Corporate Digital Banking
Consent Auto Debit

for

BSNeBiz, BSNeBiz Mobile and IBAM.

Business Requirement and Functional Document

(PENRIL/BSN/BRFD_BSNEBIZ(P2)029)
Revision: 00

Prepared By:

816792-X

Penril Datability (M) Sdn Bhd (816792-X)
Suite A-07-07 Plaza Mon't Kiara
No. 2, Jalan Kiara, Mon't Kiara
50480 Kuala Lumpur, Malaysia
Tel: (603) 6201 2622 Fax: (603) 6201 7622

Document Amendment Log

Rev. No	Date Update	Description of Change	Update By <Name, Dept>	Review By <Name, dept>	Approved By <Name, Dept>

Table of Content

- Private & Confidential -

- Private & Confidential -

Business Requirement & Functional Acceptance

I/We hereby verify that this Business Requirement & Functional consist of all the requirements requested by BANK SIMPANAN NASIONAL. The implemented system will fulfill ONLY this requirement.

I/We also hereby AGREE that this satisfies our entire requirement for **DuitNow Pay To Proxy.**

Any future changes to this agreed scope would be treated as an enhancement to the system. Any future changes to the project timeline will be subjected to the final approval of the project steering committee.

BANK SIMPANAN NASIONAL:

Approved by	Role	Signature	Date

Penril Datability (M) Sdn. Bhd.:

Approved by	Role	Signature	Date

Section A: Introduction

1 Introduction

This document served as the business requirement and system specification of implementing **DuitNow – Pay to Proxy service** in BSNeBiz and IBAM system, which is customer able to make monetary transaction to Own Account, Intrabank and Interbank Account via online.

This document shall explain all the features and functionalities, which is elaborating with screen captures, process flow, descriptions, input fields specifications and error messages. **All screen designs provided in this document are samples and only illustration purpose for easy understanding. The screen designs are not final.**

1.1 Objective

The objective of this document is to capture user requirements of transactional and administration modules of implementing DuitNow – Consent service. This document will facilitate development and implementation of the mentioned modules of Internet Banking System for BSNeBiz.

The base line features description and screen designs will become a reference blueprint for the development team to develop the transactional and administration module. Hence, it is crucial that all stakeholders need to ensure the correctness and adequacy of the requirements captured in this document.

All stakeholders involved are expected to review and sign off this document before the development start. By signing off the document, the stakeholder has endorsed the correctness and accuracy and adequacy of the requirements documented in this document.

1.2 Assumptions

➢ **To define DuitNow Consent**
   o DuitNow Pay To Proxy only can be maintain by Corporate Administrator in Corporate Administrator module.
   o BSNeBiz User able to make DuitNow Payment Pay To Proxy in new module DuitNow using proxy ID :
      • Business Registration Number
      • Mobile Phone Number
   o Proxy ID can be add in favourite list
   o DuitNow Pay To Proxy also available in Bulk Payment module

1.3 DuitNow Consent Diagram

Registration Request
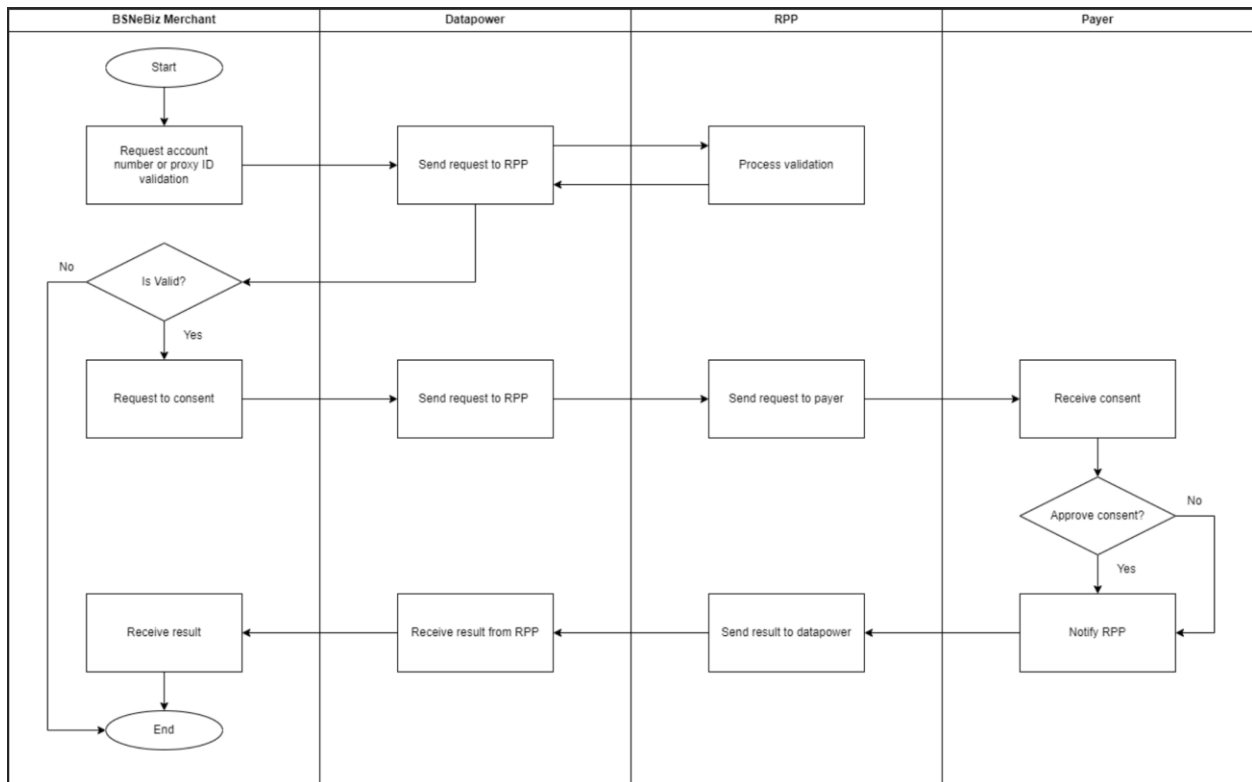
Diagram 1: DuitNow – Contest Register Request flow diagram.

- Private & Confidential -
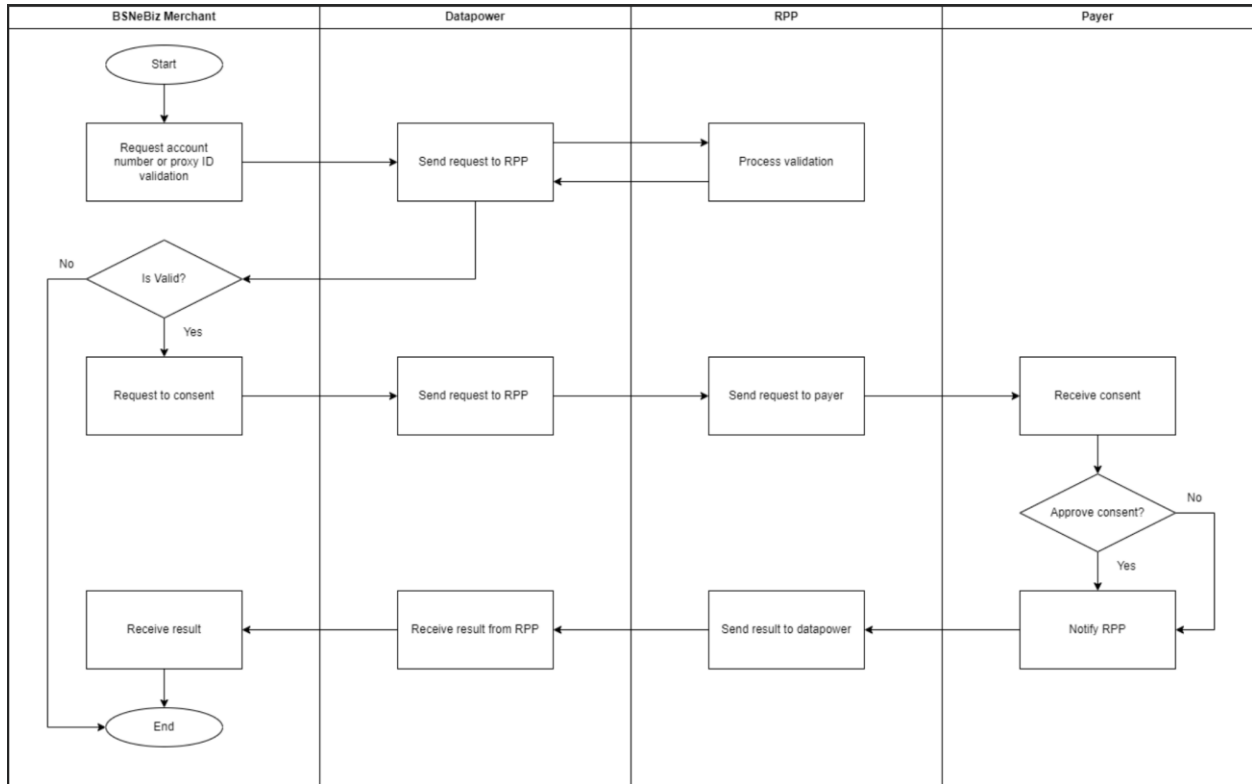
Autodebit Process

Diagram 2: DuitNow – Autodebit Process File flow diagram

- Private & Confidential -

DuitNow Consent
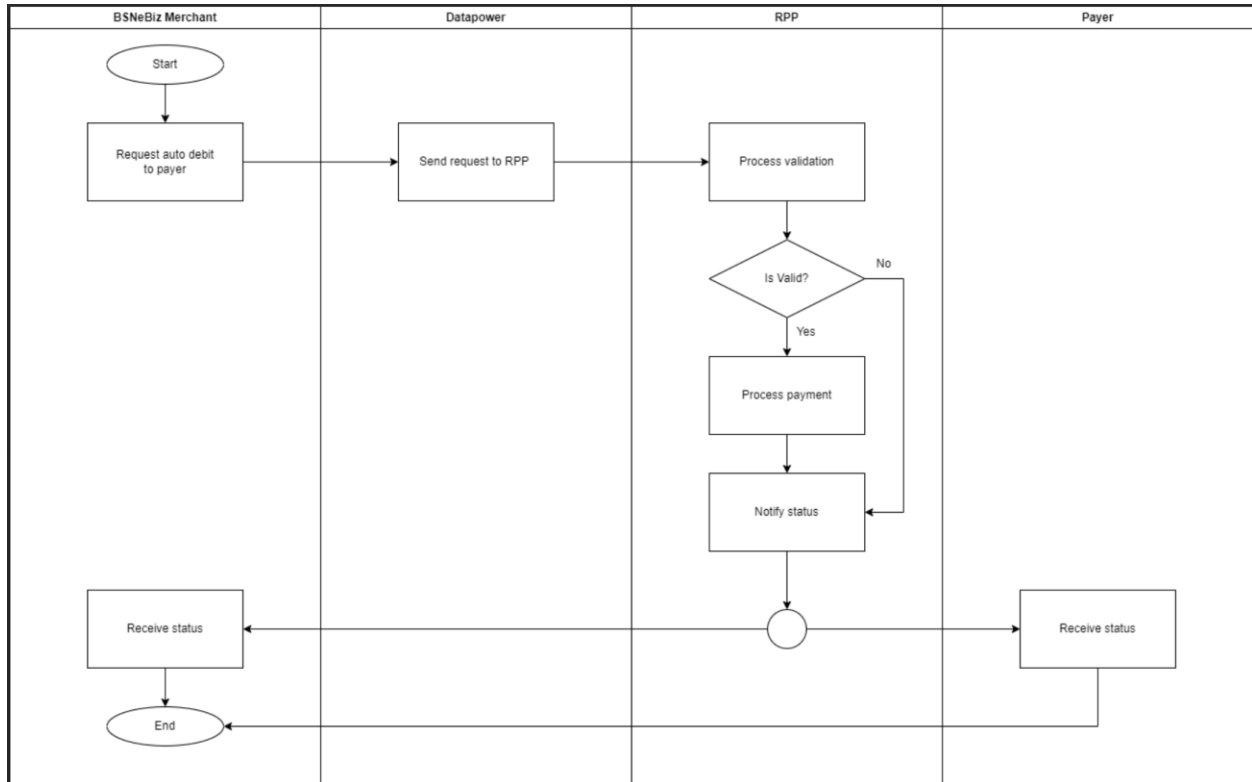
Diagram 3: DuitNow – Autodebit Process Individual flow diagram

1.4 Impact Modules

System	Modules	Features	Description

BSNeBiz	New Module – DuitNow - eConsent	New Menu & Sub Menu	1. DuitNow – Auto Debit Consent Module (Registration)
			a) RTP – Register
			   - Reqister screen – details screen
			   - Register to Account Number and Proxy
			b) RTP – Manage Approve
			   - Action (include Approve and Reject)
			
			2. DuitNow Self Consent (BSN as Customer)
			a) Consent – Register
			   - Register screen – details screen

System	Modules	Features	Description

			- Register Account Number
			b) Consent – Manage Approve
			   - Action (include Approve, Reject, Forward and Block
			c) Consent Block Maintenance
			   - Retrieve block list from DB
			   - View and unblock on the account number, proxy ID (Mobile number and Business Registration Number)
			d) Consent Cancel
			   - Allow to View and Cancel Request.
			e) Consent Switch Bank
			   - Allow customer to view and Switch Bank
			f) Consent Switch Account
			   - Allow customer to view and Switch Account.
			   - Proxy ID

	DuitNow Real Time Debit	New Menu & Sub Menu	1. DuitNow Customer Auto Debit
			   a. To send and manage customer's Auto Debit
			2. DuitNow Self Auto Debit
			   a. Manage Auto Debit Sent by Others
			3. RTP with Auto Debit Registration offer
			   a. Once RTP successful, offer to do give consent similar to item i(b)

	Enhancement - Authorization	Table	a) Authorization a. Update Authorization (Verifier & Approver) Module in BSNeBiz (Web) for Incoming DuitNow consent.
	Enhancement - History	Listing	a) **Host Transaction History** Penril assumes that Host will provide different TC for any transaction related to Consent Management such as: i. Auto Debit after recurring transaction completed. ii. Penril assumed that the transaction

System	Modules	Features	Description
			description will be customised for Auto Debit payment purpose. **b) BSNeBiz Transaction History** i. This consists of successful Auto Debit Registration ii. This consists of successful Auto Debit Update (Switch Bank & Switch Account, Pause, Enable, Cancel/Remove) iii. Block & Unblock iv. Reject
BSNeBiz-Mobile	Authorization	Notification	Update Authorization (Verifier & Approver) module in BSNeBiz (Mobile) for incoming DuitNow consent.
	Push Notification	Notification	i. Cover for Android & IOS ii. Message of incoming notification iii. Push Notification – to approve
Internet Banking Application Manager (IBAM)	New feature at IBAM	Template	**a) DuitNow Consent Maintenance** i. Min and Max of Consent Auto Debit amount. ii. Suspended Merchant Maintenance (Supend Merchant by Bank) **b) Report** i. Consent Auto Debit Register Report (Incoming, Outgoing and Redirect) ii. eConsent Auto Debit Report.
	Enhancement on other related modules at IBAM	Template	a) IBAM > CBE (Organization Setup; BSNeBiz Navigation; BSNeBiz Transaction Enquiry; User Activity Log; BSNeBiz Report; RPP Message Log) b) IBAM > BBE (Content - Service Info; File Format)
Integration / Database	BSNeBiz Web Integration	Template	a) New integration to Paynet i. Consent Request ii. Approve consent iii. Reject consent iv. Cancel active consent v. Auto Debit transaction b) New Webservice for Paynet to call

System	Modules	Features	Description
			i. Consent Maintenance ii. Approve (Update Status) iii. Reject (Update Status) iv. Cancel (Update Status) v. Consent Incoming vi. Real Time Debit – To confirm

	BSNeBIz Mobile Integration	Template	a) To create restful for integration with backend service
			    i. To create restful integration with backend service
			    ii. Register eConsent
			    iii. Manage Pending
			    iv. Manage active eConsent
			    v. Block Maintenance
			    vi. Authorization
			    vii. Real Time Debit

	Enhancement at Batch Program and Database	Template	a) To create Batch for
			    i. Outgoing Request
			    ii. Expired Consent
			
			b) To add new table at Database

Table 1: Consent – Impact Module

2 Secure Verification for Monetary Transaction at BSNeBiz

PIN is required as the second level security authentication for BSNeBiz Role's Single User and Approver when perform any monetary transactions via online. PIN is a six random digits temporary security code, which is generated and verified by the authentication server.

There are two types of Secure Verification assign to the user by Corporate Admin:

- A. Hardware Token (Vasco)
- B. Mobile Token

2.1 Hardware Token (Vasco)

Hardware token from VASCO is physical device that will be used by Single User and Approver to authorize a monetary transaction using the "Transaction Singing" function; also known as Challenge Response (CR).
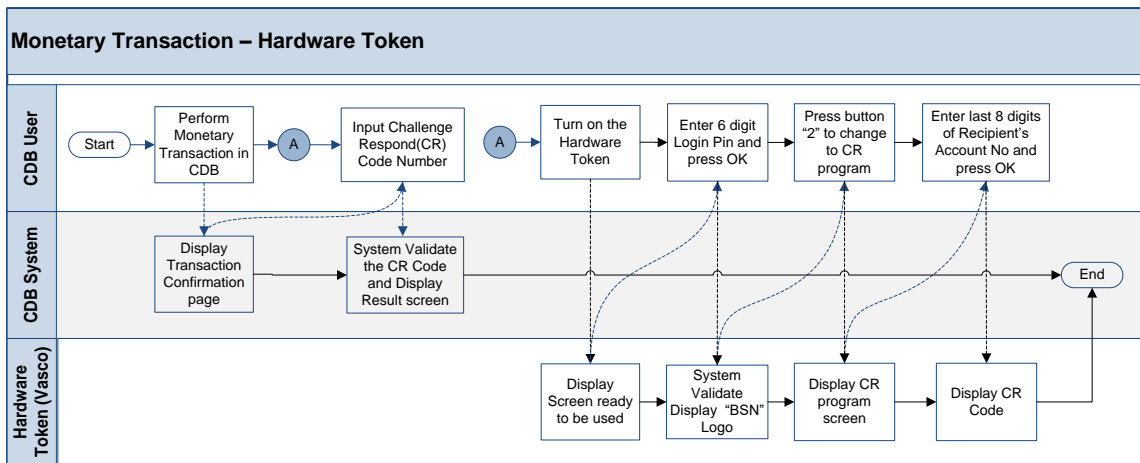
2.1.1 Process Flow

Diagram 4: Hardware Token Flow Diagram

2.1.2 Screen Flow

Step 1:

1. When user in Transaction Confirmation page, BSNeBiz system will required Challenge Response code to proceed the transaction
2. User needs to use Hardware Token to generate the Challenge Response code.

Figure 1: Hardware Token

Step 2:

1. Users press OK button for 2 seconds to turn on the Token.
2. User key in the 6 digits login PIN (User Password) and press OK.
3. BSN logo will be displayed on the token screen.
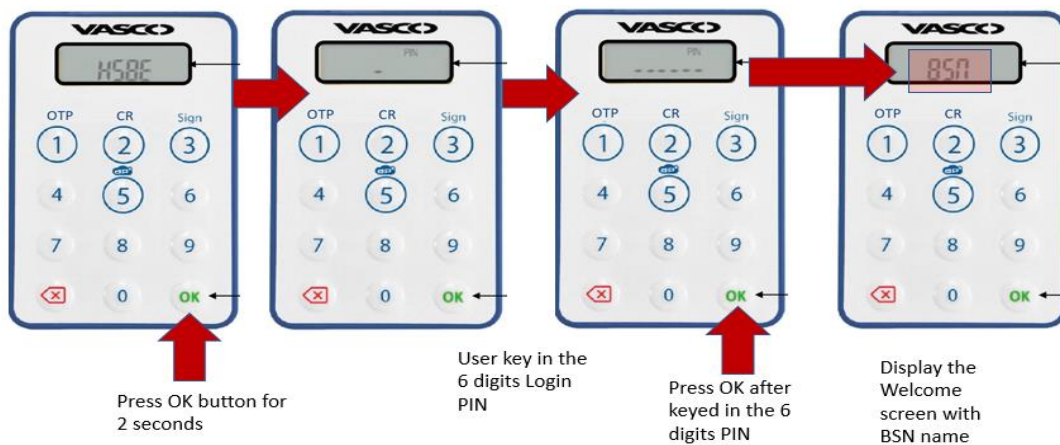
Figure 2: Turn on Token Flow

Step 3:

1. User press button 2 to change to Challenge Response program.
2. User key in the last 8 digits of recipient account number for Challenge Response.
3. Press OK and Challenge Response code will be displayed.

Figure 3: Get Challenge Response Code Flow

Step 4:

1. User use generated Challenge Response from the Token and input to the Challenge Response field in BSNeBiz – Transaction Confirmation pages.

Figure 4: Confirmation page for Hardware Token verification

2.2 Mobile Token

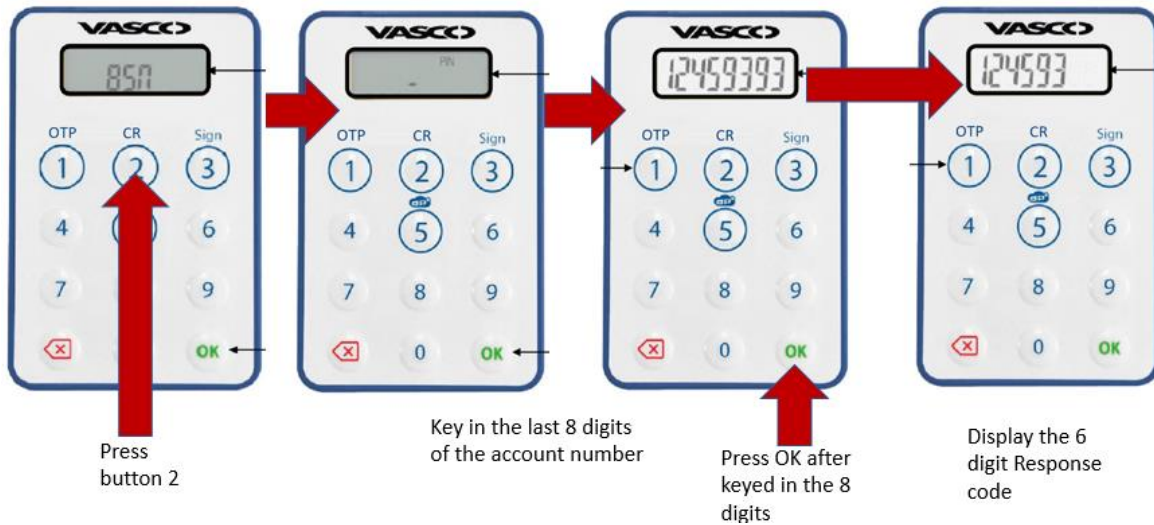Mobile Token is a mobile application that has the same functionalities as the VASCO Hardware Token using mobile phone features and serves the same usage purpose.

2.2.1 Process Flow
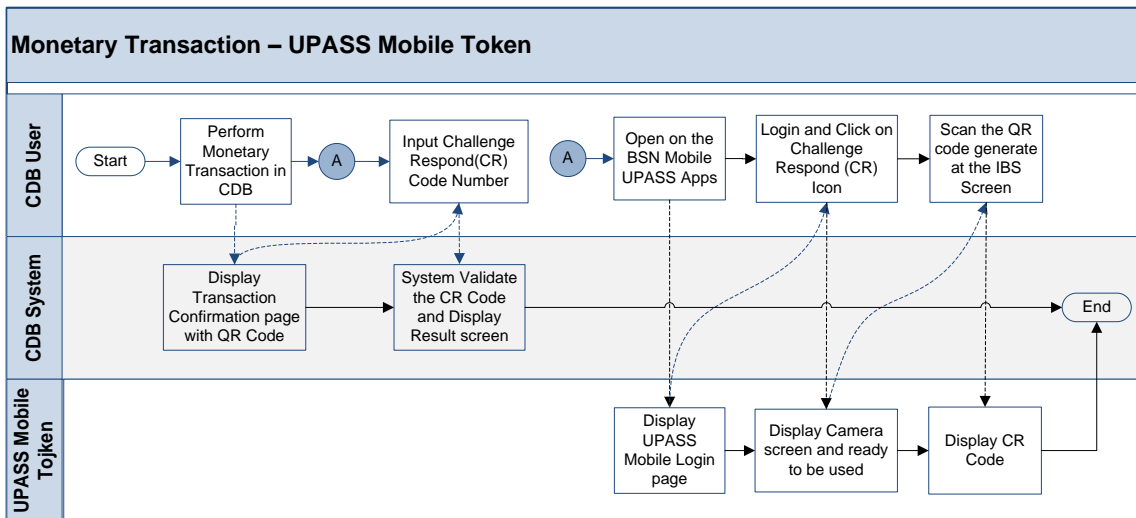
Diagram 2: Mobile Token Flow Diagram

2.2.2 Screen Flow

Step 1:

1. When user in Transaction Confirmation page with QR code.
2. User needs to use Mobile Apps to scan the QR code to generate the Challenge Response code.
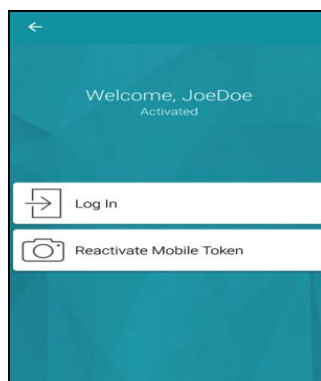
Figure 5: Mobile Apps screen

Step 2:

1. User Login to the Mobile apps and Click on Challenge Respond icon.
2. User scans the QR code generated at IBS confirmation screen.
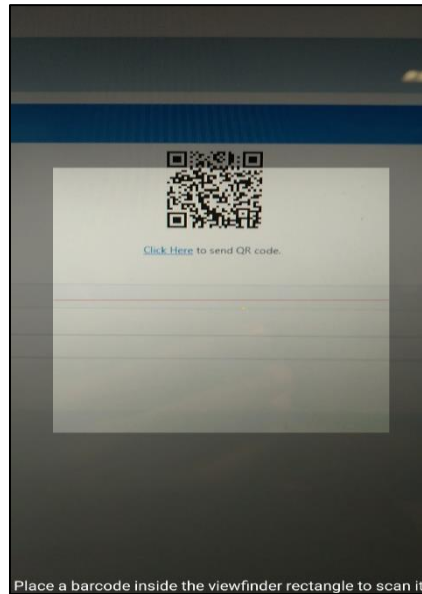
Figure 6: Mobile Apps QR Scan screen

Step 3:

1. BSN Application generate and display the Challenge Response code to be used.
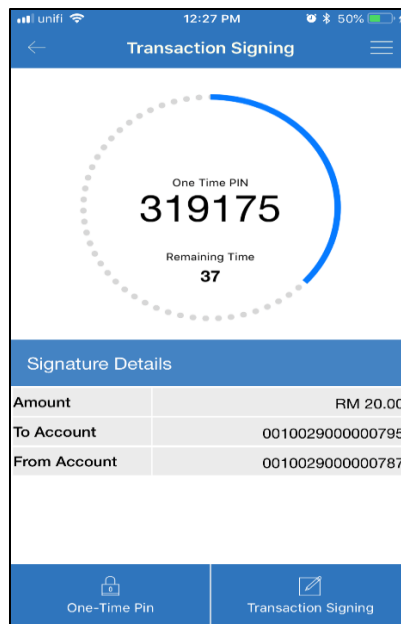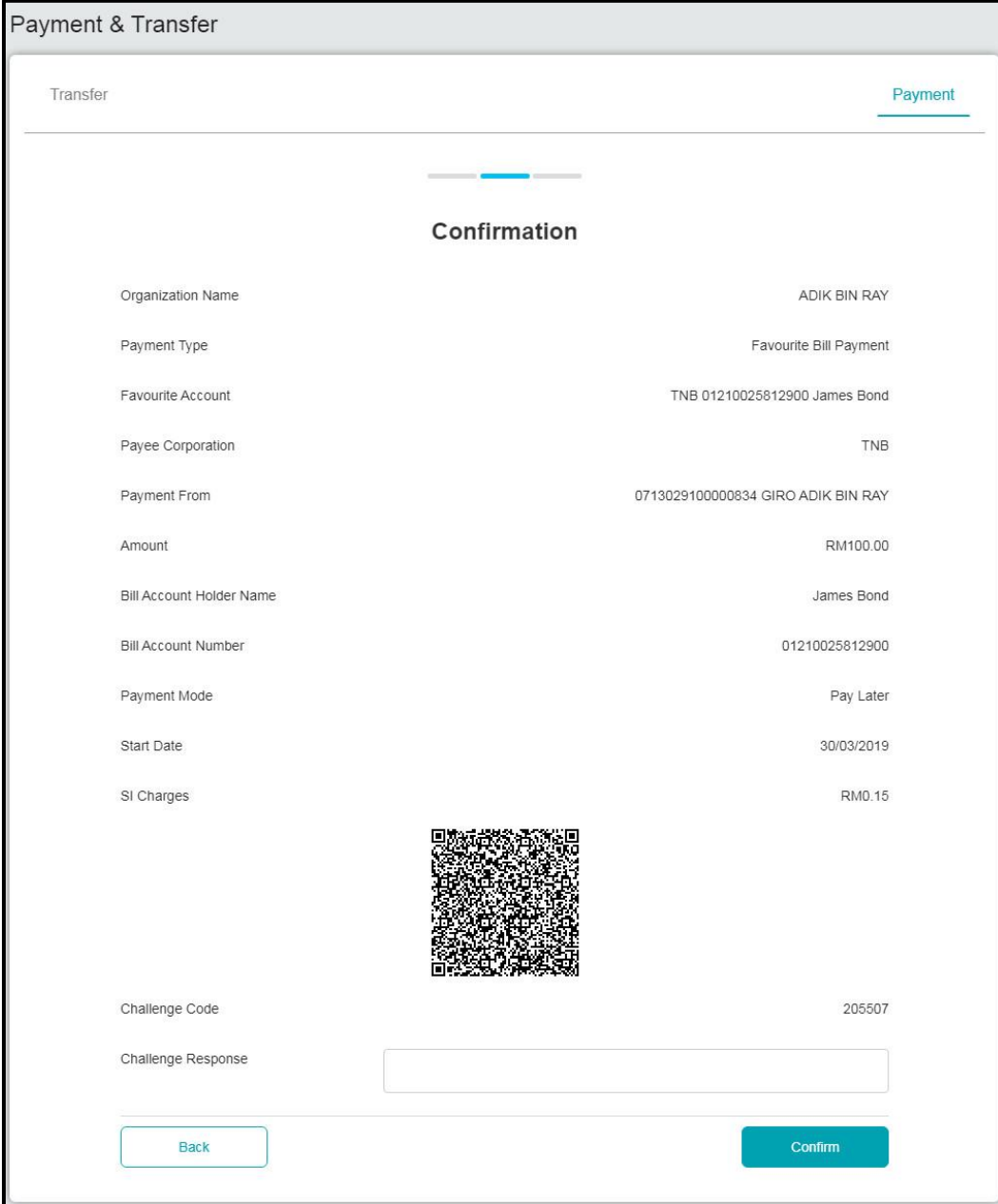
Figure 7: Challenge Response Code display Screen

Page 15 of 67

- Private & Confidential -

Step 4:

1. User use generated Challenge Response from the Mobile Token App and input to the Challenge Response field in BSNeBiz – Transaction Confirmation pages.
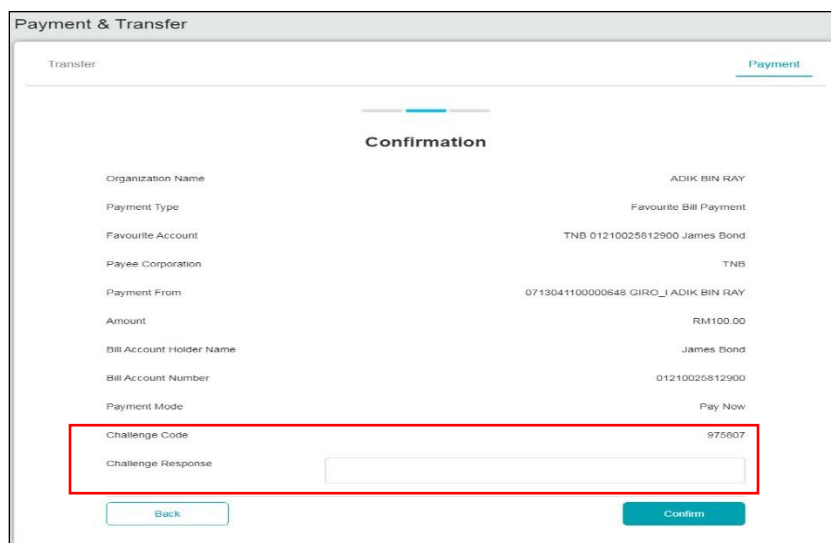

Figure 8: Confirmation page for Mobile Token verification

Section B: Duitnow – Consent (Auto Debit)

3   SOW02: DuitNow Consent (Auto Debit)

3.1   SOW02.1.1: DuitNow Customer Consent Registration(BSN as Merchant)

3.1.1   Process Flow
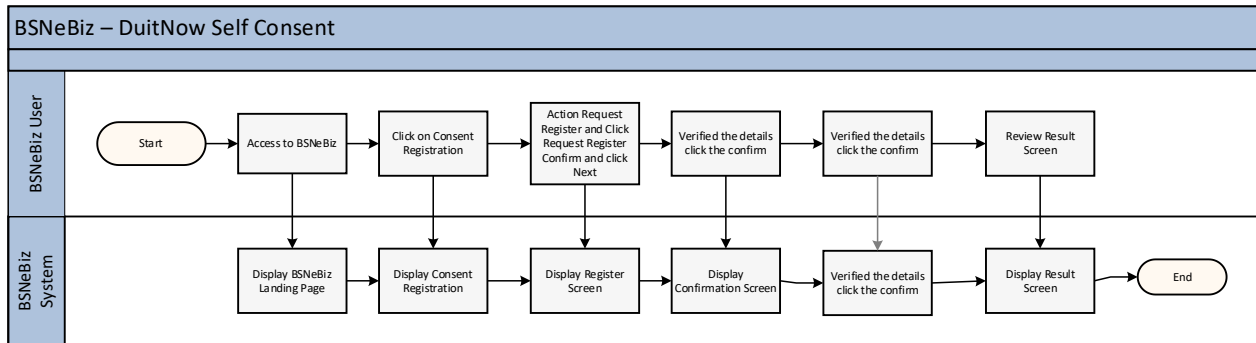
Diagram 3: AutoDebit Registration Process

3.1.2   Screen Flow

Step 1:

1. Customer access to BSNeBiz system
2. Customer Click eConsent Registration.
3. Customer Click on Registeration Request.
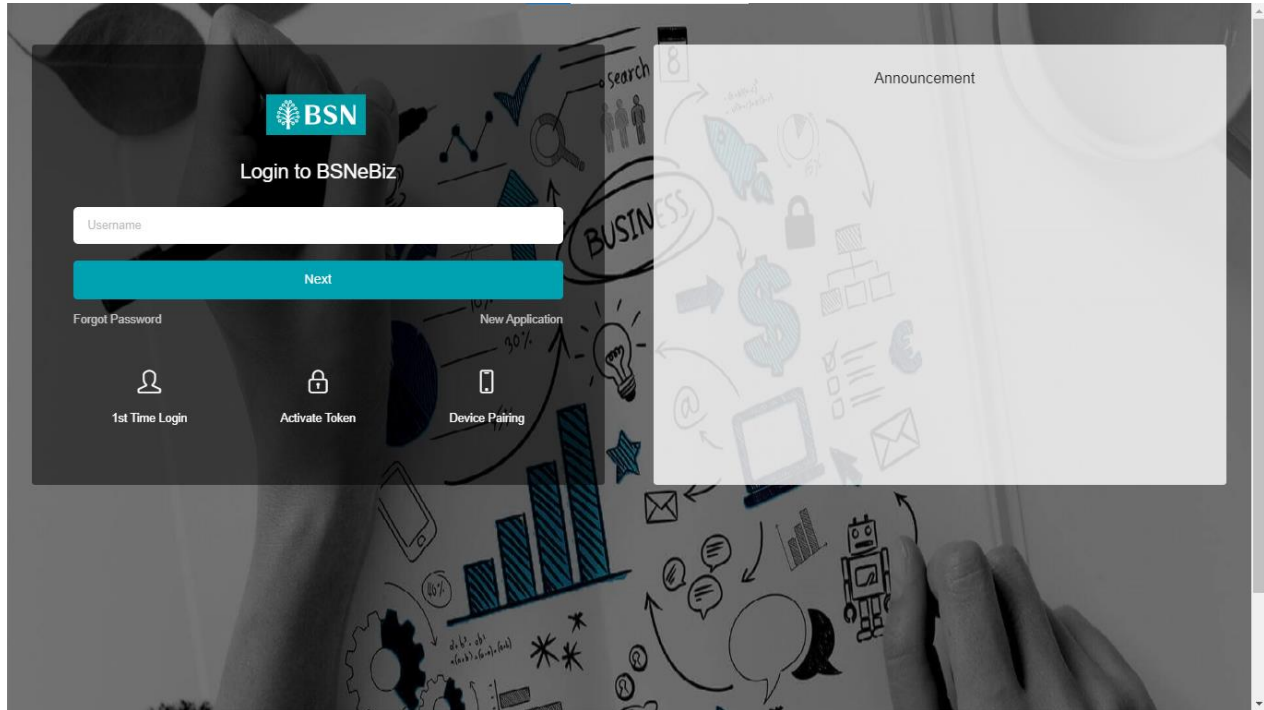
Figure 1: BSNeBiz Login Screen
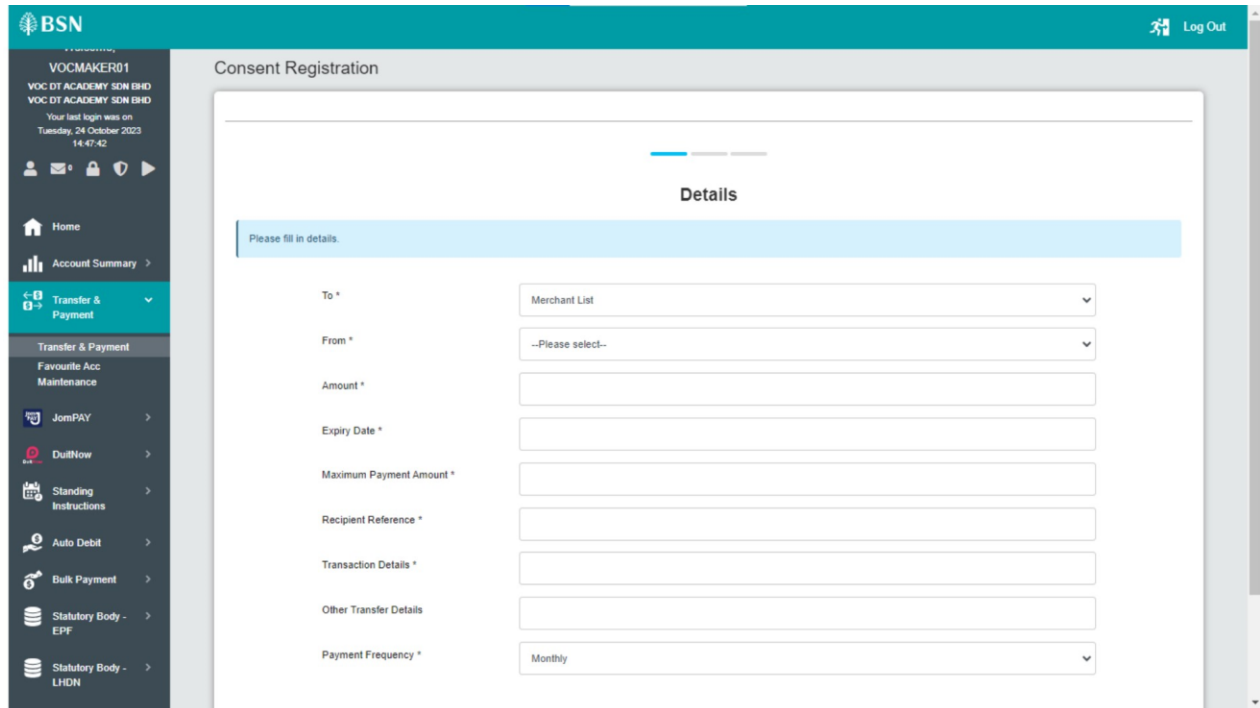
Figure 2: Registration Details

Display Specification:

No	Field	Field Type	Rule	Description	Required
1.	To	Drop Down	List of Merchant	The list of Merchant	Yes
2.	From	Drop Down	List of Account Number	List Account Number	Yes
3.	Amount	Text Box	Max length:5 Numeric	Amount	Yes
4.	Expiry Date	Text Box	Max length: 8 Numeric	Displays Expiry Date	Yes
5.	Maximum Payment Amount	Text Box	Max Length: 64 Alphanumeric	Displays the maximum Payment Amount	Yes
6.	Payment Frequently	Text	Max Length: 64 Alphanumeric	The auto debit details	Yes
7.	Others Auto Debit Details	Text	Max Length: 64 Alphanumeric	The auto debit details	Yes
8.	Transfer Mode	Drop Down	List of Transfer Mode: Select one only	Non-government or government	Yes
9.	Corporate Administrator's ID No.	Text Box	Max Length:12 Alphanumeric	Organization Corporate Administrator's ID No.	Yes
10.	Corporate Administrator's Mobile Phone No.	Text Box	Max Length:14 Numeric	Organization Corporate Administrator's Mobile Phone No.	Yes
11.	Corporate Administrator's Email	Text Box	Max length:40 Alpha, numeric, and/or Text combination as long contain this format: <value>@<value>.<value>	Organization Corporate Administrator's email	Yes

Table 2: Consent Registration Log Display Field

Action:

No	Action	Type	Description
1.	Clear	Button	Contain the action to clear the page field
2.	Next	Button	• Contains the action to do field validation according to requirement mentioned in specification table, also checks for empty and duplicate fields. • Forward the action to save the input fields to database

Table 3: RPP – DuitNow Log Action

Step 2:

1. Customer fill the mandatory field.
2. Fill the registration details.

- Private & Confidential -

Figure 4: Consent Registration Field.

Input Specification:

No	Field	Field Type	Rule	Description	Required
12.	Transfer Type	Drop Down	List of Duit Now: Select one only	The type of transfer	Yes
13.	Auto Debit Type	Drop Down	List of Auto Debit: Select One Only	The type of Auto Debit	Yes
14.	Date	Text Box	Max length:64 Alphanumeric	The date of Auto Debit	Yes
15.	Amount	Text Box	Match length:5 Numeric	The amount of Auto Debit	Yes
16.	Recipient Reference	Text Box	Max Length: 64 Alphanumeric	Displays the recipient reference	Yes
17.	Auto Debit Details	Text	Max Length: 64 Alphanumeric	The auto debit details	Yes

Table 4: RPP – DuitNow Log advance search Display Field

Action:

No	Action	Type	Description
1.	Clear	Button	Contain the action to clear the inserted details at advance search
2.	Search	Button	Contain the action to search the transaction

Table 5: RPP – DuitNow Log Action

Step 3:

1. BSNeBiz user verified the details.
2. System display details screen click Save and BSNeBiz System will save the data input.
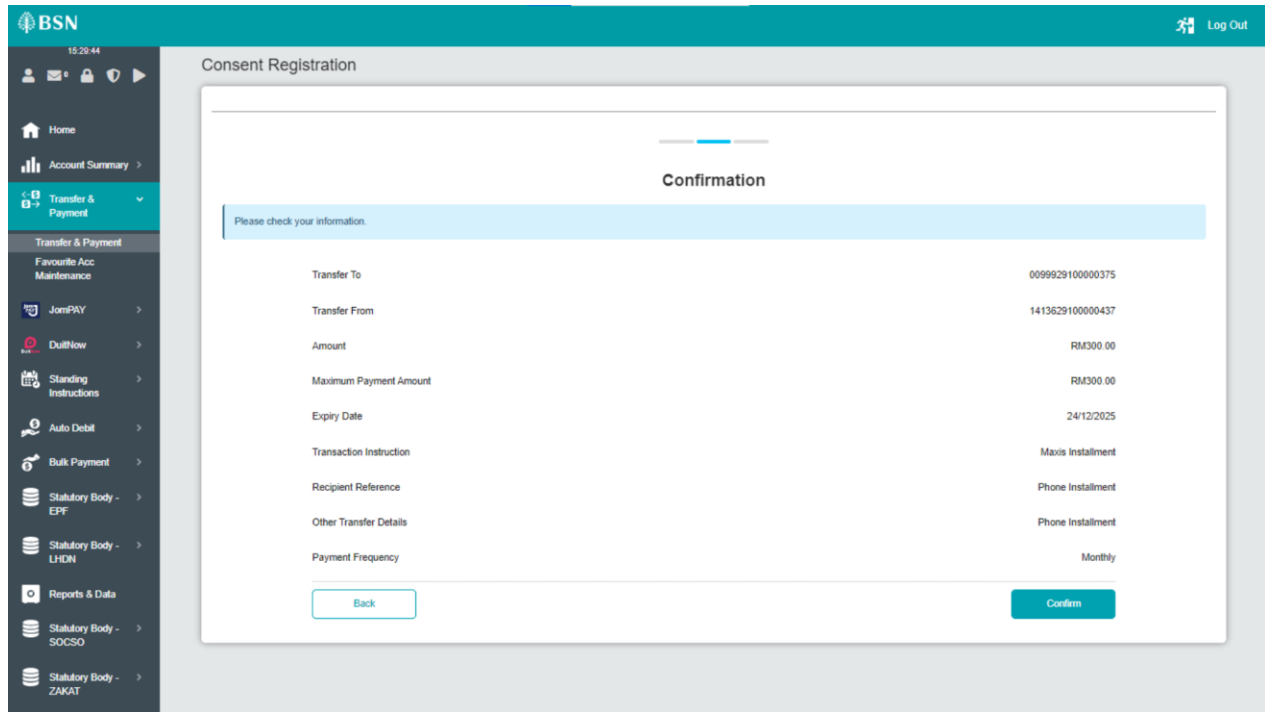
Figure 3: DuitNow Confirmation screen

Display Specification:

No	Field	Field Type	Description
1.	Organization Name	Text	Display the name of the organization
2.	Transfer To	Numeric	Display the sender Account Number
3.	Bank Name	Text	Display the Bank Name
4.	Transfer To	Numeric	Display the receiver account number
5.	Beneficiary Name	Text	Display the beneficiary name
6.	Amount	Numeric	Display the amount
7.	Expiry Date	Monthly	Display the Expiry Date
8.	Maximum Payment	Numeric	Display the maximum payment amount
9.	Payment Frequently	Monthly	Display the Payment Frequently

No	Field	Field Type	Description
10.	Recipient Reference	Text	Display the Recipient Reference
11.	Transaction Details	Text	Display the Transaction Details
12.	Other Transaction Details	Text	Display the Transaction Details

Table 6: RPP – DuitNow Log Display Field

Action:

No	Action	Type	Description
1.	Back	Button	Contain the action to go back to previous screen
2.	Confirm	Button	Contain the action to confirm the details

Table 7: RPP – DuitNow Log list of action
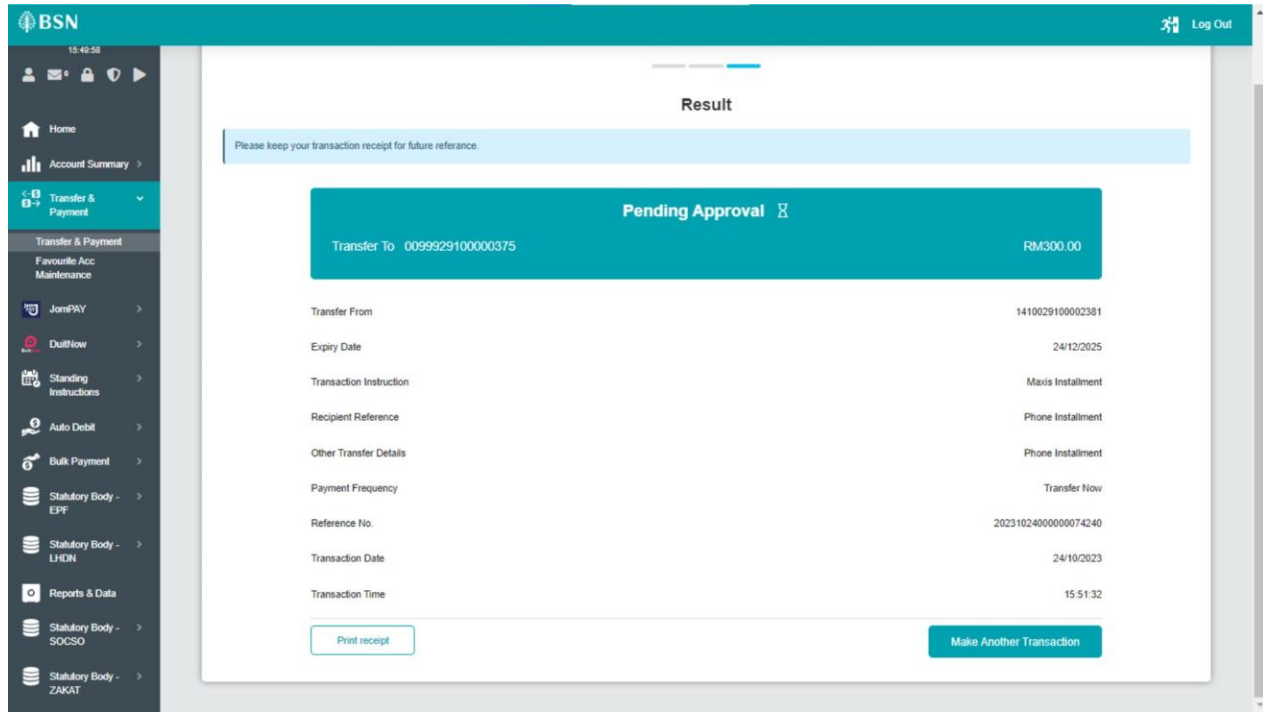
Figure 4: RPP – DuitNow pending Verify screen

Display Specification:

No	Field	Field Type	Description
1.	Organization Name	Text	Display the Organization Name
2.	DuitNow ID Type	Text	Display the ID Type
3.	Transfer From	Numeric	Display the account number
4.	Beneficiary Name	Text	Display the Beneficiary Name
5.	Recipient Reference	Text	Display the Recipient Reference
6.	Other Transfer Details	Text	Display the Transfer Details
7.	Payment Frequently	Monthly	Display the Payment Frequently
8.	Registration Date	Monthly	Display the Registration Date

No	Field	Field Type	Description
9.	Registration Type	Text	Display the Registration Type

<div align="center">Table 8: RPP – DuitNow Log Display Field</div>

Action:

No	Action	Type	Description
1.	Print Receipt	Button	Contain the action to print receipt
2.	Make another Auto Debit Registration	Button	Contain the action to make another auto debit registration.

<div align="center">Table 9: RPP – DuitNow Log details screen list of Action</div>

3.2 SOW02.1.2: Manage Pending

This feature allows User to manage consent given to others.
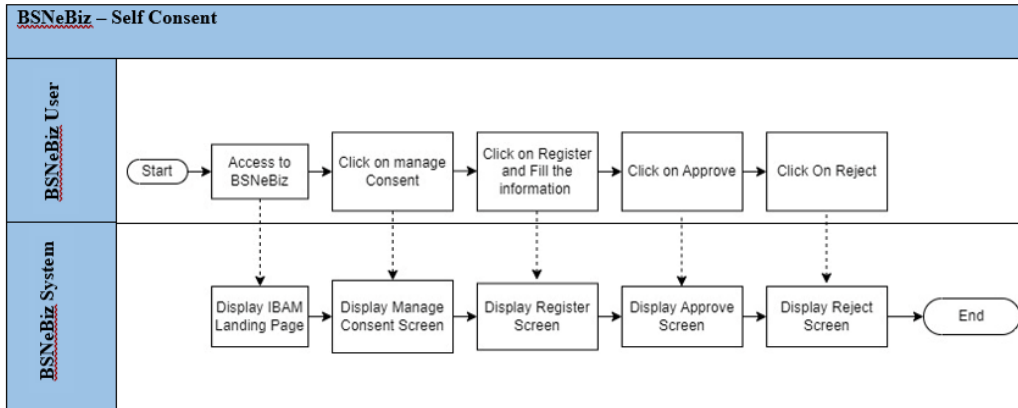
3.2.1 Process Flow

Diagram 4: RPP – BSNeBiz Self Consent Process Flow Diagram

3.2.2 Screen Flow

Step 1:

1. Access to BSNeBiz system
2. Under BBE, click Consent Navigation
3. System display Consent Navigation Screen

Figure 5: Registration

Input Specification:

No	Field	Field Type	Description
1.	Organization Name	Text	Display the Organization Name
2.	DuitNow ID Type	Text	Display the ID Type
3.	Transfer From	Numeric	Display the account number
4.	Beneficiary Name	Text	Display the Beneficiary Name
5.	Recipient Reference	Text	Display the Recipient Reference
6.	Other Transfer Details	Text	Display the Transfer Details
7.	Payment Frequently	Monthly	Display the Payment Frequently
8.	Registration Date	Monthly	Display the Registration Date
9.	Registration Type	Text	Display the Registration Type

Action:

No	Action	Type	Description
1.	"Eye" icon	Button	Contain the action to display the selected RPP – DuitNow transaction
2.	"Pencil" Icon	Button	Contain the action to edit the navigation information

Table 10: IBAM NAvigation list of action

Step 2:

1. Click pencil icon to edit the navigation details
2. Click confirm to confirm the action
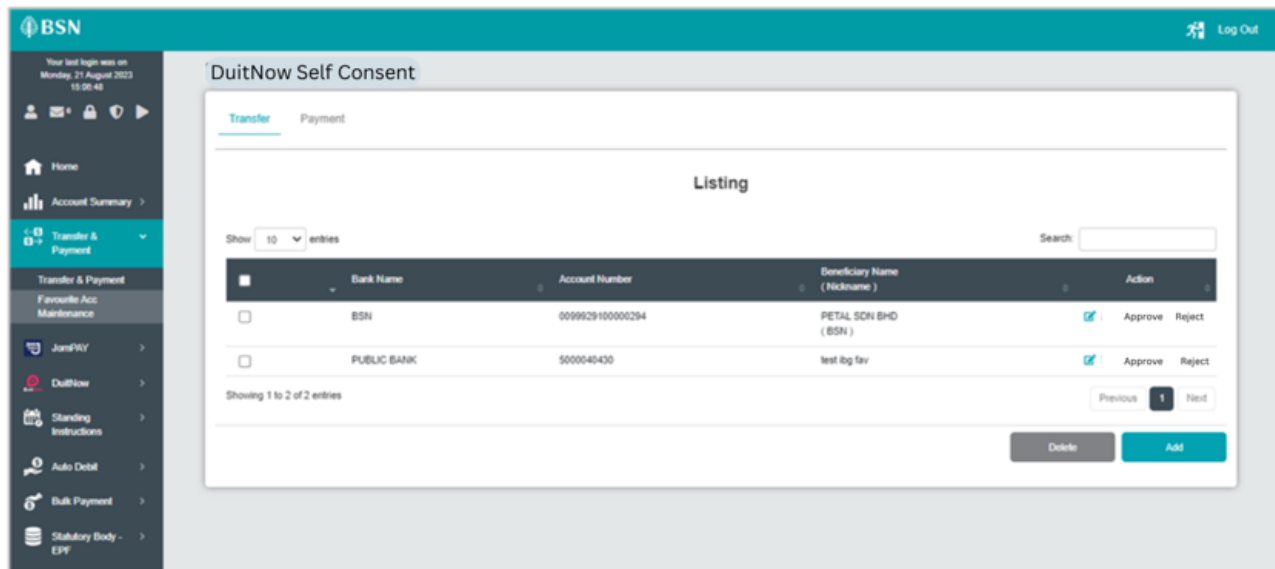3. System display result screen

Figure 6: RPP – DuitNow Navigation details screen

- Private & Confidential -

No	Action Code	Error Description in English
1.	REJECT	Notification message "You are reject this consent". Please contact BSNeBiz Contact Centre at 1300 88 1900 for assistance".

Table 11: RPP – DuitNow Navigation Display Field

Action:

No	Action	Type	Description
1.	Back	Button	Contain the action to go back to previous page
2.	Confirm	Button	Contain the action to confirm the changes

Table 12: RPP – DuitNow Navigation list of action
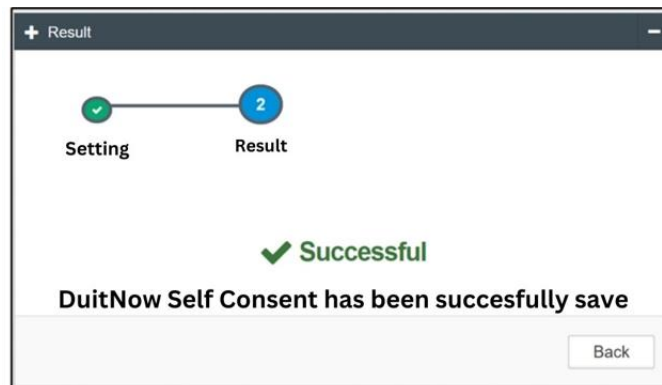
Figure 8: RPP – DuitNow Navigation result screen

Action:

No	Action	Type	Description
3.	Back	Button	Contain the action to go back to previous page

Table 13: RPP – DuitNow Navigation list of action

3.3 SOW02.1.3: Block/Unblock

This feature allows user to Auto Debit

3.3.1 Process Flow

Diagram 5: RPP – BSNeBiz Navigation Process Flow Diagram

3.3.2 Screen Flow

Step 1:

1. Access to IBAM system
2. Under CBE, click BSNeBiz Navigation
3. System display BSNeBiz Navigation Screen
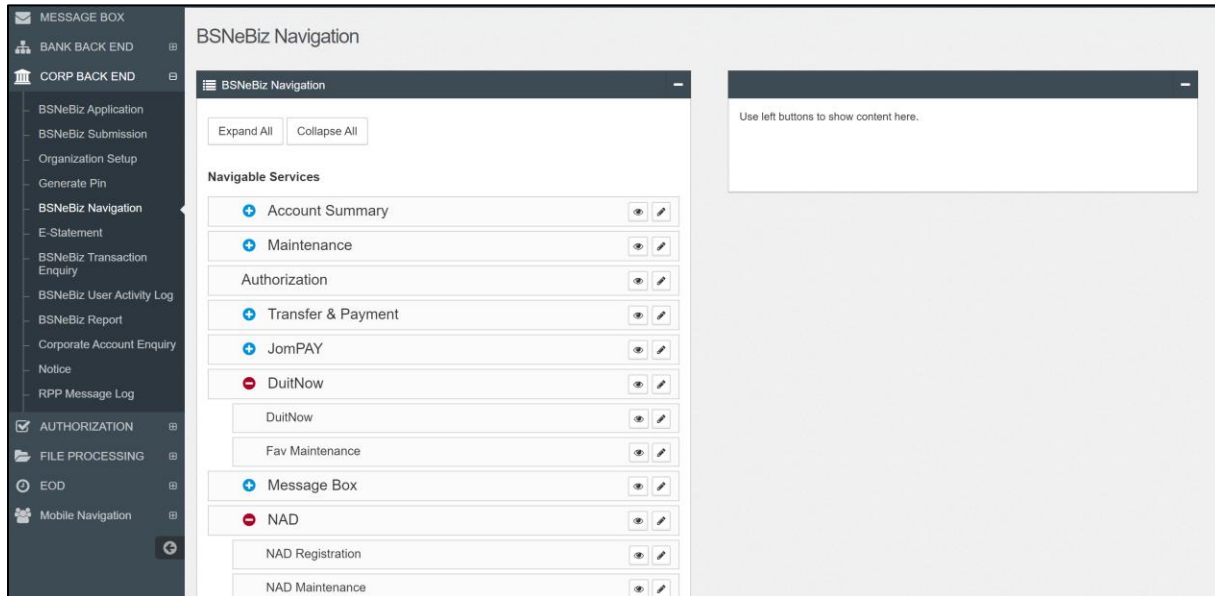
Figure 10: BSNeBiz Navigation

Figure 9: BSNeBiz Navigation screen

Action:

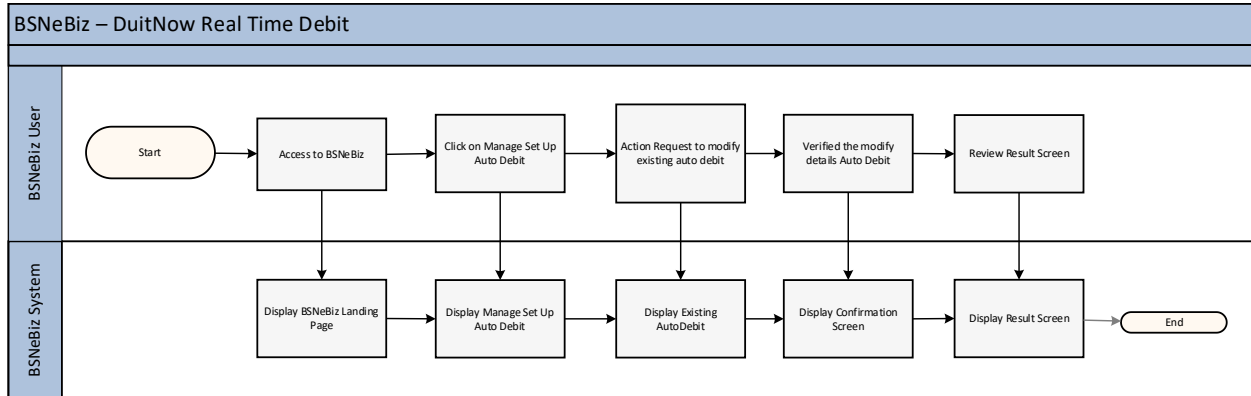| No	Action	Type	Description
1.	"Eye" icon	Button	Contain the action to display the selected RPP – DuitNow transaction
2.	"Pencil" Icon	Button	Contain the action to edit the navigation information

Table 14: IBAM NAvigation list of action

Step 2:

1. Click pencil icon to edit the navigation details
2. Click confirm to confirm the action
3. System display result screen
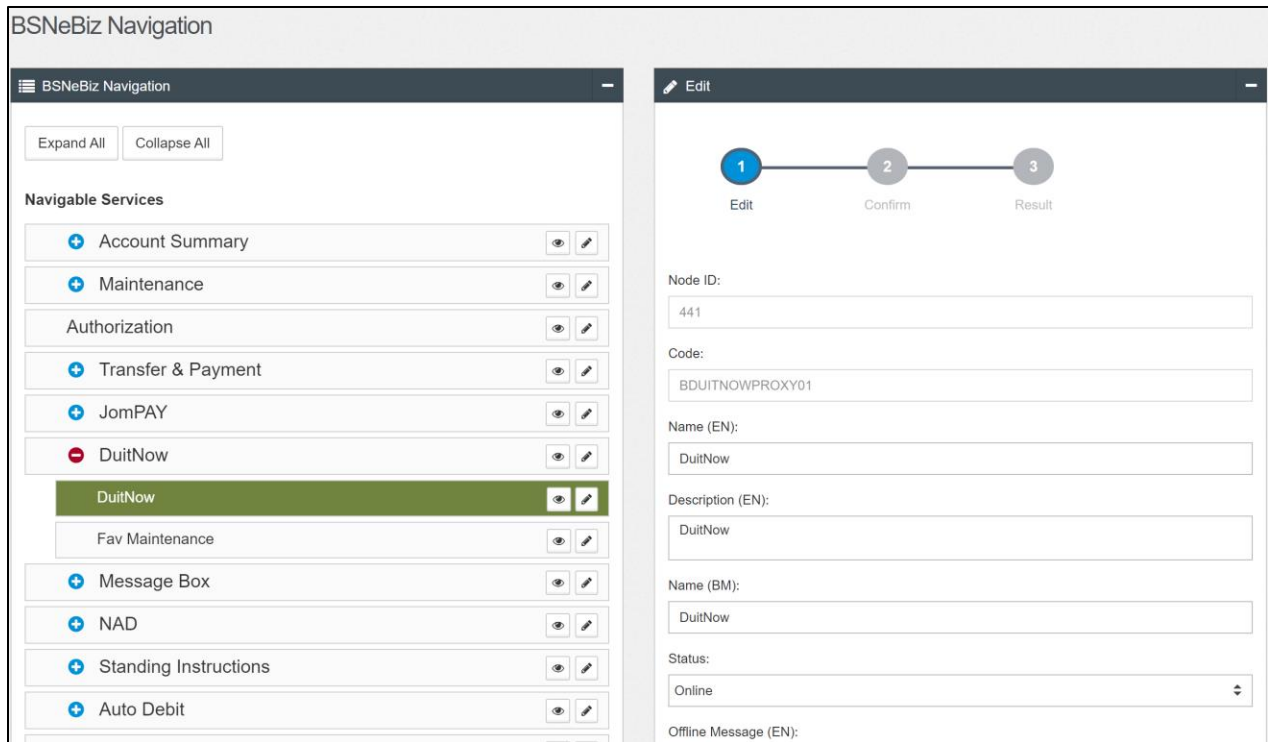
Figure 11: Rpp - BSNeBIz Navigation
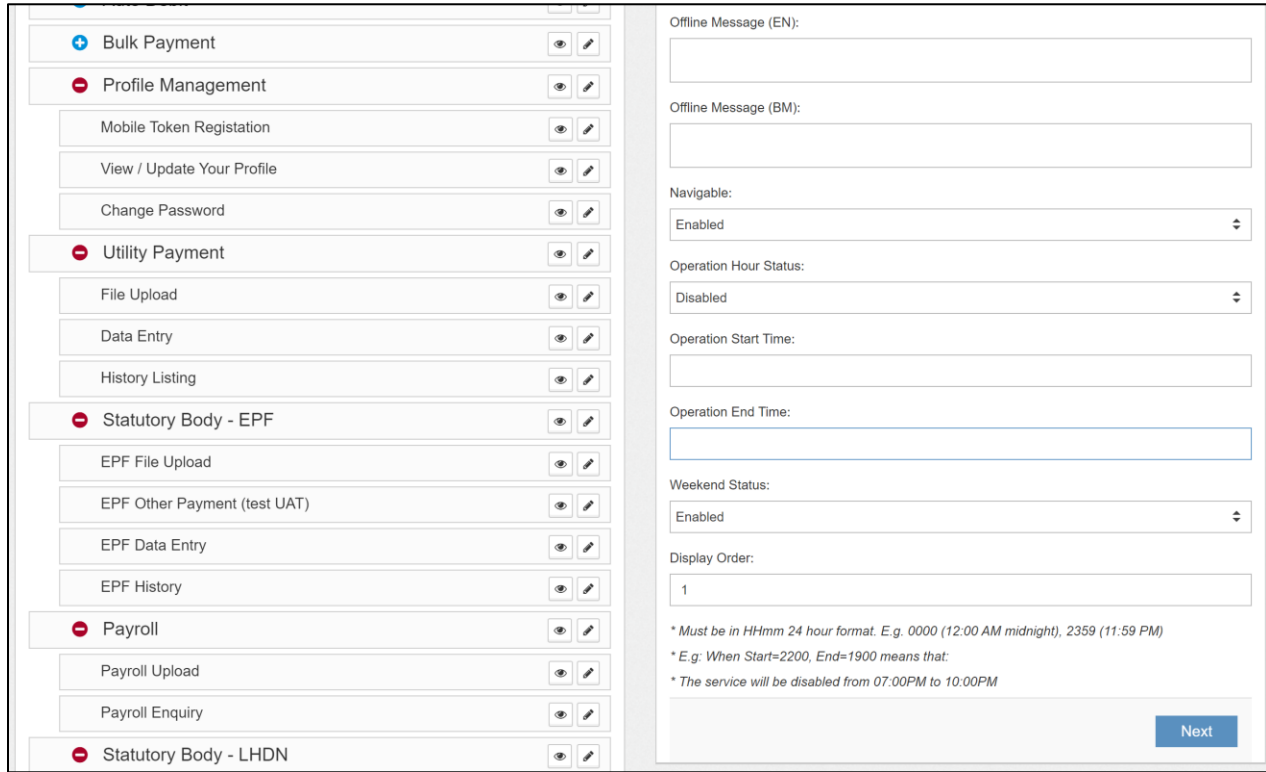
Figure 12: RPP – DuitNow Navigation details screen

Display Specification:

No	Field	Field Type	Description
1.	Node ID	Text	Display the Node ID of the navigation
2.	Code	Text	Display the Code of the navigation

Table 15: RPP – DuitNow Navigation Display Field

Input Specification:

No	Field	Field Type	Validation Rule	Description	REQUIRED
1.	Name (EN)	Textbox	Alphabet	Allow user to insert navigation name	YES
2.	Description (EN)	Textbox	Alphabet	Allow user to insert the description of the navigation	YES
3.	Name (BM)	Textbox	Alphabet	Allow user to insert navigation name	NO

No	Field	Field Type	Validation Rule	Description	REQUIRED
4.	Status	Dropdown list	Select one	Allow user to set the navigation status	YES
5.	Offline Message (EN)	Textbox	Alphabet	Allow user to insert online offline message	NO
6.	Offline Message (BM)	Textbox	Alphabet	Allow user to insert online offline message	NO
7.	Navigable	Dropdown List	Select one	Allow user to set the navigation to available or disable	YES
8.	Operation Hour Status	Dropdown List	Select one	Allow user to set the navigation operation hour	YES
9.	Operation Start Time	Dropdown List	Select one	Allow user to manage the navigation time	NO
10.	Operation End Time	Dropdown List	Select one	Allow user to manage the navigation time	NO
11.	Weekend Status	Dropdown List	Select one	Allow user to control the navigation availability on weekend	NO
12.	Display Order	Textbox	Numeric	Allow user to insert the order for navigation	YES

Table 16: RPP – DuitNow Navigation Display Field

Action:

No	Action	Type	Description
1.	Back	Button	Contain the action to go back to previous page
2.	Confirm	Button	Contain the action to confirm the changes

Table 17: RPP – DuitNow Navigation list of action

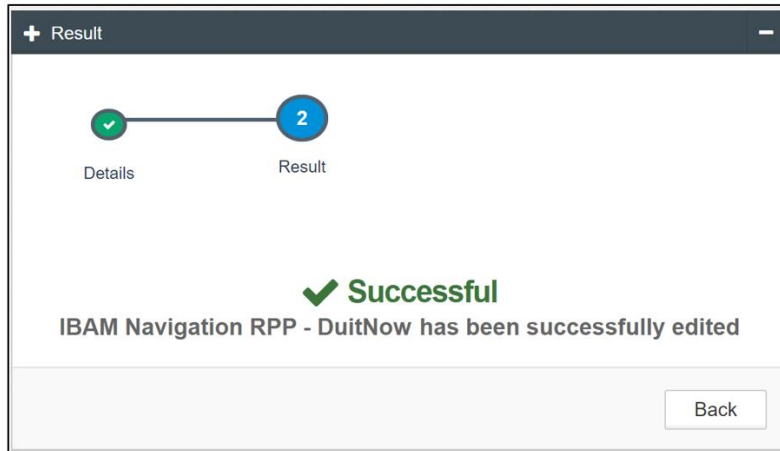Figure 13: RPP – DuitNow Navigation result screen

Action:

No	Action	Type	Description
1.	Back	Button	Contain the action to go back to previous page

Table 18: RPP – DuitNow Navigation list of action

3.4   SOW02.1.4:   DuitNow Self Auto Debit
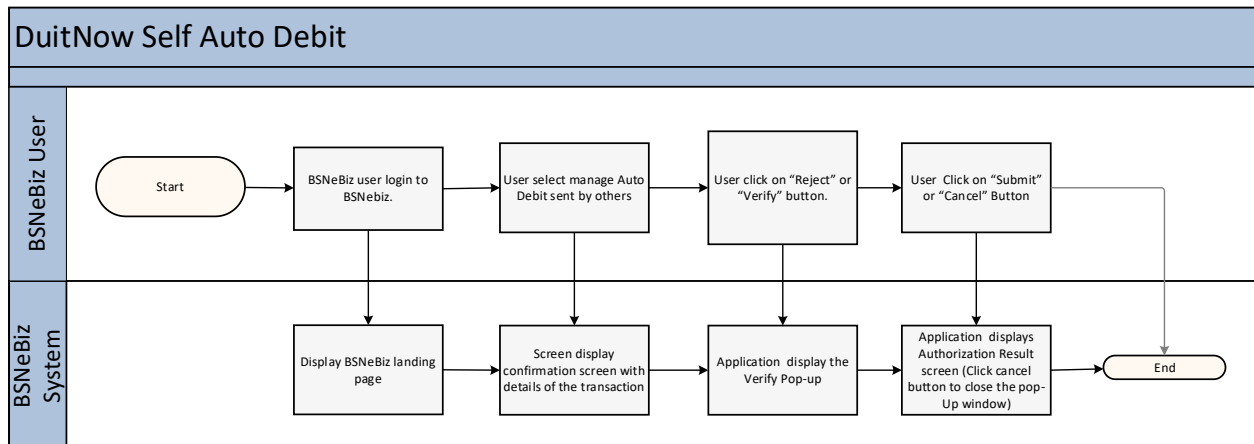
3.4.1   Process Flow

Diagram 6: DuitNow Self Auto Debit flow

3.4.2   Screen Flow

Step 1:

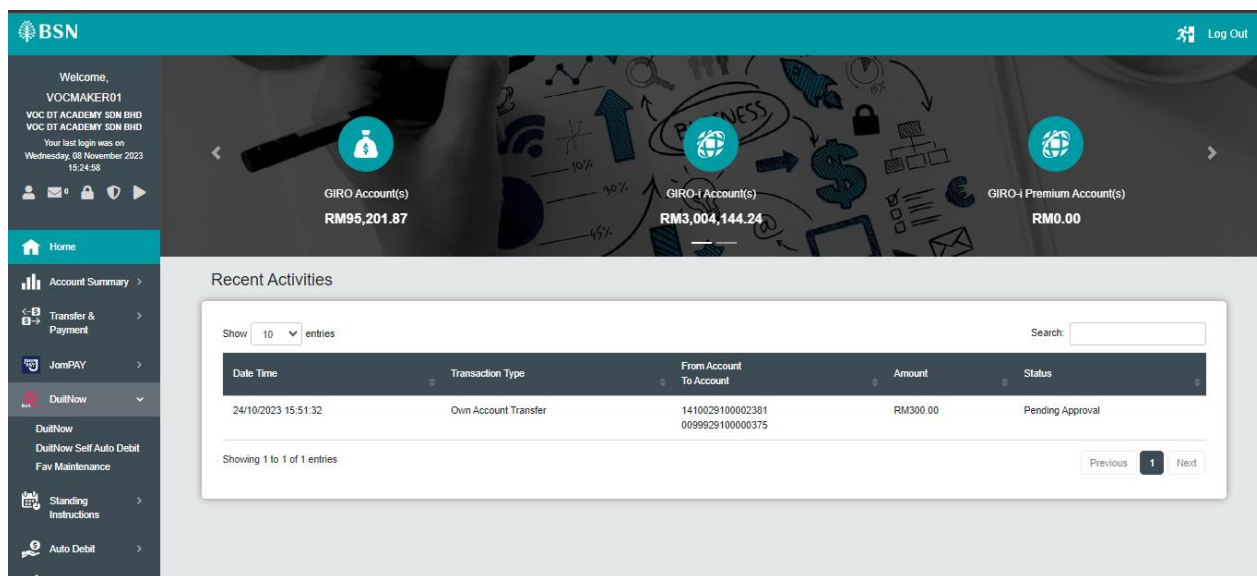1. BSNeBiz user access to BSeBiz page and click on DuitNow Self AutoDebit on navigation pane.

Figure 14: DuitNow Self Landing Page

Action:

No	Action	Type	Description
1.	Navigation Pane	Navigation Pane	Contain the action to go to DuitNow Self Auto Debit Register.

Step 2:

2. BSNeBiz user click on approve to approve the request and can click on reject to reject the request.
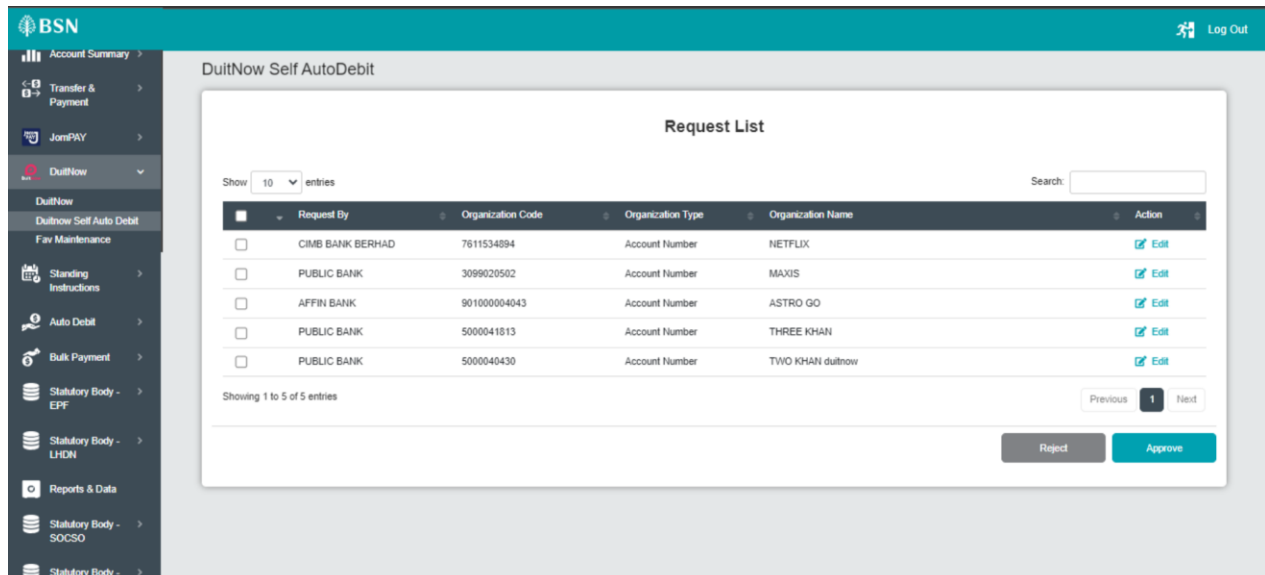
Figure 15: DuitNow Self Debit

Action:

No	Action	Type	Description
1.	Approve	Button	Contain action button to approve.
2.	Reject	Button	Contain action button to reject.
3.	Checkbox	Checkbox	Contain action to tick.

3.5 SOW02.1.5 Request to Pay with Auto Debit Registration offer

3.5.1 Process Flow

3.5.2 Screen Flow

3.6 SOW02.1.6: Authorization

3.6.1 Process Flow
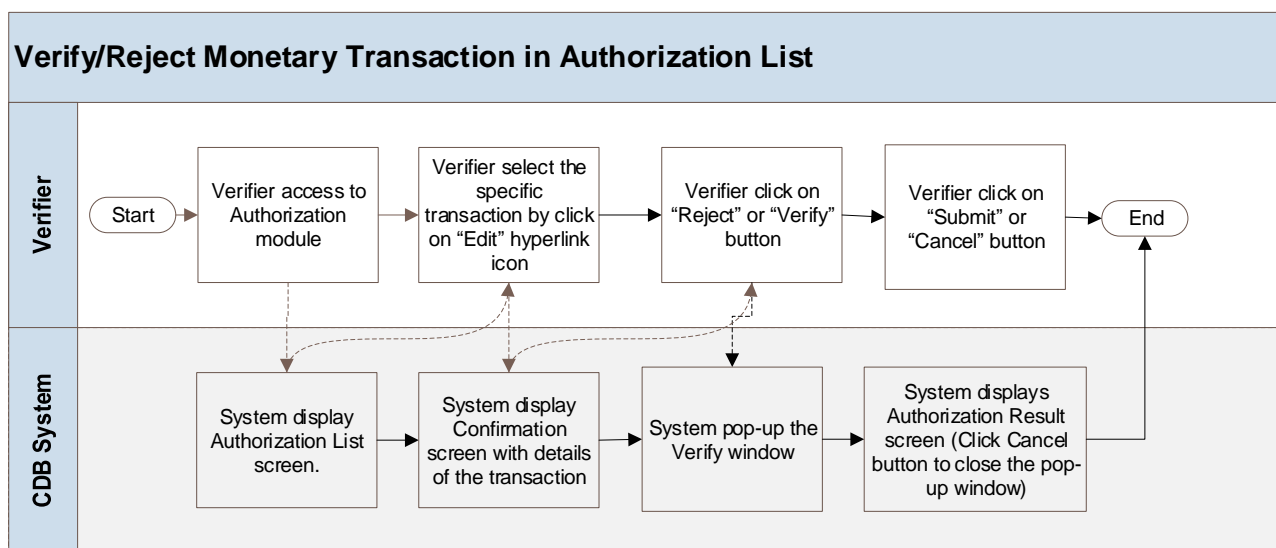
Diagram 7: Verify Transaction Flow Diagram

3.6.2 Screen Flow

Step 1:

1. Verifier access to Authorization list.
2. Verifier click "Edit" at selected transaction.

Figure 16: Authorization List Screen

Step 2:

1. System displays the selected transaction - Confirmation screen. Verifier reviews the details of transaction and click on "Verify" or "Reject" button, to Verify or reject the transaction.
2. Verifier can click on "Back" button to go back to the Authorization list.

Figure 7: Transaction – Confirmation Screen (Transfer Now)

Display Field:

No	Field	Format	Description
1.	Authorization Status	Text	Shows the Organization Status
2.	Organization Name	Text	Shows the Organization Name
3.	Transaction Type	Text	Shows the Transfer Type selection
4.	Transfer From	Numeric	Shows the crediting account number
5.	Transfer To	Numeric	Shows the debiting account number
6.	Amount	Text	Shows the transaction amount of Interbank Transfer
7.	Beneficiary Name	Text	Shows the name of Account holder
8.	Recipient Reference		Shows the Recipient Reference. Such as Invoice number, Receipt Number etc
9.	Other Transfer Details	Text	Show the any other transfer details.
10.	Transfer Mode	Text	The mode of transaction • Transfer Now • Transfer Later

			• Recurring
11.	Reference No	Text	Show reference no
12.	Initiator Name	Text	Show initiator name
13.	Initiator Date	Text	Show initiator date

Table 19: Transfer > Authorization screen Display Fields

Action:

No	Field	Field Type	Description
1.	Verify	Button	Indicator to Verify on item. Contains action to pop up the Verify screen.
2.	Reject	Button	Indicator to reject on item. Contains action to pop up the Verify screen.
3.	Back	Button	Contains action to display back on previous page.

Step 3:

1. After user clicks on "Verify" or "Reject" button, system will display the Verify pop-up window.
   - *Reject: Remarks is mandatory for Reject action.*
2. User clicks on "Submit" button to proceed the transaction and can clicks on "Cancel" button to cancel the transaction and to close the pop-up window.
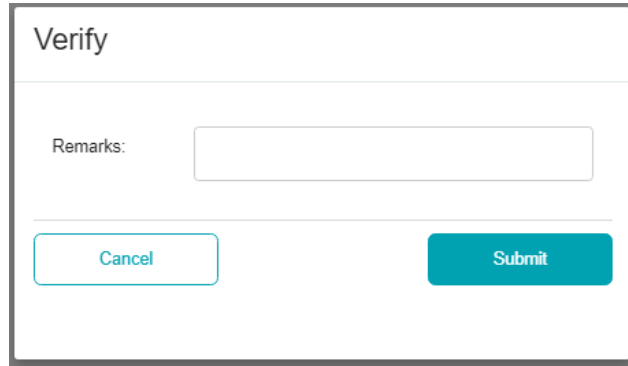
Figure 18: Transfer – Verify – Pop-up window

Action:

No	Action	Type	Description
1.	Cancel	Button	Contains an action to cancel the transaction process.
2.	Submit	Button	Contains an action to proceed the transaction.

Table 20: New Bill Payment – Confirmation List of Action

Step 3:

1. After user clicks on "Submit" button, System displays the Authorization Result Page.
2. Verifier views the result and click on "Make another Authorization" to go back to Authorization list or click at "Receipt" button to view receipt or to print result screen.
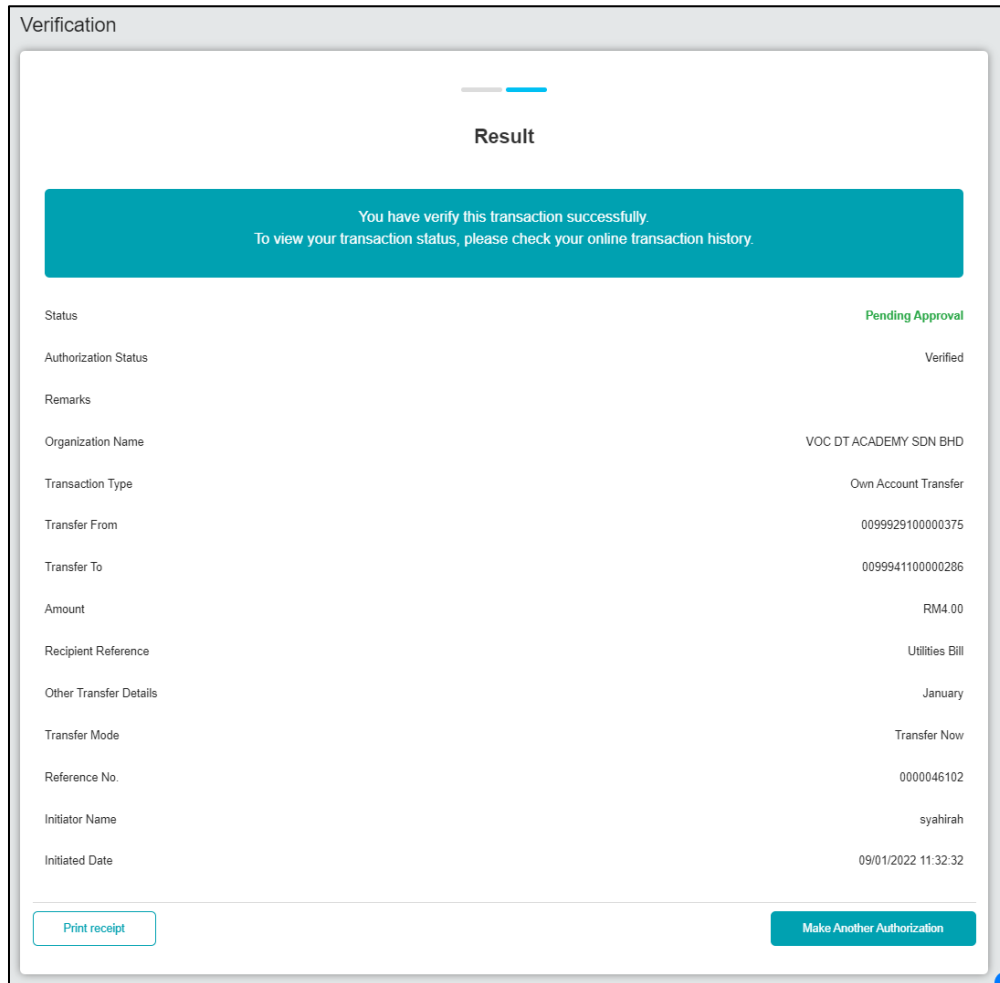
Figure 9: Transfer - Verification result screen

Display Field:

No	Field	Format	Description
1.	Status	Text	Shows the transaction Status
2.	Authorization Status	Text	Shows the Organization Status
3.	Remarks	Text	Shows the Remarks
4.	Organization Name	Text	Shows the Organization Name
5.	Transaction Type	Text	Shows the Transfer Type selection
6.	Transfer From	Numeric	Shows the crediting account number
7.	Transfer To	Numeric	Shows the debiting account number
8.	Amount	Text	Shows the transaction amount of Interbank Transfer

- Private & Confidential -

9.	Recipient Reference		Shows the Recipient Reference. Such as Invoice number, Receipt Number etc
10.	Other Transfer Details	Text	Show the any other transfer details.
11.	Transfer Mode	Text	The mode of transaction • Transfer Now • Transfer Later • Recurring
12.	Reference No	Text	Show reference no
13.	Initiator Name	Text	Show initiator name
14.	Initiator Date	Text	Show initiator date

<p align="center">Table 21: Transfer – Result Display Fields</p>
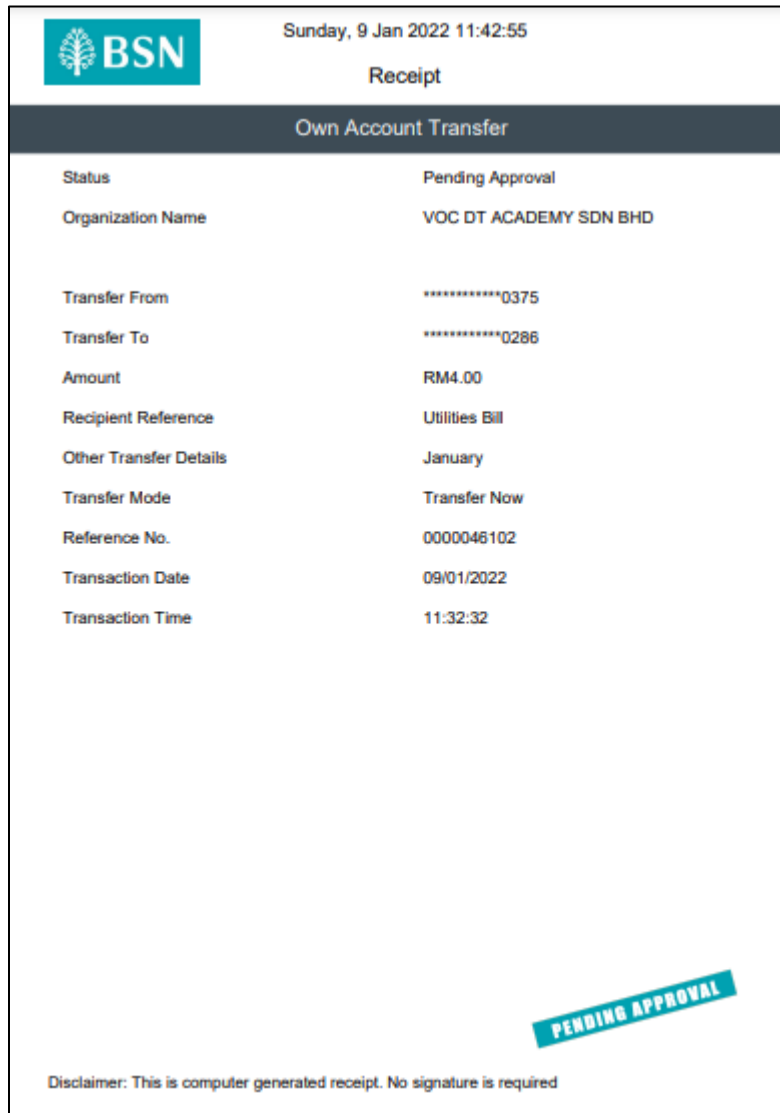
Action:

No	Field	Field Type	Description
1.	Print Receipt	Button	Contain action to view and print receipt.
2.	Make Another Authorization	Button	Contain action to go to authorization list.

<p align="center">Table 22: Transfer – Result List of Action</p>

Step 4:

1. Corporate User click on "Print Receipt" button to print the transaction receipt and click "Make Another Authorization" to go back to authorization screen.

Figure 20: Transfer - Verification receipt screen

Display Field:

No	Field	Format	Description
1.	Status	Text	Shows the Status
2.	Organization Name	Text	Shows the Organization Name
3.	Transfer From	Numeric	Shows the Transfer From Account Number
4.	Transfer To	Numeric	Shows the Transfer To account number
5.	Amount	Alphanumeric	Shows the Transaction Amount
6.	Recipient Reference		Shows the Recipient Reference. Such as Invoice number, Receipt Number etc
7.	Other Transfer Details	Text	Shows the any other transfer details.
8.	Transfer Mode	Text	The mode of transaction • Transfer Now • Transfer Later • Recurring
9.	Reference No	Text	Show IB reference no
10.	Transaction Date	Text	Show Transaction Date
11.	Transaction Time	Text	Show Transaction Time

Table 23: Transfer – Result Display Fields

3.7   SOW02.1.7: Enhancement on other related modules at BSNeBiz (Web)

3.7.1   Process Flow
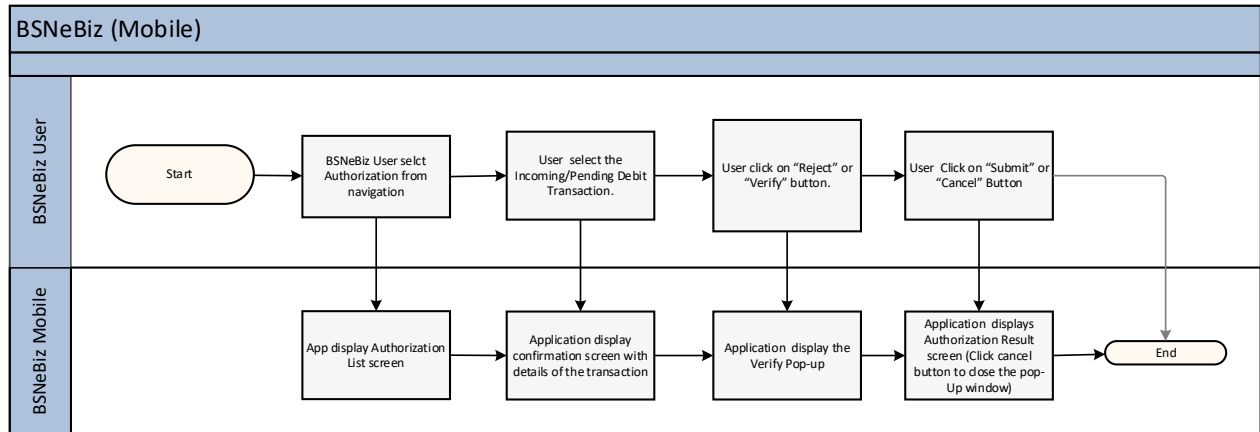
Diagram 5: Enhancement Modules Flow Diagram

3.7.2 Screen Flow

Step 1:

1. BSNeBiz user click on Host Transaction History.
2. Transaction History will display

4 SOW02.2: BSNeBiz (Mobile)

4.1 SOW02.2.1: Update Authorization

This feature allows User to Update Authorization (Verifier & Approver) module in BSNeBiz (Mobile) for incoming DuitNow consent.

4.1.1 Process Flow
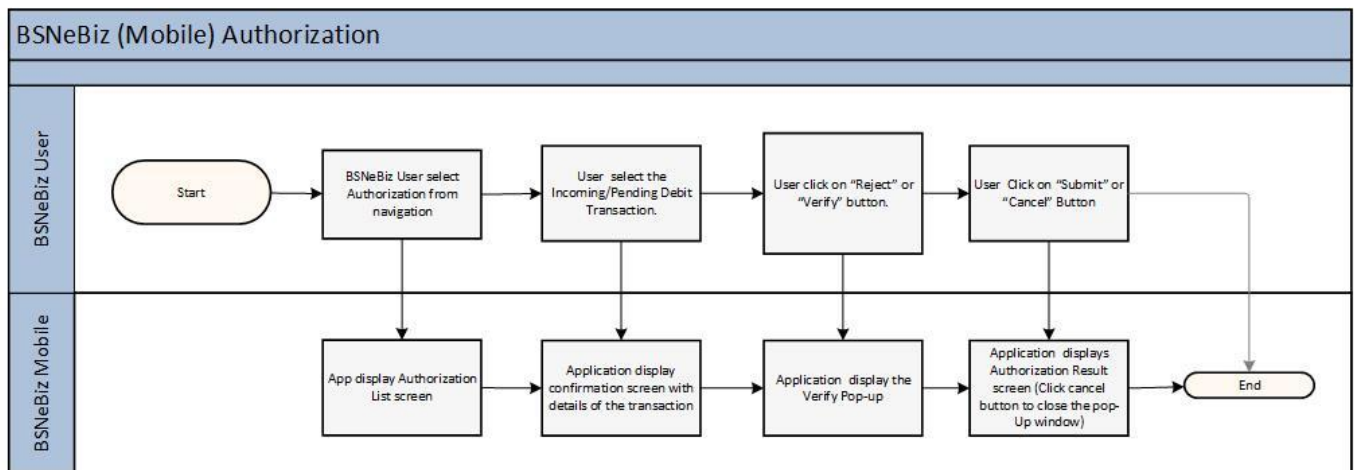
Diagram 6: BSNebiz Mobile Application (Authorization)

4.1.2 Screen Flow

Step 1:

User required to Login BSNeBiz to access Authorization.

- Private & Confidential -
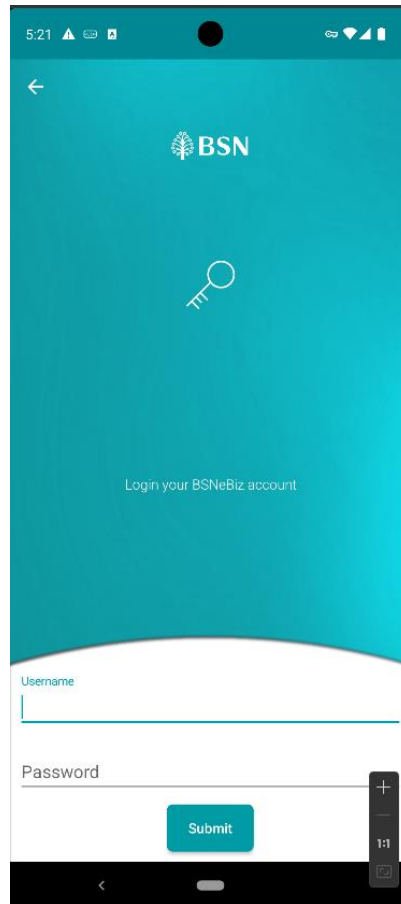
Figure 21: BSNeBiz Mobile Login Page

Input Specification:

No	Field	Field Type	Rule	Description	Required
1.	Username	Text	Max Length:24 Alphanumeric	User Username	Yes
2.	Password	Text	Max Length:24 Alphanumeric	User Password	Yes

Table 24: Transfer and Payment Fill Details Input Specification

Action:

No	Action	Type	Description

- Private & Confidential -

No	Action	Type	Description
1.	Login	Button	This action will be used to verify User username and password
2.	Cancel	Button	This action will deny user from login to BSNeBiz App

Table 25: Login Popup Actions

List of available messages for the screen:

No.	Event	Error Description in English
1.	Username field empty	Please insert username
2.	Password field empty	Please insert password

- Private & Confidential -

Step 2:

1. After User successfully login, BSNeBiz Mobile App will show Mobile Homescreen
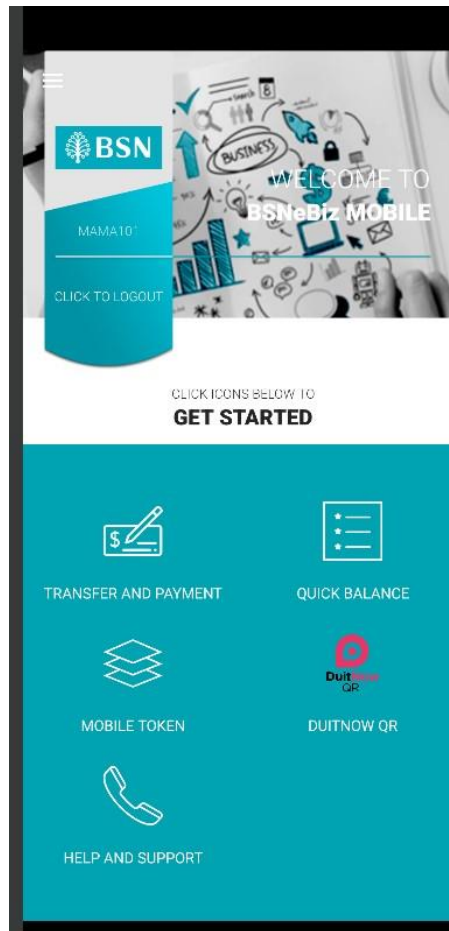
Figure 22: BSNeBiz Application Homescreen

- Private & Confidential -

Step 3:

User required to click on DuitNow Consent.
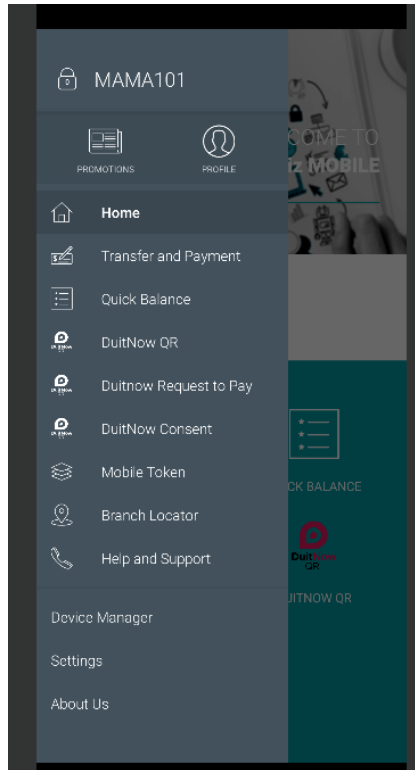
Figure 23: Navigation Pane BSN Mobile EBiz.

Step 4:

User required to click on Outgoing Request and select the account to display the Pending List.
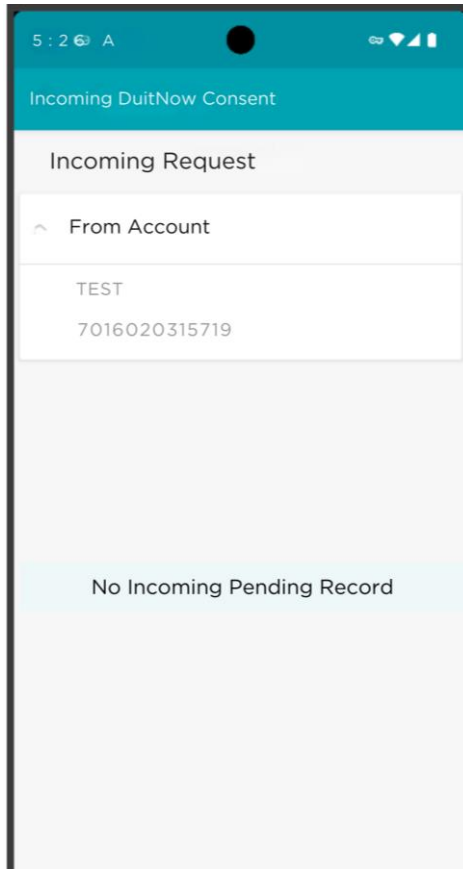
Figure 24: Incoming Duit Now Consent
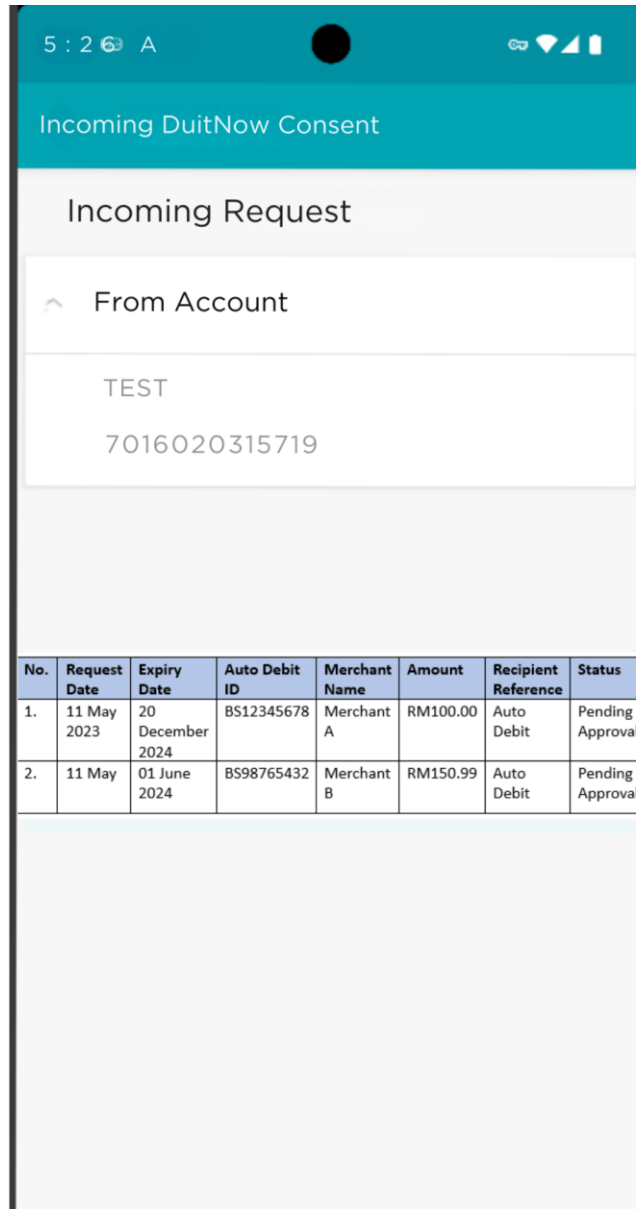
Figure 25: Incoming Duit Now Consent

4.2   SOW0.2.2.2: Push Notification

This feature allows User to to turn on a concise and effective push notification message which is related to updating the Authorization in BSNeBiz (Mobile) for incoming DuitNow consent.

4.1.3   Process Flow
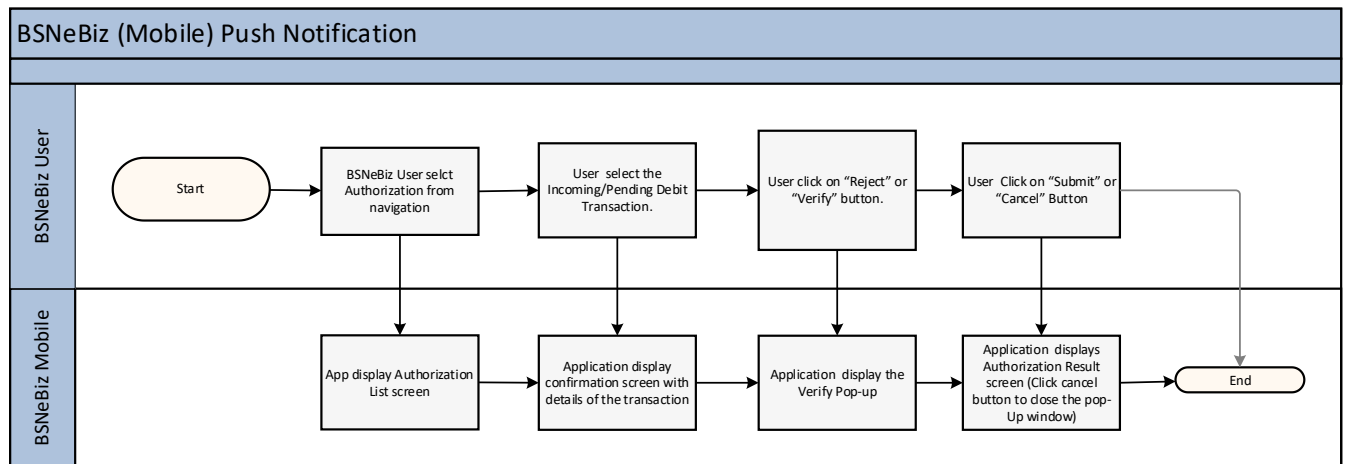
Diagram 8: Push Notification screen flow

4.1.4   Screen Flow

KIV

5 SOW02: Internet Banking Application Manager (IBAM)

5.1 SOW02.3: DuitNow Consent Maintenance

5.1.1 Process Flow
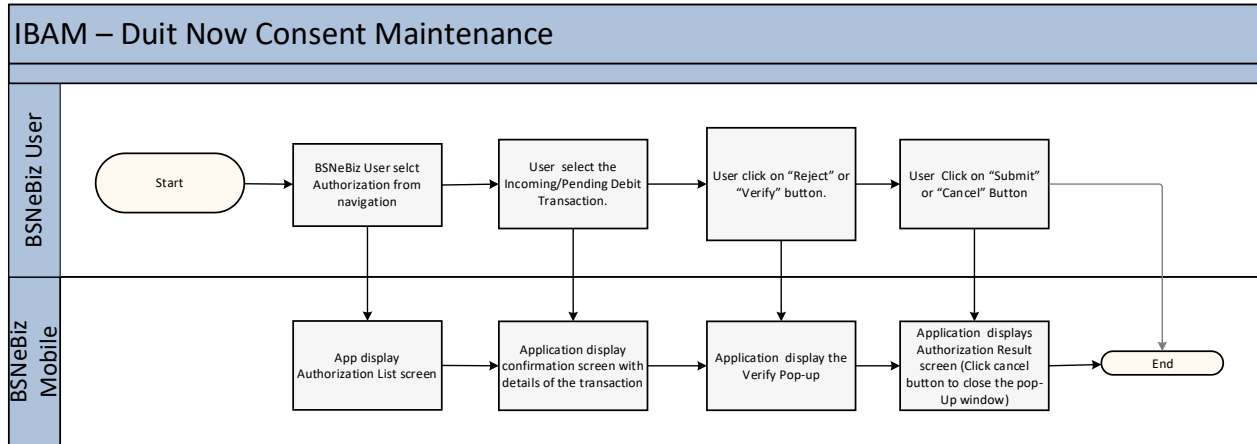
Diagram 7: Duit Now consent Maintenance flow

5.1.2 Screen Flow

KIV

Step 1:

1. Access to IBAM system
2. Access to DuitNow Consent Maintenance
3. Select Suspended Merchant Maintenance
4. Select Auto Debit Validity period maintenance
5. Enter required information for period maintenance.

KIV

Figure 10: IBAM Navigation Screen

Input Specification

1.					
2.					

- Private & Confidential -

3.				
4.				
5.				
6.				
7.				
8.				
9.				

Table 26: Open DuitNow Transfer input specification – details

Action

1.			
2.			

Table 27: Open DuitNow Transfer available action – details

List of available Error Message

1.		•
2.		
3.		

Table 28: Open DuitNow available error message – details

Step 2:

1. View Report at Consent Auto Debit Register Report (Incoming, Outgoing and Redirect.
2. Click on Auto Debit Report
3. Auto Debit Report will shown.

<p style="text-align:center; color:red;">KIV</p>

Display Specification

1.			
2.			
3.			
4.			

- Private & Confidential -

5.			
6.			
7.			
8.			
9.			

Table 29: Open DuitNow Transfer display specification – confirm

Action

1.			
2.			

Table 30: Open DuitNow Transfer available action – confirm

Display Specification

1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Table 31: Open DuitNow Transfer display specification – result

Action

1.			

2.			
3.			

Table 32: Open DuitNow Transfer available action – result

5.2 SOW02.4 Duit Now Consent Auto Debit Register Report

5.2.1 Process Flow
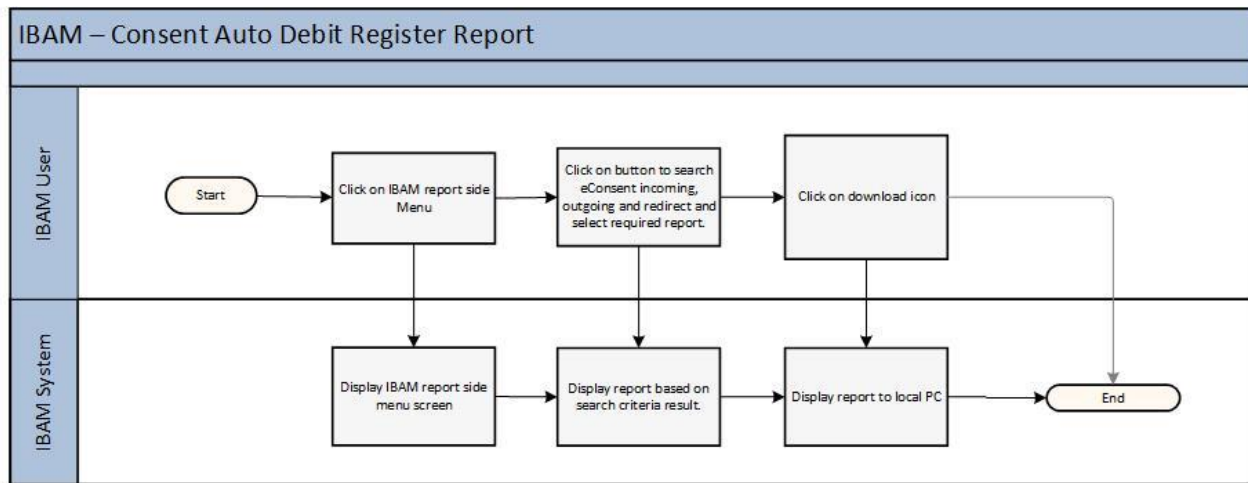
Diagram 10: IBAM Consent Auto Debit Register Report

5.2.2 Screen Flow

KIV

- Private & Confidential -

5.3 SOW02.5 Enhancement on other related modules at IBAM
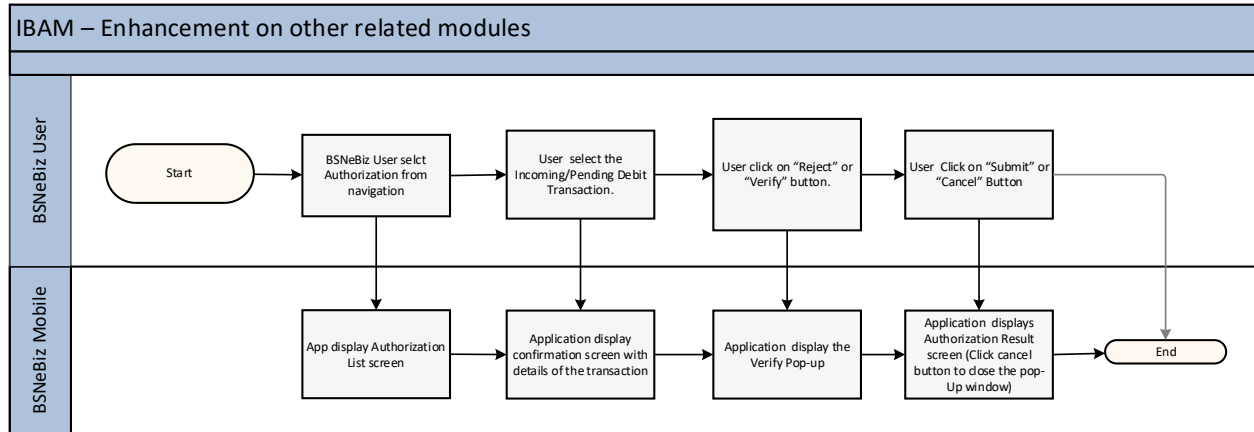
5.3.1 Process Flow

Diagram 13: CBE process flow

5.3.2 Screen Flow

Step 1:

1. IBAM User login to IBAM BSNeBiz system
2. Access to Navigation
3. Organization Setup, BSNeBiz Navigation, BSNeBiz transaction Enquiry, User Activity Log, BSNeBiz Report, RPP Message Log will appear.

Figure 26: Favourite DuitNow – details screen
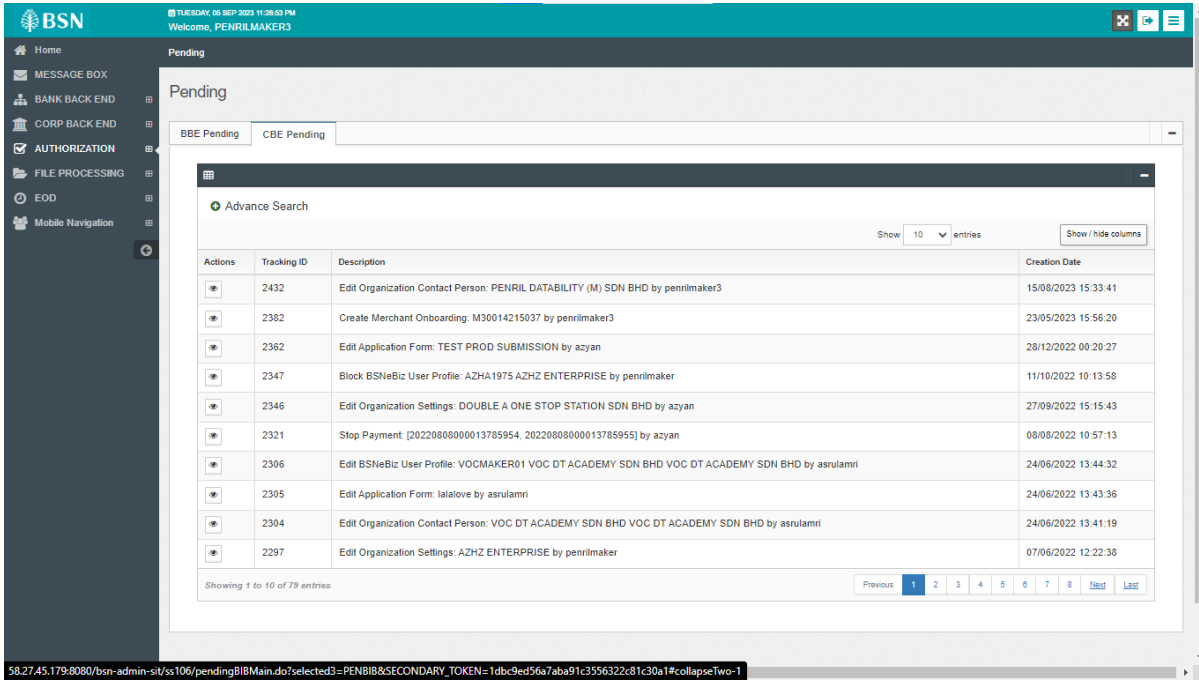
Display Specification

No	Field	Type	Description
1.	DuitNow ID Type	Text	Display DuitNow ID Type
2.	DuitNow ID Number	Text	Display DuitNow ID Number

Table 33: Open DuitNow Transfer display specification – Details

Input Specification

No	Field	Field Type	Validation Rule	Description	Required
1.	Transfer Type	Dropdown	Choose one	List of transfer type	YES
2.	Transfer To	Dropdown	Choose one	List of Favorite DuitNow	YES
3.	Transfer From	Dropdown	Choose one	List of organization account	YES
4.	Amount	Textbox	Numeric	Transaction amount	YES
5.	Recipient's Reference	Textbox	Alphanumeric 40 char	Details of transaction	YES
6.	Other Transfer Details	Textbox	Alphanumeric 140 char	Details of transaction	NO

No	Field	Field Type	Validation Rule	Description	Required
7.	Transfer Mode	Radio Button	Choose either one	Payment Mode a. Pay Now (Default) b. Pay Later c. Set up as recurring payment	YES
8.	RPP Terms and Condition	Check Box	-	RPP Terms and Condition user agreement	YES

Table 34: Favourite DuitNow Transfer input specification – details

Action

No	Action	Type	Description
1.	Clear	Button	Contains an action to clear field for Open DuitNow details
2.	Next	Button	Contains an action to proceed to next step of DuitNow transfer

Table 35: Favourite DuitNow Transfer available action – details

List of available Error Message

No.	Event	Error Description
1.	Leave blank to required fields	• Transfer From is required • Transfer To is required • Amount is required • Recipient's Reference is required • Other Transfer Details is required • Terms and Conditions is required
2.	Fill in field other than numeric for Amount	Amount is not numeric
3.	Fill in field with not an email format for Recipient's Email Address	Email is not a valid email address

Table 36: Favourite DuitNow available error message – details

5.4 SOW02.6   IBAM > BBE

5.4.1 Process Flow
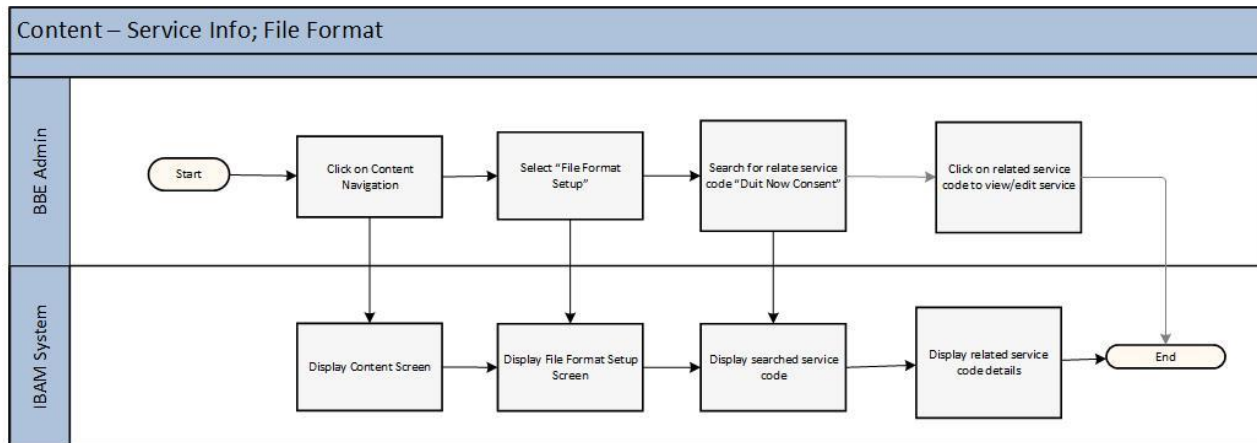
5.4.2 Screen Flow

KIV

6 SOW02.4 BSNeBiz Web Integration

6.1 SOW02.4.1   New Integration to Paynet.

6.1.1 Process Flow

KIV

Figure 11: Sample screen for transaction History to include DuitNow transaction

6.1.2 Screen Flow
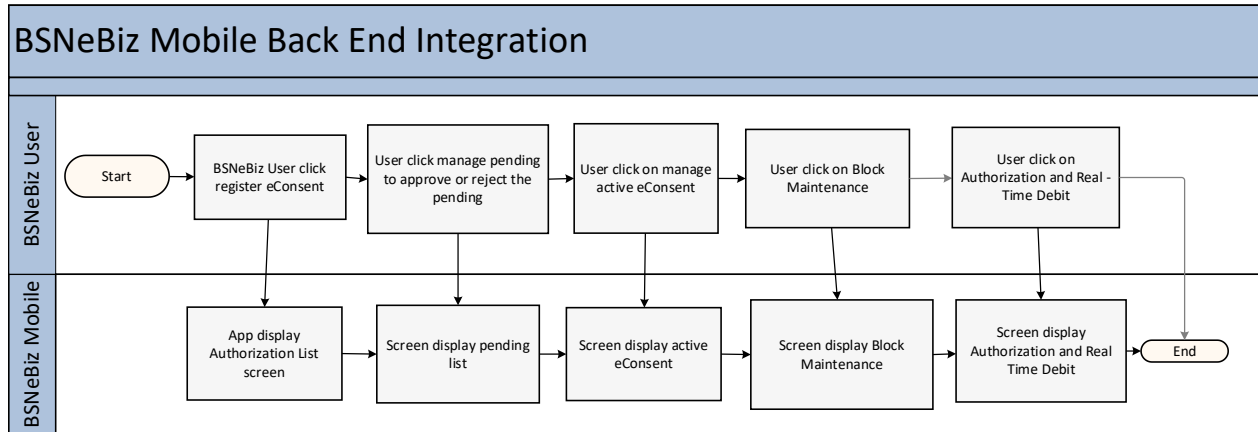
KIV

6.2   SOW02.4.2   New Webservice for Paynet to call

6.2.1   Process Flow

6.2.2   Screen Flow

7   SOW02.5   BSNeBiz Mobile Integration

7.1   SOW02.5.1   Integration with backend service.

7.1.1   Process Flow

7.1.2   Screen Flow

8   SOW02.6   Enhancement at Batch Program and Database

8.1   SOW02.6.1   Create Batch Program and Database

8.1.1   Process Flow

8.1.2   Screen Flow

8.2   SOW02.6.2   Add new table at Database

8.2.1   Process Flow

8.2.2   Screen Flow