



2019

Annual **INCOSE**
international workshop

Torrance, CA, USA

January 26 - 29, 2019

Object-Oriented Systems Engineering Method (OOSEM)

www.incose.org/iw2019

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CHAIR

Howard Lykins (howardlykins@verizon.net)



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MEMBERS

30

CO-CHAIR

Loren Walker (celernity123@gmail.com)

INCOSE CONNECT ADDRESS



<https://connect.incose.org/WorkingGroups/OOSEM/Pages/Home.aspx>

INCOSE WEB PAGE



<https://www.incose.org/incose-member-resources/working-groups/transformational/object-oriented-se-method>

Charter Summary



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WG PURPOSE/MISSION

The INCOSE Chesapeake Chapter Object-Oriented Systems Engineering Method (OOSEM) Working Group (WG) strives to continuously improve upon Object-Oriented Analysis and Design (OOA/D) applied to Model-Based Systems Engineering (MBSE) through research into Object-Oriented (OO) MBSE concepts, notations, and methods.

Group members are practitioners of Systems Engineering and related disciplines who apply their experience to maintaining and improving the Object-Oriented Systems Engineering Method (OOSEM).

WG GOAL(S)

Goals for the OOSEM WG include:

- Collaborate with other INCOSE Working Groups, such as Critical Infrastructure Protection and Recovery (CIPR).
- Collaborate with OO organizations external to INCOSE, such the Object Management Group (OMG) and IEEE.

WG SCOPE

The OOSEM WG serves as a resource to the Systems Engineering community by:

- Supporting the capture, analysis, synthesis, and understanding of complex architectures, systems specifications, technologies, and designs.
- Facilitating Family/Systems of Systems (FoS/SoS), system-, element-, and component-level reuse and design evolution.
- Enhancing integration between engineering disciplines including but not limited to systems, human(s), software, hardware, test, environment, and logistics.
- Focusing on enhanced and improved integration between Systems Engineering and OOA/D Software Engineering.

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- Advancing integration between MBSE and modern management practices such as the Lean Startup Method (LSM) and Agile (Systems Engineering, Software Engineering, and Project Management).
- Investigating, learning, employing, advocating, and teaching OOSEM-related aspects of the new Object-Process Methodology (OPM) specification.

IW Outcomes



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IW Outcomes

International Workshop (IW) OOSEM WG Outcomes include:

- Make available OOSEM Working Group history and background information, as well as near and long term product planning insights to all IW attendees in an OOSEM Working Group Orientation Session.
- Share information and lessons learned from 2015, 2016, 2017, and 2018 educational workshops on using Lean Startup Method (LSM) and Agile for Initial Project Planning (IPP) of OOSEM-related MBSE projects.

Planned Work past IW



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PLANNED ACTIVITIES

Planned Activities for the OOSEM WG include:

- Discuss and outline future OOSEM inputs to the next planned version of the INCOSE Systems Engineering Handbook.
- Discuss and outline future OOSEM inputs to refinements of the OMG Systems Modeling Language (SysML) Specification.
- Incorporate the Object-Process Methodology (OPM) specification into OOSEM WG research, study, experimentation, and technical product development.
- Discover and discuss potential interactions between the OOSEM WG and other Working Groups.
- Refinement of the existing Object-Oriented Systems Engineering Method (OOSEM) Introductory Course.

PLANNED WORK PRODUCTS

Planned Work Products for the OOSEM WG include:

- Updated, "OOSEM Introductory Practitioners Course".
- "LSM/Agile for IPP Facilitator's Guide", for facilitating and using the Lean Startup Method (LSM) and Agile for Initial Project Planning (IPP) of any system solution project.