

Smart Impacts on Settlement

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Supplier Volume Allocation

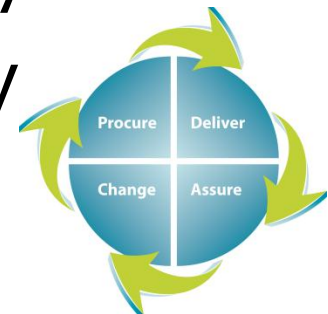


- » ELEXON manages the meter to bank process for electricity Settlement
- » There are 63 Supplier Ids across 35 companies
- » Collectively these Suppliers are responsible for 29.5 million Metering Systems and 305 million MWh of demand per year
- » We need to know the half hourly consumption for each Supplier for each of the 17,520 settlement periods each year



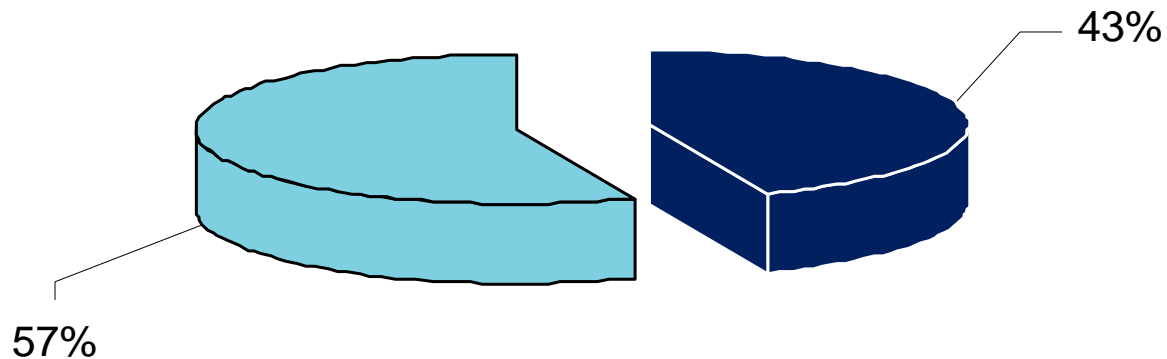
Half Hourly vs. Non Half Hourly

- » Settlement split between Half Hourly and Non Half Hourly Meters
- » Different Settlement rules apply for each
- » HH uses actual metered data as opposed to estimated data for NHH
- » There are 111,509 Half Hourly Meters compared to 29,452,129 Non Half Hourly
- » Smart Meters have Half Hourly capability



Comparative Metered Volumes

- Half Hourly Import (MWh)
- Non Half Hourly Import (MWh)



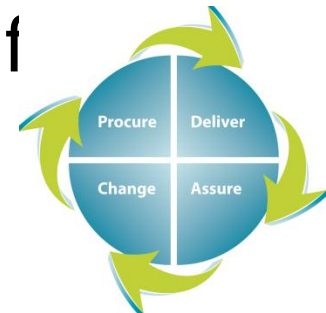
Less than 0.4% of Metering Systems are Half Hourly
But attribute over 40% of Energy Volume



Half Hourly Settlement

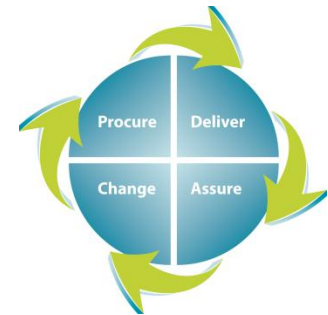


- » Half Hourly Metering is mandatory above 100kW import
- » Actual meter reading data collected by Data Collector
- » Data Aggregator calculates aggregated volumes
- » SVAA uses GSP Group Correction calculation and adds to the corrected NHH volumes for a deemed take for each Supplier in each half hour



Non Half Hourly Settlement

- » Over 29 million Metering Systems without Half Hourly Metering
- » How do we know how much a Supplier's customers without Half Hourly Meters consumed in a given half hour?
- » We use Annualised Advances (AAs) and calculate Estimated Annual Consumptions (EACs)
- » Estimates based on Profiles



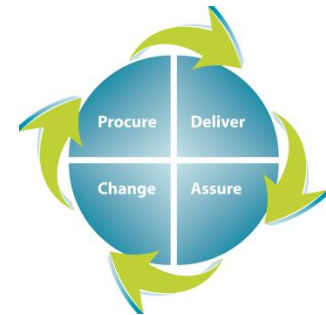
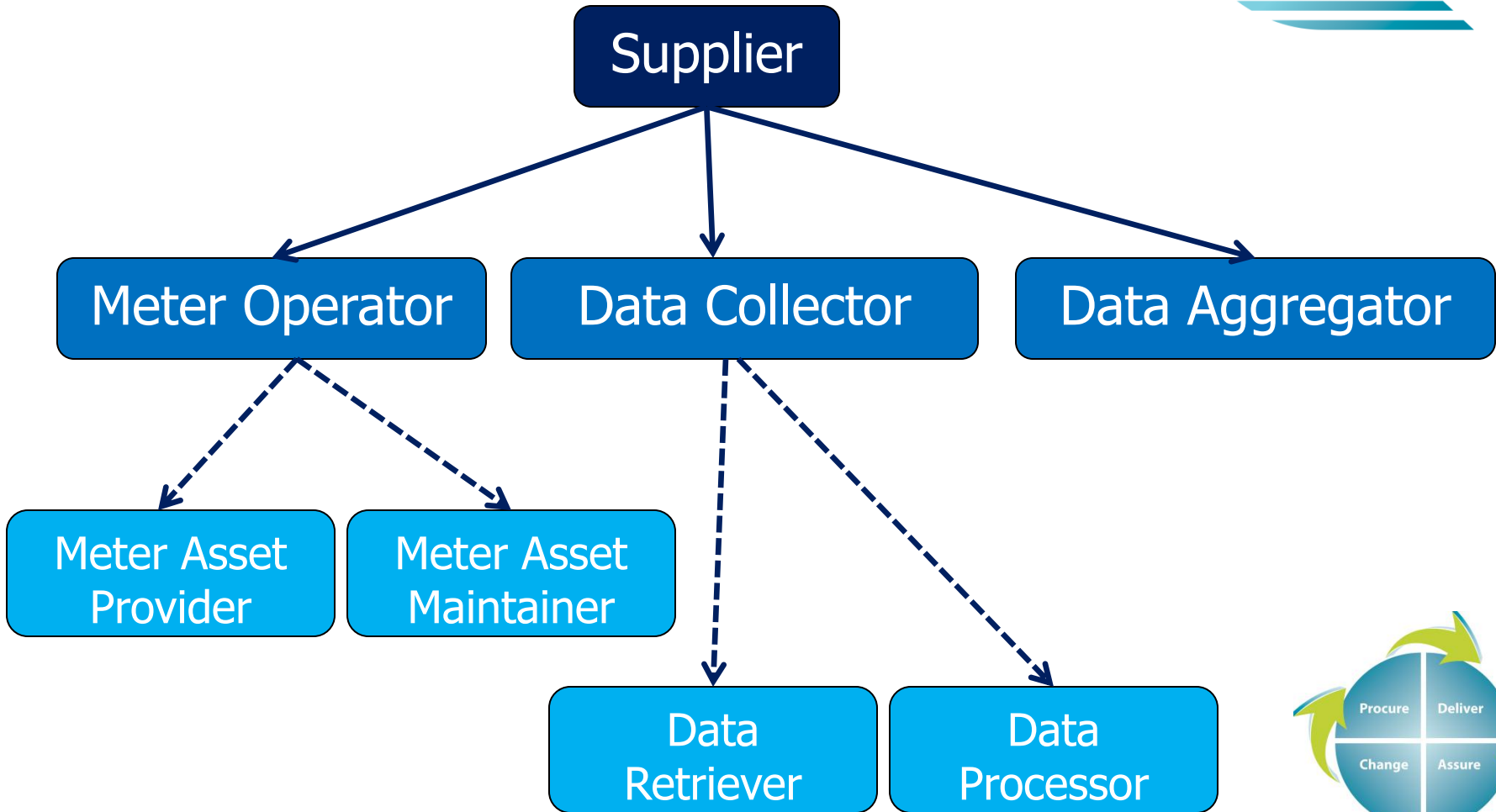
The Supplier Volume Allocation Agent (SVAA)



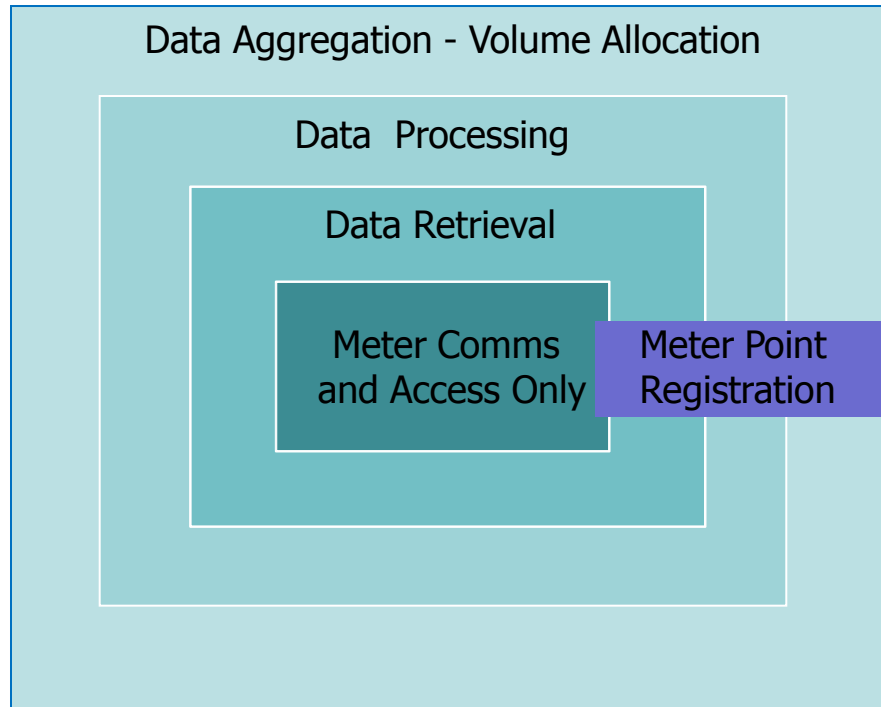
- » Receives data from NHH and HH Data Aggregators
- » Produces Daily Profiles
- » Provides Daily Profiles to Data Collectors
- » Uses HH profiles to derive HH consumption estimates for NHH metered customers
- » Calculates and applies NHH line losses
- » Applies GSP Group Correction
- » Sends volumes to Settlement (SAA)



The Supplier Hub



Implementation of the DCC



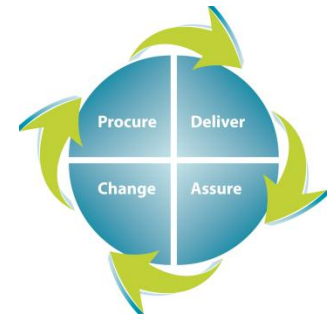
- Instruction Processing
- Validated data to Settlement
- What about the Supplier Hub?
- Real data not AAs and EAC
- Central Data Collection Agent
- Data storage
- Least impact
- Existing meter-to-bank processes

Integrity of Settlement Data Critical



Profiling and Settlement Review

- » ELEXON led review issued May 2010
- » 32 Responses across a number of stakeholders
- » Mandated roll out of advanced (2014) and smart (2020) meters
- » Impact of advanced and smart meters
- » Identify improvements and opportunities
- » Shape the future of Settlement



What are we looking at?



- » Impacts of smart and advanced meters
- » Review of existing Settlement timetable
- » Perceived barriers to Half Hourly Settlement
- » Pros and cons of settling Half Hourly
- » Accuracy of existing Non Half Hourly Profiles
- » Supporting changes in consumer behaviour



Why are we looking at?



- » Non Half Hourly was always an interim solution
- » Significant technology changes since 1998
- » Half Hourly is efficient and accurate
- » Smart meters collect half hourly readings
- » How accurate are existing Profiles?
- » Reduce Settlement from 14 months
- » Resolve Change of Supplier issues
- » Impact on the Assurance Framework



What are we doing?



- » Identification of barriers to HH Settlement
- » Cost benefit analysis and modelling
- » Impacts on other charges
- » Review of the SVA specified charge
- » Identification of transition issues
- » Engagement with industry to help shape the future
- » Developing a smart vision for Settlement



Smart Vision for Settlement

- » Do we want to settle Half Hourly ?
- » Can we lower central costs with DCC ?
- » Can the BSC provide a cost effective solution ?
- » How do we use innovative Time of Use Tariffs?
- » New Smart Measurement Class - 'S'
- » More accurate NHH profiling
- » Smooth transition of legacy arrangements

