

## SYSTEMS ENGINEERING CAPABILITY MODEL APPRAISAL METHOD

### CONTENTS

	<b>Page</b>
<b>Forward</b>	<b>v</b>
<b>Acknowledgments</b>	<b>vi</b>
<b>1 Introduction</b>	<b>1</b>
1.1 Overview	1
1.2 Assumptions	1
<b>2 Summary of the Appraisal Method</b>	<b>2</b>
2.1 Overview	2
2.2 Appraisal Method	2
2.3 Appraisal Roles	4
2.4 Appraisal Instruments	6
2.5 How to Read the Process Activity Summaries	8
<b>3 Preparation Phase Activities</b>	<b>9</b>
3.1 Preparation Phase Overview	9
3.2 Preparation Phase Activities	9
3.2.1 Obtain Sponsor Commitment	11
3.2.2 Select Appraisal Parameters	12
3.2.3 Plan Appraisal Details	14
3.2.4 Collect Questionnaire Data	15
<b>4 On-Site Phase Activities</b>	<b>17</b>
4.1 On-Site Phase Overview	17
4.2 On-Site Phase Activities	20
4.2.1 Conduct Opening Meeting	21
4.2.2 Familiarize Team with the Appraisal Method	22
4.2.3 Analyze Questionnaire	23
4.2.4 Interview Product Leads	25
4.2.5 Consolidate Data from Interviews	27
4.2.6 Interview Practitioners	29
4.2.7 Consolidate Data from Practitioners	32
4.2.8 Develop Preliminary Findings	33
4.2.9 Review Preliminary Findings	36
4.2.10 Develop the Ratings	39
4.2.11 Develop Draft Findings	42
4.2.12 Present Draft Findings	44
4.2.13 Adjust Draft Findings	46
4.2.14 Present Final Briefing	47
4.2.15 Brief Sponsor (optional)	49
4.2.16 Conduct Wrap-Up	50
<b>5 Post-Appraisal Phase Activities</b>	<b>52</b>
5.1 Post-Appraisal Phase Overview	52
5.2 Post-Appraisal Phase Activities	53
5.2.1 Report Lessons Learned	53
5.2.2 Develop and Present Action Plans	54
5.2.3 Perform Actions	55

**CONTENTS (continued)**

5.2.4	Develop Findings and Recommendations Report	55
<b>6</b>	<b>Guidance for Initiating an Appraisal</b>	<b>57</b>
6.1	Introduction	57
6.2	Using Business Goals in the Appraisal Method	57
6.3	Tailoring the Appraisal Method Based on Organizational Context	58
6.4	Selecting Appraisal Personnel	59
6.5	Selecting Programs to be Appraised	60
6.6	Tailoring the Appraisal Questionnaire	61
6.7	Tracking and Maintaining Appraisal Data	63
6.8	Developing the Rating Profile	64
6.9	Rating Presentation Formats	65
6.10	Developing Findings	67
<b>Annexes</b>		
<b>A</b>	<b>Template for Appraisal Method Opening Briefing</b>	<b>69</b>
<b>B</b>	<b>Template for Appraisal Method Final Briefing</b>	<b>73</b>
<b>C</b>	<b>Example Schedule for an Appraisal</b>	<b>80</b>
<b>D</b>	<b>Appraisal Method Training Support</b>	<b>87</b>
<b>E</b>	<b>Site Coordination Checklist</b>	<b>107</b>
<b>F</b>	<b>Appraisal Method Scoring Charts</b>	<b>112</b>
<b>G</b>	<b>Individual Interview Exploratory Questions</b>	<b>114</b>
<b>H</b>	<b>Appraisal Questionnaire</b>	<b>136</b>
<b>Figures</b>		
Figure 2-1.	Flow Diagram for a Complete Appraisal	3
Figure 2-2.	Findings Flow	6
Figure 2-3.	Sample Format for Depicting Focus Area Ratings (Technical Category)	8
Figure 3-1.	Diagram of Preparation Phase	9
Figure 4-1.	Diagram of On-Site Phase	17
Figure 5-1.	Diagram of Post-Appraisal Phase	52
Figure 6-1.	Key Influences of Organizational Improvement	60
Figure 6-2.	Rating Profile Development Process	66
Figure 6-3.	Pie Chart Example	67
Figure 6-4.	Bar Chart Example	68
Figure C-1.	Product Line Leader Appraisal Schedule	85
Figure C-2.	Practitioner's Appraisal Schedule	
Figure C-3.	Sponsor's Appraisal Schedule	87
Figure C-4.	Appraisal Team Leader's Appraisal Schedule	88
Figure C-5.	Appraisal Team Member's Appraisal Schedule	88
Figure F-1.	Technical Category Scoring Chart	114
Figure F-2.	Management Category Scoring Chart	115
Figure F-3.	Environment Category Scoring Chart	115

**CONTENTS (continued)****Tables**

Table 2-1 - Labor Requirements for a Complete Appraisal	4
Table 2-2 - Appraisal Phases	4
Table 2-3 - Appraisal Roles	5
Table 2-4 - Findings and Ratings Development	7
Table 2-5 - Process Activity Summaries Organization	8
Table 3-1 - Summary Description of Preparation Phase	10
Table 3-2 - Participants for Preparation	10
Table 3-3 - Participants for Obtain Sponsor Commitment	12
Table 3-4 - Participants for Select Appraisal Parameters	13
Table 3-5 - Participants for Plan Appraisal Details	14
Table 3-6 - Participants for Collect Questionnaire Data	16
Table 4-1 - Summary Description of the On-Site Phase	18
Table 4-2 - Participants for Conduct Opening Meeting	20
Table 4-3 - Steps for Conduct Opening Meeting	21
Table 4-4 - Participants for Familiarize Team with the Appraisal Method	22
Table 4-5 - Steps for Familiarize Team with the Appraisal Method	22
Table 4-6 - Participants for Analyze Questionnaire	23
Table 4-7 - Steps for Analyze Questionnaire	24
Table 4-8 - Participants for Interview Product Leads	26
Table 4-9 - Steps for Interview Product Leaders	26
Table 4-10 - Participants for Consolidate Data from Interviews	28
Table 4-11 - Steps for Consolidate Data from Interviews	28
Table 4-12 - Participants for Interview Practitioners	30
Table 4-13 - Steps for Interview Practitioners	30
Table 4-14 - Participants for Consolidate Data from Practitioners	32
Table 4-15 - Steps for Consolidate Data from Practitioners	33
Table 4-16 - Participants for Develop Preliminary Findings	34
Table 4-17 - Steps for Develop Preliminary Findings	34
Table 4-18 - Participants for Review Preliminary Findings	37
Table 4-19 - Steps for Review Preliminary Findings	38
Table 4-20 - Participants for Develop the Ratings	40
Table 4-21 - Steps for Develop the Ratings	40
Table 4-22 - Participants for Develop Draft Findings	42
Table 4-23 - Steps for Develop Draft Findings	43
Table 4-24 - Participants for Present Draft Findings	44
Table 4-25 - Steps for Present Draft Findings	45
Table 4-26 - Participants for Adjust Draft Findings	46
Table 4-27 - Steps for Adjust Draft Findings	47
Table 4-28 - Participants for Present Final Briefing	48
Table 4-29 - Steps for Present Final Briefing	48
Table 4-30 - Participants for Brief Sponsor	49
Table 4-31 - Steps for Brief Sponsor	50
Table 4-32 - Participants for Conduct Wrap-Up	51
Table 4-33 - Steps for Conduct Wrap-Up	51
Table 5-1 - Summary Description of Post-Appraisal Phase	52
Table 5-2 - Participants for Report Lessons Learned	53
Table 5-3 - Participants for Report Appraisal Output to Other Parties	54
Table 5-4 - Participants for Manage Records	55
Table 5-5 - Participants for Report Lessons Learned	56
Table 6-1 - Program Selection Considerations	60
Table 6-2 - Questionnaire Distribution Table	62
Table 6-3 - Tabular Format Example	66

**CONTENTS (continued)**

Table C-1 - Typical Two+Five Day Appraisal Schedule	<b>80</b>
Table C-2 - Labor Requirements for a Two + Five Day Appraisal	<b>82</b>
Table E-1 - Preparation Tasks for Site Coordinator	<b>107</b>
Table H-1 - Generic Practices Questionnaire	<b>136</b>
Table H-2 - Generic Attributes Questionnaire	<b>137</b>
Table H-3 - FA 1.1 Questionnaire	<b>138</b>
Table H-4 - FA 1.2 Questionnaire	<b>139</b>
Table H-5 - FA 1.3 Questionnaire	<b>140</b>
Table H-6 - FA 1.4 Questionnaire	<b>141</b>
Table H-7 - FA 1.5 Questionnaire	<b>142</b>
Table H-8 - FA 1.6 Questionnaire	<b>143</b>
Table H-9 - FA 1.7 Questionnaire	<b>144</b>
Table H-10 - FA 2.1 Questionnaire	<b>145</b>
Table H-11 - FA 2.2 Questionnaire	<b>146</b>
Table H-12 - FA 2.3 Questionnaire	<b>147</b>
Table H-13 - FA 2.4 Questionnaire	<b>148</b>
Table H-14 - FA 2.5 Questionnaire	<b>149</b>
Table H-15 - FA 2.6 Questionnaire	<b>150</b>
Table H-16 - FA 2.7 Questionnaire	<b>151</b>
Table H-17 - FA 2.8 Questionnaire	<b>152</b>
Table H-18 - FA 3.1 Questionnaire	<b>153</b>
Table H-19 - FA 3.2 Questionnaire	<b>154</b>
Table H-20 - FA 3.3 Questionnaire	<b>155</b>
Table H-21 - FA 3.4 Questionnaire	<b>156</b>

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## Foreword

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### **Purpose**

This document describes the Appraisal Method (AM) for the Systems Engineering Capability Model (SECM). An appraisal compares an organization's Systems Engineering capabilities against the Specific Practices of the Focus Areas and the Generic Characteristics defined in EIA/IS 731, Part 1.

### **Who Should Use the Appraisal Method**

Executives and process owners in organizations, enterprises, or programs performing just about any kind of Systems Engineering product life cycle activities may use the Appraisal Method. Organizations already engaged in process improvement efforts may use this Appraisal Method and the SECM to baseline their efforts and success to date.

### **Why the Appraisal Method was developed**

The problem that EPIC, the SECM Working Group, EIA, and INCOSE intends to solve is to reduce the barriers to enterprise-wide process improvement. As part of this, a consistent Appraisal Method is needed to provide a publicly accessible method to prepare for and acquire capability baselines and industry/product-independent, comparative appraisals.

### **Appraisal Method Scope**

The scope of the Appraisal Method is designed specifically to support continuous process improvement. The Appraisal Method activities are the same basic set used by the SEI CMM-Based Appraisal for Internal Process Improvement (CBA-IPI) method for staged architecture CMM@s. Some differences exist due to the different model architectures.

This document is a process description for the Appraisal Method, not a training manual. Some materials are included that support appraisal training; however, it is *not* the intent of this document to be a substitute for appraisal training materials.

### **How this Appraisal Method should be used**

This Appraisal Method description was written to support an appraisal using the SECM as a reference model. This Appraisal Method description was not written to meet the needs of a third-party evaluation or audit. An appraisal of an organization's systems engineering capabilities primarily provides information useful for improving those capabilities vis-à-vis the SECM. This Appraisal Method can be performed as a self-appraisal or conducted by or with the assistance of an outside organization or consultant.

### **Appraisal Method developers**

This Appraisal Method was developed by the EIA G47 SECM Working Group that developed EIA/IS 731, Part 1.

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## **Acknowledgments**

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The acknowledgments are given in Part 1 of this document.