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

Utility Reference Model

4.2.1.1b SGG-MDM. Upload Device Measurements (Echelon)

December 2012

ORACLE

Oracle Utilities SGG V2.0.0 to MDM V2.0.1 Integration Utility Reference Model 4.2.1

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Chapter 1

Overview

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

- **Brief Description**

Brief Description

Business Process: 4.2.1.1a SGG-MDM.Upload Device Measurements (L+G)

Process Type: Sub-Process

Parent Process: 4.2.1 SGG-MDM.Collect and Process Device Measurements

Sibling Processes:

This process takes place when device measurements (IMDs) become available in NES system. SGG sends requests to retrieve meter reads from NES system utilizing batch function available in NES for client applications. SGG downloads batches of IMDs from the Echelon Head End System, transforms and processes them. Authorized Users can review and analyze payload statistics. SGG pre-processes the IMDs and enables them for further processing (VEE processing, Usage calculation) that typically handled by MDM application.

Chapter 2

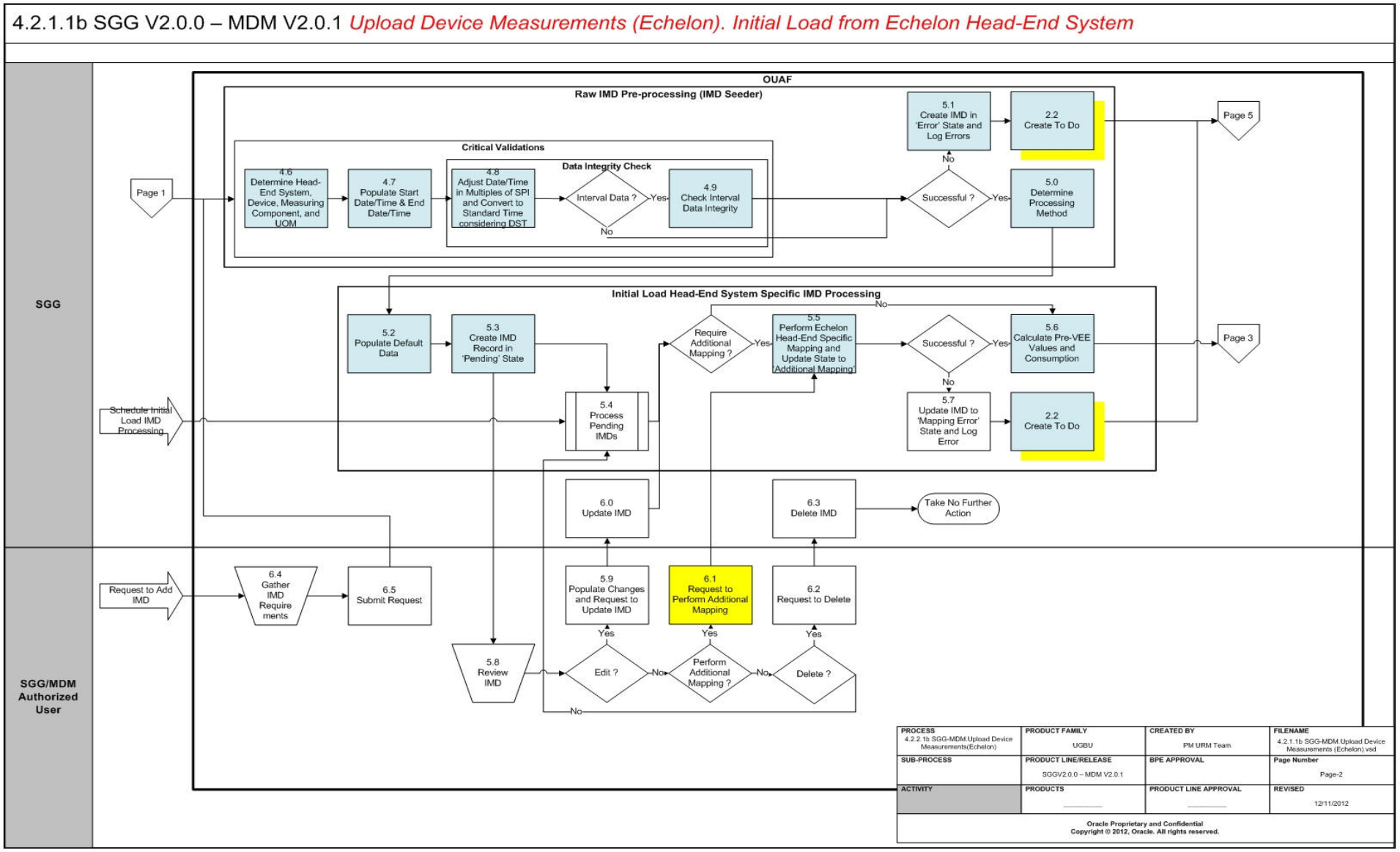
Detailed Business Process Model Description

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

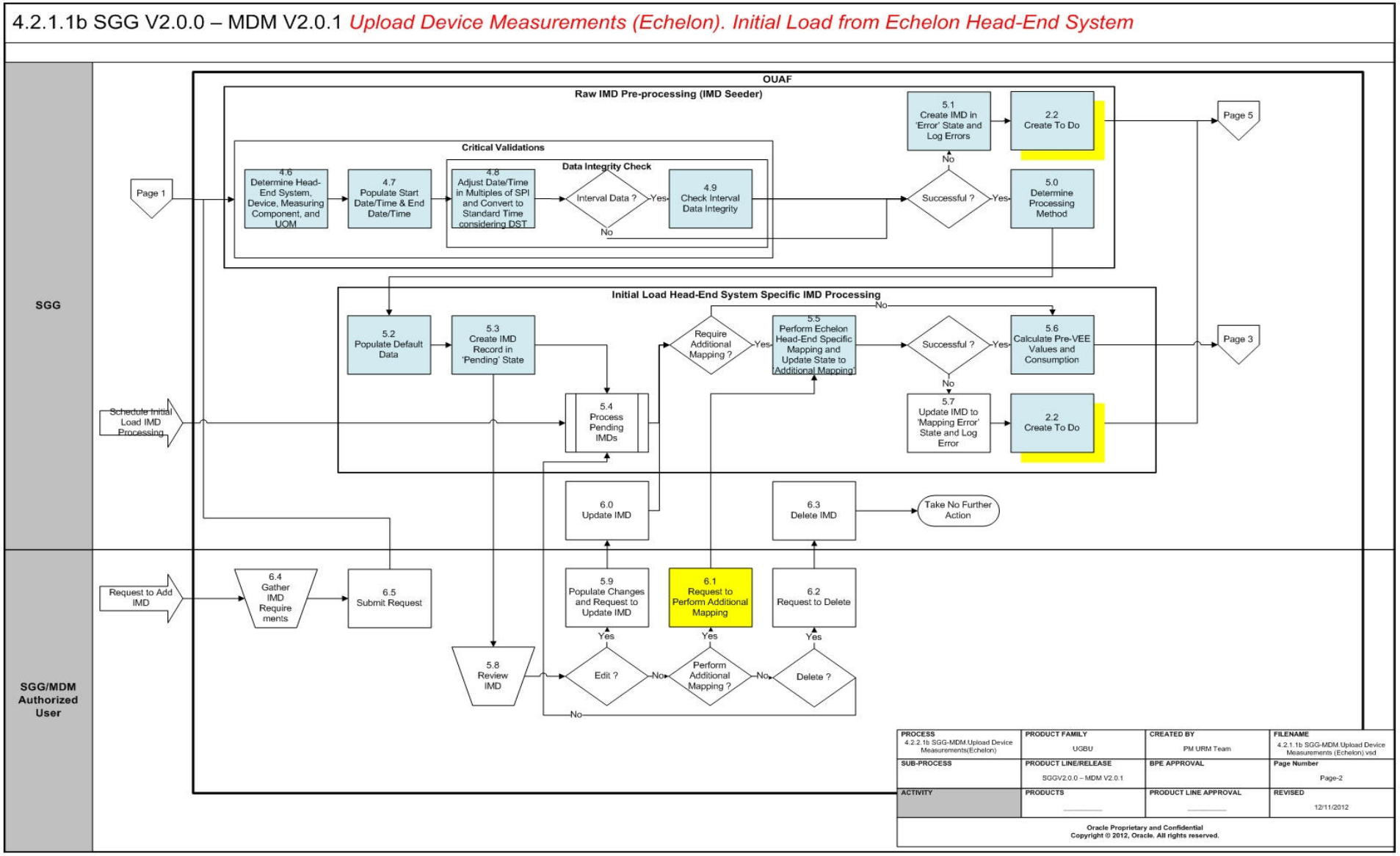
- **Business Process Diagrams**
  - **Business Process Model Page 1**
  - **Business Process Model Page 2**
  - **Business Process Model Page 3**
  - **Business Process Model Page 4**
  - **Business Process Model Page 5**
  - **Business Process Model Page 6**
- **SGG-MDM Upload Device Measurements (Echelon) Description**
- **Business Objects Life Cycle**
  - **Initial Load IMD Interval**
  - **Initial Load IMD Scalar**
  - **IMD Seeder**

Business Process Diagrams

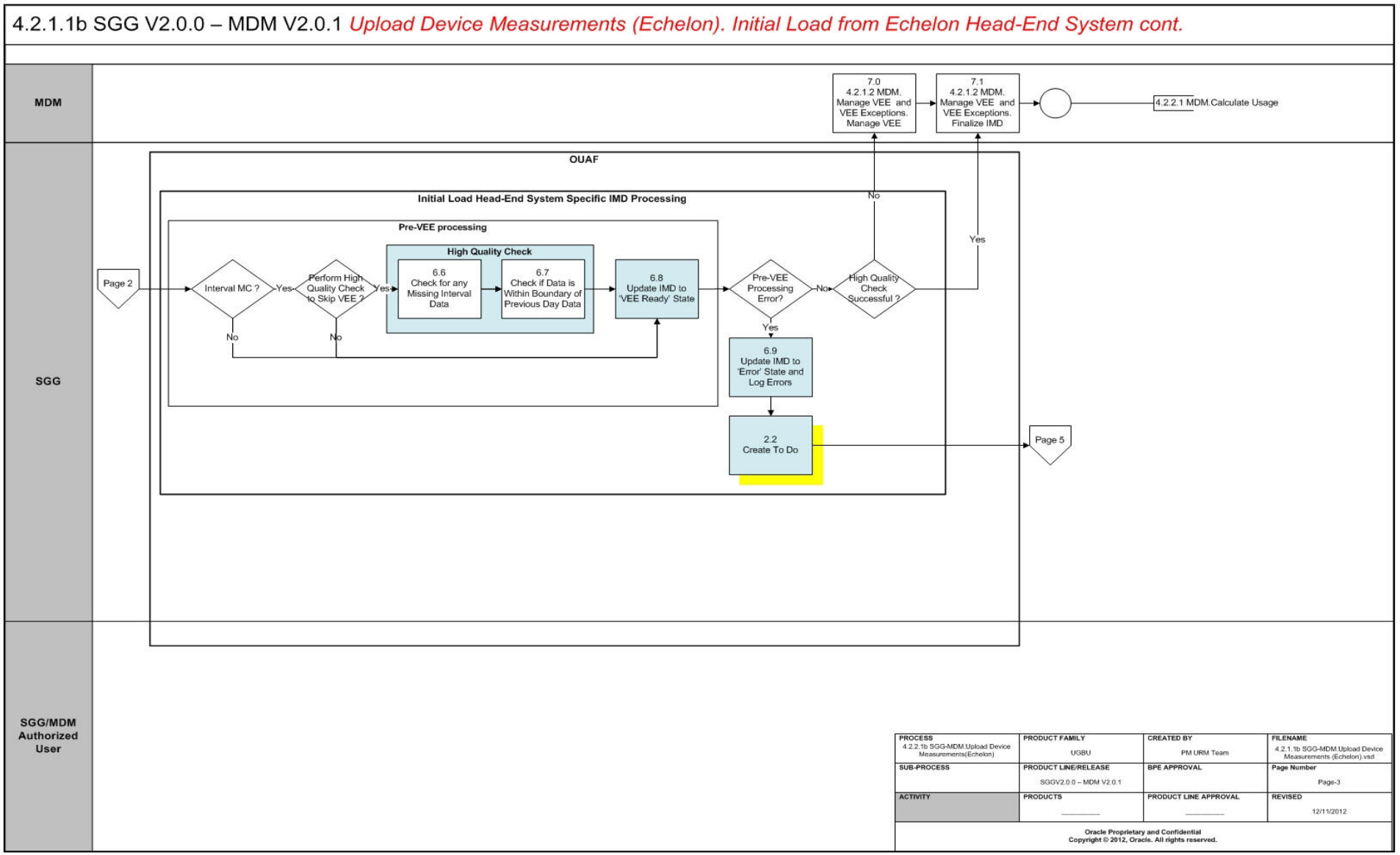
Business Process Model Page 1



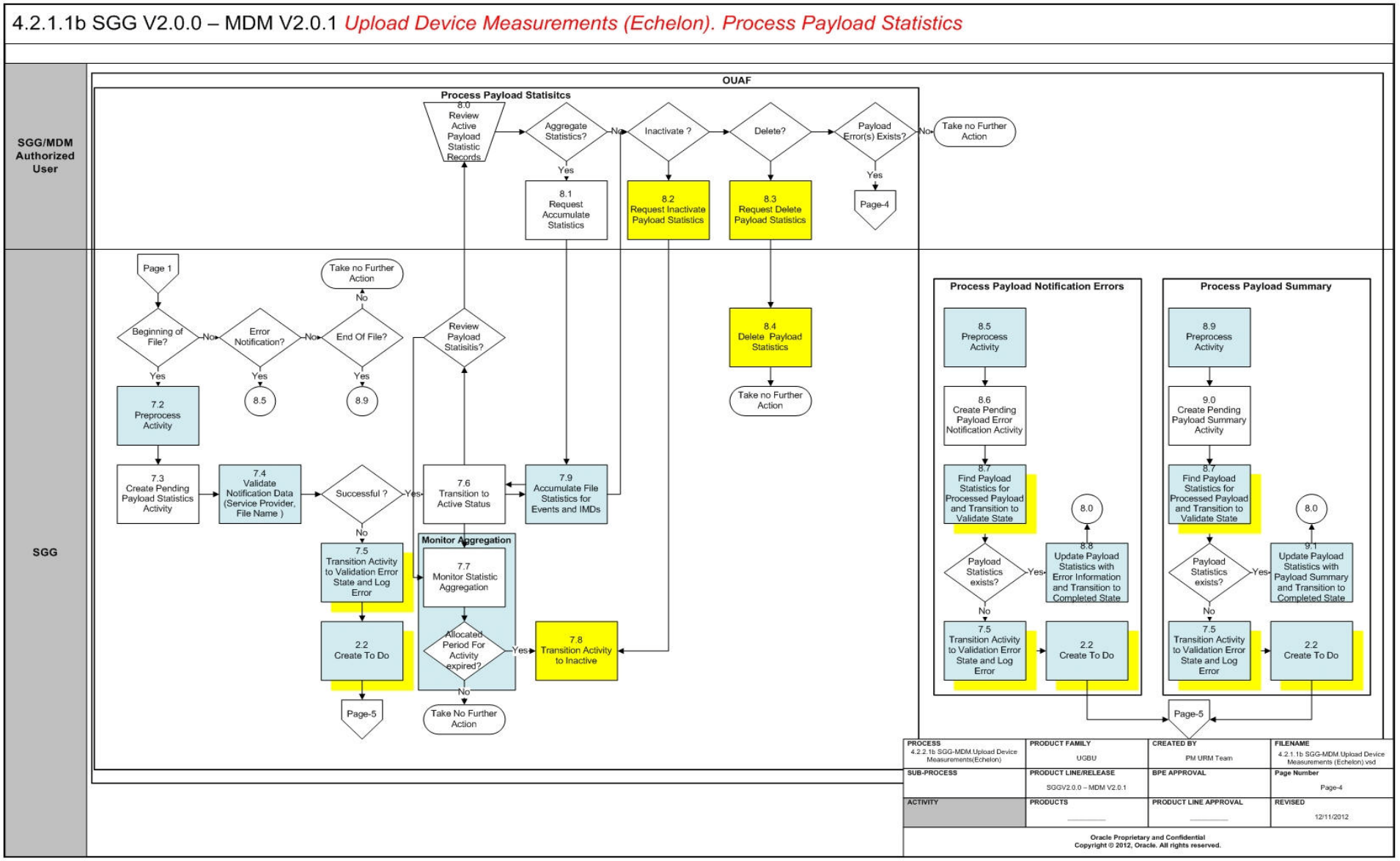
Business Process Model Page 2



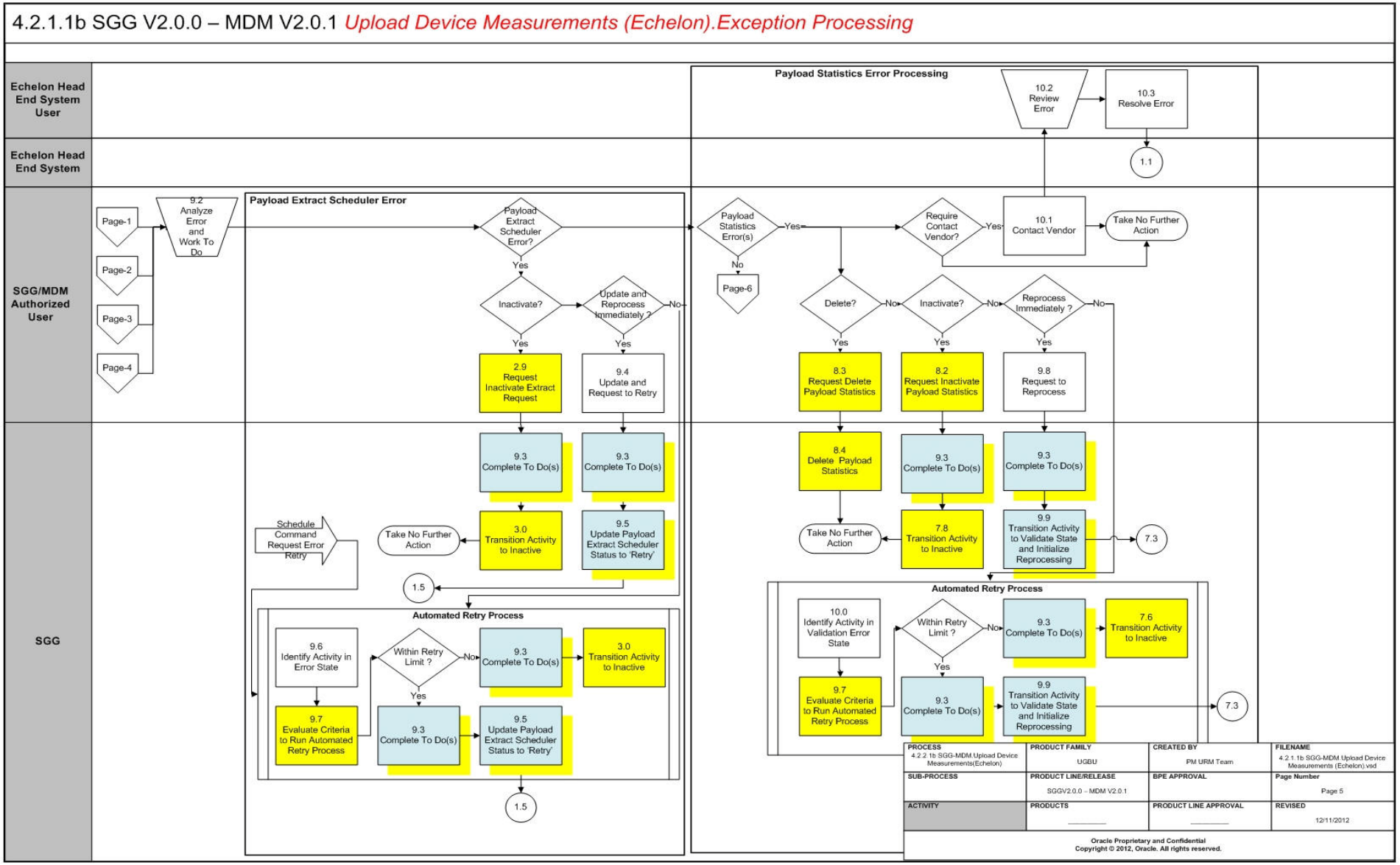
Business Process Model Page 3



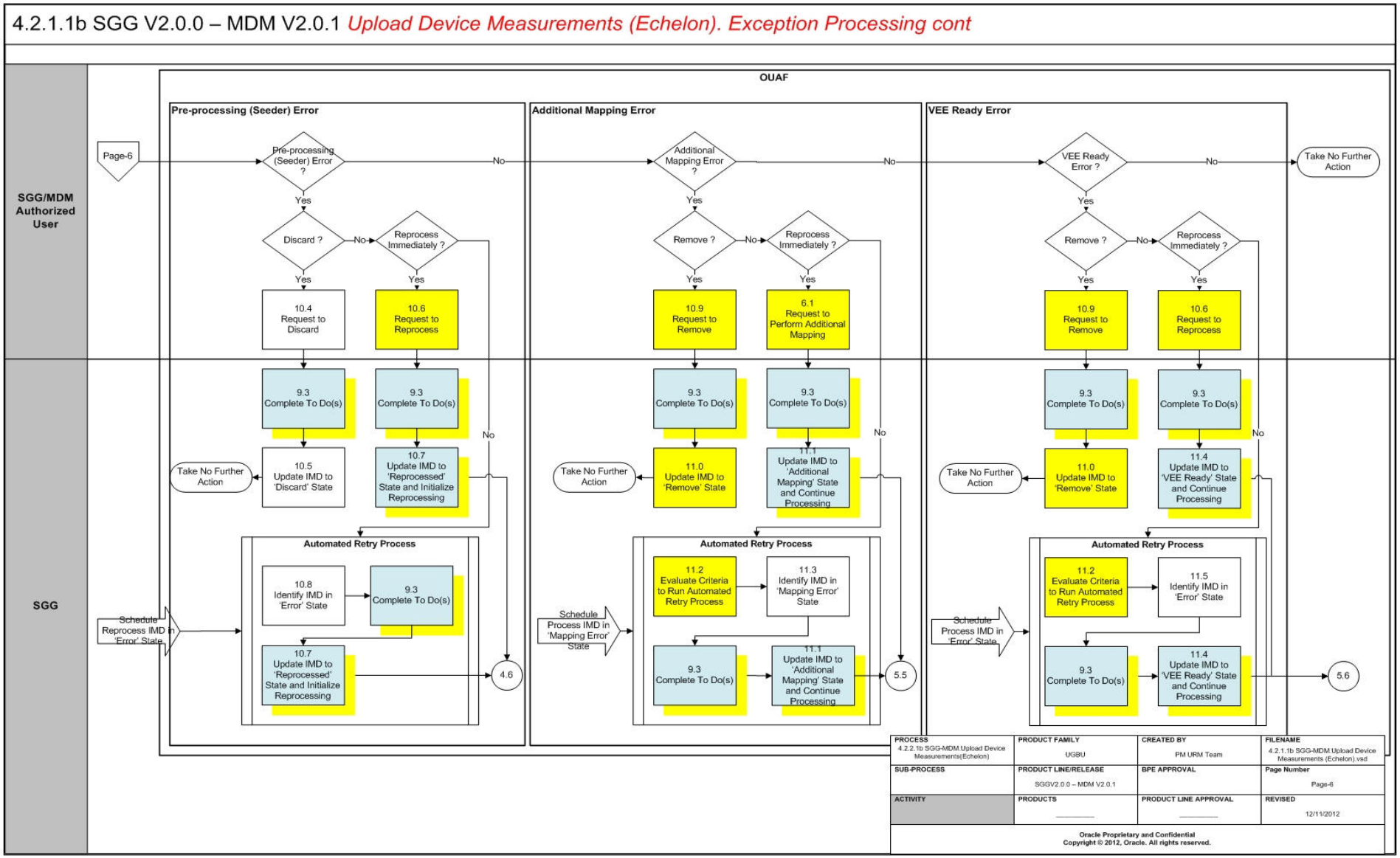
Business Process Model Page 4



Business Process Model Page 5



Business Process Model Page 6



SGG-MDM Upload Device Measurements (Echelon) Description

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

- **1.0 Analyze Requirements to Send Request**
- **1.1 Submit Request for Usage Extract Payload for Period**
- **1.2 Preprocess and Create Scheduler in Pending Status**
- **1.3 Transition to Active Status**
- **1.4 Monitor and Initiate Extract Request Processing**
- **1.5 Create and Send Extract Request, Transition to Send Request Status**
- **1.6 Communicate and Transform Extract Request to Echelon Format**
- **1.7 Process Request**
- **1.8 Send Positive or Negative Response**
- **1.9 Process Response**
- **2.0 Evaluate Response**
- **2.1 Transition Extract Scheduler to Request Error State and Log Error**
- **2.2 Create To Do**
- **2.3 Review Active Request**
- **2.4 Request to Send Extract Request**
- **2.5 Populate Required Changes**
- **2.6 Update Extract Request**
- **2.7 Request Delete Activity**
- **2.8 Delete Activity**
- **2.9 Request Inactivate Extract Request**
- **3.0 Transition Activity to Inactive**
- **3.1 Process Request and Create Meter Reads Payload**
- **3.2 Poll File Location**
- **3.3 Parse, Analyze File and Identify Records**
- **3.4 Transform Meter Read Record to 'Plain' XML**
- **3.5 Process Message Through Notifications Generator**
- **3.6 Create and Send Statistical Notification**
- **3.7 Route Notification Through JMS Queue to OUAF**
- **3.8 Create and Publish Additional Notification(s)**
- **3.9 Perform Custom Pre-Processing**
- **4.0 Validate Meter Read Record**
- **4.1 Transform "Plane" XML Meter Read Record to SGG IMD Standard Format**
- **4.2 Create and Send Error Notification**
- **4.3 Perform Custom Post-Processing**
- **4.4 Send IMD Record**

- **4.5 Route IMD Record Through JMS Queue to OUAF**
- **4.6 Determine Head-End System, Device, Measuring Component, and UOM**
- **4.7 Populate Start Date/Time & End Date/Time**
- **4.8 Adjust Date/Time in Multiples of SPI and Convert to Standard Time considering DST**
- **4.9 Check Interval Data Integrity**
- **5.0 Determine Processing Method**
- **5.1 Create IMD in 'Error' State and Log Errors**
- **5.2 Populate Default Data**
- **5.3 Create IMD Record in 'Pending' State**
- **5.4 Process Pending IMDs**
- **5.5 Perform Echelon Head-End Specific Mapping and Update State to 'Additional Mapping'**
- **5.6 Calculate Pre-VEE Values and Consumption**
- **5.2 Populate Default Data**
- **5.8 Review IMD**
- **5.9 Populate Changes and Request to Update IMD**
- **6.0 Update IMD**
- **6.1 Request to Perform Additional Mapping**
- **6.2 Request to Delete**
- **6.3 Delete IMD**
- **6.4 Gather IMD Requirements**
- **6.5 Submit Request**
- **6.6 Check for any Missing Interval Data**
- **6.7 Check If Data Is Within Boundary Of Previous Day Data**
- **6.8 Update IMD to 'VEE Ready' State**
- **6.9 Update IMD to 'Error' State and Log Errors**
- **7.0 4.2.1.2 MDM. V2.0.1. Manage VEE and VEE Exceptions. Manage VEE**
- **7.1 4.2.1.2 MDM. Manage VEE and VEE Exceptions. Finalize IMD**
- **7.2 Preprocess Activity**
- **7.3 Create Pending Payload Statistics Activity**
- **7.4 Validate Notification Data (Service Provider, File Name)**
- **7.5 Transition Activity to Validation Error State and Log Error**
- **7.6 Transition To Active State**
- **7.7 Monitor Statistic Aggregation**
- **7.8 Transition Activity to Inactive**
- **7.9 Accumulate File Statistics for Events and IMDs**
- **8.0 Review Active Payload Statistic Records**
- **8.1 Request Accumulate Statistics**

- **8.2 Request Inactivate Payload Statistics**
- **8.3 Request Delete Payload Statistics**
- **8.4 Delete Payload Statistics**
- **8.5 Preprocess Activity**
- **8.6 Create Pending Payload Error Notification Activity**
- **8.7 Find Payload Statistics for Processed Payload and Transition to Validate State**
- **8.8 Update Payload Statistics with Error Information and Transition to Completed State**
- **8.9 Preprocess Activity**
- **9.0 Create Pending Payload Summary Activity**
- **9.1 Update Payload Statistics with Payload Summary and Transition to Complete State**
- **9.2 Analyze, Work Errors and To Do**
- **9.3 Complete To Dos**
- **9.4 Update and Request to Retry**
- **9.5 Update Payload Extract Scheduler status to Retry**
- **9.6 Identify Activity in Error State**
- **9.7 Evaluate Criteria to Run Automated Retry Process**
- **9.8 Request to Reprocess**
- **9.9 Transition Activity Status to Validate and Initialize Reprocessing**
- **10.0 Identify Activity in Validation Error State**
- **10.1 Contact Vendor**
- **9.2 Review Error**
- **9.3 Resolve Error**
- **7.5 Request to Discard**
- **7.6 Complete To Do(s)**
- **7.7 Update IMD to 'Discard' State**
- **7.8 Request to Reprocess**
- **7.9 Update IMD to 'Reprocessed' State and Initialize Reprocessing**
- **8.0 Identify IMD in 'Error' State**
- **8.1 Request to Remove**
- **8.2 Update IMD to 'Remove' State**
- **8.3 Update IMD to 'Additional Mapping' State and Continue Processing**
- **8.4 Evaluate Criteria to Run Automated Retry Process**
- **8.5 Identify IMD in 'Mapping Error' State**
- **8.6 Update IMD to 'VEE Ready' State and Continue Processing**
- **8.7 Identify IMD in 'Error' State**

1.0 Analyze Requirements to Send Request

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: SGG Authorized Uses evaluates requirements to initiate Extract process in order to retrieve batch of meter reads from Echelon head end system.

Entities to Configure
Activity Type
Echelon Usage Extract Scheduler Type
Payload Extract Scheduler Type

1.1 Submit Request for Usage Extract Payload for Period

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: SGG/MDM Authorized User submits request to extract meter reads and specifies the period using Extract Request screen.

1.2 Preprocess and Create Scheduler in Pending Status

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: The application preprocesses request to initiate extract meter reads process and creates Echelon Extract Scheduler Activity in Pending state.

Business Objects	Available Algorithms
D1-PayloadExtractScheduler D4-UsageExtractScheduler	D1-DETACTTYP Determine Activity Type D1-CRAINFO Command Request Activity Information

1.3 Transition to Active Status

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions Echelon Usage Extract Scheduler Activity to Active state.

Business Objects
D1-PayloadExtractScheduler
D4-UsageExtractScheduler

1.4 Monitor and Initiate Extract Request Processing

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG monitors Echelon Usage Extract Activity to initiate sending request process.

Business Objects
D1-PayloadExtractScheduler D4-UsageExtractScheduler

Customizable Process
D1-EXTSC Usage / Event Extract Scheduler Monitor

1.5 Create and Send Extract Request, Transition to Send Request Status

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: If it's a scheduled time or simply business requires to send request for usage extract from Echelon, application creates Outbound Message with extract request and sends it to Echelon head end system.

Business Objects	Available Algorithms
D1-PayloadExtractScheduler D4-UsageExtractScheduler	D4-USGSNDREQ Usage Extract Scheduler Send Request

1.6 Communicate and Transform Extract Request to Echelon Format

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: The Integration Layer (BPEL) processes outbound message that triggers extract process. BPEL also transforms Outbound message to Echelon format.

1.7 Process Request

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: Echelon Head End System

Description: The Echelon head end system receives request from SGG and initiates request processing.

1.8 Send Positive or Negative Response

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: Echelon Head End System

Description: The Echelon sends positive or negative response to SGG.

1.9 Process Response

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: Integration layer (BPEL) receives and processes negative or positive response sent from NES (Echelon head end system).

2.0 Evaluate Response

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: The SGG analyses response received from Echelon.

2.1 Transition Extract Scheduler to Request Error State and Log Error

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Raw IMD Pre-processing (IMD Seeder)

Group: Initial Load Head-End System Specific IMD Processing

Group: Process Payload Statistics

Group: Process Payload Notification Errors

Group: Process Payload Summary

Actor/Role: SGG

Description: If negative response is received from Echelon, SGG transitions Usage Extract Scheduler Activity to Error state and logs the error.

2.2 Create To Do

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: If business identifies the needs to create To Do for Authorized User, the SGG creates a To Do entry. It allows Authorized Users review the error and attempt to fix the problem.

Entities to Configure
To Do Type
To Do Role

Business Objects	Available Algorithms
D1-IMDSeeder D1-PayloadExtractScheduler D1-PayloadStatistics D1-PayloadErrorNotif D1-PayloadSummary D1-PayloadNotification D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	D1-CREATTODO D1-CRE-SEDTD (Create To Do for IMD Seeder) D1-CRE-TDNVE (Create IMD To Do for Error States)

2.3 Review Active Request

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: The SGG/MDM Authorized User reviews usage extract request activity in active status using Echelon Usage Scheduler page.

2.4 Request to Send Extract Request

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: The SGG/MDM Authorized User requests to send extract request if business process requires immediate processing.

2.5 Populate Required Changes

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: The SGG/MDM Authorized User makes required changes in original usage extract request.

2.6 Update Extract Request

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG stores changes made by SGG/MDM Authorized User in usage extract request.

Business Objects
D1-PayloadExtractScheduler D4-UsageExtractScheduler

2.7 Request Delete Activity

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: SGG/MDM Authorized User deletes Echelon Usage Extract Scheduler activity that has been created previously and is not required by any business process.

Note: The application allows to delete the request, however it's not recommended to use this action because application will not have history records associated with deleted activity.

2.8 Delete Activity

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG deletes Echelon Usage Extract activity.

Business Objects
D1-PayloadExtractScheduler D4-UsageExtractScheduler

2.9 Request Inactivate Extract Request

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: SGG/MDM Authorized User requests inactivate Echelon Usage Extract Scheduler activity.

3.0 Transition Activity to Inactive

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions Echelon Usage Extract Scheduler activity to inactive state.

Business Objects
D1-PayloadExtractScheduler D4-UsageExtractScheduler

3.1 Process Request and Create Meter Reads Payload

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: Echelon Head End System

Description: The Echelon head end system (NES system) supports batch processing technique. It allows retrieve and store filtered meter reads, mark the batch as completed, and make IMDs available for further processing by SGG.

3.2 Poll File Location

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Group: JCA File Adapter

Actor/Role: SGG

Description: The JCA File Adapter service polls the designated directory based on the configured path and frequency.

Entities to Configure
Payload File Path
Polling Frequency

3.3 Parse, Analyze File and Identify Records

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Group: JCA File Adapter

Actor/Role: SGG

Description: JCA File Adapter parses the file and identifies records and determines types of records.

3.4 Transform Meter Read Record to 'Plain' XML

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Group: JCA File Adapter

Actor/Role: SGG

Description: JCA File Adapter transforms records from the L+G format to the 'Plain' XML structure.

3.5 Process Message Through Notifications Generator

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: JSA file adapter identifies type of messages being processed (beginning of file, end of file, errors) and initiates Notification processing.

3.6 Create and Send Statistical Notification

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: OSB creates and sends Statistical Notification when OSB starts and finishes processing payload.

Customizable Service
NotificationBusinessService

3.7 Route Notification Through JMS Queue to OUAF

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: Notification message is sent through JMS Queue to OUAF.

3.8 Create and Publish Additional Notification(s)

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: If business requires create additional notification, OSB creates and publish this notification.

Note: This is a custom process that allows implement additional functionality such as generating and sending e-mails to recipients etc.

Customizable Service
NotificationProxyService

3.9 Perform Custom Pre-Processing

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: This task is being executed if additional preprocessing is required.

Customizable Service
PreProcessingProxyService

4.0 Validate Meter Read Record

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: Processing Proxy Service validates the event record.

4.1 Transform "Plane" XML Meter Read Record to SGG IMD Standard Format

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: Processing Proxy Service transforms "Plain "XML meter read record to SGG IMD format.

4.2 Create and Send Error Notification

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: If error(s) occur during preprocessing, validation or transformation steps, OSB generates and route error notification. OSB also generates and routes error notification if error takes place during post-processing.

Customizable Service
NotificationBusinessService

4.3 Perform Custom Post-Processing

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: This task is being executed if additional post-processing is required.

Customizable Service
PostProcessingProxyService

4.4 Send IMD Record

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: OSB creates and sends Event result message to JMS Queue.

Customizable Service
DestinationBusinessService

4.5 Route IMD Record Through JMS Queue to OUAF

See **Business Process Model Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Integration Layer (OSB)

Actor/Role: SGG

Description: JMS Queue routes record to OUAF for further processing.

4.6 Determine Head-End System, Device, Measuring Component, and UOM

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Raw IMD Pre-Processing (IMD Seeder)

Group: Critical Validations

Actor/Role: SGG

Description: SGG initiates pre-processing of the raw meter data by performing series of critical validations. This task is the first task among critical validations. SGG attempts to read the raw data received and determines the head-end system (Service Provider), device, measuring component, and unit of measure. Based on the identified measuring component and the Head-End System, the SGG determine the type of data received.

Entities to Configure
Measuring Component
Device
Device Configuration
Head-End System (Service Provider)

Business Objects	Available Algorithms
D1-IMDSeeder	D1-DER-SPRMC (Determine Service Provider Measuring Component)

4.7 Populate Start Date/Time & End Date/Time

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Raw IMD Pre-Processing (IMD Seeder)

Group: Critical Validations

Actor/Role: SGG

Description: SGG populates the Start Date/Time and End Date/Time. The system performs this task for both interval and scalar types of data.

Entities to Configure
Measuring Component Type

Business Objects	Available Algorithms
D1-IMDSeeder	D1-VALDR-INP (Derive IMD Date/Time Values)

4.8 Adjust Date/Time in Multiples of SPI and Convert to Standard Time considering DST

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Raw IMD Pre-Processing (IMD Seeder)

Group: Critical Validations

Group: Data Integrity Check

Actor/Role: SGG

Description: SGG adjusts the Start Date/Time, Intervals, and End Date/Time so that they are in multiples of SPI and converts them from local to standard time considering the Daylight Savings Time (DST).

Entities to Configure
Measuring Component
Device (Incoming Data Shift)
Device Configuration
Service Point

Business Objects	Available Algorithms
D1-IMDSeeder	D1-DODTTMADJ (Perform Date/Time Adjustments and Undercount/Overcount Check)

4.9 Check Interval Data Integrity

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Raw IMD Pre-Processing (IMD Seeder)

Group: Critical Validations

Group: Data Integrity Check

Actor/Role: SGG

Description: SGG performs the over count and under count check for the interval data.

Business Objects	Available Algorithms
D1-IMDSeeder	D1-DODTTMADJ (Perform Date/Time Adjustments and Undercount/Overcount Check)

5.0 Determine Processing Method

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Raw IMD Pre-Processing (IMD Seeder)

Actor/Role: SGG

Description: SGG determines the Processing Method for the raw measurement data received. Depending on the type of data and Head End System, the Initial Load IMD or Manual IMD or Estimate IMD is instantiated.

Business Objects	Available Algorithms
D1-IMDSeeder D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar	D1-DER-SPRMC (Determine Service Provider and Measuring Component)

5.1 Create IMD in 'Error' State and Log Errors

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Raw IMD Pre-Processing (IMD Seeder)

Actor/Role: SGG

Description: If any error occurs during any step of IMD pre-processing, the system creates a seeder record in 'Error' state and logs an error.

Business Objects	Available Algorithms
D1-IMDSeeder	D1-LOG-SEEDR (Create Initial Measurement Data Seeder Log Entries)

5.2 Populate Default Data

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Initial Load Head-End System Specific IMD Processing

Actor/Role: SGG

Description: SGG populates the default data such as Date/Time and Time Zone based on the details from the raw meter data received from the Head End system if they are not populated.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	D1-INT-SPEC (Validate Interval Initial Measurement Data Input)

5.3 Create IMD Record in 'Pending' State

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Initial Load Head-End System Specific IMD Processing

Actor/Role: SGG

Description: SGG ensures the availability of common input data such as Measuring Component Identifier, Device Identifier, UOM and creates an IMD in the pending state.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	D1-IMD-COMM (Validate Initial Measurement Data Common Input) F1-AT-RQJ (Transition to Default Next Status)

5.4 Process Pending IMDs

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Initial Load Head-End System Specific IMD Processing

Actor/Role: SGG

Description: System automatically initiates processing the IMD records in pending status. This step represents SGG capability to process the IMDs in batch if required due to high volume.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	F1-AT-RQJ (Transition to Default Next Status)

5.5 Perform Echelon Head-End Specific Mapping and Update State to 'Additional Mapping'

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Initial Load Head-End System Specific IMD Processing

Actor/Role: SGG

Description: This step takes place only if the there is a need to perform additional L+G Head End system specific mapping.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval	D1-PBSCMTOCC Interval Status Code Mapping to Condition Codes

5.6 Calculate Pre-VEE Values and Consumption

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Initial Load Head-End System Specific IMD Processing

Actor/Role: SGG

Description: SGG calculates the Pre-VEE values and consumption and prepares data for VEE processing.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	D1-PRCLINIMD (Calculate Interval Consumption and Prepare IMD) D1-PRCLSCIMD (Calculate and Prepare Scalar Consumption)

5.7 Update IMD to 'Mapping Error' State and Log Error

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Group: Initial Load Head-End System Specific IMD Processing

Actor/Role: SGG

Description: If any error occurs during head-end specific additional mapping, SGG automatically updates IMD status to 'Mapping Error' and logs an error.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	F1-AT-RQJ (Transition to Default Next Status)

5.8 Review IMD

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: SGG/MDM Authorized User reviews and analyzes the pending IMD before further processed using Review Pending State IMD page.

5.9 Populate Changes and Request to Update IMD

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: If an Authorized User decides that the pending IMD requires modifications, the Authorized User makes required changes using Edit IMD Details page and requests to update the IMD record.

6.0 Update IMD

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG updates the IMD record.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	D1-AUD-QTYUE (Audit IMD Quantity Changes and Set User-Edited Flag)

6.1 Request to Perform Additional Mapping

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: If SGG/MDM Authorized User determines that pending IMD should be processed immediately and the business requires additional head end system mapping as a next step, then authorized user requests to perform additional mapping.

6.2 Request to Delete

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: The SGG/MDM Authorized User requests to delete the IMD record in pending status.

6.3 Delete IMD

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG deletes the IMD Record in pending status.

Note: Once a record is deleted it is permanently removed from the system and it cannot be retrieved.

6.4 Gather IMD Requirements

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: The Authorized User gathers all the required information required for adding an initial measurement.

6.5 Submit Request

See **Business Process Model Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: The SGG/MDM Authorized User adds initial measurement data (IMD) records to the SGG application by using the Initial Measurement Upload Portal or uploading an XML document using Load IMDs/Events (XML) portal. MDM performs an audit of the IMD added.

Entities to Configure
Measuring Component
Device
Start and End Date and Time
Consumption for Scalar IMD
Intervals and respective data for Interval IMD

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	D1-AUD-QTYUE (Audit IMD Quantity Changes and Set User-Edited Flag)

6.6 Check for any Missing Interval Data

See **Business Process Model Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Initial Load Head-End System Specific IMD Processing

Group: High Quality Check

Actor/Role: SGG

Description: SGG deletes the IMD Record in pending status.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D4-InitialLoadIMDInterval	D1-HIGHQUALV (High Quality Check - Vector Band Based)

6.7 Check If Data Is Within Boundary Of Previous Day Data

See **Business Process Model Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Initial Load Head-End System Specific IMD Processing

Group: High Quality Check

Actor/Role: SGG

Description: SGG checks if the Interval data is within a pre-defined quantity tolerance boundary (pre-defined tolerance levels) of the previous day's corresponding interval data.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D4-InitialLoadIMDInterval	D1-HIGHQUALV (High Quality Check - Vector Band Based)

6.8 Update IMD to 'VEE Ready' State

See **Business Process Model Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Initial Load Head-End System Specific IMD Processing

Group: High Quality Check

Actor/Role: SGG

Description: SGG updates the IMD status to VEE Ready.

Note: If the High Quality Check has been successful, VEE process is skipped and the IMD transitions to normalization and finalization steps. If the High Quality Check fails, the IMD transitions to VEE Processing.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	F1-AT-RQJ (Transition to Default Next Status)

6.9 Update IMD to 'Error' State and Log Errors

See **Business Process Model Page 3** on page 2-4 for the business process diagram associated with this activity.

Group: Initial Load Head-End System Specific IMD Processing

Actor/Role: SGG

Description: If any error occurs while SGG prepares data for VEE, SGG updates IMD status to 'Error' state and logs an error.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	F1-AT-RQJ (Transition to Default Next Status)

7.0 4.2.1.2 MDM. V2.0.1. Manage VEE and VEE Exceptions. Manage VEE

See **Business Process Model Page 3** on page 2-4 for the business process diagram associated with this activity.

Actor/Role: MDM

Description: The Meter Data Management application performs VEE. This step represents IMD VEE processing described in 4.2.1.2 MDM. V2.0.1. Manage VEE and VEE Exceptions. Manage VEE document.

7.1 4.2.1.2 MDM. Manage VEE and VEE Exceptions. Finalize IMD

See **Business Process Model Page 3** on page 2-4 for the business process diagram associated with this activity.

Actor/Role: MDM

Description: The Meter Data Management application finalizes IMD processing and creates final measurements. This process is described in 4.2.1.2 MDM. V2.0.1. Manage VEE and VEE Exceptions. Finalize IMD document.

7.2 Preprocess Activity

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Actor/Role: SGG

Description: SGG preprocesses payload statistic that contains information from the file's header record.

Business Objects	Available Algorithms
D1-PayloadStatistics	D1-PLSTCRBO (Set Payload Statistics BO name) D1-DETACTTYP (Determine Activity Type)

7.3 Create Pending Payload Statistics Activity

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Actor/Role: SGG

Description: Application creates Payload Statistics Activity in Pending status.

Business Objects
D1-PayloadStatistics

7.4 Validate Notification Data (Service Provider, File Name)

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Actor/Role: SGG

Description: Application validates message received.

Business Objects	Available Algorithms
D1-PayloadStatistics	D1-VALACTTYP Validate Activity Type D1-VALACTFIL Validate Activity File Name D1-SPRIDAGG Service Provider Identification (for Aggregation)

7.5 Transition Activity to Validation Error State and Log Error

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Group: Payload Notification Errors

Group: Process Payload Summary

Actor/Role: SGG

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

.

Business Objects	Available Algorithms
D1-PayloadStatistics D1-PayloadErrorNotif D1-PayloadSummary D1-PayloadNotification	See list of algorithms associated with validations

7.6 Transition To Active State

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Actor/Role: SGG

Description: If processing record successfully passed the validations, application transitions Payload Statistics activity to Active status.

Business Objects
D1-PayloadStatistics

7.7 Monitor Statistic Aggregation

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Actor/Role: SGG

Description: SGG monitors payload statistics in Active state, evaluates payload cut off day and controls transition to the next logical step of the process (state).

Business Objects	Available Algorithms
D1-PayloadStatistics	D1-PRFACTAGG (Perform Activity Aggregation)

7.8 Transition Activity to Inactive

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Group: Payload Statistics Error Processing

Actor/Role: SGG

Description: Application transitions payload statistics to Inactive state.

Automated Process: This step is performed if system detects that payload cut off date is in the past

Manual Process: System also performs this task after Authorized User requests to inactivate payload statistics

Business Objects
D1-PayloadStatistics

7.9 Accumulate File Statistics for Events and IMDs

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Actor/Role: SGG

Description: Application collects statistics about all the events and IMDs uploaded as a result of payload processing.

Business Objects	Available Algorithms
D1-PayloadStatistics	D1-ACCSTATS (Accumulate Statistics Algorithm)

8.0 Review Active Payload Statistic Records

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Actor/Role: SGG/MDM Authorized User

Description: Authorized User reviews and analyzes payload statistics using Payload Statistics screen.

8.1 Request Accumulate Statistics

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Actor/Role: SGG/MDM Authorized User

Description: If required, Authorized User requests accumulate payload statistics.

8.2 Request Inactivate Payload Statistics

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Group: Payload Statistics Error Processing

Actor/Role: SGG/MDM Authorized User

Description: Authorized User requests inactivate payload statistics.

8.3 Request Delete Payload Statistics

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Group: Payload Statistics Error Processing

Actor/Role: SGG/MDM Authorized User

Description: Authorized User requests delete payload statistics.

8.4 Delete Payload Statistics

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Statistics

Group: Payload Statistics Error Processing

Actor/Role: SGG

Description: Application deletes payload statistics.

Business Objects
D1-PayloadStatistics

8.5 Preprocess Activity

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Notification Errors

Actor/Role: SGG

Description: Application preprocesses error notifications received from integration layer.

Business Objects	Available Algorithms
D1-PayloadNotification D1-PayloadErrorNotif	D1-DETACTTYP Determine Activity Type

8.6 Create Pending Payload Error Notification Activity

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Notification Errors

Actor/Role: SGG

Description: Application creates pending error notification activity.

Business Objects	Available Algorithms
D1-PayloadStatistics	D1-PLSTCRBO (Set Payload Statistics BO name) D1-DETACTTYP (Determine Activity Type)

8.7 Find Payload Statistics for Processed Payload and Transition to Validate State

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Notification Errors

Group: Process Payload Summary

Actor/Role: SGG

Description: SGG validates error notification and identifies Payload Statistics Activity created for processing Payload and couples it with currently processing notification.

Business Objects	Available Algorithms
D1-PayloadNotification D1-PayloadErrorNotif D1-PayloadSummary	D1-SPRIDAGG (Service Provider Identification (for Aggregation) D1-CPLPLST (Couple with Payload Statistics)

8.8 Update Payload Statistics with Error Information and Transition to Completed State

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Notification Errors

Actor/Role: SGG

Description: Application updates payload statistics with information from error notification.

Business Objects	Available Algorithms
D1-PayloadNotification D1-PayloadErrorNotif	D1-UPERRINFO Update Error Info onto Payload Statistics Algorithm Type

8.9 Preprocess Activity

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Summary

Actor/Role: SGG

Description: Application preprocesses payload summary message (file trailer data) received from integration layer.

Business Objects	Available Algorithms
D1-PayloadSummary	D1-DETACTTYP (Determine Activity Type) D1-PLSUCRBO (Set Payload Summary BO name)

9.0 Create Pending Payload Summary Activity

See **Business Process Model Page 4** on page 2-5 for the business process diagram associated with this activity.

Group: Process Payload Summary

Actor/Role: SGG

Description: Application creates pending payload summary activity.

Business Objects
D1-PayloadSummary

9.1 Update Payload Statistics with Payload Summary and Transition to Complete State

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Process Payload Summary

Actor/Role: SGG

Description: Application updates payload statistics with information from summary notification received from middleware (file trailer).

Business Objects	Available Algorithms
D1-PayloadSummary	D1-UMWSTAT (Update Middleware Statistics onto Payload Statistics

9.2 Analyze, Work Errors and To Do

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: SGG/MDM Authorized User analyzes the error and corresponding To Do entry.

9.3 Complete To Dos

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Payload Extract Scheduler

Group: Payload Statistics Error Processing

Group: Pre-processing Error (Seeder)

Group: Additional Mapping Error

Group: VEE Ready Error

Group: Pre-processing Error (Seeder)

Actor/Role: SGG

Description: SGG automatically completes To Do entries.

Business Objects	Available Algorithms
D1-IMDSeeder D1-PayloadNotification D1-PayloadExtractScheduler D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	D1-COMPDE-TD D1-GTDCBO Generic To Do completion for BO

9.4 Update and Request to Retry

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Payload Extract Scheduler Error Processing

Actor/Role: SGG/MDM Authorized User

Description: SGG/MDM Authorized User requests to retry send request to extract events.

Business Objects
D1-PayloadExtractScheduler

9.5 Update Payload Extract Scheduler status to Retry

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Payload Extract Scheduler Error Processing

Actor/Role: SGG

Description: SGG transitions event payload extract scheduler to retry status.

Business Objects	Available Algorithms
D1-PayloadExtractScheduler	D1-RBOE Retry BO in Error

9.6 Identify Activity in Error State

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Payload Extract Scheduler Error Processing

Actor/Role: SGG

Description: Application continuously monitors payload extract scheduler records to identify the requests in error state.

Business Objects	Available Algorithms
D1-PayloadExtractScheduler	D1-RBOE

Customizable process
D1-CRERR Command Request Error - Retry

9.7 Evaluate Criteria to Run Automated Retry Process

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Payload Extract Scheduler Error Processing

Group: Payload Statistics Error Processing

Actor/Role: SGG

Description: SGG evaluates criteria to run retry process. Application times out process if Activity stayed in error status too long (Waiting period is determined by business and configured in application).

Business Objects	Available Algorithms
D1-PayloadExtractScheduler D1-PayloadStatistics	D1-WTTMOUT Wait Time Out - Transition to Rejection

9.8 Request to Reprocess

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Payload Statistics Error Processing

Actor/Role: SGG/MDM Authorized User

Description: SGG/MDM Authorized User requests to reprocess payload statistics.

Business Objects	Available Algorithms
D1-PayloadExtractScheduler D1-PayloadStatistics	D1-WTTMOUT Wait Time Out - Transition to Rejection

9.9 Transition Activity Status to Validate and Initialize Reprocessing

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Payload Statistics Error Processing

Actor/Role: SGG

Description: SGG transition the seeder to Reprocessed state and initializes reprocessing.

Business Objects	Available Algorithms
D1-PayloadStatistics	D1-RBOE

10.0 Identify Activity in Validation Error State

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Payload Statistics Error Processing

Actor/Role: SGG

Description: Application continuously monitors payload statistics records to identify the records in validation error state.

Business Objects	Available Algorithms
D1-PayloadStatistics	D1-RBOE

10.1 Contact Vendor

See **Business Process Model Page 5** on page 2-6 for the business process diagram associated with this activity.

Group: Payload Statistics Error Processing

Actor/Role: SGG/MDM Authorized User

Description: SGG/MDM Authorized User contacts L+G Head End Head System User to report error.

9.2 Review Error

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Group: Payload Statistics Error Processing

Actor/Role: L+G Head End Head System User

Description: L+G Head End Head System User reviews and analyzes error.

9.3 Resolve Error

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Group: Payload Statistics Error Processing

Actor/Role: L+G Head End Head System User

Description: L+G Head End Head System User works on payload error resolution.

7.5 Request to Discard

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: MDM Authorized User

Description: The MDM Authorized User the user requests to discard IMD record in "Error state.

7.6 Complete To Do(s)

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: MDM

Description: Application automatically completes To Do entries before reprocessing.

Business Objects	Available Algorithms
D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar D1-PayloadSummary D1-IMDSeeder D1-InitialLoadIMDInterval	D1-COMP-TD (Complete To Do Entries for Initial Measurement Data)

7.7 Update IMD to 'Discard' State

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions the IMD seeder to 'Discard' status indicating that it cannot be used further.

Business Objects
D1-IMDSeeder

7.8 Request to Reprocess

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: After the problem is resolved and required changes are made SGG/MDM Authorized User requests to reprocess the data.

7.9 Update IMD to 'Reprocessed' State and Initialize Reprocessing

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions the seeder to 'Reprocessed' state and initializes reprocessing.

Business Objects	Available Algorithms
D1-IMDSeeder	D1-CRE-IMDSD (Attempt to Reprocess Seeder Initial Measurement)

8.0 Identify IMD in 'Error' State

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Group: Automated Retry Process

Actor/Role: SGG

Description: This task is the first task of automated seeder retry process. SGG identifies the IMD seeder records in 'Error' state.

Business Objects	Available Algorithms
D1-IMDSeeder	DM_IMD (IMD Monitor - Standard AutoTransition)

Customizable process
Generic IMD Monitor - IMD Seeder (D1-GNIMD)

8.1 Request to Remove

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: SGG/MDM Authorized User

Description: SGG/MDM Authorized User requests to remove IMD record using Initial Measurement page.

Business Objects
D1-InitialLoadIMDInterval
D1-InitialLoadIMDScalar
D4-InitialLoadIMDInterval
D4-InitialLoadIMDScalar

8.2 Update IMD to 'Remove' State

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG updates the IMD to 'Remove' state.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	F1-AT-RQJ (Transition to Default Next Status)

8.3 Update IMD to 'Additional Mapping' State and Continue Processing

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transitions the IMD to 'Additional Mapping' state and initiates re-processing steps associated with additional mapping.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	F1-AT-RQJ (Transition to Default Next Status)

8.4 Evaluate Criteria to Run Automated Retry Process

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Group: Automated Retry Process

Actor/Role: SGG

Description: This task is the first task of an automated retry process. Application determines necessity to re-initiate:

- Additional mapping for IMDs in "Additional mapping Error" state based on one or more specific criteria (e.g. number of errors to be processed before run terminates)
- VEE ready processing for IMDs in VEE Ready Error " state based on one of more specific criteria (e.g. number of errors to be processed before run terminates)

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	D1-IMD-RETRY- Retry Initial Measurement Data Processing

Customizable process
D1-IMD - IMD Monitor - Physical Devices

8.5 Identify IMD in 'Mapping Error' State

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Group: Automated Retry Process

Actor/Role: SGG

Description: Application identifies IMD record in 'Mapping Error' .

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	D1-IMD-RETRY (Retry Initial Measurement Data Processing)

Customizable process
D1-IMD - IMD Monitor - Physical Devices

8.6 Update IMD to 'VEE Ready' State and Continue Processing

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Actor/Role: SGG

Description: SGG transition the IMD in an 'Error' state to 'VEE Ready' and initiates re-processing.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	F1-AT-RQJ (Transition to Default Next Status) D1-IMD-RETRY (Retry Initial Measurement Data Processing

Customizable process
D1-IMD - IMD Monitor - Physical Devices

8.7 Identify IMD in 'Error' State

See **Business Process Model Page 6** on page 2-7 for the business process diagram associated with this activity.

Group: Automated Retry Process

Actor/Role: SGG

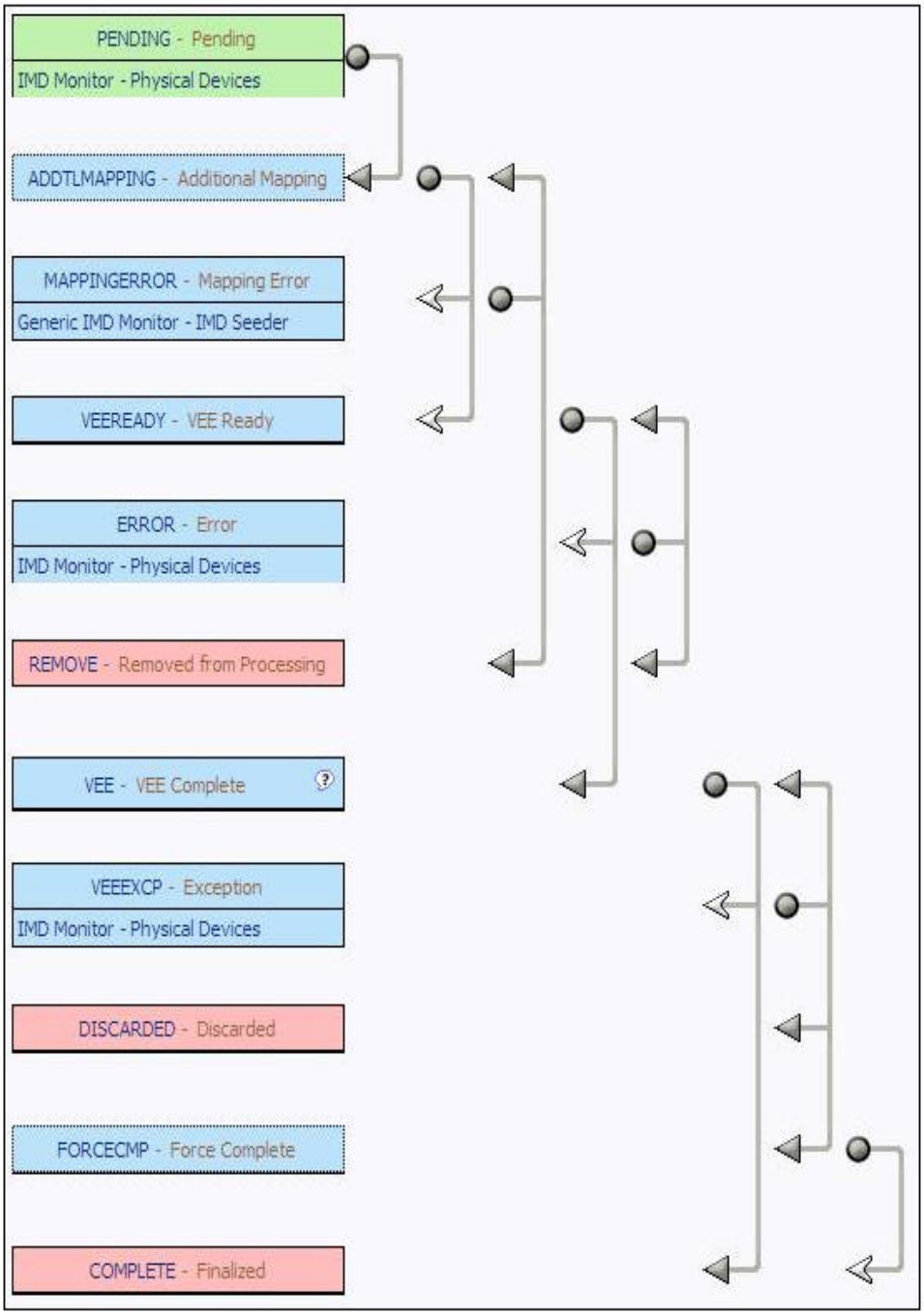
Description: Application identifies IMD record in 'Error' state and initiates re-processing.

Business Objects	Available Algorithms
D1-InitialLoadIMDInterval D1-InitialLoadIMDScalar D4-InitialLoadIMDInterval D4-InitialLoadIMDScalar	D1-IMD-RETRY (Retry Initial Measurement Data Processing)

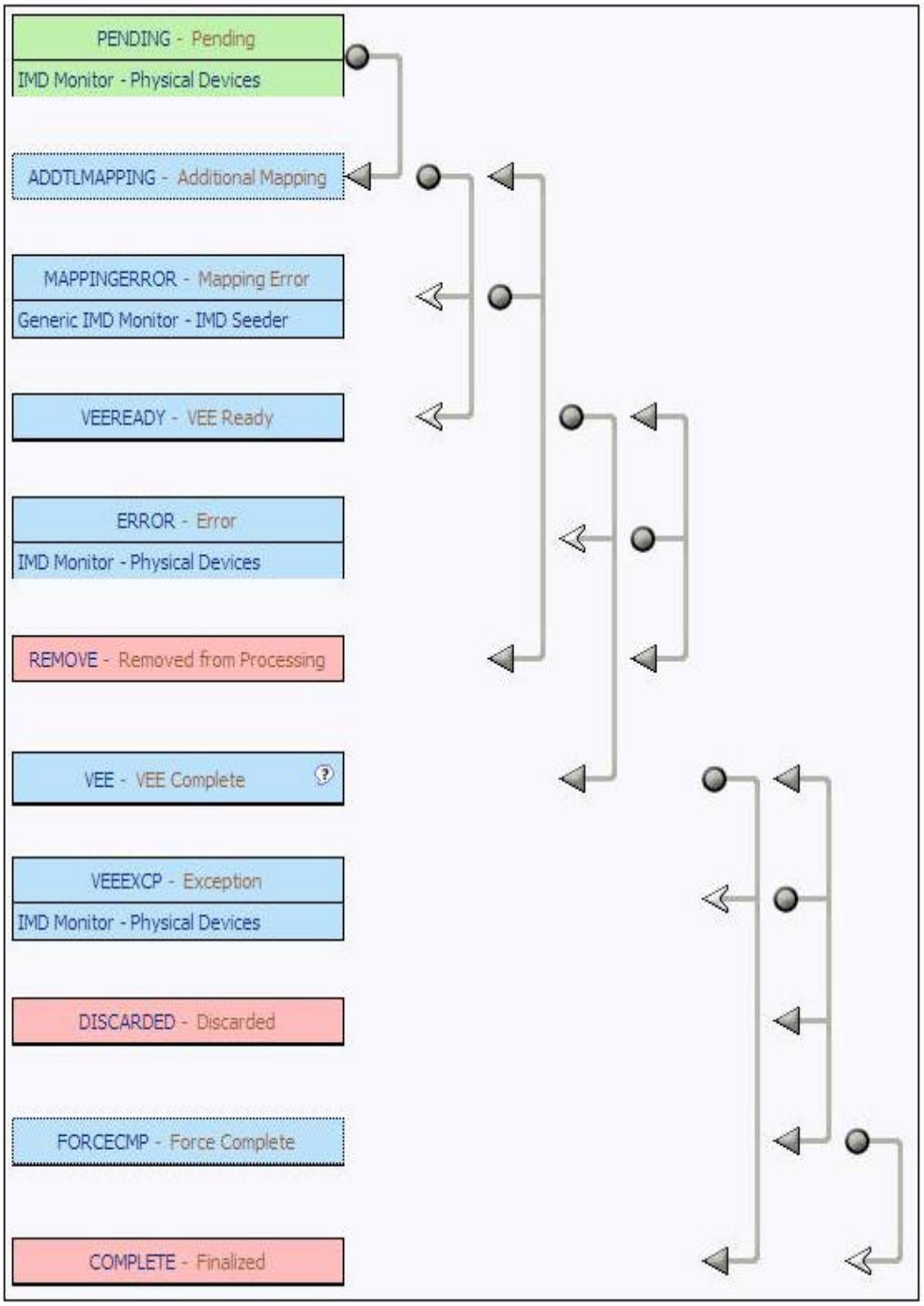
Customizable process
IMD Monitor - Physical Devices (D1-IMD)

Business Objects Life Cycle

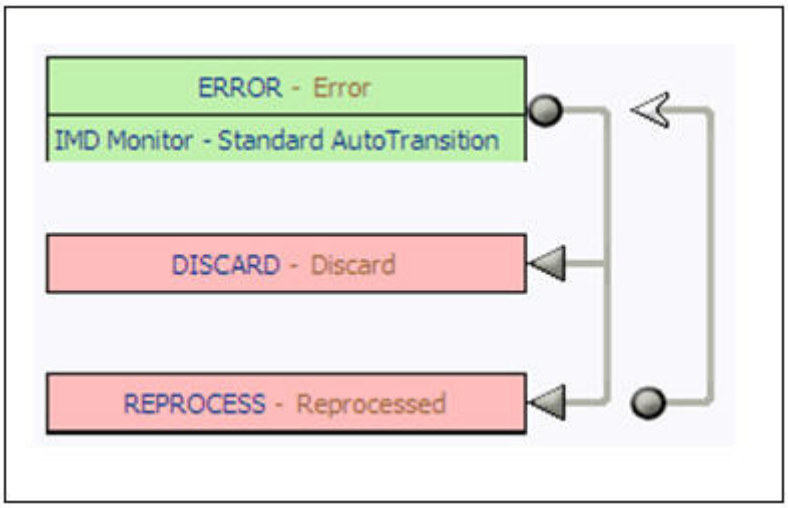
Initial Load IMD Interval



Initial Load IMD Scalar



IMD Seeder


ERROR - Error
IMD Monitor - Standard AutoTransition
DISCARD - Discard
REPROCESS - Reprocessed