

# Development of SEBoK v. 1.3

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This version of the SEBoK was released 30 May 2014. This is a minor release of the SEBoK which includes three new case studies, a new use case, updates to several existing articles, and updates to references, particularly updates to the newest version of the *Project Management Body of Knowledge (PMBOK)*. The Editorial Board released the associated version of the Sandbox in June 2014.



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## Content and Feature Updates for v. 1.3.2

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Version 1.3.2 fixes a number of broken links caused by changes to the INCOSE website. Where possible the link has been updated to point at the same material in its new home on the INCOSE.org website. If that was not possible the direct link has been removed and replaced with a reference giving title, author and date. We will review all of these links for SEBoK v. 1.4 to ensure the linked material is still available and relevant. If you have any problems finding particular linked material in the mean time please contact the Editorial Board for assistance. All changes made for version 1.3.1 remain in

place. Content and Feature Updates for 1.3.1

## **Content and Feature Updates for v. 1.3.1**

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Changes between versions 1.3 and version 1.3.1 included:

- New primary references have been added to the Security Engineering article.
- A read-through has been completed of Part 1, Part 2 and Part 4 focused on text errors, references, citations, and general formatting for alignment with the style guide.
- A number of minor descriptions and references related to military standards, DoD System Engineering Plan (SEP) and SPRDE-SE Competency Model / ENG Competency Model has been updated to reflect newer external material available on these subjects. This has had an impact on the following articles: Systems Engineering and Procurement/Acquisition, Technical Leadership in Systems Engineering ,Developing Individuals, Assessing Individuals, Roles and Competencies, Environmental Engineering, and Safety Engineering.

## **Content and Feature Updates for v. 1.3**

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Changes between versions 1.2 and version 1.3 included:

- A new use case intended to help individuals who are unfamiliar with systems engineering understand key concepts and navigate the SEBoK to get acquainted with the discipline;
- Three new case studies on Business Transformation, Next Generation Air Traffic Control, and NASA's Mission to Saturn;
- Updates to the Hubble Space Telescope Case Study; and
- Minor updates to references and content to reflect new sources of information, in particular the publication of the newest version of the Project Management Body of Knowledge (PMBok).

## SEBoK v. 1.3 Authors

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Authors who contributed materials specifically to the v. 1.3 products are listed in Table 1, below.

**Table 1. SEBoK v. 1.3 Authors.** (SEBoK Original)

Author	Contribution
Mikhail Belov, <i>IBS</i> (Russia)	Successful Business Transformation within a Russian Information Technology Company
Hamid Darbi, <i>Stevens Institute of Technology</i> (USA)	Federal Aviation Administration Next Generation Air Transportation System
David H. Olwell, <i>Naval Postgraduate School</i> (USA)	Use Case 0: Systems Engineering Novices
Brian Sauser, <i>University of North Texas</i> (USA)	Hubble Space Telescope Case Study
Mike Vinarcik, <i>Booz Allen Hamilton and University of Detroit, Mercy</i> (USA)	How Lack of Information Sharing Jeopardized the NASA/ESA Cassini/Huygens Mission to Saturn
Brian White, <i>CAU&gt;SE</i> (USA)	Hubble Space Telescope Case Study

## SEBoK v. 1.3 Editors

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The Editorial Board for v. 1.3 is listed in Tables 2, 3, and 4 below.

**Table 2. SEBoK v. 1.3 Leadership.** (SEBoK Original)

### BKCASE Editor in Chief

#### Richard D. Adcock



*Cranfield University (UK)*

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SEBoK v. 1.3 was the first iteration of the SEBoK published under Rick's leadership. In addition to his duties as EIC, Rick is responsible for the Systems Fundamentals, Systems Science, Systems Thinking, and Systems Approach Applied to Engineered Systems knowledge areas in Part 2: Foundations of Systems Engineering along with Cihan Dagli.

The Editor in Chief was supported by the Associate Editors. Each Associate Editor's area(s) of responsibility are highlighted in Table 3 below.

**Table 3. SEBoK v. 1.3 Associate Editors.** (SEBoK Original)

**BKCASE Associate Editors**

**Barry Boehm**

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Responsible for the Systems Engineering Management knowledge area with Greg Parnell and Life Cycle Models knowledge area; both are in Part 3: Systems Engineering and Management.

**Cihan Dagli**

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Responsible for the Systems Fundamentals, Systems Science, Systems Thinking, and Systems Approach Applied to Engineered Systems knowledge areas in Part 2: Systems along with Rick Adcock.

**Judith Dahmann**

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Responsible for Product Systems Engineering, Enterprise Systems Engineering, and Systems of Systems (SoS) in Part 4: Applications of Systems Engineering with Mike Henshaw.

**Heidi Davidz**

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Responsible for the Enabling Individuals knowledge area with Tim Ferris and the Enabling Teams knowledge area in Part 5: Enabling Systems Engineering.

**Ricardo Pineda**

*Stevens Institute of Technology (USA)*

*Version 1.3 of the SEBoK was dedicated in memory of Ricardo.*

**Garry Roedler**

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**Brian Sauser**

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**Timothy Ferris**

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Responsible for Product Systems Engineering, Enterprise Systems Engineering, and Systems of Systems (SoS) in Part 4: Applications of Systems Engineering with Judith Dahmann.

**James Martin**

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Supports the Systems Fundamentals and Enterprise Systems Engineering knowledge areas.

**Ariela Sofer**

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Responsible for Part 1, including an overview of systems engineering and an overview of the SEBoK.

**Alice Squires**

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Responsible for Systems Engineering and Project Management. Alice also serves as the Senior Editor for Integration.

**Ricardo Valerdi**

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Responsible for the System Realization knowledge area in Part 3: Systems Engineering and Management. Dr. Valerdi is also developing a new article on Systems Engineering References.

**Brian White**

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Responsible for Part 7: Systems Engineering Implementation Examples, which includes Case Studies and Vignettes, with Brian Sauser.

**David H. Olwell**

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Responsible for Use Case 0.  
Dave also serves as the  
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*Graduate Reference  
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Responsible for the Systems  
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knowledge area with Dov Dori in Part 2: Systems and the  
Systems Engineering Management knowledge area with  
Barry Boehm in Part 3: Systems Engineering and  
Management.

The Assistant Editors provide general editorial support  
across all topics. They assist both with content  
improvement and production issues.

**Table 4. SEBoK v. 1.3 Assistant Editors.** (SEBoK Original)

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## SEBoK v. 1.3 Staff

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The Editorial Board was further supported by the  
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**Table 5. SEBoK v. 1.3 BKCASE Staff.** (SEBoK Original)

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