Notes from the Chair:
Dear Management Division members,

Greetings from the executive committee!

Hope all of you are doing well. As we head towards the end of the year, the committee would like to provide a brief update on our activities over the last few months. The committee has been working on several initiatives, a few of which, are summarized below:

- **Rejuvenating the social media presence of the Management Division:** Dr. Wolfgang Mueller has been working on increasing the level of interaction through the Management Division social media websites i.e., LinkedIn Discussion groups and Twitter accounts. To that end, you can expect to get an update from the committee with more information that will enable you to interact with your colleagues.

- **Outreach to schools with Engineering Management programs:** Dr. Siva Pilli has been driving the outreach effort to schools with engineering management programs. The team has been selectively reaching out to engineering management programs in US and Canada, to increase awareness of the Management Division within ASME and inform them of the opportunities for leadership and networking as part of the division.

- **IMECE Management Division Meeting:** Several members of the executive committee are busy organizing the Management Division meeting during IMECE 2012. We invite you to join us on **Sunday, November 11, 2012 at 1PM** at the Hilton Americas in **Houston, Texas, USA**. Note that there is a significantly reduced conference fee for attending just the meetings (*See note below regarding MD sponsorship of meeting attendance*). We welcome the opportunity to meet our constituents at every ASME event and look forward to seeing you there.

Those are the highlights of the activities of the executive committee over the last few months.

We welcome you to get involved in the leadership of the Management Division. To that end, several committee positions will be opening up as we head into early 2013. Please feel free to reach out to any of the executive committee members (for contact information [click here](#)) with questions you may have or if you would like to get involved with the workings of the executive committee.

Regards,

Chetan Paydenkar
Management Division Chair

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1. For this year, the MD will cover conference meeting registration expenses (maximum of $25) for all management division members who attend the MD meeting during IMECE 2012. Please contact the executive committee to learn more about possible funding for your section members.
Call for articles on Engineering Management for ASME publications

The Management Division is periodically called upon to contribute articles in ASME publications such as the Mechanical Engineering Magazine that all of you are familiar with. To that end, if any of our members would like to author or co-author a leading article in the magazine as early as January, 2013, please contact the Division Chair (Chetan Paydenkar) for further information.

Thank you and looking forward to hearing back.

Spotlight Article from our past-chair Mr. Ted Aanstoos, P.E.

Engineering Project Management Certification in the Federal Sector

In an earlier Management Division newsletter article, we talked about the transportability of engineering management skills to Project Management in other disciplines. We widened the scope of engineering project management from core mechanical engineering projects (such as R&D, new product development, etc) to include three broad ranges of activity; project management, information and data management, and human resource management. Of course these are not mutually exclusive, but they require quite a diverse set of skills, in areas ranging from business analysis to systems engineering, operations research, conflict resolution, regulatory compliance, risk analysis and management, sustainability, law and ethics, and many others.

Since that discussion, I have had the challenge and pleasure of working as Program Manager and Supervisory Project Manager in two major federal agencies. There are several primary (and many secondary) paths for project management accreditation that apply in the federal sector, and engineers have an intrinsic cross-linking to these due to our training and experience. Following are top-level descriptions of some of these.

Associate Engineering Manager (AEM) / Professional Engineering Manager (PEM)

The American Society of Engineering Management delivers the Associate Engineering Manager (AEM) and Professional Engineering Manager (PEM) certifications. While these are tailored to the technical skills in engineering project management, they can be very useful toward acceptance in various project management disciplines in the public sector.

Requirements for the AEM and the more advanced PEM vary by training, education, and professional experience. Initial certification is good for three years; re-certification is by continuing education and experience.

Training plus experience plus a written examination are required for the PEM accreditation (the written exam is waived for engineers with the PhD degree).

Project Management Professional (PMP)

The PMP certification is offered by the Project Management Institute, and is widely recognized as a basic qualification for a position as project manager in the US Government in several disciplines, including
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Information Technology and Design and Construction. The initial PMP certificate is earned by 40 hours of classroom training, a written exam, and detailed documentation of project management experience. The core curriculum of the PMP is contained in the Project Management Book of Knowledge (PMBoK), which organizes project management into five process groups:

1. Project Initiation
2. Project Planning
3. Project Execution
4. Project Controlling
5. Project Closing

These broad groups in turn contain 44 individual processes which form the training and examination body of knowledge. The PMP certificate also requires continuing education and experience documentation. In many federal positions, the PMP is accepted as entry qualification for project management position descriptions (PDs) and for GS classification.

Federal Acquisition Certification for Program and Project Managers FAC-P/PM

The Services Acquisition Reform Act of 2003 (SARA, P.L. 108-136) expanded the definition of acquisition to include functions performed by program and project managers. In response, the Federal Acquisition Certification for Program and Project Managers (FAC-P/PM) is being integrated by executive level federal agencies. While not discipline specific, FAC-P/PM is being used in project management arenas ranging from acquisition, information technology, design and construction services, mission development, etc. Core management competencies are the focus of the extensive training for FAC-P/PM, which is graded in three levels depending on training and experience.

FAC-P/PM training and certification is offered to career-level federal employees and will probably become the core qualification for positions ranging from Product and Project management, to COTR/COR (contracting officer technical Representative/Contracting Officer Representative). Especially, the more senior FAC-P/PM levels will be required for all major federal acquisitions and capital projects.

Professional Engineer (PE)

Professional licensure as a is not required for most architectural or engineering positions in the federal government, as we do not directly offer our services to the public (most A/E design for public projects is contracted to the private sector). However, the PE license (and its requirement for continuous competency training) is considered such a strong credential that in most cases a current PE license meets or exceeds minimum certification requirements for federal positions described as Project Manager, Senior Project Manager, Supervisory Project Manager, etc. Holding and maintaining your PE license is probably your best bet if you intend to migrate into the public sector in such positions, and if you do not intend to pursue other certifications (although naturally, others may be helpful or even required as you advance).

Global Project Management (GPM)

Although Global Project Management is not a certification or accreditation program, is recognized as a very powerful framework for measuring project performance in many federal programs and projects. The GPM Framework defines five major disciplines (Global Teams, Global Communication, Global Organizations, Global Tools, and Global Techniques). These discipline areas in turn encompass 25 knowledge areas. GPM embodies the use of standard project documentation, such as the Program Management Plan and the Communications Plan, as the basis for management through the project life cycle,
which is defined by a series of standard milestones. Global Project Management is such a rich framework
that an entire session could be built around it in a future ASME conference such as IMECE.

Summary

Engineers have ample opportunities to excel as Program or Project managers in the federal service. Although such positions may be approached from a large variety of certification and accreditation vehicles, our experience in engineering management gives us a natural affinity for the skills and abilities required of project managers in a wide variety of disciplines. Mechanical engineers thus have much to offer and to gain from management positions in federal government, even as second or third careers. Management Division welcomes your questions, input, or ideas for panels/papers regarding this rich field.

References

The Project Management Institute
http://www.pmi.org/
American Society of Engineering Management
http://asem.org/asmweb-emprofessional.html
OMB memo dated April 25, 2007 on FAC-P/PM
http://www.whitehouse.gov/sites/default/files/omb/procurement/workforce/fed_acq_cert_042507.pdf
Global Project Management