ISO/IEC/IEEE 24748-2:2024-03 (E)

Systems and software engineering - Life cycle management - Part 2: Guidelines for the application of ISO/IEC/IEEE 15288 (system life cycle processes)

Contents

Page

Foreword ..... **v**

Introduction ..... **vii**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Overview of ISO/IEC/IEEE 15288 ..... **1**

4.1 General 1

4.2 Structure of ISO/IEC/IEEE 15288 2

4.3 Context of ISO/IEC/IEEE 15288 2

4.4 Comparison of ISO/IEC/IEEE 15288 to prior version 4

5 Application concepts **5**

6 Applying ISO/IEC/IEEE 15288 ..... **5**

6.1 Overview 5

6.2 Application strategy 5

6.2.1 Overview 5

6.2.2 Planning the application 7

6.2.3 Conduct pilot project(s) 7

6.2.4 Formalise the approach 8

6.2.5 Institutionalise the approach 8

6.3 Application of system concepts 8

6.3.1 General 8

6.3.2 Systems 8

6.3.3 System structure 9

6.3.4 Structure in systems and projects 9

6.3.5 Interfacing, enabling and interoperating systems 9

6.4 Application of life cycle concepts 10

6.4.1 Overview 10

6.4.2 Decision gates 11

6.4.3 Application approaches 12

6.5 Application of organizational concepts 17

6.5.1 Overview 17

6.5.2 Methods and tools 19

6.5.3 Considerations and techniques 19

6.5.4 Management commitment 20

6.5.5 Uses of ISO/IEC/IEEE 15288 within an organization 20

6.6 Application of project concepts 20

6.7 Application of process concepts 21

6.7.1 General 21

6.7.2 Application of agreement processes (ISO/IEC/IEEE 15288:2023, 6.1) 21

6.7.3 Application of organizational project-enabling processes (ISO/IEC/IEEE 15288:2023, 6.2) 24

6.7.4 Application of technical management processes (ISO/IEC/IEEE 15288:2023, 6.3) 25

6.7.5 Application of technical processes (ISO/IEC/IEEE 15288:2023, 6.4) 32

6.8 Application of conformance and adaptation concepts 47

6.8.1 Application of conformance concepts 47

6.8.2 Application of adaptation concepts 47

Annex A (informative) **Summary of typical revised points in ISO/IEC/IEEE 15288:2023 from ISO/IEC/IEEE 15288:2015** **50**
Annex B (informative) **Example for interfacing, enabling and interoperating systems** **57**
Annex C (informative) **Model-based systems and software engineering (MBSSE)** **59**
Bibliography **62**