



Infrastructure Management Working Group (IMWOG) Annual Report to the Directors Calendar Year 2007

Introduction

The Vision of the Infrastructure Management Working Group (IMWOG) is to share its expertise in Infrastructure Management and provide strategic advice that will enable the Department of Energy (DOE) and its contractors to have a responsive infrastructure that is essential to support the DOE's missions. In addition, the IMWOG will focus on key DOE issues with the goal of meeting mission needs cost effectively.

The purpose of the IMWOG is to promote excellence across the DOE complex, and as a team, foster growth and opportunities to continue to incorporate the Best Practices at all the DOE sites using shared information and resources to accomplish this vision.

IMWOG's approach is to partner with the DOE and its contractors, to communicate effectively across the complex and to develop core guidelines and shared leadership styles to support Facility Management as the foundation of a responsive infrastructure in support of the DOE Missions.

The scope of the IMWOG includes improving asset maintenance, management, and planning; work management productivity; recommending and/or developing effective infrastructure metrics, asset acquisition, including use of alternate financing techniques and effective use of small business; improving construction management; and disseminating Best Practices and Lessons Learned.

Membership

IMWOG currently has 78 members with 21 member companies represented along with three DOE HQ sponsors. The Working Group is comprised of five subgroups focused on specific Facility and Infrastructure (F&I) areas with sponsorship from the DOE. The Steering Committee includes the working group officers, subgroup chairs, and DOE sponsors. Below is the IMWOG Leadership team:

- **IMWOG Working Group Officers**

—Pamela Horning	BWXT	Sponsoring Director
—Denise Robinson	LLNL	Chair
—John Clymo	NSTEC	Vice chair
—Lanny Bates	ORNL	Secretary

- **DOE/NNSA Sponsors:** Robert Dino Herrera, NNSA/NA-52; Paul Bosco/Pete O'Konski, OECM/MA-50; John Yates, OS/SC-31.2



- **Subgroup Chairs**

—Jim Medford	AREVA	Asset Acquisition
—Rab Malhotra*	Argonne	Asset Management & Performance Measures
—Mark Gokey*	BWXT Y-12	Construction Management
—Ed Williams*	SNL	Maintenance Management
—Tony Jennings	CH2MHill–Hanford	Work Management

*Three of the sub-groups had a change in Chairs during 2007

Working Group Objectives and Achievements—Overview

The IMWOG continues to focus on key initiatives established with the DOE and NNSA sponsors to include maintenance and operations (M&O), deferred maintenance, alternate financing, performance metrics, and work management. In summary, the major accomplishments include development of white papers on sustainment models and partnership with DOE/EH to support DOE Order 433.1, Maintenance Management Program for DOE Nuclear Facilities.

The scheduled activities for the year included the monthly steering committee conference call every second Wednesday, which improved communication between the DOE sponsors and the sub-group chairs progress on the initiatives; the Asset Acquisition Subgroup meeting and Construction Management Subgroup meeting both held in February 2007.

The IMWOG annual meeting was held at the Atomic Testing Museum in Las Vegas, Nevada October 23-25, 2007 hosted NSTec. Some of the highlights were:

- Executive Order 13423 and Real Property Management
- NNSA, OECM and Science sponsor briefings on their F&I Progress
- Reliability Centered Maintenance (RCM)
- DOE Order 433.1 Working Group FY 08 and Out years Activities - Maintenance Management Program for DOE Nuclear Facilities
- Work Planning & Control for “All” Activity Level Work
- President’s Management Agenda: Real Property Management
- Renewable Energy



Subgroup/Task Group Objectives and Achievements

Asset Acquisition (Jim Medford, AREVA).

The subgroup initiatives included comparing metrics between alternate finance projects and DOE funded projects, alternate finance project guidelines, and developing an alternate finance lessons learned handbook. The summary of accomplishments are as follows:

- Finalized the current alternate finance survey results.
- The updated list of projects and Lessons Learned document was completed in April 2007 and the plan is to update it thereafter as appropriate. This approach will promote the development and availability of a technical resource for alternative financing that represents current experience within DOE. This will promote consistency, improve quality of documentation, and minimize the learning curve for member representatives attempting to develop an alternate finance project.
- The alternate finance handbook completed June 2007 is an expanded version of the presentation developed in 2006 on the same subject. In addition, a document library was completed August 2007 that relates to alternate finance projects. These resource materials will enhance efficiency related to the development of alternate finance projects.

Asset Management and Performance Measures (Rabinder Malhotra).

The subgroup worked on the initiatives summarized below:

- Surveyed RPV calculation methods. John DiNicola of Brookhaven National Laboratory and John Yates with the Office of Science are working on the initiative with the goal of achieving possible future savings if the benchmarking leads to cost saving improvements. Phase I survey of EFCOG sites compares methods used to calculate RPV. Phase II completed in October 2007 evaluates the results. Rollout of the results will be provided in 2008.
- Development and Rollout of Facilities Data Warehouse. The subgroup held a workshop at NTS to share the methods and views needed to create the warehouse. The attendees included Dave Bedsun, NSTec Nevada Test Site, Barbara Spavin, Insight, Gary Horen, OECM, and other interested sites. The subgroup had planned to create a Facility Data Warehouse that could be shared with all of the sites, however, several issues arose and this initiative was put on hold.

During the year Jill Farrell of LLNL stepped down and Rab Malhotra of Argonne was selected as the new Chair at the IMWOG Annual Meeting. We appreciate all of Jill's efforts in leading this sub-group.



Construction Management (Mark Gorkey Y-12)

The goal during the subgroups first year was to seek collaborative opportunities with DOE and coordinate its efforts with related EFCOG subgroups/initiatives.

During the year John Howanitz of BWXT/Y-12 stepped down and Mark Gokey of BWXT/Y-12 was selected as the new Chair at the IMWOG Annual Meeting. We appreciate all of John's efforts in leading this sub-group.

Maintenance (Ed Williams, SNL)

- Partnered with the OECM and the Asset Management subgroup in the development of a White Paper on sustainment model best practices and reviewed the current sustainment modeling tools used within the complex.
- Assisted OECM in identifying an operations cost measure to facilitate their benchmarking of costs within the complex.
- Continuing to partner with DOE on the DOE Order 433.1 Working Group on nuclear facility maintenance:
 - Developing maintenance implementation plan graded approach guidance
 - Developing nuclear facility maintenance oversight criteria review and approach document
 - Trending safety related maintenance cost against the National Research Council recommended maintenance expenditure of 2–4% RPV,
 - Determining the deferred maintenance impact on safety structures, systems, and components,
 - Determining the impact of 10CFR851 worker safety and health program on nuclear facility maintenance
 - Revising DOE facility maintenance management training course (PMCE06)

During the year Lynn Eberhardt of ORNL stepped down and Ed Williams of SNL was selected as the new Chair at the IMWOG Annual Meeting. We appreciate all of Lynn's efforts in leading this sub-group.



Work Management (Tony Jennings, CH2MHill–Hanford)

The subgroup performed an assist visit at SRS. The goal was to achieve continuous improvement through independent review and benchmarking. Feedback indicates the assist visit was successful and additional visits to other sites have been requested.

Subgroup/Task Group Planning for the Year Ahead

Asset Acquisition (Jim Medford, AREVA)

1. Work with DOE (OECM) to develop and publish guidelines for implementing alternate finance projects.
2. Develop a Lessons Learned document from recent DOE alternate finance (to include GSA construction lease) successes

Asset Management and Performance Measures (Rab Malhotra, Argonne)

The subgroup has two initiatives:

1. Asset Utilization Index Goals and metrics. Develop White Paper on Asset Utilization goals and metrics.
2. RPV calculation methodologies. Partner with the Maintenance Subgroup to develop a White Paper on Calculating RPV and guidance related to RPV of enduring vs non-enduring facilities.

Construction Management (Mark Gokey, BWXT Y-12)

The subgroup has three initiatives:

1. Development of a productivity tool.
1. Discussion paper regarding Q clearances for craftsmen.
2. White paper on barriers to effective execution of construction.



Maintenance (Ed Williams, SNL)

The subgroup has four initiatives:

1. Continue supporting the Chuck Ramsey (DOE/EH) with the 433.1 Working Group.
2. Continue support of OECM and NNSA on sustainability (greening of real property) as required by Executive Order 13423 and establishment of a consistent approach to sustainment.
3. Deploy the results of sustainment model white paper
3. Develop definitions for skill of the craft.
4. Work with Office of Science on their Stewardship Initiative.
5. Conduct a survey of the maintenance management systems the different sites are using
6. Address 2-4% maintenance related to non nuclear enduring and non-enduring facilities

Work Management (Tony Jennings, CH2MHILL–Hanford)

The subgroup has three initiatives:

1. Perform an Assist visit at LLNL in the late spring.
2. Develop White paper on incorporating Human Performance Improvement (HPI) into work control corrective actions.
3. Survey sites to develop benchmarks on ratios of support personnel to crafts.



Lessons Learned

Coordination among working groups is critical to avoid potential overlapping topics. Contractor changes are increasing turnover in the leadership of sub-groups which in turn slows down progress on initiatives. We need to establish Vice Chairs for each of the sub-groups to facilitate continuity during personnel changes.

Effectiveness Evaluation

The Working Group continues to have excellent support and involvement from our DOE/NNSA sponsors. Those partnerships are evidenced in the numerous DOE/NNSA requests for input from the Working Group.

Recommendations

Continue to partner with the NNSA, OECM, and SC on key initiatives. Explore ways to more fully engage EM with the Working Group. Continue to deliver on initiatives and remain flexible enough to respond to ad hoc requests from the DOE and NNSA.