

**Oracle Utilities SGG V2.0.0 and MDM
V2.0.1 Integrations**

Utility Reference Model

5.6.3.2b SGG-MDM.Manage Device Commissioning
(Echelon)

December 2012

Oracle Utilities SGG V2.0.0 to MDM V2.0.1 Integration Utility Reference Model 5.6.3.2b

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Chapter 1

Overview

This chapter provides a brief description of the SGG-MDM. Manage Device Commissioning (Echelon) business process and associated process diagrams. This includes:

- **Brief Description**

Brief Description

Business Process: 5.6.3.2b SGG-MDM.Manage Device Commissioning (Echelon)

Process Type: Process

Parent Process: 5.6.3 SGG-MDM.Manage Devices

This process gets initiated when a 3rd Party Application (E.g. Customer Care and Billing Application), makes a request for a Device Commission or a MDM or SGG Authorized User manually requests for a Device Commission within SGG system. SGG initiates Device Commission by communicating with respective Echelon Head-End System that in turn communicates with the Smart Meter device, for Device Commission, and sends response back to SGG.

Chapter 2

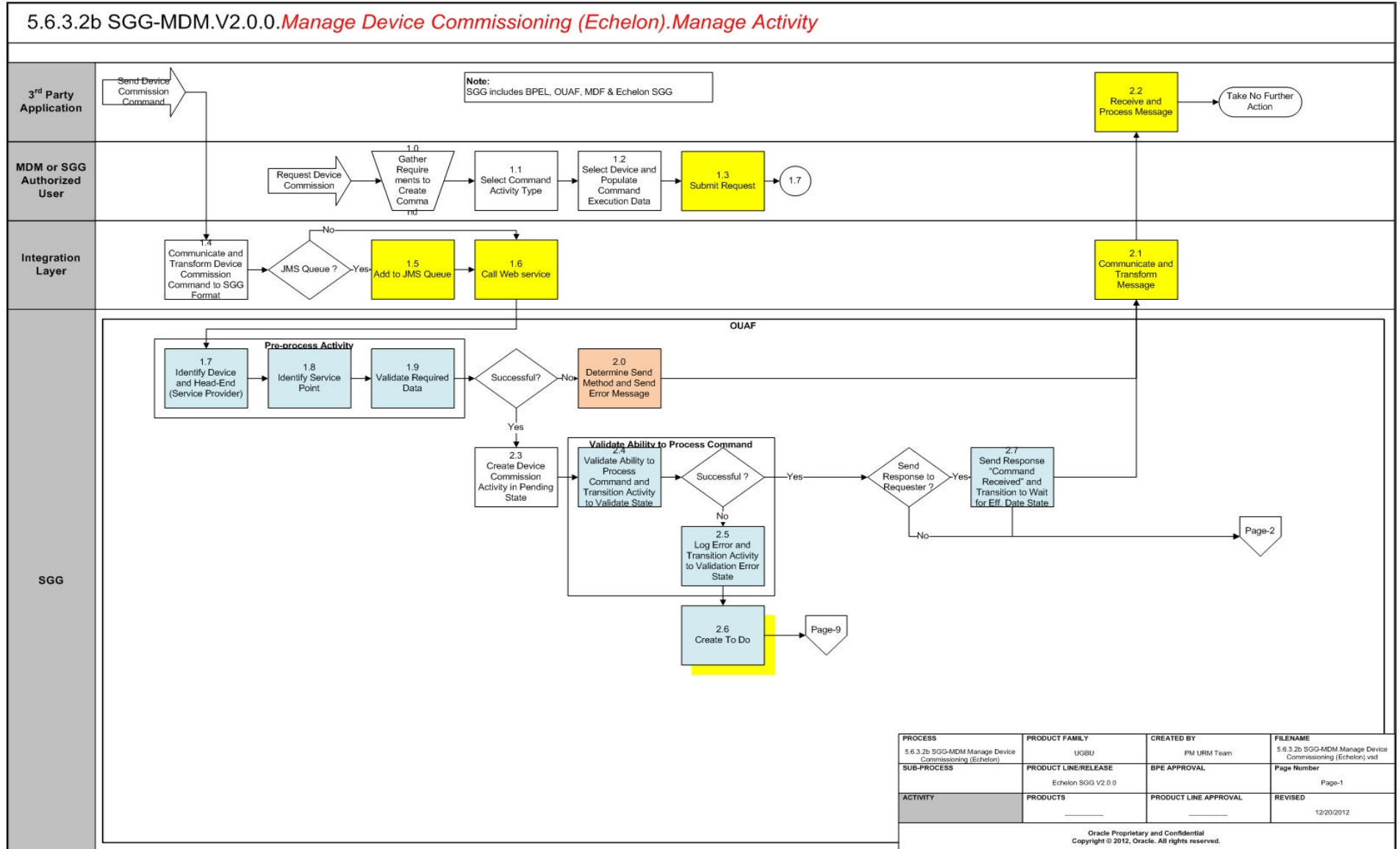
Detailed Business Process Model Description

This chapter provides a detailed description of the SGG-MDM.Manage Device Commissioning (Echelon) business process. This includes:

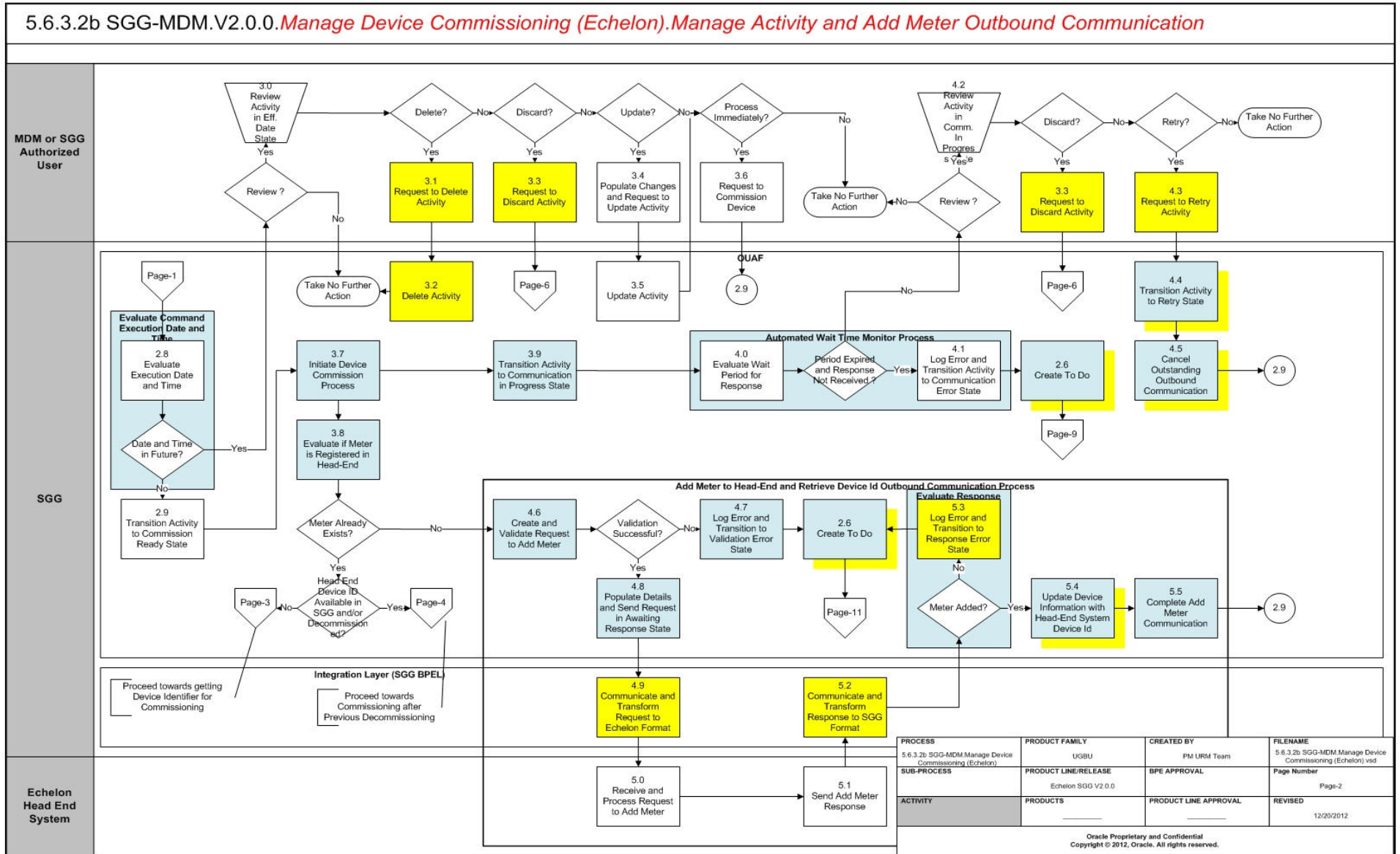
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- **SGG-MDM.Manage Device Commissioning (Echelon) Description**
- **Business Objects Life Cycle**
 - **D1-DeviceCommission**
 - **D4-AddMeterRequest**
 - **D4-RetrieveMeterIdentifier**
 - **D4-SetATMConfiguration**
 - **D4-SetATMConfigNotification**
 - **D1-CommissionDevice**

Business Process Diagrams

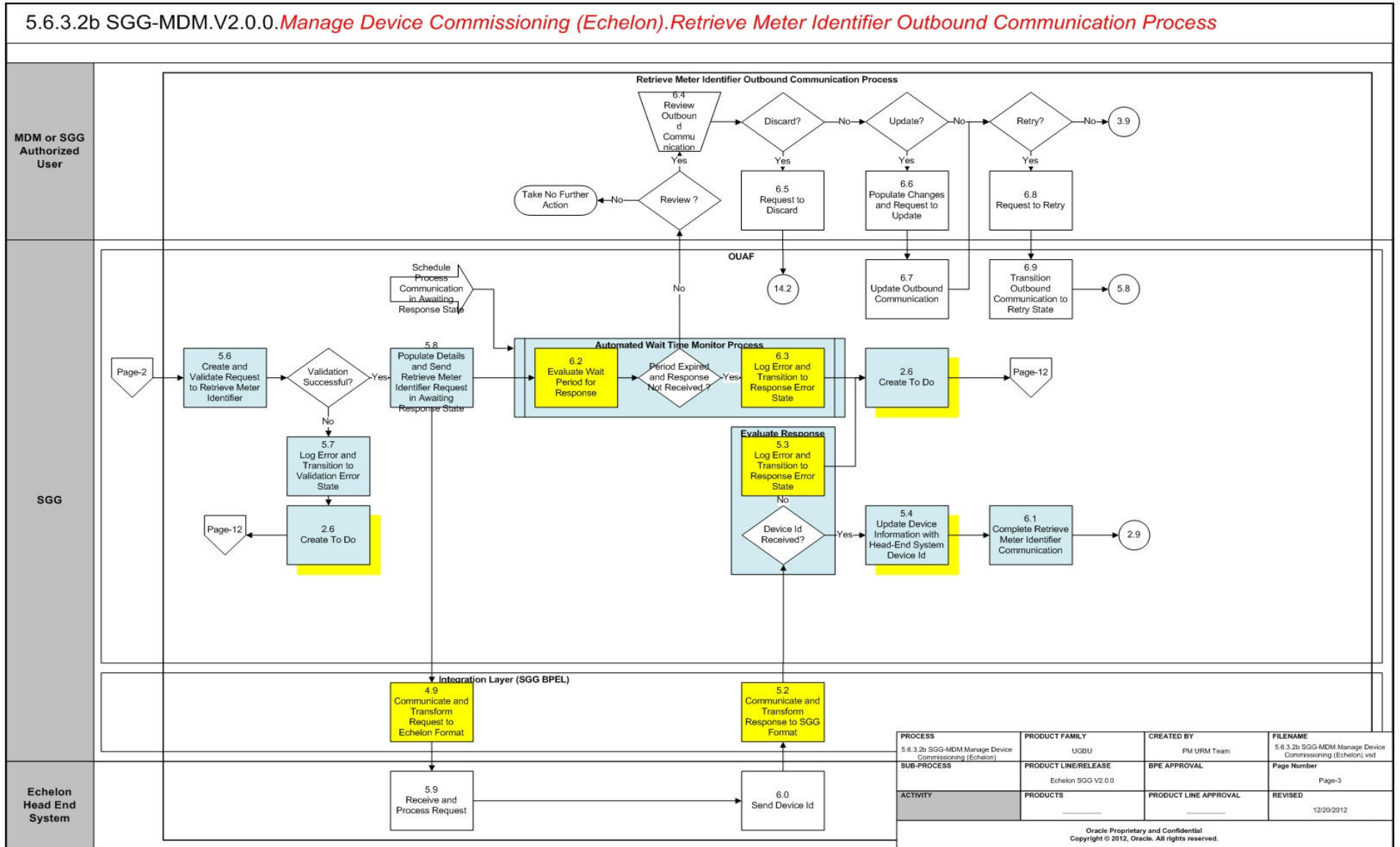
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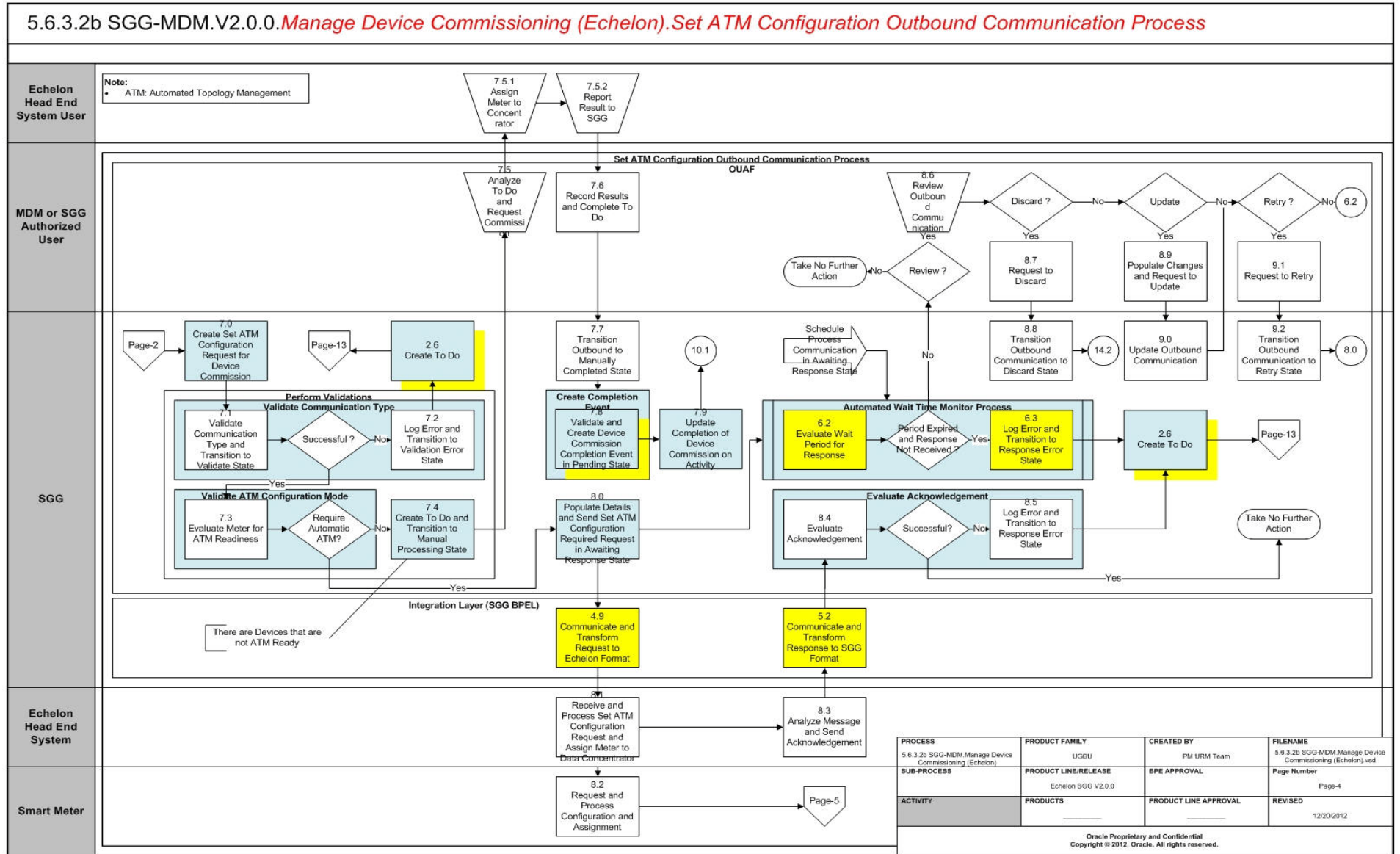
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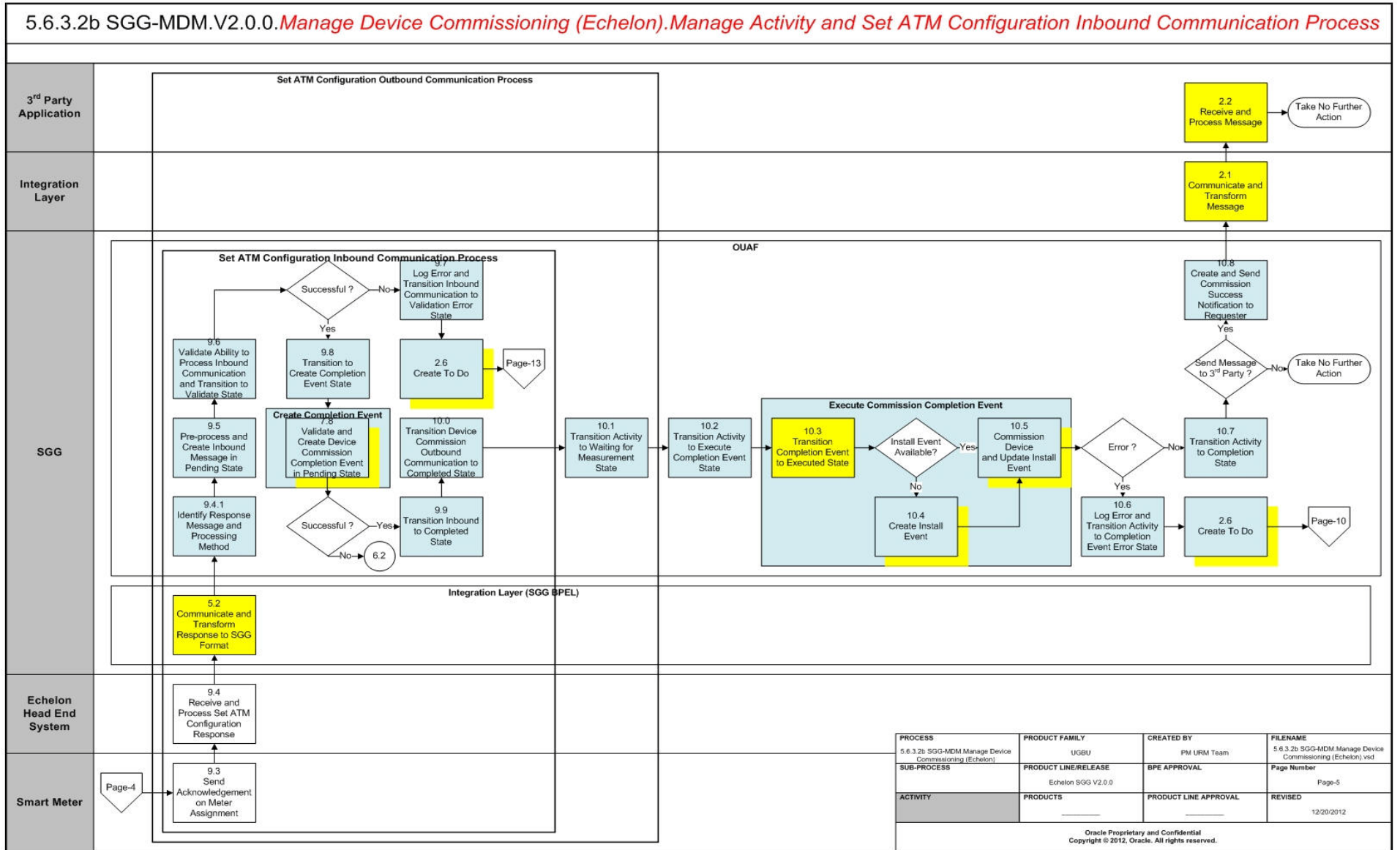
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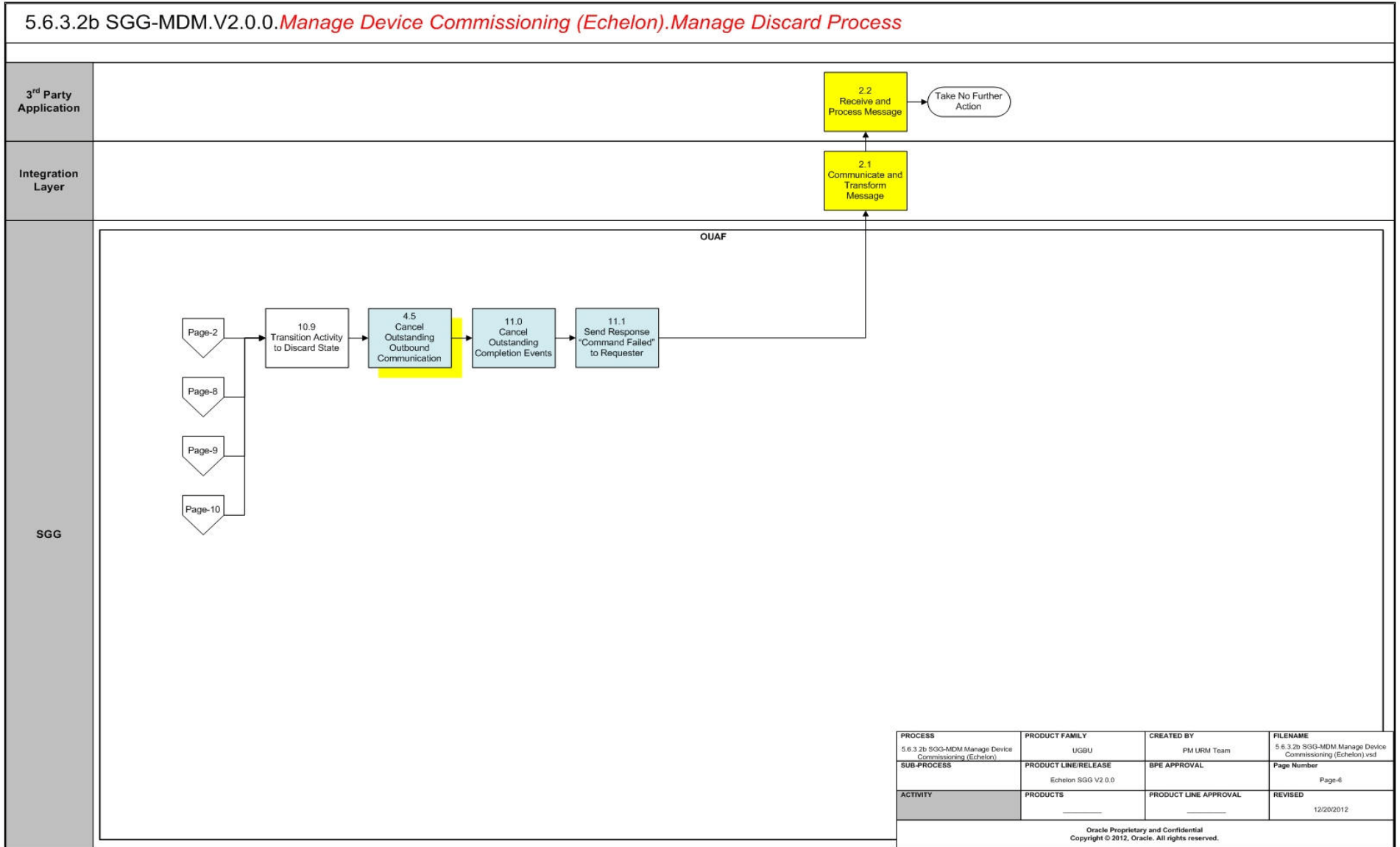
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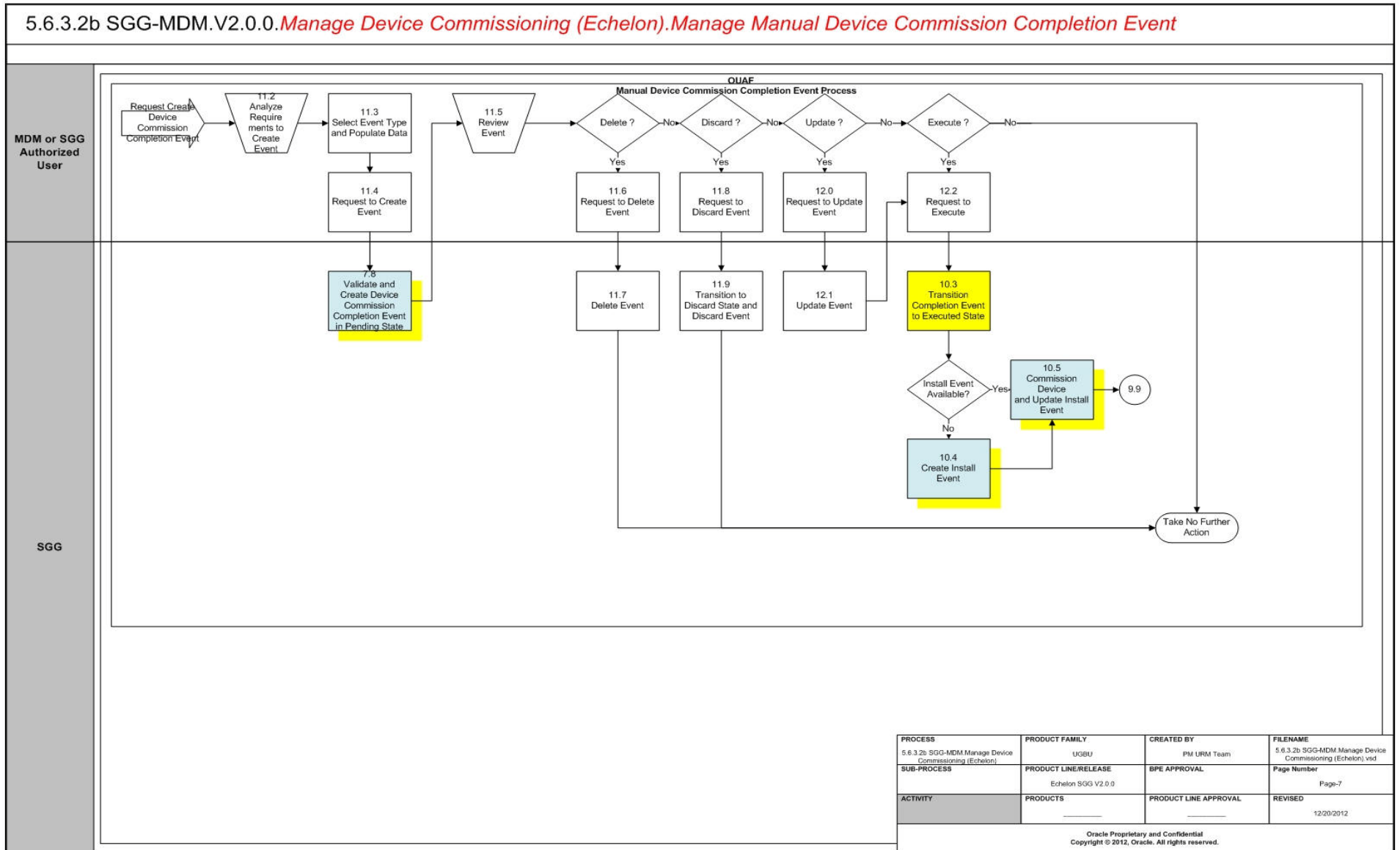
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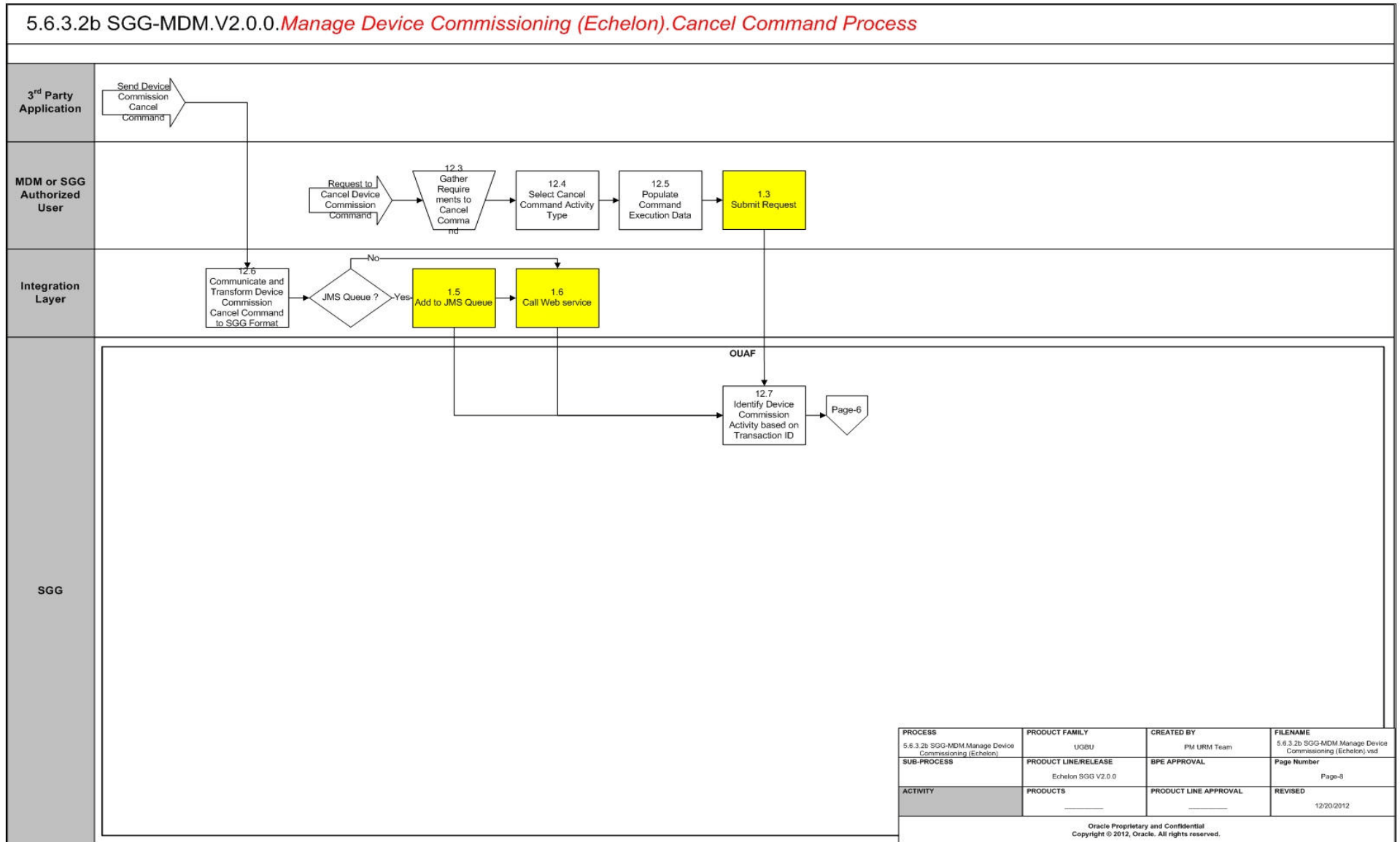
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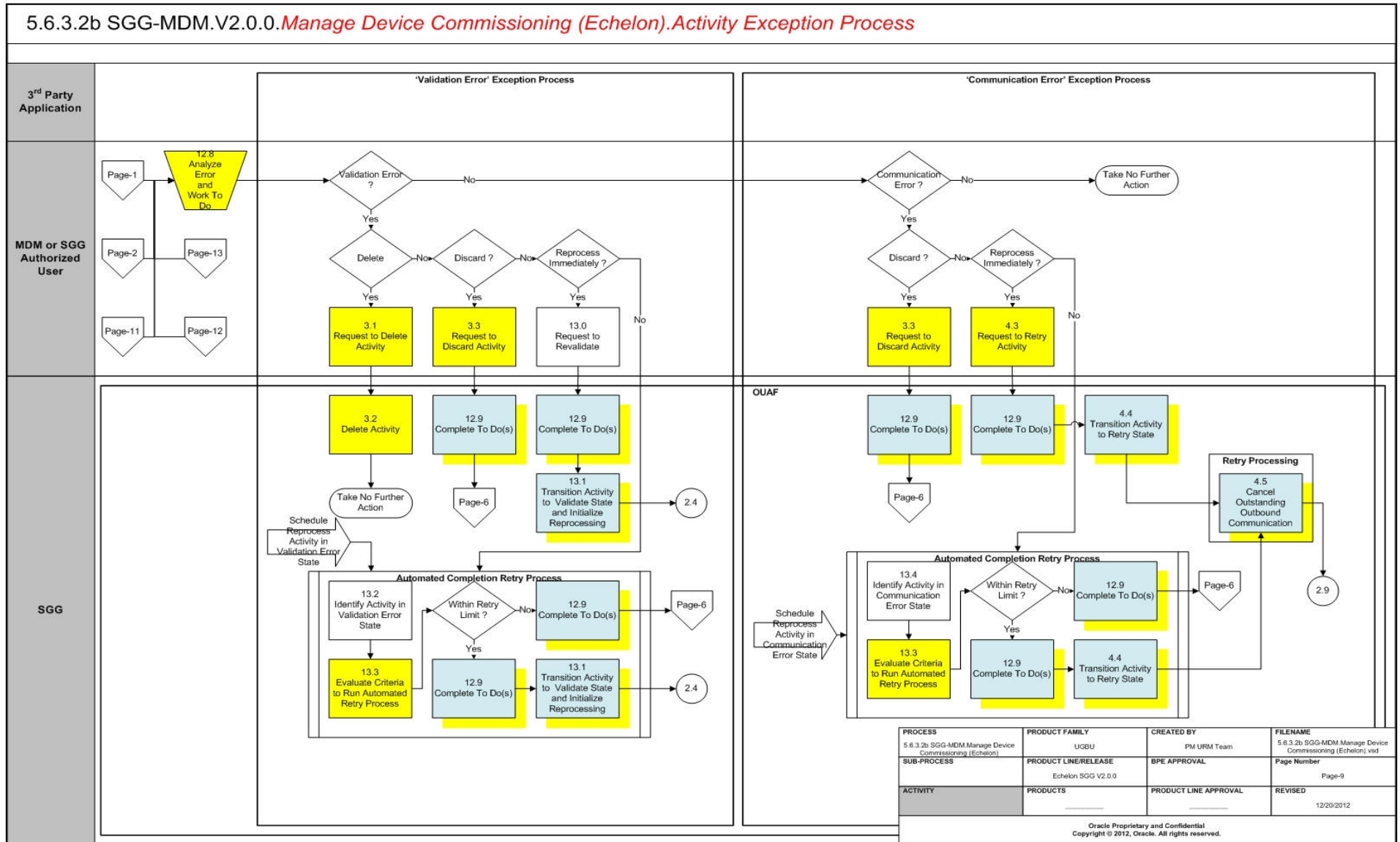
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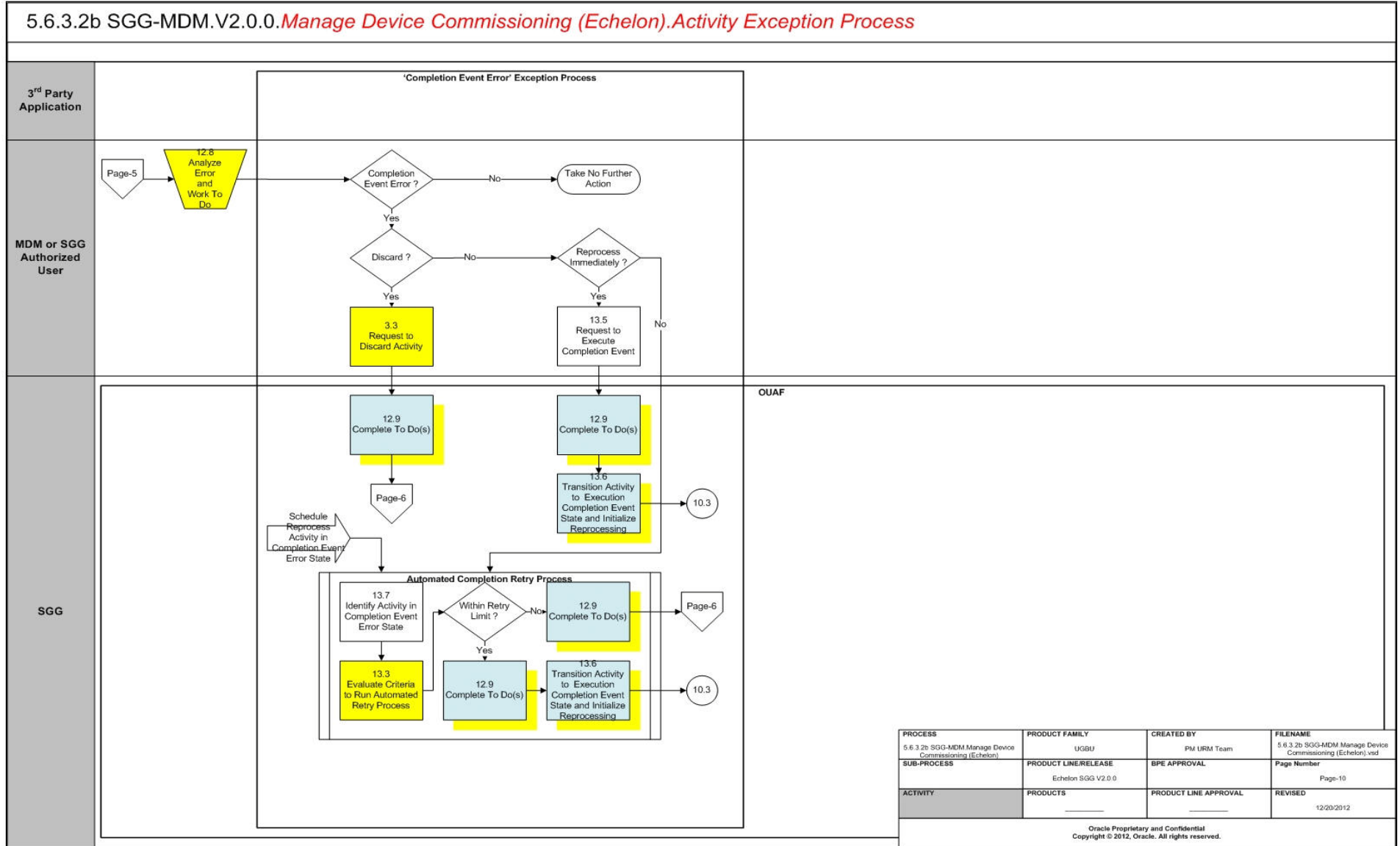
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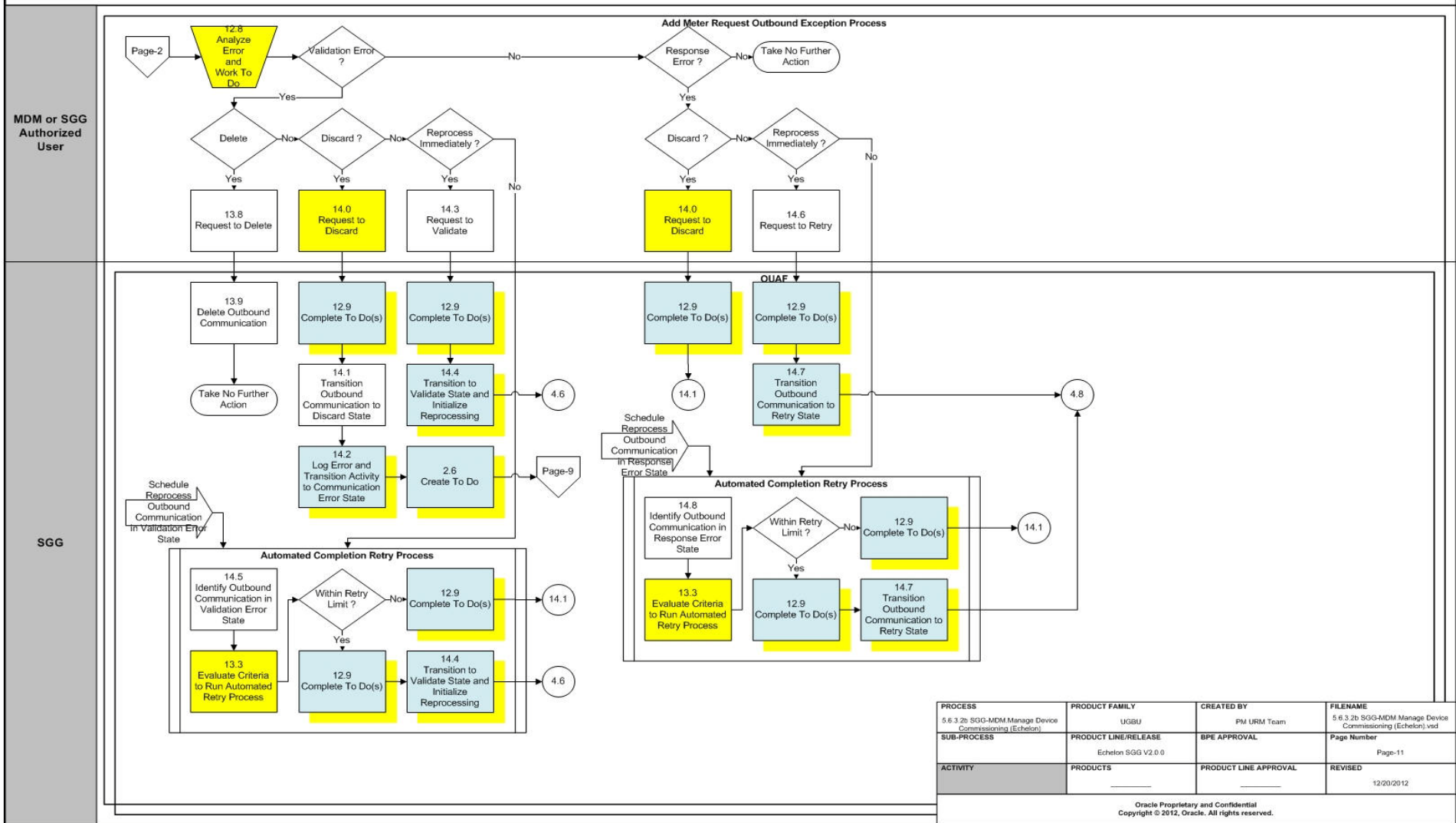


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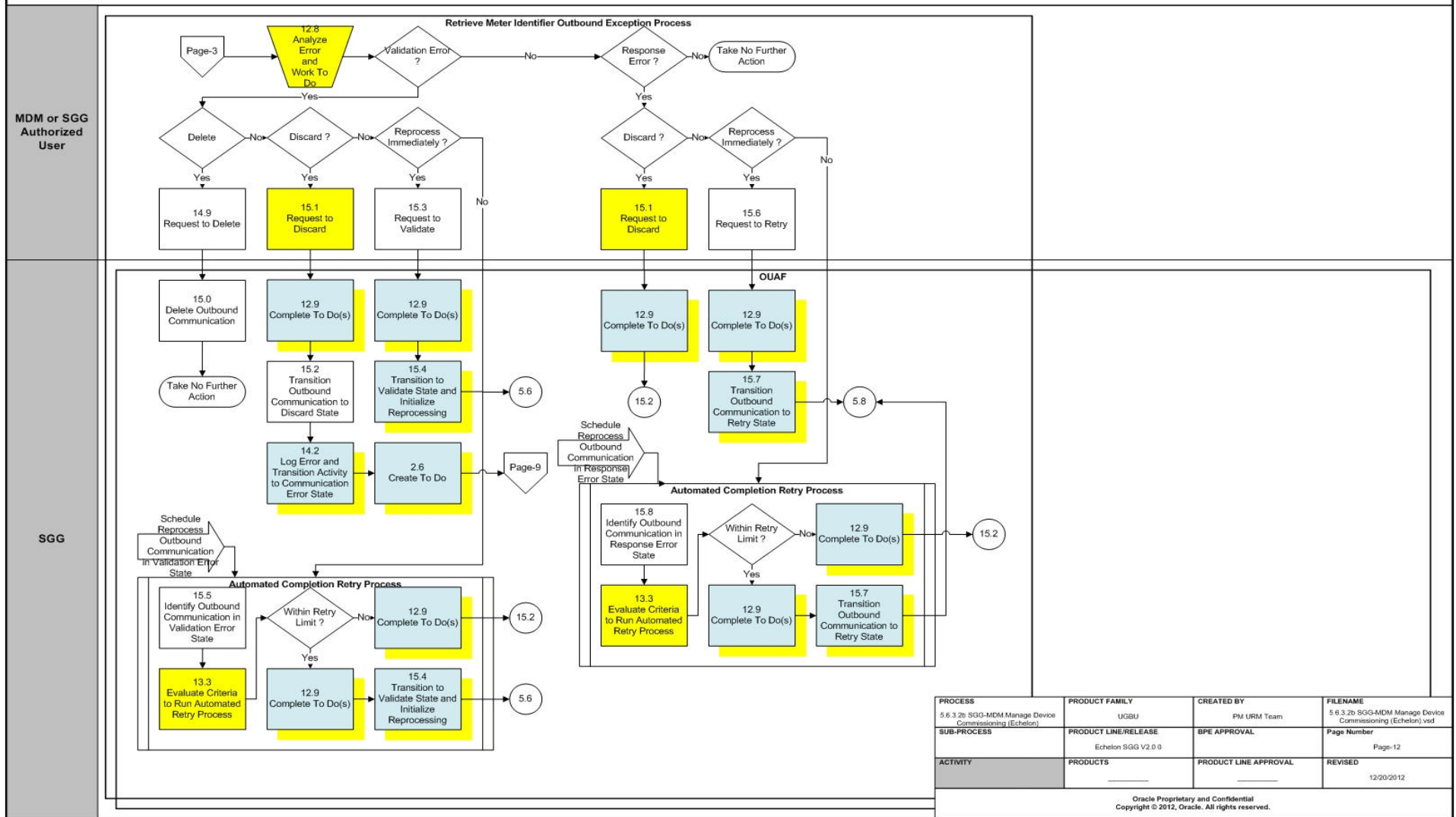
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5.6.3.2b SGG-MDM.V2.0.0.Manage Device Commissioning (Echelon).Add Meter Request Exception Process



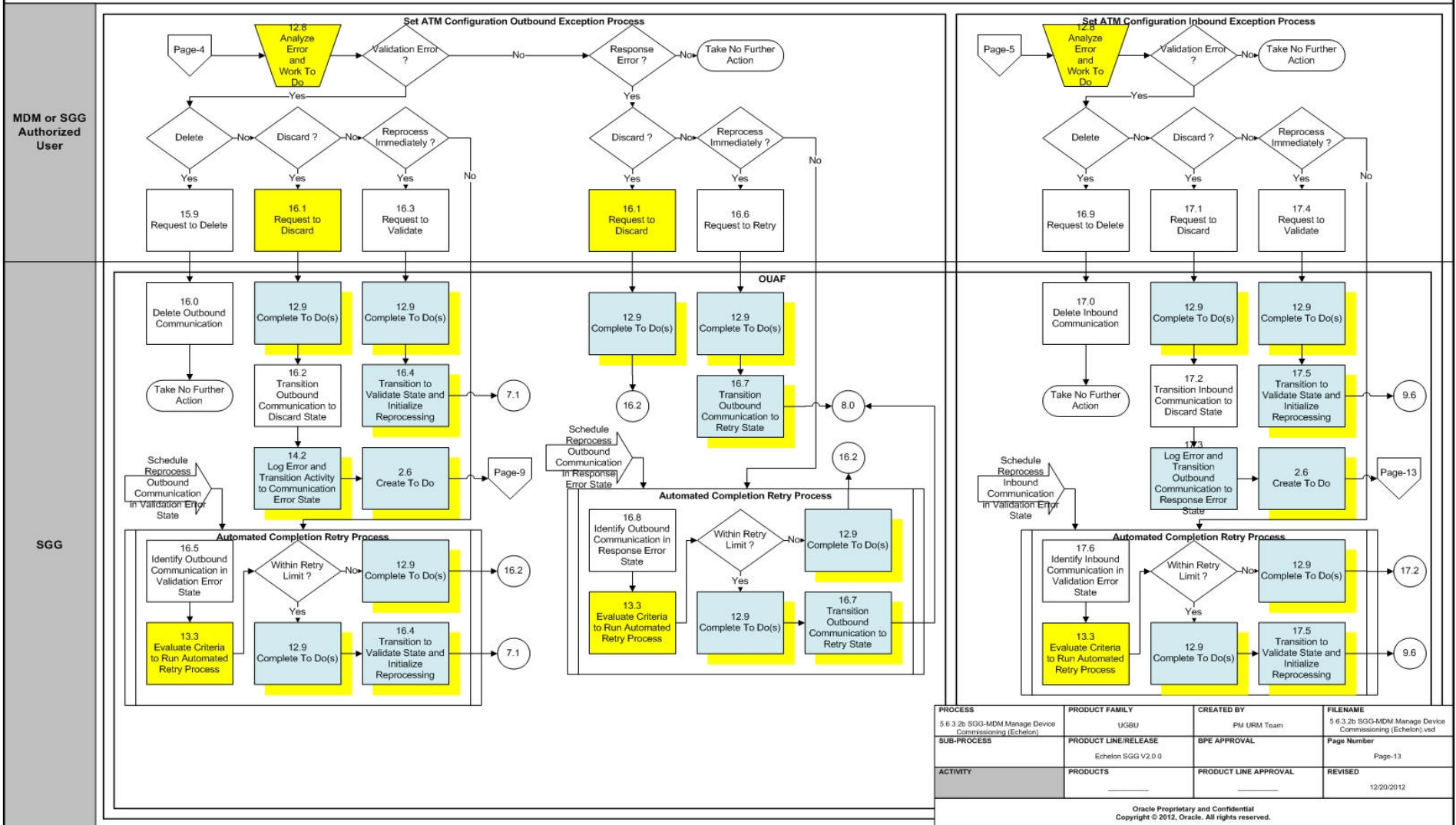
Manage Device Commissioning (Echelon) Page 12

5.6.3.2b SGG-MDM.V2.0.0. *Manage Device Commissioning (Echelon).Retrieve Meter Identifier Exception Process*



Manage Device Commissioning (Echelon) Page 13

5.6.3.2b SGG-MDM.V2.0.0.Manage Device Commissioning (Echelon).Set ATM Configuration Outbound and Inbound Exception Process



SGG-MDM.Manage Device Commissioning (Echelon) Description

This section includes detailed descriptions of the steps involved in the SGG-MDM.Manage Device Commissioning (Echelon) business process, including:

- **1.0 Gather Requirements to Create Command**
- **1.1 Select Command Activity Type**
- **1.2 Select Device and Populate Command Execution Data**
- **1.3 Submit Request**
- **1.4 Communicate and Transform Device Commission Command to SGG Format**
- **1.5 Add to JMS Queue**
- **1.6 Call Web service**
- **1.7 Identify Device and Head-End (Service Provider)**
- **1.8 Identify Service Point**
- **1.9 Validate Required Data**
- **2.0 Determine Send Method and Send Error Message**
- **2.1 Communicate and Transform Message**
- **2.2 Receive and Process Message**
- **2.3 Create Device Commission Activity in Pending State**
- **2.4 Validate Ability to Process Command and Transition Activity to Validate State**
- **2.5 Log Error and Transition Activity to Validation Error State**
- **2.6 Create To Do**
- **2.7 Send Response "Command Received" and Transition to Wait for Eff. Date State**
- **2.8 Evaluate Execution Date and Time**
- **2.9 Transition Activity to Commission Ready State**
- **3.0 Review Activity in Eff. Date State**
- **3.1 Request to Delete Activity**
- **3.2 Delete Activity**
- **3.3 Request to Discard Activity**
- **3.4 Populate Changes and Request to Update Activity**
- **3.5 Update Activity**
- **3.6 Request to Commission Device**
- **3.7 Initiate Device Commission Process**
- **3.8 Evaluate if Meter is Registered in Head-End**
- **3.9 Transition Activity to Communication in Progress State**
- **4.0 Evaluate Wait Period for Response**
- **4.1 Log Error and Transition Activity to Communication Error State**
- **4.2 Review Activity in Comm. In Progress State**
- **4.3 Request to Retry Activity**
- **4.4 Transition Activity to Retry State**

- 4.5 Cancel Outstanding Outbound Communication
- 4.6 Create and Validate Request to Add Meter
- 4.7 Log Error and Transition to Validation Error State
- 4.8 Populate Details and Send Request in Awaiting Response State
- 4.9 Communicate and Transform Request to Echelon Format
- 5.0 Receive and Process Request to Add Meter
- 5.1 Send Add Meter Response
- 5.2 Communicate and Transform Response to SGG Format
- 5.3 Log Error and Transition to Response Error State
- 5.4 Update Device Information with Head-End System Device Id
- 5.5 Complete Add Meter Communication
- 5.6 Create and Validate Request to Retrieve Meter Identifier
- 5.7 Log Error and Transition to Validation Error State
- 5.8 Populate Details and Send Retrieve Meter Identifier Request in Awaiting Response State
- 5.9 Receive and Process Request
- 6.0 Send Device Id
- 6.1 Complete Retrieve Meter Identifier Communication
- 6.2 Evaluate Wait Period for Response
- 6.3 Log Error and Transition to Response Error State
- 6.4 Review Outbound Communication
- 6.5 Request to Discard
- 6.6 Populate Changes and Request to Update
- 6.7 Update Outbound Communication
- 6.8 Request to Retry
- 6.9 Transition Outbound Communication to Retry State
- 7.0 Create Set ATM Configuration Request for Device Commission
- 7.1 Validate Communication Type and Transition to Validate State
- 7.2 Log Error and Transition to Validation Error State
- 7.3 Evaluate Meter for ATM Readiness
- 7.4 Create To Do and Transition to Manual Processing State
- 7.5 Analyze To Do and Request Commission
 - 7.5.1 Assign Meter to Concentrator
 - 7.5.2 Report Result to SGG
- 7.6 Record Results and Complete To Do
- 7.7 Transition Outbound to Manually Completed State
- 7.8 Validate and Create Device Commission Completion Event in Pending State
- 7.9 Update Completion of Device Commission on Activity

- 8.0 Populate Details and Send Set ATM Configuration Required Request in Awaiting Response State
- 8.1 Receive and Process Set ATM Configuration Request and Assign Meter to Data Concentrator
- 8.2 Request and Process Configuration and Assignment
- 8.3 Analyze Message and Send Acknowledgement
- 8.4 Evaluate Acknowledgement
- 8.5 Log Error and Transition to Response Error State
- 8.6 Review Outbound Communication
- 8.7 Request to Discard
- 8.8 Transition Outbound Communication to Discard State
- 8.9 Populate Changes and Request to Update
- 9.0 Update Outbound Communication
- 9.1 Request to Retry
- 9.2 Transition Outbound Communication to Retry State
- 9.3 Send Acknowledgement on Meter Assignment
- 9.4 Receive and Process Set ATM Configuration Response
 - 9.4.1 Identify Response Message and Processing Method
- 9.5 Pre-process and Create Inbound Message in Pending State
- 9.6 Validate Ability to Process Inbound Communication and Transition to Validate State
- 9.7 Log Error and Transition Inbound Communication to Validation Error State
- 9.8 Transition to Create Completion Event State
- 9.9 Transition Inbound to Completed State
- 10.0 Transition Device Commission Outbound Communication to Completed State
- 10.1 Transition Activity to Waiting for Measurement State
- 10.2 Transition Activity to Execute Completion Event State
- 10.3 Transition Completion Event to Executed State
- 10.4 Create Install Event
- 10.5 Commission Device and Update Install Event
- 10.6 Log Error and Transition Activity to Completion Event Error State
- 10.7 Transition Activity to Completion State
- 10.8 Create and Send Commission Success Notification to Requester
- 10.9 Transition Activity to Discard State
- 11.0 Cancel Outstanding Completion Events
- 11.1 Send Response "Command Failed" to Requester
- 11.2 Analyze Requirements to Create Event
- 11.3 Select Event Type and Populate Data
- 11.4 Request to Create Event

- 11.5 Review Event
- 11.6 Request to Delete Event
- 11.7 Delete Event
- 11.8 Request to Discard Event
- 11.9 Transition to Discard State and Discard Event
- 12.0 Request to Update Event
- 12.1 Update Event
- 12.2 Request to Execute
- 12.3 Gather Requirements to Cancel Command
- 12.4 Select Cancel Command Activity Type
- 12.5 Populate Command Execution Data
- 12.6 Communicate and Transform Device Commission Cancel Command to SGG Format
- 12.7 Identify Device Commission Activity based on Transaction ID
- 12.8 Analyze Error and Work To Do
- 12.9 Complete To Do(s)
- 13.0 Request to Revalidate
- 13.1 Transition Activity to Validate State and Initialize Reprocessing
- 13.2 Identify Activity in Validation Error State
- 13.3 Evaluate Criteria to Run Automated Retry Process
- 13.4 Identify Activity in Communication Error State
- 13.5 Request to Execute Completion Event
- 13.6 Transition Activity to Execution Completion Event State and Initialize Reprocessing
- 13.7 Identify Activity in Completion Event Error State
- 13.8 Request to Delete
- 13.9 Delete Outbound Communication
- 14.0 Request to Discard
- 14.1 Transition Outbound Communication to Discard State
- 14.1 Transition Outbound Communication to Discard State
- 14.2 Log Error and Transition Activity to Communication Error State
- 14.3 Request to Validate
- 14.4 Transition to Validate State and Initialize Reprocessing
- 14.5 Identify Outbound Communication in Validation Error State
- 14.6 Request to Retry
- 14.7 Transition Outbound Communication to Retry State
- 14.8 Identify Outbound Communication in Response Error State
- 14.9 Request to Delete
- 15.0 Delete Outbound Communication

- 15.1 Request to Discard
- 15.2 Transition Outbound Communication to Discard State
- 15.3 Request to Validate
- 15.4 Transition to Validate State and Initialize Reprocessing
- 15.5 Identify Outbound Communication in Validation Error State
- 15.6 Request to Retry
- 15.7 Transition Outbound Communication to Retry State
- 15.8 Identify Outbound Communication in Response Error State
- 15.9 Request to Delete
- 16.0 Delete Outbound Communication
- 16.1 Request to Discard
- 16.2 Transition Outbound Communication to Discard State
- 16.3 Request to Validate
- 16.4 Transition to Validate State and Initialize Reprocessing
- 16.5 Identify Outbound Communication in Validation Error State
- 16.5 Identify Outbound Communication in Validation Error State
- 16.6 Request to Retry
- 16.7 Transition Outbound Communication to Retry State
- 16.8 Identify Outbound Communication in Response Error State
- 16.9 Request to Delete
- 17.0 Delete Outbound Communication
- 17.1 Request to Discard
- 17.2 Transition Inbound Communication to Discard State
- 17.3 Log Error and Transition Outbound Communication to Response Error State
- 17.4 Request to Validate
- 17.5 Transition to Validate State and Initialize Reprocessing
- 17.6 Identify Inbound Communication in Validation Error State

1.0 Gather Requirements to Create Command

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User analyzes requirements and gathers information required to create Device Commission command.

1.1 Select Command Activity Type

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User selects Activity Type to create a Device Commission command request.

Entities to Configure

Activity Type

1.2 Select Device and Populate Command Execution Data

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User selects the device and populates required data such as request effective date, request expiration date, etc. User can also indicate if the command is optional incase future Concurrent Decommissioning command is present.

1.3 Submit Request

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User submits request using Device Commission manual request screen.

Business Objects

D1-DeviceCommission

1.4 Communicate and Transform Device Commission Command to SGG Format

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: Integration Layer

Description: Integration layer facilitates the communication between the 3rd Party Application and the SGG Application. It receives the Device Commission request, transforms, and converts the request into format compatible with SGG Application.

1.5 Add to JMS Queue

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: Integration Layer

Description: Integration Layer adds the Device Commission request to JMS queue.

1.6 Call Web service

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: Integration Layer

Description: Integration Layer calls web services to process further the Device Commission request.

1.7 Identify Device and Head-End (Service Provider)

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Pre-process Request

Actor/Role: SGG

Description: SGG initiates pre-processing of the Device Commission request that came from 3rd Party Application. It attempts to read the request message and determines the Device for which the Commission request is made, and the Head-End system that communicates with the device. Prior to this, SGG identifies the Activity Type related to the Activity.

Note: Typically system has different Activity types configured to reflect different business scenarios, and currently the system will select the Activity type related to Commission command action.

Entities to Configure

Device

Head -End System (Service Provider)

Activity Type

To Do Type

To Do Role

Business Objects	Available Algorithms
D1-DeviceCommission	D1-DEFACTTYP (Determine Activity Type) D1-DDR (Determine Device and Recipient)

1.8 Identify Service Point

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Pre-process Request

Actor/Role: SGG

Description: As a part of pre-processing SGG identifies the Service Point at which the Device needs to be commissioned.

Entities to Configure

Service Point

Install Event

Business Objects

D1-DeviceCommission

Available Algorithms

D1-SETSVCP (Set Service Point)

1.9 Validate Required Data

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Pre-process Request

Actor/Role: SGG

Description: SGG validates the availability and correctness of required information. Usually, SGG checks for Requester information, Device information, Effective Date/Time and Expiration Date/Time, etc.

Entities to Configure

Device

Edge Application Details

Business Objects

D1-DeviceCommission

Available Algorithms

D1-GINPVAL (Common Input Validation)

2.0 Determine Send Method and Send Error Message

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG determines the method to send the error message to 3rd Party Application and sends it.

Note: Sending mechanism could be different and depends on Application landscape. Currently it is determined based on customer requirements.

2.1 Communicate and Transform Message

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: Integration Layer

Description: Integration Layer receives the outbound message from SGG, transforms, and converts it into format compatible with 3rd Party Application.

2.2 Receive and Process Message

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: 3rd Party Application

Description: 3rd Party Application receives message from SGG and processes it.

2.3 Create Device Commission Activity in Pending State

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG creates Device Commission Activity in 'Pending' state.

Business Objects

D1-DeviceCommission

2.4 Validate Ability to Process Command and Transition Activity to Validate State

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Validate Ability to Process Command

Actor/Role: SGG

Description: SGG validates ability to process Device Commission request. Typically, system validates current Device Commission status, Ability of Head-End to support Device Commission, Checks if already any Commission or Decommission command is issued, etc.

Entities to Configure

Device

Service Point

Install Event

Processing Method for Device Commission

Business Objects	Available Algorithms
D1-DeviceCommission	D1-VALACT*TDI (Validate Activity Type and Transition to Error State if Invalid) D1-VALDVCNAC (Validate Device Not Already Commissioned) D1-VHCPCOMMS (Validate Head-End's Capability to Commission Device) D1-CACTCOMM (Check for Existing Active Commissioning Command Request) D1-CHKFDCOMM (Check for Concurrent Decommissioning Command Request) F1-AT-RQJ (Transition to Default Next Status)

2.5 Log Error and Transition Activity to Validation Error State

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Validate Ability to Process Command

Actor/Role: SGG

Description: If any error occurs during validations, SGG logs an error and transitions the Activity to 'Validation Error' state.

Business Objects

D1-DeviceCommission

2.6 Create To Do

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: Once an error is logged, SGG creates a 'To Do' entry for the Authorized User.

Entities to Configure

To Do Type

To Do Role

Business Objects	Available Algorithms
D1-DeviceCommission	D1-CTDEBOE (Create To Do Entry for BO in Error)
D4-AddMeterRequest	
D4-RetrieveMeterIdentifier	
D4-SetATMConfiguration	
D4-SetATMConfigNotification	

2.7 Send Response "Command Received" and Transition to Wait for Eff. Date State

See **Manage Device Commissioning (Echelon) Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG sends command received acknowledgement to the 3rd party requester.

Entities to Configure

Processing Role

Business Objects	Available Algorithms
D1-DeviceCommission	D1-RRER (Send Received Response to External Requester)

2.8 Evaluate Execution Date and Time

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: If command's Effective Date and Time are available, SGG uses it to determine execution date and time. If the Effective Date and Time are not available, SGG processes the Outbound Communication immediately. If Effective Date and Time are in the future, System waits in 'Wait for Effective Date' state, else, it initiates the Outbound Communication.

Entities to Configure

Effective Date and Time

Business Objects	Available Algorithms
D1-DeviceCommission	D1-WAITEFFDT (Wait for Effective Date)

2.9 Transition Activity to Commission Ready State

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions Activity to 'Commission Ready' state where it initiates Outbound Communication. The other possible option of transition to 'Commission Ready' state is when the Authorized User makes a manual request for Commission Device when the Activity is waiting for Effective Date and Time.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-WAITEFFDT (Wait for Effective Date)

3.0 Review Activity in Eff. Date State

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User reviews and analyzes the Activity.

Business Objects
D1-DeviceCommission

3.1 Request to Delete Activity

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: If MDM or SGG Authorized User determines that the Activity is not required, Authorized User requests to delete Activity record.

Business Objects
D1-DeviceCommission

3.2 Delete Activity

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG deletes the Activity.

Note: Once an Activity record is deleted it is permanently removed from the system and cannot be recovered. This option is not recommended for common business practice.

Business Objects

D1-DeviceCommission

3.3 Request to Discard Activity

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User if determines that the Activity is not required, Authorized User requests to discard it.

Business Objects

D1-DeviceCommission

3.4 Populate Changes and Request to Update Activity

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User modifies Activity data and requests to perform appropriate updates.

Business Objects

D1-DeviceCommission

3.5 Update Activity

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG updates the Activity with data populated by Authorized User.

Business Objects

D1-DeviceCommission

3.6 Request to Commission Device

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: If command's effective date and time is in the future and MDM or SGG Authorized User identifies the need to execute command immediately, Authorized User requests to initiate the command processing..

Business Objects

D1-DeviceCommission

3.7 Initiate Device Commission Process

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG determines the processing method for Device Commission Outbound Communication and initiates the Outbound Communication process.

Entities to Configure

Processing Method for Role D1AM (Obtain AMI Device Identifier)

Business Objects

D1-DeviceCommission

Available Algorithms

D1-AMIOWCOMM (AMI Device Identifier Outbound Communication Creation)

3.8 Evaluate if Meter is Registered in Head-End

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG evaluates if Meter is already registered in Head-End system. If Meter is not registered in Head-End, SGG initiates Add Meter processing method and alternatively if Meter is already registered in Head-End but if its Device Id is not present in SGG, it invokes Retrieve Meter Identifier processing method.

Business Objects	Available Algorithms
D4-GenericAMIDeviceIdentifier	D1-GDRFFPA (Default required fields from Parent Activity) D4-CAMIBO (Create applicable AMI Device Identifier BO)

3.9 Transition Activity to Communication in Progress State

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions Activity to 'Communication in Progress' state to monitor response for the outbound communication.

Business Objects	Available Algorithms
D1-DeviceCommission	F1-AT-RQJ (Transition to Default Next Status)

4.0 Evaluate Wait Period for Response

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG periodically checks if the Activity expiration wait time configured for monitoring the response has expired or not.

Entities to Configure
Activity Type

Business Objects	Available Algorithms
D1-DeviceCommission	D1-WTTMOUTEX (Wait Time Out - Transition to Exception)

4.1 Log Error and Transition Activity to Communication Error State

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: If the Activity wait time for outbound communication response has expired, SGG logs an error and transitions Activity to 'Communication Error' state,

Business Objects

D1-DeviceCommission

4.2 Review Activity in Comm. In Progress State

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User reviews and analyzes the Activity.

Business Objects

D1-DeviceCommission

4.3 Request to Retry Activity

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User requests to recreate the Outbound Communication process.

Business Objects

D1-DeviceCommission

4.4 Transition Activity to Retry State

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions Activity to 'Retry' state.

Business Objects

D1-DeviceCommission

Available Algorithms

D1-RBOE (Retry BO in Error)

4.5 Cancel Outstanding Outbound Communication

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG cancels any existing outstanding Outbound Communications.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-COOC (Cancel Outstanding Outbound Communication)

4.6 Create and Validate Request to Add Meter

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Add Meter to Head-End and Retrieve Device Id Outbound Communication Process

Actor/Role: SGG

Description: SGG creates Add Meter Outbound Communication in Pending State and Validates it. Typically, system checks for communication type.

Entities to Configure

Communication Type

Business Objects	Available Algorithms
D4-AddMeterRequest	D1-COMMINFO (Communication Information) D4-DRFPA (Default required fields from Parent Activity) D1-VALCOMTP (Validate Communication Type) F1-AT-RQJ (Transition to Default Next Status (Java))

4.7 Log Error and Transition to Validation Error State

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Add Meter to Head-End and Retrieve Device Id Outbound Communication Process

Actor/Role: SGG

Description: If any error occurs during validations, SGG logs error and transitions the Outbound Communication to 'Validation Error' state.

Business Objects

D4-AddMeterRequest

4.8 Populate Details and Send Request in Awaiting Response State

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Add Meter to Head-End and Retrieve Device Id Outbound Communication Process

Actor/Role: SGG

Description: SGG populates details for Add Meter request and sends it to Head-End System in 'Awaiting Response' state.

Business Objects	Available Algorithms
D4-AddMeterRequest	D4-ADDMETR (Populate Add Meter Request Send Detail) D4-COCOUTMSG (Create Outbound Message For Commissioning - Add Meter Request)

4.9 Communicate and Transform Request to Echelon Format

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Add Meter to Head-End and Retrieve Device Id Outbound Communication Process

Group: Integration Layer (SGG BPEL)

Actor/Role: SGG

Description: Integration Layer of SGG facilitates the communication between the SGG and Echelon Head-End System. It receives the Outbound Communication request, transforms, and converts the request into format compatible with Head-End System.

Business Objects	Available Algorithms
D4-AddMeterRequest	D4-ADDMETR (Populate Add Meter Request Send Detail) D4-COCOUTMSG (Create Outbound Message For Commissioning - Add Meter Request)

5.0 Receive and Process Request to Add Meter

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Add Meter to Head-End and Retrieve Device Id Outbound Communication Process

Actor/Role: Echelon Head-End System

Description: Echelon Head-End System receives the Add Meter request and processes to add Meter details in Head-End system.

Note: This is external and outside the Oracle SGG environment.

5.1 Send Add Meter Response

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Add Meter to Head-End and Retrieve Device Id Outbound Communication Process

Actor/Role: Echelon Head-End System

Description: Echelon Head-End System sends a real-time response back to SGG along with Device Id.

5.2 Communicate and Transform Response to SGG Format

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Add Meter to Head-End and Retrieve Device Id Outbound Communication Process

Group: Integration Layer (SGG BPEL)

Actor/Role: SGG

Description: Integration Layer of SGG facilitates the communication between the Echelon Head-End System and SGG. It receives the synchronous response, transforms, and converts the acknowledgement into format compatible with SGG.

5.3 Log Error and Transition to Response Error State

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Add Meter to Head-End and Retrieve Device Id Outbound Communication Process

Actor/Role: SGG

Description: SGG logs error and transitions Add Meter Outbound Communication to Response Error state.

Business Objects	Available Algorithms
D4-AddMeterRequest	D4-EVSYNCRS (Evaluate Synchronous Response)

5.4 Update Device Information with Head-End System Device Id

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Add Meter to Head-End and Retrieve Device Id Outbound Communication Process

Actor/Role: SGG

Description: SGG updates Device Identifier information on Outbound Communication and Activity.

Business Objects	Available Algorithms
D4-AddMeterRequest	D4-UPDEVID (Update AMI Device ID on Activity)

5.5 Complete Add Meter Communication

See **Manage Device Commissioning (Echelon) Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Add Meter to Head-End and Retrieve Device Id Outbound Communication Process

Actor/Role: SGG

Description: SGG completes Add Meter Outbound Communication.

Business Objects	Available Algorithms
D4-AddMeterRequest	D4-UPSYNCFLA (Update Synchronous Completion Flag on Activity)

5.6 Create and Validate Request to Retrieve Meter Identifier

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: SGG

Description: SGG creates Retrieve Meter Identifier Outbound Communication in Pending State and validates it. Typically, system checks for communication type.

Entities to Configure

Communication Type

Business Objects	Available Algorithms
D4-RetrieveMeterIdentifier	D1-COMMINFO (Communication Information) D4-DRFPA (Default required fields from Parent Activity) D1-VALCOMTP (Validate Communication Type) F1-AT-RQJ (Transition to Default Next Status (Java))

5.7 Log Error and Transition to Validation Error State

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: SGG

Description: If any error occurs during validations, SGG logs error and transitions the Outbound Communication to 'Validation Error' state.

Business Objects

D4-RetrieveMeterIdentifier

5.8 Populate Details and Send Retrieve Meter Identifier Request in Awaiting Response State

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: SGG

Description: SGG populates details for Retrieve Meter Identifier request and sends it to Head-End System in 'Awaiting Response' state.

Entities to Configure

Communication Type

Business Objects	Available Algorithms
D4-RetrieveMeterIdentifier	D4-REDMETR (Populate the Read Meter Identifier Send Detail) D4-RMCOUTMSG (Create Outbound Message For Commissioning - Retrieve Meter)

5.9 Receive and Process Request

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: Echelon Head-End System

Description: SGG populates details for Retrieve Meter Identifier request and sends it to Head-End System in 'Awaiting Response' state.

6.0 Send Device Id

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: Echelon Head-End System

Description: Echelon Head-End System sends a real-time response back to SGG along with Device Id.

6.1 Complete Retrieve Meter Identifier Communication

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: SGG

Description: SGG completes Retrieve Meter Identifier Outbound Communication.

Business Objects	Available Algorithms
D4-RetrieveMeterIdentifier	D4-UPSYNCFLA (Update Synchronous Completion Flag on Activity)

6.2 Evaluate Wait Period for Response

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: SGG

Description: SGG periodically checks if the Outbound Communication expiration wait time configured for monitoring the response has expired or not.

Entities to Configure

Outbound Communication Type

Business Objects	Available Algorithms
D4-RetrieveMeterIdentifier	D4-UPSYNCFLA (Update Synchronous Completion Flag on Activity)

Customizable process

D1-OCWT (Outbound Communication Wait - Monitor)

6.3 Log Error and Transition to Response Error State

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: SGG

Description: If the wait time for outbound communication response has expired, SGG logs error and transitions the Outbound Communication to 'Response Error' state.

Business Objects

D4-RetrieveMeterIdentifier

6.4 Review Outbound Communication

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User reviews and analyzes the Outbound Communication.

Business Objects

D4-RetrieveMeterIdentifier

6.5 Request to Discard

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User if determines that the Outbound Communication is not required, Authorized User requests to discard it.

Business Objects

D4-RetrieveMeterIdentifier

6.6 Populate Changes and Request to Update

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User modifies Outbound Communication data and requests to perform appropriate updates

Business Objects

D4-RetrieveMeterIdentifier

6.7 Update Outbound Communication

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: SGG

Description: SGG updates the Outbound Communication with data populated by Authorized User.

Business Objects

D4-RetrieveMeterIdentifier

6.8 Request to Retry

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User requests to recreate the Outbound Communication.

Business Objects

D4-RetrieveMeterIdentifier

6.9 Transition Outbound Communication to Retry State

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Communication Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Retry' state.

Business Objects

D4-RetrieveMeterIdentifier

7.0 Create Set ATM Configuration Request for Device Commission

See **Manage Device Commissioning (Echelon) Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG creates Set ATM Configuration Outbound Communication in Pending State. Prior to this, SGG updates the Device Id on Device.

Entities to Configure

Processing Method for Role D1DC (Device Commission)

Business Objects	Available Algorithms
D4-SetATMConfiguration	D1-UPDEVIDD (Update AMI Device ID on Device) D1-CMSOBCOMM (Commissioning Outbound Communication Creation) D1-COMMINFO (Communication Information) D4-DRFPA (Default required fields from Parent Activity)

7.1 Validate Communication Type and Transition to Validate State

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG validates for required data in Validation State. Typically, system checks for communication type.

Entities to Configure

Communication Type

Business Objects	Available Algorithms
D4-SetATMConfiguration	D1-VALCOMTP (Validate Communication Type) F1-AT-RQJ (Transition to Default Next Status (Java))

7.2 Log Error and Transition to Validation Error State

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: If any error occurs during validations, SGG logs error and transitions the Outbound Communication to 'Validation Error' state.

Business Objects

D4-SetATMConfiguration

7.3 Evaluate Meter for ATM Readiness

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG evaluates Automated Topology Management (ATM) mode for the device in SGG.

Entities to Configure

Device ATM Mode

Business Objects	Available Algorithms
D4-SetATMConfiguration	D4-EVCRATM (Evaluate criteria for ATM)

7.4 Create To Do and Transition to Manual Processing State

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG if finds that the ATM mode is not present on Device or if it is not Automatic, creates a To Do for Manual Processing in Manual Processing State.

Business Objects	Available Algorithms
D4-SetATMConfiguration	D4-CRTODOMP (Create To Do for Manual Processing)

7.5 Analyze To Do and Request Commission

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User reviews To Do and Requests Head-End System User for Manual Meter Commissioning.

Business Objects

D4-SetATMConfiguration

7.5.1 Assign Meter to Concentrator

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Actor/Role: Echelon Head End System User

Description: Echelon Head End System User will initiate manual action and will assign Meter to a Data Concentrator.

7.5.2 Report Result to SGG

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Actor/Role: Echelon Head End System User

Description: Echelon Head End System User will report result of Device Commissioning to MDM or SGG Authorized User.

7.6 Record Results and Complete To Do

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User records result of Device Commissioning and Completes To Do manually.

Business Objects

D4-SetATMConfiguration

7.7 Transition Outbound to Manually Completed State

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Manually Completed' state.

Business Objects

D4-SetATMConfiguration

7.8 Validate and Create Device Commission Completion Event in Pending State

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG creates Commission Device Completion Event in 'Pending' state. SGG validates ability to process Commission Device Completion Event. Typically, it checks for Completion Event and its related Activity Type, Sequence number for Completion Events, etc.

Business Objects	Available Algorithms
D4-SetATMConfiguration D1-CommissionDevice	D4-CRCCOMPEV (Create Commission Device Completion Event) D1-CEVTINFO (Completion Event - Information) D1-VALCEVT (Validate Completion Event) D1-VALOUTCOM (Validate Outbound Communication)

7.9 Update Completion of Device Commission on Activity

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG completes Device Commission Outbound Communication and updates status on Activity.

Business Objects	Available Algorithms
D4-SetATMConfiguration	D4-UPCCFLGTP (Update Commissioning Completion Flag And Transition Parent Activity)

8.0 Populate Details and Send Set ATM Configuration Required Request in Awaiting Response State

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG populates details for Set ATM Configuration request and sends it to Head-End System in 'Awaiting Response' state.

Business Objects	Available Algorithms
D4-SetATMConfiguration	D4-STATMSD (Populate Set ATM Configuration Send Detail) D4-COUTMSGSA (Create Outbound Message For Set ATM Configuration)

8.1 Receive and Process Set ATM Configuration Request and Assign Meter to Data Concentrator

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: Echelon Head-End System

Description: Echelon Head-End System receives Set ATM Configuration request and processes it. It assigns Meter to Data Concentrator as part of this.

Note: This is external and outside the Oracle SGG environment.

8.2 Request and Process Configuration and Assignment

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: Smart Meter

Description: Smart Meter receives request for ATM Configuration and proceeds forward to automatically assign itself to Data Concentrator.

Note: This is external and outside the Oracle SGG environment.

8.3 Analyze Message and Send Acknowledgement

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: Echelon Head-End System

Description: Echelon Head-End System acknowledges the receipt of Set ATM Configuration request and sends an acknowledgement to SGG.

Note: This is external and outside the Oracle SGG environment.

8.4 Evaluate Acknowledgement

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG evaluates acknowledgement sent by the Head-End.

Business Objects	Available Algorithms
D4-SetATMConfiguration	D4-EVALRESP (Evaluate Response)

8.5 Log Error and Transition to Response Error State

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG logs error and transitions Set ATM Configuration Outbound Communication to Response Error state.

Business Objects
D4-SetATMConfiguration

8.6 Review Outbound Communication

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User reviews and analyzes the Outbound Communication.

Business Objects
D4-SetATMConfiguration

8.7 Request to Discard

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User if determines that the Outbound Communication is not required, Authorized User requests to discard it.

Business Objects

D4-SetATMConfiguration

8.8 Transition Outbound Communication to Discard State

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Discard' state.

Note: When an Outbound Communication is 'Discarded' it still remains in the system database and is not removed, hence, this is the preferred business practice to perform.

Business Objects

D4-SetATMConfiguration

8.9 Populate Changes and Request to Update

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User modifies Outbound Communication data and requests to perform appropriate updates.

Business Objects

D4-SetATMConfiguration

9.0 Update Outbound Communication

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG updates the Outbound Communication with data populated by Authorized User.

Business Objects

D4-SetATMConfiguration

9.1 Request to Retry

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User requests to recreate the Outbound Communication.

Business Objects

D4-SetATMConfiguration

9.2 Transition Outbound Communication to Retry State

See **Manage Device Commissioning (Echelon) Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Retry' state.

Business Objects

D4-SetATMConfiguration

9.3 Send Acknowledgement on Meter Assignment

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Group: Set ATM Configuration Inbound Communication Process

Actor/Role: Smart Meter

Description: Smart Meter sends acknowledgement to Head-End on Meter Assignment to Data Concentrator.

Note: This is external and outside the Oracle SGG environment.

9.4 Receive and Process Set ATM Configuration Response

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Group: Set ATM Configuration Inbound Communication Process

Actor/Role: Echelon Head-End System

Description: Echelon Head-End System receives the Set ATM configuration response from Smart Meter and processes a response for SGG.

Note: This is external and outside the Oracle SGG environment.

9.4.1 Identify Response Message and Processing Method

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Group: Set ATM Configuration Inbound Communication Process

Actor/Role: SGG

Description: SGG identifies the inbound command completion event message and determines appropriate processing method.

Note: The SGG uses device event seeder to perform this action.

Business Objects	Available Algorithms
D1-DeviceEventSeeder	D1-DVEVTINFO (Device Event Info) D1-SETERRFLG (Set Error Flag) D1-SPRID (Service Provider Identification) D1-DEVICEID (Device Identification) D1-SHEVTDITM (Shift Event Date/Times to Standard) D1-DETBOID (Device Event Type and Business Object Identification) D1-SETBO (Set BO)

9.5 Pre-process and Create Inbound Message in Pending State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Group: Set ATM Configuration Inbound Communication Process

Actor/Role: SGG

Description: SGG retrieves details from inbound communication response and performs pre-processing. It then creates Inbound Communication in Pending state.

Entities to Configure

Processing Method Inbound Notification

Business Objects	Available Algorithms
D4-SetATMConfigNotification	D1-COMMINFO (Communication Information) D4-SETDFBOEL (Set default BO elements)

9.6 Validate Ability to Process Inbound Communication and Transition to Validate State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Group: Set ATM Configuration Inbound Communication Process

Actor/Role: SGG

Description: SGG validates ability to process Inbound Communication. Typically, it checks for Communication Type, determines the outbound communication that initiated it and links to it and also evaluates the status of Device Commission event.

Entities to Configure

Inbound Communication Type

Business Objects	Available Algorithms
D4-SetATMConfigNotification	D1-VALCOMTP (Validate Communication Type) D4-FPCOMMBO (Find Initiating Outbound Communication) D4-EVTATMNST (Evaluate Set ATM Notification Status) F1-AT-RQJ (Transition to Default Next Status)

9.7 Log Error and Transition Inbound Communication to Validation Error State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Group: Set ATM Configuration Inbound Communication Process

Actor/Role: SGG

Description: If any error occurs during validations, SGG transitions the Inbound Communication to 'Validation Error' state and logs an error.

Business Object

D4-SetATMConfigNotification

9.8 Transition to Create Completion Event State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Group: Set ATM Configuration Inbound Communication Process

Actor/Role: SGG

Description: SGG transitions Inbound Communication to 'Create Completion Event' state.

Business Objects	Available Algorithms
D4-SetATMConfigNotification	F1-AT-RQJ (Transition to Default Next Status (Java))

9.9 Transition Inbound to Completed State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Group: Set ATM Configuration Inbound Communication Process

Actor/Role: SGG

Description: SGG transitions Inbound Communication to 'Completed' state.

Business Objects	Available Algorithms
D4-SetATMConfigNotification	F1-AT-RQJ (Transition to Default Next Status (Java))

10.0 Transition Device Commission Outbound Communication to Completed State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Group: Set ATM Configuration Inbound Communication Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Completed' state and updates Event Date/Time.

Business Objects	Available Algorithms
D4-SetATMConfigNotification	D1-UPPCMEVDT (Update Parent Outbound Communication's Event Date Time) D1-TRANPRBO (Transition Parent Outbound Communication BO)

10.1 Transition Activity to Waiting for Measurement State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Communication Process

Actor/Role: SGG

Description: SGG transitions Activity to Waiting for Measurement State.

Business Objects	Available Algorithms
D4-SetATMConfigNotification	D4-UPCCFLGTP (Update Commissioning Completion Flag And Transition Parent Activity)

10.2 Transition Activity to Execute Completion Event State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions Activity to 'Execution Completion Event' state because there is no need to wait for IMD for Echelon Adapter.

Business Objects	Available Algorithms
D4-SetATMConfigNotification	D1-CHKIMDFLG (Check For Wait For IMD Flag)

10.3 Transition Completion Event to Executed State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: When the Activity is in 'Execute Completion Event' state, SGG transitions Completion Event to 'Executed' state.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-EXCMPEVTS (Execute Completion Events)
D1-CommissionDevice	

10.4 Create Install Event

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG creates an install Event if it is not available.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-CREINSEVT (Create Install Event)
D1-CommissionDevice	

10.5 Commission Device and Update Install Event

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG updates install Event status to 'Commissioned' state.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-COMMDEV (Commission Device)
D1-CommissionDevice	

10.6 Log Error and Transition Activity to Completion Event Error State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: If any errors occur during transitioning of Completion Event to 'Executed' state, SGG logs error and transitions Activity to 'Completion Event Error' state.

Business Object
D1-DeviceCommission
D1-CommissionDevice

10.7 Transition Activity to Completion State

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions Activity to 'Completion' state.

Business Objects	Available Algorithms
D1-DeviceCommission	F1-AT-RQJ (Transition to Default Next Status (Java))

10.8 Create and Send Commission Success Notification to Requester

See **Manage Device Commissioning (Echelon) Page 5** on page 2-6 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG creates the message and sends Device Commission success notification to Requester based on the processing method.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-SRER (Send Success Response to External Requester)

10.9 Transition Activity to Discard State

See **Manage Device Commissioning (Echelon) Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions Activity to 'Discard' state indicating that it cannot be further used. However, it remains in the system.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-TPATOF (Transition Parent Activity To Failed)

11.0 Cancel Outstanding Completion Events

See **Manage Device Commissioning (Echelon) Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: When Activity is discarded, SGG cancels any existing outstanding Completion Events.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-COCE (Cancel Outstanding Completion Events)

11.1 Send Response "Command Failed" to Requester

See **Manage Device Commissioning (Echelon) Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG creates the message and sends Command Fail response to Requester based on the identified method.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-FRER (Send Fail Response to External Requester)

11.2 Analyze Requirements to Create Event

See **Manage Device Commissioning (Echelon) Page 7** on page 2-8 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User analyzes requirements and gathers information required to create Device Commission Completion Event.

Note: In general, creating Completion Event manually is not the practical business practice.

11.3 Select Event Type and Populate Data

See **Manage Device Commissioning (Echelon) Page 7** on page 2-8 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User selects the event type as Device Commissioning Completion Event and populates the required data.

11.4 Request to Create Event

See **Manage Device Commissioning (Echelon) Page 7** on page 2-8 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User makes a request to create a Device Commissioning Completion Event.

11.5 Review Event

See **Manage Device Commissioning (Echelon) Page 7** on page 2-8 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User can review and analyze the Device Commissioning Completion Event.

Business Object

D1-CompletionEvent

D1-CommissionDevice

11.6 Request to Delete Event

See **Manage Device Commissioning (Echelon) Page 7** on page 2-8 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User if determines that the Device Commissioning Completion Event is not required, Authorized User requests to delete it.

Business Object

D1-CompletionEvent

D1-CommissionDevice

11.7 Delete Event

See **Manage Device Commissioning (Echelon) Page 7** on page 2-8 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: SGG

Description: SGG deletes the Device Commissioning Completion Event.

Business Object

D1-CompletionEvent

D1-CommissionDevice

11.8 Request to Discard Event

See **Manage Device Commissioning (Echelon) Page 7** on page 2-8 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User if determines that the Device Commissioning Completion Event is not required, Authorized User requests to discard it.

Business Object

D1-CompletionEvent

D1-CommissionDevice

11.9 Transition to Discard State and Discard Event

See **Manage Device Commissioning (Echelon) Page 7** on page 2-8 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: SGG

Description: SGG transitions Device Commissioning Completion Event to 'Discard' state.

Business Object

D1-CompletionEvent

D1-CommissionDevice

12.0 Request to Update Event

See **Manage Device Commissioning (Echelon) Page 7** on page 2-8 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User modifies Device Commissioning Completion Event data and requests to perform appropriate updates.

Business Object

D1-CompletionEvent

D1-CommissionDevice

12.1 Update Event

See **Manage Device Commissioning (Echelon) Page 7** on page 2-8 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: SGG

Description: SGG updates the Device Commissioning Completion Event with data populated by Authorized User.

Business Object

D1-CompletionEvent

D1-CommissionDevice

12.2 Request to Execute

See **Manage Device Commissioning (Echelon) Page 8** on page 2-9 for the business process diagram associated with this activity.

Group: Manual Device Commission Completion Event Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User requests to 'Execute' Device Commissioning Completion Event.

Business Object

D1-CompletionEvent

D1-CommissionDevice

12.3 Gather Requirements to Cancel Command

See **Manage Device Commissioning (Echelon) Page 8** on page 2-9 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User analyzes requirements and gathers information required to cancel Device Commission command.

12.4 Select Cancel Command Activity Type

See **Manage Device Commissioning (Echelon) Page 8** on page 2-9 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User selects Activity Type as 'Cancel Command' to cancel Device Commission request.

12.5 Populate Command Execution Data

See **Manage Device Commissioning (Echelon) Page 8** on page 2-9 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User populates the required data such as Parent Activity ID, Request expiration date, Recipient information, etc

12.6 Communicate and Transform Device Commission Cancel Command to SGG Format

See **Manage Device Commissioning (Echelon) Page 8** on page 2-9 for the business process diagram associated with this activity.

Actor/Role: Integration Layer

Description: Integration Layer facilitates the communication between the 3rd Party Application and the SGG Application. It receives the Cancel Command request, transforms, and converts the request into format compatible with SGG Application.

12.7 Identify Device Commission Activity based on Transaction ID

See **Manage Device Commissioning (Echelon) Page 8** on page 2-9 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG identifies the Device Commission Activity to cancel based on the transaction ID which was created in SGG, when the request originally came from 3rd party Application, and sent later to 3rd party Application. However, in case of manual request from Authorized User, the Activity is identified based on manual selection while populating the required data for cancel command request.

12.8 Analyze Error and Work To Do

See **Manage Device Commissioning (Echelon) Page 9** on page 2-10 for the business process diagram associated with this activity.

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User analyzes the error logged and respective To Do created to determine the corrective action and to perform work.

Business Object

D1-DeviceCommission

D4-AddMeterRequest

D4-RetrieveMeterIdentifier

D4-SetATMConfiguration

D4-SetATMConfigNotification

12.9 Complete To Do(s)

See **Manage Device Commissioning (Echelon) Page 9** on page 2-10 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG finds all non-completed To Do entries and completes them.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-GTDCBO (Generic To Do Completion for BOs)
D4-AddMeterRequest	
D4-RetrieveMeterIdentifier	
D4-SetATMConfiguration	
D4-SetATMConfigNotification	

13.0 Request to Revalidate

See **Manage Device Commissioning (Echelon) Page 9** on page 2-10 for the business process diagram associated with this activity.

Group: 'Validation Error' Exception Process

Actor/Role: MDM or SGG Authorized User

Description: If Authorized User wants to reprocess the Activity, can request to validate it.

Business Object
D1-DeviceCommission

13.1 Transition Activity to Validate State and Initialize Reprocessing

See **Manage Device Commissioning (Echelon) Page 9** on page 2-10 for the business process diagram associated with this activity.

Group: 'Validation Error' Exception Process

Actor/Role: SGG

Description: SGG transitions Activity to 'Validate' state and initializes reprocessing.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-RBOE (Retry BO in Error)

13.2 Identify Activity in Validation Error State

See **Manage Device Commissioning (Echelon) Page 9** on page 2-10 for the business process diagram associated with this activity.

Group: 'Validation Error' Exception Process

Actor/Role: SGG

Description: SGG identifies Activity in 'Validation Error' state.

Business Objects	Available Algorithms
D1-DeviceCommission	D1-CRERR (Command Request Error - Retry)

13.3 Evaluate Criteria to Run Automated Retry Process

See **Manage Device Commissioning (Echelon) Page 9** on page 2-10 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG evaluates criteria to run automated retry process. A Batch process is configured for this.

Note: If Business requires different criteria to retry the process, those criteria could be configured in parameter section of batch process.

Business Object

D1-DeviceCommission
D4-AddMeterRequest
D4-RetrieveMeterIdentifier
D4-SetATMConfiguration
D4-SetATMConfigNotification

Customizable process

D1-CRERR (Command Request Error - Retry)
D1-OCERR (Outbound Communication Error - Retry)
D1-ICERR (Inbound Communication Error - Retry)

13.4 Identify Activity in Communication Error State

See **Manage Device Commissioning (Echelon) Page 9** on page 2-10 for the business process diagram associated with this activity.

Group: 'Communication Error' Exception Process

Actor/Role: SGG

Description: SGG identifies Activity in 'Communication Error' state.

Business Object

D1-DeviceCommission

Customizable process

D1-CRERR (Command Request Error - Retry)

13.5 Request to Execute Completion Event

See **Manage Device Commissioning (Echelon) Page 10** on page 2-11 for the business process diagram associated with this activity.

Group: 'Completion Event Error' Exception Process

Actor/Role: MDM or SGG Authorized User

Description: If Authorized User wants to reprocess the Activity, can request to execute Completion Event.

Business Object

D1-DeviceCommission

13.6 Transition Activity to Execution Completion Event State and Initialize Reprocessing

See **Manage Device Commissioning (Echelon) Page 10** on page 2-11 for the business process diagram associated with this activity.

Group: 'Completion Event Error' Exception Process

Actor/Role: SGG

Description: SGG transitions Activity to 'Execution Completion Event' state and initializes reprocessing.

Business Objects

Available Algorithms

D1-DeviceCommission

D1-RBOE (Retry BO in Error)

13.7 Identify Activity in Completion Event Error State

See **Manage Device Commissioning (Echelon) Page 10** on page 2-11 for the business process diagram associated with this activity.

Group: 'Communication Error' Exception Process

Actor/Role: SGG

Description: SGG identifies Activity in 'Completion Event Error' state.

Business Object

D1-DeviceCommission

Customizable process

D1-CRERR (Command Request Error - Retry)

13.8 Request to Delete

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: If MDM or SGG Authorized User determines that the Outbound Communication is not required, Authorized User can request to delete it.

Business Object

D4-AddMeterRequest

13.9 Delete Outbound Communication

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: SGG

Description: SGG deletes Outbound Communication from the system.

Business Object

D4-AddMeterRequest

14.0 Request to Discard

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User, if determines that the Outbound Communication is not required, Authorized User can request to discard it.

Business Object

D4-AddMeterRequest

14.1 Transition Outbound Communication to Discard State

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Discard' state.

Business Object
D4-AddMeterRequest

14.2 Log Error and Transition Activity to Communication Error State

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: SGG

Description: SGG logs an error and transitions Activity to 'Communication Error' state.

Business Objects	Available Algorithms
D4-AddMeterRequest	D1-TPCOMMTFL (Transition Parent Commissioning Activity To Failed)

14.3 Request to Validate

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: If Authorized User wants to reprocess the Outbound Communication, can request to validate it.

Business Object
D4-AddMeterRequest

14.4 Transition to Validate State and Initialize Reprocessing

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Validate' state and initializes reprocessing.

Business Objects	Available Algorithms
D4-AddMeterRequest	D1-RBOE (Retry BO in Error)

14.5 Identify Outbound Communication in Validation Error State

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: SGG

Description: SGG identifies Outbound Communication in 'Validation Error' state.

Business Objects	Available Algorithms
D4-AddMeterRequest	D1-OCERR (Outbound Communication Error - Retry)

14.6 Request to Retry

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User requests to recreate the Outbound Communication message.

Business Object
D4-AddMeterRequest

14.7 Transition Outbound Communication to Retry State

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Retry' state.

Business Objects	Available Algorithms
D4-AddMeterRequest	D1-RBOE (Retry BO in Error)

14.8 Identify Outbound Communication in Response Error State

See **Manage Device Commissioning (Echelon) Page 11** on page 2-12 for the business process diagram associated with this activity.

Group: Add Meter Request Outbound Exception Process

Actor/Role: SGG

Description: SGG identifies Outbound Communication in 'Response Error' state.

Business Object

D4-AddMeterRequest

Customizable process

D1-OCERR (Outbound Communication Error - Retry)

14.9 Request to Delete

See **Manage Device Commissioning (Echelon) Page 12** on page 2-13 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: If MDM or SGG Authorized User determines that the Outbound Communication is not required, Authorized User can request to delete it.

Business Object

D4-RetrieveMeterIdentifier

15.0 Delete Outbound Communication

See **Manage Device Commissioning (Echelon) Page 12** on page 2-13 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Exception Process

Actor/Role: SGG

Description: SGG deletes Outbound Communication from the system.

Business Object

D4-RetrieveMeterIdentifier

15.1 Request to Discard

See **Manage Device Commissioning (Echelon) Page 12** on page 2-13 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User, if determines that the Outbound Communication is not required, Authorized User can request to discard it.

Business Object

D4-RetrieveMeterIdentifier

15.2 Transition Outbound Communication to Discard State

See **Manage Device Commissioning (Echelon) Page 12** on page 2-13 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Exception Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Discard' state.

Business Object

D4-RetrieveMeterIdentifier

15.3 Request to Validate

See **Manage Device Commissioning (Echelon) Page 12** on page 2-13 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: If Authorized User wants to reprocess the Outbound Communication, can request to validate it.

Business Object

D4-RetrieveMeterIdentifier

15.4 Transition to Validate State and Initialize Reprocessing

See **Manage Device Commissioning (Echelon) Page 12** on page 2-13 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Exception Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Validate' state and initializes reprocessing.

Business Objects	Available Algorithms
D4-RetrieveMeterIdentifier	D1-RBOE (Retry BO in Error)

15.5 Identify Outbound Communication in Validation Error State

See **Manage Device Commissioning (Echelon) Page 12** on page 2-13 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Exception Process

Actor/Role: SGG

Description: SGG identifies Outbound Communication in 'Validation Error' state.

Business Objects	Available Algorithms
D4-RetrieveMeterIdentifier	D1-RBOE (Retry BO in Error)

15.6 Request to Retry

See **Manage Device Commissioning (Echelon) Page 12** on page 2-13 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User requests to recreate the Outbound Communication message.

Business Object
D4-RetrieveMeterIdentifier

15.7 Transition Outbound Communication to Retry State

See **Manage Device Commissioning (Echelon) Page 12** on page 2-13 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Exception Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Retry' state.

Business Objects	Available Algorithms
D4-RetrieveMeterIdentifier	D1-RBOE (Retry BO in Error)

15.8 Identify Outbound Communication in Response Error State

See **Manage Device Commissioning (Echelon) Page 12** on page 2-13 for the business process diagram associated with this activity.

Group: Retrieve Meter Identifier Outbound Exception Process

Actor/Role: SGG

Description: SGG identifies Outbound Communication in 'Response Error' state.

Business Object

D4-RetrieveMeterIdentifier

Customizable process

D1-OCERR (Outbound Communication Error - Retry)

15.9 Request to Delete

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: If MDM or SGG Authorized User determines that the Outbound Communication is not required, Authorized User can request to delete it.

Business Object

D4-SetATMConfiguration

16.0 Delete Outbound Communication

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Exception Process

Actor/Role: SGG

Description: SGG deletes Outbound Communication from the system.

Business Object

D4-SetATMConfiguration

16.1 Request to Discard

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User, if determines that the Outbound Communication is not required, Authorized User can request to discard it.

Business Object

D4-SetATMConfiguration

16.2 Transition Outbound Communication to Discard State

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Exception Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Discard' state.

Business Object

D4-SetATMConfiguration

16.3 Request to Validate

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: If Authorized User wants to reprocess the Outbound Communication, can request to validate it.

Business Object

D4-SetATMConfiguration

16.4 Transition to Validate State and Initialize Reprocessing

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Exception Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Validate' state and initializes reprocessing.

Business Objects	Available Algorithms
D4-SetATMConfiguration	D1-RBOE (Retry BO in Error)

16.5 Identify Outbound Communication in Validation Error State

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Exception Process

Actor/Role: SGG

Description: SGG identifies Outbound Communication in 'Validation Error' state.

Business Objects	Available Algorithms
D4-SetATMConfiguration	D1-OCERR (Outbound Communication Error - Retry)

16.6 Request to Retry

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User requests to recreate the Outbound Communication.

Business Object
D4-SetATMConfiguration

16.7 Transition Outbound Communication to Retry State

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Exception Process

Actor/Role: SGG

Description: SGG transitions Outbound Communication to 'Retry' state.

Business Objects	Available Algorithms
D4-SetATMConfiguration	D1-RBOE (Retry BO in Error)

16.8 Identify Outbound Communication in Response Error State

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Outbound Exception Process

Actor/Role: SGG

Description: SGG identifies Outbound Communication in 'Response Error' state.

Business Object

D4-SetATMConfiguration

Customizable process

D1-OCERR (Outbound Communication Error - Retry)

16.9 Request to Delete

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Inbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: If MDM or SGG Authorized User determines that the Outbound Communication is not required, Authorized User can request to delete it.

Business Object

D4-SetATMConfigNotification

17.0 Delete Outbound Communication

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Inbound Exception Process

Actor/Role: SGG

Description: SGG deletes Inbound Communication.

Business Object

D4-SetATMConfigNotification

17.1 Request to Discard

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Inbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: MDM or SGG Authorized User, if determines that the Inbound Communication is not required, Authorized User can request to discard it.

Business Object

D4-SetATMConfigNotification

17.2 Transition Inbound Communication to Discard State

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Inbound Exception Process

Actor/Role: SGG

Description: SGG transitions Inbound Communication to 'Discard' state.

Business Object

D4-SetATMConfigNotification

17.3 Log Error and Transition Outbound Communication to Response Error State

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Inbound Exception Process

Actor/Role: SGG

Description: SGG logs error and transitions Outbound Communication to Response Error state.

Business Objects

D4-SetATMConfigNotification

Available Algorithms

D1-FAILPCOUT (Fail Parent Outbound Activity)

17.4 Request to Validate

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Inbound Exception Process

Actor/Role: MDM or SGG Authorized User

Description: If Authorized User wants to reprocess the inbound communication, can request to validate it.

Business Object

D4-SetATMConfigNotification

17.5 Transition to Validate State and Initialize Reprocessing

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Inbound Exception Process

Actor/Role: SGG

Description: SGG transitions Inbound Communication to 'Validate' state and initializes reprocessing. .

Business Objects

Available Algorithms

D4-SetATMConfigNotification

D1-RBOE (Retry BO in Error)

17.6 Identify Inbound Communication in Validation Error State

See **Manage Device Commissioning (Echelon) Page 13** on page 2-14 for the business process diagram associated with this activity.

Group: Set ATM Configuration Inbound Exception Process

Actor/Role: SGG

Description: SGG identifies Inbound Communication in 'Validation Error' state.

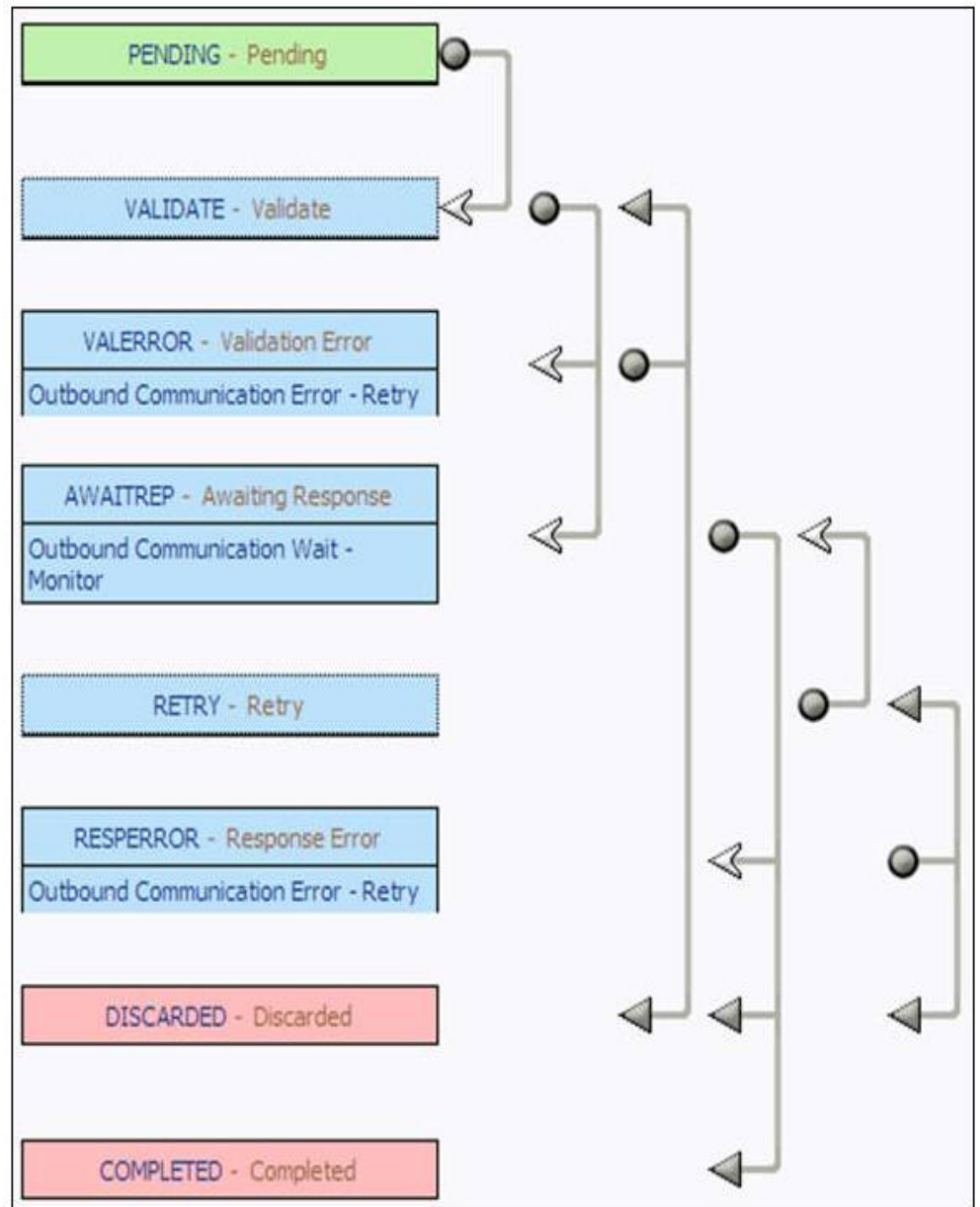
Business Object

D4-SetATMConfigNotification

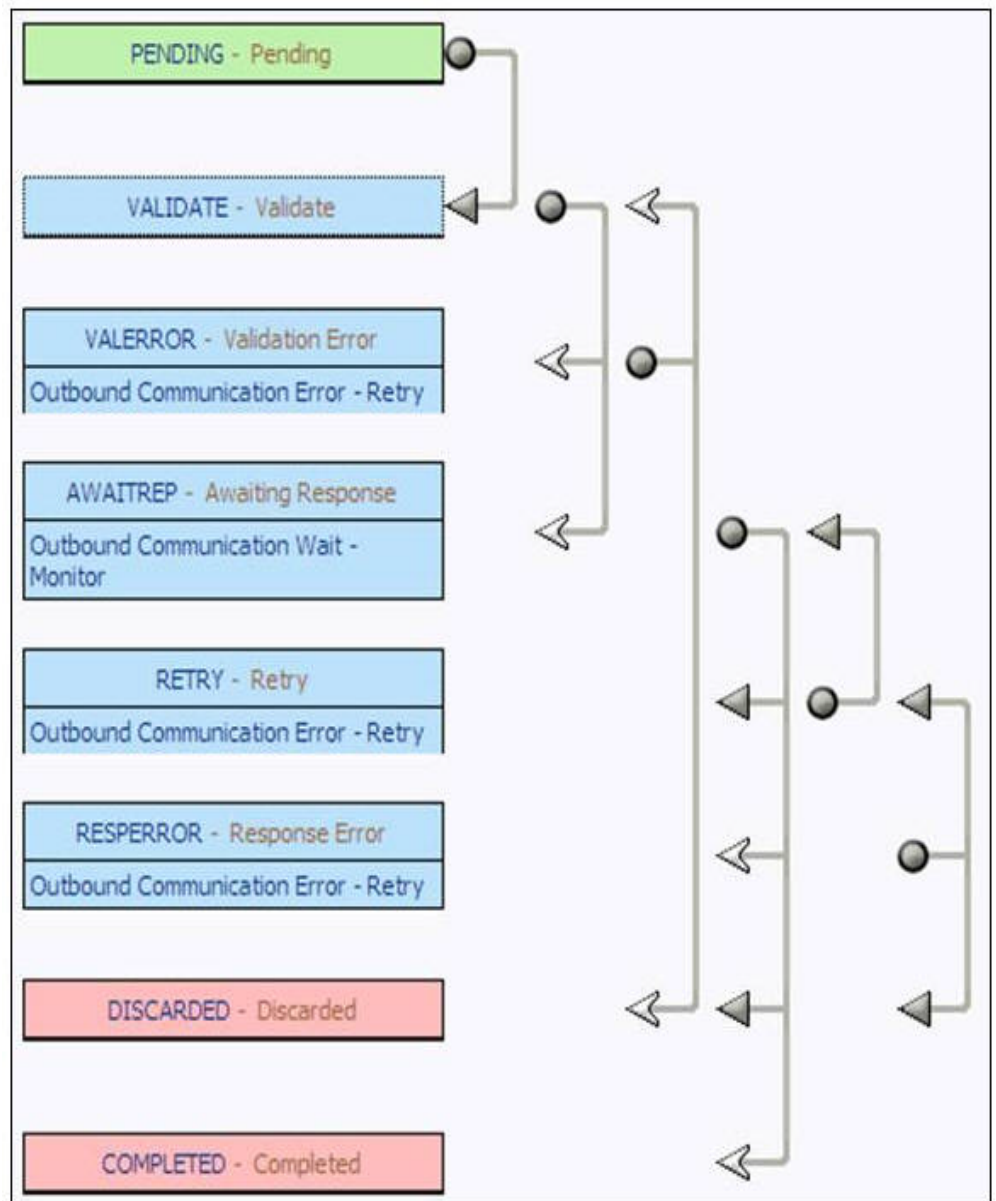
Customizable process

D1-ICERR (Inbound Communication Error - Retry)

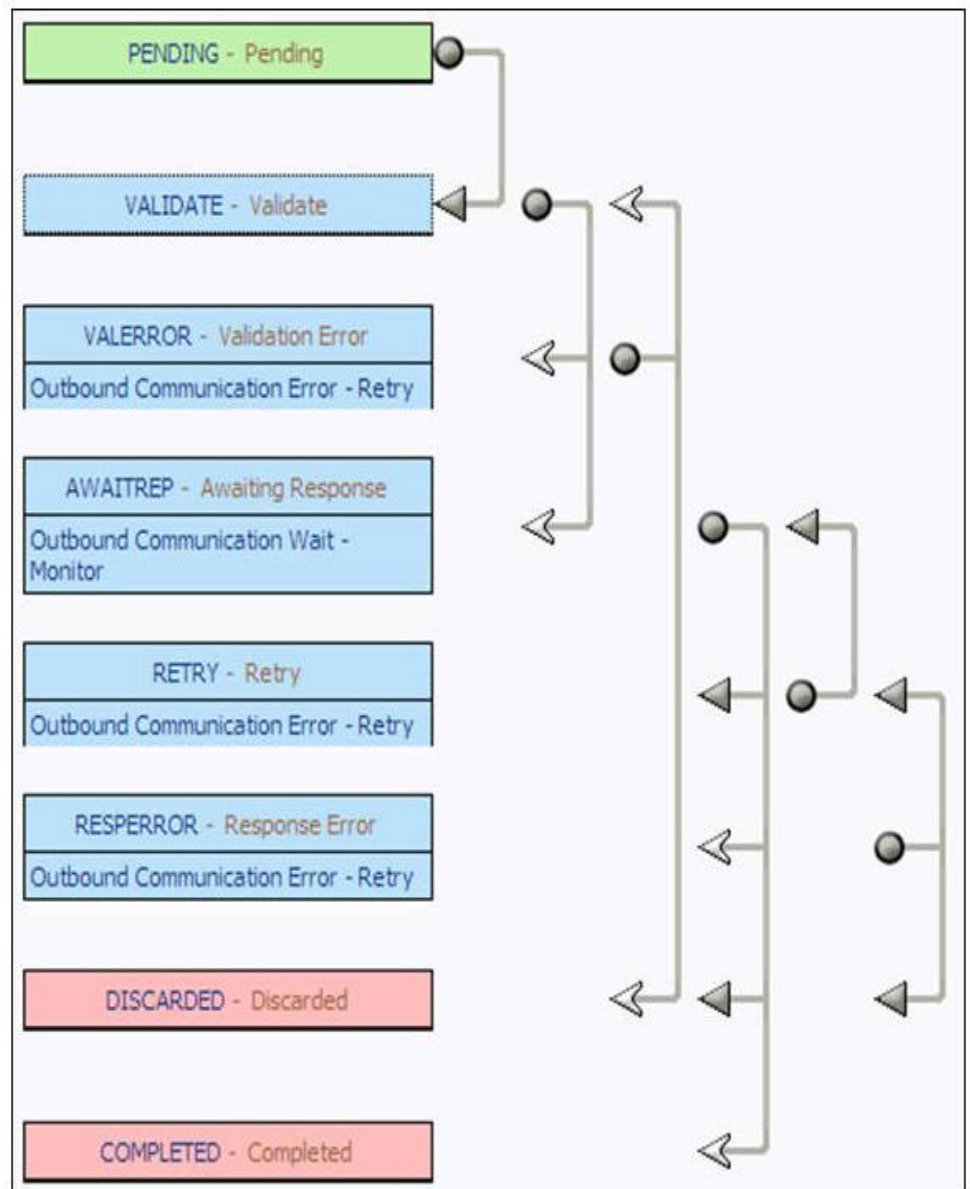
D4-AddMeterRequest



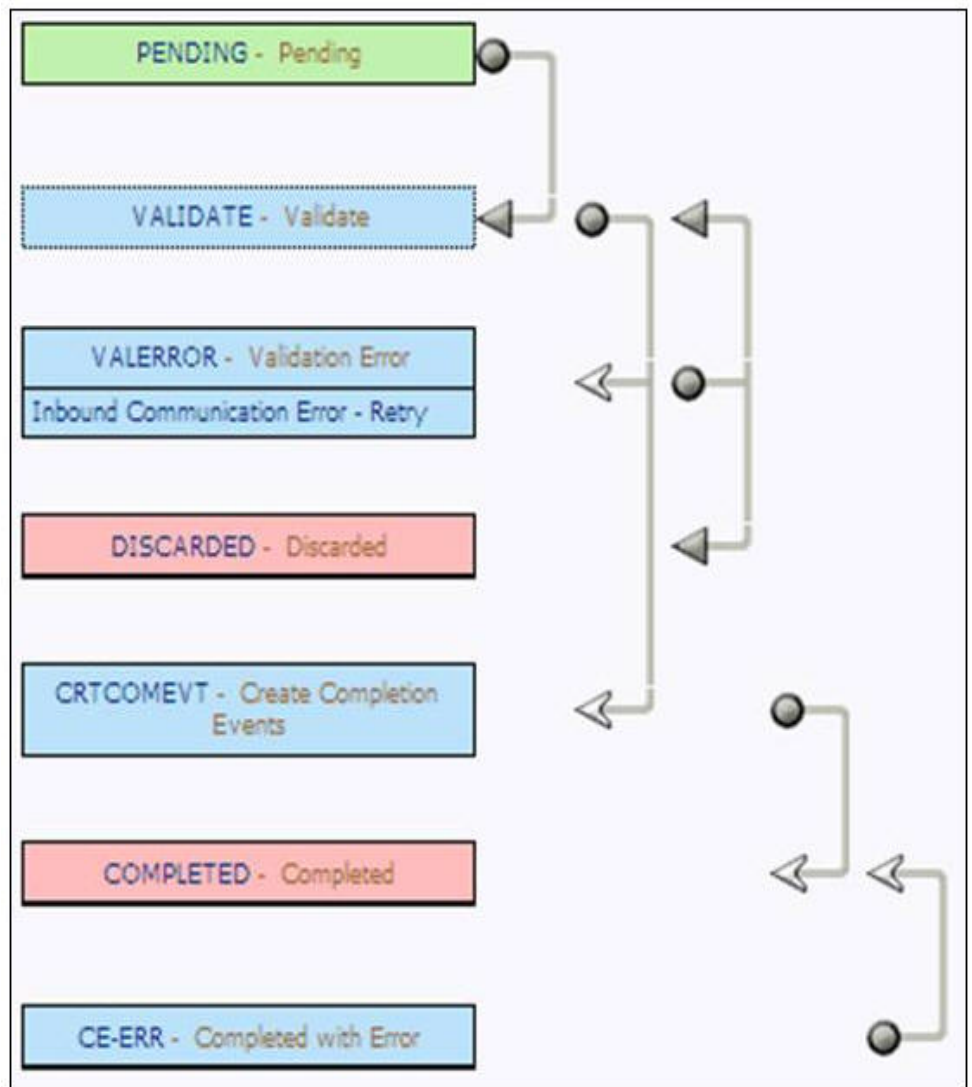
D4-RetrieveMeterIdentifier



D4-SetATMConfiguration



D4-SetATMConfigNotification



D1-CommissionDevice

