03 January 2004

To Whom It May Concern:

On behalf of Navy Modeling and Simulation Office Verification, Validation, and Accreditation (NMSO VV&A), it gives me great pleasure to invite you to share your VV&A policies and processes at the upcoming Joint NMSO/Army M&S Office (AMSO) VV&A Technical Working Group (TWG), to be held on Wednesday, 16 February 2005 at the Dugway Proving Grounds Conference Center in Salt Lake City, UT.

The purpose of the workshop is to educate, share, and understand M&S VV&A practices, methodologies, and tools with participants from all Navy/Army commands and activities. Additionally, it is an opportunity to identify issues and concerns affecting the M&S VV&A community at large, with emphasis on the policy and implementation processes. As such, we do have a few recommended areas for discussion in your presentation. Previous TWGs have brought to light several key questions and areas of discussion in which VV&A implementers have shown keen interest. These key questions are listed on the second page and we encourage any insight that you might provide in these areas. We have found that adherence to these themes have helped to create both greater understanding and greater benefits gained from attending the TWG.

We would greatly appreciate your acceptance to our invitation. Please RSVP at your earliest convenience, but no later than COB Friday, 14 January 2005 to Hanae K. Hara (hanae@nosc.mil or 619.553.3803). Please do not hesitate to contact me if you have any questions. It would be my pleasure to assist with any administrative and coordination questions or details you may have. For general NMSO VV&A information, please visit the NMSO website at http://navmsmo.hq.navy.mil.

Sincerely yours,

Hanae K. Hara
NMSO VV&A TWG Coordinator
O.B.O. Ms. Jennifer Park, NMSO VV&A Lead
And Mr. Frank Schwartzenberg, AMSO VV&A Lead

Suggested Topic Areas for VV&A TWG Presentations

We have found that TWG participants have asked questions/would like to broaden their understanding of VV&A in the areas listed below. The topic areas have been provided to guide the presentation flow on your VV&A process. Please feel free to speak broadly on several areas or focus in on a specific topic that challenged your program.

I. Policy Compliance, Planning, and Execution
- A. Policy Compliance
  1. What DOD, SECNAV, and/or internal policies were used to implement and evaluate VV&A.
  2. Have these policies aided in the implementation of VV&A?
  3. What aspects of the policy were applicable to your program?
- B. Planning
  1. Organization and Teaming Structures
     a. What organizational and teaming structures are used to conduct VV&A? If formal organizational structure was used, describe the reporting and line of communication infrastructure.
     b. How have these structures evolved and been tailored to meet internal needs, scheduling constraints, and M&S user needs?
- C. Process of Requirements & Clarity of the Intended Use
  1. Are the M&S user's requirements locked and agreed upon prior to initiation of the M&S development? Is the identification of the user a part of the requirements definition?
     a. What kinds of changes to the requirements are encountered along the road of development? What are the costs associated with these adjustments?
  2. With what level of detail and clarity are the requirements presented to the those involved in the M&S and M&S VV&A Process?
  3. What problems have the VV&A agents and M&S developers encountered in identifying and fulfilling the user requirements?
  4. Were your requirements defined early on the program? If so, how did this assist in risk migration and identifying potential problem areas?
- D. VV&A Execution: Innovations of Process
  1. What processes or techniques have been useful in expediting the M&S VV&A process?
- E. VV&A Execution: Budgeting, Tracking, and Scheduling
  1. How has your program budgeted for VV&A?
     a. How much does VV&A cost your program?
     b. Has VV&A been a cost issue for the M&S program?
  2. With what level of scrutiny and success has the VV&A been tracked?
  3. Details of scheduling for VV&A in relation to the overall M&S development
- F. Configuration Management
  1. Is configuration management conducted and is it effective?
- G. Defining the Conceptual Model V&V
  1. How is conceptual model V&V conducted? Has sufficient data been available to conduct CM V&V?
  2. What is your program's definition of Conceptual Model?
  3. What issues have fallen out of the CM V&V effort? How have these issues been resolved?
- H. Data V&V

1. What level of data V&V is performed?
2. What was the method used to collect and analyze data appropriate for the program?
3. What problems have V&V agents encountered in obtaining the data necessary to perform V&V?
4. Was there sufficient data to validate the M&S. If not what other means were used to validate the M&S? Has data V&V created added value to the overall M&S program?

I. Systems V&V
1. How was a system verified and validation? What process was used to validate the systems in a distributed or stand alone environment?
2. What problems have been encountered in attempts at systems V&V?

J. Documentation
1. What kinds of documents have been produced as a part of V&V?
2. Is the documentation generated sufficient as valid artifacts for those who may be interested in use of your models and simulation?
3. What kinds of information have been consistently lacking in V&V?

K. COTS and V&V
1. What sorts of COTS have been used in the V&V process?
2. How have these COTS been evaluated and determined as sufficient for the fulfillment of V&V?
3. How have these tools added value to the V&V process?

II. Lessons Learned and Evaluation of VV&A Efforts

A. Lessons Learned
1. Problems and challenged faced in the VV&A effort.
2. Has VV&A brought to light inherent problems with the M&S which would otherwise have gone unchecked?

B. Risk Mitigation
1. Has VV&A aided in risk mitigation of M&S?
2. What efficiency or value has VV&A aided to the M&S process?