

Banking Industry Architecture Network

BIANRelease 10.0 **Release Notes**

Organization

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1 Overview of Release 10.0

BIAN 10.0 provides more content and an enhanced quality of existing artifacts. In the figure below the evolution of the content of BIAN is presented. These changes are explained more detailed in the subsequent paragraphs.

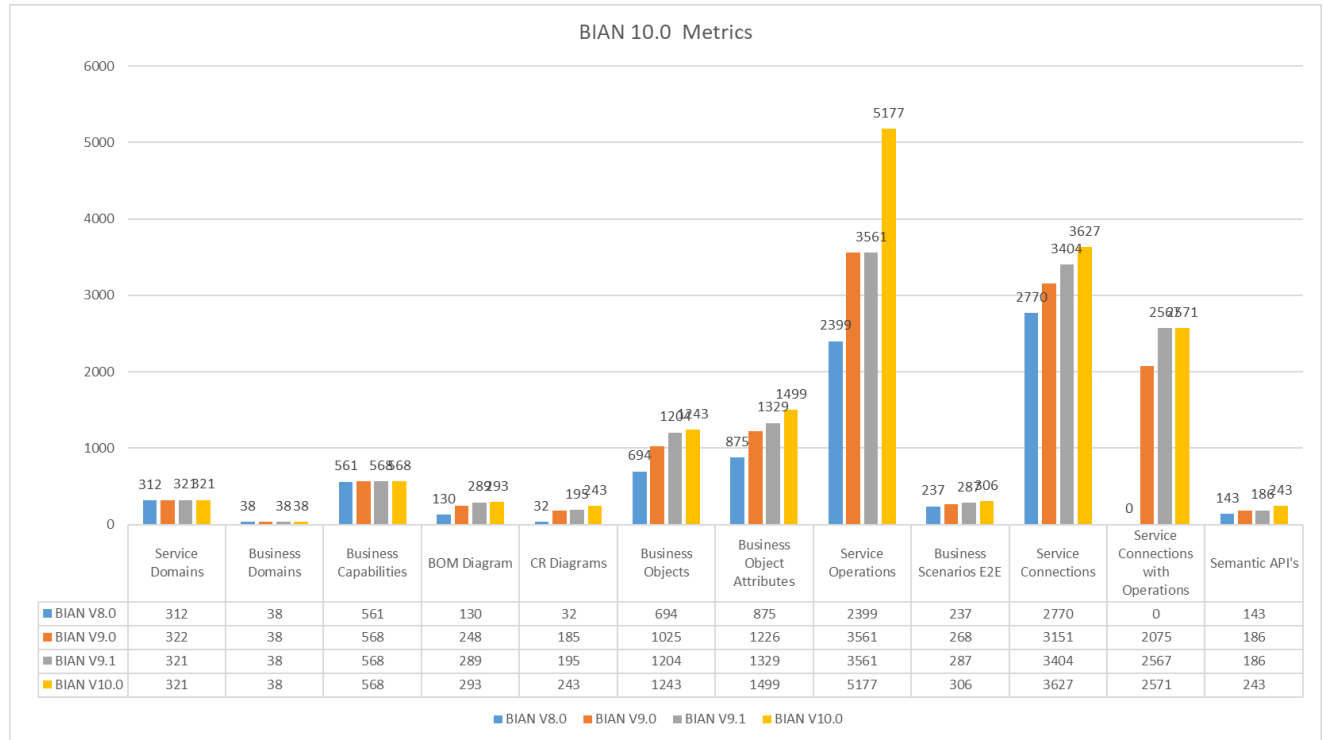


Figure 1 BIAN v10.0 Numbers of artefacts compared to the previous releases

1.1 API Waves 1-6

Release 10.0 contains updates for artefacts that were already part of Release 9.1 as well as a significant number of new artefacts in the area of BIAN Core Value Chain Service Domains.

Some Service Domains were removed, others changed name as its scope has evolved, for 60+ Service Domains new semantic API's are created, accompanied by the Control Record Models. For these Service Domains, the Control Record Models are now detailed with Behaviour Qualifiers. Each behaviour qualifier has its own service operations which results in a huge set of extra endpoints. The API endpoints with their input/output parameters are now also foreseen by "semantic data-types" instead of all "text" data types.

the BIAN definition of an API is the complete collection of default service operations/end points offered by a Service Domain. This means 1 Service Domain, 1 Semantic API , but many semantic endpoints.

The total number of unique BIAN API's is **243**

1.2 Increase in the Creation of Bank-verified Content

Release 10.0 is based on an increased participation of the Working Groups in defining content, which made it possible to add meaningful descriptions to the documented Business Capabilities, Business Scenarios and Service Domains. From Release 8 onwards the model is being documented in BiZZdesign, BIAN's repository tool. It currently includes all the BIAN artefacts and their relationships. The Business Capability Model, the Business Scenario Model with Service Domain descriptions, the Business Object Model and Control Records, descriptions of Service Operations and input/output parameters are all documented, conformant to the BIAN meta model.

The Service Domains and Business Capabilities are all fully expressed in the ArchiMate 3.1 language. The Control Records, Business Objects with Attributes and the Business Scenarios are expressed in UML because of the detailed nature of these artefacts.

1.3 BIAN Modelling Language and Notation

The BIAN Metamodel Architectural concepts are expressed in the ArchiMate 3.1 architecture modelling language. It gives Banking Enterprise Architects a more precise understanding of the BIAN defined meta model.

The BIAN Reference Architecture is expressed in a combination of ArchiMate and UML. The BIAN Service Landscape is documented in ArchiMate language. The Business Object Model and Control Record Model are documented in UML Class Diagrams, the Business Scenarios are documented in UML Sequence Diagrams.

1.4 Digital Repository in HTML

A fundamental change on the look and feel of the digital repository has been made. Continuously BIAN is striving to enhance the ease of access of the digital repository. The HTML version of BIAN V10.0 offers a starting page for the navigation. A search function allows finding elements in the digital repository. When searching for a Service Domain, the starting point to navigate through the Service Domain information is the Service Domain Overview Diagram.

All model elements which have a relationship to another model element can be browsed following a relation driven navigation path. This navigation path is most easily understood by having the BIAN meta model in mind.

2 Metamodel Updates

2.1 Event Driven Architecture

The BIAN Metamodel is extended with concepts to allow Event Driven Architecture. The concept of “Event” and “Event Message” is introduced and related to the “Service Domain” . This should make BIAN ready for delivering content which can be referenced when Event Driven Architecture makes part of the Architecture Style of an organization specific Banking Enterprise Architecture.

2.2 Generic Artifact “Arrangement” => Name Change

The Generic Artifact “Arrangement” of the functional pattern “Fulfill” has changed name to “Facility”. The term “Arrangement” was an ambiguous term and could mean “Agreement” and “Arrangement” as defined in the BIAN Business Object Model Content Pattern. What is actually meant are those agreements where the fulfillment has a recurring character, which is mostly the case with long-term agreements such as loans, leaseings, current accounts. The selected name is “Facility” so we can refer to the asset type as a “facility” eg. “Loan Facility”, “Current Account Facility” etc. which is actually the name of the “Control Record”. This means that all the Service Domains with Functional Pattern “Fulfill” have a changed “Control Record” name. So also the Service Operations related to this Control Record have changed names.

2.3 Behaviour Qualifier Type => Name Change

In order to improve readability of generated definitions and more accurately represent the underlying design concept, changes have been made as follows:

From BQ Type name	To BQ Type name
Measures	Indicator
Feature	Fulfillment

2.4 Naming Standard for Service Operations

Service Operations are now named as <action term> <Control Record Model Class>. When applied to a Instance Class at the level of

- Control Record the name is <action term> <Control Record Instance name>.
- Behavior Qualifier the name is <action term> <Behavior Qualifier Instance name>

Example for Service Domain “Dealer Desk” :

- Control Record: Dealer Desk Operating Session
 - Initiate Dealer Desk Operating Session
 - Exchange Dealer Desk Operating Session
- Behavior Qualifier : Dealer Desk Consolidated Position Tracking Function
 - Initiate Dealer Desk Consolidated Position Tracking Function
 - Request Dealer Desk Consolidated Position Tracking Function

The application of the naming standard is at the moment only applied for the 62 Service Domains that are leveraged in BIAN 10.0

We will post a survey to our members to ask if it is acceptable to change all existing Service Domains Service Operation names to the new standard naming convention.

The URL is updated accordingly i.e. /ServiceDomain/{ServiceDomainId}/ControlRecordModelInstanceClass/ControlRecordModelInstanceClassId/ActionTerm

Example Dealer Desk

<https://app.swaggerhub.com/apis/BIAN-3/DealerDesk/10.0.0>

CR – DealerDeskOperatingSession

- POST /DealerDesk/Initiate
- PUT /DealerDesk/{dealerdeskId}/Exchange

BQ - DealerDeskConsolidatedPositionTrackingFunction

- POST /DealerDesk/ {dealerdeskId} /DealerDeskConsolidatedPositionTrackingFunction/Initiate
- PUT /DealerDesk/{dealerdeskId} /DealerDeskConsolidatedPositionTrackingFunction/{DealerDeskConsolidatedPositionTrackingFunctionId}/Request

3 Business Capability Model Updates

No changes in the documentation of the Business Capabilities.

The working group is working on the relationships between Business Capabilities and Service Domains, and it is also extending the use of Business Capabilities in the context of strategic Value Chains, which is more Business Strategy oriented.

The total number of Business Capabilities is unchanged at **568**.

4 Service Landscape Updates:

In Release 10.0 the number of Service Domains is remained the same i.e. 321. Service Domains which had the status Obsolete, are now removed from the repository and not published anymore (Service Domains “Remittances” and “Dunning”). A total of 6 Service Domains were removed, mostly because of overlap with other Service Domains. Also 7 new Service Domains were introduced and 2 Service Domains are merged into 1 i.e. Corporate Deposit and Deposit Account is merged into “Term Deposit” (which was actually already from BIAN 9.1).

4.1 Service Domain Name Changes

Based on feedback we have updated the names of several Service Domains to ensure the names more accurately reflect their purpose and in cases to standardise the use of key words and formatting. The name changes do not indicate any change in the original business role of the Service Domain.

From	To
Lead/Opportunity Management	Lead and Opportunity Management
Employee/Contractor Contract	Employee and Contractor Contract
Contractor/Supplier Agreement	Contractor and Supplier Agreement
Account Balance Sweeping	Cash Concentration
Employee Payment Services	Corporate Payroll Services
Customer Profile	Party Routing Profile

Correspondent Bank	Correspondent Bank Operations
ACH Fulfillment	ACH Operations
Correspondent Bank Data Management	Correspondent Bank Directory
Business Architecture	Enterprise Architecture
Dealer Workbench	Dealer Desk
Traded Position Management	Trader Position Operations
Bank Drafts And Travelers Checks	Bank Drafts
Document Library	Document Directory

4.2 Replaced Service Domains

From	With
Corporate Deposits	Term Deposit (and adjusted description)
Settlement Obligation Management	Trade Clearing
	Trade Settlement

4.3 Service Domain’s Functional Pattern changes

The more detailed assessments of the required working of Service Domains that has been involved in adding their business qualifiers and API specifications has resulted in several functional pattern changes:

Service Domain	From Funct. Pattern	To Funct. Pattern
Correspondent Bank	Fulfill	Operate
Corporate Finance	Fulfill	Advise
Mergers and Acquisitions	Fulfill	Advise
Card Billing and Payments	Transact	Process
Counterparty Administration	Administer	Catalog
Order Allocation	Transact	Process
Security Fails Processing	Manage	Process
Trader Position Operations	Transact	Operate
Bank Guarantee	Fulfill	Transact

All Control Records are renamed accordingly, inclusive the Service Operations names.

4.4 Service Domain’s Asset Type Changes

The API related extension work has also resulted in some revision of the ‘asset types’ associated with several Service Domain control records

Service Domain	From Asset Type	To Asset Type
Credit Facility	Credit Facility	Credit Line
Card Network Participant Facility	Card Network Participant Facility	Card Network Participant
Merchant Acquiring Facility	Merchant Acquiring Facility	Merchant Acquiring
Cash Concentration	Cash Concentration	Account Balance Sweeping

Corporate Payroll Services	Corporate Payroll Services	Employee Payroll Services
Dealer Desk	Trading Desk	Dealer Desk

All Control Records are renamed accordingly, inclusive the Service Operations names.

4.5 Control Record Models Updates:

- 62 New CR Models (61 for version 10.0 + 1 CR Model for Branch Location Operations SD from version 9.1.)
- Added definitions for all CR/BQ Classes and their attributes (only for CR/BQ which had no definition) in CR Models
- All attributes in CR Models now have a semantic data type.

4.6 Service Domain's BQ name changes

Service Domain	From BQ	To Funct. Pattern
Payment Execution	Payment Execution	Payment Execution Workstep

All BQ names, of 62 Service Domains handled in BIAN release 10.0, end with the BQ-type name.

4.7 Deleted Service Domains

Deleted Service Domain	Replaced With
Deposit Account	Term Deposit
Remittances	
Dunning	
Settlement Obligation Management	Trade Clearing
Credit Card Transaction	Card Position Keeping
Credit Card Transaction Execution	
Service Product	Consumer Advisory Services
Securities Delivery and Receipt Management	Trade Settlement
Card Billing and Payments	

- Removed "Deposit Account" SD and replaced by "Term Deposit"
- Removed "Remittances" SD (already obsolete in previous version)
- Removed "Dunning" SD (already obsolete in previous version)
- Removed "Settlement Obligation Management" SD because same asset type and functional pattern as SD "Securities Delivery and Receipt Management. It is replaced by the new Service Domain "Trade Clearing".
- Removed "Credit Card Transaction" SD because the functionality was already covered by "Card Position Keeping"
- Removed "Credit Card Transaction Execution" because all the cash movements are made from the "Current Account". Cards simply tracks a notional balance of money owed.
- Removed "Service Product" because the functionality is already covered by "Consumer Advisory Services"

- Removed “Securities Delivery and Receipt Management” and is replaced by “Trade Settlement
- Removed “Card Billing and Payments”

4.8 BIAN 10.0 NEW Service Domains

While working with the members on Business Scenarios and Requirements, this resulted in the following new Service Domains.

- Trade Clearing
- Trade Settlement
- Financial Statement Assessment
- Operational Gateway
- Payment Instruction
- Payment Rail Operations
- Service Directory

4.9 BIAN 10.0 Leveraged Service Domains

53 existing Service Domains have been extended with Behavior Qualifiers, Service Operations, Control Record Models, API's and better descriptions of the Service Domain Role, Executive Summary, Examples and Features.

The 'leveraged' Service Domains are as a result of BIAN's ongoing efforts to extend the definition of all of the main Service Domains to include the detail needed to support the semantic API specifications.

- Reviewed definitions
- added BQs
- Generated Control Record Model
- Semantic API
- Service Domain Overview Diagrams

4.10 BIAN 10.0 Semantic API Updates

BIAN version 10.0 now has for extra 62 Service Domains the Control Records and the Semantic API's generated. (1 was already part of version 9.1, but was not published).

1. Account Reconciliation
2. Archive Services
3. Bank Drafts
4. Bank Guarantee
5. Brokered Product
6. Cash Concentration
7. Cheque Lock Box
8. Contractor and Supplier Agreement
9. Corporate Action
10. Corporate Finance
11. Corporate Payroll Services
12. Corporate Trust Services
13. Correspondent Bank Relationship Management
14. Counterparty Administration
15. Credit Card Position Keeping
16. Credit Risk Operations

17. Customer Products and Services
18. Customer Proposition
19. Document Directory
20. Dealer Desk
21. eTrading Workbench
22. Factoring
23. Financial Instrument Reference Data Management
24. Financial Instrument Valuation
25. Financial Statement Assessment
26. Hedge Fund Administration
27. Internal Bank Account
28. Letter of Credit
29. Market Making
30. Merchant Relations
31. Mergers and Acquisitions Advisory
32. Mutual Fund Administration
33. Notional Pooling
34. Operational Gateway
35. Order Allocation
36. Payment Instruction
37. Payment Rail Operations
38. Private Placement
39. Product Sales Support
40. Product Service Agency
41. Program Trading
42. Project Finance
43. Public Offering
44. Quote Management
45. Securities Fails Processing
46. Service Directory
47. Servicing Issue
48. Standing Order
49. Stock Lending and Repos
50. Sub Custodian Agreement
51. Syndicate Management
52. Trade and Price Reporting
53. Trade Clearing
54. Trade Confirmation Matching
55. Trade Finance
56. Trade Settlement
57. Trader Position Operations
58. Trading Book Oversight
59. Trust Services
60. Unit Trust Administration
61. Virtual Account

4.11 Other Changes to highlight:

- All data-model elements for the Business Objects Model Attributes and the Control Record Model Attributes now have “semantic” data-type assigned.

- All Control Record Instance Records and Behavior Qualifier Instance Records do now have a definition.
- For the Control Records created in release 10.0 also all the Control Record Model attributes do have a definition.

5 Information Model Updates

Information Model of Release 10.0

Release 10.0 continues the expansion of the Information Model resulting in additional content for the new Semantic API's. The Information Model of this release includes three main artefacts:

5.1 Service Domain based Business Object Model (BOM)

A continuous effort is done to create for each Service Domain in the BIAN Service Landscape, a pure Business Object Model (BOM) . In this release the focus was on finishing the semantic API's for the "Core" Service Domains of the Value Chain Diagram. For these Service Domains the Control Record Models are created. In the next release the Service Domain Business Object model Diagrams will be developed.

In Release 9.1, the total number of BOM diagrams was 289 diagrams. In Release 10.0 the total number of BOM diagrams is **293**, from which 186 are Service Domain BOM Diagrams, 107 helper Diagrams. As mentioned, the effort of the Information Architecture Working Group was on defining a mechanism to identify reusable attribute groups applicable for the creation of CR and BQ instance records of Service Domains.

5.2 Service Domain based Control Record (CR) Model

For each Service Domain in the BIAN Service Landscape, a Control Record (CR) Model has been created which represents main business information governed by the Service Domain.

In Release 10.0, BIAN published 61 additional Control Record (CR) Models. The number of Control Record (CR) Model diagrams is now **243**.

5.3 Control Record-BOM-ISO 20022 Mappings

This is a mapping between Control Record elements (BIAN API Semantic), business objects and attributes (BIAN BOM) and business components and elements (ISO20022 BM). We call this mapping "ISO20022 Light Mapping" which means we only refer to the existing components and elements of ISO20022 and temporarily do not extend the ISO20022 Business Model anymore in comparison with Release 7.0.

BIAN is continuously updating these mappings. It must be said that for BIAN version 10.0 we were only able to spend very little time on this mapping exercise. In the next months there will be a renewed effort to map, as the Business Object Model Diagrams for the 62 Service Domains of release 10.0 are developed.

The full list is available for members and can be found on the members area of the BIAN Wiki [ISO mappings for BIAN Service Domains](#)

6 Business Scenarios

With Release 10.0 a total of 19 new Business Scenarios are created and 223 linkages of service connections are added.

7 BIAN Semantic API Portal

The BIAN Semantic API portal got a fundamental revision. The links from the service domains to the api-urls is updated accordingly.

The most important changes are

1. All 243 APIs, now published in latest OAS 3.x format (an upgrade from the previous Swagger 2.x versions).
2. For each Service Domain, API Endpoints are now grouped by the Control Record and Behaviour Qualifiers, to align with the functional aspects of the Service Domain. This is a change from the Action Term based grouping used previously.
3. Endpoints reflect Service Domain and Behaviour Qualifier specific names and IDs, replacing the generic terms used in previous versions. They also include the Action Term in the path.
4. API Endpoint payloads now mirror exactly, the Service Operation Input / Output parameters as specified in BiZZdesign.