Synchronizing M&S Plans Across Navy Acquisition

Or:
Prior Proper Prudent Planning Prevents Piss Poor Performance

21 October 2008

The insights presented here are those of the authors and do not reflect any official views. We would like to thank NAVMSMO, NRL, and NMSO for their years of support.

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Outline

• Why M&S Planning
• Synchronize to Requirements
• Synchronize to Other Plans
• Synchronize to Future Activities
• Snapshot of Current Navy Acquisition M&S Plans
• Conclusions and Recommendations
**M&S Investments**

Large Expenditures in M&S!
Yet the Cost of Planning is Quite Low*
M&S Planning Can...

- Identify cross-cutting requirements and potential synergies
- Associate funding expenditures and capability delivery
- Facilitate common technical infrastructures
- Establish relationships between key personnel
- Help coordinate individual efforts
Relevance to Community

• Leaders / Sponsors

• Planners / Managers

• Developers / Implementers

• Operators / Users

That is:

Leave Any One Out at Your Peril
Empower and Involve

• The Willing

• The Impacted

• The Needed

• The Required
Guide and Iterate

• Spiral Development – With POA&M

• Include All Community Members

• Start General and Mature Specificity

• *Stay* in ‘Swim Lane’ of Plan Type
Interconnect to Other Documents

**Baseline Assessment**
*Descriptive*
- Application Areas (and enablers)
- Programs and Funding
- Trends and Issues

**Master Plan**
*Prescriptive*
- Navy-Wide Vision and Goal
- Application Areas and Enablers
  (associated visions and goals)
- Strategies and Sequencing
- NAVMSMO’s Mission

**Application and Enabler Road Maps**
*Proactive*
- Area visions and goals
- Implementation, Objectives, Funding, Metrics
- Processes, Resources, Timing
- Organizational Missions

**Investment Strategy**
*Fiscal*
- Simulation and Supporting Efforts
- Analysis and Navy-Wide Rationalization and POMing
- Dollars, Personnel, and Facilities with Potential for Synergy
Account for External Activities

External Depends...

- Coalition, Joint, DoD, Other Service, …
- DHS, DoS, …
- Congressional, …
- Considering Each / All Can Improve the Plan
## Define Terms and Timing!

| Master Plan | Vision = *Utility* of simulation to the Navy Enterprise  
|            | Goals = Application and enabler sub-components of Navy-wide vision (long-term)  
|            | Strategy = Overall actions taken to reach vision and goals  
| “5-25 yrs” |  

| Business Plan | Vision = *Contribution* of simulation to application area or enabler (goals from above)  
|              | Goals = More specific application area or enabler components (mid-term)  
|              | Means = What needs to be done and *process improvements*  
|              | Mission = Relevant organizational roles and responsibilities  
| “3-15 yrs” |  

| Road Map | Goals = *Application* of M&S to meet systemic goals  
|         | Objectives = Activities and tasks required to achieve goals (mid / near-term)  
|         | Execution Approach = Means to accomplish goals and objectives (how, who, where)  
|         | Sequencing, Timing, Resources = Order, duration (when), and investments needed  
|         | Metrics = That reflect contribution / value and degree to which objectives have been met  
| “1-10 yrs” |  

| Implementation Guide | Execution Approach = *Specific steps / actions* required (near / now-term)  
|                     | Context = Application of individual standards, codes of best practice, and similar  
|                     | Product = A POA&M of capabilities that will be delivered over time  
| “1-3 yrs” |  

*and Strategic Plan, Investment Strategy, Program Plan, ...*
Implementing Processes

• M&S Specific - *Technical*
  – Visualization, Data, Time Management
  – Languages (JAVA), Availability (SOA), etc.
  – Hardware / Distribution Alignment

• M&S Context - *Requirements*
  – Information Technology, Soft/Hardware, etc.
  – R&D / S&T / ACTDs
  – Commercial Developments

• M&S Relevant - *Users*
  – Involve End Users Early and Often
  – Understand and Reflect the Problem Context with the M&S Use
Incorporation of Data

• Good

• And Evolve, to…

• Good Enough

• “The perfect is the enemy of the good enough”
Integration of Leadership

- Involve Leader(s) – AMAP
- Develop Broad “Top Cover”
- Iterate / Promulgate Ideas, Plans, Policies
- Implement (Enforce) Directives (as much as possible!)
Synchronizing M&S Plans Across Navy Acquisition

Snapshot of Today

• The US Navy M&S Acquisition Community has
  – Developed an M&S Business Plan Structure
  – Using it as a foundation for an ASN(RDA) M&S Road Map
  – RM includes Leadership, Infrastructure, and Similar
  – RDA interacts with all Navy M&S Communities

  “Lead by Example While Gathering Steam”
Conclusion – Planning Can Establish

- “Shared vision / understanding of objectives
- Commitment of the organization and its people
- Ability to partition complexity into actionable parts
- Use of intermediate steps
- Application of proven methods and standards”*

* Success Factors, SOS Engineering Conference, 25 July 2006, Mr. Carl Siel, ASN(RDA) CHENG
Recommendation

• **Plan!**

• *It’s well worth the investment!*
Back-Up
Plans Promote... (I)

1. Conversion of the vision, goals, and strategy found in the Master Plan into specific (executable) actions and objectives
2. Better meeting of requirements through articulation, projection, and understanding of needs and capabilities available to address them
3. System life-cycle cost reduction by efficiently meeting requirements and through enabler alignment, synergy, and integration
4. Identification of system, decision, and process prerequisites, precedence, dependence, and sequencing
5. Establishment of technology insertion and modernization points and ways to leverage other Service, Joint, Government, and private enterprise initiatives
6. Definition of current and needed funding levels, programmatic, and relevant performance metrics*
7. Capabilities development, acquisition, and deployment priorities and approaches
8. Identification of organizational roles and responsibilities and proposed changes and enhancements

* - to include warfighter impact, opportunity costs, and similar measures of merit
9. Statement of definitions, informing interested communities, and consolidation of relevant information, resources, and references

10. Base-lining of current systems and developing consensus on requirements

11. Plans to be formulated to meet current requirements and proactive approaches to be constructed to address long term needs

12. Development and agreement on process descriptions of needed and optional actions, decisions, information gathering and submission points, and roles and responsibilities of organizations and individuals

13. Effective orchestration of experiments, demonstrations (ACDs and ACTDs), systems developments and deployment, and organizational changes

14. System convergence, integration, and consolidation approaches that may be required

15. Characterization of challenges and approaches to meet them

16. Matching and aligning of future required capabilities, emerging software and hardware technologies, developing standards, and maturing design, development, and manufacturing methods