

# ISO/IEC TR 29110-3-4:2015-10 (E)

## Systems and software engineering - Lifecycle profiles for Very Small Entities (VSEs) - Part 3-4: Autonomy-based improvement method

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
1.1	Fields of application .....	1
1.2	Target audience .....	1
2	Normative references .....	1
3	Terms and definitions .....	2
4	Conventions and abbreviated terms .....	2
4.1	Naming, diagramming, and definition conventions .....	2
4.2	Abbreviated terms .....	2
5	Process improvement context for VSEs .....	2
5.1	Considerations of related standards for VSEs .....	2
5.2	Rationale of the process improvement for VSEs .....	2
6	Process improvement approach for VSEs .....	3
7	Characteristics for autonomy-based approach .....	4
7.1	General .....	4
7.2	Autonomy .....	4
7.3	Conciseness and easiness to understand .....	4
7.4	Low cost, quick cycle and controllable .....	4
7.5	Confidence of effectiveness and necessity .....	4
7.6	Communication with stakeholders and communities .....	4
8	Framework of process improvement .....	5
8.1	Initiation of improvement .....	5
8.2	Activities of improvement .....	5
8.2.1	Activity 1: Awareness of process problems .....	5
8.2.2	Activity 2: Analysis of problems and their relationships .....	5
8.2.3	Activity 3: Analysis of the root cause of problems .....	5
8.2.4	Activity 4: Identification of a process or processes relating to the root cause .....	5
8.2.5	Activity 5: Clarification of the fundamental purpose, outcomes, and practices of the process .....	5
8.2.6	Activity 6: Study on best practices on the process .....	6
8.2.7	Activity 7: Develop improvements to eliminate or mitigate problems .....	6
8.2.8	Activity 8: Evaluate the improvement plan for feasibility and impact .....	6
8.3	Continuous improvement cycle .....	6
8.4	Improved communication and agreement .....	6
8.5	Competency for improvement .....	7
8.6	Enhancement tools for improvement .....	7
8.7	Preparation or selection of a VSE profile .....	7
9	Improvement means growth and innovation .....	7
Annex A (informative)	Example: SPINA3CH method for the basic profile .....	8
Annex B (informative)	Adapting various profiles with the SPINA3CH method .....	20
Bibliography .....		22