DEFENSE ACQUISITION MATERIALS DECLARATION

AEROSPACE AND DEFENSE INDUSTRY ACTIVITIES

Tim Sheehan, CIH, CSP, PE
Engineering Fellow
AIA NAS411WG co-chair & (former)/IAEGWG1 (Materials and Substances Declaration) lead
Raytheon Company
Timothy_j_Sheehan@raytheon.com

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MATERIALS AND SUBSTANCES DECLARATION
- BACKGROUND

- Chemical content of hardware/articles and related support requirements
  - Obtain, manage, utilize data "rolled-up" from the supply chain
  - Standardized data elements
  - Electronic and/or "paper" formats

- IPC-1754 - developed for data exchange in aerospace and defense industry ("Materials and Substances Declaration for Aerospace and Defense and Other Industries")
  - Supports both substances-in-articles (SiA), as well as substances-in-process (SiP) declarations
  - The IAEG has supporting tools, training and data management resources to support AD industry declarations

IAEG® RESOURCES

- Aerospace and Defense Declarable Substances List (AD-DSL
  - Currently, Version 3

- Associated support lists
  - AD Query List
  - AD Material Use Function List
  - AD Substance Use Function List

- Aerospace and Defense Substance Reporting Tool (AD-SRT)
  - Excel spreadsheet

- Supporting training, reference guides, etc.

AEROSPACE INDUSTRIES ASSOCIATION (AIA)

- National Aerospace Standard 411 (NAS411) Working Group (NAS411WG)
  - Collaboration between industry and the military ESOH community
  - Focus - standardizing and improving materials and substances data reporting on acquisition programs
  - Developed/Manages:
  - NAS411, Hazardous Material Management Program
    - Identifies data to be delivered to customers
  - Developed/manages NAS411-1, Hazardous Material Target List (HMTL)
    - Currently - Revision 1
   - "Harmonized" with the AD-DSL

CURRENT INITIATIVES

- Use AD industry framework to support acquisition program reporting and risk management
  - Integrate the AD-DSL into the HMTL
  - Use IPC-1754 data to contribute to:
    - Logistics Product Data
    - Hazardous Material Management Program Reporting (MIL-STD 882E, Task 108)
    - System safety hazardous material risk assessments (O&SHA, HHA, EHA, etc.)
- Expand data use – to support:
  - **<u>Design selection – identify and minimize lifecycle ESOH/supply risks</u>**
  - Residual risk management – to protect users, maintainers, environment
  - Compliance with regulatory requirements (e.g., REACH) – internally and for customers
  - Materials obsolescence management – characterize substance dependencies

DECLARATION DATA ELEMENTS

- NAS411WG is currently discussing data element integration between IPC-1754 and Hazardous Material Management Program Reporting

- Reporting is based on components and materials

- Required data elements include:
  - Supplier information – name, address, CAGE code
  - Part information – description, identification, etc.
  - Substance Name, CAS#, chemical family, etc.
  - Material (name) where the substance occurs (Optional in IPC 1754)

- Optional data elements elements (in 1754, but may be imposed by contract)
  - Mass

ACQUISITION DECLARATION "VISION"

Data "flow"

Supply chain

Defense industry

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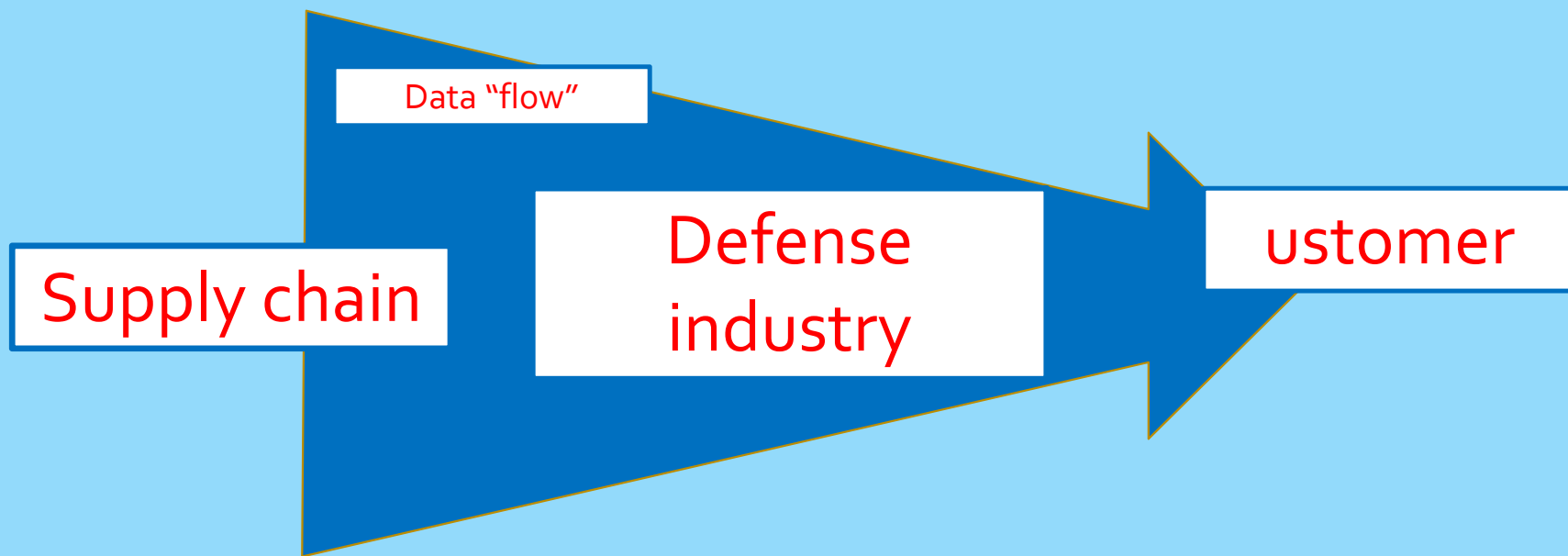
Electronic, reusable data, sourced from the extent of the defense supply chain!

CHALLENGES

- Increasing/evolving requirements and capabilities
  - E.g., EU Waste Framework Directive - **S**ubstances of **C**oncern **I**n articles, as such or in complex objects (**P**roducts) – "SCIP" database
  - Increasing product data management capabilities

- Declaration process development/support
  - E.g., standard methods to determine/estimate substance content in "articles"

- Communications and engagement.

THANK YOU!

Questions?