# Syllabus
# BIAN Banking Architecture Practitioner Certification
# (Version 3)



Version 3.4

# Introduction

This syllabus outlines the knowledge the candidates need to master in order to pass the BIAN Banking Architecture Practitioner Certification exam. It provides suggestions for preparation and highlights the benefits of taking this exam.

## The Financial Services ecosystem in turmoil

Disruptive technology is changing the playing field for consumer services in general and financial services in particular. It is not only technology that is changing the scene, new regulations are also changing the playing field dramatically. They force financial institutions to disclose financial information to Third Party Providers (TPPs), providing access to financial services for new players and facilitating competition from FinTechs and RegTechs.

Financial information requirements and financial services are changing at a very high speed. The financial ecosystem is continuously changing, at an ever-increasing pace. This requires an adaptive and agile banking business, supported by an agile organization and ICT platform. Adaptability to new regulations, service requirements, new market players and stakeholders drives the speed and dynamics of the financial world.

Financial institutions were among the first to automate their businesses and are now among the most digitalized service providers. They have pervasive but often complex legacy ICT platforms, with lots of duplication of functionality and data. Monolithic systems, stovepipe systems are connected through point-to-point connections with numerous interface adapters. These legacy systems are a barrier to reacting in a timely and cost-effective manner to market and ecosystem changes. Their complexity results in inflexible/unresponsive systems, inflated enhancement, increasing maintenance and operational costs, and an inability to rapidly leverage advanced solutions, technologies, approaches and business models.

In order to be adaptive in rapidly changing circumstances, financial institutions need agile banking and ICT architectures on an enterprise level. BIAN supports financial institutions in elaborating such a target architecture and in adopting a step-by-step migration towards that target.

## The Banking Industry Architecture Network and its mission

The Banking Industry Architecture Network (BIAN) is a global, not-for profit association of banks, solution providers, consultancy companies, integrators and academic partners with the shared aim of defining a semantic standard for the banking industry covering the business and application architectural layers and the behavior, services and information viewpoints.

The BIAN Association strives to enhance the flexibility and agility of financial services systems by improving the integration of these with an architecture that is based on services.

BIAN's vision and expectation is that a standard definition of business functions, service interactions and business objects which describe the general construct of any bank will be of significant benefit to the industry.

BIAN's mission is to provide the world with the best banking architecture framework and banking standard. BIAN provides a trusted roadmap for constant innovation.

The goal of the BIAN Association is to develop the most important content, concepts and methods in interoperability, supporting the aim of lower integration costs in the financial services industry and facilitating business innovation and agility by:

- Providing an architecture framework with all of the necessary elements, tools and methodologies for a sustainable operational model through the adoption of, and alignment with, available market standards.
- Focusing on the definition of semantic services and/or API-definitions to improve the semantic integration of the financial services landscapes.
- Enabling the financial services industry to develop and run a loosely coupled environment successfully.
- Gaining acceptance from the members of the BIAN Association and the industry of the way in which the requirements will be implemented by both financial institutions and solution suppliers, resulting in the defined services becoming the de-facto standard in the financial services industry.

# The BIAN Certification roadmap

The BIAN Certification roadmap offers role-specific training designed for cross-team alignment. All candidates start with a core Foundation Certification before progressing to one of four Practitioner paths:

- Enterprise Architect
- Solution Architect/Developer
- Data Architect, or
- Business Professional.

These certifications are structured to ensure BIAN teams work to the best of their ability, enabling organizations to extract maximum value from the BIAN framework. More details on the BIAN Certification roadmap can be found here.

## The BIAN Banking Architecture Practitioner Certification

The BIAN Enterprise Architecture Practitioner exam leads to the official BIAN Enterprise Architecture Practitioner Certification by the Banking Industry Architecture Network. It is carried out by Van Haren Learning Solutions.

The BIAN Banking Architecture Practitioner Certification builds on the Foundation level and confirms that participants can apply BIAN in real-world banking architecture and transformation initiatives. It covers the added value BIAN provides to the financial industry and its service providers, and goes further by focusing on how to use BIAN's Reference Architecture for the Financial Industry in practice - to design, structure, and evolve interoperable and manageable banking capabilities and services.

This Practitioner level includes a strong understanding of the design principles and key architectural elements of the BIAN Reference Architecture, and how these can be used to achieve tangible outcomes such as:

- Reducing integration cost through standardized service boundaries and consistent interaction patterns.
- Maximizing interoperability across platforms, vendors, and ecosystems.
- Improving enterprise manageability by enabling modularity, clearer ownership, and controlled evolution of capabilities.
- It also includes an understanding of the relationships between BIAN and other standards, enabling practitioners to position BIAN effectively within an enterprise architecture and broader industry landscape.

*Purpose and learning focus*

This certification validates that professionals can:

- Explain the added value and intent of BIAN and translate it into architectural decisions.
- Apply BIAN's design principles and architectural elements to structure banking domains and services.
- Use the BIAN Reference Architecture to create more transparent, modular, and interoperable ICT systems.
- Evaluate and align BIAN with other standards and frameworks used in financial services.
- Support practical adoption by connecting business needs to BIAN-aligned architectural solutions.

The BIAN Banking Architecture Practitioner Certification is intended for professionals in, or serving, financial institutions, such as:

- Enterprise and solution architects.
- Consultants and senior consultants.
- Tooling providers, software solution providers, integrators, and third-party service providers.
- Business and information architects.
- Integration specialists and API designers working on interoperability.
- Transformation and change managers supporting architecture-led modernization.

*Key benefits of the BIAN Practitioner Certification are:*

- It enables professionals to leverage BIAN effectively in practical architecture and transformation work.
- It strengthens professionals' financial services architecture skills, supporting the creation of more transparent ICT landscapes.
- It provides professionals and their organizations with a competitive advantage in BIAN-aligned initiatives and ecosystems.
- It serves as a hallmark of professionalism for banking professionals and banking architects.

## Certification definition

The BIAN Banking Architecture Practitioner certification is a vital component of the BIAN Banking Architecture Certification program. This certification validates a candidate's understanding of the BIAN Reference Architecture for the Financial Industry, including its advantages to the financial sector and its service providers.

The certification also verifies the candidate's knowledge about the design principles and elements of the Reference Architecture and its ability to reduce integration costs, increase interoperability, and enhance enterprise manageability.

## BIAN Banking Architecture Practitioner Certification requirements

Vouchers for the Certification exam are available through accredited trainers and Van Haren Group.

The knowledge of the candidates will be tested through a multiple-choice exam. An overview of the exam characteristics is given in Table 1.

All exam candidates will get access to the online exam environment and will need to answer 60 multiple-choice questions within 60 minutes.

70% of the questions need to be answered correctly (at least 42 of the 60 questions) in order to pass.

Questions can have one to many correct answers. The number of correct answers is not always indicated in the question. Negative questions (… NOT…) are included. Candidates are advised to read both questions and possible answers with care.

The candidate will receive the result immediately after the exam. (Digital) Access to their certificate will be given once they have passed.

The candidate can take a number of trial exams, but only one actual Certification exam. Taking trial exams before attempting the actual Certification exam, is highly recommended.

*Table 1 Overview of BIAN Banking Architecture Practitioner Certification exam characteristics*

| | |
|---|---|
| Number of questions: | 60 |
| Time (minutes) for the exam: | 60 minutes |
| Passing grade: | 70% |
| Open/closed book: | Closed |
| Language: | English |
| Exam format: | Online |
| Type of question: | Multiple choice<br>One to many possible correct answers<br>Negative questions included |

## Validity of the Certification

The BIAN Banking Architecture Practitioner Certificate is valid for two years.

## The BIAN Banking Architecture Practitioner Certification in the Bloom Taxonomy

The BIAN Banking Architecture Practitioner Certification audits candidates at the Bloom Levels 1 and 2.

This means (according to Bloom's Revised Taxonomy):
• Remembering: Bloom Level 1
• Understanding: Bloom Level 2

## Weight of the BIAN Banking Architecture Practitioner topics

The candidate's knowledge will be tested on the topics enumerated in Table 2. Each topic has a different weighting. The number of exam questions testing that topic will be chosen according to this weight.

*Table 2 BIAN Banking Architecture Practitioner Certification exam topics and their weight*

| Category | Weight (number of questions) | Level of cognition (Bloom level) |
|---|---|---|
| Introducing BIAN and its framework | 7 12% | 1 & 2 |
| Principles and approach | 5 10% | 1 & 2 |
| The architecture | 20 36% | 1 & 2 |
| Applying the standard: general abilities | 7 12% | 1 & 2 |
| Applying the standard: layers and transversal views | 16 27% | 1 & 2 |
| BIAN and TOGAF | 2  3% | 1 & 2 |

# Preparing for the BIAN Banking Architecture Practitioner Certification exam

The BIAN Banking Architecture Practitioner Certification is based on knowledge articulated in the publication "BIAN 2nd Edition – a framework for the financial services industry" (ISBN Hard copy: 978 94 018 0768 5).

This book summarizes the information that is available in the Guides, White Papers and Webinars, available on the BIAN website.

Self-study is not allowed for the BIAN Banking Architecture Practitioner course, however. On top of the training course, it's advised to take about 16 hours to study, depending on existing knowledge. It is recommended that candidates have a working knowledge of business and/or application architecture.

To support the candidates, an accredited BIAN Architecture Practitioner training course is available via Accredited Education Partners. You can ask BIAN Services or Van Haren Learning Solutions (info@vanharen.net) for a reference.

**Error! Reference source not found.** gives an overview of the exam topics and where they are covered in the accredited training course and the book "BIAN 2$^{nd}$ Edition – a framework for the financial services industry".

*Table 3 Exam topics – Training module and literature mapping*

| Category | Relevant course sections | Weight (number of questions) | Level of cognition (Bloom level) |
|---|---|---|---|
| Introducing BIAN and its Framework (Basic)<br>• The BIAN Association, its vision, mission, goals, and benefits Section 1.1<br>• Positioning BIAN in the standards landscape Section 1.3 Section 2.1 Chapter 11<br>• How BIAN evolves - a member-driven architecture Subsection 1. 4.1<br>• The BIAN Framework is a toolbox Subsections 1.4.2; 1.4.3 | Introduction & Fundamentals Recap, BIAN Core Concepts, BIAN and Standards Positioning, BIAN Framework and Toolbox | 3 | 1 |
| Introducing BIAN and its Framework (Advanced)<br>• The BIAN Association, its vision, mission, goals, and benefits Section 1.1<br>• Positioning BIAN in the standards landscape Section 1.3 Section 2.1 Chapter 11<br>• How BIAN evolves - a member-driven architecture Subsection 1. 4.1<br>• The BIAN Framework is a toolbox Subsections 1.4.2; 1.4.3 | Introduction & Fundamentals Recap, BIAN Core Concepts, BIAN and Standards Positioning, BIAN Framework and Toolbox | 4 | 2 |
| Principles and approach (Basic)<br>• Agile principles Subsections 1.2.2; 1.2.3<br>• Changing architecture thinking - building blocks vs. process-based architecture Subsection 1.2.4 | Introduction & Fundamentals Recap, BIAN Core Concepts | 2 | 1 |
| Principles and approach (Advanced)<br>• Agile principles Subsections 1.2.2; 1.2.3<br>• Changing architecture thinking - building blocks vs. process-based architecture Subsection 1.2.4 | Introduction & Fundamentals Recap, BIAN Core Concepts | 3 | 2 |

| | | | |
|---|---|---|---|
| The architecture (Basic)<br><br>• The BIAN Metamodel Section 2.2<br>• The Service Landscape Section 2.3<br>• Service Domain and its pattern Section 2.4<br>• Control Record and Information Profile and their patterns Section 2.5<br>• Business Object Model and its approach & patterns Section 2.6<br>• Service Operations and Semantic API and their patterns Section 2.7<br>• Business Scenario and Wireframe Section 2.9<br>• Business Capability Section 2.10<br>• Value Streams (new course content -reference to be developed) | Explaining the BIAN Architecture, The BIAN Metamodel, The Service Landscape, The Blueprint as a Frame of Reference, Assembling the Enterprise Blueprint, Value Streams, Service Domain and Pattern, Business Scenarios and Wireframes, BIAN Business Object Model (BOM), Control Record and Information Profile, Service Operations, Semantic API, Business Capabilities | 4 | 1 |
| The architecture (Advanced)<br><br>• The BIAN Metamodel Section 2.2<br>• The Service Landscape Section 2.3<br>• Service Domain and its pattern Section 2.4<br>• Control Record and Information Profile and their patterns Section 2.5<br>• Business Object Model and its approach & patterns Section 2.6<br>• Service Operations and Semantic API and their patterns Section 2.7<br>• Business Scenario and Wireframe Section 2.9<br>• Business Capability Section 2.10<br>• Value Streams (new course content -reference to be developed) | Explaining the BIAN Architecture, The BIAN Metamodel, The Service Landscape, The Blueprint as a Frame of Reference, Assembling the Enterprise Blueprint, Value Streams, Service Domain and Pattern, Business Scenarios and Wireframes, BIAN Business Object Model (BOM), Control Record and Information Profile, Service Operations, Semantic API, Business Capabilities | 16 | 2 |
| Applying the standard: general abilities (Basic)<br><br>• Common Frame of Reference - ambition level in use as Section 4.1<br>• Tailoring Section 4.2<br>• Gradual introduction Section 4.3 | Tailoring BIAN, Tailoring BIAN for the Enterprise,<br><br>The Service Landscape | 3 | 1 |

| | | | |
|---|---|---|---|
| Applying the standard: general abilities (Advanced)<br><br>• Common Frame of Reference - ambition level in use as Section 4.1<br>• Tailoring Section 4.2<br>• Gradual introduction Section 4.3 | Tailoring BIAN, Tailoring BIAN for the Enterprise,<br><br>The Service Landscape | 7 | 2 |
| Applying the standard: layers and transversal views (Basic)<br><br>• A holistic overview of the enterprise Chapter 5<br>• Business layer Chapter 6<br>• Application layer Chapter 7<br>• Information and data Chapter 8<br>• Interoperability Chapter 9 | BIAN for a Holistic View of the Enterprise, BIAN for the Business Layer, BIAN for Business Architecture, BIAN for Business Change and Investment Portfolio, BIAN and Information Architecture, BIAN for Integration Architecture, BIAN for Application Architecture     2 | | 1 |
| Applying the standard: layers and transversal views (Advanced)<br><br>• A holistic overview of the enterprise Chapter 5<br>• Business layer Chapter 6<br>• Application layer Chapter 7<br>• Information and data Chapter 8<br>• Interoperability Chapter 9 | BIAN for a Holistic View of the Enterprise, BIAN for the Business Layer, BIAN for Business Architecture, BIAN for Business Change and Investment Portfolio, BIAN and Information Architecture, BIAN for Integration Architecture, BIAN for Application Architecture     14 | | 2 |
| BIAN and TOGAF (Basic)<br><br>• BIAN and TOGAF Chapter 10 | BIAN and TOGAF | 1 | 1 |
| BIAN and TOGAF (Advanced)<br><br>• BIAN and TOGAF Chapter 10 | BIAN and TOGAF | 1 | 2 |

# Exam regulations

## General rules

A BIAN Banking Architecture Practitioner Certification is an prestigious title, and fraud is not tolerated. Your exam will be immediately rejected if fraud is found to have been committed during or after completion of the exam. As a result, you will not be reimbursed for your examination fees.

If you fail to pass the exam, you will not receive a certificate. This also means that you must purchase and take a new exam for your Certification. Every candidate only gets one attempt per exam to succeed.

## Sharing of exam questions is illegal

It is not allowed to share exam questions with others or make them public. This is a violation of the copyright and IP of the BIAN Association and Van Haren Learning Solutions. Doing so can lead to legal action by Van Haren Learning Solutions with potentially harmful consequences.

# Key terms and concepts

The terms and concepts described in Table 4 need to be known in order to successfully pass the BIAN Banking Architecture Practitioner Certification exam.

*Table 4 Terms and expressions, key to taking the BIAN Banking Architecture Practitioner Certification exam.*

| Term/expression | Definition or meaning, as used in the BIAN context |
|---|---|
| Action Term | A fundamental unit of behavior that characterizes the purpose of a Service Operation. |
| API Swagger File | A machine-readable format (according to Swagger[1] TM) of a semantic API description. |
| Asset Type | Something tangible or intangible the bank has ownership and/or influence over, that can create value for the bank. |
| Behavior Qualifier | A set of business information that qualifies (i.e., refines) the Control Record of a Service Domain. |
| Behavior Qualifier Type | A type of information that refines the Generic Artifact and specifies a classification of Behavior Qualifiers. |
| BIAN BOM | Reference information architecture model for the financial industry. |
| BIAN Framework | BIAN's Reference Architecture for the Financial Services Industry, and its standard, and the toolbox BIAN offers in support for their adoption. |
| BIAN Metamodel | The constructs and rules according to which the BIAN Architecture models the reality of the financial industry. |
| Business Area | A grouping of Business Domains used for a structured presentation of the Service Landscape. |
| Business Capability | A particular ability that a business may possess or exchange to achieve a specific purpose. |
| Business Domain | A grouping of Service Domains used for a structured presentation of the Service Landscape. |
| Business Object | Something that exists in reality, concrete or abstract, and participates and/or influences the nature of the business. |
| Business Scenario | A linked sequence of interactions between Service Domains in response to a business event. |

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[1] Swagger[TM] allows you to describe the structure of your APIs so that machines can read them. It enforces adherence to the Open API Specification.

| | |
|---|---|
| Canonical | In a common language, meant to enable communication between "speech communities". |
| Control Record | A set of business information that reflects all information needed to support the fulfillment of the role of Service Domain on instances of an Asset Type. |
| Customizing the BIAN Architecture | Adding/deleting and adapting elements of the BIAN Architecture in view of the specificities of the bank. |
| First Order Connection | The service dependency between two Service Domains, one offering the service and one consuming the service. |
| Frame of Reference | The set of reference or anchor points offered by BIAN, that enable a unique identification, understanding and positioning of the elements of a bank. |
| Functional Pattern | A behavior or mechanism that can be applied to some asset in the execution of commercial business. |
| Generic Artifact | The general type of artifact produced and/or managed by any Service Domain that conforms to the Functional Pattern. |
| Implementation agnostic | Indicating *what* needs to be done/known and *not how and with what* this needs to be implemented. |
| Information Profile | The information required for a Service Domain to function. |
| Message | The input and output parameters exchanged through a Semantic API Endpoint. |
| Reference Architecture for the Financial Services Industry | The architecture model in which BIAN captures the reality of the financial industry. |
| Semantic | Expressed in business language, indicating *what* needs to be done/known and *not how and with what* this needs to be implemented. |
| Semantic API | The collection of the Semantic API Endpoints of one Service Domain. |
| Semantic API Endpoint | An access point where one Service Operation offered by one Service Domain is made available to the environment. |
| Service Connection | A connection between two BIAN Service Domains, in the context of a Business Scenario or Wireframe, realized by a Service Operation. |
| Service Domain | An elemental or atomic functional building block that can be service enabled as a discrete and unique business responsibility. |
| Service Domain BOM | Model of the business information, governed by a Service Domain, modeled according to the BOM approach. |

| Service Landscape | A representation that organizes the BIAN Service Domains and facilitates access to them. |
| --- | --- |
| Service Operation | A business service that is exposed by a Service Domain. |
| Standard | Element of BIAN's Reference Architecture for the Financial Services Industry for which it is the ambition to achieve a consensus among leading banks and providers in the financial services industry, which in due time should lead to standardized services. |
| Tailoring the BIAN Architecture | Detailing the descriptions of the elements of the BIAN Architecture and customizing it. |
| Technology agnostic | Unbiased towards what technology is used for implementations. |
| Wireframe | An interaction representing the available Service Connections for a selection of Service Domains. |