Attendance during the open session was as follows:

Board of Governors

President: Charla K. Wise
Immediate Past President: K. Keith Roe
President-Elect: Said Jahanmir
Governors: Stuart Cameron, Bryan A. Erler, Caecilia Gotama, Robert E. Grimes, Mahantesh Hiremath, Karen J. Ohland, Sriram Somasundaram, Mary Lynn Realff, William J. Wepfer
Governors-Elect: Mike Molnar, Karen Thole
Absent: Joe Fowler (Governor-Elect)

Other Officers

Senior Vice Presidents: Sam Korellis, Standards and Certification
Richard C. Marboe, Technical Events and Content
Paul D. Stevenson, Student and Early Career Development
Tim Wei, Public Affairs and Outreach
Senior Vice Presidents Elect: Kalan Guiley, Public Affairs and Outreach
Callie Tourigny, Student and Early Career Development

Secretary and Treasurer: James Coaker
Executive Director: Thomas G. Loughlin
Assistant Secretary: John Delli Venneri
Assistant Treasurer: William Garofalo

Corporate Counsel
John Sare

Committee Chairs
Yildiz Bayazitoglu Committee on Honors
John Goossen Strategy Advisory Committee
Marc Goldsmith Committee of Past Presidents
John Mulvihill Group Engagement Committee
Robert Pangborn Committee on Finance and Investment (via phone)
Fred Stong Committee on Organization and Rules

Other Guests
Frank Adamek Adamek Engineering & Technology Solutions, LLC
Nael Barakat  Texas A&M Kingsville  
Betty Bowersox  COFI member  
Kathryn Drost  Analyst, Finance and Accounting, Project Management  
Eمامال Haque  Hunch Ventures  
Amos Holt  Past President, 2009-2010  
Laura Hitchcock  The Boeing Company  
Jonathan Jennings  ECLIPSE Intern BOG 2017-2018  
Madiha Kotb  Past President, 2013-2014  
Webb Marner  UCLA  
Twishansh Mehta  Loblaw Companies, LTD  
John Parker  Past President, 2000-2001  
George Papadopoulos  Innoveering, LLC  
Victoria Rockwell  Past President, 2011-2012  
Amip Shah  HPE  
Robert Simmons  Past President, 2010-2011  
Stephanie Tomasso  Russell Reynolds Associates  
Nishant Trivedi  ECLIPSE Intern S&C 2017-2018  
Reginald Vachon  Past President, 2003-2004  
Joel Willett  Russell Reynolds Associates  
Sam Zamrik  Past President, 2007-2008  

**Staff**

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Hasan Agha</td>
<td>Director, Programming &amp; Application Architecture</td>
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<tr>
<td>William Berger</td>
<td>Managing Director, Standards &amp; Certification</td>
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<tr>
<td>Keith Bloesch</td>
<td>Managing Director, Project Management</td>
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<tr>
<td>Clare Bruff</td>
<td>Senior Manager, Executive Operations</td>
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<tr>
<td>Melissa Carl</td>
<td>Manager, Public Affairs</td>
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<tr>
<td>Paul Cleri</td>
<td>Business Development Director, Power &amp; Energy</td>
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<tr>
<td>Michael Cowan</td>
<td>Director, Public Information</td>
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<tr>
<td>Joy DeMello</td>
<td>Director, Enterprise Infrastructure Technology Services</td>
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<tr>
<td>John Falcioni</td>
<td>Editorial Director, Engineering Magazine</td>
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<tr>
<td>Elena Gerstmann</td>
<td>Deputy, Executive Operations</td>
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<tr>
<td>Heidi Hijiikata</td>
<td>Director, Global Development</td>
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<tr>
<td>Deborah Johnson</td>
<td>Director, Website &amp; Online Services</td>
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<td>Dennis Kilian</td>
<td>Managing Director, Corporate Sales</td>
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<td>Phyllis Klassky</td>
<td>Director, Events Management</td>
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<tr>
<td>John Koehr</td>
<td>Managing Director, Technology Advancement and Business Development</td>
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<td>Raj Manchanda</td>
<td>Business Development Director, Manufacturing</td>
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<tr>
<td>Elio Manes</td>
<td>Director, Communities and Services</td>
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<td>Tom Meehan</td>
<td>Controller, Finance</td>
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<td>Jeff Patterson</td>
<td>Chief Operating Officer</td>
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<td>Allian Pratt</td>
<td>Project Director, Executive Office</td>
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<td>Claire Ramspeck</td>
<td>Managing Director, Standards &amp; Certification</td>
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<tr>
<td>Laurel Raso</td>
<td>Associate Executive Director, Human and Capital Resources</td>
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<tr>
<td>Christine Reilley</td>
<td>Business Development Director, Healthcare and Engineering</td>
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<tr>
<td>Luis Rodriguez</td>
<td>Associate Executive Director, Technical Services</td>
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<td>Karen Russo</td>
<td>Project Manager, Executive Office</td>
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</table>
1. **Closed Session Agenda Items:** Closed session items are reported below, under item 2.6.

   A Board Dialogue was held over breakfast in which no actions were taken. It was attended only by the current Governors, Governors-Elect, and Counsel.

   1.1. Selection of Executive Director Search Firm
   1.2. Legal Update
   1.3. Approval FY18 Incentive Compensation Goals
   1.4. Financial Update
   1.5. Segregated Accounts Tiger Team
   1.6. Approval of Secretary-Treasurer Nominee for 2018-2021

2. **Opening of the Meeting**

   2.1. **Call to Order:** On November 4, 2017, a meeting of the Board of Governors of the American Society of Mechanical Engineers was held in Tampa, FL at the Tampa Marriott Waterside Hotel. A quorum being present, the meeting was called to order by the President at 12:55 PM Eastern Time.

   2.2. **Adoption of the Agenda:** The Board voted to adopt the agenda as circulated on October 20, 2017. (Appendix 2.2)

   2.3. **Announcements Including Celebrations:** President Wise welcomed all to the meeting and recognized recent milestones by ASME volunteers and staff by giving those in attendance a chance to acknowledge and celebrate any significant events. President Wise recognized the attendance of Past Presidents Amos Holt, Madiha Kotb, John Parker, Vickie Rockwell, Bob Sims, Bob Simmons, Reggie Vachon, and Sam Zamrik.

   2.4. **President’s Remarks:** President Wise discussed the process of selecting the Executive Director Search firm and the next steps moving forward. She also discussed the vision of the Strategy Advisory Committee and how important this committee will be with aligning the strategy. She also discussed the Tiger Teams that have been appointed to discuss Segregated Accounts, the FY19+ IOP planning, membership of the committees reporting to the Board, and brainstorming what ASME would look like if we started it today. (Appendix 2.4)

   2.5. **Executive Director’s Remarks:** Tom Loughlin mentioned the IAB Fall meeting was recently held in New York City with the theme of “ASME as an Industry-Focused Organization: Potential Collaborations and Opportunities for the Future.” He elaborated on the collaboration between ASME and Engineering for Change, which hosted the inaugural *Impact Engineered* live forum and awards. This event provided a forum for recognizing and amplifying the role of engineering in solving global challenges. He discussed the FY18 IOP progress, and that the IOP is in full alignment with transforming the staff organization. He discussed the upcoming IT projects which represent the bedrock of future business operations. (Appendix 2.5)
2.6. Report on Closed Session: Jim Coaker, Secretary/Treasurer, reported on the Closed Session held on the morning of November 4, 2017. The Board:

- Held a Board dialogue
- Selected Russell Reynolds Associates as the Executive Director search firm
- Approved Bryan Erler as the Secretary/Treasurer for FY19-21
- Received a legal update
- Approved FY18 Incentive Compensation Goals
- Received a Financial Update
- Discussed the status of the Segregated Accounts Tiger Team, as chartered by President Wise

2.7. Introductions: Continuing with the introductions started at the June Board meeting, Yildiz Bayazitoglu, Clare Bruff, Marc Goldsmith, Claire Ramspeck, Fred Stong, and Elizabeth Sumpter introduced themselves. (Appendix 2.7)

2.8. Consent Items for Action: The Board approved the following items on the consent agenda:

2.8.1. Identification of Items to be removed from Consent Items: No items were removed.

2.8.2. Minutes from the September 28, 2017 Meeting

2.8.3. ASME General Position Paper on Peer Review (Appendix 2.8.3)

2.8.4. Update to By-law B4.3.5 under Section 4.3 Officers- Clarity of Executive Director’s Responsibilities (Appendix 2.8.4)

2.8.5. Revision of Strategy Flyer (Appendix 2.8.5)

3. Open Session Agenda Items

3.1. Update on the Group Engagement Committee: John Mulvihill, Chair of the Group Engagement Committee, provided a brief summary of the Group Engagement Committee activities since its formation in June 2017. He discussed the focus areas for the Group Engagement Committee’s first year. These include improving communication and engagement strategies with all groups, developing a communications and change management plan, following through on expectations about pathways of engagement, thinking about future funding and staff support, enhancing group support through improved GPS tools, and developing KPIs for all group activities. (Appendix 3.1)

3.2. FY19 IOP/Budget Planning: Tim Wei, Vice-Chair of the Sector Management Committee, and Jeff Patterson, COO, provided a brief summary of the work done on the process, timeline, and outline for the FY19 IOP. (Appendix 3.2)

3.3. Technical Services Strategy and IOP Alignment: Luis Rodriguez, AED, Technical Services, introduced the overview of the technical services department. Joy DeMello gave an overview of the infrastructure, Hasan Agha discussed business applications, and Deborah Johnson provided an overview of on-line systems. (Appendix 3.3)
3.4. **SAC Dialogue: Technology Advisory Panels:** John Goossen, Chair of the Strategy Advisory Committee, introduced the discussion, explaining that Technology Advisory Panels (TAPs) are organized around the key strategic technology areas selected by the Board. The TAPs are focused on gaining marketing insights from industry experts within core constituencies to help guide the ASME strategy. The current TAPs are devoted to manufacturing, bioengineering, clean energy, pressure technology, robotics, and the enabling technologies. John Koehr, Paul Cleri, Raj Manchanda, and Christine Reilley introduced and updated the Board on the Technology Advisory Panels and progress. (Appendix 3.4)

3.5. **Status Report on July 2017 Board Retreat:** Elena Gerstmann, Deputy, Executive Operations, provided a status report on action items from the July 2017 BOG retreat. She provided updates on the three areas of focus that were developed at the retreat – 1) Fulfill our Mission by clarifying and aligning to our strategy and operating goals, 2) Strengthen our Technology and Solutions Portfolios to expand our influence and reach, and 3) Reclaim the hearts, minds and soul of ASME and secure our Leadership Position while increasing Engagement, Collaboration and diversity and diversity through a holistic engagement model. (Appendix 3.5)

4. **New Business:** No items.

5. **Open Session Information Items:** Included in the appendices.

   5.1. **Sector Management Committee Report** (Appendix 5.1)

6. **Closed Session Information Items:** Contained in the Minutes from the Closed Session.

   6.1. **Report on Payout of FY17 Incentive and Discretionary Awards**

7. **Adjournment:** The meeting adjourned on Saturday, November 4, 2017 at 4:40 PM Eastern Time.

________________________
James Coaker
Secretary
Appendices
Appendix 2.2  November 4, 2017 BOG Agenda
Appendix 2.4  President’s Comments
Appendix 2.5  Executive Director’s Comments
Appendix 2.7  Introductions
Appendix 2.8.3  ASME General Position Paper on Peer Review
Appendix 2.8.4  Update to By-law B4.3.5 under section 4.3 Officers- Clarity of Executive Director Responsibilities
Appendix 2.8.5  Correction to a 10 Year Society Goal in the Strategy Document
Appendix 3.1  Activities/Update of the Group Engagement Committee
Appendix 3.2  FY19+ IOP Budget Planning
Appendix 3.3  Technical Services Strategy and IOP Alignment
Appendix 3.4  SAC Dialogue: An Introduction to the Technology Advisory Panels
Appendix 3.5  2017 Board Retreat Follow-Up
Appendix 5.1  Sector Management Committee Report

Dates of Future Meetings

<table>
<thead>
<tr>
<th>DATE</th>
<th>DAY</th>
<th>TIME (local time)</th>
<th>LOCATION</th>
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| February 8-9, 2018 (a) | Thursday-Friday | February 8: 12:00PM - 5:00PM  
February 9: 8:00AM - 12:00PM | New York, NY |
| April 19-20, 2018 (a) | Thursday-Friday | April 19: 12:00PM - 5:00PM  
April 20: 8:00AM - 12:00PM | New York, NY |
| June 3, 2018 (a)   | Sunday      | 8:30AM - 4:30PM                        | Vancouver, Canada      |
| June 6, 2018 (b)   | Wednesday   | 10:00 AM - 3:00 PM                     | Vancouver, Canada      |
| July 25-27, 2018 (b)| Wednesday-Friday | July 25: beginning at 12:00 PM  
July 27: ending at 12:00 PM | NY or DC Metro Area |

(a) 2017-2018 Board of Governors (b) 2018-2019 Board of Governors
DRAFT AGENDA
BOARD OF GOVERNORS

Day & Time: Saturday, November 4, 2017, 7:30 AM – 5:00 PM
Location: Grand Ballroom E, Tampa Marriott Waterside Hotel, Tampa, Florida

1. **Closed Session Agenda Items** (7:30 AM – 12:05 PM)

   1.1. Board Dialogue over Breakfast in Grand Ballroom D (90 minutes)  DISCUSSION
   1.2. Selection of Executive Director Search Firm (30 minutes)  ACTION
       Reggie Vachon
       (Agenda Appendix 1.2)
   1.3. Legal Update (30 minutes)  INFORMATION
       John Delli Venneri
   1.4. Approval of FY18 Incentive Compensation Goals (20 minutes)  ACTION
       Keith Roe

   BREAK (10:20 AM – 10:30 AM)

   1.5. Financial Update (30 minutes)  DISCUSSION
       Bill Garofalo
       (Agenda Appendix 1.5)
   1.6. Segregated Accounts Tiger Team (60 minutes)  DISCUSSION
       Jeff Patterson and Elio Manes
       (Agenda Appendix 1.6)
   1.7. Approval of Secretary-Treasurer Nominee for 2018-2021 (5 minutes)  ACTION
       Charla Wise

   LUNCH (12:05 PM – 12:45 PM)

2. **Opening of the Meeting** (12:45 PM – 1:30 PM)

   2.1. Call to Order
   2.2. Adoption of the Agenda
   2.3. Announcements Including Celebrations (10 minutes)
   2.4. President’s Remarks (10 minutes)  DISCUSSION
       Charla Wise
   2.5. Executive Director’s Remarks (10 minutes)  DISCUSSION
       Tom Loughlin
2.6. **Report on Closed Session** (5 minutes)  
Jim Coaker

2.7. **Introductions** (10 minutes)

2.8. **Consent Items for Action**  
2.8.1. **Identification of Items to be removed from Consent Items**  
Consent Items for Action are items the Board is asked to take action on as a group. Governors are encouraged to contact ASME Headquarters with their questions prior to the meeting as it is not expected that consent items be removed from the agenda.

2.8.2. **Approval of Minutes from the September 28, 2017 Meeting**

2.8.3. **Approval of ASME General Position Paper on Peer Review**  
(Agenda Appendix 2.8.3)

2.8.4. **Update to By-law B4.3.5 under Section 4.3 Officers- Clarity of Executive Director’s Responsibilities**  
(Agenda Appendix 2.8.4)

2.8.5. **Revision of Strategy Flyer**  
(Agenda Appendix 2.8.5)

3. **Open Session Agenda Items** (1:30 PM – 5:00 PM)

3.1. **Update on the Group Engagement Committee** (15 minutes)  
John Mulvihill  
(Agenda Appendix 3.1)

3.2. **FY19 IOP/Budget Planning** (15 minutes)  
Tim Wei and Jeff Patterson  
(Agenda Appendix 3.2)

3.3. **Technical Services Strategy and IOP Alignment** (60 minutes)  
Luis Rodriguez  
(Agenda Appendix 3.3)

BREAK (3:00 PM – 3:15 PM)

3.4. **SAC Dialogue: Technology Advisory Panels** (90 minutes)  
Jeff Patterson and John Koehr  
(Agenda Appendix 3.4)

3.5. **Status Report on July 2017 Board Retreat** (10 minutes)  
Elena Gerstmann  
(Agenda Appendix 3.5)
4. **New Business**

5. **Open Session Information Items**
   5.1. Sector Management Committee Report  
      (Agenda Appendix 5.1)

6. **Closed Session Information Items**
   6.1. Report on Payout of FY17 Incentive and Discretionary Awards  
      (Agenda Appendix 6.1)

7. **Adjournment**

**List of Appendices**

1.2 Selection of Executive Director Search Firm (Closed)  
1.5 Financial Update (Closed)  
1.6 Segregated Accounts Tiger Team (Closed)  
2.8.3 ASME General Position Paper on Peer Review  
2.8.4 Update to By-law B4.3.5 under Section 4.3 Officers- Clarity of Executive Director’s Responsibilities  
2.8.5 Revision of Strategy Flyer  
3.1 Update on the Group Engagement Committee  
3.2 FY19 IOP/Budget Planning  
3.3 Technical Services Strategy and IOP Alignment  
3.4 SAC Dialogue: Technology Advisory Panels  
3.5 Status Report on July 2017 Board Retreat  
5.1 Sector Management Committee Report  
6.1 Report on Payout of FY17 Incentive and Discretionary Awards (Closed)

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| June 6, 2018 (b)   | Wednesday          | 10:00 AM – 3:00 PM    | Vancouver, Canada |

(a) 2017-2018 Board of Governors (b) 2018-2019 Board of Governors
President’s Comments:

Charla Wise
November 4, 2017
Board of Governors Meeting
Items Since September BOG:

• ED Search Activity
• Standing up the Strategic Advisory Committee
• Tiger Team Status:
  - Segregated Accounts – Near Completion
  - FY19+ IOP Planning - Completed
  - Board Committees - Completed
  - Zero-base ASME – Completed
  - Other?
Executive Director’s Comments:

Thomas Loughlin
November 4, 2017
Board of Governors Meeting
Items Since September BOG:

• Major Events:
  • IAB
  • Impact.Engineered
  • Rio Pipeline & OTC

• FY18 IOP Progress
  • Staff Implementation Team
  • Key Hires
  • Reseller Negotiation
  • IT Projects
  • Other

• FY19+ IOP Planning

• ED Goals & Dashboard
Items Since September BOG:

• Major Events:
  • IAB
  • Impact.Engineered
  • Rio Pipeline & OTC
• FY18 IOP Progress
  • Staff Implementation Team
  • Key Hires
  • Reseller Negotiation
  • IT Projects
  • Other
• FY19+ IOP Planning
• ED Goals & Dashboard
Introductions
Yildiz Bayazitoglu

H.S. Cameron Chair Professor of Mechanical Engineering
Professor of Materials Science and Nanoengineering
Rice University
Houston, TX

Fellow of ASME
Honorary Member of ASME
Current Chair of Committee on Honors
Personal:
Married, has three grown sons and six grandchildren.

Degrees:
B.S., Mechanical Engineering, Middle East Technical University, Ankara, Turkey.

M.S., and Ph.D. Mechanical Engineering, University of Michigan, Ann Arbor, Michigan.
Prior ASME involvement

Editor of 13 Conference Proceedings. Including HTD Proceedings of IMECE 2002 which had 7 volumes.

Organized of 21 ASME Conference sessions.

Associate Editor of ASME J. of Heat Transfer.

ASME HTD Representative of IMECE 2002.

ASME Heat Transfer/Fluids Engineering (HT/FE) SHT Conference Co-Chair.

ASME HTD Liaison for Energy Technology Conferences.


Scientific Committee Member and Board Member of ASME Micro/Nanoscale Heat and Mass Transfer International Conferences
Member of ASME HTD K-8 Fundamentals of Heat Transfer Committee

Member ASME HTD, K-3 Honors and Awards Committee (4yrs)

Chair of ASME HTD, K-3 Honors and Awards Committee (2yrs)

Executive Committee Member of the ASME HTD (4 yrs)

Chair of the Executive Committee Member of the ASME HTD (1 yr)

Chair of the Past Chairs of the Executive Committee Member of the ASME HTD (1 yr)

Member of the ASME Committee on Honors (2 yrs)

Currently, Chair of the ASME Committee on Honors
Involved and worked for other organizations such as:

AIAA
SWE
ICHMT
ELSEVIER
TUBA

However, ASME was always the HOME
Just like Houston is the Home of the World’s champion
Houston Astros

WTG ASTROS...
Marc Goldsmith
# Introduction to BOG

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<tr>
<td><strong>Name:</strong></td>
<td>Claire Ramspeck</td>
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<tr>
<td><strong>Where you live:</strong></td>
<td>Atlanta</td>
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<tr>
<td><strong>Employer:</strong></td>
<td>ASME</td>
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<tr>
<td><strong>Profession:</strong></td>
<td>Managing Director, Standards Development</td>
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<tr>
<td><strong>Prior ASME involvement:</strong></td>
<td>N.C. State University Student Section Chair Region IV Board Member Central Savannah River Area Section Chair</td>
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<td><strong>Fun Fact:</strong></td>
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ASME Board of Governors
Agenda Item
Cover Memo

Date Submitted: 10/19/2017
BOG Meeting Date: 11/4/2017

To: Board of Governors
From: Committee on Government Relations, Public Affairs & Outreach Sector
Presented by:

Agenda Title: ASME General Position Paper on Peer Review

Agenda Item Executive Summary: (Do not exceed the space provided)

The attached ASME General Position Paper entitled “ASME Resolution: Commitment to Peer Review” is an update to a statement initially issued by the ASME Board of Governors in 2011. The Committee on Government Relations (CGR) has determined that this statement should be updated per Society Policy 15.1, to reaffirm ASME’s commitment to the practice of peer review as an essential part of the allocation of public funds in support of the nation’s research and development endeavor, and to reflect concerns about the current political climate pertaining to peer review. The updated statement contains only modest revisions, and is consistent with prior ASME statements on peer review and federally funded research practices.

Proposed motion for BOG Action: (if appropriate)

Approval to release as an ASME General Position Paper.

Attachments: ASME Resolution: Commitment to Peer Review
The American Society for Mechanical Engineers (ASME), a professional society representing over 130,000 engineers, scientists, and other professionals, recognizes that:

- Basic research and development (R&D) is critical to innovation and the creation of new and improved products for the marketplace.
- Competitive extramural grant programs of the Federal Government (e.g., the National Science Foundation, U.S. Department of Energy, U.S. Environmental Protection Agency, National Institutes of Health, National Institute of Standards and Technology, National Aeronautics and Space Administration and U.S. Department of Defense) are the mainstay of scientific and engineering research that leads to a broad range of economic and technological benefits for the nation.
- The research community strongly supports the peer review systems of the aforementioned agencies.
- Federal funding for university research is crucial for supporting the education, training and professional preparation of the nation’s scientific and engineering workforce.
- Research and development appropriations are fixed by legislation, but the ratio of directed expenditures to competitive expenditures is variable.

Whereas, the industry/university/government partnership is essential to the progress of science, engineering and education and the resulting innovation.

Whereas, peer review ensures the quality of research and education in science and engineering, based on intellectual and technical merit enforced by professional evaluation.

Whereas, a rigorous peer review process incorporates ethics rules and training to ensure objectivity and integrity in the assessment of scientific merit of research proposals and must be free from political interference.

Be it resolved, that ASME reaffirms its commitment to the practice of peer review as an essential part of the allocation of public funds in support of the nation’s research and development endeavor.

Approval Requested By: ASME Board of Governors
ASME Board of Governors
Agenda Item
Cover Memo

Date Submitted: October 20, 2017
BOG Meeting Date: November 4, 2017

To: Board of Governors
From: Keith Roe, Chair EDESC
Presented by: Keith Roe
Agenda Title: Update to By-Law B4.3.5- Clarity of Executive Director Responsibilities

Agenda Item Executive Summary: *(Do not exceed the space provided)*

A redlined version of the proposed change is attached, as well as a clean proposed version.

The reason for the recommended change is to add greater clarity to the scope of the Executive Director’s responsibilities and to better reflect current Society operations.

Proposed motion for BOG Action:

Approval of the Changes to By-Law B-4.3.5

Attachments:

Redlined version of revised By-Law
B4.3.5 The Executive Director shall be an employee reporting directly to the Board, an ex officio member of the Board of Governors without vote and the chief operating executive Officer of the Society, an ex officio member of the Board of Governors without vote. The Executive Director shall have supervision, direction and management of the business and affairs of the Corporation, including, but not limited to strategy, operations, finance, marketing, human resources and philanthropic efforts. The Executive Director and shall have such powers and perform such duties as the Board of Governors may from time to time prescribe.
Proposed Final Version

B4.3.5 The Executive Director shall be an employee reporting directly to the Board, an ex officio member of the Board of Governors without vote and the chief executive officer of the society. The Executive Director shall have supervision, direction and management of the business and affairs of the Corporation, including, but not limited to strategy, operations, finance, marketing, human resources and philanthropic efforts. The Executive Director shall have such powers and perform such duties as the Board of Governors may from time to time prescribe.
ASME Board of Governors
Agenda Item
Cover Memo

Date Submitted: October 17, 2017
BOG Meeting Date: November 4, 2017

To: Board of Governors
From: John Goossen, Chair, Strategy Advisory Committee; Elena Gerstmann, Deputy, Executive Operations
Presented by: John Goossen/Elena Gerstmann
Agenda Title: Correction to a 10 Year Society Goal in the Strategy Document

Agenda Item Executive Summary: (Do not exceed the space provided)

The strategy document shared with the Board of Governors during their September 28, 2017 meeting had two incorrect words that were accidentally carried over from a previous version.

To ensure that ASME uses only the Board-approved strategy, the Board is asked to re-approve the strategy with the correct words.

Incorrect wording (approved on September 28, 2017)
- ASME engages and inspires young people to pursue careers in engineering.

Correct wording
- ASME engages and inspires future generations to pursue careers in engineering.

Proposed motion for BOG Action: (if appropriate)

Approve a correction to the ASME Strategy Document related to one of the 10 Year Society Goal. More specifically, “ASME engages and inspires young people to pursue careers in engineering” will be replaced with, “ASME engages and inspires future generations to pursue careers in engineering.”

Attachments:
Date Submitted: October 12, 2017  
BOG Meeting Date: November 4, 2017  

To: Board of Governors  
From: Sector Management Committee  
Presented by: John Mulvihill, Group Engagement Committee Chair  
Agenda Title: Activities/Update of the Group Engagement Committee  

Agenda Item Executive Summary:  

As a follow up to recommendations made by the Group Engagement Presidential Task Force (2016-2017), the Board passed a motion to establish a Group Engagement Committee (GEC), at their June 2017 BOG meeting. During the September 2017 BOG meeting, the Board approved John Mulvihill as the chair of the GEC.  

John has been busy setting up the committee and will provide a quick overview of the committee and its planned activities.  

Proposed motion for BOG Action:  
Discussion - No motion required.  

Attachments:  
PowerPoint Presentation
Group Engagement Committee (GEC)
What to Expect from Presentation

• **Brief Description** – Provide a brief summary of the Group Engagement Committee (GEC) activities from its formation in June 2017

• **Desired Outcome** – Update the Board of Governors on the structure of the organization, its current and future committee and engagement activities and the Committees focus for this first year

• **Questions** – Please ask clarifying questions throughout the presentation but hold general questions until after the presentation

• **Duration** – Presentation: 10 Minutes; Discussion: 5 Minutes
Group Engagement Committee (GEC) Volunteer & Staff Structure

- GEC Chair
  - Communications Coordinator
  - Training Coordinator
  - Tools Coordinator

- GPS Staff
- Sections Engagement
- Student Sections Engagement
- Divisions Engagement
- Early Career Engagement
- International Engagement
## Engagement Teams

<table>
<thead>
<tr>
<th>Role</th>
<th>Volunteer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sections Engagement</td>
<td>Michael Roy</td>
</tr>
<tr>
<td>Divisions &amp; Research Committees</td>
<td>Rick Cowan, Kathryn Kirsch</td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
</tr>
<tr>
<td>Student Sections Engagement</td>
<td>Mohammad Mahinfalah</td>
</tr>
<tr>
<td>Old Guard &amp; Early Career</td>
<td>Dilshad Sulaiman <em>(Also assist with International Engagement)</em></td>
</tr>
<tr>
<td>Engagement</td>
<td></td>
</tr>
<tr>
<td>International Engagement</td>
<td>Desmond Chong</td>
</tr>
</tbody>
</table>
## Support Teams*

<table>
<thead>
<tr>
<th>Role</th>
<th>Volunteer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communications Coordinator</strong></td>
<td>John Blanton</td>
</tr>
<tr>
<td><em>Group Communities, Web Pages, Social Media, List Serve</em></td>
<td></td>
</tr>
<tr>
<td><strong>Training Coordinator</strong></td>
<td>Johnny Murrell</td>
</tr>
<tr>
<td><em>VOLT Liaison, Group Leadership Development and Training Programs</em></td>
<td></td>
</tr>
<tr>
<td><strong>Tools Coordinator</strong></td>
<td>Pasquale Dell 'Aquila</td>
</tr>
<tr>
<td><em>GPS Liaison for Group tools needs; Webinars, E-Learning Platforms</em></td>
<td></td>
</tr>
</tbody>
</table>

*BOG Liaisons - Karen Ohland and Caecilia Gotama*
GEC Committee Activities

- Inception Meeting, June 12, 2017, ASME Annual Meeting, Newport Beach, CA
- Teleconference, September 6, 2017 – Initial Coordination Meeting to introduce members to Goals and Objectives
- VOLT Retreat, September 15-17, 2017, GEC and GPS attended
- Teleconference, October 27, 2017 – Coordination Meeting
- Meeting – Monday, November 6, 2017, 10 AM to 5 PM, IMECE, Tampa, FL
- Teleconferences – Monthly Dates/Times TBD
- Meeting – June 2018, ASME Annual Meeting, Vancouver, BC
GEC Engagement Activities

- Webinar, ASME “Go-To Organization” Research Results, May 24 and June 1, 2017
- Webinar, Consolidated Banking, June 20, 2017
- Division Leadership Town Hall Meeting, September 18, 2017
- Webinar, GEC Organization & GPS Initiatives Update, October 3, 2017
- Webinar, Update on ASME & GPS Initiatives, January 24, 2018
- Training Event, Group Leadership Development, March 2 – 3, 2018, Orlando, Florida
- Webinar, Update on ASME & GPS Initiatives, April 17, 2018
- Webinar, FY19 Annual Plans, May 9, 2018
GEC Focus – 1st Year

• Improved Communication and Engagement strategy with all Groups. (Communications and Change Management Plan)
• Follow through on expectations about Pathways of Engagement, Future Funding and Staff Support
• Enhance Group Support through improved GPS tools
• Develop and Assess KPI’s for all Group activities and assist with improvements
• Assist Groups with Strategy and Core Technology alignment
• Assist Groups with local delivery of ASME centrally packaged content and activities
• Develop budget needs for IOP FY 2019
GEC Focus – 1st Year

- Evaluate North American and International Sections for transition into a Technical Chapter
- Evaluate status of inactive Divisions and Sections for possible merger or sunset
- Improve Student Sections activity tracking
- Assist Student Sections to improve alignment with local senior Sections
- Provide Monthly Information and Training Webinars focused on information and alignment with ASME strategy
- Conduct Group Leadership Development (GLD) Event
- Identify processes and tools needed to move from tracking membership to member interest (self selection/op-in)
ASME Board of Governors
Agenda Item
Cover Memo

Date Submitted: October 20, 2017
BOG Meeting Date: November 4, 2017

To: Board of Governors
From: Sector Management Committee – FY19+ IOP Planning Team
Presented by: Tim Wei & Jeff Patterson
Agenda Title: FY19+ IOP Budget Planning

Agenda Item Executive Summary: (Do not exceed the space provided)

A draft timeline and process for developing the FY19+ IOP and Budget will be shared with the Board.

Proposed motion for BOG Action:
None

Attachments:
Progress Report on the Development of the FY19 Integrated Operating Plan

TIMELINE AND OUTLINE

TIM WEI & JEFF PATTERSON

11.4.17

DRAFT SUBJECT TO FINAL CONFIRMATION BY SMC 11.7.17
What to Expect from this Presentation

» Brief Description – Provide a brief summary of work done on the process, timeline and outline for the FY19 IOP.

» Desired Outcome – Inform the Board of Governors on progress to date.

» Questions – Please ask clarifying questions throughout the presentation but hold general questions until after the presentation.

» Duration – Presentation: 10 Minutes; Discussion: 5 Minutes
MID-NOVEMBER — MID-JANUARY:

• By 15 December, individual units update 10 – 3 – 1 operating goals based on discussions across sub-units at IMECE. (N.B. Again, for the 2019 IOP, this is likely to be a moderately to highly approximate listing. Presumably, this will actually serve as the starting point for the 2020+ IOP process.)

• SVPs and staff counterparts work with their respective Sectors to develop action plans and resource estimates aligned with the BOG approved 1 – 3 – 10 year Society goals and metrics.

• SVPs and staff counterparts coordinate cross-sector collaborative project planning.

• By 26 January, units develop 1 – 3 – 10 year budget plans including cross-unit budget coordination.
MID-NOVEMBER – MID-JANUARY (CONT’D.):

• COO works with operational staff leadership to develop action plans and resource estimates to provide essential support for the near and long term activities and infrastructure.

• SVPs and staff counterparts inform AED, Finance & Accounting of the status of the IOP and the potential financial impact for guidance and recommendations.
LATE JANUARY:

- The SMC (i.e. SVPs, senior staff counterparts, COO and President Elect) coordinate and integrate activity plans across the Society for the 1 – 3 – 10 year timeframes.

FEBRUARY:

- By 2 February, SMC provides a preliminary set of operating goals and budget request to SAC and AED, Finance & Accounting, to ensure alignment with strategic objectives and budget forecasts. *(N.B. This is a coordination and confirmation step; it is not a request for approval.)*

- A draft IOP document is prepared by the SMC for the next 1 – 3 – 10 years.

- By 23 February, a first draft of the 2019 IOP is available for SMC review and comment. *(N.B. This should be a matter of the COO and SMC Vice-Chair placing the individual unit, integrated multi-unit goals and related budgetary projections in the appropriate places of the IOP.)*
FEBRUARY:

• SVP’s and staff counterparts inform AED, Finance & Accounting of the status of the IOP and the potential financial impact for guidance and recommendations.

MARCH:

• By 9 March, the 2019 IOP is ready for COFI review.
• The draft IOP is submitted to and presented by the SVP’s and staff counterparts to COFI for budgetary review and recommendation to the BOG.
• The draft IOP is submitted to BOG for preliminary review.
• Modifications to the draft IOP are made as necessary.
APRIL:

• The final IOP is submitted to the BOG for approval.

JUNE:

• BOG votes on approving the IOP
1. Executive Summary (2 pages)

2. Introduction/overview (2 pages)

3. Overall 10 - 3 - 1 year Society goals articulated by the SAC (1 page)

4. Individual 10 - 3 - 1 year operating goals of each Sector and Staff Service Unit with brief explanations of the mapping to the 10 - 3 - 1 year Society goals (4 pages)

5. Identification of cross sector/unit goals (3 pages)

6. Articulation of individual 1 - 3 - 10 year plans (8 pages)

7. Explanation of cross sector/unit integrated efforts (4 pages)

8. Individual 2019 budget requests and revenue forecasts with brief justifications (4 pages)

9. Explanation of how 2019 cross sector/unit efforts are budgeted (2 pages)

10. Roll-up of 2019 budget request and revenue forecast (1 page)

11. Individual sector/unit 3 - 10 year budget projections and revenue forecasts with brief explanations (8 pages)

12. Explanation of how 3 - 10 year cross sector/unit efforts will be budgeted (2 pages)

13. Roll-up of 3 - 10 year budget projections (1 page)
Date Submitted: October 19, 2017
BOG Meeting Date: November 4, 2017

To: Board of Governors
From: Technology Services
Presented by: Luis Rodriguez, Associate Executive Director, Technology Services; Joy DeMello, Director of Infrastructure Services and Support; Hasan Agha, PMP - Director, Programming & Application Architecture Systems & Programming; Deborah Johnson, Director, Website and Online Services

Agenda Title: Technical Services Strategy and IOP Alignment

Agenda Item Executive Summary:

A presentation will be shared with the Board that will provide an overview of the technical services department including organization and costs.

It will outline technical strategies and how initiatives are aligned to support the IOP. The presentation will also include architectural overview, roadmap of the technologies, and a more detailed outline of solutions being proposed.

Proposed motion for BOG Action:

None

Attachments:
Technical Services

Presentation for Board of Governors

November 4, 2017
What to Expect from Presentation

• **Brief Description** – Provide an overview of the technical services department including organization, costs and technical strategies

• **Desired Outcome** - “Information Only” to raise the BOG’s awareness and knowledge of ASME’s technology initiatives

• **Questions** – Please hold questions until after the presentation

• **Duration** – Presentation will be approximately 30 minutes allowing for 30 minutes of questions
## Technical Services YOY Costs

<table>
<thead>
<tr>
<th></th>
<th>FY15 Actuals</th>
<th>FY16 Actuals</th>
<th>FY17 Actuals</th>
<th>FY18 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary/Compensation Expense*</td>
<td>$6,710,924</td>
<td>$7,044,695</td>
<td>$6,646,504</td>
<td>$6,393,997</td>
</tr>
<tr>
<td>Depreciation</td>
<td>$2,990,553</td>
<td>$2,841,262</td>
<td>$1,062,367</td>
<td>$1,200,806</td>
</tr>
<tr>
<td>Maintenance</td>
<td>$1,216,933</td>
<td>$1,146,761</td>
<td>$1,007,071</td>
<td>$1,491,673</td>
</tr>
<tr>
<td>Consulting Expense</td>
<td>$424,649</td>
<td>$262,808</td>
<td>$453,682</td>
<td>$891,232</td>
</tr>
<tr>
<td>Phone, Hosting and Network Connectivity</td>
<td>$522,042</td>
<td>$277,362</td>
<td>$266,120</td>
<td>$726,341</td>
</tr>
<tr>
<td>Other</td>
<td>$152,728</td>
<td>$182,265</td>
<td>$98,377</td>
<td>$125,893</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$12,017,828</strong></td>
<td><strong>$11,755,153</strong></td>
<td><strong>$9,534,121</strong></td>
<td><strong>$10,829,942</strong></td>
</tr>
</tbody>
</table>

Headcount (including open not filled heads)  
- FY15: 47  
- FY16: 51  
- FY17: 47  
- FY18: 51  

Annualized Salaries Filled and Vacant (excluding AED)  
- FY15: $5,154,257  
- FY16: $5,612,202  
- FY17: $5,041,521  
- FY18: $5,701,256

* Net of capitalized labor in FY2018
Focus First on Initial Organizational Issues

• Technical Services efforts are not aligned to strategic plans

• Dysfunctional processes contributed to slow response times, additional costs and reduction in customer satisfaction

• Misuse of resources and skill sets resulted in service gaps, poor morale, higher costs and increased risks

• Deficient skill sets resulted in missed opportunities, delayed response and cost overruns due to reliance on outside vendors
Efficiency: IT Staff Time

Through better processes and focus on root cause issues

Through redesigned and new systems and infrastructure.
• Current application portfolio is old and costly to support and enhance with base functionality that often does not meet current business needs.

• Current infrastructure in many cases is obsolete, unreliable, and unnecessarily complex, which has led to increased maintenance costs and response times.

• On-line presence is difficult to navigate and does not produce an experience that maximizes revenue and user satisfaction.

• Due to the simultaneous work involved in addressing the issues above:
  - A significant amount of coordination and project management will be needed (within the business and in technical services) to effectively execute on the objectives and time lines set out in this plan.
  - Some technical resources still need to support current operations (at assumed rate of 25% fixing, 25% supporting deferred legacy systems, 50% new system development/implementation).
## ASME at a Functional Area Level

### ASME Core Enterprise

**Functions (Internal/External)**
- Communities
- ASME.org
- E-Commerce
- Customer Portal
- Content Distribution
- Identity Management
- Single Sign-On
- Online Training
- Customer Support
- Resource and Skill Management
- Core HR Services
- Contract and Document Management
- Workflow Management

### Association Management Functions
- Customers repository
- Volunteer Management
- Engagement Tracking
- Customer Service
- Order Entry
- Membership Management
- Certifications: Personal Certification
- Event Management (Exhibits, Meetings, Conferences, etc.)
- Fund Raising and Donor Management
- Accounts Receivable/Revenue recognition
- Selling and Advertising Transactions
- Inventory Management
- Accreditations

### Marketing & Sales Functions
- Customers/Prospect Management (Enterprise & worldwide level)
- Sales Metrics Management
- Opportunity management
- Marketing/campaign Management
- Promotion Management (E-mail, Social Media)
- Content Selling (Publications, Subscriptions, etc.)

### Content Creation
- Codes & Standards creation
- Content Editing
- Content Approval
- Content Q&A
- Content Curation & Creation
- Rights Managements
- Academia Content
- Media Content
- Content Publishing
- Multimedia Management & Creation
- Mobile Content

### Finance/Accounting Services
- Payables
- Fixed Assets/inventory
- Purchasing
- Requisitions
- Financials
- Budgeting
- EFT & ACH
- Loan Management
- Expense Management
- Banking

### Infrastructure Services
- Telephony
- Active Directory
- E-mail
- Intranet
- File Sharing
- Remote Access
- Server Management
- Backup & Retention
- Security
- Office Automation

### Reporting & Business Intelligence
- Analytical Reporting
- Business Intelligence
- Financial Analytics
- KPI Reporting
- Engagement Analytics
- Product Analytics
- Customer Analytics

### Not every area is supported by a system
## IT Triage for FY2018...

<table>
<thead>
<tr>
<th>OPERATIONAL</th>
<th>REVENUE</th>
<th>INFRASTRUCTURE</th>
<th>ENGAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Budgeting – more functional, better supported and easier to use</td>
<td>▪ CA Connect and CS Connect replacements – more functional with better user and customer experience</td>
<td>▪ Disaster Recovery</td>
<td>▪ Single Sign-on - new, more secure and integrated.</td>
</tr>
<tr>
<td>▪ Reporting – Cleaner, more consolidated and accessible data with better analytical tools</td>
<td>▪ System Reliability</td>
<td>▪ System Reliability</td>
<td>▪ Site Search - making content is easy to find and get to.</td>
</tr>
<tr>
<td>▪ Project Accounting – better integrated with accounting system and fully supported</td>
<td>▪ Risk Management</td>
<td>▪ Risk Management</td>
<td>▪ Taxonomy - unified, structured and maintainable.</td>
</tr>
<tr>
<td>▪ Constituent Relationship Management - Unified and integrated</td>
<td>▪ Subscription Management / Content Delivery – Greater selling capabilities through product packaging and pricing</td>
<td>▪ Modernized &amp; Standardized Technology</td>
<td>▪ Personalization and content tools – to better and more efficiently reach constituents with relevant content</td>
</tr>
<tr>
<td>▪ Email Outreach – More efficient</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>▪ Vendor Reliability – less reliance on unsupported systems</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Capital Expenditures - 3 Year Costs and Highlights Summary

<table>
<thead>
<tr>
<th>Project Area</th>
<th>Sum of Total Capital Expenditures 2018</th>
<th>Sum of Total Capital Expenditures 2019</th>
<th>Sum of Total Capital Expenditures 2020</th>
<th>Sum of Total 3 Year Project Capital Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise</td>
<td>$2,323,727</td>
<td>$2,143,550</td>
<td>$1,341,477</td>
<td>$5,808,754</td>
</tr>
<tr>
<td>Business Systems</td>
<td>$1,099,675</td>
<td>$2,029,330</td>
<td>$1,232,408</td>
<td>$4,361,413</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>$3,527,853</td>
<td>$2,816,052</td>
<td>$825,604</td>
<td>$7,169,509</td>
</tr>
<tr>
<td>On-Line</td>
<td>$2,196,529</td>
<td>$2,693,256</td>
<td>$1,933,105</td>
<td>$6,822,890</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>$9,147,784</strong></td>
<td><strong>$9,682,188</strong></td>
<td><strong>$5,332,594</strong></td>
<td><strong>$24,162,566</strong></td>
</tr>
</tbody>
</table>
ASME’s Systems Strategy and Alignment with the IOP
• Situation Analysis / Key Challenges

• Solutions Outlined in the IOP

• Update
Where Are We Now?

Key areas were evaluated for gaps and risks

<table>
<thead>
<tr>
<th>IT Service Name</th>
<th>Current Technical Gaps</th>
<th>Business Risks</th>
<th>Current State Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Center</td>
<td>Lifecycle management, high-availability, disaster recovery, security</td>
<td>Lack of agility and flexibility in servicing customers, excessive downtime, increased costs</td>
<td>1</td>
</tr>
<tr>
<td>Backup &amp; Disaster Recovery</td>
<td>Back-up/restore, disaster recovery, staffing and institutional knowledge</td>
<td>Extended downtime due to human error or mechanical failure, loss of corporate data, reputation damage</td>
<td>1</td>
</tr>
<tr>
<td>Systems Management</td>
<td>Lifecycle management, testing environments, lack of operational documentation, duplication of software/systems</td>
<td>Limitations in detecting system/service failure, increased information security risk, increased costs, reputation damage</td>
<td>1</td>
</tr>
<tr>
<td>Active Directory</td>
<td>Lifecycle management, security, staffing and institutional knowledge</td>
<td>Unable to seamlessly connect to ASME systems, increased information security risk</td>
<td>1</td>
</tr>
<tr>
<td>Network</td>
<td>Lifecycle management, security</td>
<td>Poor performance when connecting to ASME systems, increased information security risk</td>
<td>2</td>
</tr>
<tr>
<td>Servers/Storage</td>
<td>Lifecycle management, testing environments, security exposure, low staffing and institutional knowledge, lack of operational documentation, duplication of software/systems, high-availability</td>
<td>Poor responsiveness when servicing customers, increased risk of system failure due to age, inability to expand systems, inability to apply new features, inability to innovate, increased costs</td>
<td>1</td>
</tr>
</tbody>
</table>

Legend

<table>
<thead>
<tr>
<th>Current State Ratings</th>
<th>1 - Unsatisfactory</th>
<th>2 - Fair</th>
<th>3 - Optimum</th>
</tr>
</thead>
</table>

Confidential and Proprietary - Not to be disclosed outside of ASME
Assessments were performed on specific IT categories to identify gaps

<table>
<thead>
<tr>
<th>IT Service Name</th>
<th>Current Technical Gaps</th>
<th>Business Risks</th>
<th>Current State Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration (SharePoint / Exchange / Lync)</td>
<td>Lifecycle management, testing environments, archiving and eDiscovery, content and records management, high-availability, lack of operational documentation, duplication of software/systems</td>
<td>Limitations in communicating/collaborating with other ASME employees or members, inability to innovate, increased cost, increased information security risk</td>
<td>1</td>
</tr>
<tr>
<td>Desktop</td>
<td>Security, duplication of software/systems, content and records management</td>
<td>Increased cost, inability for users to function, increased information security risk</td>
<td>2</td>
</tr>
<tr>
<td>SQL/Applications</td>
<td>Lifecycle management, testing environments, archiving and eDiscovery, content and records management, lack of operational documentation, duplication of software/systems, high-availability</td>
<td>Poor responsiveness to service customers, inability to apply new features, inability to innovate, increased administrative overhead and cost</td>
<td>2</td>
</tr>
<tr>
<td>Provisioning/De-Provisioning</td>
<td>Security</td>
<td>Increased administrative costs, risks due to loss of data</td>
<td>2</td>
</tr>
<tr>
<td>Helpdesk</td>
<td>Staffing and institutional knowledge</td>
<td>User productivity decreased until issue is resolved, increased administrative costs</td>
<td>2</td>
</tr>
<tr>
<td>Information Security</td>
<td>Security, Staffing and Institutional Knowledge</td>
<td>Reputation and financial damage, Loss of corporate data</td>
<td>2</td>
</tr>
</tbody>
</table>

Legend

<table>
<thead>
<tr>
<th>Current State Ratings</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>2 - Fair</td>
</tr>
<tr>
<td>3 - Optimum</td>
</tr>
</tbody>
</table>
## ASME Technical Infrastructure Goals

<table>
<thead>
<tr>
<th>Standardized IT Practices</th>
<th>System Reliability &amp; Availability</th>
<th>Strong Foundation Technologies</th>
<th>Innovation Readiness</th>
<th>Reduced IT Risk</th>
<th>Adequate Staffing</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Institutionalize lifecycle management</td>
<td>• Test backups</td>
<td>• Active Directory (AD) consolidation</td>
<td>• More proactive introduction of new tools to improve processes</td>
<td>• Continued improvements for system compliance</td>
<td>• Bring in enough staff to provide adequate level of support without being reactive</td>
</tr>
<tr>
<td>• Operational best practices &amp; monitoring</td>
<td>• Develop disaster recovery/high availability practices</td>
<td>• Installation of tools to aid deployment and management of systems and desktops</td>
<td>• Improve archiving of content</td>
<td>• Improve archiving of content</td>
<td>• Provide technical training for staff</td>
</tr>
<tr>
<td>• System deployment</td>
<td>• Deploy application level monitoring</td>
<td>• Strong system and tool standards with common builds</td>
<td>• Better testing facilities and procedures</td>
<td>• More records management capabilities</td>
<td>• Include skills transfer into consultant engagements</td>
</tr>
<tr>
<td>• New technology introduction</td>
<td>• Establish SLA’s</td>
<td>• More inter-group collaboration for improving current state and delivering new technologies</td>
<td>• More inter-group collaboration for improving current state and delivering new technologies</td>
<td>• Standardized security and platform services</td>
<td>• Leverage Azure Cloud Services, especially SaaS and PaaS Services to reduce administration overhead to reduce IT security risk</td>
</tr>
<tr>
<td>• Project &amp; operational governance</td>
<td>• Less downtime</td>
<td>• Building multi-state dev and test environments, including processes that will improve success &amp; reliability</td>
<td>• Less downtime</td>
<td>• More monitoring &amp; auditing capabilities</td>
<td></td>
</tr>
<tr>
<td>• Standardize project management methodology</td>
<td>• More monitoring &amp; auditing capabilities</td>
<td>• Reduced complexity of environment by eliminating duplicate products</td>
<td>• More monitoring &amp; auditing capabilities</td>
<td>• Building multi-state dev and test environments, including processes that will improve success &amp; reliability</td>
<td></td>
</tr>
</tbody>
</table>

- **Standardized IT Practices**
- **System Reliability & Availability**
- **Strong Foundation Technologies**
- **Innovation Readiness**
- **Reduced IT Risk**
- **Adequate Staffing**
Enterprise Infrastructure Roadmap

**Project Objective:** Enterprise infrastructure projects on the 3 year roadmap are core foundational components that are required for 100% of the IOP projects. They will not drive revenue, but if not done the IOP projects will be at great risk of success. It would benefit the IOP projects if the enterprise infrastructure projects were completed in advance. In lieu of potentially not being able to stay ahead, we will consider hosted cloud solutions as an alternative, where deemed necessary.

<table>
<thead>
<tr>
<th>IT Assessment &amp; Design</th>
<th>Document Retention and Backups</th>
<th>Data Center Replacement &amp; Systems Management</th>
<th>Active Directory Redesign &amp; Upgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Formulate long term Data Center Strategy to ensure resilience and redundancy for critical applications</td>
<td>• Implement best practices for backup and recovery</td>
<td>• Host critical production applications in purpose-built Data Center w/24 hour coverage</td>
<td>• Foundational infrastructure providing directory services, security, organizational data and data availability (e.g., user login, email access, file share access)</td>
</tr>
<tr>
<td>• Assess &amp; Design IT Enterprise Infrastructure for future state</td>
<td>• Provide SLA’s for application recovery</td>
<td>• Achieve cost reductions</td>
<td>• Provides SSO capabilities</td>
</tr>
<tr>
<td>• Build 3 Year Enterprise Infrastructure Roadmap</td>
<td>• Provide solution for legal holds</td>
<td>• Risk avoidance (system availability, redundancy and resiliency)</td>
<td>• Need to upgrade to supported platform</td>
</tr>
<tr>
<td>• Design enterprise infrastructure that builds a strong flexible foundation</td>
<td>• Legal discovery compliance</td>
<td>• Server consolidation provides cost avoidance, flexibility and scalability</td>
<td>• Test environment will be built for testing with applications</td>
</tr>
<tr>
<td>• Capability: Improved utilization and reliability of core infrastructure and applications</td>
<td>• Capability: Minimize risk and provide reliable backup solution for applications and servers and aide in legal holds/discoveries</td>
<td>• Capability: Reduced risk and service loss due to downtime</td>
<td>• Capability: Improved more secure and transparent access to technical services</td>
</tr>
</tbody>
</table>

Confidential and Proprietary - Not to be disclosed outside of ASME
<table>
<thead>
<tr>
<th>Skype for Business</th>
<th>User Experience</th>
<th>Collaboration Platform</th>
<th>Disaster Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Short-term performance improvements</td>
<td>• Refresh desktops to latest hardware and system software platform (4-5 year lifecycle)</td>
<td>• Upgrade Email and SharePoint to new supported collaboration platforms</td>
<td>• Perform business impact analysis (BIA) to determine Recovery Time Objectives and Recovery Point Objectives</td>
</tr>
<tr>
<td>• Upgrade to latest version</td>
<td>• Standardize and reduce complexities associated with toolsets used to manage desktops</td>
<td>• Achieve scalability, resilience and redundancy</td>
<td>• Tier applications by criticality based on BIA and formulate recovery SLA’s</td>
</tr>
<tr>
<td>• Consider cloud platform to eliminate challenges associated with staff expertise</td>
<td>• Improve remote connectivity platform</td>
<td>• Consolidate existing disparate platforms</td>
<td>• Design and test disaster recovery plan</td>
</tr>
<tr>
<td>• Capability: Improved use of key applications</td>
<td>• Capability: Improved use of key applications and ease of management</td>
<td>• Capability: Improved use of key collaboration platforms</td>
<td>• Capability: Reduced risk and service loss due to downtime</td>
</tr>
</tbody>
</table>

- Consider cloud platform to eliminate challenges associated with staff expertise
- Leverage O365 license purchase
- Improves remote connectivity platform
- Design and test disaster recovery plan
- Capability: Improved use of key applications
- Capability: Improved use of key applications and ease of management
- Capability: Improved use of key collaboration platforms
- Capability: Reduced risk and service loss due to downtime
ASME Network Upgrade

Current State:
• No failover capabilities
• Network performance issues
• Security issues
• Many vendors and contracts

Proposed State:
• Automatic failover capabilities
• Increased network bandwidth
• Improved cloud services capabilities
• Masergy – top tier provider

Cost Savings:
• Current annual cost: $416K
• Proposed annual cost: $285K
• Estimated annual savings: $130K

Timeline:
• Project will span 12 month period beginning Oct ‘17
Infrastructure Projects

ASME INTEGRATED OPERATING PLAN

FY17 | FY18 | FY19 | FY20 | FY21 | FY22 | FY23

- Document Retention & Backup
- Data Center Replacement & System Management
- Active Directory Redesign & Upgrade
- Safety & Business
- Audit and Video Upgrades
- User Experience (to be prioritized based on level of exposure)
- Non-revenue generation collaboration options (e.g., internal staff collaboration tools)
- Reduced risk and service loss due to downtime
- "Best Worst" Disaster Recovery
- Improved use of key applications
- Improved use of key collaboration platforms
- Improved use of key applications and sense of management
- Reduced risk and service loss due to downtime

Calendar 2017 | Calendar 2018 | Calendar 2019 | Calendar 2020 | Calendar 2021 | Calendar 2022 | Fiscal Year 2018 | Fiscal Year 2019 | Fiscal Year 2020 | Fiscal Year 2021 | Fiscal Year 2022 | Fiscal Year 2023
<table>
<thead>
<tr>
<th>Project</th>
<th>Milestone</th>
<th>Status</th>
<th>Actual/Expected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Document Retention and Backups</strong></td>
<td>Design upgraded backup and implement recovery platforms</td>
<td>Complete</td>
<td>Oct-2017</td>
</tr>
<tr>
<td></td>
<td>Implement upgraded backup software</td>
<td>In Progress</td>
<td>Feb-2018</td>
</tr>
<tr>
<td><strong>Disaster Recovery – Phase I</strong></td>
<td>Design disaster recovery for 4 critical applications</td>
<td>Complete</td>
<td>Oct-2017</td>
</tr>
<tr>
<td></td>
<td>Implement new disaster recovery Platform for one mission critical application</td>
<td>In Progress</td>
<td>Dec-2017</td>
</tr>
<tr>
<td><strong>Data Center Replacement &amp; Systems Management</strong></td>
<td>Preliminary assessment of ASME Data Centers and Systems Management</td>
<td>Complete</td>
<td>April-2017</td>
</tr>
<tr>
<td></td>
<td>Establish requirements and develop RFP</td>
<td>In Progress</td>
<td>Nov-2017</td>
</tr>
<tr>
<td><strong>Audio Video Upgrades</strong></td>
<td>Redesign and fix NY Office Boardroom video and audio</td>
<td>Complete</td>
<td>Jul-2017</td>
</tr>
<tr>
<td><strong>Active Directory Redesign &amp; Upgrade</strong></td>
<td>Preliminary assessment of Active Directory</td>
<td>Complete</td>
<td>Apr-2017</td>
</tr>
<tr>
<td></td>
<td>Establish requirements and develop RFP</td>
<td>In Progress</td>
<td>Jan-2018</td>
</tr>
</tbody>
</table>
• Situation Analysis / Key Challenges
• Solutions Outlined in the IOP
• Update
...that need to be integrated for ASME to grow

Standards / Publishing – 44%
Subscriptions
Membership – 10%
Events (T&D, Conferences, SECD) – 15%
Consulting Services (CA) – 29%
P. Certification / Accreditation - .6%
Programs / Donations - .6%
Standards Delivery Platform
Code Development
Marketing / Advertising / CRM
Digital Online / ASME.org
Section / Consolidated Banking - .3%
Student Loan Management

* % of FY'17 revenue
The six interconnected projects with underlying infrastructure improvements outlined in the IOP represent the majority of the capital spend and development efforts in FY’18.

In general, each of the six projects illustrated above individually represent a greater work effort than any single project ASME has delivered in the past five years. These six projects fully utilize all existing ASME capacity to implement systems leaving only resources to maintain existing systems and processes.
Solutions Outlined in the IOP – Visual Diagram

The following two slides provide a visual representation of the systems identified in the IOP (see page 95 and 96 for capital budget; page 131 for estimated timeline).
## Estimated Schedule for Significant Projects / System Upgrades or Implementations

<table>
<thead>
<tr>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Infrastructure Projects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personally: Stabilize Existing Business</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>ASME.org Major Enhancements / New Online Initiatives</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CS Connect Replacement</td>
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</tr>
<tr>
<td>Learning Management System</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Standards Delivery / Subscriptions Platform</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master Data Management Tool for Standards Delivery / Subscriptions Platform</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cleansing Categories</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Implement CRM and BI Tools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement &quot;Vizual&quot; GL Application</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Focus on Stability of Current Business; Prepare for Profitability and Growth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus on Profitability / migration to net surplus. Will drive growth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus on Growth: New revenue models for 2026 goals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace outdated core systems for existing revenue streams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Focus on stability of current systems and operations; provide reporting insights for profitability and growth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Confidential and Proprietary - Not to be disclosed outside of ASME*
## IOP Projects – Enterprise Business Systems Update

<table>
<thead>
<tr>
<th>Project</th>
<th>Milestone</th>
<th>Status</th>
<th>Actual/Expected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implement “Vanilla” G/L Application</td>
<td>Complete initial upgrade and design GP Proof of Concept</td>
<td>In Progress</td>
<td>Nov 2017</td>
</tr>
<tr>
<td>CA Connect Replacement (FieldPoint)</td>
<td>Complete initial design Proof of Concept</td>
<td>In Progress</td>
<td>Mar 2018</td>
</tr>
<tr>
<td>CS Connect Replacement</td>
<td>Secure and build project team</td>
<td>Complete</td>
<td>Oct 2017</td>
</tr>
<tr>
<td></td>
<td>Finalize plans and secure external resources</td>
<td>In Progress</td>
<td>Nov 2017</td>
</tr>
<tr>
<td>Master Data Management Tool</td>
<td>Create “Staging” databases</td>
<td>In Progress</td>
<td>Jan 2018</td>
</tr>
<tr>
<td>Implement CRM and BI Tools</td>
<td>Pre-plan for formal project kick-off</td>
<td>In Progress</td>
<td>Nov 2017</td>
</tr>
<tr>
<td>Standards Delivery / Subscriptions Platform</td>
<td>On-board consultant to assist with Discovery and RFP</td>
<td>Complete</td>
<td>Oct 2017</td>
</tr>
<tr>
<td></td>
<td>Pre-plan for formal project kickoff</td>
<td>In Progress</td>
<td>Nov 2017</td>
</tr>
<tr>
<td>Personify: Stabilize Existing Business</td>
<td>Increase internal Personify support level</td>
<td>Complete</td>
<td>Nov 2017</td>
</tr>
<tr>
<td></td>
<td>Work with vendor to resolve top 3 issues</td>
<td>In Progress</td>
<td>Apr 2018</td>
</tr>
</tbody>
</table>
On-Line Systems Overview

- Situation Analysis / Key Challenges
- Solutions Outlined in the IOP
- Update
On-line Systems - Current Situation Analysis

• User interfaces, searches and navigation are not consistent and easy to use.

• There is no cohesive architecture that integrates all of the site components for consistency and easy maintenance.

• There is no extensive use of analytics and search optimization to measure performance and develop KPIs.

• Web site initiatives were not tied to a comprehensive strategy with marketing and content goals.

• Community and social media presence is lacking in functionality and integration.

• Tools used are outdated and under utilized.
Digital Architecture for On-line Initiatives

The year one initiatives that are designed to be the foundation of all future on-line, digital and mobile development under a single consolidated architecture and plan.

- Kentico be accepted as the foundation for digital commerce. Included in this foundation are:
  - Kentico E-Commerce
  - Kentico Digital Marketing
  - Kentico Content Management

- Kentico Single Sign-On (SSO) be extended to connect to all ASME owned and partnered web sites and integrates with Active Directory to provide staff with seamless single sign-on.

- New search engine be acquired and implemented - this is an opportunity to take a forward looking view of this core capability with leading search engines that would provide strong capabilities.

- Develop a new taxonomy, implement an automated tagging process and automated taxonomy management tool to efficiently maintain and improve search and content/product findability.

- Use of templated frameworks for re-use and automated responsive design to facilitate mobile usage.
Recommended Digital Architecture

The recommendation is to adopt Kentico EMS as the enterprise digital platform. This will provide one integrated solution for digital experiences regarding content access, marketing consistency, online purchasing and self service capabilities.

What this provides:

**Single Sign-On**
- Industry Standards
- Extendable to other web-sites

**Profile**
- Repository of registered user’s attributes and actions
- Enable self-service with My Account

**Digital Marketing**
- Personalization Tools
- E-Mail & Onsite Marketing

**E-commerce**
- Multi-Storefronts
- Configurable Products

**Cart**
- Integrated Cart
- Payment Gateways

**Search**
- Better User Experience
- Improved Findability

**Taxonomy Management**
- Auto Tagging
- Taxonomy governance
## ASME INTEGRATED OPERATING PLAN

### ASME.org Major Enhancements / New Online Initiatives

<table>
<thead>
<tr>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>FY23</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **ePortal websites**
- **ASME Conference & Events Website Implementation**
- **Online Redesign Journeys**
- **Registration Journey**
- **Email Journey**
- **Online Content/Redesign Implementation**
- **New e-commerce Platform**
- **ASME.org Redesigned Membership**
- **New Community Site**
- **Calendar of Events Replacement**
- **Marketing System Event & Replacement**
- **Implement Online Marketing Tools Phase I**
- **Advanced Personalization Phase I**
- **Analytics Phase I**
- **Online Treasury**
- **GUI Revert & Upgrade**
- **Foundation Website**

### Timeline

<table>
<thead>
<tr>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
<th>FY23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 Jul</td>
<td>Q2 Oct</td>
<td>Q3 Jan</td>
<td>Q4 Apr</td>
<td>Q1 Jul</td>
<td>Q2 Oct</td>
<td>Q3 Jan</td>
</tr>
<tr>
<td>Fiscal Year 2017</td>
<td>Fiscal Year 2018</td>
<td>Fiscal Year 2019</td>
<td>Fiscal Year 2020</td>
<td>Fiscal Year 2021</td>
<td>Fiscal Year 2022</td>
<td>Fiscal Year 2023</td>
</tr>
</tbody>
</table>
# IOP Projects – Online Services Update

<table>
<thead>
<tr>
<th>Project</th>
<th>Milestone</th>
<th>Status</th>
<th>Actual/Expected Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efests Websites</td>
<td>Design and Implementation of Phase I Site under new platform</td>
<td>Complete Efests.asme.org</td>
<td>Oct-2017</td>
</tr>
<tr>
<td></td>
<td>Efest Phase 2 – Requirements and design</td>
<td>In Progress</td>
<td>Mar-2018</td>
</tr>
<tr>
<td>R&amp;D Conferences &amp; Events</td>
<td>Design and build wireframe changes</td>
<td>In Progress</td>
<td>Dec-2017</td>
</tr>
<tr>
<td>Website Implementation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New e-commerce Platform</td>
<td>Build Initial Design Proof of Concept</td>
<td>In Progress</td>
<td>Mar-2018</td>
</tr>
<tr>
<td>Online Taxonomy</td>
<td>Design Enterprise wide Taxonomy</td>
<td>In Progress</td>
<td>Jan-2018</td>
</tr>
<tr>
<td>Calendar of Events Replacement</td>
<td>Complete Design Specifications</td>
<td>In Progress</td>
<td>Feb-2018</td>
</tr>
<tr>
<td>Online Strategy/Architecture</td>
<td>Complete Architectural Design</td>
<td>Complete</td>
<td>Sep-2017</td>
</tr>
<tr>
<td>Implementation</td>
<td>Design Responsive UX/UI &amp; Branding Specification</td>
<td>In Progress</td>
<td>Jan-2018</td>
</tr>
<tr>
<td>Implement Online Marketing Tools</td>
<td>Install and configure Software</td>
<td>In Progress</td>
<td>Jan-2018</td>
</tr>
<tr>
<td>Online Redesign Journeys</td>
<td>Design four online journeys for products to be utilized in future site development.</td>
<td>Complete</td>
<td>Oct-2017</td>
</tr>
</tbody>
</table>
Questions?
An Introduction to the Technology Advisory Panels (TAPs)

PRESENTATION TO THE BOARD OF GOVERNORS

NOVEMBER 2017
What to Expect from Presentation

» **Brief Description** - Introduction to Technology Advisory Panels (TAPs) and update on progress.

» **Desired Outcome** – For discussion. Raise the BOG’s awareness of the TAPs and discuss their potential contribution to strategy implementation.

» **Questions** - Please ask clarifying questions during the presentation, but please hold commentary for the discussion.

» **Duration** – This presentation consists of 37 slides and is scheduled for 90 minutes; 30 minutes for presentation materials, 60 minutes for discussion.
Purpose

» The purpose of the Technology Advisory Panels (TAPs) is principally to gain market insights from industry experts within core constituencies to help guide ASME strategy implementation.

» TAPs are unique:

  » Organized by the BOG-selected key strategic technology areas.
  » Enterprise view; not directly aligned with any single Sector, Group, or business unit; not constrained by existing or traditional impact areas.
  » Engage new constituencies beyond our current network of members, volunteers, and qualified content contributors.
  » Help generate and validate new ideas for market facing solutions beyond ASME’s traditional solutions portfolio.
TAP Results & Highlights
### FY17 Approved New Opportunities to Develop

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Manufacturing</th>
<th>Bioengineering</th>
<th>Clean Energy</th>
<th>Pressure Technology</th>
<th>Robotics</th>
<th>Products</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>eLearning - Cell Therapy</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Course</td>
<td>Approved Q3</td>
</tr>
<tr>
<td>Alliance of Advanced Biomedical Engineering</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Subscription service</td>
<td>Approved Q3</td>
</tr>
<tr>
<td>Journal of Biomedical Eng. and Biotechnology</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Journal</td>
<td>Approved Q3</td>
</tr>
<tr>
<td>Journal of NDE, Diagnostics and Prognostics</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Journal</td>
<td>Approved Q3</td>
</tr>
<tr>
<td>eLearning - Design for Additive Manufacturing</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>Course</td>
<td>Approved Q4</td>
</tr>
<tr>
<td>eLearning - Robotic Systems for Manufacturing</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Course</td>
<td>Approved Q4</td>
</tr>
<tr>
<td>Pressure Technology Industry Event</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Conference and expo</td>
<td>Approved Q4</td>
</tr>
<tr>
<td>eLearning - Nuclear Decommissioning and Decontamination</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Course</td>
<td>Approved Q4</td>
</tr>
<tr>
<td>Offshore Wind Energy Conference</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Conference and expo</td>
<td>Approved Q4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2</strong></td>
<td><strong>3</strong></td>
<td><strong>2</strong></td>
<td><strong>1</strong></td>
<td><strong>1</strong></td>
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</tr>
</tbody>
</table>

Appendix 3.4
Page 5 of 37
## TAP F2F Meetings: to-date & planned

<table>
<thead>
<tr>
<th>TAP</th>
<th>Initial F2F Meeting</th>
<th>Next F2F Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Technologies</td>
<td>February 2, 2017</td>
<td>November 16, 2017</td>
</tr>
<tr>
<td>Clean Energy</td>
<td>March 1, 2017</td>
<td>December 2017</td>
</tr>
<tr>
<td>Bioengineering</td>
<td>January 13, 2017</td>
<td>July 20, 2017</td>
</tr>
<tr>
<td>Enabling Technologies</td>
<td>January 11, 2017</td>
<td>January/February 2018</td>
</tr>
<tr>
<td>Robotics</td>
<td>March 31, 2017</td>
<td>December 13, 2017</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>April 18, 2017</td>
<td>October 6, 2017</td>
</tr>
</tbody>
</table>
Pressure Technology TAP

Market Needs Feedback:

» Baseload power plant cycling
» Risk-based inspection matrix tool
» Technical sessions on advanced materials
» Flowchart of ASME Code development process
» NDT process for testing pipeline strength
» Guidelines for sweet and sour gases pipeline crack growth rate testing
» Guidelines for 3rd party oversight of ASME AIAs
» Pressure vessels database
» Certification program for companies/individuals as qualified inspectors
» Applied industry practices L+D programs for pressure vessels and pressure technology
Clean Energy TAP

Market Needs Feedback:

» Clean energy technologies standards
» L+D on technologies for measuring and controlling emissions
» Performance testing codes that link air quality standards to emission limits
» Water reuse standards for power generation
» Onsite carbon neutral power generation solutions
» Multiple needs on grid stability
» Multiple needs on cybersecurity
» Standards for net metering
» Tools to support development and commercialization of new clean energy technologies
Robotics TAP

Key Takeaways

» Standards needed in robot arm performance parameters & evaluation, interchangeability of end of robot arm tooling, plug-n-play robots & system components

» Insufficient numbers of graduating, early career, & experiences engineers with robots and robotic system knowledge to meet demand

» Need for industry certification programs in robotics

» Need for applied robotics events to exchange latest knowledge on robotics system developments and successful applications

» Encourage human-robot collaboration
Manufacturing TAP

ASME Manufacturing Technology Advisory Panel is meeting right now (on Manufacturing Day) at ASME Headquarters

Spending #MFGDay2017 at @ASMEdotorg with its #AdditiveManufacturing Technical Advisory Panel! @Senvol is here too!
Manufacturing TAP

Key Takeaways

» Lack of engineers with Design for Additive Manufacturing (DfAM) training/experience

» Current education curriculum not providing necessary skillsets for additive manufacturing and other advanced manufacturing technologies

» Need for industry certification programs in additive manufacturing

» Industry needs additional standards, guidelines, reference data to increase adoption of additive manufacturing and other advanced manufacturing technologies

» Many business leaders do not fully know how to respond to new manufacturing technologies and how to integrate them into their business
Bioengineering TAP

Wordle summary of TAP discussions...
Bioengineering TAP

» Key Takeaways

- Standards needed in biomanufacturing, regenerative medicine, and biometrology
- Field is fragmented; engineers need to connect with those in other disciplines, including clinicians
- The divide between engineers and biologists inhibits innovation
- Difficulty navigating the regulatory landscape impedes commercialization
Enabling Technologies TAP  
Opportunities for ASME to Contribute

» Workshop on Big data for Data generators/data users-ownership right + trust
» SDO advice/consulting to industry IoT consortia?
» Partners with organization different ways (i.e., education modules)
» Early IoT standard: Application standards/other docs for IoT deployment scenarios
» Certification/Training - Target local market with strong ASME presence. Digital engineer training/courses in select industries relevant to local markets
» IoT - manufacturing vertical software/hardware reference architecture not vendor driven. Drive discussion that needs to take place
» Drive movement on model base qualification of physical devices for in situ/real time testing? How much data is collected over lifespan? How frequently to sample?
Enabling Technologies TAP (cont.)
Opportunities for ASME to Contribute

» IoT/ASME Interface
» Collaborate on U.S based leadership on global OT/IT standard
» IoT peer reviewed journal
» Influence ABET accreditation. Mfg. is not in the curriculum
» Code security
» Audit/Cert process for IOT security conformity assessment/standard proactive to certify if/when an "IoT system is secure"
» Hackathon (Big data/Iota apps/security) - Identify top ASME accounts/sponsors. Understand 1-3 key problems in the space Built on other ASME event
» Certification of models for physical qualification
» Early additive standards materials vs. fabrication
Who/ what are these TAPs?
TAP 1.0 - Background

» Original TAP formed by the Sector Management Committee (SMC) in FY16 to assist with initial technology selection.

» Membership included volunteer subject matter experts nominated by the four ASME Sectors and staff.

» The TAP 1.0 scope was limited to ranking of top technologies based on their favorability toward achievement of the enterprise objective.

» The TAP 1.0 effort culminated with a facilitated workshop in March 2016.

» Strategic technologies formally selected by BOG in June 2016.
TAP 2.0 - Current

» Formed in FY17 for each strategic technology focus area.

» Provide technology and market insights, identification of constituent needs, advice for potential new ASME products and services, and advice for greater constituent engagement.

» Members are diverse thought leaders from industry, academia, research, and government; deliberate focus toward industry.

» Advisory to all Sectors through Technology Advancement and Business Development (TABD) staff.

» Some TAP members are active ASME Group participants and leaders.

» Aware of, but not constrained by, traditional ASME products.

» Advisory committee, operates without formal parliamentary procedures.

» Development of an operations guide is planned.
Pressure Technology TAP

Delinda L. Whiting
Hartford Steam Boiler Global Standards

Jason Lee, P.E.
Babcock Power Services Inc.

Roger Cordes, Ph.D., P.E.
Stress Engineering Services, Inc.

Clayton T. Smith, P.E., PMP
Smith Associates Consulting Group

Daniel T. Peters, P.E.
Structural Integrity Associates, Inc.

Robert Smith
USDOT Pipeline and Hazardous Materials Safety Administration

Pamela Hamblin
Thielsch Engineering, Inc.
Robotics TAP

Robert C. Cohen  
Vice President and General Manager  
Global Research & Development  
Reconstructive Division  
Stryker Orthopaedics

David Dechow  
Material Handling Segment  
Staff Engineer - Intelligent Robotics/Machine Vision  
FANUC America Corporation

Zohaib T. Mian, PhD  
Senior Research Engineer/Scientist - Control Systems  
United Technologies Research Center

Tom Ryden  
Executive Director  
MassRobotics

Steve Toebes  
Chief Product Officer  
Humatics Corporation

Carle Vause  
Chief Executive Officer  
Soft Robotics, Inc.

Brooke Reed  
SSG Supplier Management Strategy & Intelligence Category Leader, Automation, The Boeing Company

John Ostrem  
CEO  
AvatarMind
### Manufacturing TAP

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daniel Bazile</td>
<td>Manager - Additive Manufacturing Certification and Qualification for Metals Boeing</td>
</tr>
<tr>
<td>Jose Coronado</td>
<td>Product Manager PTC</td>
</tr>
<tr>
<td>Laurent Cretegny, PhD</td>
<td>Senior Product Line Manager GE Power</td>
</tr>
<tr>
<td>Bryan Fischer</td>
<td>Vice President – Dimensional Engineering Sigmetrix</td>
</tr>
<tr>
<td>Jonathan Jennings</td>
<td>Systems Engineer Honeywell Space &amp; Defense Systems</td>
</tr>
<tr>
<td>Evan Kuester</td>
<td>Applications Engineer 3D Systems</td>
</tr>
<tr>
<td>Brandon McWilliams, PhD</td>
<td>Team Lead, Laser Additive Manufacturing and Engineering Team Materials US Army</td>
</tr>
<tr>
<td>Victor Oancea, PhD</td>
<td>Mechanica Technology Director Dassault Systèmes</td>
</tr>
<tr>
<td>Ferenc Pankotai</td>
<td>Plant Manager, Experimental Manufacturing and Tooling Solar Turbines, A Caterpillar Company</td>
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</table>
TAP Ideation Process
TAP Ideation Process

Ideation Workshop Process and Guidelines

- Out-of-the-box ideas strongly encouraged with solution.
- The wilder the better. No judgement – we’re all friends here.
- New idea? Use a new sheet

Ideation Workshop Process

- Every TAP member will receive an “Idea Form” to write down idea and solution relating to the industry need.
- Pass “Idea Form” to your left and receive new “Idea Form” from your right.
- Read the original idea and add a new solution in another solution box or if new idea? Use a separate new “Idea Form.”
- “Idea Forms” will make one full rotation/everyone will read each idea sheet once.
- Second rotation to fine tune ideas (if necessary)
- Break
- Group the ideas and display on easels by subject/topic
- TAP members provided with six orange voting dots to vote for best solutions/discussion
- Group discussion of the “most voted” solutions of each subject/topic
- Conversation points and ideas recorded
Example: Ideation questions

» What challenges do you and your organization face?
» What are your organization’s key pain points?
» What are new developments and emerging trends in your industry?
» What are the most critical happenings in your industry?
Ideation

- TAPs
- Other Market Feedback
- Sectors/Volunteer Groups
- ASME Product Groups

Ideas
Evaluating Ideas

- Weighted
- Ranked
- Analyzed
- Sorted
- Selection
Disseminating and Developing the Ideas

Ideas

ASME Product Groups

Staff/ volunteers take actionable ideas and develop new products through normal processes

Sectors/ Volunteer Groups

Staff/ volunteers take actionable ideas and develop content through Divisions, Segments, or other Groups as applicable using current processes

ASME’s TABD-NPD

TABD staff develops Business Model Frameworks (BMFs) for priority opportunities for EMT approval. New Product Development (NPD) staff coordinate product development for approved BMFs
Example Screening Criteria

» Strategic Fit
» Size & Growth Potential of Target Market (TAM)
» Level of Competition / Competitive Advantage
» Ease of Product Development
» Potential Partnership Opportunities
» Potential for Multiple Derivative Products
» Investment / Cost of Entry
» Relevant to Existing Programs / Stakeholders
» Stakeholder Engagement Potential

» Global Adoption Potential
» Development Time (Time-to-Market)
» Profitability & Rate-of-Return
» Market Need / Tangible Benefits to Customer
» Stay within Core Competencies
» Risk
» Positive Feedback from Industry
» Urgency
» Improve Branding
» ASME Thought Leadership Potential
» Access to SMEs
# Example: Ideas Screening Matrix

![Example Ideas Screening Matrix](image-url)
Key Questions to Evaluate New Ideas

» What is the customer problem we will solve?
» How many customers are there for our solution?
» What’s unique about our solution? What’s our competitive advantage?
» What price can we charge?
» What is the financial model and projection?
IDEAS become OPPORTUNITIES…

If “Business as usual”; fits in current operations; Sectors/Volunteer Groups, Product Groups

Ideation and Evaluation
- TAPS
- Sectors/Volunteer Groups
- Product Groups

- Normal Processes for evaluation and approval
- Share/communicate with other groups
- Seek integration; derivative products

New Traditional Products

If new; does not clearly fit in current operations; TABD/NPD

Phase 0 – Opportunity Evaluation
BMF Development
- Value prop
- Markets
- Products/service channels
- Relationships
- Resources
- Partners
- Activities
- ROI/SROI

Validate Opportunity
- Market Research
- Stakeholder feedback
- In-depth interviews
- “Roundtable” discussions
- “Whiteboarding” sessions
- Attend industry events
- Facility visits
- Meetings

Phase 1 – Planning

Phase 2 – Development

Phase 3 – Production Readiness

Phase 4 – Production and Market Launch
Suggested Discussion Topics

» Are the roles of the TAPs and their value to ASME clear?

» How can we most effectively integrate the TAPs with the rest of the enterprise?

» Is governance necessary for TAPs to continue acting in their advisory capacity?

» What is the most effective way to collect and disseminate ideas?
2017 Board Retreat Follow-Up
Elena Gerstmann, PhD, Deputy, Executive Operations

ASME Board of Governors Meeting
November 4, 2017
Tampa, Florida
What to Expect from Presentation

• **Brief Description** – Provide a status report on action items from the July 2017 Board retreat.

• **Desired Outcome** – To provide the Board and guests with a line-of-sight into projects coming from the retreat.

• **Questions** – Please ask clarifying questions throughout the presentation but hold general questions until after the presentation.

• **Duration** – Presentation: 5 Minutes; Discussion: 5 Minutes.
The Story in Short

Challenge
ASME needs to stay relevant in a changing world and needs a robust strategy and common goals that all can unite behind.

Opportunity
We are well positioned to lead in our core business, grow in key technologies and leverage the passion and expertise of our society to become the go-to organization serving core engineering constituencies.

Focal Point
Over the next three years, leveraging our Strategy and Integrated Operating Plan, we continue moving forward “together” on our five Strategic Actions and realize our Enterprise Strategy over the next 10 years.

The Payoff
Are recognized as the leader and essential resource for mechanical engineers and other technical professionals globally for solutions that benefit humankind—leading in key technologies that impact the world.

How We Deliver
Fulfill our Mission by clarifying and aligning to our strategy and operating goals.

How We Deliver
Reclaim the hearts, minds and soul of ASME and secure our Leadership Position while increasing Engagement, Collaboration and diversity.

How We Deliver
Strengthen our Technology and Solutions Portfolios to expand our influence and reach.
How We Deliver

**People**

A. Communicate, celebrate and collaborate to energize and engage the hearts, minds and soul of ASME
B. Expand and reinvigorate ASME’s diverse global community

**Products**

A. Diversify our reach and connection to key stakeholders and future markets for all products and services
B. Ensure the strength and future of S&C

**Process**

A. Release our Strategy now and communicate and clarify it across ASME
B. Develop a robust strategic plan and metrics which enables alignment across ASME
C. Transform how we prioritize, operationalize and measure what we choose to pursue
D. Provide clarity around 2 key issues to move forward
Projects Status Sheets

<table>
<thead>
<tr>
<th>Date</th>
<th>Target</th>
<th>Status</th>
<th>Details</th>
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<tr>
<td>12/21/2017</td>
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1) Fulfill our Mission by clarifying and aligning to our strategy and operating goals

- **Release our Strategy now and communicate and clarify it across ASME**
  - Revised 2-pager shared with the Board on Nov 4 and published on asme.org during week of Nov 6.
  - Work is continuing on the communications plan; strategy master deck near completion.

- **Develop a robust strategic plan and metrics, which enables alignment across ASME**
  - The review of the strategy, clarifying Society goals and flow-down is completed.
  - Work continues on a larger plan that will include information from sectors and business units.

- **Transform how we prioritize, operationalize and measure what we choose to pursue**
  - The FY-18 IOP was put through the filter of the 5 Strategic Actions.
  - SMC is working on the FY19-IOP.

- **Provide clarity around two key issues to move forward**
  - The second reading of the Bylaws related to ED and President Roles & Responsibilities happened on Nov 4.
  - SMC will bring a recommendation on 10-year operating goals with regard to modifying the goals of “double the revenue” and “50% revenue from S&C.”
2) Strengthen our Technology and Solutions Portfolios to expand our influence and reach

- **Diversify our reach and connection to key stakeholders and future markets for all products and services**
  - Project leads have been identified to begin discussions on creating industry multi-society conference workshops.
  - Tim Wei is the lead and will plan to budget in FY19 the Engineering Ambassador program.

- **Ensure the strength and future of S&C**
  - Board on Codes and Standards Operations was advised of intention to conduct a lean exercise on standards.
  - Video interviews are being conducted during IMECE towards communicating and sharing the value of standards.
  - Several new topics are being explored for potential standards development, particularly in the bioengineering area.
3) Reclaim the hearts, minds and soul of ASME and secure our Leadership Position while increasing Engagement, Collaboration and diversity and diversity through this holistic engagement model

- Communicate, celebrate and collaborate to energize and engage the hearts, minds and soul of ASME
  - March Group Leadership Training event planned for March 2018 in Orlando, Florida.
  - Preliminary list of tools and resources to enhance collaboration among volunteers, members and staff has been identified and provided to IT.

- Expand globally and reinvigorate ASME’s diverse global community
  - A presidential tiger team was created to address a funding model for group activities (segregated accounts). To be discussed at November Board meeting.
Questions?

Answers
Date Submitted: October 13, 2017
BOG Meeting Date: November 4, 2017

To: Board of Governors
From: Sector Management Committee

Agenda Item Executive Summary:

The report updates the BOG on SMC activity and is for information only. There is no action required.

Proposed motion for BOG Action: *(if appropriate)*
No action

Attachments:
One
I. SMC Operations

- Tim Wei has accepted the role of Vice Chair of the SMC and will work with Jeff Patterson on the FY19 IOP.
- The SMC will meet in Tampa, Florida during IMECE. In addition to discussing FY19+ IOP planning and 10-year operating goals, the committee will review updates to the Operation Guide.
- VOLT will offer various training sessions at IMECE in November.
- John Mulvihill will present an update to the BOG on Group Engagement Committee (GEC) activities.

II. Sector Highlights

Standards and Certification – Sam Korellis/Bill Berger

Quarterly Highlights:

- The Council on Standards and Certification (CSC) last met on June 13 during the Annual Meeting in Newport Beach, CA, and its next meeting is scheduled for November 6 during IMECE in Tampa, FL.
- At its June 13 meeting, CSC received reports from its four strategy Task Teams on implementation of their recommendations related to portions of the S&C Strategic Plan [International Working Groups; Derivative (or Companion) Products; Benchmarking Other SDO’s (in how they identify standards opportunities for emerging technologies in their areas); and Committee Best Practices]. Among actions completed to date are the issuance of a brochure containing a compilation of best practices being utilized by various committees that can be used by other committees; the distribution of a protocol to facilitate committees’ identification and evaluation of potential derivative products related to their core products; and S&C presentation of a Workshop on Development of Monitoring, Diagnostic, and Prognostic Guidelines to Support Health Management and Control of Manufacturing Systems at the University of Southern California as part of the ASME Manufacturing Science and Engineering Conference.
- ASME has informed the American National Standards Institute (ANSI) of its intent to initiate a new standards development activity on Application of Mobile Unmanned Systems (MUS) for inspections, monitoring, and maintenance of industrial facilities and power plants as well as equipment, transmission lines, and pipelines. ASME is also a participating member of the new ANSI Unmanned Aircraft Systems Standardization Collaborative. An ANSI standardization collaborative is a mechanism to advance cross-sector coordination in the development and compatibility of standards and conformance programs.
needed to support emerging technologies and national / global priorities.

- A good portion of the November 6 meeting of CSC will be devoted to prioritizing the five technologies for applicability to potential standards activities and to seek recommendations for new subject matter experts that can contribute to the assessment and development of new standards in these areas.

- The draft of Y14.46, Product Definition Practices for Additive Manufacturing has been Standards Committee and Board approved, and is expected to be published in November / December 2017 as a Draft Standard for Trial Use. This document will supplement the requirements of Y14.5 for additive manufacturing designs.

- S&C continues to work with ASME Engineering Education to incorporate standards content into 4-year Mechanical Engineering and 2-year/4-year Mechanical Engineering Technology programs. A joint team was established, consisting of educators who teach students every day and S&C subject matter experts who write standards every day. The team has developed 8 modules that are currently being piloted. To date, 18 schools have requested to use and pilot the modules. A goal of the project is to have 50 schools using the modules by the end of FY 19; the ultimate goal is to reach 150,000 students in the U.S. plus students in 20 other countries.

- The Nuclear Quality Assurance (NQA) Committee China International Working Group (IWG) was inaugurated on July 4, 2017 in Shanghai in conjunction with ICONE-25. The State Nuclear Power Engineering Company (SNPEC) is serving as the partner organization to support the operation of the NQA China IWG.

Upcoming Activities/What’s on the Horizon?
Nothing at this time.

Technical Events and Content (TEC) – Rick Marboe/John Koehr
Quarterly Highlights

- **Technical Events and Content (TEC) Council**
  - TEC Council held web conferences on September 8 and October 2, 2017.
  - Segment Leadership Team (SLT) meetings and conference activities are described below for each segment.

- **Design, Materials, and Manufacturing (DMM) Segment**
  - IDETC/CIE, sponsored by the Design Engineering and Computers and Information in Engineering Division’s, was held from August 6-9 in Cleveland, Ohio. Total attendance was 1241.
  - InterPACK, sponsored by the Electronic and Photonic Packaging Division, was held from August 29 – September 1 in San Francisco, California. Total attendance was 340. Local media coverage: [https://www10.mcadcafe.com/nbc/articles/1/1529900/Optomec-CEO-Presents3D-Printed-SensorsSolution-InterPACK-Conference](https://www10.mcadcafe.com/nbc/articles/1/1529900/Optomec-CEO-Presents3D-Printed-SensorsSolution-InterPACK-Conference)
  - The 26th Annual Information Storage and Processing Systems (ISPS) Conference was co-located with InterPACK. Total attendance was 75.
  - The Smart Materials, Adaptive Structures and Intelligent Systems (SMASIS) Conference was held from September 18-20, 2017 in Snowbird, Utah. Total attendance was 228.
DM SLT held a teleconference on October 5, 2017 to prepare for its November 4, 2017 meeting at IMECE in Tampa, Florida.

**Energy Sources and Processing (ESP) Segment**
- The Ocean, Offshore and Arctic Engineering Conference was held in Trondheim, Norway from June 25-30 with a total of 1080 attendees.
- The International Pipeline Geotechnical Conference (IPG) was held in Lima, Peru on July 24-26, 2017.
- The Unconventional Resources Technology Conference (URTeC) was held in Austin, TX from July 24-26, 2017.
- OTC Brasil and Rio Pipeline were held October 24-26, 2017 in Rio de Janeiro.

**Energy Conversion and Storage (ECS) Segment**
- The Power and Energy Conference combined with Turbo Expo, was held June 26-30, with a total attendance of 3,608.
- The International Conference on Nuclear Engineering (ICONE 25) was held July 2-6, 2017 in Shanghai, China.
- The Internal Combustion Engine Fall Technical Conference (ICEF) was held on October 15-18, 2017 in Seattle, Washington.

**Gas Turbine Segment (GTS)**
- Segment Leadership Team (SLT) held 2 teleconferences in August and September 2017.
- SLT is scheduled to hold a strategic planning meeting in October 2017, facilitated by a VOLT volunteer with input from the Strategic Advisory Committee, goal is to gain tools to formulate a formal strategic plan for the Segment.
- Maintenance Repair and Overhaul (MRO) / Gas Turbine (GT) Aftermarket event – continuing development for the event, will hold MRO Day within the Turbo Expo 2018 program; goal is to expand the GT audience in MRO space to gain momentum for a stand-alone event by 2019 or 2020.
- Technology Roadmap focused on the global Gas Turbine industry – a workshop is planned for October 2018 in Washington, D.C. to explore the creation of a Gas Turbine Advanced Manufacturing roadmap.
- Turbo Expo, combined with Power Energy Conference, was held June 26-30, total attendance 3,608.

**Engineering Sciences Segment (ESS)**
- Three conferences held over the summer:
  - The 2017 Fluids Engineering Division Summer Meeting was held July 30-August 4 in Waikoloa, HI. Total attendance was 364.
  - The 2017 Summer Heat Transfer Conference was held July 9-14 in Bellevue, WA. Total attendance was 319.
  - 2017 International Conference on Nanochannels, Microchannels, and Minichannels, August 27-30, Cambridge, MA. Total attendance was 139.
- Planning underway for the 2017 IMECE in Tampa, FL.
  - ESS meeting will be held November 4th.
  - The Nanoengineering in Energy and Sustainability is planning a workshop on Recent Advances in Nanotechnology on November 7th.
  - ESS chair and staff will attend the division executive committee meetings.

**Upcoming Activities/What’s on the Horizon?**

**TEC Council**
A face-to-face TEC Council meeting is scheduled for November 5, 2017 in Tampa, FL, concurrent with IMECE.

Meeting plans include finalizing updates to the Sector and Segment Operations Guides, development of TEC Sector Strategic Plan, and discussion of common conference elements.

**Design, Materials, and Manufacturing (DMM) Segment**
- The Dynamic Systems and Control Division will hold its annual conference in Tysons Corner, Virginia, October 11-13, 2017
- ASME/BATH 2017 Symposium on Fluid Power and Motion Control (FPMC), October 16-19, 2017, Lido Beach Resort, Sarasota, FL
- DMM is meeting at IMECE in Tampa, Florida on November 4, 2017.
- The 2nd meeting of the Manufacturing Technology Advisory Panel (TAP) is scheduled for October 6, 2017 at ASME HQ.
- The 2nd meeting of the Robotics Technology Advisory Panel (TAP) is scheduled for December 13, 2017 at ASME HQ.

**Gas Turbine Segment (GTS)**
- Gas Turbine India (GT India), December 7-8, 2017
  - 382 abstracts received through Call for Papers
  - Highest number of abstracts in GT India history

**Engineering Sciences Segment (ESS)**
- Planning for the following ESS conferences are underway and on target for execution:
  - 2018 Nanoengineering in Medicine and Biology, August 21-25, Los Angeles, CA.

**Public Affairs & Outreach (PA&O) – Tim Wei/Melissa Carl**

*Quarterly Highlights:*

**Cross-cutting Initiatives**
- Engineering Education/Standards Education (EE/S&C) project, to create free/open access technical problems and instructor presentations infused with standards content, ended. Nat’l Inst for Stds & Tech (NIST) funded $50K, and has considered add’l funding. ASME-owned modules complete, to be placed on ASME.org by L&D.

**Engineering for Global Development and Engineering for Change**
- DEMAND–Fall issue will be released this month. Has media partnership with the Sankalp Forum for all events this year (Indonesia, Sept; Global Summit, Mumbai, Dec; Kenya, Feb).
- EGD Research–Successful 5th annual EGD Research Forum at IDETC; videos on .ORG early 2018.
- Engineering for Change–launched a new Steering Committee to provide advice and strategic input on issues of market impact, program direction, network/funding expansion, and stakeholder/competitor issues. Cmte includes reps from ASME (Past Pres–Madiha Kotb), IEEE, USAID, MIT and Tata Center for Tech & Design.

**K12/Diversity/Scholarships**
- ASME INSPIRE ended FY17 in 1,110 middle and high schools across 48 states, engaging well over 46,000 students on the platform. FY18 1st quarter stats demonstrate
that program use is strong: 438 schools using INSPIRE in September, compared to 303 year over year. INSPIRE STEM Career Exploration is new middle-school-specific program in portfolio, offering experiences such as being a shoe designer (3D design and manufacturing) and an online music company (developing algorithms).

- The 6th ASME Foundation/Future Engineers Challenge, Two for the Crew, launched September 27th at a public event at the Smithsonian Air & Space Museum. [www.futureengineers.org/twoforthecrew](http://www.futureengineers.org/twoforthecrew)

- October 6-8, ASME Foundation and Future Engineers hosted booth at the Nat’l Girl Scouts Convention in Columbus, OH, where nearly 10,000 girl scouts, delegates, and parents experienced 3D design.

**Diversity and Inclusion Strategy**

- The Diversity and Inclusion Strategy Committee met via conference call on Sept 21, 2017 and discussed:
  - Committee recommended updates to 4 diversity/inclusion-related Society policies. Recommendations currently under review by HR and COR.
  - Committee has recommended changes to the diversity in STEM position paper to update the data referenced and align with the proposed changes to the society policies, and is working with CGR.
  - The importance of considering diverse candidates in the Executive Director search.
  - The future of the McDonald Mentoring Award.

**Engineering Education**

- ASME scheduled 112 ABET assignments for the 2017-18 accreditation cycle. ME/MET programs underway at 57 domestic universities, and 25 international visits at institutions in 13 countries: Egypt, India, Jordan, Lebanon, Mexico, Palestine, Peru, Philippines, Poland, Qatar, Saudi Arabia, Turkey and UAE.
- ME/MET Department Heads meetings and special WEPAN/ASME TECAID session featured at the ASEE Ann Conf, June 24-29, 2017, Columbus, OH. EE Stds project team also met to finalize modules dissemination.
- ASME Committees on Engineering & Engineering Technology Education, July 12, in conjunction with ABET Commission meetings in Baltimore, MD.
- NSF-funded TECAID grant is currently working on the logic model and learning modules, a more focused effort on institutionalizing the work within ASME Engr Education, to be disseminated to the MEDH community.
- ASME 2017-2018 Graduate Teaching Fellows: Megan Tomko, Georgia Tech; Allison Mahvi, Georgia Tech; Trevor Terrill, Texas A&M; and Allison Lee, Brigham Young.
- 2018 ME Education Leadership Summit, (MEED), Mar 14-17, 2018, San Juan, PR.
- LTW-The NCEES Education Committee met at the annual meeting in August to amend PS35 to Option E.

**Government Relations (GR)**

Issued 10 position statements on topics including principles of peer review of scientific research, intellectual property rights in academic publishing, and federally funded scientific and engineering research budget and appropriations issues.

- **ASME Federal Government Fellowships**
  - Dr. Andrew Bicos, ASME Congressional Fellow, Honorable Tom Reed (R-OH) until June 2018.
Dr. Shawn Moylan, ASME Congressional Fellow, Honorable Gary Peters (D-MI) until August 2018.
Dr. Urmila Ghia, ASME Congressional Fellow-elect, will serve a one year term beginning Jan 2018.

Congressional Briefings

Industry Advisory Board
- Fall IAB Meeting, ASME as an Industry-Focused Organization: Potential Collaborations and Opportunities for the Future. Oct 16-17. IAB members participated in a small group activity/larger group discussion that gave ASME more insights into what its industry executive customers want/need.

Public Affairs and Outreach Council
- The PAO Council met via conference call on Sept 18 to discuss current unit activities and the new IOP.

Upcoming Activities/What’s on the Horizon?

Engineering for Global Development and Engineering for Change
- ISHOW New York, October 17-19; Impact.Engineered October 18 at NY’s Centre for Social Innovation, hosted by E4C and ASME; E4C will deliver Social Impact Zones at ASME’s E-Fests 2018.

K12/Diversity/Scholarships
- INSPIRE school site visit early November in Charlotte, NC; Video and collateral material development for the Giving Tuesday campaign underway; Protocols/campaign launch Clark Student Scholarship for HS students engaged on the INSPIRE platform.

Diversity and Inclusion Strategy
- The Diversity and Inclusion Strategy Committee will meet on Sunday, November 5 during IMECE.
- Women in Engineering Reception, including a structured networking activity, at IMECE on Tue, Nov 7.
- Katarina Weinberg’s (DISC Chair) term ends Jun 2018. Chair-elect to be chosen by Dec 2017.

Engineering Education
- ABET Society Liaison, Board of Delegates & Board of Directors meetings, October 19-21, Baltimore, MD.
- Engineering Education meetings and forums for ME/MET department heads at 2017 IMECE in Tampa, FL.
- Engineering Education Awards (Church and Sparks) will be selected in October.
- TECAID 4-part webinars will begin late October for the MEDH community.

Government Relations (GR)
Industry Advisory Board
• Spring IAB meeting date/location is TBD.
• The IAB Executive Committee is discussing the possible re-start of the IAB quarterly webinar series.

Public Affairs and Outreach Council
• The PAO Council will be meeting at IMECE 2017 on Monday, November 6, from 10:30 am-5:00 pm.

Student & Early Career Development (SECD) – Paul Stevenson/Paul Scott
The SECD Council will hold a face-to-face meeting in November at IMECE. The SVP election process has concluded and a SVP-elect has been confirmed.

Quarterly Highlights

E-Fests
• Four E-Fests are being planned for 2018: E-Fest Asia Pacific at Delhi Technological University (March 15 – 18, 2018), E-Fest East at Penn State University (contract pending; April 13 – 15, 2018), E-Fest West (dates and location in progress/pending), E-Fest South America (Brazil or Peru, July 2018).
• HPVC, SDC, Old Guard and IAM3D are all planned for the 2018 E-Fest cycle. A new volunteer lead has been recruited for IAM3D.
• Application interest from schools in the Middle East (for 2018 hosting) have been somewhat tepid. Additionally, many schools do not have adequate space for all of the required events.
• The EFX model is taking shape and the E-Fest Steering Committee has begun developing a process for this application.

ECEPC
• FutureME has undergone rebranding and developed new guidelines; including new consistent social headers, new logos, and templates
• Focused on networking skills FutureME held a Social Meetup at IDETC-CIE conference in August; roughly 58 attendees, NPS 35%
• The post-production for eight (8) mini-talks/Q&A video clips and nine (9) ECE interviews finalized with Technology Services.
• Released seventeen (17) video clips on our YouTube channel with some select versions posted on .ORG

Community Development Team
• Published a July and September issue of ME Today

Upcoming Activities/What’s on the Horizon?

E-Fests
• The 2019 E-Fest Application has been completed and will be distributed at the ME Dept. Heads meeting at IMECE and then posted to the new E-Fest website.
• E-Fest Steering Committee to meet at IMECE to review 2018 line-up of events, strategize on 2019 venues and EFX construct and process.

Early Career Programs
• Early Career activities will be in full swing at IMECE with committee meetings and ECE interviews
• There will be a FutureME presence at the IMECE opening reception, plus MiniTalks, a Social Meet-Up and a sponsored Coffee Break
• ME Today November issue to be published
• FutureME to expand its social media footprint: Launching new Facebook page
• FutureME will extend its reach at the Net Impact conference in Atlanta GA, late October
• FutureME developing marketing assets and strategies to support promotional activity: postcard, signage, photowall, tchotchkes
• FutureME to explore and identify stakeholders and locations to hold 2-3 social meetups for ECE networking opportunities

III. VOLT Academy – Marc Goldsmith/Clare Bruff

Quarterly Highlights:
The VOLT Executive Committee held its annual retreat September 15-17 in Pompano Beach, FL. In addition to the Executive Committee, staff and volunteers from GPS/Group Engagement Committee and E-Fests were invited to participate to identify areas for collaboration. The VOLT Executive Committee planned its programming for the remainder of the year and identified volunteer leads for each program.

Upcoming Activities/What’s on the Horizon?
• There will be an Officer and Governor-Elect Orientation at IMECE on Friday, November 3. Marc Goldsmith will lead the session, with presentations from Charla Wise, Tom Loughlin, John Delli Venneri, Bill Garofalo, and others.
• Phase 2 of the Leadership Communications Training for ASME’s volunteer leadership will be offered at IMECE on Friday, November 3. Once again, this session will be led by Brenda McClain.
• A train-the-trainer program for volunteer trainers will be offered to 4 individuals at IMECE on Friday, November 3 and Saturday, November 4. These volunteers will be trained by Brenda McClain in the delivery of communications training. Following the train-the-trainer session, the volunteer trainers will deliver training to a variety of ASME groups at upcoming events.
• There will be a VOLT & ECLIPSE Networking Reception at IMECE on Saturday, November 4. This will be an opportunity for alumni from the ECLIPSE, LDI, and MLP programs, as well as current interns and other participants in VOLT events to meet up and network.
• A VOLT Leadership Workshop entitled “Creating and Working in Effective Teams” will be offered twice during IMECE, on Sunday, November 5 and Monday, November 6. The presenter is Col. Kyle Voigt, USAF, Ret. and the session will be moderated by Cindy Stong.
• There will be a meeting for the 2017-2018 ECLIPSE Interns at IMECE on Sunday, November 5, which will be an opportunity for them to discuss and get feedback on their project with a member of the ECLIPSE Intern Committee and VOLT Executive Committee.
VOLT will once again offer a Cross-Sector Leadership Development Workshop in April, 2018. We will be reaching out to the SMC to identify candidates to participate in the workshop in the November-December timeframe.

In 2018, VOLT will offer a new training and orientation program targeted for incoming chairs of committees, segment leadership teams, and those in similar positions at ASME.

VOLT will lead the orientation and training for the Nominating Committee. Between January and March, VOLT will offer three sessions for NC members: an orientation and overview of ASME; a briefing with the PEDT; and a training on unconscious bias.

IV. Group Engagement Committee – John Mulvihill/Elio Manes

Quarterly Highlights:

- GPS staff processed 368 individual requests from groups in FY18 Q1; Approximately 50% were activity requests.
- The Group Engagement Committee has identified six individuals to lead its Engagement Teams and three additional individuals to lead its Support Teams.
- The Group Engagement Teams have begun the engagement and communications process with their respective groups.
- An initial teleconference was held with the GEC members on September 6, 2017 in order to introduce its Engagement and Support Team members to the goals and objectives of the Committee.
- A Group Engagement Webinar was conducted on October 3, 2017 to introduce the Groups to the GEC program and to provide updates to the GPS program.
- A Division Leadership “Town Hall” meeting was held at ASME HQ in NY on Sept 18. A total of 46 individuals participated in the meeting (32 in-person and 14 online). The purpose of this meeting was to get Division Leaders together to hear and address their concerns. In addition, the meeting was a platform for volunteers to provide feedback to the BOG committee chartered to address how we can help Divisions be successful. Lastly, there was discussion regarding issues around segregated accounts.
- Contract has been signed for the volunteer leadership conference that will take place on March 2-3, 2018.
- John Mulvihill and Ty Booker attended the VOLT meeting in Fort Lauderdale, FL, September 15 – 17, 2017 to discuss the new Group Engagement Committee and the volunteer leadership conference.
- GPS staff created over 800 individual awards for various ASME summer conferences (technical division conferences).
- FY18 annual plans have been submitted by 97 (out of 134) groups. The total anticipated expenses for groups (who completed plans) in FY18 is approx. $3.5M.

Upcoming Activities/What’s on the Horizon?

- A teleconference with the Group Engagement and Support Committee members is scheduled for the last week in October.
- The GEC will hold a face-to-face meeting with the Engagement and Support Committee members on November 6 at IMECE in Tampa.
- A Group Leadership Development training event is scheduled for March 2-4, 2018 in Orlando Florida. Divisions and Section Representatives will be invited to attend.
• Training and information Webinars are currently scheduled for January, April and May 2018. These are designed to provide information and updates on programs and activities available to the Groups.