National Defense Industrial Association Systems Engineering Division Modeling and Simulation Committee

Status Report on the Essential Elements of the Digital System Model Subcommittee

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Status of the Subcommittee's Activities

- **Completing the Study Final Report**
  - **Draft Final Report completed**
  - **Submitting draft into the NDIA internal review / approval process**

- **The model will be made available in two forms:**
  - **A static view for those who want to look at the model – most likely in .pdf format**
  - **A format that will allow individuals to use the model data – most likely in MS Excel format**

- **Anticipate making annual updates to the model to incorporate feedback provided by the community**

- **Approved Final Report and the model will be posted on M&S Committee website**

Overview of the Model

- **All phases of the DoD acquisition lifecycle**
- **283 distinct acquisition and modeling & simulation activities**
- **7 milestones / decisions**
- **588 distinct input/output items**
 - 211 of which have been tagged as "essential elements"
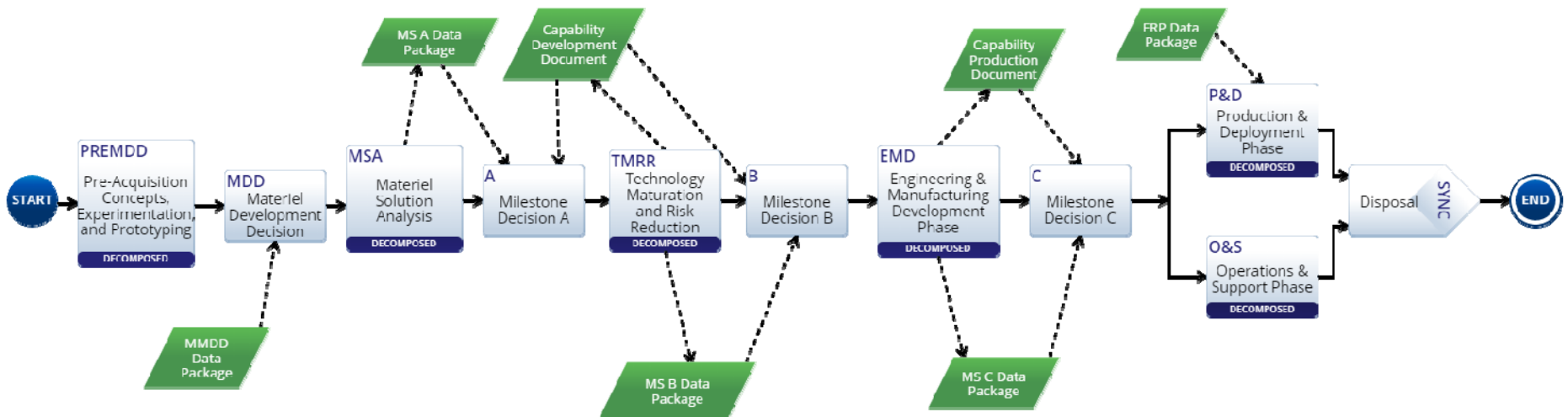
Defining an Essential Element

- **"Use" characteristics of a DSM essential element:**
  - Required by an acquisition activity or M&S capability for all types of systems
  - Required to make decisions during the lifecycle
  - Used in more than one acquisition activity during the lifecycle
  - Used by more than one organization, or discipline, during the lifecycle

- **"Impact" characteristics of a DSM essential element:**
  - Required by DoD acquisition policies and/or best practices
  - If it is changed, it will impact other elements or the system
  - Required to complete all activities in the acquisition process

- **An essential element of the DSM is information and/or data that:**
  - if missing, prevents subsequent acquisition activities from being performed; or
  - is required to make decisions at formal Decision Points and Milestone Decisions identified in the acquisition life cycle.
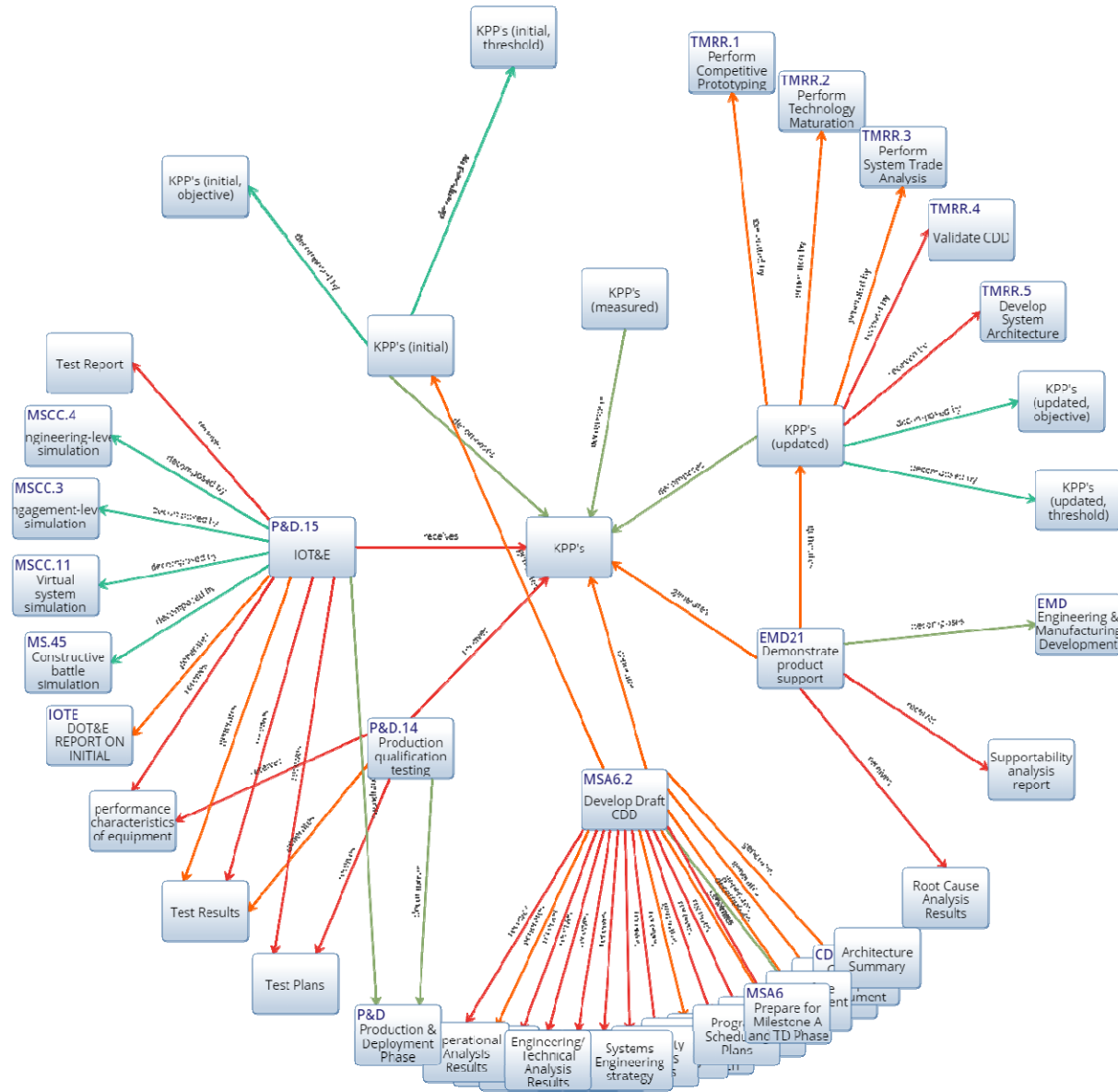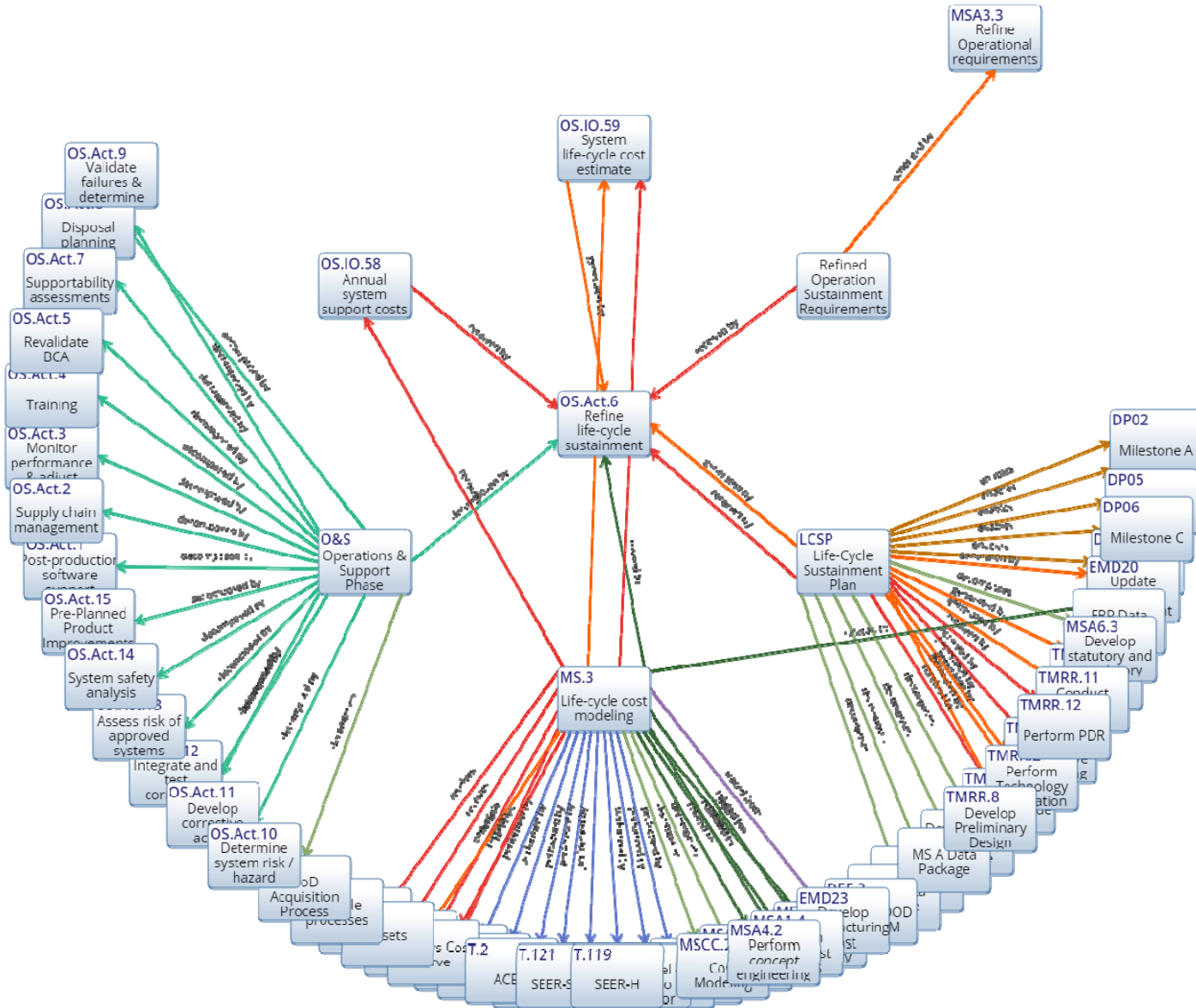
Benefits of the Study

- **Provides guidance to Government contracting officers and program managers:**
  - Identifies the data and information that Government produces and Industry needs
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- **Formal model provides a platform for further analysis:**
  - Identifying areas where the digital system model can impact the effectiveness of the acquisition process
  - Guiding improvements in how modeling and simulation capabilities and data can better support the digital system model and the acquisition process
  - Assessing how potential changes to the acquisition process will affect the generation and use of the data and information contained within the digital system model

Subcommittee Members and Organization

- Jeff Bergenthal (JHU/APL, Study Lead)
- Tyesia Alexander (Engility)
- David Allsop (Boeing)
- Bill Beavin (Boeing)
- Curtis Blais (NPS)
- Alex Boydston (AMRDEC)
- David Bottcher (Boeing)
- Christina Bouwens (MSCI)
- Jim Coolahan (JHU)
- Steve Dam (SPEC Innovations)
- Bob Epps (Lockheed Martin)
- Tracee Gilbert (Engility)
- Allen Harvey (TASC)
- Greg Haun (AGI)
- George Hazelrigg (NSF)

- Craig Hugger (emSOLVE)
- David Kaslow (self)
- Jack Kelly (Engility)
- Crash Konwin (BAH)
- Claudia Kropas-Hughes (AFRL)
- Andrea Lora (Engility)
- Frank Mullen (SimVentions)
- Chris Oster (Lockheed Martin)
- Greg Pollari (Rockwell Collins)
- Hans Polzer (self)
- Frank Salvatore (Engility)
- Jayne Talbot (Raytheon)
- Tim Tritsch (Engility)
- Bill Warner (Boeing)
- Beth Wilson (Raytheon)

Questions?