

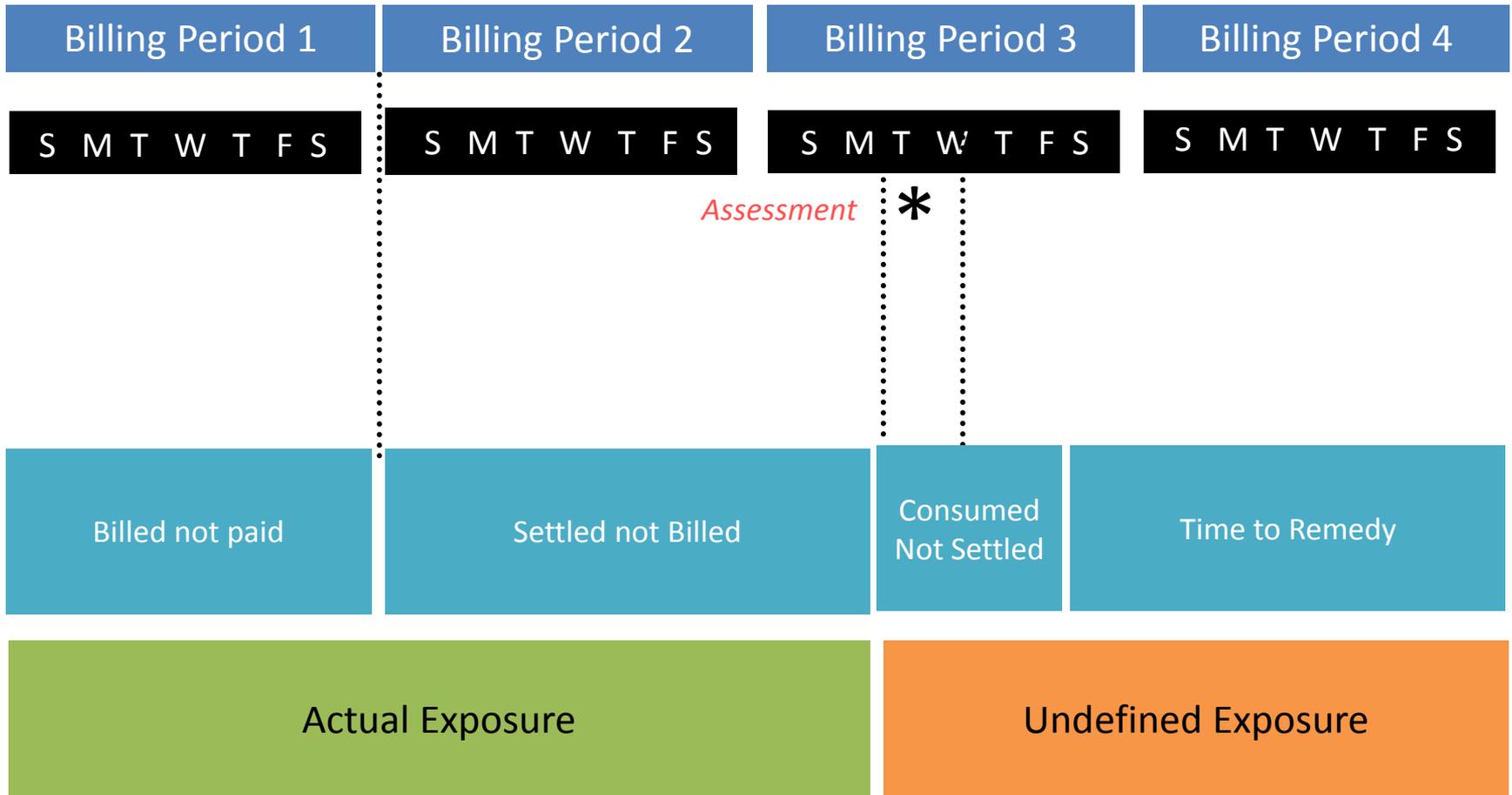
# Chapter 3: Implementation for the SEM

# Implementation for the SEM

- The implementation of Credit Cover Requirements for the SEM was designed to cover exposures in most circumstances
- It implements this by considering exposures in three elements:

#	Element	Description
1	Billed exposures	Relate to settlement calculations that have been included in a billing run and are still due for payment. In the diagram over, these are noted as “ <b>Billed not paid</b> ” and make up part of the <b>Actual Exposure</b>
2	Unbilled exposures	Relate to settlement calculations that have been determined but have not yet been included in a billing run. In the diagram over, these are noted as “ <b>Settled not Billed</b> ” and also make up part of the <b>Actual Exposure</b>
3	Undefined exposures	Relate to forward exposures, including amounts consumed and not yet settled. This is to cover the time between any potential default and when such a default is remedied

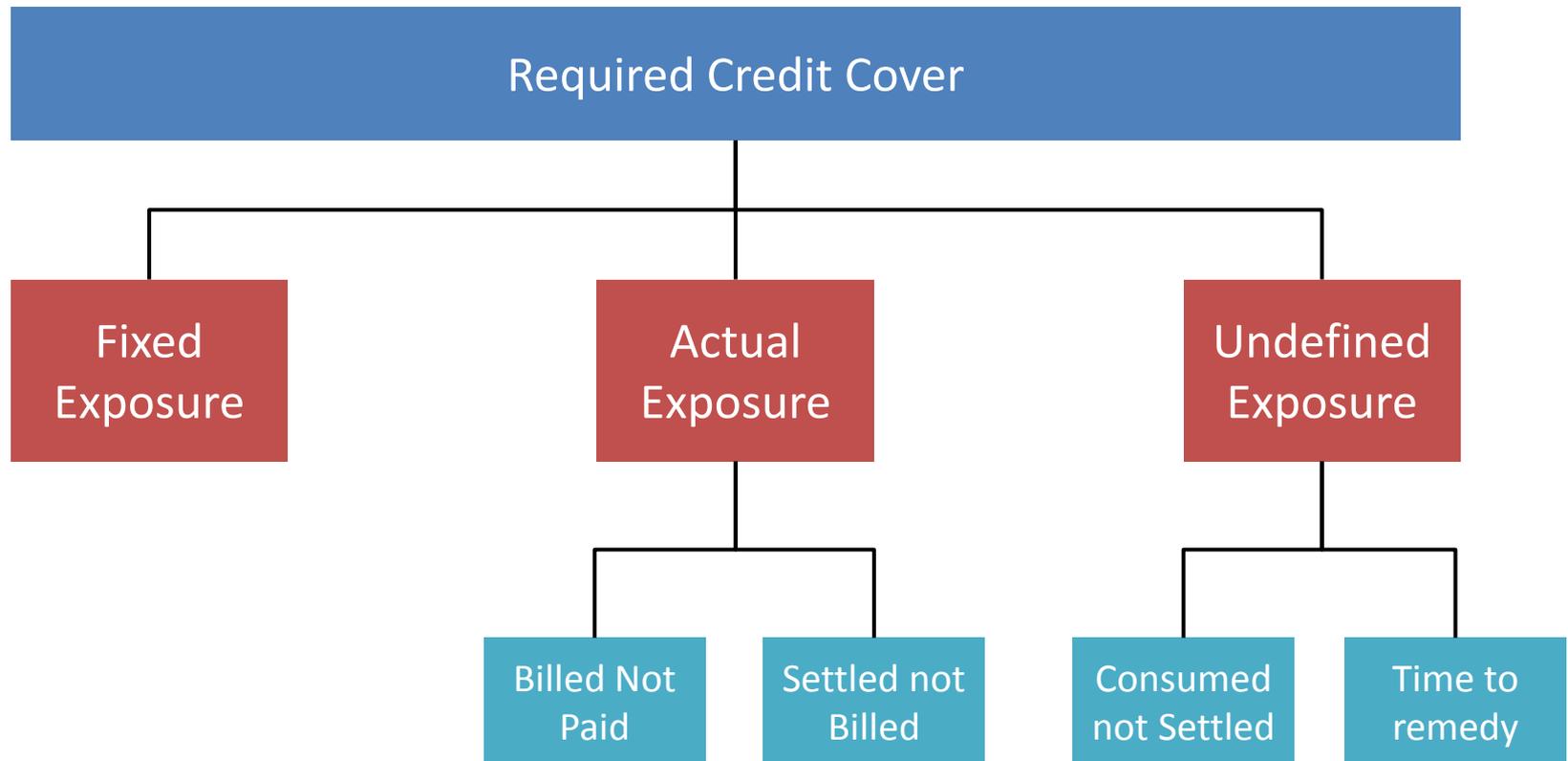
# Implementation for the SEM



# Implementation for the SEM

- The previous slide demonstrates how these elements are build up
- With a credit assessment taking place at the point marked \*, the following elements are included:
  - *The invoices issued with respect to Billing Period 1: these would have issued the previous Friday and with a credit assessment taking place on a Tuesday, these amounts have not yet been paid;*
  - *All settlement statements issued after Billing Period 1: both indicative and initial statements would have been completed and are available for inclusion;*
  - *Undefined exposures calculated to cover dates for which settlement has not taken place: this includes current days where consumption has taken place but metering has not yet been provided ('Consumed not Settled') and forecast cast consumption across the undefined exposure period ('Time to Remedy');*
  - *A Fixed Credit Requirement amount is also required for each unit registered to the Participant*

# Implementation for the SEM

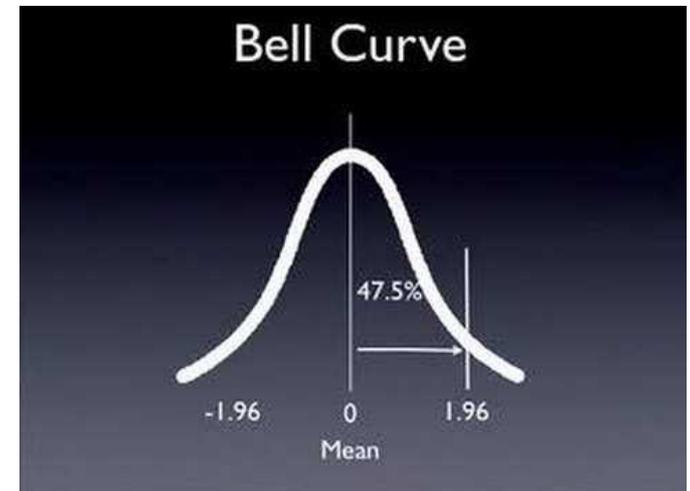


# Implementation for the SEM

- Participants are classed as New, Adjusted or Standard for the determination of how their undefined exposure is calculated
- A **Standard Participant** has their undefined exposure determined **based on a statistical analysis of their historical settlement amounts**. This analysis is done across a period of time known as the Historical Assessment Period
- A **New Participant** does not have sufficient historical data to support an accurate statistical analysis; therefore, they must **provide a forecast** to the MO on registration which is used to determine their undefined exposure
- An **Adjusted Participant** is where a participant's consumption (or generation) profile has changed significantly such that a historical analysis will no longer be accurate. These are treated the same as a New Participant

# Implementation for the SEM

- To calculate a Standard Participant's undefined exposure, the methodology used is:
  - Review the data in the Historical Assessment Period
  - Take Samples of settlement amounts for a period of time equal to the undefined exposure period
  - Calculate average settlement amounts for each sample and a standard deviation
  - Apply an Analysis Percentile Parameter: this is a z score value from a bell curve that provides a statistical confidence that up to a given percentage, all such scenarios should be covered



# Implementation for the SEM

- For the SEM, this statistical analysis approach is used to determine:
  - Undefined exposure for Supplier Units for Trading Charges
  - Undefined exposure for Generator Units for Trading Payments
  - Undefined exposure for Supplier Units for Capacity Charges
  - Undefined exposure for Generator Units for Capacity Payments
  - The Credit Assessment Price for energy to be used in the determination of the undefined exposure for New and Adjusted Participants
- The same approach has been applied in the new I-SEM arrangements