

Actions

- ACTION **TWG co-chairs and outreach leads** to work with IOB industry ambassadors to explore opportunities for agency attendance and participation at IW2016.
- ACTION **Nita and Jenn** to update TWG Outreach plan to align with IOB outreach plan.
- ACTION **Dale** will ask David Springstead (head of APTA SE subcommittee) about how to approach formal relationship between APTA and INCOSE
- ACTION **Nita** to work with Malcolm Thomas and Dale to determine how to administer TWG member mailing list and determine what products are available to members vs. general public.
- ACTION **Rianne, David Rojas and Constantinos** to develop webinar schedule for the next 6-12 months and provide to Nita.
- ACTION **Simon** to follow-up with Paul Davies to seek funding for agency presenters registration fee.
- ACTION **Paul Davies** get MOU with Building SMART to have dialog about SE and BIM.
- ACTION **Dale** to identify paper reviewers prior to INCOSE deadline and manage the reviews.
- ACTION **Co-chairs** to identify IS2016 round table topic.
- ACTION **Anne** will develop template for INCOSE TWG invitation letter from co-chairs to key agency leaders. And work on sending out.

Minutes

**Co-Chair update (Nita, Simon and Dale)**

Transportation Industry Ambassadors: Anne O'Neil and Lilanthi Balasingham

Ambassadors to use their personal network to facilitate connections between people working day to day on TWG events/products and others who can assist. Ambassadors will liase and support outreach effort.

**TWG Outreach Update (Jenn)**

Upcoming opportunities for Outreach

- IW2016 30Jan-2Feb2015 in Torrance (LA region)

## TWG Working Session 15<sup>th</sup> Jul2015

- ½ day intensive summit
- steering committee will work over next few months on this
- will reach out to local agencies (past participants have been CALTRANS, SANDAG, FHWA)
- there is an APTA SE subcommittee (they will meet again in SF in Oct2015). They have agency lead funding for travel for support to develop SE guidance/standards documents. TWG can volunteer to host and facilitate this development process.
- Paul Davies said we need to get an MOU together with APTA SE subcommittee and nominate relationship manager and append a list of target topics to MOU. Paul Davies to help with that.

### Tools of Outreach

- TWG mailing list
  - technical difficulties with list at this time
  - Want to provide benefits to INCOSE members, e.g. SE brochures from TWG and Infrastructure Working Group
- Linked In Site +500 members
- A link to newsletter available
- Webinar Series
  - Need ideas for topics
  - David Rojas created newsletter available on the TWG website and emailed out
- Bi-monthly call: business and job opportunities, issues in community are covered.

### **Brainstorm Industry Themes/Challenges Lead by Simon: Purpose was to identify themes for papers, webinars and bi-monthly discussions.**

- Bringing awareness of SE into an institution / introducing SE and providing business case of SE.
- Need tailored process for translation of conops to systems requirements for transportation. Bill G. and Brian B. to be on panel?
- SE management to integrating many disciplines for rail systems/ unique and common. SE capability across supply chain needs to be increased now that agencies are recognizing need. Domain and systems experience is much more effective than just knowing one. Building pool of SE capabilities and competencies. PM, QA and SE and how they relate to each other. PMI and INCOSE will author handbook and Laura U can provide input into book. CAB top initiative is competencies (e.g. in rail) and domain engineering perspective and development path. There is money available for that.
  - General managers can come to learn about link between asset management and SE. Need business case for value of SE.

## TWG Working Session 15<sup>th</sup> Jul2015

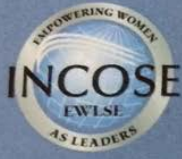
- IW and IS registration fee is a roadblock to agency presenters.
- Validation across contractual boundaries
- Handover of SE process from owner to contractor
- Intermodal transfer as systems challenge
- Requirements engineering for rail systems (what help is needed)
  - Contract requirement definition
  - Compliance Management (system with contract)
  - Management of regulatory requirements (pushing them down to subs)
- PTC/ERTMS is a systems issue.
- How do you get interfaces validated when doing concurrent design across contractual boundaries?
- BIM and MBSE. Do we have common definition of BIM? Need one source of truth of all stakeholders to reference.
- Cyber security standards and how they affect transportation SE.

### **Potential Transportation Papers at IS 2016 (Dale)**

- Getting ready for Edinburgh: Which brainstorming topics would make good papers?
- Deadline is Nov8
- Bill Gleckler and Allison Ruggiero: requirements engineering topic Brian B can help or co-author
- Oliver Huehne: Combination of PM and SE.
- Dale, Laura and Nita: QA and SE interplay
- Brian Berenbach: volunteered to coach anyone writing a paper
- Alex Whittel and Dale Brown: Business case of SE
- Brian Berenbach: webinar on paper writing
- Ken Capshaw: webinar on cybersecurity standards for digital architecture and how they affect transportation SE.
- Paul Davies and Nita Rabadia: Technical tour of concurrent design of the Edinburgh-Glasgow rail improvement project.

### **Empowering Women as Leaders in Systems Engineering (EWSLE)**

Contact Dr. Alice F. Squires, Chair, Empowering Women as Leaders in Systems Engineering (EWSLE), [alice.squires@wsu.edu](mailto:alice.squires@wsu.edu)



## EMPOWERING WOMEN AS LEADERS IN SYSTEMS ENGINEERING (EWLSE)



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