



2019

Annual **INCOSE**
international workshop

Torrance, CA, USA

January 26 - 29, 2019

Lean Systems Engineering

www.incose.org/iw2019

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CHAIR

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MEMBERS

100

INCOSE CONNECT ADDRESS



350 Provencal road

INCOSE WEB PAGE



<https://www.incose.org/incose-member-resources/working-groups/transformational/lean-systems-engineering>

Charter Summary



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WG PURPOSE/MISSION

The Lean Systems Engineering Working Group provides a forum for discussion and information distribution of Lean Systems Engineering best practices, methods, tools and processes to promote the efficient concepting, designing, launching and Life Cycle Management of new products and services that are market leading and compelling to the Enterprise stakeholders and external experiencers.

WG GOAL(S)

It is our goal to strengthen the practice of Systems Engineering (SE) by exploring and capturing the synergy between traditional SE and Lean New Product Creation. To do this, we will advance the Body of Knowledge of Lean Thinking into SE practices to integrate people, processes, and tools for the most effective delivery of value to program stakeholders.

Our goal is 2019 is to progress the development of the Lean Systems Design framework to the point it can be implemented by Enterprises to efficiently develop human centered market leading products and services.

WG SCOPE

Present major effort is the development and documentation of a new Lean Product Creation framework built on the lean enablers previously published by this work group and added to by the addition of integrating Design Science and Agile Development methodologies.

IW Outcomes



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IW Outcomes

Sandia National Labs Development Cycle Time Reduction (Compton/ Conroy)

- Input provided on the presentation in support of presentation at IS2019.
- A more detailed discussion on lean methods will be held with Sandia after the IW2019.

Lean Systems Engineering Product Creation Framework was presented and discussed.

- Monthly meetings to be set with the participants
- Initial Next Steps from the discussion to be brought into for the Monthly meetings are:
- Review of Work Group charter -- in recognition of the WG re-boot we started in 2018.
- Overall Framework clarification -- "New" IP needs to be clearly identified and examples beyond Automotive are needed
- Experienter Empathy Cycle detail process review should be scheduled
- A review of the Scaled Agile SAFe process and adjacent INCOSE WGs should be scheduled to clarify differences to the Framework & specific new IP such as the Plan-Do-Check-Act Architecture and Subsystem Design processes.
- How does Conceptual Design discussed at the IW2019 compare to the Framework process
- A separate meeting with LAM Research will be scheduled to try and tailor the Framework to small Enterprise environment

Planned Work past IW



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PLANNED ACTIVITIES

1. Monthly LSE Work Group meetings to resume.
2. Adjacent WGs need to be contacted to clarify interactions and overlaps.

PLANNED WORK PRODUCTS

- The LSE Work Group is not aligned on specific Products we will produce. The decision on this will be an outcome of the monthly WG meetings.