



Very Small Entities Working Group (VSE WG) Charter

Scope:

The Very Small Entities Working Group (VSE WG) is to assist in the application of systems engineering for product development in Very Small Entities (VSEs). To support this mission, the VSE WG is creating Deployment Packages (DPs) and developing case studies for the benefit of and critical to the VSEs' success. These DPs provide systems engineering process information tailored and scaled for use by the VSE. The DPs will provide systems engineering tasks and activities for quick and efficient implementation. These DPs are derived from ISO Standards (ISO/IEC/IEEE 15288, ISO/IEC 29110, and ISO/IEC/IEEE 12207) and the INCOSE SE Handbook. Case studies, based on ISO/IEC 29110 and DPs, will provide VSE WG members with examples of applications of systems engineering in organizations.

Definition: Very Small Entity (VSE) is defined as an entity (enterprise, organization, department or project) having up to 25 people.

Goals:

Systems engineering concepts have been adopted and adapted by many industries in various domains (Aeronautics, Defense, Space, Transportation, Telecom, Information Systems, Bio Medical...) for development of product and services.

In the context of very small entities and small projects (VSEs), these concepts can be used or tailored to improve:

- Product development and service delivery efficiency (including costs and delays)
- Product Quality and Deployment to meet stakeholder needs

The goals of this working group are:

1. To improve and make product development within VSEs more efficient by using Systems Engineering concepts, standards and proven practices
2. To elaborate tailored guidance to apply, in the context of either a prime or subcontractor role, to VSEs
3. To provide the best of Systems Engineering techniques, methods and processes for the betterment of the broad scope of domains around the globe
4. Support the transformation of Systems Engineering to a model based discipline

Activities, Projects and Products:

This WG is conducted in an international context and includes INCOSE, AFIS and ISO/IEC JTC-1 SC7 WG-24. WG-24 is commissioned by ISO to develop systems and software



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engineering standards and guides. These standards and guides, labeled ISO/IEC 29110, are approved by ISO/IEC. The VSE WG is developing Deployment Packages (DPs), which supplement the ISO/IEC 29110 management and engineering guides, as well as case studies illustrating the application of DPs in real projects.

Technical Leadership Team Placement:

Application Sectors: Industry

Organization:

Officers: Chair: Angela Robinson, Co-chairs: Ken Ptack; Claude Y Laporte.

Meetings: National meetings or telecons (every month)
International plenary telecons (every 2 months)
INCOSE International Symposium,
INCOSE International Workshop,
Others as required

Communications:

INCOSE Assistant Director for Industry
WG Membership through Webinars
Other INCOSE WGs, particularly SE Enablers, Lean SE, Agile SE,
Requirements, SoS WG, Enterprise WG, MBSE
External organizations: ISO, PMI, IEEE, AFCEA
Chapter webinars

Resource Needs (2016 projection):

- Representatives of industrial and/or individuals member of EMEA/AFIS/INCOSE/PMI. Workload is estimated to be 1 day per month.
- Representative VSEs willing to benchmark and enhance their product development practices. Workload is estimated to 1 day per month.
- Budget to support WG outreach at select seminars, conferences and workshops (PMI) (\$2,500.00).
- SE graduate interns to support deployment package review, requirements traceability and process modeling (\$2,000.00).

Outreach:



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Outreach is a key focus area for the VSE WG. The WG will reach out to Sector Directors and offer the VSE WG Overview presentation and pointers to DPs and case studies posted on Connect. VSE concepts have received attention and interest within INCOSE, Chapters, and systems engineering practitioners. Opportunities for chapter level VSE WG affiliation are available. These affiliations can provide assistance to organizations around the world. Establishing SE processes is one of the best ways to increase SE awareness (and membership) in INCOSE.

One early VSE WG session was dedicated to working with SEBoK reviewer(s) to determine the best section to include VSE contributions. VSE WG members identified SEBoK Section 5.1 as the best section for VSE information.

The VSE WG goal is to investigate, develop and migrate to a model based applications used for Collaborative Lifecycle Management (CLM) and collection of the MBSE documentation across the project lifecycle. We plan to identify a model application that can support this feature for publishing DPs. This objective not only supports MBSE, but also establishes a longer-term document management strategy for posting DP products and industrial case studies.



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Revision History

Revision	Change	Author	Date
1.0	Initial Draft.	Gauthier Fanmuy	Apr-04-09
2.0	Approved version by INCOSE	Gauthier Fanmuy Ken Ptack	July 23-09
2.1	Minor changes: <ul style="list-style-type: none"> • additional VSEs terminology • project to working group 	Gauthier Fanmuy	Sept-02-09
2.2	Minor changes: <ul style="list-style-type: none"> • update activities, products and projects • Update Resources needed • Update leadership 	Joseph Marvin	Oct-21-12
3.0	Updates to incorporate WG objectives presented at 2014 IW.	Joseph Marvin	Feb-16-14
3.1	Minor changes: VSME WG renamed as VSE WG Update activities, products and projects Update leadership	Ken Ptack	Feb-01-16