

Security Equipment Integration Working Group (SEIWG) Overview 12 Sept 2006

Harry Jones

L-3 Titan, supporting US Army

Phone: (703) 416-8007

E-Mail: harry.jones@L-3com.com

SEIWG Chairperson: Roy Higgins (USAF)

Service Representatives: Edward Layo (US Navy)

Timothy Bootle (USMC)

Richard Goehring (US Army)

Michael McGinnis (DTRA)

Architecture Advisor: Dr. Robert Rains (MITRE)

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SEIWG Mission

- Support the Physical Security Equipment Action Group (PSEAG)
- Ensure new security systems integrate with existing systems and minimize architectural redesign
- Focus activities on systems for intruder detection, access control, and detection of explosives in vehicles at entry control points
- Develop Anti-Terrorism/Force Protection Technical Standards Profile (TV-1), Technical Standards Forecast (TV-2), and interface control documents (ICDs) that guide development of physical security equipment by the four services

SEIWG Approach

- Evolve operationally demonstrated XML-based interfaces by adding requirements for new capabilities in such a way that new interfaces are backward compatible with existing capabilities
- SEIWG-ICD-0100 provides the foundation for the development of additional ICDs

Overview of Architecture Products and Standards Registry

- The Technical Standards Profile (TV-1) provides a list of standards each of which is mandated for specific system elements and/or information exchanges in a given architecture
- The Technical Standards Forecast (TV-2) provides a description of emerging standards and potential impact on current specific system elements and/or information exchanges, within specific time frames
- The DoD Information Technology Standards Registry (DISR) identifies the minimal set of standards governing the arrangement, interaction, and interdependence of system parts or elements, whose purpose is to ensure that a conformant system satisfies a specified set of requirements. It defines the standards and standards profiles applicable to all DoD systems. Use of the DISR is mandated for the development and acquisition of new or modified fielded Information Technology and National Security systems throughout the Department of Defense. Effective 15 July 2004, the DISR replaced the Joint Technical Architecture

REFERENCES

1. John P. Stenbit, DoD CIO, "DoD Architecture Framework (DoDAF)," 9 Feb 2004.
http://www.defenselink.mil/nii/doc/DoDAF_v1_Memo.pdf
2. "DoD Architecture Framework (DoDAF) Version 1.0, Volume I: Definitions and Guidelines," 9 Feb 2004.
http://www.defenselink.mil/nii/doc/DoDAF_v1_Volume_I.pdf
3. "DoD Architecture Framework (DoDAF) Version 1.0, Volume II: Product Descriptions," 9 Feb 2004.
http://www.defenselink.mil/nii/doc/DoDAF_v1_Volume_II.pdf
4. "DoD Architecture Framework (DoDAF) Version 1.0, Deskbook," 9 Feb 2004. The deskbook provides supplementary "how to" information relating to architectures. http://www.defenselink.mil/nii/doc/DoDAF_v1_Deskbook.pdf
5. DoD Directive 4630.5, "Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)", 5 May 2004.
<http://www.dtic.mil/whs/directives/corres/html/46305.htm>
6. Ms. Priscilla E. Guthrie, RADM N. Brown, and Mr. Robert J. Skalamera, "Department of Defense Information Technology Standards Registry Baseline Release 04-1.0," 15 July 2004. <https://disronline.disa.mil/a/DISR/docs/DISRBaseline0410.pdf>
7. DoD Information Technology Standards Registry (DISR). The Department of Defense (DoD) Information Technology Standards Registry (DISR) mandates the minimum set of standards and guidelines for the acquisition of all DoD systems that produce, use, or exchange information.
<https://disronline.disa.mil/a/DISR/index.jsp>

SEIWG Recent Activities

- SEIWG Spiral 1 (FY04)
 - Prepared initial draft of AT/FP TV-1
 - Prepared initial draft update to “Interface Specification (RF Data Transmission Interfaces) for the DoD Base and Installation Security System (BISS),” SEIWG-005A
 - Prepared initial draft of “Interface Control Document ICD-0100 for XML Information Interchange,” SEIWG-ICD-0100, an update to the XML ICD then being used by tactical force protection equipment
- SEIWG Spiral 2 (FY05)
 - Prepared second draft of AT/FP TV-1 and initial draft of AT/FP TV-2
 - Prepared updates to SEIWG-ICD-0100 and SEIWG-005
 - Prepared initial drafts of a number of AT/FP Command, Control, and Display Equipment (CCDE)-to-sensor/component ICDs

SEIWG Spiral 3 (FY06-07)

Architecture Tasks

Tasks 1, 2, and 3 started 28 April 2006. Tasks 4, 5, and 6 are options

- **Task 1 – Finalize FY06 AT/FP TV-1 and TV-2 and begin development of FY07 AT/FP TV-1 and TV-2**
- **Task 2 – Refine overarching ICD covering interfaces between AT/FP Command, Control and Display Equipment (CCDE) and sensors/components**
- **Task 3 – Develop draft CCDE-to-CCDE ICD**
- **Task 4 – Incorporate CCDE-to-Access Control System ICD into overarching ICD developed under Task 2**
- **Task 5 – In support of interface verification/validation, develop and demonstrate software implementing CCDE-to-sensor/component/access control system interface requirements defined in Tasks 2 and 4**
- **Task 6 – In support of interface verification/validation, develop and demonstrate software implementing CCDE-to-CCDE interface requirements defined in Task 3**

SEIWG Spiral 4 (FY07-08)

Planned Architecture Tasks

- **Finalize FY07 AT/FP TV-1 and TV-2 and begin development of FY08 TV-1 and TV-2 (FY07)**
- **Prepare initial draft CCDE-to-Integrated Base Defense Command and Control (IBDC2) ICD (FY07)**
- **Prepare validated AT/FP CCDE-to-sensors/components/access control systems ICD and CCDE-to-CCDE ICD for formal review/ approval (late FY07 or early FY08)**
- **Begin development of IBDC2 external ICDs (FY08)**
- **Submit Validated CCDE-to-sensors/components/access control systems ICD and Validated CCDE-to-CCDE ICD for Final Review/ Approval (FY08)**
- **Refine CCDE-to-IBDC2 ICD and prepare for formal review/approval (FY08)**
- **Continue to maintain TV-1 and TV-2: Updates due annually (FY08 and beyond)**
- **Maintain SEIWG-005A / SEIWG-005B: Updates due bi-annually (even years beginning FY08)**

Long-Term Vision for SEIWG

- **Continue to work urgent SEIWG ICD development tasks**
- **Maintain products already developed (e.g., SEIWG-005A, SEIWG-005B, TV-1, TV-2, CCDE-to-sensors/components/access control systems ICD, CCDE-to-CCDE ICD, and CCDE-to-IBDC2 ICD)**
- **Begin developing foundation AT/FP architecture views for each service and a joint service set of views**

Security Industry Association (SIA) Standards Committee

- The SIA standards council is an ANSI accredited organization with a mission to “*work to create the best technical environment for the application of security technologies.*”
[Ref. <http://www.siaonline.org/response.asp?c=standards.>]
 - Developing common, open, interoperability protocols and performance standards.
 - Representing SIA to the Security Industry Standards Council, to Standards Developing Organizations, and to other standards related venues
- The SIA and SEIWG have similar long-term goals: to develop products that are “open” in order to create a “Plug and Play” environment. Synergy exists between the groups.
- The SEIWG is building a relationship with the SIA

Society of Automotive Engineers (SAE) Unmanned Systems Committee (AS-4)

- The Unmanned Systems Committee of the SAE (SAE AS-4) is assuming responsibility for the Joint Architecture for Unmanned Systems (JAUS) Reference Architecture Specification
- Some AT/FP systems make use of unmanned systems [e.g., Mobile Detection Assessment Response System (MDARS); and Force Protection Airborne Surveillance System (FPASS), aka “Desert Hawk.”]
- The SAE AS-4 and SEIWG have similar long-term goals and intersecting interests
- The SEIWG has begun building a relationship with SAE AS-4

Sensor Standards Harmonization Working Group (SSHWG)

- The SSHWG seems to be focusing primarily on standards associated with Chemical/Biological/Radiological/Nuclear (CBRN) sensors.
- The SEIWG effort is focusing primarily on systems for detecting intruders approaching/entering a base/installation/facility without authorization; base/installation/facility access control; and detection of explosives in vehicles entering the base
- The SSHWG and SEIWG have similar long-term interests
- Within two to three years, we anticipate evolving requirements for integration of all base/facility/installation sensor data, including intruder data and CBRN data. As those requirements evolve, information exchanges will be mutually beneficial
- The SEIWG has begun building a relationship with the SSHWG

CD

- SEIWG Products on CD:
 - SEIWG Approved Documents
 - SEIWG-005A with Addendum
 - SEIWG Draft Documents (work in progress)
 - SEIWG-ICD-0100
 - SEIWG Draft 2006 TV-1
 - SEIWG Draft 2006 TV-2
 - SEIWG Draft CCDE-to-sensor/component ICDs