


# Project Management by ICB4



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## COLOPHON

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## PREFACE

This book is intended for project professionals, students, and graduates of project management, and is arranged to reflect tools and methods behind the competences (People, Practice and Perspective) prescribed by the standard IPMA Individual Competence Baseline 4.0 (ICB4). It should be embraced as a guide for practicing project management on different levels of career development and project complexity. It is also intended as a book of knowledge for supporting the IPMA ICB4 when preparing for certification of competence in project management. For project managers, these are: IPMA Level A: Certified Projects Director, IPMA Level B: Certified Senior Project Manager, IPMA Level C: Certified Project Manager and IPMA Level D: Certified Project Management Associate. (more at [www.ipma.world](http://www.ipma.world))

The book begins by emphasising the importance of the role of project manager, project management, and project setting and promotes project culture in everyday work. Thus it introduces the theoretical and practical components that constitute the field of project management.

Being both academic and practitioner in project management, I often witness project managers becoming so consumed in delivery and technical details that they forget the need to generate value for both clients and the people involved. The authors, Bert Hedeman and Roel Riepma so eloquently remind us of this need that beside technical aspects managers need to focus on their leadership and people skills and deliver value within a contemporary context. This is even more relevant considering the rapidly changing environment we are facing. With fewer resources, uncertain supply chains, less water, more carbon, labour shortage and a rapidly changing climate – project management can only get tougher, and more important.

Formal education and academia can grasp the opportunities to stimulate and inform future generations of project professionals... However, it is the current generation, who frequently have had little formal or systematic training in project management and who will immediately face the challenges and seize the opportunities. Therefore, this book is important for so called self-educated project professionals and ad hoc managers for improving their skills in everyday work.

Whether you are a serious project professional or a student in project management, you will find 'Project Management by ICB4' thought-provoking and will keep you willing to test the tools in real life. Reading this book will be enjoyable for anyone interested in the broad field of managing work through projects and is a required reading for those interested in contributing to project management discipline and continuously developing competences in project management.

This book is the product of two partnerships, IPMA and Van Haren Publishing. Many people have helped us to develop the ideas put forward in the book. Of course, the main authors: Bert Hedeman and Roel Riepma, but also the wide team of reviewers: Peter Pürckhauer, Rebeka Danijela Vlahov Golomejić and Kristijan Robert Prebenić and IPMA Publications Review and Editing team led by Reinhard Wagner have made this book a success.

Prof. Dr. Mladen Vukomanović,  
Vice President Professional Development  
IPMA

**International Project Management Association (IPMA)** is the oldest non-profit professional organisation dedicated to promoting excellence and professionalism in project, program, and portfolio management. It was founded in 1965, in Switzerland and nowadays operates in more than 70 countries worldwide through its Member Associations, thus providing a global platform for connecting practitioners and organisations, enabling collaboration and cooperation, sharing ideas and benchmarking, as well as advancing practices and competences in the field. Join the IPMA community at: [www.ipma.world](http://www.ipma.world).

# TABLE OF CONTENTS

<b>General Introduction</b>	<b>1</b>
Purpose	1
Audiences and uses	1
Certification scheme	2
<b>1. Structure of the Book</b>	<b>4</b>
Order of subjects	4
Vision and roadmap	6
Structure of the chapters	6
<b>2. Competence Development</b>	<b>8</b>
Purpose of competence development	9
<b>Practice Competences</b>	<b>11</b>
<b>3. Project Orientation</b>	<b>13</b>
What is a project?	14
What is project management?	15
Reasons to initiate a project	15
Position projects	15
Necessary conditions for a project to exist	16
Work forms	18
Staging, controlling, decision making	19
Projects within the product lifecycle	21
Projects at different levels	22
Project output, outcome, benefits and goals	22
People and perspective context of projects	22
Agile versus Waterfall	23
Sustainability	23
Tailoring	24
Responsibilities	24
Advanced	25
Project Excellence Baseline (advanced)	25
<b>4. Project Preparation</b>	<b>27</b>
<b>4.01 Project Preparation Stage</b>	<b>29</b>
Project preparation stage	30
Project mandate and project outline	31
Plan for the project definition stage	33
Project decision	33
Sustainability	33
Tailoring	34
Responsibilities	34



<b>4.02 Stakeholders</b> .....	<b>35</b>
Stakeholder analysis .....	36
Engage stakeholders .....	38
Managing expectations .....	39
Stakeholder management strategy and Plan .....	39
Sustainability .....	40
Tailoring .....	41
Responsibilities .....	41
<b>4.03 Project Organisation</b> .....	<b>42</b>
Project governance .....	43
Customer-supplier relationship .....	43
Separation of technique and management .....	43
Project management structure .....	44
Project organisation .....	44
Roles and responsibilities .....	46
Meeting structure and linking-pin principle .....	51
Responsibilities matrix (RASCI model) .....	52
Sustainability .....	53
Tailoring .....	53
Responsibilities .....	53
<b>4.04 Requirements and Objectives</b> .....	<b>54</b>
Project, output, outcome, benefits, and goal .....	55
Quality expectations and acceptance criteria .....	56
Requirements and requirement specification .....	57
Sustainability .....	58
Tailoring .....	58
Responsibilities .....	58
Advanced .....	59
Value management (advanced) .....	59
Total cost of ownership (advanced) .....	59
Product cost management (advanced) .....	59
<b>4.05 Risk and Opportunity</b> .....	<b>60</b>
Risks and opportunities .....	61
Risk management .....	62
Risk management strategy and response plan .....	63
Risk definitions .....	63
Probability, impact and proximity .....	64
Risk owner and risk action-holder .....	64
Different types of risks .....	64
Risk categories .....	65
Risk responses .....	65
Inherent, residual and secondary risk .....	66
Risk techniques .....	66

Time and cost contingency reserves .....	68
Sustainability .....	68
Tailoring .....	68
Responsibilities .....	68
Advanced .....	69
Opportunity responses (advanced) .....	69
ISO 31000 Risk management (advanced) .....	69
Risk identification techniques (advanced) .....	71
Risk assessment techniques (advanced) .....	72
<b>5. Project Definition</b> .....	<b>75</b>
<b>5.01 Project Definition Stage</b> .....	<b>77</b>
Activities project definition stage .....	77
Project management plan .....	79
Project start-up workshop .....	80
Kick-off .....	81
Project decision/ decision to fund .....	81
Sustainability .....	81
Tailoring .....	82
Responsibilities .....	82
Advanced .....	83
Setting up a project support (advanced) .....	83
<b>5.02 Project Design</b> .....	<b>84</b>
Project (management) approach and design .....	85
Project success .....	86
Project success criteria .....	87
Project success factors .....	87
Project management success .....	88
Project performance management .....	88
lessons learned .....	89
Sustainability .....	89
Tailoring .....	89
Responsibilities .....	89
Advanced .....	90
Diamond model (advanced) .....	90
<b>5.03 Scope</b> .....	<b>92</b>
Scope .....	93
Scope creep .....	95
Project breakdown structures .....	95
Work Breakdown Structure (WBS) .....	95
Product Breakdown Structure (PBS) .....	97
Scope (configuration) management .....	100
Sustainability .....	100

Tailoring . . . . .	100
Responsibilities . . . . .	101
Advanced . . . . .	102
Position sub-projects in a WBS (advanced) . . . . .	102
<b>5.04 Quality . . . . .</b>	<b>103</b>
Process and product quality . . . . .	104
Standard operating procedures . . . . .	104
Verification and validation . . . . .	104
Quality management . . . . .	105
Quality management strategy and plan . . . . .	106
Deming cycle . . . . .	106
Standards, norms and regulations . . . . .	107
Quality review, audit and evaluation . . . . .	107
Quality register/test register . . . . .	108
Quality tools . . . . .	109
Sustainability . . . . .	110
Tailoring . . . . .	110
Responsibilities . . . . .	110
Advanced . . . . .	111
Additional quality tools (advanced) . . . . .	111
Inspection methods and techniques (advanced) . . . . .	112
Testing and test concepts (advanced) . . . . .	112
Quality costs (advanced) . . . . .	113
<b>5.05 Time . . . . .</b>	<b>114</b>
Planning types . . . . .	115
Baselines . . . . .	116
Project stages and phases . . . . .	116
Phasing models . . . . .	117
Scheduling methods . . . . .	120
Precedence chart . . . . .	120
Gantt chart . . . . .	122
Shorten the time schedule . . . . .	123
Sustainability . . . . .	123
Tailoring . . . . .	124
Responsibilities . . . . .	124
Advanced . . . . .	125
Other scheduling restrictions (advanced) . . . . .	125
Three-point estimates (advanced) . . . . .	126
<b>5.06 Resources . . . . .</b>	<b>131</b>
Resource management . . . . .	132
Resource utilisation . . . . .	132
Resource allocation . . . . .	132
Estimating techniques . . . . .	133

Sustainability . . . . .	136
Tailoring . . . . .	136
Responsibilities . . . . .	136
Advanced . . . . .	137
Critical Chain Method (advanced) . . . . .	137
<b>5.07 Finance . . . . .</b>	<b>140</b>
Estimating, budgeting and cost control . . . . .	141
Cost breakdown structure . . . . .	143
Reserves and margins . . . . .	144
Cost and budget control . . . . .	146
Project and business accounting . . . . .	147
Power of attorney . . . . .	147
Sustainability . . . . .	147
Tailoring . . . . .	148
Responsibilities . . . . .	148
Advanced . . . . .	149
Linking WBS and CBS with the OBS (advanced) . . . . .	149
Financial control & cash flow planning (advanced) . . . . .	149
Project financing (advanced) . . . . .	150
<b>5.08 Business Justification . . . . .</b>	<b>152</b>
Characteristics business case . . . . .	153
Business case document . . . . .	153
Baseline measurement, baseline scenario and delta measurement . . . . .	154
The business case in the product lifecycle . . . . .	155
Customer and supplier business cases . . . . .	156
Sustainability . . . . .	157
Tailoring . . . . .	157
Responsibilities . . . . .	157
<b>6. Project Delivery and Close-out . . . . .</b>	<b>159</b>
<b>6.01 Procurement . . . . .</b>	<b>161</b>
Make or buy . . . . .	162
Procurement process . . . . .	163
Selection and award criteria . . . . .	163
Best-effort and performance agreements . . . . .	164
Contractual terms and conditions . . . . .	164
General terms and conditions . . . . .	166
Sustainability . . . . .	167
Tailoring . . . . .	167
Responsibilities . . . . .	167
Advanced . . . . .	169
Sourcing strategies (advanced) . . . . .	169
Supplier development methodologies (advanced) . . . . .	169

Procurement strategy and plan (advanced) .....	169
Type of contracts (advanced) .....	170
RFI, RFS, RFP, RFQ (advanced) .....	171
Supply and demand concept (advanced) .....	172
Tender procedures and practices (advanced) .....	172
Letter of intent and pre-contractual arrangements (advanced).....	173
Securities (advanced) .....	174
Contract management (advanced).....	175
Claim management (advanced).....	175
Various partnerships (advanced) .....	176
Supply chain management (advanced) .....	177
<b>6.02 Change Control .....</b>	<b>178</b>
Change control and change management .....	179
Three types of issues and other issues .....	179
Change control strategy and change register .....	180
Off-specifications and off-specification register .....	181
Other issues and issue register .....	181
Change authority and change budget.....	181
Priority and urgency .....	182
Sustainability.....	182
Tailoring.....	182
Responsibilities .....	183
Advanced .....	184
Configuration management (advanced).....	184
<b>6.03 Information and Documentation .....</b>	<b>187</b>
Information versus data .....	188
Information versus document management .....	188
Information management infrastructure .....	188
Information management strategy .....	189
Information management plan .....	190
Quality and security criteria.....	191
Project filing structure .....	191
Document tracking matrix.....	192
Sustainability.....	193
Tailoring.....	193
Responsibilities .....	193
<b>6.04 Control and Reporting .....</b>	<b>194</b>
Control cycle .....	195
Management and reporting levels.....	195
Management by objectives .....	196
Management by Exception.....	196
Daily management.....	197
Managing stage transition.....	199

Escalating exceptions . . . . .	201
Project controls . . . . .	202
Project management products . . . . .	202
Trend analysis . . . . .	204
Milestone trend analysis . . . . .	205
Sustainability . . . . .	206
Tailoring . . . . .	206
Responsibilities . . . . .	206
Advanced . . . . .	207
Earned Value Analysis (advanced) . . . . .	207
<b>6.05 Organisational Change and Transformation . . . . .</b>	<b>210</b>
Change management . . . . .	211
Change management approach . . . . .	211
Leading change – Kotter . . . . .	212
Sustainability . . . . .	213
Tailoring . . . . .	214
Responsibilities . . . . .	214
Advanced . . . . .	215
Kübler-Ross' Change Curve (advanced) . . . . .	215
Diffusion of Innovation – Rogers (advanced) . . . . .	216
Learning organisations – Senge (advanced) . . . . .	217
Transformational learning – Schein (advanced) . . . . .	218
<b>6.06 Project Closure . . . . .</b>	<b>220</b>
Handing over the project output . . . . .	221
Decommission the project . . . . .	223
Project evaluation . . . . .	225
Closure and discharge . . . . .	226
Sustainability . . . . .	226
Tailoring . . . . .	226
Responsibilities . . . . .	226
<b>People Competences . . . . .</b>	<b>227</b>
<b>7 Managing Yourself . . . . .</b>	<b>229</b>
<b>7.01 Self-reflection and Self-management . . . . .</b>	<b>231</b>
Self-reflection and self-analysis . . . . .	232
Emotional intelligence . . . . .	232
Johari diagram . . . . .	233
Big Five . . . . .	234
Core quadrants . . . . .	235
Effectiveness theories . . . . .	237
Self-motivation . . . . .	237
The seven habits of highly effective people . . . . .	238
Personal time management . . . . .	240

Stress management	241
Eustress and distress	242
Triggers and symptoms of distress	242
Reducing distress	243
Advanced	246
Techniques personal time management (advanced)	246
Rational Emotive Behaviour Therapy (advanced)	247
Steps in goal setting (advanced)	249
techniques for reducing distress (advanced)	251
<b>7.02 Personal Integrity and Reliability</b>	<b>253</b>
Aspects of reliability	253
Ethics	254
Social equity and sustainability principles	255
Professional ethics and IPMA Code of Ethics	256
Advanced	258
Ethics test (advanced)	258
Personal ethics versus business ethics (advanced)	258
UN Universal Declaration of Human Rights (advanced)	259
<b>7.03 Personal Communication</b>	<b>261</b>
Communication	262
Levels of communication	265
Active listening	266
Asking the right questions	267
Giving and receiving feedback	268
Meetings	268
Facilitated workshops	271
Written communicating	274
Presentations	275
Advanced	277
Elevator pitch (advanced)	277
Bad news conversation (advanced)	277
<b>8 Connecting with Others</b>	<b>279</b>
<b>8.01 Relationships and Engagement</b>	<b>281</b>
Aspects, characteristics and policies on openness	281
Building arguments	283
Building networks	284
Motivation theories	286
Maslow hierarchy of needs	286
Motivation and hygiene factors	287
Theory X and Y manager	287
Advanced	289
Self-Determination Theory (advanced)	289

Behavioural patterns/Rose of Leary (advanced) . . . . .	291
Spiral Dynamics (advanced) . . . . .	292
The role of the project manager as a consultant (advanced) . . . . .	294
Creating an open business culture (advanced) . . . . .	296
<b>8.02 Leadership . . . . .</b>	<b>298</b>
Differences between leadership and management . . . . .	298
Styles of Leadership . . . . .	299
Contingency theory . . . . .	300
Situational leadership . . . . .	301
Circle of influence and circle of concern . . . . .	304
Assertiveness . . . . .	306
Advanced . . . . .	307
Role content, interpretation and expectation (advanced) . . . . .	307
Coaching (advanced) . . . . .	308
Servant leadership (advanced) . . . . .	309
Sense-making and sense-giving (advanced) . . . . .	310
three levels of leadership (advanced) . . . . .	311
Vroom and Yetton decision model (advanced) . . . . .	314
<b>8.03 Teamwork . . . . .</b>	<b>316</b>
Team development phases . . . . .	316
Situational leadership and team development phases . . . . .	318
Team interventions at phase transitions . . . . .	319
Teambuilding . . . . .	321
Dealing with resistance . . . . .	322
Advanced . . . . .	324
Team composition (advanced) . . . . .	324
Developing an Effective project culture (advanced) . . . . .	327
Team roles (advanced) . . . . .	328
Group thinking (advanced) . . . . .	331
Dealing with resistance (advanced) . . . . .	332
Managing virtual teams (advanced) . . . . .	334
<b>8.04 Resourcefulness . . . . .</b>	<b>336</b>
Thinking methods . . . . .	336
Analytic problem-solving . . . . .	338
Creative problem-solving . . . . .	338
Methods of decision-making . . . . .	340
Cause identification and analysis techniques . . . . .	341
Solution identification techniques . . . . .	342
Divergent creativity techniques . . . . .	342
Solution assessment techniques . . . . .	344
Solution evaluation techniques . . . . .	345
Advanced . . . . .	346
problem-solving in standardised processes (advanced) . . . . .	346



Additional Divergent creativity techniques (advanced) . . . . .	348
Convergent creativity techniques (advanced) . . . . .	349
Decision-making procedure (advanced) . . . . .	350
Innovation processes and techniques (advanced) . . . . .	351
organisational innovation (advanced) . . . . .	352
<b>8.05 Result Orientation . . . . .</b>	<b>353</b>
Efficiency, effectiveness and productivity . . . . .	353
Continuous improvement (Kaizen) . . . . .	354
Advanced . . . . .	358
Entrepreneurship (advanced) . . . . .	358
Efficiency improvement techniques (advanced) . . . . .	358
Results-orientated project management (advanced) . . . . .	360
Political and social sensitivity (advanced) . . . . .	362
<b>8.06 Negotiation . . . . .</b>	<b>364</b>
Negotiation strategies . . . . .	364
Positional negotiation . . . . .	365
Best Alternative to a Negotiated Agreement . . . . .	366
Principled negotiations . . . . .	366
Advanced . . . . .	368
Phases in a negotiation process (advanced) . . . . .	368
Influential Aspects of negotiation (advanced) . . . . .	369
Negotiation tactics (advanced) . . . . .	370
<b>8.07 Conflicts and Crises . . . . .</b>	<b>372</b>
Functional and dysfunctional conflicts . . . . .	372
Types of conflict . . . . .	373
Conflict management styles . . . . .	374
Phases in a conflict . . . . .	375
De-escalation in the different conflict phases . . . . .	376
Advanced . . . . .	380
various roles in conflicts (advanced) . . . . .	380
Crisis and desired style of leadership (advanced) . . . . .	382
Crisis plan (advanced) . . . . .	383
<b>Perspective Competences . . . . .</b>	<b>385</b>
<b>9. Implementing Changes . . . . .</b>	<b>387</b>
<b>9.01 Strategy . . . . .</b>	<b>389</b>
Align with organisational mission, vision and strategic objectives . . . . .	390
Organisational mission, vision, and core values . . . . .	390
Strategy and strategic objectives . . . . .	391
Benchmarking . . . . .	392
SWOT analysis . . . . .	392
Responsibilities . . . . .	393

Advanced	394
Ten Schools of Thought (advanced)	394
Business Model Canvas (advanced)	395
7S-model van McKinsey (advanced)	396
Strategic performance management (advanced)	397
EFQM model (advanced)	400
Investment calculations (advanced)	401
Net present value analysis (advanced)	401
Payback period (advanced)	404
Break-even point (advanced)	404
<b>9.02 Programme Management</b>	<b>406</b>
Programme and programme management	406
Differences between projects and programmes	407
Responsibilities	407
Advanced	409
Programme organisation (advanced)	409
Multi-organisation programmes (advanced)	411
Benefits management (advanced)	412
Programme lifecycle (advanced)	414
Core documents (advanced)	415
<b>9.03 Portfolio Management</b>	<b>416</b>
Portfolio management	417
Management by projects	417
Programme, portfolio management and management by projects	418
Responsibilities	418
Advanced	419
Prioritise projects and programmes (advanced)	419
Portfolio organisation (advanced)	420
Portfolio lifecycle (advanced)	421
<b>9.04 Supporting Functions and implementing PPP management</b>	<b>422</b>
Purpose and characteristics of a permanent PMO	423
Added value of a permanent PMO	424
Responsibilities	425
Advanced	426
Implementing a PPP organisation (advanced)	426
ISO 21502: 2020, Guidance on Project Management (advanced)	427
IPMA Organisational Competence Baseline (advanced)	428
Identifying the maturity level (advanced)	429
<b>9.05 Development Frameworks</b>	<b>432</b>
Agile	433
Scrum	435
Responsibilities	442

Advanced	443
Lean Six Sigma (advanced)	443
Kanban (advanced)	444
<b>10. Internal Context</b>	<b>447</b>
<b>10.01 Organisation Theories</b>	<b>449</b>
Permanent organisation	450
Interfaces between project and permanent organisation	453
Organisational models	454
Responsibilities	455
Advanced	456
Systems approach (advanced)	456
Organisational configurations framework (advanced)	458
Total Quality Management (advanced)	460
Theory of Constraint (advanced)	461
<b>10.02 Personnel Management</b>	<b>462</b>
Personnel policy and personnel management	463
Personnel management in projects	463
Responsibilities	463
Advanced	464
Knowledge management (advanced)	464
Competence management (advanced)	464
Single-, double-, and triple-loop learning (advanced)	464
<b>10.03 Financial Administration</b>	<b>466</b>
Cost classification	466
Responsibilities	467
Advanced	468
Principles of financial accounting (advanced)	468
Accounting (advanced)	468
Annual accounts (advanced)	469
Calculation of net cash flow (advanced)	473
Valuation of projects (advanced)	474
Allocation of indirect costs (advanced)	474
<b>11. External Context</b>	<b>477</b>
<b>11.01 Health, Safety, Security and Environment</b>	<b>479</b>
Health and safety legislation	480
Security	481
General Data Protection Regulation	482
Environmental legislation	482
Responsibilities	483

<b>11.02 Sustainability</b> .....	<b>484</b>
Sustainable development .....	484
People, Planet, Profit (3Ps model) .....	485
Sustainable development in projects .....	485
Corporate Social Responsibilities .....	486
The Triple Bottom Line (TBL) .....	487
Responsibilities .....	488
Advanced .....	489
The 10 Principles of the UN Global Compact (advanced) .....	489
ISO 26000 Corporate social responsibility (advanced) .....	489
<b>11.03 Laws and Legislation</b> .....	<b>492</b>
Agreements .....	492
Shortcomings in the fulfilment of an agreement .....	494
Unlawful act/tort .....	495
Regulatory agencies .....	496
Responsibility of the project manager in law enforcement .....	496
Responsibilities .....	496
Advanced .....	497
Areas of law (advanced) .....	497
Intellectual property law (advanced) .....	497
<b>11.04 Power and Interests</b> .....	<b>499</b>
Projects related to power and interests .....	500
Power and authority .....	500
Principles of persuasion .....	501
PESTLE analysis .....	502
Responsibilities .....	504
Advanced .....	505
Sources of interest (advanced) .....	505
<b>11.05 Culture and Values</b> .....	<b>507</b>
Projects related to culture and values .....	508
Dimensions of national cultures .....	508
Organisational culture model .....	511
Responsibilities .....	513
Advanced .....	514
Organisational culture and decision-making (advanced) .....	514
<b>ANNEX</b> .....	<b>517</b>
<b>A Glossary</b> .....	<b>519</b>
<b>B Acronyms</b> .....	<b>533</b>
<b>C Literature</b> .....	<b>535</b>
<b>D Index</b> .....	<b>539</b>



# GENERAL INTRODUCTION

IPMA observes an increasing number and importance of projects in business, public and people's lives, also known as 'projectification', which is why we need to engage more and more in projects. IPMA stands for *International Project Management Association* and is a federation of about 70 Member Associations for project management.

This book provides a knowledge base for developing individual competences for managing projects as described in the IPMA Individual Competence Baseline version 4.

IPMA defines a project as a unique, temporary, multidisciplinary and organised endeavour to realise agreed deliverables within predefined requirements and constraints. Projects drive the development of new products and services, expansions, new capabilities, implementation of new strategies and new generations of infrastructure, but also major maintenance and upgrade of existing facilities and infrastructure.

We recognise that projects begin and end with people and that their competent performance is at the heart of every successful project. This textbook describes the processes and steps applied in project management and the relevant knowledge basis for the people and perspective competences.

Please observe that some of this book's elements may be the subject of patent rights. IPMA shall not be held responsible for identifying such patent rights. Any trade name in this document is information given for users' convenience and does not constitute an endorsement.

## PURPOSE

IPMA realises that no single book can contain the complete knowledge needed to develop project management skills and abilities. No two projects are the same, nor are the people who work on them, nor the stakeholders, nor the context within the project to be implemented. However, this book offers a knowledge base that can be built on further in developing individual competences in project management to make projects succeed.

Theories and practices for all ICB4 competences are described. They are logically sequenced, explained and enriched with practical theories, which can be learned and applied in the daily practice of project management. As such, it is entirely in line with IPMA's vision: to strengthen competence across society to enable a world in which all projects succeed. This book also supports obtaining an IPMA certificate as proof of your competence in projects.

## AUDIENCES AND USES

Like the IPMA ICB4, this book is intended for a wide range of audiences across many uses. It was written with these audiences in mind. The audiences mentioned below are by no means exhaustive.

**Project professionals** – The primary audience is the project professionals, providing a basis for their professional development, as a reference guide, also as a basis to prepare for their certification. In the context of this book, project professionals are anyone who plays a role in managing the project and those who support them; these are the (sub-)project manager, work package leader, and project support staff. From convenience, we usually address the reader from their role as project manager.

**IPMA Member Associations** – This book is also intended for the various IPMA Member Associations (MAs), their certification boards, and assessors if they wish to strengthen their knowledge base for certifying project professionals and attract new members. This book may provide a solid foundation for that. Member Associations can add theories for certification on a chapter-by-chapter basis. Future versions of this book may include these theories.

**Trainers and educators** – Furthermore, this book may be used by trainers and educators as a basis for their curriculum and as a guide for delivering project management training. This applies, in particular, to those certified under the IPMA Education & Training Registration System (REG Partners).

**Companies, governments, and not-for-profit organisations** – Finally, this book is practical for decision-makers in companies, governments, and not-for-profit organisations to decide how to shape the competence development of project professionals within their organisations with the IPMA ICB4.

## CERTIFICATION SCHEME

IPMA has developed a 4-level certification schema for project professionals based on the Individual Competence Baseline. The four levels of individual certification and their titles are described on the website of IPMA World (<https://ipma.world>).

**Level D: Project Management Associate** – An IPMA Level D certification requires that the candidate is knowledgeable in all Competence Elements (CEs) related to project management. As such, they possess broad project management knowledge and can work in a project team. No previous experience is required.

**Level C: Project Manager** – An IPMA Level C certification requires the candidate should have a minimum of three years of experience in the last six years as a project manager within projects of moderate complexity or in a responsible project management role assisting the project manager in complex projects.

**Level B: Senior Project Manager** – An IPMA Level B certification for project management requires that, in the last eight years, the candidate should have a minimum of five years of experience as a project manager, of which at least three years were in a responsible leadership function managing complex projects.

**Level A: Projects Director** – An IPMA Level A certification for project management requires that, in the last twelve years, the candidate should have a minimum of five year experience as a project manager in a responsible leadership function managing complex projects, of which a minimum of three years at a strategic level.

For Levels B, C and D, candidates should complete a self-assessment and pass an examination. The self-assessment is designed to provide a clear picture of an individual's experience in project-related environments. The exam aims to test your level of knowledge as a project professional. The knowledge tested is based on the competences described in the IPMA *Individual Competence Baseline*. The Certification Bodies of the IPMA Member Associations are responsible for the individual assessments and certification.



# 1. STRUCTURE OF THE BOOK

For project management, the Individual *Competence Baseline* version 4 (ICB4) describes 28 competences, subdivided into (see Table 1.01):

- » 05 Perspective competences
- » 10 People competences
- » 13 Practice competences

Perspective competences		People competences		Practice competences	
4.3.1	Strategy	4.4.1	Self-reflection and self-management	4.5.1	Design
4.3.2	Governance, Structures and processes	4.4.2	Personal integrity and reliability	4.5.2	Requirements, objectives and benefits
4.3.3	Compliance, standards and regulations	4.4.3	Personal communication	4.5.3	Scope
4.3.4	Power and Interest	4.4.4	Relationships and engagement	4.5.4	Time
4.3.5	Culture and values	4.4.5	Leadership	4.5.5	Organisation and information management
		4.4.6	Teamwork	4.5.6	Quality
		4.4.7	Conflict and crisis	4.5.7	Finance
		4.4.8	Resourcefulness	4.5.8	Resources
		4.4.9	Negotiation	4.5.9	Contracts and procurement
		4.4.10	Result orientation	4.5.10	Plan and control
				4.5.11	Risk and opportunities
				4.5.12	Stakeholders
				4.5.13	Change and transformation

Table 1.01 ICB4 competence overview

The perspective competences define the contextual competences to navigate projects within and across the broader environment. The people competences define the personal and interpersonal competences required to succeed in projects. The practice competences define the technical aspects of managing projects.

## ORDER OF SUBJECTS

To meet the readers' needs, this book starts with an introduction to projects and project management. Next, the practice competences are described, then the people competences, and finally, the perspective competences.

The practice competences are described in the sequence of the project lifecycle. Starting with the project preparation (Part 4), then project definition (Part 5) and finally, project delivery (Part 6). To do this logically, the ICB4 sequence has been changed, and competences have also been split up, as sections of certain ICB4 competences are particularly relevant for one particular project stage.

The people competences are described in Parts 7 and 8. The chapters in Part 7 focus mainly on managing yourself, and in Part 8, more on the interpersonal competences that connect with others.