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Electricity Settlement Reform
Significant Code Review

Design Advisory Board 18 January 2018

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<u>Agenda</u>

1. HHS project update & administrative matters

    - update on business case & policy workstreams

    - HHS feedback from future of supply market arrangements

    - DAB alternates & next meeting

2. Feedback on DAB scenarios

    - summary of feedback

    - discussion questions

3. Update on the TOM design work & overview of draft skeleton
    TOM options

    - initial DAB member views

4. Wrap up

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Business Case

- SOC to be published this winter
- A second iteration Outline Business Case to be published by mid-2018

Access to HH data

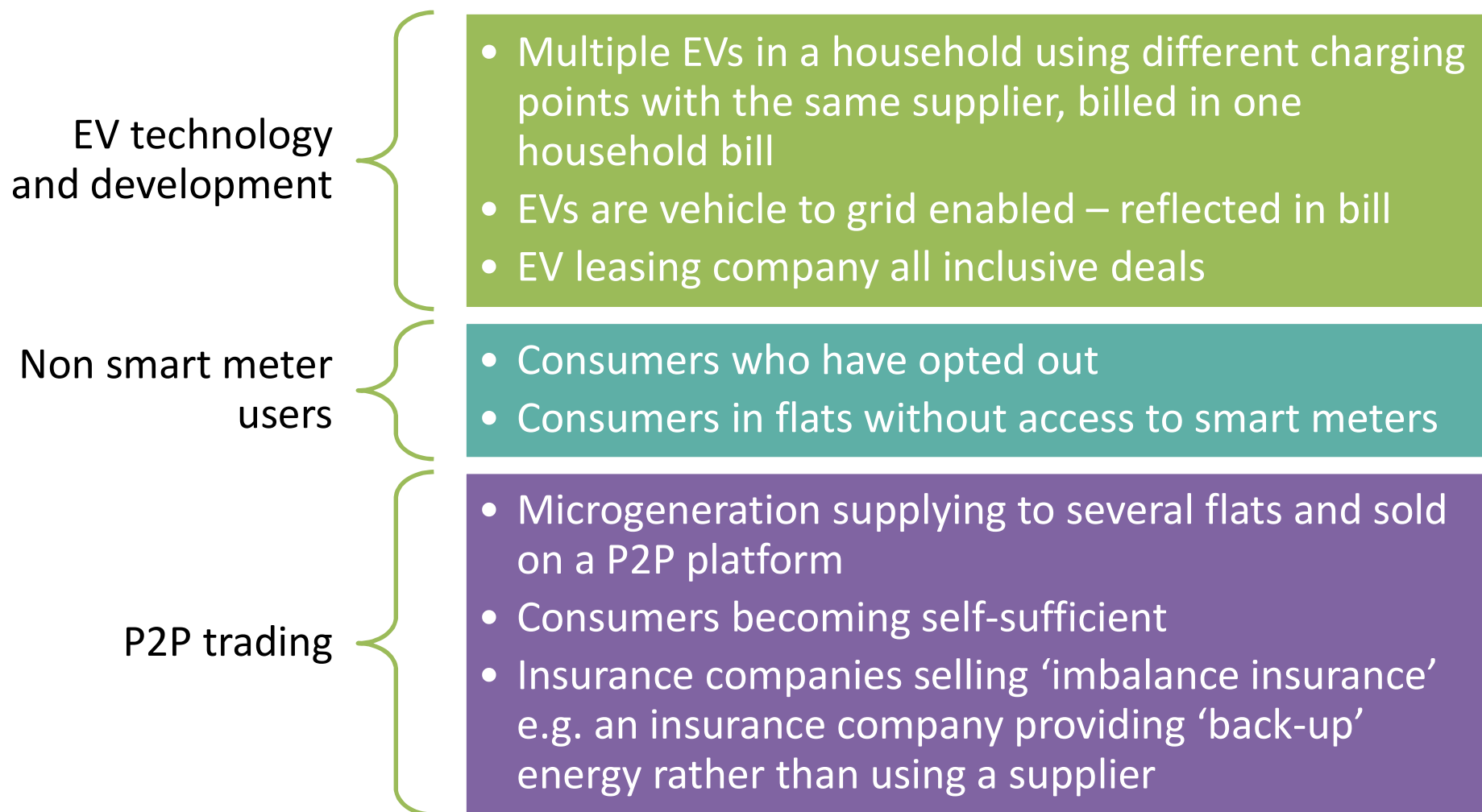- We plan to publish the Privacy Impact Assessment and a consultation this Spring

Agent functions

- Using our RFI, meetings with stakeholders and other sources we are continuing work in this policy area
- Expect a publication in Spring to give stakeholders an update

DAB alternate members

DAB member	Alternate
Chris Allanson	
Sara Bell	Joanna Hubbard (Electron)
Will Broad	
David Crossman	Ed Reed (Cornwall)
Mitch Donnelly	Rhys Keally (British Gas)
Chris King	
Graham Oakes	Rachel Stanley (Open Utility)
Prof. Catherine Mitchell	
Judith Ward	
Stew Horne	Victoria Pelka (Citizens Advice)

Next meeting

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- Next DWG meetings:
  - **14 February –** DWG assessment of draft skeleton TOM options against assessment criteria and updates where necessary. DWG feedback on ELEXON information paper
  - **14 March** and **25 April**

- Possible dates for next DAB meeting in March (based on known availability:
  - 5 March (Monday)
  - 8 or 9 March (Thursday or Friday)
  - 13, 15 or 16 March (Tuesday, Thursday or Friday)
  - 20 March (Tuesday)

Feedback on DAB scenarios

EV technology and development

- Multiple EVs in a household using different charging points with the same supplier, billed in one household bill
- EVs are vehicle to grid enabled – reflected in bill
- EV leasing company all inclusive deals

Non smart meter users

- Consumers who have opted out
- Consumers in flats without access to smart meters

P2P trading

- Microgeneration supplying to several flats and sold on a P2P platform
- Consumers becoming self-sufficient
- Insurance companies selling 'imbalance insurance' e.g. an insurance company providing 'back-up' energy rather than using a supplier

- In the last DWG meeting, the DWG members discussed the DAB scenarios

  ➢ DWG members raised concerns that many of the issues raised in DAB scenarios fell outside of settlement

  ➢ DWG members found that the potential wider regulatory implications of the scenarios meant it was challenging to focus on the settlement aspects alone

- We would like to take a step back and discuss with the DAB their views on how they think the settlement system should interact with new technologies and businesses which are likely to appear in the new future

- This will help us refine the DAB scenarios to focus on these interactions and 'future-proof' the TOM

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1. How should the settlement system interact with new decentralised technologies and businesses in the future

   • Will a lack of interaction impede the entry of decentralised technologies and businesses

   • What level of interaction required to ensure that the settlement arrangements are accurate and as cost-reflective as possible

2. Are there any particular aspects of the design of the settlement system which are required to promote flexibility and ensure that HHS is an enabler of new technologies and businesses

3. Customers may have multiple energy service providers in future, including multiple BSC parties. To what extent should the TOM try to accommodate this?

   • Given the potential impact of EVs on system demand and that they could be supplied under different arrangements than supply arrangements for a premises, should settlement arrangements have optionality to separate out EV consumption

DAB Restricted

DAB: Design Working Group update (2)

Skeleton TOMs

18 January 2018
Justin Andrews

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Content

- DAB 1st meeting DWG

- DWG work progress

- DWG approach to TOM development

- DWG assumptions

- Service Descriptions

- Skeleton TOMs

- Next steps
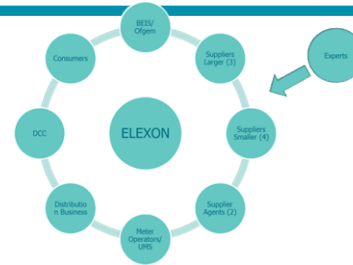
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DAB Recap

DAB Recap of DWG work

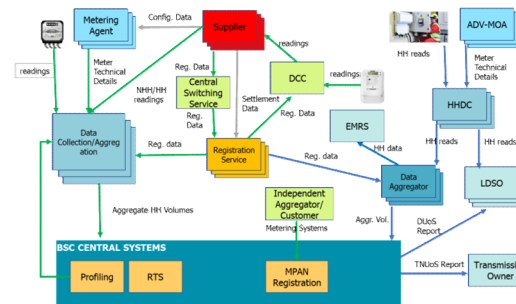- DWG set up and approach

- Timeline

  Draft Skeleton TOMs

- Assumptions   '**HHS is an enabler for innovation to provide consumer benefits**'

- Market segments (Smart SP, Smart RR, Advanced, Non Smart and Unmetered)

- Strawman TOMs

(2) Smart Agent: NHH Plus with combined NHH/HH

DWG progress

DWG progress update: 18 Jan. 2018

■ Focus today

Draft skeleton TOMs	Provide draft skeleton TOMs to Ofgem to assist Ofgem policy work streams	January 2018

■ Four DWG meetings (11 Oct, 15 Nov, 13 Dec, 10 Jan)

– ToR, ways of working and strawmen TOMs

– Services, process maps, market segments and Use cases

– Baseline principles, service groupings (Smart and Advanced, non smart)

– Completed service groupings, e.g. registration, metering

– Skeleton TOMs, DWG focus

■ HHS updates to BSC Panel, MEC, SEC and DCUSA Panels and ICoSS

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DWG approach to TOM development

DWG baseline principles (DWG 04/01)

TOMs will:

1. Be optimised for the longer term 'target state' where the majority of meters will be Smart or Advanced meters. Any meter not either of these should be managed as part of the transitional arrangements

2. Only consider as transitional states (and not the final TOM option) any designs that use the existing Elective HH and Non Half Hourly (NHH) settlement arrangements

3. Cover HH meter data (Active Import and Active Export) for Settlement purposes only. While non-settlement activities (such as billing) are out of scope, the design will aim not to be actively detrimental to these

4. Aim to design out elements of the existing Non-Half Hourly (NHH) profiling process such as the use of Annualised Advances (AAs) and EACs (EACs) in aggregation

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DWG baseline principles (DWG 04/01) contd

TOMs will:

5. Aim to have at least one TOM aligning with the policy developments for data privacy and consideration of agent functions

6. Not consider technology or architecture factors at this stage

7. Consider any new Unmetered Supplies arrangements only once a framework is in place for the metered segments of the market so as not to constrain the possibilities for the TOM design

8. Not consider Settlement timescales until TOM options have been further developed

Market segments and service groupings

- Model processes for five market segments:

  1. Smart Meter, Settlement Period data

  2. Smart Meter, Register Reading data

  3. Non Smart Meter, Register Reading data

  4. Advanced Meter, Settlement Period data

  5. Unmetered Supplies

- Mapped E2E from registration to final settlement

- Use Cases compared to determine common functionality

- Focus on key activities to determine:

  – Where opportunities exist for defined roles in the Settlement process

  – How each TOM supports each of these market segments

  – How the market will evolve with rollout of Smart and Advanced meters

  – Potential gaps in processes

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DWG TOM development approach
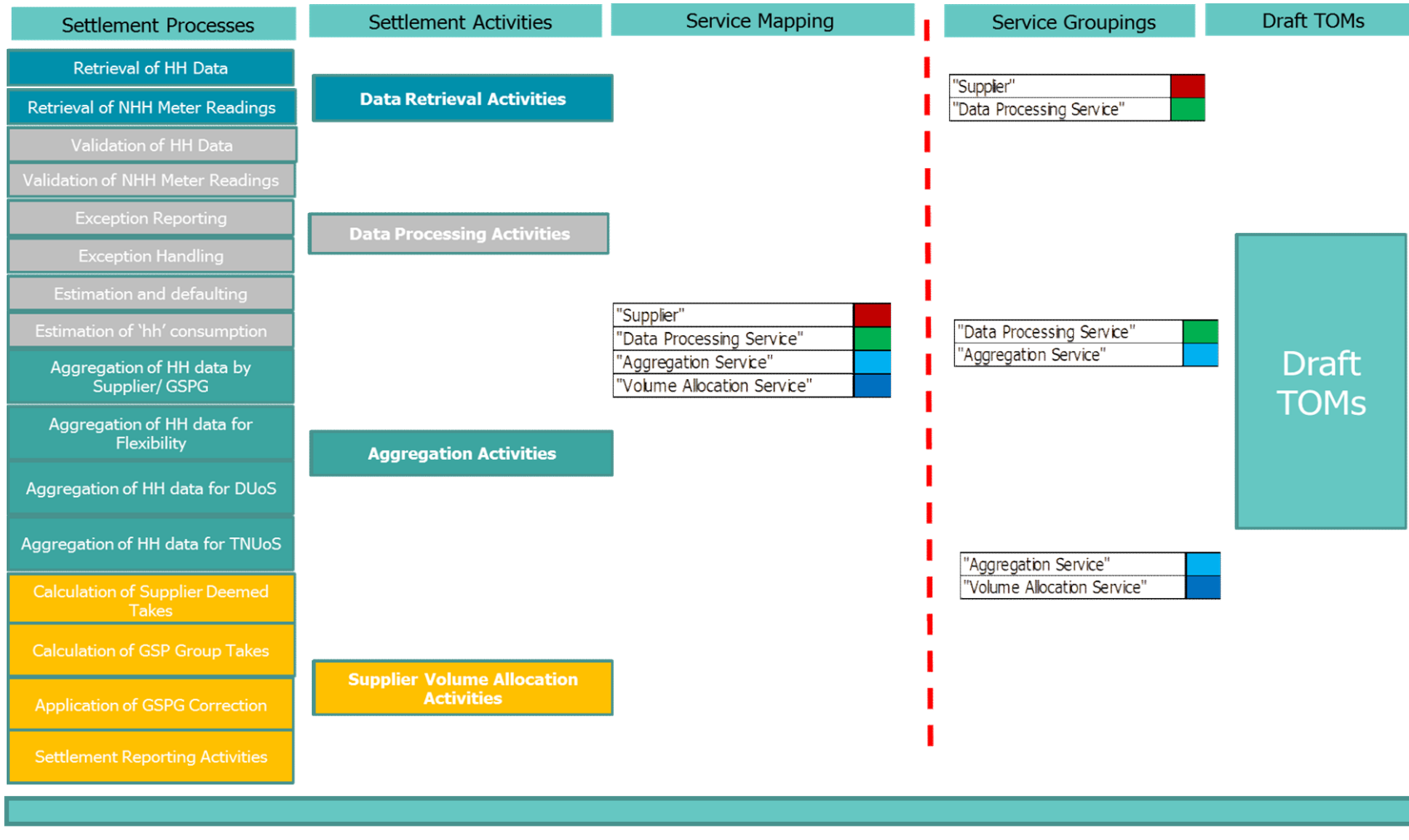
DWG key considerations

- Smart (Register Reads);

  – Majority accessed through DCC

  – Almost identical to Smart (Settlement Period) except requires conversion to half hourly data during data processing phase (derivation of load shaping to be considered separately)

- Advanced meters:

  – Process works well today, does not necessarily need to change

  – Data retrieval and processing activities can be grouped as both services require access to the meter

- Non-smart meters:

  – Same as Smart (Register Reads) except requires manual meter reading

- Aggregation service:

  – Flexibility benefits if service is across all market segments

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Other Service Groupings

- Metering Services

  - Smart and non smart

  - Advanced

- Registration

  - One service (multiple Distribution Businesses), allocating volume by registrant

  - Data may change (flexibility)

  - Data privacy interaction

- Unmetered Supplies

  - Basis as HH now with efficiencies

  - Transition consider moving NHH to HH

- Load shaping Service

  - One service across smart and non smart

  - Access to SP data

  - Representative and depends on TOM option

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Skeleton TOMs

DWG Focus

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DWG 04 output

- DWG recommended focus on TOMs

  - A: Combined Retrieval and Processing with Separate Aggregation
  - C: Single End-to-End service covering Retrieval through to Aggregation
  - E: Single End-to-End Service covering Retrieval through to Volume Allocation

- TOMs B and D less favoured

  - B: Separate Retrieval with Combined Processing and Aggregation
  - D: Separate Services

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TOM settlement services

1. Registration Service

2. Metering Service

3. Meter Reading Service

4. Retrieval Service

5. Processing Service

6. Load Shaping Service

7. Settlement Period level Unmetered Supplies Service

8. Aggregation Service

9. Volume Allocation Service

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Registration Service

This service will be responsible for:

- acting as registrar for all Metering Systems in Supplier Volume Allocation (SVA)

- receive, validate and process updates from the registrant

- maintaining and updating data items as appropriate within the registration system for settlement purposes

- provision of registration data or access to registration data to other parties as required (e.g. future flexibility)

DAB note for scenarios:
- Future innovation/flexibility requirements need new registration data (e.g. new participants, behind the meter data items, types of aggregation)

- Potential important significant impacts

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Metering Service

This service will be responsible for:

- installing, commissioning and maintaining all Meters (& associated equipment)

- configuration of non-Smart and Advanced Meters

- maintaining the accuracy of Meter Technical Details (MTD) including Current Transformer (CT) and Voltage Transformer (VT) information where applicable

- energisation and de-energisation of Meters

- connection and disconnection of Meters

- Meter fault investigation where a site visit is required

DAB note for scenarios:
- Future flexibility requirements: new meters types (non settlement)
  - EV chargers, generation meters

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Meter Reading Service (non smart meter)

This service will be responsible for:

- obtaining Register Reads (RRs) from non-smart Meters either via a site visit or remotely as applicable

- providing these Register Reads (RRs) to parties as required for mon-smart Meters

- Assumption small number of meters, risk that organisations will not be available

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Retrieval Service

This service will be responsible for:

- receiving appointments to Metering Systems

- retrieving/accessing Time of Use (TOU) Register Reads (RRs) for Active Import Registers and the Active Export Register and Meter configuration data from Smart Meters

- retrieving the Settlement Period level Active Import (AI) and Active Export (AE) consumption (and other data as required e.g. reactive power) data from other Metering Systems as appropriate (dependent on TOM)

- receiving and maintaining Meter Technical Detail (MTD) data for Metering Systems

- calculating Meter Advances (MAs) for Register Read (RR) data where appropriate

Processing Service (1 of 2)

This service will be responsible for:

- Validate and estimate meter data, convert Register Reads (RR) to Settlement period (SP) data, provide to relevant parties and exception reports

In detail:
- validating Settlement Period (SP) level consumption data for Active Import and Active Export (and other data as required) using a common set of agreed validation rules to be implemented electronically where possible

- estimating Settlement Period (SP) level consumption data for Active Import and Active Export (and other data as required) where such data fails validation or is missing or unavailable

- estimating Settlement Period (SP) level data for Metering Systems with Register Reads (RRs) where such data fails validation or is missing or unavailable

- estimating Settlement Period (SP) level data for Metering Systems with Register Reads (RRs) for periods between Meter Readings

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Processing Service (2 of 2)

This service will be responsible for:

- conversion of Meter Advances for Metering Systems with Register Reads (RRs) into Settlement Period (SP) level data using information on Meter configuration and data provided by the Load Shaping Service (LSS)

- maintenance of standing data as appropriate;

- exception reporting for any Metering Systems where data is deemed to be invalid or where access or issues with Metering Systems are identified;

- providing validated Settlement Period (SP) level data to the other parties as appropriate

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Load Shaping Service

This service will be responsible for:

- receiving smart Meter Settlement Period (SP) data for Active Import (AI) and Active Export (AE) from the Processing Service (Smart Metering Systems) according to an agreed schedule

- deriving 'Load Shape' data for an agreed number of categorisations relating to the type of Metering Systems for which Load Shaping information is required

- providing 'Load Shape' data for the agreed categorisations to the Processing Service (Smart and Non-Smart Metering Systems) according to an agreed schedule

DAB note:
- must be representative, service depends on TOM and decision on whether or not to centralise agent functions

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Settlement Period Level Unmetered Supplies Service

This service will be responsible for:
* UMS inventory, dynamic switching info, calculating Settlement Period data, reports

In detail:
* contracting with and receiving appointments for unmetered supply customers
* receiving inventory data associated with unmetered Supplies from distribution businesses
* validating the inventory data as appropriate
* accessing other dynamic information relating to the operation of unmetered Supplies
* accessing standing data relating to unmetered supplies
* calculating Settlement Period level data for unmetered supplies according to a defined schedule
* providing access to calculated Settlement Period level data to the Aggregation Service
* providing reports and data to unmetered supply customers and distribution businesses as appropriate

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Aggregation Service (1 of 2)

This service will be responsible for:
- Getting registrant appointments/standing data, estimating data, applying losses, aggregating SP level meter data for settlements and other organisations (distribution/transmission businesses) and for flexibility

In detail:
- receiving appointments to Metering Systems

- maintenance of standing data as appropriate

- receiving registration data from the Registration Service

- accessing validated Settlement Period level data for Smart and non-smart Meter from the Processing Service according to a defined schedule

- accessing validated Settlement Period level data for unmetered supplies from the Settlement Period level Unmetered Supplies Service to a defined schedule

- identifying duplication or omission of Metering System data

- estimating data where missing according to Settlement timescales

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Aggregation Service (2 of 2)

In detail:

- aggregating the Settlement Period level data based on defined aggregations for the calculation of Imbalance Settlement purposes based to defined Settlement timescales

- aggregating the Settlement Period level data based on defined aggregations for the calculation of Network Charging (as appropriate) based on defined Settlement timescales

- aggregating the Settlement Period level data based on defined aggregations for other purposes e.g. flexibility or smart grids (as appropriate) based on defined Settlement timescales

- applying network loss factors to aggregated volumes as appropriate using data provided by distribution businesses

- Provision of aggregated consumption volumes and losses to the Volume allocation Service according to Settlement timescales

- Provision of aggregated consumption volumes and losses to other parties as required

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Volume Allocation Service (1 of 2)

According to Settlement timescales this service will be responsible for:
- Aggregating meter volume data by Balancing Responsible Party by GSP Group, applying correction and calculating Balancing Mechanism Unit volumes

In detail:
- receiving aggregated Settlement Period level data from the Aggregation Service

- receiving information from other central services on the net volume of energy entering a distribution region for each Settlement Period

- aggregating data for Balancing Responsible Parties by GSP Group (distribution region)

- aggregating all Balancing Responsible Party data within a distribution region

- comparing and calculation differences between the aggregated Balancing Responsible Party data with the information on the net volume of energy entering a distribution region for each Settlement Period

Volume Allocation Service (2 of 2)

In detail:

- correcting the Balancing Responsible Party data within a GSP group (distribution region) as appropriate

- aggregating the corrected Balancing Responsible Party data across GSP Groups for use in the imbalance Settlement calculations

- provision of out-turn data to the Service responsible for the Imbalance Settlement calculation

- maintenance of standing data as appropriate

- provision of reports and data to other parties as appropriate

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Target Operating Models (TOMs)

TOM A: Combined Retrieval and Processing with Separate Aggregation

TOM B: Separate Retrieval with Combined Processing and Aggregation

TOM C: Single End-to-End service covering Retrieval through to Aggregation

TOM D: Separate Services

TOM E: Single End-to-End Service covering Retrieval through to Volume Allocation

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TOM A: Overview

- Data Retrieval and Data Processing combined

- Separate process for Advanced meters due to meter communication methods and not involved in load shaping

- Data Processing converts Register Reads to Settlement Period-level data

- No real change for settlement of Advanced meters (i.e. excluding billing activities)

- Across market segment aggregation of Settlement Period-level data

- Across market segment aggregation service – can facilitate independent aggregators (demand-side response), peer-to-peer, system operation by DNOs, data for network charging if one service

- Main difference from the status quo is the across market segment aggregation

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TOM A: Description and Features

Description of TOM A:

- The basis of this TOM is that Retrieval and Processing are bundled into a single service, one for Smart and one for Advanced, reflecting the different ways of communicating with these meters. The Smart service will also apply conversion where HH data is not available before outputting HH-level data to a market wide Aggregator, who will sum up the data across the whole market before feeding aggregated volumes to a single Volume Allocation Service

- Though much of the Processing of HH data is likely to be similar between the Smart and Advanced meter segments, these are also defined separately because of the need to convert meter or register advances into HH period data for SMETS meters (e.g. for opt out customers) which is not required for Advanced

Features:

- If there was a single aggregation service (subject to Ofgem policy decisions); all the SP-level data would be aggregated across market, thus facilitating flexibility, e.g. aggregators, demand-side response, peer-to-peer, DSOs, meter data for new network charging arrangements
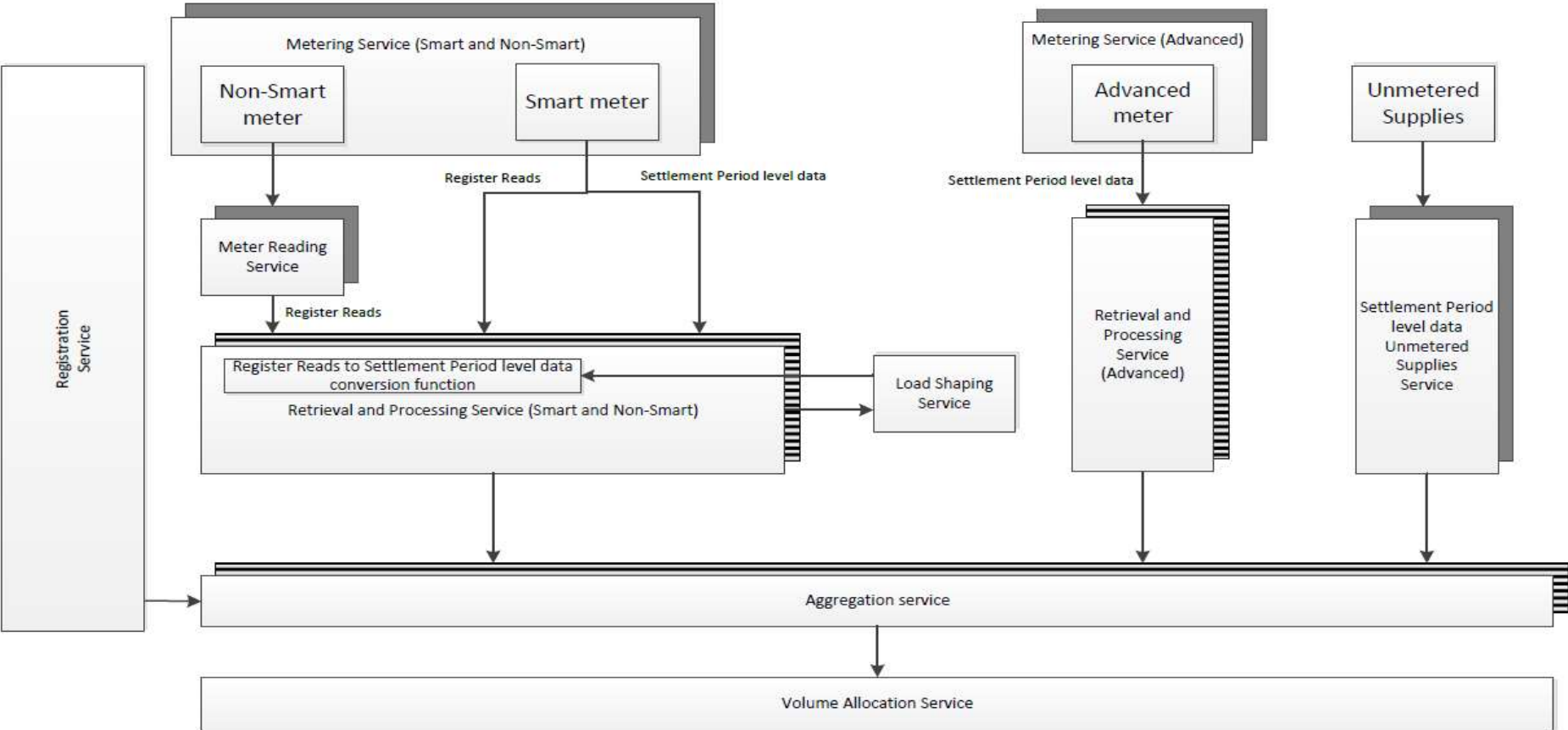
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TOM A: Combined Retrieval and Processing with Separate Aggregation

TOM A: Advantages and Disadvantages

Advantages:

- Defining new Smart Retrieval and Processing services separately from Advanced HH will minimise the impact on existing HH processes, even though the same organisations may provide services in both market segments

- Creating an 'all HH' system will allow the Aggregation service/s to operate across all market segments and facilitate aggregations of specific groups of customers across Supplier portfolios for a range of purposes

- Processing services will still be able to 'aggregate' the data that they hold for provision to Suppliers, but this will be a reporting-only activity that will form part of processing and not an input to the Settlement process

- Making changes to Aggregation service system(s) would be simpler if a small number of providers are involved

Disadvantages:

- Central procurement of the Aggregation service could be required, depending on the preferred governance model

- If the Aggregation service/s is not competitively provided, a charging model with price controls may be required

- Would require a change to Smart Energy Code (SEC) if the Smart Retrieval and Processing service will be collecting settlement period data from the smart Meter

- This TOM could still encounter issues with data handoffs between the Processing and Aggregation services, although this could be addressed by requiring the Aggregation service to access the data from the Processing service without receiving or holding copies of the data; i.e. the Processing service still holds the master data

TOM B: Overview

■ Data Processing and Data Aggregation bundled together

■ Flexibility with provision of Data Retrieval service

■ No central view of MPAN-level data

■ No significant difference from the status quo

TOM B: Description and Features

Description of TOM B:

- The basis of this TOM is that Processing and Aggregation are bundled into a single service for Smart meters, with retrieval of readings via the DCC being separated out to allow more flexibility in who might deliver that service

- With Aggregation done as part of Processing, it means that with multiple Processing Services operating the data will be aggregated first before reaching the Volume Allocation Service which covers the whole market. That would mean that there is no single market wide view of MPAN-level data should it be required for demand-side response or other activities that require access to this data. To mitigate this, a separate view of market-wide MPAN level data would have to be obtained or accessed from all the Processing services operating in the market

Features:

- No significant differences in market services structure from current state, hence impacts may be less with by existing providers.
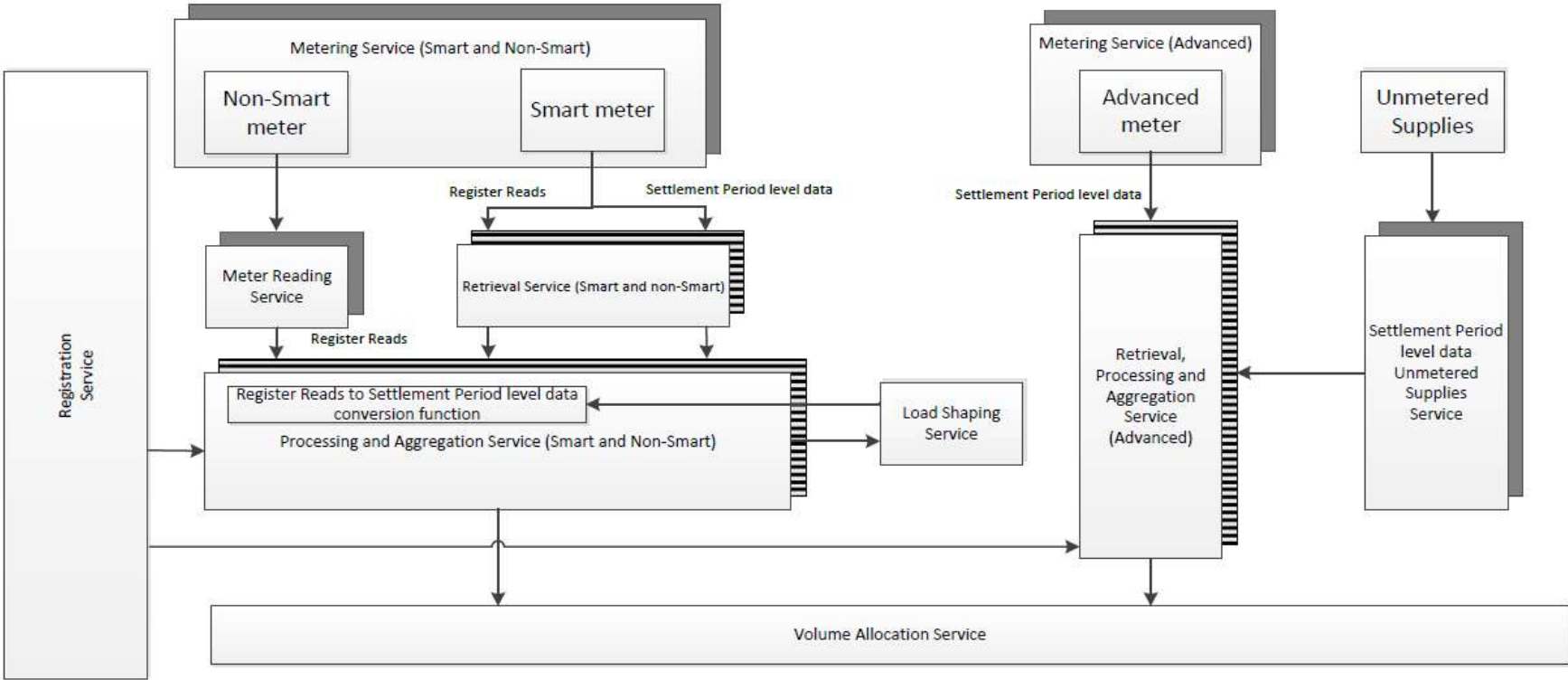
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TOM B: Separate Retrieval with Combined Processing and Aggregation

TOM B: Advantages and Disadvantages

Advantages:

- Combining processing and aggregation services removes one agent handoff compared to the current baseline

- Preserves the existing SEC and DCC arrangements where the supplier is the de facto Retrieval service, although a choice under this TOM could be to formally assign Retrieval to a market participant other than the supplier

- Alternatively, a separately defined retrieval service could also allow for new providers offering a self-contained DCC solution with a scheduling service without requiring every supplier to accede to the SEC

- A separately defined non-supplier Retrieval service could facilitate additional data privacy and security controls

Disadvantages:

- Supplier as the de facto Retrieval service may present challenges for data privacy and security

- Separating Retrieval and Processing across organisations would make resolving data issues more difficult as the Processor will be validating data but will need to use the Retrieval service to obtain readings

- Splits Processing and Aggregation into Smart and Advanced segments by defining two distinct services even though may processes are similar. This could limit Aggregation across the segments, e.g. matching generation in the Advanced market with demand in the Smart metered market

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TOM C: Overview

■ Retrieval, Processing and Aggregation services combined.

■ Based-on current practices with HHDC & HHDA

■ Reduced hand-offs

■ Single provider must be responsible for Retrieval, Processing and Aggregation

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TOM C: Description and Features

Description of TOM C:

■ The basis of TOM C is that there is a recognition that the current market roles of Data Collection (including Retrieval) and Aggregation are most commonly done by the same organisation in the existing HH Advanced market. The 'DC/DA split' was largely a function of the NHH market where aggregation was done using complex rules and using instructions from the NHHDC containing Annualised Advanced and Estimated Annual Consumption. NHHDAs also use the Party Agent software supplied by ELEXON and so there was a natural separation on that basis as well. However, in an all HH market, that split is less significant, and so the natural consequence is a combined DC/DA (DR/DP/DA) service

■ TOM C also offers the fewest handoffs between service providers as they are likely to be done within the same organisation (although some might outsource Smart Meter Retrieval while still being the official Retrieval service.

Features:

■ Combination of Retrieval, Processing and Aggregation reduces hand-offs, potentially reducing data quality issues.

■ Combining retrieval, processing and aggregation service means a provider must be responsible for all three services

■ Would require a change to Smart Energy Code (SEC) if the E2E service is required to collect settlement period data from the smart meter

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TOM C: Single End-to-End service covering Retrieval through to Aggregation
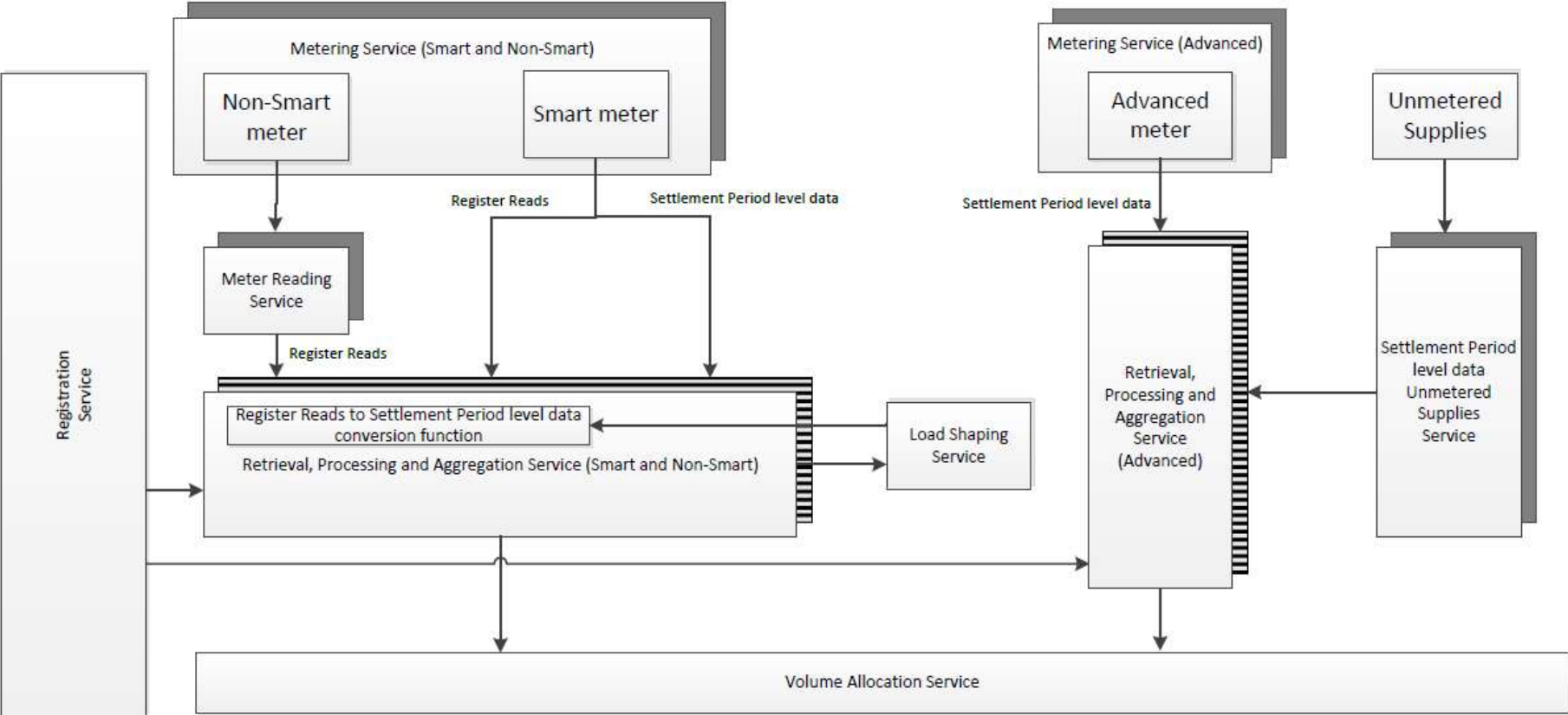
Key to shadows

- Competitively procured
- Competitively procured or single/multiple monopolies
- No shadow Single or multiple monopolies

TOM C: Advantages and Disadvantages

Advantages:

- As with TOM A, seeks to minimise the impact on existing HH processes, even though the same organisations may provide services in both market segments

- Combines the formerly separate agent roles of Collection (Retrieval and Processing) and Aggregation into a single service, recognising that in the existing HH market these are nearly always delivered by the same organisation and this is likely to be the same in a new 'all HH' market

- Aggregation remains a simplified service for Smart meters compared to the existing NHH arrangements for non-Smart domestic customers as it will be handling SP-level data only

Disadvantages:

- Effectively splits the market into Smart and Advanced segments by defining two separate E2E services. This could make it impractical for any Aggregation across the segments, e.g. matching generation in the Advanced market with demand in the Smart metered domestic market

- Higher risk of single point of failure for 3 services combined

TOM D: Overview

- Separate services (retrieval, processing)

- Across market segment aggregation – could facilitate innovation, e.g. independent aggregators etc.

- Opportunity for competition in the provision of services

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TOM D: Description and Features

Description of TOM D:

■ The basis of this TOM is that the four essential 'Meter to Bank' services are all left separate to allow the maximum amount of optionality in how these are delivered in a new 'all-HH' market. As a consequence of this, Aggregation has been explicitly defined as an across market segments service only

■ However, separating Retrieval from Processing in the Advanced meter segment is impractical as the Processing service needs access to the Meter for validation purposes. Equally, because Smart meters are read via the DCC and access is governed under the Smart Energy Code (SEC), making Retrieval a defined service under the BSC would offer flexibility should the eventual providers of that service need to accede to the SEC

■ This TOM would also support a market wide Retrieval service that is independent of Processing

Features:

■ Across market segments aggregation service means all the SP-level data could be performed centrally, thus facilitating independent aggregators (demand-side response), peer-to-peer, system operation by DNOs, data for network charging

■ The significant difference from the status quo is the across market segments aggregation service

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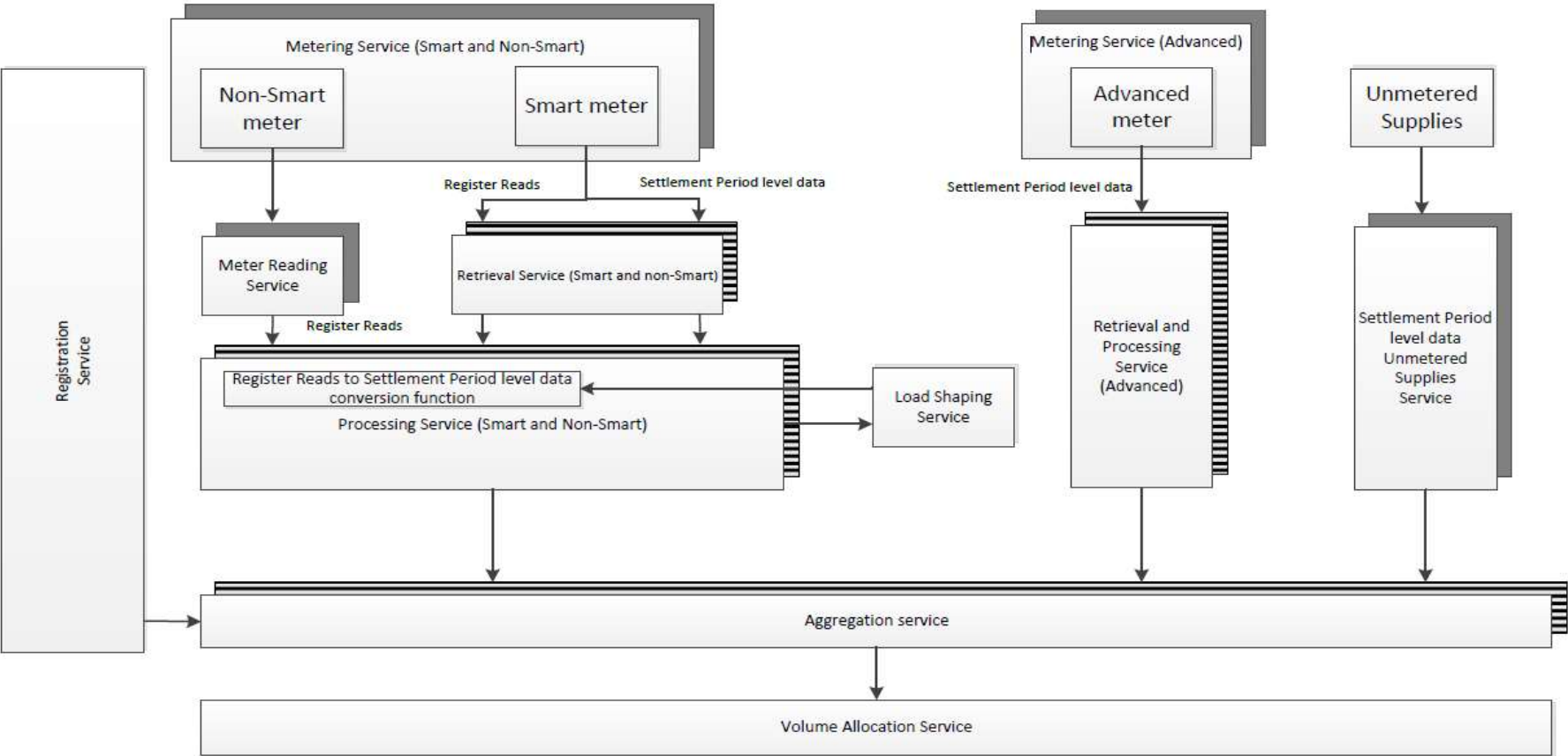
TOM D: Advantages and Disadvantages

Advantages:

- Allows maximum optionality in how market participants can organise themselves to deliver these services

- Could make it easier for new service providers to enter the market specialising in either Smart meter Retrieval, Processing or Aggregation

- Creating an 'all HH' system will allow the Aggregation service/s to operate across all market segments and facilitate aggregations of specific groups of customers across Supplier portfolios for a range of purposes

- Processing services will still be able to 'aggregate' the data that they hold for provision to Suppliers, but this will be a reporting-only activity that will form part of processing and not an input to the Settlement process

- Could allow some functions to be moved from the Volume Allocation Service to the Aggregation service/s

- Making changes to Aggregation service system(s) would be simpler if a small number of providers are involved

Disadvantages:

- Doesn't deliver any significant reduction in handoffs over the current baseline, and may even add one

- Central procurement of the Aggregation service could be required, depending on the preferred governance model

- If the Aggregation service(s) is/are procured, a charging model with price controls may also be required

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TOM E: Overview

■ Maximum centralisation

■ Needs controls around data access and security

■ Centralised Aggregation – facilitates independent aggregators etc.

■ Reduced hand-offs

■ Reduced competitive procurement (as market-wide Aggregation and Volume allocation require single centralised provider)

TOM E: Description and Features

Description of TOM E:

■ This TOM is based on a single central service for Smart Meters that could retrieve readings via the DCC, process, aggregate and provide Volume Allocation services. For Advanced Meters, the Aggregation and Volume Allocation elements of the single central service could be used for Advanced meters, leaving Retrieval and Processing similar to what HHDCs currently do for this sector

■ As with any centralised option, controls would have to be in place to ensure that data access and security concerns were addressed

Features:

■ Aggregating SP-level data centrally would facilitate independent aggregators (demand-side response), peer-to-peer, system operation by DNOs, data for network charging

■ Combination of Retrieval, Processing, Aggregation and Volume Allocation reduces hand-offs, potentially reducing data quality issues

■ Combining market-wide services (Aggregation and Volume Allocation) with Retrieval and Processing for smart/non-smart meters would reduce options for competition in the provision of these services

■ This TOM requires one centralised provider executing data retrieval, processing, aggregation and volume allocation services

■ A change to Smart Energy Code (SEC) if the single central E2E service will be required to collect settlement period data from the smart Meter

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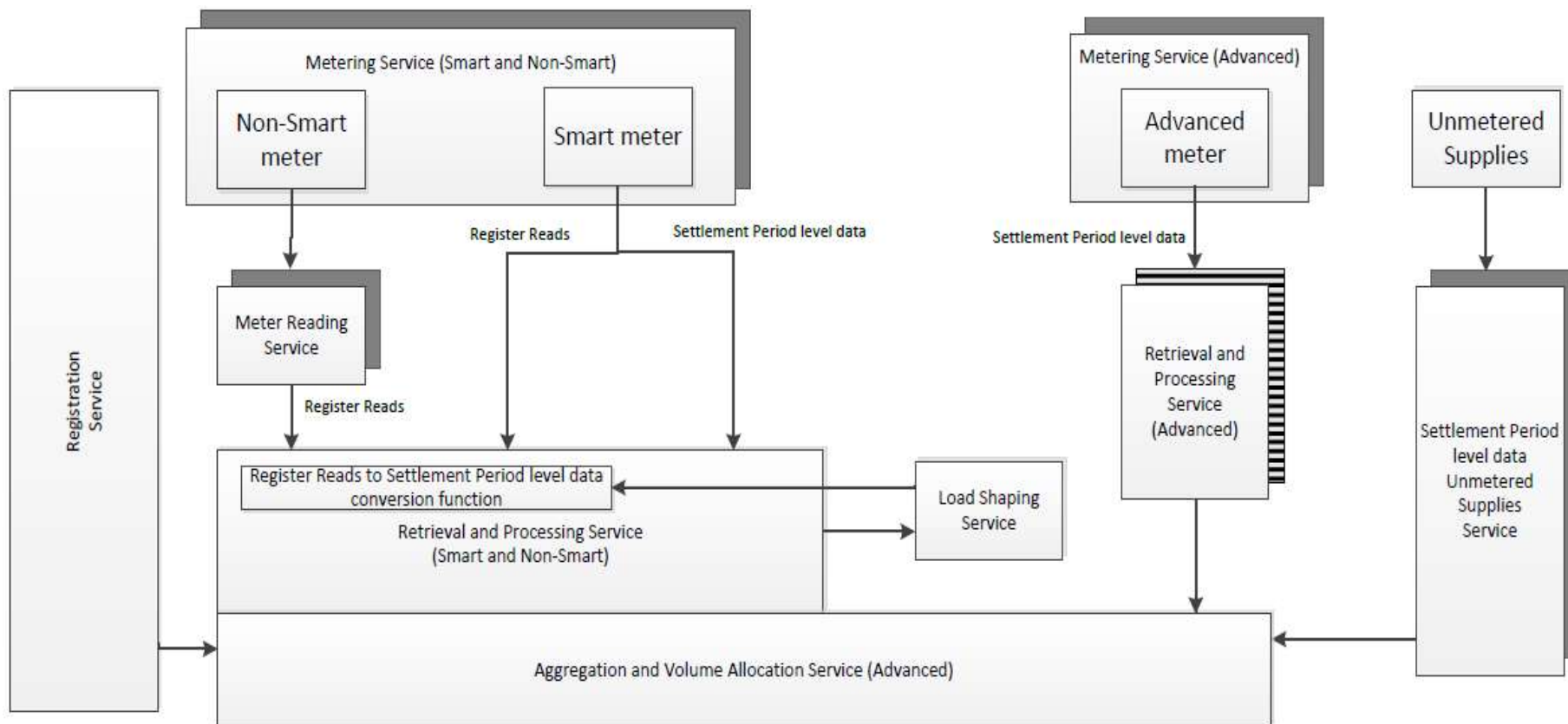
TOM E: Advantages and Disadvantages

Advantages:

- Provides a single service available to all market participants applying a single set of defined rules

- Single E2E service will be able to handle register reads and settlement period level data for all Suppliers to maintain continuity in service provision where SP-level data may not be available

- Facilitates multiple forms of aggregation across the market as all metering systems will be in a single service

- Could allow for more sophisticated privacy and security if only one service will be handling settlement data

Disadvantages:

- Suppliers cannot choose who can provide DR, DP and DA settlement services

- Could reduce incentives to innovate or for the new service to offer other non-settlement services

- A single instance of a service is also a single point of potential failure, so mitigation measures will be required

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Next steps

TOM Stage 1

ELEXON/DWG next steps

- ELEXON

  - TOMs, service descriptions, high level pros and cons/rationale, work plan

- DWG meeting 14 February

  - Review Skeleton TOMs
  - Evaluate against criteria

- Potential DWG meeting 14 March

- HHS Seminar end of Feb/March

  - Work to date of the DWG and approach taken
  - TOM skeleton options (describe the services and high level pros and cons)

- Phase 1 deliverables Skeletons TOMs

- Updates to BSC Panel, SEC, MEC, DCUSA Panels

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