ESS Enterprise Architecture Reference Framework

**Artifact 7: Toolkit: Defining your project’s Business Architecture based on the ESS EARF**

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Version 1.0



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# About this document

The document at hand is a template for documenting the Business Architecture of a change initiative.

A Business Architecture is defined before a change is detailed to describe the desired target state of the business which is subject to change.

According to TOGAF, the Business Architecture *“describes the product and/or service strategy, and the organizational, functional, process, information, and geographic aspects of the business environment”*.[[1]](#footnote-2)

This template serves two purposes as well as two audiences:

* **Business Architecture elaboration** – The first purpose is to help ESS projects elaborate their Business Architecture (BA). Audience are thus ESS project managers and project staff. The template suggests a Table-of-Content for the Business Architecture document and indicates best practice elements for reuse.
* **Business Architecture review** – The second purpose is to support a systematic, structured review of an ESS project’s BA. Audience are thus EA experts in charge of such reviews. The template comprises the key criteria against which the assessment should be made as well as the required evaluation grids.

The template describes what should be elements in a business architecture and provides a structure for documenting it. For each element, the template provides:

* a description of what the item should cover including its indicative length
* reusable elements
* key quality criteria.

The template supports a review of the Business Architecture and thus supports the calculation of an overall score reflecting the global quality and completeness of the Business Architecture.

The template builds on TOGAF, a worldwide recognized Enterprise Architecture Development Method, as well as the ESS Enterprise Architecture Reference Framework (ESS EARF) and ESS Statistical Production Architecture (ESS SPRA). For further information, please directly consult these source documents.

# Business Architecture Table of Content

1. Introduction (2 pages)
	1. Purpose of a Business Architecture
* This section should explain the purpose of a BA document in general terms: why a BA is needed, what its key content elements are, and so forth.
	+ - The text should be based on standard frameworks for Enterprise Architecture e.g. TOGAF which provide detailed information on the purpose and usage of a BA.[[2]](#footnote-3)
		- The text should also explain the needs the BA has to fulfil: i.e. to in a succinct way communicate the Target State Business Architecture, the Current State Architecture, Gaps between the two and the Roadmap to close the gap.
			* + Example text[[3]](#footnote-4): *According to TOGAF, a widely used reference framework for Enterprise Architecture, the Business Architecture “describes the product and/or service strategy, and the organizational, functional, process, information, and geographic aspects of the business environment”. Its purpose is to provide a common understanding of a change initiative and of the way it will impact the current way of “doing business": it identifies the changes an initiative aims to realize and translates them into a blueprint for concrete implementation.*
	1. Purpose of the Business Architecture specific to the ESS project
* This section should summarize the purpose of the Business Architecture specifically for the ESS project.
* It should further relate the Business Architecture to other planned project deliverables that will build on the BA such as the more technical interoperability or solution architectures.
	1. Reader
* This section should list the intended audience of the BA. NB: a BA is typically targeting management (IT and Business) and hence uses executive language and displays fairly limited detail. The overall length of the core document (annexes excluded) should typically be 20-25 pages.
* The section may also showcase the use cases of the document for the various types of target audiences.
* Finally, this section should also explain the structure of the document chapter by chapter.
	1. Versioning
* Versioning information in table format

### Reusable material

* Above, generic description of Business Architecture
* TOGAF descriptions of the needs and purpose of a BA: http://pubs.opengroup.org/architecture/togaf9-doc/arch/chap08.html

### EA evaluation grid

|  |  |  |
| --- | --- | --- |
| Criterion | Score[[4]](#footnote-5) | Reviewer comments |
| The BA adheres to the template or provides justification for deviations |  |  |
| The justification for producing a BA in the project is convincing |  |  |
| The structure of the BA is clear to the reader after reading this section |  |  |
| The reader has a clear view on how to use the document in his particular context |  |  |
| Other: free text for reviewer |  |  |

1. Context (2 pages)
	1. Scope
* This section delimits the scope of the Business Architecture in terms of for example:
	+ - Statistical domain: Agriculture statistics, Transport statistics, and so forth
		- Innovation area: Big Data, introduction of Service Oriented Architecture, deployment of innovative technologies, and so forth
		- Geographical scope: DG ESTAT versus NSIs, number of ESS partners involved, and so forth
		- Etc.

This section is paramount to determine in simple terms what is in-scope for the transformation and what is out-of-scope and will thus be continued without undergoing change.

* 1. Drivers for change
* This section summarizes the main drivers for change. Be brief on general drivers (i.e. drivers that impact statistics in general terms) & rather focus on drivers that are specific to the project.
	+ - Keep in mind the definition of “driver”: An external or internal condition that motivates a change and therefore the organization to reconsider its goals. An example of an external driver is a change in regulation or compliance rules, or the emergence of a new data source or technology.[[5]](#footnote-6)
* Establish a link to the business strategy and envisioned change i.e. how the drivers for change are impacting the project’s business orientation.
	1. Key stakeholders
* List the project’s main stakeholders and briefly explain their stake in the change. If relevant, stakeholders can be segmented according to generic criteria. An example segmentation from *TOGAF* is: level of understanding, commitment and support to the project or their communication needs.
* Explain more thoroughly the user groups of the information system the project will establish as well as an overall characterization of the needs of each each user group.

### Reusable material

* TOGAF definition of drivers: http://pubs.opengroup.org/architecture/togaf9-doc/arch/apdxa.html
* TOGAF Stakeholder mapping techniques: <http://pubs.opengroup.org/architecture/togaf9-doc/arch/chap24.html>

### EA evaluation grid

|  |  |  |
| --- | --- | --- |
| Criterion | Score[[6]](#footnote-7) | Reviewer comments |
| The BA adheres to the template or provides justification for deviations |  |  |
| The drivers described are specific and complete |  |  |
| The differentiation between stakeholders and users is clear |  |  |
| The needs of future information system users are clearly described  |  |  |
| Other: free text for reviewer |  |  |

1. Objectives (3 pages)
	1. Project vision
* The project’s vision as per common agreement among the project members, expressed in one or just a few paragraphs. This can typically be taken from the *Project Initiation Request* or the *project’s business case*. Note that this is the starting point for the entire BA document and hence should be agreed upon at the very first.
	1. Project objectives
* This section details the project’s objectives.
* *How can the project best describe its objectives?* From an EA point-of-view, it is suggested to use Business Capability Modeling as a technique to express a project’s objectives and link them back to the project vision of the previous paragraph.[[7]](#footnote-8)
	+ - The technique of Business Capability Modeling is presented in the ESS EARF.
			* + Note that: The business capability model describes what a project does and what it will need to do differently (in response to the strategic challenges and opportunities and priorities identified in the vision and the contextual analysis). A capability is supported by adequate combination of people, skills, process, systems and technologies, methods and standards. A business capability map provides a synthetic view of a project’s objectives, envisioned outcomes and deliverables that can be understood by both business and IT.

### Reusable material

* Project Vision from PIR or Business Case
* ESS Business Capability Model (Artefact 3 of the ESS EARF)

### EA evaluation grid

|  |  |  |
| --- | --- | --- |
| Criterion | Score[[8]](#footnote-9) | Reviewer comments |
| The BA adheres to the template or provides justification for deviations |  |  |
| The project’s vision is comprehensive |  |  |
| It is clear how the project will contribute to Vision 2020 realization |  |  |
| All relevant capability dimensions (standards, method, organization, …) are adequately considered |  |  |
| The timelines suggested for the project’s implementation are realistic |  |  |
| The project deliverables are complete and relate clearly to project outcomes |  |  |
| Other: free text for reviewer |  |  |

1. Key Business Architecture artefacts

This chapter includes the artifacts of the Business Architecture. Typically these are: the Current State BA, the Target State BA, a Gap analysis between the two, a Roadmap to close the gap.

* 1. Current State Business Architecture (3 pages, plus visual)
* *How can the project best describe its Current State architecture?* The Current State is suggested to be expressed using a Process Model.
* The process model must (in a simplified way):
	+ - Depict the key process steps of the current state
		- Depict the key actors carrying out the process steps
		- Depict the key information systems carrying out the process steps
		- Depict the key inputs and outputs of the process steps
		- Depict the institutional boundaries between actors i.e. what resides centrally (with Eurostat) and what is decentral (with the NSIs)
* The idea is to present one overview-visual here. An example is inserted below.
	+ - More detailed visualizations should be included in the Annex.

Example Process Models in the ESS (Validation project)



* 1. Target State Business Architecture (2 pages, plus visual)

The Target State should be illustrated in the same way as the Current State so to facilitate a comparison between as-is and to-be. The Target State description should specifically highlight what will change in terms of the process.

Example Process Models in the ESS (Validation project)



* 1. Gap analysis (3 pages)
* *How can the project best conduct a Gap analysis?* It is suggested to again use the Business Capability Modeling approach to conduct the Gap analysis.
	1. Roadmap (1 page, plus graph)
* This section should add the “time” dimension to the gap analysis. For consistency reasons, it is again suggested to continue using the Business Capability Modeling approach to create the Roadmap.

### Reusable material

* Example process models from other ESS projects
* Process model definition and examples from TOGAF[[9]](#footnote-10): http://pubs.opengroup.org/architecture/togaf9-doc/arch/chap35.html
* ESS Business Capability Model (Artefact 3 of the ESS EARF)

### EA evaluation grid

|  |  |  |
| --- | --- | --- |
| Criterion | Score[[10]](#footnote-11) | Reviewer comments |
| The BA adheres to the template or provides justification for deviations |  |  |
| The ambition level of the to-be state is adequate |  |  |
| The difference in terms of current and to-be processes is clear |  |  |
| The visuals are succinct and understandable to business leaders |  |  |
| There is sufficient detail made available in the annexes to complement this section |  |  |
| There is a clear link to ESS Building Blocks and business services |  |  |
| Reuse of Building Blocks and services is privileged |  |  |
| Project timelines are realistic and take into account interdependencies (within and outside of the project) |  |  |
| Other: free text for reviewer |  |  |

1. Principles (2 pages)
* This section should lay down the key principles of the ESS project.

### Reusable material

* ESS EARF Principles (Artefact 2 of the ESS EARF)

### EA evaluation grid

|  |  |  |
| --- | --- | --- |
| Criterion | Score[[11]](#footnote-12) | Reviewer comments |
| The BA adheres to the template or provides justification for deviations |  |  |
| The principles are specific and relevant to the project |  |  |
| The principles are reasonable in their number |  |  |
| The principles are well-described and their description is complete |  |  |
| It is clear how the principles can be put to the project’s use in decision-making situations |  |  |
| Other: free text for reviewer |  |  |

1. Next steps in terms of Architecture development (2 pages)
* This chapter shall define how the BA will evolve as a “living” document. Note that a BA may be updated one or a few times as the project evolves.
* It should describe how the other architecture views (Information, Technology, Application) will be derived from the BA.
* It can include a timetable for the next deliverables of the ESS project.

### Reusable material

* NA as chapter 6.0 is free format text

### EA evaluation grid

|  |  |  |
| --- | --- | --- |
| Criterion | Score[[12]](#footnote-13) | Reviewer comments |
| The BA adheres to the template or provides justification for deviations |  |  |
| It is clear how the BA document will be updated over time |  |  |
| The BA is appropriately put into relation with other architecture views |  |  |
| Other: free text for reviewer |  |  |

1. Annexes
	1. Detailed process models
	2. Glossary
	3. Acronyms
	4. References

### Reusable material

* ESS EARF Glossary (Artefact 5 of the ESS EARF)

### EA evaluation grid

|  |  |  |
| --- | --- | --- |
| Criterion | Score[[13]](#footnote-14) | Reviewer comments |
| The BA adheres to the template or provides justification for deviations |  |  |
| The Annexes are complete and of the required quality |  |  |
| The Glossary is aligned with the ESS EARF Glossary |  |  |
| Other: free text for reviewer |  |  |

# Overall BA evaluation

Please insert the aggregated scores from the previous sections here and complete the overall evaluation sheet.

|  |
| --- |
| **Reviewer:**  |
| **Date:**  |
| **Section evaluation scores** |
| Score: Introduction |  |
| Score: Context |  |
| Score: Objectives |  |
| Score: Artifacts |  |
| Score: Principles |  |
| Score: Next steps |  |
| Score: Annexes |  |
| Overall Rating |  |
| **Reviewer Analysis** |
| Required improvement steps |  |
| Additional review plans |  |

Any questions regarding this Report
should be addressed to:

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1. http://pubs.opengroup.org/architecture/togaf9-doc/arch/chap08.html [↑](#footnote-ref-2)
2. See for example: http://pubs.opengroup.org/architecture/togaf9-doc/arch/chap08.html [↑](#footnote-ref-3)
3. Example taken from the Validation project. [↑](#footnote-ref-4)
4. Score from 1 to 3 (low to high), 3 reflecting high quality and completeness [↑](#footnote-ref-5)
5. http://pubs.opengroup.org/architecture/togaf9-doc/arch/apdxa.html [↑](#footnote-ref-6)
6. Score from 1 to 3 (low to high), 3 reflecting high quality and completeness [↑](#footnote-ref-7)
7. The project objectives and outcomes are expressed in project management deliverables such as a Project Initiation Request or a Business case. Capabilities modeling is complementary to these as an Enterprise Architecture technique. [↑](#footnote-ref-8)
8. Score from 1 to 3 (low to high), 3 reflecting high quality and completeness [↑](#footnote-ref-9)
9. Note that TOGAF uses the term “process flow diagram” [↑](#footnote-ref-10)
10. Score from 1 to 3 (low to high), 3 reflecting high quality and completeness [↑](#footnote-ref-11)
11. Score from 1 to 3 (low to high), 3 reflecting high quality and completeness [↑](#footnote-ref-12)
12. Score from 1 to 3 (low to high), 3 reflecting high quality and completeness [↑](#footnote-ref-13)
13. Score from 1 to 3 (low to high), 3 reflecting high quality and completeness [↑](#footnote-ref-14)