

# SAA CALCULATIONS AND PROCESSING

This document outlines the methodology used to assess the Settlement Risk related to the SAA calculations being processed incorrectly or using incorrect data. 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...** the SAA's calculations and processing are incorrect or use incorrect data **resulting in...** erroneous Trading Charges

## Estimated impact in 2019/20

**Category:** Central aggregation and Trading Charges

**Sub Category:** SAA calculation

Lower	Middle	Upper
£0	£508k	£750k

### Please note:

### At risk population

The SAA calculation is completed for each Settlement Period, each day and will therefore be calculated 17,520 times in 2019/2020.

The at risk population for this risk is likely to be all Parties given that a number of the calculations are based upon market/volume share. However, the materiality and impact on the different Parties depends on the scale of the error and the Settlement Periods that are affected.

The number of active trading Parties has increased over the last three years, and continues to increase. The more Parties that are involved in the market increases the at risk population.

Trading Parties	2016/17	2017/18
No. of active Parties	89	111
No. of new active Parties	11	22

- 25% increase in active Parties within one financial year.
- In addition to the number of active Parties we have also seen an increase in the number of BSC Parties overall who could qualify and start trading within 2019/20.

### Failure rate

There are controls in place to cover the BSC Central systems, and the data that is being created, that almost always capture any issues prior to Settlement.

As data can be seen by ELEXON and Parties at the II Settlement Run, issues are generally identified and corrected before there is financial impact at the SF Settlement Run. For this reason, the failure rate is low and there aren't many instances of historical issues to consider.

When assessing historical performance in this area, we considered the number of SAA incidents that have occurred over the last three years. Any issues with the SAA have been resolved before SF, emphasising the effectiveness of the controls we have in place.

However, there is an inherent feature of the SAA system that has been identified, and is awaiting change, which can be used as an example of materiality for an SAA calculation issue. For clarity, the feature is in line with the BSC and is compliant.

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The materiality is forecast between £445,000 and £508,000 for 2017/18.

We have used the upper of the range as the middle value for estimated impact and increased this for the upper estimate in 2019/20 to account for the increase in Trading Parties.

## Considerations

Below are the key considerations and assumptions for the 2019/20 period:

- Any issues related to SAA are often related to the large amount of input data that it receives – these have their own associated risks within the risk register and are therefore not considered within this risk.
- Controls are in place to check data produced by SAA at II Settlement Run, before data is entered into Settlement and there are financial implications.
- Input data has to pass a number of validation criteria when received by the SAA. These checks are completed before the Settlement Run is executed and any data that fails validation is reported to ELEXON for investigation prior to proceeding. ELEXON are also informed if any data is not received so default rules can be applied if necessary.
- Each file received has a timestamp or sequence number within it so when selecting the correct files to be used, it would be clear to the SAA which is the latest file. An older sequence number or timestamp would be rejected.
- When looking ahead to 2019/20, changes to SAA are in scope for ELEXON's foundation programme as part of the November 2019 release. The systems will be fully tested ahead of the release and run alongside legacy platforms for a short period of time as mitigation. However, changes to systems come with inherent risks and should be considered.