# Air Force Association (AFA) Air Space and Cyber (ASC) Conference Industry Sidebar – Digital Materiel Management (DMM) Consortium

1. **Purpose and Context.** On 12 Sept 2023 Gen Duke Richardson, Commander, Air Force Materiel Command (AFMC), and Hon Andrew Hunter, Deputy Secretary of the Air Force for Acquisition, Technology, and Logistics, co-hosted a sidebar session with several industry partners. This side-bar session was facilitated by Col Erik Quigley, Director of the AFMC Digital Acceleration Task Force (DATF), and Mr. Kyle Hurst, Chief of the Digital Transformation Office (DTO). The focus of the sidebar session was to discuss Digital Materiel Management (DMM). DMM is defined as ensuring critical processes employ digital methods across the entire lifecycle – from invention to retirement – for both warfighting capabilities as well as installations and mission support capabilities.[1] In order to fully employ DMM, models must replace documents. Structured data must replace disparate information. Digital collaboration must break down decision stovepipes.[2] The sidebar session at AFA was intended to discuss what areas are most ripe for government and industry collaboration and partnership in order to realize DMM.

2. **Attendees.** Attendees for this sidebar session included traditional defense prime industry partners and senior acquisition professionals. Air Force representatives included:
    a. Gen Duke Richardson, Commander AFMC
    b. Hon Andrew Hunter, Assistant Secretary of the Air Force for Science, Technology, and Logistics
    c. Mr. Fobert Fookes, Director of Engineering and Technical Management, AFMC
    d. Ms. Kristen Baldwin, Deputy Assistant Secretary of the Air Force for Science, Technology, and Engineering
    e. MGen Alice Trevino, Deputy Assistant Secretary for Contracting
    f. Ms. Kathy Sowers, Director of Strategic, Plans Programs, Requirements, and Analyses, AFMC
    g. Mr. Rich Clifford, Deputy General Counsel for Acquisition, Technology and Logistics
    h. Col Erik Quigley, Director of the Digital Acceleration Task Force, AFMC
    i. Mr. Kyle Hurst, AFMC/EN
    j. Dr. Steve Turek, AFMC/EN
    k. Mr. Nihad Alfaysale, SAF/AQR
    l. Mr. Noah Demerly, AFMC/EN
    m. Ms. Elizabeth Loiacono, AFMC/EN
    n. Mr. Ryan Patrick, AFMC/FM
    o. Ms. Patricia Judge, AFMC/PK
    p. Mr. Christian Ryan, AFLCMC/PK
    q. Mr. Brennan Townley, AFMC/EN ctr support
    r. Ms. Philomena Zimmerman, Systems Engineering Research Center
Companies represented by industry participants included:

       **a.** British Aerospace (BAE)
       **b.** General Electric (GE) Aerospace
       **c.** Honeywell
       **d.** Lockheed Martin
       **e.** Northrop Grumman Corporation
       **f.** RTX
       **g.** Rolls Royce

3. **Sidebar Introduction Discussions.** Hon Hunter opened the meeting with a dialogue focused on how industry and government collaborate in a digital first way, how we could better share information collaboratively moving forward. Ms. Baldwin highlighted the urgency to act and briefed a short set of slides that included AQ and AFMC Digital priorities and objectives, as well as the Digital Building Codes guidance document that sets Air Force and Space Force Service Acquisition Executives' expectations for programs to better leverage digital tools and technologies. Ms. Baldwin also briefed the six initiatives within DMM, as depicted in figure 1.



*Figure 1. Digital Materiel Management Initiatives*

At this point, the concept of a collaborative government/industry consortium was initiated. Ms. Baldwin shared that the Air Force is already working with NDIA to establish an Industry Association Consortium on the topic of DMM. The Air Force also shared that it may pursue additional industry consortia approaches, including selective, funded consortia. At this point, a series of discuss questions was shared for industry feedback.

4. **Discussion Topics.** The following discussion questions, and associated conversations, were held:
   a. Discussion question: How do primes share data with each other, their subs, and government while protecting IP?
      i. Contractual arrangements often govern this; often only what is prescribed to share is what is actually shared. Primes may prescribe tool but want to limit stifling creativity. Modularity and open architecture are also important.
      ii. Cost is an important consideration as well, and is typically modeled early in the process by industry.
      iii. Cooperative Research and Development Agreements (CRADAs) were provided as a good example of data sharing agreements
      iv. Architecture must be figured out early. There are also several ongoing efforts organized by industry to work on these issues. For example, a data standards working group that industry self-organized was referenced.
   b. Discussion Questions: What policies are in place by the Air Force that inhibit our collective digital transformation?
      i. The importance of leveraging existing standards and information rather than attempting to create something new was discussed.
      ii. Some industry partners articulated that technology and strategy is developing very quickly in this space and cautioned patience to better understand tactical applications before getting too far along with policy changes.
   c. What does a collaborative digital environment look like? What would make this feasible?
      i. Gen Richardson opened this topic up with a discussion about several program deep-dives he had recently received and gave examples how each of the programs had developed their own solution.
      ii. Hon Hunter added that is comes down to data and how that data is shared, owned, and managed.
      iii. One industry partner echoed that the data needed to be actionable to be useful. It was also highlighted that it's a bi-directional problem and clearly defined government/industry swim lanes are needed.
      iv. Data stewardship and ownership will and should change through the lifecycle. Focusing on what data people need to do their jobs and make data-driven decisions should be a priority.
      v. Gen Richardson highlighted the importance of specificity; much of the discussion was about data generally but we don't want to be overwhelmed with all of the data, we just want the data that we'll actually use
      vi. Ms. Baldwin highlighted that data will inevitably be a focus area of the consortium and will be discussed more at the initial consortium meetings.
   d. Other discussion question that we're provided but not discussed due to time limitations were:

   i. What mandates and requirements are not in place today that would help if the Air Force was more prescriptive?

   ii. What are actionable/tactical ways we can address data access vs. ownership during design and development?

   iii. What existing standardization activities for data standards, formats, style guides, and frameworks are already underway?

     1. Where is the government not involved where we should be?

5. **Next Steps**. The Air Force is seeking to continue discussions with industry, Federally Funded Research and Development Centers (FFRDCs) and University Affiliated Research Centers (UARCs), and formal industry forums (e.g. National Defense Industrial Association (NDIA), American Institute for Aeronautics and Astronautics (AIAA)). The Air Force will begin hosting formalized engagements, likely in partnership with NDIA and under the title "US Air Force Digital Material Management (DMM) Industry Association Consortium (IAC)". These events will be widely advertised through AFMC and NDIA. The Air Force is also seeking additional industry feedback and areas for government/industry collaboration in a notional funded and selective Digital Acceleration Consortium. Industry can provide feedback directly to Col Erik Quigley (erik.quigley@us.af.mil), Mr. Kyle Hurst (james.hurst.18@us.af.mil), or through formal RFIs that will be published by the AFMC DMM team.

Sources:

1. 2023 AFMC Strategic Plan, https://www.afmc.af.mil/Home/Strategic-Plan/
2. Digital Materiel Management: An Accelerated Future State, https://dafdto.com/wp-content/uploads/2023/06/DMM-Gen-Richardson-Manifesto-v5-2023-06-02-CL.pdf