2022
Annual **INCOSE**
international workshop
HYBRID EVENT
Torrance, CA, USA
Jan 29 - Feb 1, 2022

# Small Business Systems Engineering

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## MEMBERS
80

## CO-CHAIRS

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Ken Ptack

## INCOSE CONNECT ADDRESS

https://connect.incose.org/WorkingGroups/SBSE/Pages/Home.aspx

## INCOSE WEB PAGE

https://www.incose.org/incose-member-resources/working-groups/transformational/SBSE

# Charter Summary

## WG PURPOSE/MISSION

Support and extend the ISO"s VSE initiative to foster the involvement of small and medium systems engineering organizations" efforts by providing products that support ISO 29110 series of technical recommendations.

## WG GOAL(S)

1. Use Systems Engineering concepts to improve and make product development within small businesses more efficient
2. Elaborate tailored guidance for small businesses to apply, in the context of either a prime or subcontractor role
3. Elaborate tailored guidance to apply to small projects
4. Contribute to standardization in the context of Systems Engineering
5. Identify funding sources for small businesses to develop technical innovations that need systems engineering.
6. Identify small businesses that are working on innovation programs, including both small business set asides (such as SBIR and STTR) and technology transfer as targets for applying systems engineering for small businesses and eventually role models.
7. Provide a means for small businesses to connect to small businesses teaming partners, Small Business Liaison Officers of large firms, universities associated, with INCOSE, and mentors among SBSE WG and INCOSE members.

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## WG SCOPE

The Small Business Systems Engineering (SBSE) Working Group (formerly the VSE WG) is creating Deployment Packages (DPs) for the benefit of and critical to small businesses and very small entities success. These DPs, developed to support the ISO/IEC 29110 systems engineering set of standard and guides, provide systems engineering process information tailored and scaled for use by the small business and very small entities. The DPs will provide systems engineering tasks and activities for quick and efficient implementation. These DPs are derived from ISO Standards (15288, 12207) and the INCOSE SE Handbook. In addition to the DPs, the SBSE WG is collecting case studies and developing training materials. All of these can be used by industry and governments worldwide.

## OUTCOMES (PRODUCTS/SERVICES)

The SBSE WG is creating Guides and Deployment Packages (DP"s) for the benefit of and instrumental to small businesses success in the System Engineering Domain. These work products are developed to support the ISO/IEC 29110 systems engineering: set of standard and guides- Basic, Intermediate, Advanced; provide systems engineering process information tailored and scaled for use by the small business (SB). We are also working to use this methodology to promote MBSE and PLE by guiding the SB through a successful product launch using the Basic Profile Guide . The S**BSE Work Products** will provide systems engineering tasks and activities for quick and efficient implementation.

All of these WG products can be used by industry and governments worldwide. To that end, we are collaborating with people who have expertise in **Small Business Innovation Research (SBIR)/Small Business Technology Transfer (STTR)** to develop a framework for commercialization of products produced using the SBSE work products. The WG would like to work with our INCOSE membership to provide a marketplace for the SB to access and collaborate with our CAB organizations. We would also like to establish a Small Business Directory within INCOSE to help inform this marketplace collaboration. We will use this collaboration process to help define a model that can be used with similar type SBIR/STTR programs throughout the INCOSE Sectors.

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## IW Outcomes

- Began definition of a Marketplace concept for Small Business collaboration with INCOSE membership for product development
- Establish technology transfer for a commercialization component of the SBSE WG using **Small Business Innovation Research ([SBIR](#))/Small Business Technology Transfer ([STTR](#))** to develop a model for the INCOSE Sectors
- Set up a meeting cadence for Phase 2 work product publications

## PLANNED ACTIVITIES AFTER IW

- Define the Marketplace concept for Small Business collaboration with INCOSE membership for product development
- Develop a model using **Small Business Innovation Research ([SBIR](#))/Small Business Technology Transfer ([STTR](#))** for SB product commercialization in all INCOSE Sectors

## PLANNED WORK PRODUCTS AFTER IW

- **Complete Phase 1 TPP for work products**
- Basic Guide
- Project Management Deployment Package
- Configuration Management Deployment Package
- Requirements Deployment Package
- **Begin Phase 2 review for TPP**
- Functional and Physical Architecture Deployment Package
- Interface Management Deployment Package
- Integration Deployment Package