MARKET PROCESS DESIGN

MPD 15.1 - Market Process for Data Processing for Half Hourly Interval Meters

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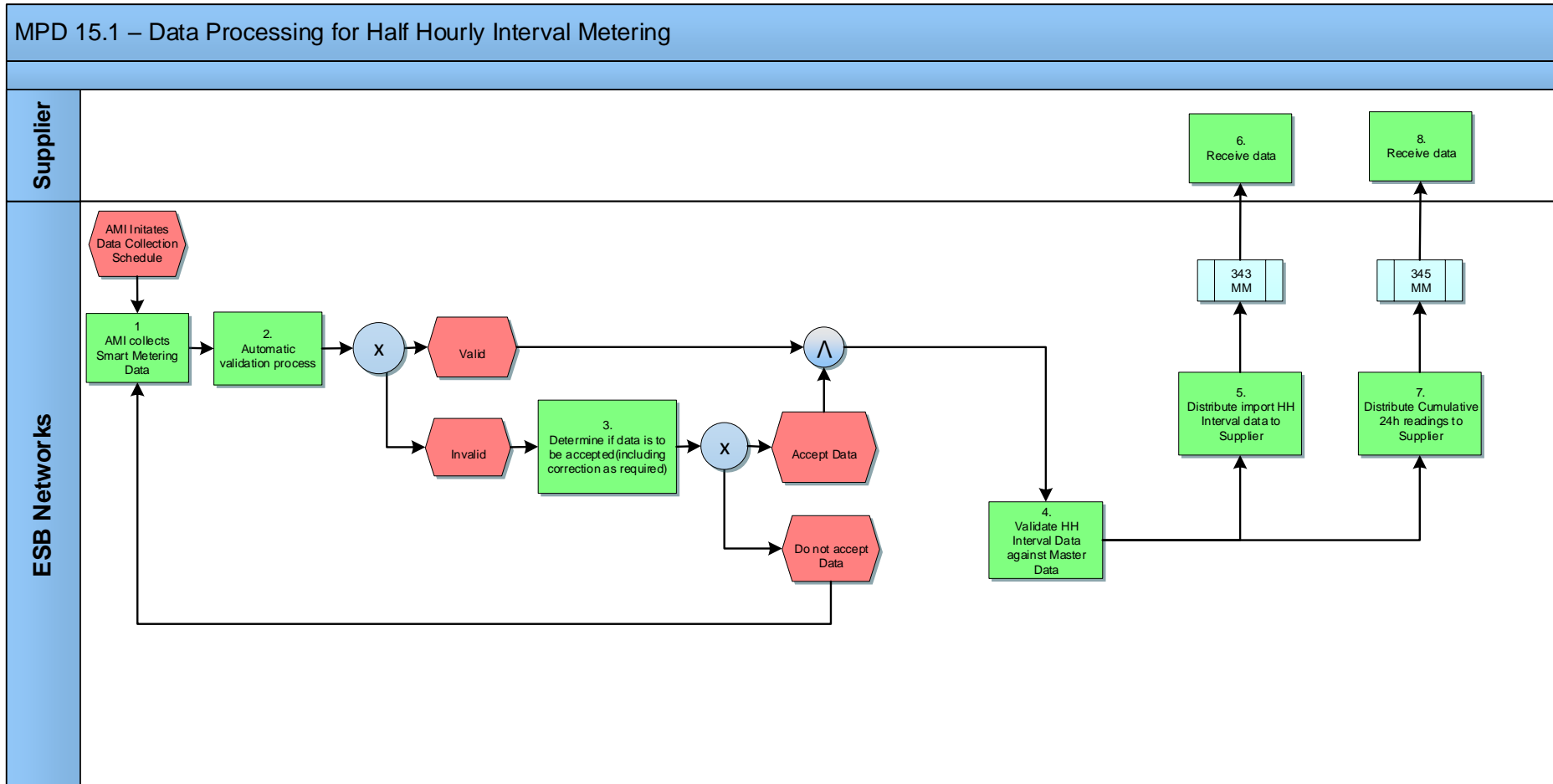# 1. Introduction

1.1   Scope

This Procedure describes the data processing and verification for Half Hourly Interval meter readings and data

1.2   History of Changes

This Procedure includes the following changes:

Version in which last change Implemented	Source of Change	Description of Change
Version 13.0	MCR 1157	New MPD for validation of Half Hourly Data

2. Process Map

MPD 15.1 – Data Processing for Half Hourly Interval Metering

Supplier

- 6. Receive data
- 8. Receive data

ESB Networks

- AMI Initates Data Collection Schedule
- 1. AMI collects Smart Metering Data
- 2. Automatic validation process
- X
- Valid
- Invalid
- 3. Determine if data is to be accepted (including correction as required)
- X
- Accept Data
- Do not accept Data
- ∧
- 4. Validate HH Interval Data against Master Data
- 343 MM
- 5. Distribute import HH Interval data to Supplier
- 345 MM
- 7. Distribute Cumulative 24h readings to Supplier

2.1 Process Description

	Process Step	Role	Process Step Description	Interface
1.	AMI Collects Smart Metering Data	ESBN	The Advanced Metering Infrastructure (AMI) collects Half Hourly Interval Data	
2.	Automatic Validation Process	ESBN	All Half Hourly Interval data received is automatically validated - see Section **3.1- Validation for Half Hourly Interval data**. Following validation data will be deemed valid or invalid: • Data is valid **-** **next step 4** • Data is invalid **-** **next step 3**	
3	Determine if data is to be accepted (including correction as required)	ESBN	Where data is found to be erroneous or incomplete the Data Collector shall correct or substitute Half Hourly Interval data in accordance with the agreed Validation, Estimation and Substitution Rules for Half Hourly Metering. • Data accepted **-** **next step back to step 4** • Data not accepted - **next step back to step 1**	
4	Validate HH Interval Data against Master Data	ESBN	When Half Hourly Interval data is available from the Data Collector, ESBN will validate against the master data held for the Meter Point - see Section **3.2 Master Data Validation for Half Hourly Interval Data.** All invalid conditions will be investigated. Invalid data will be distributed and aggregated provided a Supplier can be identified.	
5	Distribute import Interval (HH) data to Supplier	ESBN	For each Half Hourly, validated meter import data will be distributed as and when a complete set of data is available using the 343 Market Message	343 MM
6	Receive data	Supplier	The Supplier receives the data	
7	Distribute Cumulative 24h readings to Supplier	ESBN	For each Half Hourly meter a Cumulative import 24 hour reading will be distributed using the 345 Market Message	345 MM
8	Receive data	Supplier	The Supplier receives the data	

3. Supplementary Information

3.1 Validation for Half Hourly Interval Data

The Data Collector shall undertake the following validations and checks on an ongoing basis as described in the Half Hourly Validation, Estimation and Substitution Rules (TO BE CREATED).

3.2 Master Data Validation for Half Hourly Interval Data

ESBN will check and investigate the following situations:

- Data is received for a date where the meter point is terminated on the date.
- Non zero Half Hourly Interval data occurs during a day throughout which the Meter Point is not energised
- Import occurs and there is no Supplier associated with the Meter Point
- Data is received for a date where the site is registered as Non Interval
- Other additional validations to be considered – tbc.

3.3 Data Replacement

The Data Collector may replace Half Hourly Interval data at any time. In general, data will only be replaced if:

- A meter is proved to be inaccurate or faulty, or tampering has occurred
- Half Hourly Interval data is proved to be inaccurate
- Actual data becomes available where an estimate was previously provided
- A more accurate estimate becomes available, as calculated from actual register data that has become available

The first version of data issued in a 343MM for a particular MPRN/Read date combination will contain a value of '1' in the ReadingReplacementVersionNumber field. If a subsequent version of data is sent then the value in the ReadingReplacementVersionNumber field will increment by one.

3.4 Estimated Data in Market Messages

Actual Half Hourly Interval data will be processed and sent to Market participants as soon as it is available, with a timeline of D+1 (calendar) for a full set of data with estimates created where no actual data has been received.

Where actuals replace estimates, these will be sent to Market participants as soon as possible.

Indicative Aggregation is required at D+1 in line with the Settlement calendar(as defined in the Wholesale Market Trading and Settlement Code). This means that all available actual Half Hourly Interval read data collected will be included in Indicative Aggregation. Where no actual read data is available estimated data will be used in Indicative Aggregation.

Data will be estimated in line with the rules documented in the Half Hourly Validation, Estimation and Substitution Rules (TO BE CREATED)

343 Market message at D+1(calendar) : HH

At D+1(calendar) the 343 Market messages sent to Market Participants will include:

- actual data that has arrived on D+1(calendar) and has replaced an estimate generated for D+1 (calendar)
- estimated data provided by the Data Collector on D+1(calendar) if no actual has been received.

any other actual data that has been collected that day

For Market Message 345 only actual data will be forwarded. Where actual data becomes available post D+1, it will be forwarded retrospectively.

3.5 Market Messaging

Scenario	Via Message
All Half Hourly import data will be issued to the Supplier registered for Import.	343
For each HH meter a Cumulative Import 24 hour reading will be distributed using the 345 Market Message.	345

3.6 Reconciliation of Display Reading for DSO Connected HH Metering - *TBC*