



MBSE Benchmarking Study

An industry collaboration on the value and effectiveness of MBSE across the life cycle

Study Plan

NDIA Systems Engineering Division meeting

August 8, 2019

MBSE Benchmarking Project Planning



Objective	<ul style="list-style-type: none"> Assess value and effectiveness of MBSE adoption for improving business outcomes (gov't, industry) – benefits vs. traditional methods. Develop a profile of MBSE use and meeting expectations across the life cycle. Where are we as organizations, and as an industry? Building models, or using models? Applying what we learn. Enable adopters to conduct a qualitative or quantitative assessment of their progress against MBSE best practices and guidance on developing an improvement roadmap
Method(s) (Ideas - TBD)	<ul style="list-style-type: none"> Need an incentive and value exchange for participants Align with INCOSE MBSE maturity matrix – orgs can self-assess and establish benchmarks/roadmap (may need to abstract the details a little bit) Interactive feedback at CAB meeting (voting devices, cell phones?) MBSE survey: qualitative/quantitative information characterizing MBSE practices, capability, value, benefits. Probe alignment and integration with other adopter initiatives (e.g., PLM, DevOps, cross-discipline) Collect and share existing assets on MBSE benefits/value from community, in any form; anecdotal
Organizational Involvement	<ul style="list-style-type: none"> Participation call through industry associations: INCOSE (lead), NDIA, IEEE, AIA, ... Government sponsorship and support: DoD (OUSD R&E), FFRDCs (SERC, MITRE, Aerospace) Core team with organizational reps (volunteers to “do the work” as needed) Survey administration (distribution, collection, analysis): DoD SERC (Stevens Institute). “Honest broker” to protect organization proprietary data.
Schedule (notional)	<ul style="list-style-type: none"> Survey: definition (Stevens: Sep-Oct); instrumentation (Nov-Dec); distribution and feedback (Dec-Jan); analysis (Feb-Mar) - <i>SERC funding from DoD for DE Metrics study is through 3/31/2020.</i>
Leadership / Coordination	<ul style="list-style-type: none"> INCOSE: Laura Hart (TBD); Troy Peterson; Garry Roedler NDIA: M&S Committee (Chris Schreiber); SE Division (Geoff Draper; Garry Roedler) IEEE: Bob Rassa SERC: Tom McDermott, Nicole Hutchinson