### **017 SVA RISK: MANAGEMENT OF EXCEPTION REPORTS**

This document outlines the methodology used to assess the Settlement Risk related to the Management of Exception reports, ensuring they are actioned in a timely manner. We are not seeking to exhaustively outline all aspects considered during this assessment; our aim is to draw out the main data items considered and any key assumptions when estimating a future impact range.

**The risk that...** Exception reports are not sufficiently managed, such that material exceptions are not addressed at all or in a timely manner **resulting in...** default or estimated data in Settlement.

Category: Data retrieval and processing

Sub category: Exception management

# Estimated impact in 2019/20

| Market    | Lower | Middle   | Upper       |
|-----------|-------|----------|-------------|
| NHH (Est) | £0    | £24,421  | £1,174,440  |
| NHH (Def) | £0    | £27,004  | £825,089    |
| HH (Est)  | £0    | £158,657 | £21,074,769 |

Covers: D0095 and D0235 exceptions

Does not cover: D0023 exceptions

#### At risk population

As part of this assessment, we seek to understand the population at risk in the upcoming period, i.e. how many times will the underlying process occur where the risk can manifest.

The at risk population for this risk is all events that result in the transfer or amendment of MTDs and submission of or amendment to Consumption data. This will affect any supplier in both the Half Hourly (HH) and Non-Half Hourly (NHH) markets.

#### Data point considered

To identify previous exception backlogs, we have used data received in BSC Audit relating to D0095 and D0235 data flows from 28 NHH Suppliers and 9 HH Suppliers. Consideration has been given to Exception Type and Materiality.

| Market                | Exceptions 2017/18 |  |
|-----------------------|--------------------|--|
| NHH Profile Class 1-4 | 456,298            |  |
| HH 100 kW             | 15,390             |  |

#### Forecast

Below are the key considerations and assumptions when forecasting the at risk population in the 2019/20 period:

- D0095s are split into two types of error, Consumption Inconsistency (E01 to E07) and Meter Technical Information (E08 to E14). There are 14 different exception types, 7 of each. 6 Exceptions (E01, E02, E06, E09, E10 and E11) will cause a material error in Settlement, the remaining exceptions may cause a material error and present a risk to Settlement accuracy.
- D0235s have 5 Exception types (996, 997, 998, 999 and 00A). All of which create a Material Impact to Settlement.
  - The Management of D0095 and D0235 is audited as part of the annual BSC Audit
- Due to increased change of Meter activity as a result of the smart Meter rollout, we are forecasting an
  increased number of Change of Agent, Meter Exchange and Change of Supply events in the upcoming period in
  both NHH and HH markets
- The BSC does not specify a time frame for the resolution of D0095s or D0235s. That said, there is a prescribed "deadline" for NHH and HH exceptions of RF for NHH and SF for HH. Prioritisation of exceptions remains with Suppliers, however we re-iterate that material exceptions should be investigated primarily

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### Failure rate

From the population at risk, we need to estimate the proportion where the risk will manifest, i.e. the failure rate. To do this, we assess historical performance in the area and consider any upcoming changes that have the potential to impact future performance.

#### Data points considered

When assessing historical performance in the area, we considered:

- Audit issues from the BSC Audit.
- Backing Data provided by Suppliers during BSC Audit

The following table provides a view of Audit issues and Average Backlogs of Exceptions

| Market                    | 2015/16 | 2016/17 | 2017/18 |   |
|---------------------------|---------|---------|---------|---|
| HH Audit Issue            | 2       | 9       | 3       | The spike in D0095 Audit                                      |
| HH Av Exception (D0235)   | -       | -       | 1710    | issues in 2016/2017 could be<br>attributed to market activity |
| HH Av Material Exception  | -       | -       | 1710    | during this time, both with                                   |
| NHH Audit Issue           | 7       | 37      | 17      | P272 migration and Smart                                      |
| NHH Av Exception (D0095)  | -       | -       | 11,945  | Metering Installations.                                       |
| NHH Av Material Exception | -       | -       | 471     |   |

#### Forecast

Below are the key consideration and assumptions when forecasting failure rates in the 2019/20 period:

- We have used historical performance observed through BSC Audit when forecasting future failure rates.
- We are forecasting failure rates in the NHH and HH markets that are comparable to those observed in previous years, with the potential for some slight degradation as activity levels increase as part of the smart Meter rollout.

#### Impact

To estimate the impact of a risk we need to understand the days impacted and error volume on average per instance.

#### Average days impacted

Considering the data points previously discussed, we looked at average age of backlogs. The following table provides a view of the percentage of Backlog at each Settlement Run

| Market      | II<br>(7 days) | SF<br>(14 Days) | R1<br>(1 Mnth) | R2<br>(4 Mnths) | R3<br>(7 Mnths) | RF<br>(14 Mnths) | DF<br>(24 Mnths) |
|-------------|----------------|-----------------|----------------|-----------------|-----------------|------------------|------------------|
| HH (D0235)  | 16.26%         | 47.44%          | 17.64%         | 7.04%           | 6.03%           | 5.38%            | 0.24%            |
| NHH (D0095) | 0.72%          | 9.57%           | 3.71%          | 5.05%           | 80.95%          | -                | -                |

Considering the breakdown of backlogs of Exceptions, the average Impacted days are

- D0235 30 Days (1 Month)
- D0095s 210 Days (7 Months)

#### Average error per day

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Risk Evaluation Supplementary Information



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For this risk we considered that the main Settlement impact of Unworked Exceptions will be either estimated or default data. For D0095s, Exceptions E01, E02 and E13 will result in a default EAC if unresolved. For D0235s, 997 can result in a default EAC being used. All other exception types can result in estimated consumption.

When estimating the error per day, we used the standard rate card related average daily inaccuracy when estimating consumption for the associated markets. This rate card is derived by analysing consumption details on a Metering System level and looking at the gross difference on average when an estimate is replaced by an actual. An extract of the relevant rate card for average daily estimation accuracy is as follows.

| Market        | Avg. error per day<br>(kWh) |   |
|---------------|-----------------------------|---|
| HH Estimated  |                             |   |
| HH Default    |                             | , |
| NHH Estimated |                             |   |
| NHH Default   |                             |   |

- To assess the difference between an estimate and an actual, an actual consumption value needs to be available
- An estimate can either over or understate consumption on a Metering System level. When assessing inaccuracy we have used for gross difference on average
- Due to fundamental differences between estimating in the HH and NHH market (i.e. at a Settlement Period level or a forward looking estimate (EAC)), the differences in inaccuracies should not be compared like for like

We convert the error volume into a monetary value by the forecast system buy and sell price for the upcoming period.



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