

NDIA SE HSI Committee Quarterly Meeting

April 14, 2016

Agenda

- **Welcome and introductions**
- **Committee overview**
- **Membership**
- **Recent Activity**
- **Future Directions**
- **2016 HSI Committee Plan**
- **19th Annual SE Conference**
- **Issues/Concerns**
- **Summary**
- **Wrap-up and actions**

NDIA-SE HSI Committee Overview



- **HSI committee reports to the NDIA SE Division**
- **Draft OSD Charter in 2008, Committee in 2009**
- **NDIA venue provides an opportunity for both govt and contractors to share and align**
- **Concerned with HSI policy, processes, and tools that support our community of interest and how that informs and adds value to the SE community**
- **Chairs**
 - OSD – David Schulte, Andrew Monje
 - Industry – Drs. Matthew Risser, PSE and Patrick Fly, Boeing

Mission, Goals & Objectives

Mission:

- Develop a Government and Industry partnership to effectively integrate Human Systems Integration (HSI) in the DoD acquisition process to improve overall system performance and decrease total ownership lifecycle costs.

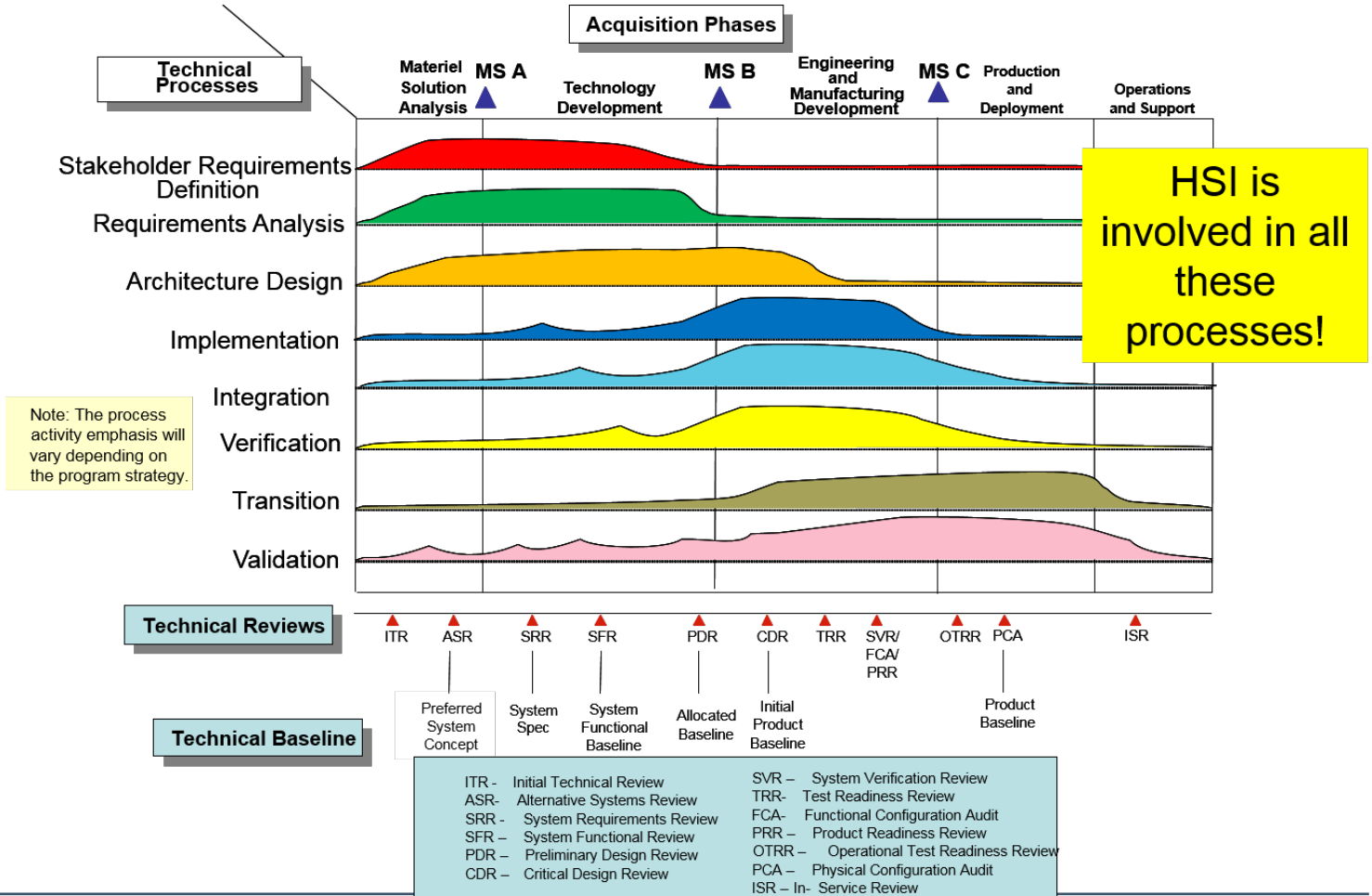
Strategic Goals

- Through partnership and collaboration to:
 - Establish and promote a common understanding of HSI
 - Advocate for the continued integration of HSI in acquisition efforts
 - Establish a means to share HSI knowledge, methods and best practices
 - Address common HSI gap areas
 - Standardize on use of language-coordinate with others

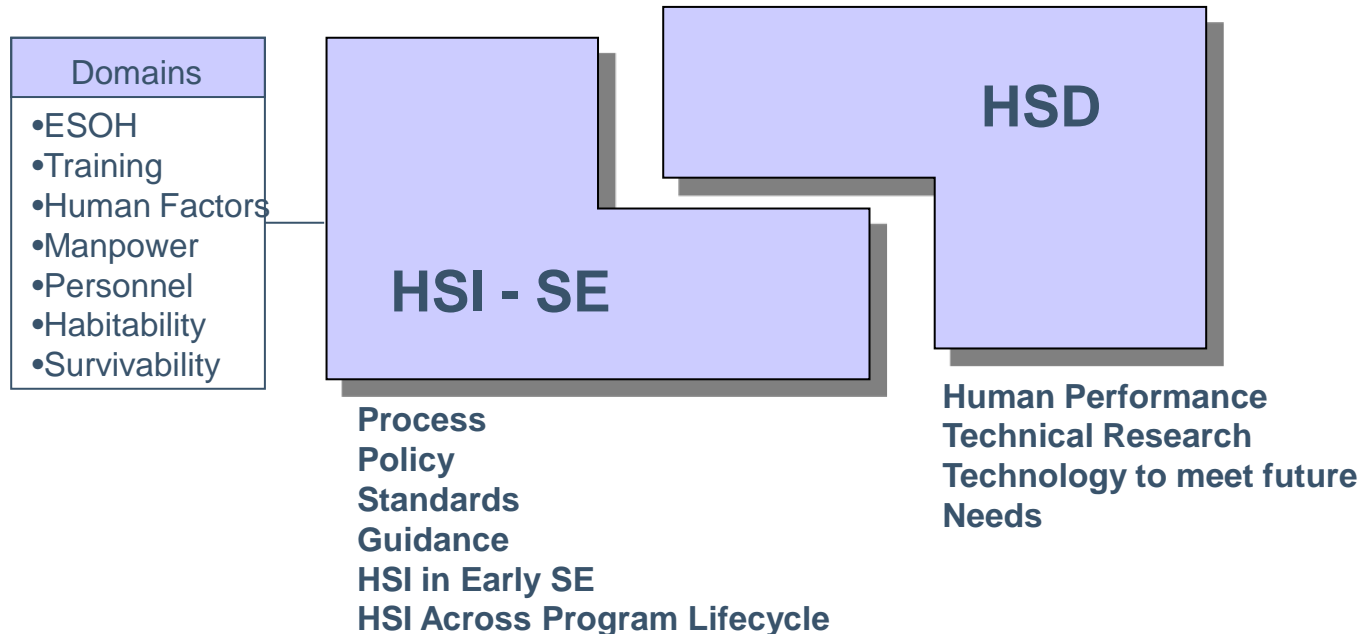
Objectives

- Grow our HSI community of practice to share knowledge, methods & tools, and collaborate with other committees and industry/academia groups
- Implement HSI uniformly, per DoDI5000.02, for best value HSI design & development solutions
- Leverage the best of HSI best practices and technology use from government, industry and academia to close gap areas and position HSI for the future

Technical Processes and Activity



Synergy with NDIA HSD



- **We are Complementary Groups Advocating for HSI**
- **NDIA SE- HSI & NDIA HSD to collaborate and support each others meetings & work products**

Standing HSI Activities

- **Quarterly teleconferences**
- **Track at annual SE Division Conference**
- **Bi-monthly SE Division meetings**
- **Align with**
 - Other SE Committees (e.g., ESOH)
 - NDIA Divisions (e.g., NDIA Human Systems Division)
 - Related groups (e.g., Joint HSI Working Group)

NDIA SE Committees

- **Architecture**
- **Automatic Test**
- **Capability Maturity Model Integration (CMMI) Project**
- **Education & Training**
- **Enterprise Health Management**
- **Environment, Safety, and Occupational Health (ESOH)**
- **Government Liaison**
- **Human Systems Integration**
- **Joint Committee for Systems Engineering and Manufacturing**
- **Life Cycle Support**
- **Mission Analysis**
- **Modeling & Simulation**
- **Software Experts Panel**
- **Steering Committee and Industry Affiliations & Liaisons**
- **Systems Security Engineering**
- **Systems Engineering Effectiveness**
- **Systems of Systems Engineering**
- **<http://www.ndia.org/Divisions/Divisions/SystemsEngineering/Pages/default.aspx>**

Membership Update

- **42 member on the distribution**
 - 24 government
 - Navy, Air Force, Army, USMC, NASA, NPS, OSD
 - 18 industry
 - LMCO, NGC, Boeing, GD, Sandia, small business

- **Over 200 presentations**
- **Panel discussions**
 - **Chief Systems Engineers**
 - **Industry Executives**
 - **DoD Program Managers**
- **Keynote presentation by Mr. Steven Welby, Assistant Secretary of Defense for Research and Engineering (ASD(R&E))**
- **HSI:**
 - **Two HSI paper sessions**
 - **Panel discussion on Human Readiness Levels in DoD Acquisition**
- **<http://www.dtic.mil/ndia/2015system/2015system.html>**

- **Purpose: Reached out to HSI representatives at the Office of the Secretary of Defense (OSD) and members of the Joint HSI Working Group:**
 - **Discuss plans and on-going activities between the organic and industry leadership in the Systems Engineering community that is supporting the HSI discipline.**
 - **Discuss HSI Committee plans for 2016.**
 - **Discuss how HSI Committee interfaces with the NDIA HE Division.**

- **Mainly Human Factors-oriented, with some HSI:**
 - **Session on HSI Metrics**
 - **Panel on Government HSI Initiatives**
 - **Three presentations on Wednesday (including Wednesday's keynote address) that discussed the importance of HSI**
- **HSI Roundtable discussion**
 - **Discussion included reps from government, industry and academia**
 - **Patrick Fly took the action to review finalized notes and help support in following up on action items.**
- **<http://www.dtic.mil/ndia/2016Human/2016Human.html>**

2016 NDIA SE Division meetings (General Dynamics, Washington, DC)



- **Wednesday, February 17**
 - Presented HSI Committee's tasks for 2016
- **Upcoming meetings:**
 - April 20, 2016
 - June 22, 2016
 - August 17, 2016

Future directions for HSI Committee



- **Support OSD in the development of a list of existing HSI tools**
- **Assist DoD HSI Standards Working Group with reviewing HSI standards**

HSI Committee – 2016 Status

2016 Tasks Planned	Status	Accomplishments (deliverables, etc.) - Comments
Align with ESOH, M&S, SEEC and SoS for the conference track	In Progress	Held HSI committee meeting on 14 Apr. Plan for and hold HSI track at the 2016 NDIA SE Conference.
Identify HSI success stories with ROI metrics	In Progress	In coordination with the Joint HSI Working Group, reach out to NDIA Human Systems Division to identify success stories. Create a common approach and a common format of the success stories.
Defining pre-Material Development Decision (MDD) HSI activities for early systems engineering	In Progress	Effort currently underway to use HSI Framework to identify pre-MDD HSI activities with USAF.
Get alignment and stakeholder buy-in for early acquisition and ensure HSI is captured properly	In Progress	Reached out to Navy lead of DoD HSI Standards Working Group. On schedule to have draft criteria developed in CY16Q3.

Last update: 04/12/16

19th Annual SE Conference

- **Date: October 24-27, 2016**
- **Place: Springfield, VA**
- **Abstract submission deadline: June 10, 2016**
- **Abstracts must fully describe the planned content and how the presentations will advance the objectives of the conference and session.**
- **Presentations must be in electronic format; full papers are optional and are not required.**
- **Abstracts must include presentation title, author's name and title, e-mail address, phone number, mailing address and organization.**
- **HSI topics for systems engineering may include process, methods, tools, policies, metrics, standards, applications, etc.**

19th Annual SE Conference



- **Submit abstracts at <http://application.ndia.org/abstracts/7870>.**
- **19th Annual Systems Engineering Conference website: www.ndia.org/meetings/7870.**

Issues/Concerns

- Adequate representation from the HSI community at the Annual SE Division Conference.
- Representation from other NDIA SE committees needed
- Charter update needed?
- HSI Committee website update needed:
<http://www.ndia.org/Divisions/Divisions/SystemsEngineering/Pages/HSISubcommittee-SE.aspx>

Summary/Minutes

- **Recent committee activity:**
 - **18th Annual SE Conference (10/23/15 -10/27/15)**
 - **Meeting with HSI representatives at OSD (01/06/16)**
 - **2016 HSD Conference (02/09/16 – 02/10/16)**
 - **SE Division meeting (02/17/16)**
 - **Developed 2016 HSI Committee Goals**
- **Call for papers for 2016 Annual SE Division Conference**

Summary/Minutes

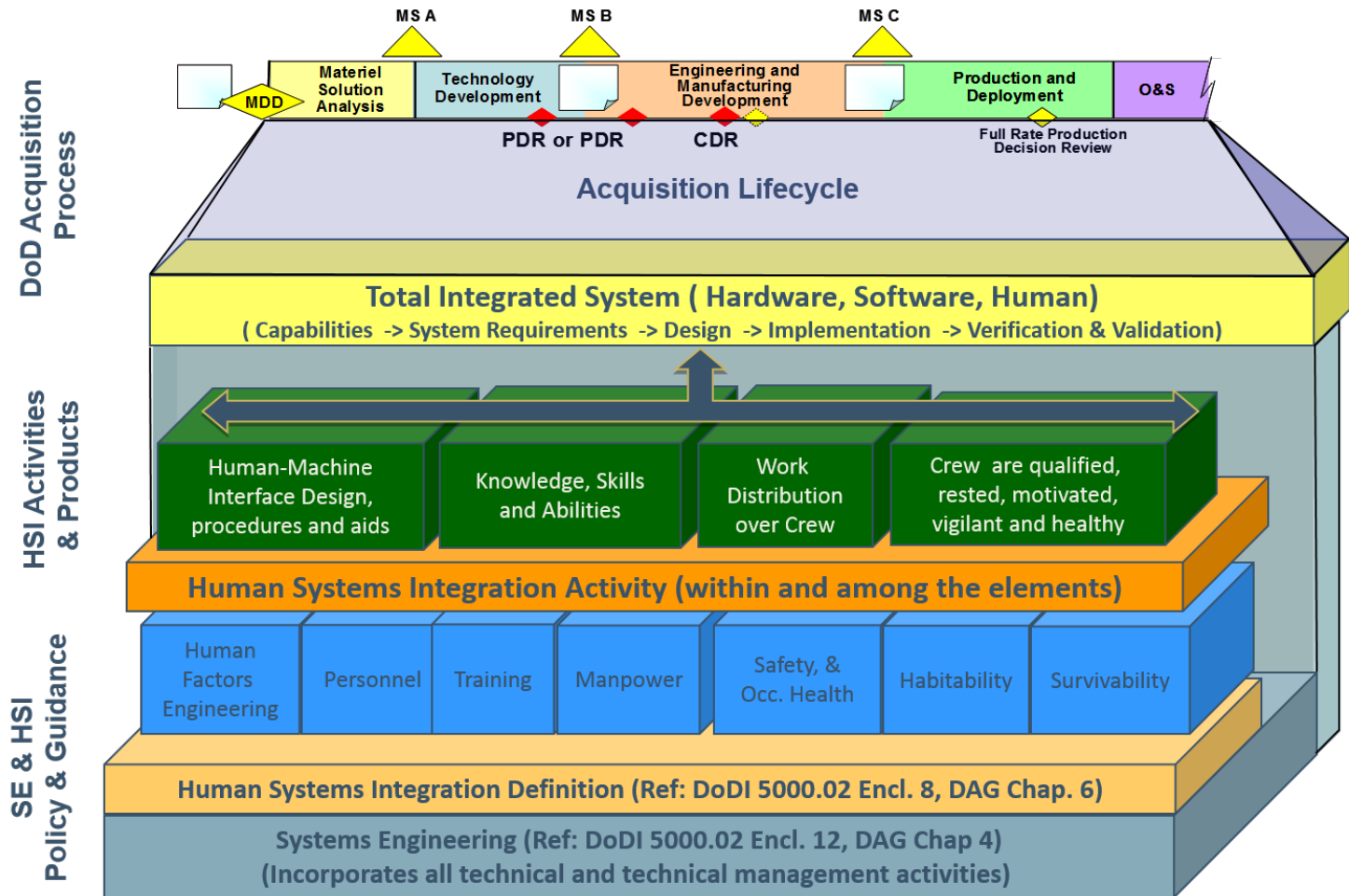
- **Bev Knapp to send out HSI success story templates and POCs for existing tool repositories. Also discussed current HSI Joint WG activities.**
- **Dave Schulte discussed**
 - **Body of Knowledge**
 - **Upcoming HSI Expo Days at the Pentagon (3-4 May, 2016)**
 - **HSI Defense Standardization**
- **Steve Merriman asked for any volunteers interested in joining the SAE Human Systems Standard to contact Patrick Fly.**

Contact

- **Matthew Risser, risser@pacific-science.com**
- **Patrick Fly, patrick.m.fly@boeing.com**
- **David Schulte, david.c.schulte2.ctr@mail.mil**

Backup

Improved Total System Performance



Previous SE Accomplishments



- **HSI in DoD policy, standards, and guidance**
- **HSI in early SE**
- **HSI support to rapid acquisition**
- **HSI in resilient systems**