

# Banking Industry Architecture Network

## **BIAN Release 12.0** **Release Notes**

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# 1 Overview of Release 12.0

BIAN 12.0 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.

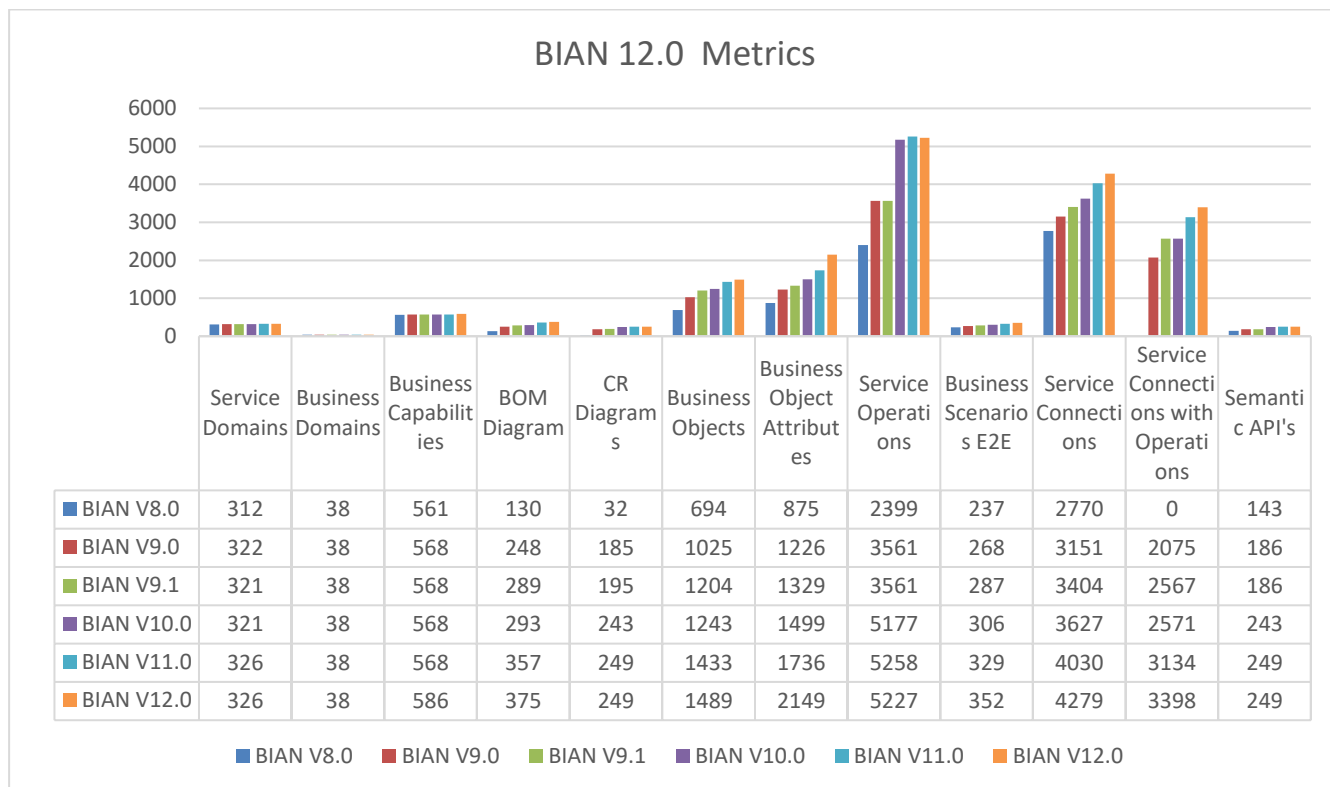


Figure 1 BIAN v12.0 Numbers of artefacts compared to the previous releases

## 1.1 Increase in the Creation of Bank-verified Content

Release 12.0 is based on participation of the Working Groups in defining content, which made it possible to add meaningful descriptions to the documented Business Capabilities, Business Scenarios, Business Objects 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. In release 12 we also added a number of extra Wireframe Diagrams as a starting point for organisation specific Business Scenarios. These Wireframes are the result of the Coreless 3 proof of concept initiative.

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.

## 1.2 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.

## 1.3 Digital Repository in HTML

The starting page of BIAN's digital repository is changed a little. It now contains a link to more detailed modelling patterns that are used within BIAN. Also a link to some basic wireframe diagrams is provided. Continuously BIAN is striving to enhance the ease of access of the full content digital repository.

The HTML version of BIAN V12.0 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 Updated Metamodel Diagrams

Updated Metamodel Diagram
- BIAN Metamodel_Event Driven View

### 2.2 New Metamodel Diagrams

New Metamodel Diagram
- No new diagram

## 3 Business Capability Model Updates

In 2023 the working group has especially been working on

- clarifying/explaining the link between the Business Capabilities and Service Domains. This resulted in a white paper that is published.
- an initial introduction to Value Streams has started, but is not yet in the repository. The results can be found in the workspace of the BCM working group on the members BIAN Wiki.
- visualisation of the BCM diagram in a Value Chain aligned to the the Value Chain representation as used for the Service Domain Landscape. Also this is work in progress and not yet published in release 12. The intermediate results can be found in the workspace of the BCM working group on the members BIAN Wiki.
- correcting hierarchical relations between the Business Capabilities resulting in consistency between what is visualized on the diagrams versus location in the hierarchy in the repository.



## 4 Service Domain Updates

### 4.1 New Service Domains

New Service Domain
Created a new service domain "Service Provider Operations"

### 4.2 Deleted Service Domains

Deleted Service Domain
No service domain has been deleted.

### 4.3 Service Domain Name Changes

Renamed Service Domain
Changed the name of "Customer Products and Services" SD to "Customer Product and Service Directory"

## 5 Behavior Qualifier Updates

### 5.1 New Behavior Qualifiers

New Behavior Qualifier
Created a new Behavior Qualifier "Service Access" for <b>Brokered Product SD</b>
Created a new Behavior Qualifier "Amount Block" for the following service domains: <ul style="list-style-type: none"> <li>- Consumer Loan SD</li> <li>- Corporate Loan SD</li> <li>- Virtual Account SD</li> </ul>
Created a new Behavior Qualifier "Booking Authorization" for the following service domains: <ul style="list-style-type: none"> <li>- Consumer Loan SD</li> <li>- Corporate Current Account SD</li> <li>- Corporate Loan SD</li> <li>- Current Account SD</li> <li>- Internal Bank Account SD</li> <li>- Savings Account SD</li> <li>- Merchandising Loan SD</li> <li>- Mortgage Loan SD</li> <li>- Term Deposit SD</li> <li>- Virtual Account SD</li> </ul>
Added Behavior Qualifier "Issued Device" for the following service domains: <ul style="list-style-type: none"> <li>- Corporate Current Account SD</li> <li>- Current Account SD</li> <li>- Merchandising Loan SD</li> <li>- Mortgage Loan SD</li> <li>- Corporate Loan SD</li> <li>- Savings Account SD</li> <li>- Term Deposit SD</li> </ul>

### 5.2 Deleted Behavior Qualifiers

Deleted Behavior Qualifier
Deleted Behavior Qualifier "Profile" from <b>Party Reference Data Directory SD</b> Overview Diagram
Deleted Behavior Qualifier "Restructuring" from <b>Credit Facility SD</b>

## 5.3 Behavior Qualifier Name Changes

Renamed Behaviour Qualifier
Renamed Behavior Qualifier "Account Balance Statement" to " Account Statement" for the following service domains: <ul style="list-style-type: none"> <li>- Consumer Loan SD</li> <li>- Corporate Current Account SD</li> <li>- Corporate Loan SD</li> <li>- Credit Card SD</li> <li>- Current Account SD</li> <li>- Loan SD</li> <li>- Merchandising Loan SD</li> <li>- Mortgage Loan SD</li> <li>- Savings Account SD</li> <li>- Term Deposit SD</li> <li>- Virtual Account SD</li> </ul>
Renamed Behavior Qualifier "In-force Service" to "Service" for <b>Customer Product and Service Directory SD</b>
Renamed Behavior Qualifier "In-force Product" to "Product" for <b>Customer Product and Service Directory SD</b>

## 5.4 Replaced Behavior Qualifiers

Replaced Behavior Qualifier
Replaced "Authentication" BQ by "Identity Proofing" BQ for <b>Party Lifecycle Management SD</b>

## 6 Functional Pattern Updates

### 6.1 Changed Functional Patterns

Changed Functional Pattern
Changed FP from "Track" to "Fulfill" for <b>Internal Bank Account SD</b>
Changed FP from "Process" to "Administer" for <b>Party Lifecycle Management SD</b>
Changed FP from "Manage" to "Fulfill" for <b>Brokered Product SD</b>

## 7 Service Operation Updates

### 7.1 New Service Operations

New Service Operation
<p>Created two new service Operations for <b>Brokered Product SD</b> at the level of Service Access BQ:</p> <ol style="list-style-type: none"> <li>1. "Execute Service Access" SO</li> <li>2. "Capture Service Access" SO</li> </ol>
<p>Created a new service operation for Service <b>Provider Operations SD</b> at the level of Control Record</p> <ul style="list-style-type: none"> <li>- "Retrieve Service Provider Registration Operating Session" SO</li> </ul>
<p>Created two new service operations for <b>Issued Device Administration SD</b> at the level of Token Assignment BQ:</p> <ol style="list-style-type: none"> <li>1. "Provide Assigned Token" SO</li> <li>2. "Execute token assignment amend permission" SO</li> </ol>
<p>Created three new service operations for <b>Session Dialogue SD</b></p> <ol style="list-style-type: none"> <li>1. "Capture customer product/service handling" SO (at the level of Product and Service BQ)</li> <li>2. "Exchange customer product/service requirements or acceptance" (at the level of Product and Service BQ)</li> <li>3. "Exchange Order" (at the level of Order BQ)</li> </ol>
<p>Created a new service operation for <b>Party Reference Data Directory SD</b> at the level of Associations BQ</p> <ul style="list-style-type: none"> <li>- "Capture Association Details" SO</li> </ul>
<p>Created four new service operations for <b>Customer Position SD</b></p> <ol style="list-style-type: none"> <li>1. "Setup transaction history" SO (Evaluate ActionTerm) at the level Cash-flow BQ</li> <li>2. "Notify details about a cash flow analysis as part of the customer position" at the level Cash-flow BQ</li> <li>3. "Notify Credit" SO at the level of Credit BQ</li> <li>4. "Evaluate Credit" SO at the level of Credit BQ</li> </ol>
<p>Created a new service operation for <b>Customer Workbench SD</b> at the level of Contact BQ</p> <ul style="list-style-type: none"> <li>- "Capture information to pass through the session" (Exchange Action Term)</li> </ul>
<p>Created a new service operation for Party <b>Routing Profile SD</b> at the level of Status BQ</p> <ul style="list-style-type: none"> <li>- "Notify Status" SO</li> </ul>
<p>Created three new service operations at the level of Amount Block BQ for three service domains (<b>Consumer Loan SD, Corporate Loan SD, and Virtual Account</b>)</p> <ol style="list-style-type: none"> <li>1. Initiate an amount block (Initiate amount block on the account)</li> <li>2. Retrieve details about an amount block (Provide details about amount block)</li> <li>3. Update details of an amount block (Update details of amount block)</li> </ol>

### New Service Operation

Created a new service operation “**Execute authorization of booking**” at the level of “Booking Authorization” for the following service domains:

- Consumer Loan SD
- Corporate Current Account SD
- Corporate Loan SD
- Current Account SD
- Internal Bank Account SD
- Savings Account SD
- Merchandising SD
- Mortgage Loan SD
- Term Deposit SD
- Virtual Account SD

Created three new service operations as mentioned below at the level of Issued Device BQ:

1. Initiate Provision of Issued Device SO
2. Retrieve Details about Issued Device SO
3. Update Details of Issued Device Allocated to This Account SO

For the following service domains:

- Consumer Loan SD
- Corporate Current Account SD
- Corporate Loan SD
- Current Account SD
- Merchandising Loan SD
- Mortgage Loan SD
- Savings Account SD
- Term Deposit SD
- Virtual Account SD

## 7.2 Deleted Service Operations

### Deleted Service Operation

Deleted four service operation from **Credit Facility SD**

1. Re BQ Retrieve details about a credit facility restructuring task
2. Ec BQ Accept, reject etc a credit facility restructuring proposal
3. Up BQ Update details of a credit facility's restructuring activities
4. GrCR Obtain a permission grant against the facility

## 7.3 Service Operation Name Change

### Renamed Service Operation

Renamed "Create Brokered Product Facility" SO to "Initiate Brokered Product Facility" for **Brokered Product SD**

Renamed all Initiate SOs into Evaluate SOs (through changing the action term) for **Product Matching SD**

## 8 Control Record Models Updates

### 8.1 New Service Domain CR Models

<b>New CR Model</b>
Service Provider Operations Control Record Diagram

### 8.2 Extended Service Domain CR Models

<b>Extended CR Model</b>
Extended Service Domain CR Models based on <b>ISO20022</b> message definitions and <b>Open Banking</b> API specifications for 38 SDs in <a href="#">Appendix A</a>

### 8.3 Linked Service Domain CR Models into BIAN BOM

<b>Linked CR Model</b>
Linked Service Domain CR Models to <b>BIAN BOM</b> for 38 SDs in <a href="#">Appendix A</a>

## 9 Business Object Model Updates

### 9.1 New Service Domain BOM Diagrams in UML

<b>New Service Domain BOM Diagram</b>
Service Provider Operations BOM Diagram

### 9.2 Updated Service Domain BOM Diagrams in UML

<b>Updated BOM Diagram</b>
Updated Service Domain BOM Diagrams based on <b>ISO20022 Business Model</b> and <b>Open Banking Data Model</b> for 38 SDs in <a href="#">Appendix A</a>

### 9.3 Linked BIAN BOM into ISO20022 BM

<b>Mapping BIAN BOM to ISO20022 BM</b>
<p><b>Mapping Data Types:</b></p> <ul style="list-style-type: none"> <li>▪ linked Data types 100.</li> <li>▪ linked Enumeration List 76</li> </ul>
<p><b>Mapping Core Business Objects:</b></p> <ul style="list-style-type: none"> <li>▪ Account, Party (Person, Organisation), Product, Agreement, Arrangement, Instruction, Transaction, Document, Location.</li> </ul>
<p><b>Mapping Business Objects in the context of Payment:</b></p> <ul style="list-style-type: none"> <li>▪ Payment, Payment Transaction, Payment Instruction, Deposit, Fee, Interest, Direct Debit, Standing Order.</li> </ul>
<p><b>Mapping BOM Helper Diagrams</b></p> <ul style="list-style-type: none"> <li>▪ Account Helper Diagram</li> <li>▪ Agreement Helper Diagram</li> <li>▪ Arrangement Helper Diagram</li> <li>▪ Banking Product Helper Diagram</li> <li>▪ Document Helper Diagram</li> <li>▪ Instruction Helper Diagram</li> <li>▪ Location Helper Diagram</li> <li>▪ Organization Helper Diagram</li> <li>▪ Party Helper Diagram</li> <li>▪ Person Helper Diagram</li> <li>▪ Payment Helper Diagram</li> <li>▪ Payment Instruction Helper Diagram</li> <li>▪ Payment Transaction Helper Diagram</li> <li>▪ Fee Helper Diagram</li> <li>▪ Interest Helper Diagram</li> <li>▪ Standing Order Helper Diagram</li> <li>▪ Direct Debit Helper Diagram</li> <li>▪ Deposit Helper Diagram</li> <li>▪ Invoice Helper Diagram</li> <li>▪ Settlement Helper Diagram</li> </ul>



## 10 Business Scenarios Updates

### **New Business Scenarios\_ Trade Finance & Direct Debits**

#### **Bank Guarantee**

1. Handle Request for Bank Guarantee
2. Handle Request to Issue Guarantee on Request of Another Bank
3. Initiate Bank Guarantee
4. Perform Underwriting for Bank Guarantee

#### **Letter of Credit**

1. Handle Request to Extend Validity of Letter of Credit
2. Handle Request to Issue Letter of Credit
3. Initiate Letter of Credit
4. Perform Underwriting for Letter for Credit
5. Process Incoming Credit Transfer for Letter of Credit
6. Process Letter of Credit Settlement Instructions from Importer
7. Receive Shipping Documents from Exporter
8. Receive Shipping Documents from Exporter Bank
9. Review Letter of Credit and Pass on to Exporter
10. Update Letter of Credit for Extension of Validity

#### **Direct Debits Service Management**

1. Handle Request for Copy of Active Version of Mandate at Debtor Bank
2. Process Notice of B2B Direct Debit Mandate Amendment from Creditor bank at Debtor Bank
3. Process Receipt of New Version of Direct Debit Mandate at Debtor Bank
4. Process Request for Copy of Active Version of Mandate at Creditor Bank
5. Record Amendment of Direct Debit Mandate at Creditor Bank

#### **Direct Debits Instruction Execution**

1. Handle Request for Refund of Unauthorised Incoming Direct Debit at Debtor Bank
2. Handle Request from Debtor to Debtor Bank for Advance Refusal of Direct Debit Collection
3. Process Incoming Direct Debit Reversal at Debtor Bank
4. Process Request from Creditor to Creditor Bank for Reversal of Direct Debit Collection
5. Process Request from Debtor Bank for Refund of Unauthorised Transaction at Creditor Bank
6. Process Response from Creditor Bank for Refund of Unauthorised Transaction at Debtor Bank

## **New Business Scenarios\_ BIAN Coreless 3.0 Banking**

### **Business Scenarios from TPP Perspective**

1. Retrieve account list for accounts carousel
2. Retrieve a list of ASPSB banks from the OB Directory
3. Retrieve a list of connected ASPSB banks
4. Initiate Consent
5. Get and store authentication token, trigger a request to transfer account
6. Process request to add account(s)
7. Process request to add account(s)
8. Trigger and “recalculate product eligibility”

### **Business Scenarios from ASPSP Perspective**

1. Initiate Consent
2. Create account consent
3. Initiate consent authorization
4. Customer log-in
5. Exchange OTP
6. Retrieve accounts and consent details
7. Save selected accounts
8. Update status of the consent to authorized and get authentication code
9. Get access token, refresh access token
10. Get list of customer accounts
11. Get customer account details
12. Get customer account balances
13. Get customer account beneficiaries
14. Get Customer account details
15. Get customer account transactions

### **Business Scenarios for Extended User Story – Business Development**

1. Retrieved ASPSP Account Information Triggers NBP (a)
2. Retrieved ASPSP Account Information Triggers NBP (b)
3. Customer Sees the NBP Offer and Decides if to Apply
4. Periodically the TPP Bank Request Account Updates

## 11 Wireframe Updates

### 11.1 New Wireframe Diagrams

New Wireframe Diagram
BIAN Coreless Wireframe 3.0 Overview Diagram
BIAN Coreless 3.0 Wireframe
TPP Backend Wireframe Lane Viewpoint
ASPSP Backend Wireframe Lane Viewpoint

## 12 Semantic API Updates

Updates
Total of 246 REST APIs
Each API corresponds to a Service Domain that has defined Service Operations.
Any changes in such Service Domains are reflected in these Service Domain APIs.
There are 2 sets of REST APIs now: <ol style="list-style-type: none"> <li>1. Expanded with the BIAN BOM</li> <li>2. Expanded with ISO20022 and aligned / annotated with Domain Driven Design terminology.</li> </ol>
API are available via: <ol style="list-style-type: none"> <li>1. The BIAN Portal</li> <li>2. GitHub</li> <li>3. The Digital Repository</li> </ol>

## Appendix A

1. Current Account
2. Corporate Current Account
3. Savings Account
4. Investment Account
5. Virtual Account
6. Credit Card
7. Term Deposit
8. Syndicated Loan
9. Consumer Loan
10. Corporate Loan
11. Loan
12. Merchandising Loan
13. Mortgage Loan
14. Corporate Lease
15. Leasing
16. Brokered Product
17. Customer Access Entitlement
18. Customer Position
19. Customer Product and Service Eligibility
20. Customer Product and Service Directory
21. Customer Relationship Management
22. Issued Device Administration
23. Direct Debit Mandate
24. Party Lifecycle Management
25. Party Reference Data Directory
26. Payment Execution
27. Payment Order
28. Position Keeping
29. Product Directory
30. Service Directory
31. Service Provider Operations
32. Servicing Mandate
33. Standing Order
34. Letter of Credit
35. Location Data Management
36. Sales Product
37. Customer Offer
38. Sales Product Agreement