

Charter

Mission Analysis Committee

of the NDIA Systems Engineering Division

Background

Mission Analysis is paramount in developing a deeper understanding of Warfighter needs to provide better solutions. This is especially true in Pre-Milestone A activities, when taking into account today's environment of escalating system of system complexity incorporating netcentric concepts. Pre-Milestone A Mission Analysis is intrinsically intertwined with CONOPS, Mission Architecture, Modeling and Simulation (M&S), etc., but at higher levels of abstraction than is found in traditional Systems Engineering methodologies. Systems Engineers are faced with first understanding future mission objectives, how specific missions are carried out today, what gaps exist in those mission areas, and then conceptually exploring alternative solutions. Business Case Analysis and DOTMLPF trade studies must be employed to downselect those alternatives before beginning an Analysis of Alternatives (AoA). Only at the conclusion of the AoA do more traditional System Engineering methodologies begin, focused on system performance leading to technology demonstrations and systems development. Understanding the differences between Pre-Milestone A Systems Engineering methodologies performed at higher levels of abstraction and the more traditional methodologies is required to provide more robust Pre-Milestone A systems engineering. These factors reinforce the need for an industry forum focusing on Pre-Milestone A Mission Analysis.

Mission Analysis Committee Mission

To provide a forum where government, industry, and academia can share lessons learned, promote best practices, address issues, and advocate the role of Pre-Milestone A Mission Analysis in the Systems Engineering process. The primary purpose is determining successful strategies for incorporating mission analysis principles and their relationships to CONOPS, Mission Architecture, M&S, etc. to provide better Warfighter solutions.

Objectives

The following is an initial set of objectives that the committee will update on a routine basis, as needed:

- Determine a common lexicon for Mission Analysis terminology
- Strengthen the Systems Engineering methodology for dealing with high level of abstraction Mission Analyses
- Understand the relationship of CONOPS, Mission Architecture, M&S, etc. to the Mission Analysis Process
- Define the way Industry can better support JCIDS Capability Based Assessments through Mission Analysis
- Evaluate and provide recommendations on policy and guidelines as to their impact on Pre-Milestone A Systems Engineering activities
- Provide best practices for Pre-Milestone A Mission Analysis and other Pre-Milestone A Systems Engineering activities.
- Etc.