- Spiral Development and Demonstration provides the forum and opportunity to evaluate what works and assist in defining and establishing a firm set of requirements for system and product development.
- Most importantly, the constituents of the served communities benefit from markedly higher security from hostile actions and/or man-made or natural disasters.



System of Systems Integration Rapidly Builds Regional/National Capabilities for Homeland Defense/ Security and Force Protection