



Companion Requirements

J.-M. Bruel

1.2.6 -- 2023-09-19



This document constitutes the requirements book of the [Requirements Handbook Companion](#). It follows the method presented in the [Handbook of requirements and business analysis](#). It uses the AsciiDoc template available [here](#).

CHANGELOG

Version	Date	Comment
1.0	2021-02-01	Initial draft by J.-M. Bruel
1.1	2021-02-08	Organization in separate books' files, by J.-M. Bruel
1.2	2021-02-21	Writing of the Process book, by J.-M. Bruel
1.2.1	2021-02-29	Minor improvements of verification rules, by J.-M. Bruel
1.2.2	2021-04-16	Minor improvements of goals, by J.-M. Bruel
1.2.3	2023-08-02	Add an example of business constraint and its rational in E.3, by J.-M. Bruel
1.2.4	2023-08-24	Add an example of Assumption in E.4, and add Minimum Outcome Principle feature, by J.-M. Bruel
1.2.5	2023-08-25	Fix Standard plan updates, by J.-M. Bruel
1.2.6	2023-08-27	Add Scenarios and authors, by J.-M. Bruel
1.2.6	2023-09-19	<i>Current PDF version, by J.-M. Bruel</i>

Table of Contents

CHANGELOG	2
Goals	4
G.1 Context and overall objective	4
G.2 Current situation	4
G.3 Expected benefits	4
G.4 Functionality overview	4
G.5 High-level usage scenarios	4
G.6 Limitations and exclusions	4
G.7 Stakeholders and requirements sources	4
Environment	6
E.1 Glossary	6
E.2 Components	6
E.3 Constraints	6
E.4 Assumptions	6
E.5 Effects	7
E.6 Invariants	7
Project	8
P.1 Roles and personnel	8
P.2 Imposed technical choices	9
P.3 Schedule and milestones	9
P.4 Tasks and deliverables	9
P.5 Required technology elements	9
P.6 Risk and mitigation analysis	9
P.7 Requirements process and report	9
System	10
S.1 Components	10
S.2 Functionality	10
S.3 Interfaces	10
S.4 Detailed usage scenarios	10
S.5 Prioritization	10
S.6 Verification and acceptance criteria	10

Goals



Front matter

G.1 Context and overall objective

G.1.1 The main purpose of the [Companion Book](#) is to complement the [Handbook](#) by providing useful additional material, examples, templates, and full PEGS use cases.

G.2 Current situation

G.2.1 The only available material is the published [Handbook](#).

G.3 Expected benefits

G.3.1 [Readers](#) of the [Companion Book](#) should be able to find some templates for the requirements' book structure.

☑ [Corresponding Artifact](#)

G.4 Functionality overview

G.4.1 The *system* under development in this specification is an unusual one: a book! It will serve as one of the case studies for the [Companion Book](#).

G.5 High-level usage scenarios

G.5.1 The main target usage of the [Companion Book](#) is for students to practice the [Handbook](#) principles.

G.5.2 An expected usage of the [Companion Book](#) is for Requirements Engineering courses teachers to get materials for their class.

G.6 Limitations and exclusions

⚠ Nothing available at this point.

G.7 Stakeholders and requirements sources

G.7.1 Here is a non-exhaustive list of the stakeholders.

Table 1. Target side stakeholders

Stakeholder	Category	Comment
Springer	Legal department	In charge of the edition of the Companion Book

Stakeholder	Category	Comment
Readers of the Handbook	User	Readers of the main Handbook that might need additional information about the method
Readers of the Companion Book	User	Person reading the Companion Book who might not have access to the main Handbook

Table 2. Production side stakeholders

Stakeholder	Category	Comment
Author of the Handbook	Domain Expert	Bertrand Meyer, author of the Handbook , and main evaluator of the Companion Book
Leader of the Companion Book	Project Manager	J.-M. Bruel , effort leader of the Companion Book
Authors of the Companion Book	Developers	J.-M. Bruel , Sophie Ebersold and Marya Naumchev, authors of the Companion Book

6.7.2 Most of the requirements come from the [Handbook](#).



Back matter

TBD list

[\[p1-persons\]](#).

Environment

E.1 Glossary

This section defines the domain-specific terms used in this document.

It also lists the icons used in this document.

E.1.1 Terms

Companion Book

The *system* to be developed: the companion book of [Handbook](#). Current version available [here](#).

Handbook

The book, entitled "Handbook of requirements and business analysis", written by Bertrand Meyer (see PDF [here](#)), and for which the [Companion Book](#) serves as complementary material.

E.1.2 Icons

Here is the list of significations for the icons used when tracing the corresponding artifacts:

Table 3. Icons signification

Icon	Signification
☑	A precisely referenced artifact satisfying the requirement
⚠	An artifact not yet fully functional
⊗	No corresponding artifact yet (requirement not satisfied)

E.2 Components

⚠ Nothing available at this point.

E.3 Constraints

E.3.1 The [Companion Book](#) should itself apply the method described in the [Handbook](#).

E.3.2 The [Companion Book](#) should reach at least 160-170 pages.

E.3.3 The rationale for requirement [E.3.2](#) is: in order to have a sufficient distinction from the [SpringerBriefs](#).

E.4 Assumptions

E.4.1 The [Companion Book](#) will be reviewed by the author of the [Handbook](#).

E.5 Effects

⚠ Nothing available at this point.

E.6 Invariants

⚠ Nothing available at this point.

Project



Front matter

P.1 Roles and personnel

P.1.1 Here are the roles for the production of the [Companion Book](#):

- Leader: The person in charge of leading and organizing the writing effort.
- Writers: The persons contributing to the writing effort.
- Reviewers: The persons in charge of reviewing the [Companion Book](#).

☑ [Corresponding Artifact](#)

P.1.2 Here are the identified people involved in the development of the [Companion Book](#):

- Leader: The writing effort of the [Companion Book](#) is under the responsibility of [J.-M. Bruel](#).
- Writers: In addition to [J.-M. Bruel](#), here are the persons involved: Sophie Ebersold, Marya Naumchev, Alexandr Naumchev, Florian Galinier
- Reviewers: In addition to Bertrand Meyer, author of [Handbook](#), some reviewers will be found among early adopters of [Handbook](#).

▼ *TBD*

Author

[J.-M. Bruel](#)

Date

2021-02-21

Deadline

June

Importance

serious

Needs

- stakeholders to ask
- documentation to consider
- management decision (by Bertrand Meyer)

⊗ [Corresponding Artifact]

P.2 Imposed technical choices

P.2.1 The [Companion Book](#) should be written in English.

P.2.2 The [Companion Book](#) should be written in one of the compatible inputs of the publisher, Springer.

⊗ [Corresponding Artifact]

P.3 Schedule and milestones

P.3.1 The expected date of the [Companion Book](#) is the end of June.

P.4 Tasks and deliverables

P.4.1 The tasks are managed through the use of a collaborative repository: <https://github.com/FormalRequirements/requirements-handbook>.

P.5 Required technology elements

▲ Nothing available at this point.

P.6 Risk and mitigation analysis

▲ Nothing available at this point.

P.7 Requirements process and report

P.7.1 The production of the [Companion Book](#) will not follow a particular requirements process.



Back matter

TBD list

- [P.1.2](#).

System

S.1 Components

S.1.1 The components of the [Companion Book](#) initially identified are the following:

- 1 An overview of the PEGS method.
- 2 At least one case study ([Roborace](#))
- 3 At least one book template

S.2 Functionality

⚠ No requirements of this type available at this point.

S.3 Interfaces

⚠ No requirements of this type available at this point.

S.4 Detailed usage scenarios

⚠ No requirements of this type available at this point.

S.5 Prioritization

⚠ No requirements of this type available at this point.

S.6 Verification and acceptance criteria

S.6.1 Here are some examples of verification rules currently implemented in the [Companion Book](#).

S.6.2 The books may reference each other, but not arbitrarily.

S.6.3 The [following diagram](#) shows which books may refer to which.



It only governs the actual contents, ignoring the front and back matter.

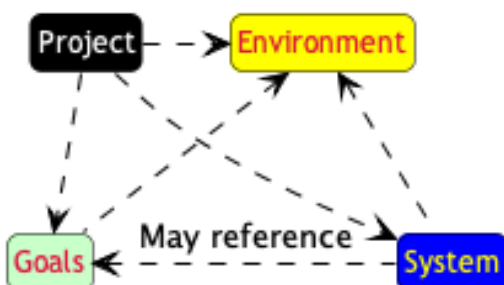


Figure 1. S.6.4: Possible references between the books

☑ Corresponding artifact

P E G S