

Public

Market-wide Half-Hourly Settlement

Stakeholder Event

6 February 2019
ELEXON



Health & Safety

In case of an emergency

An alarm will sound to alert you. The alarm is tested for fifteen seconds every Wednesday at 9.20am

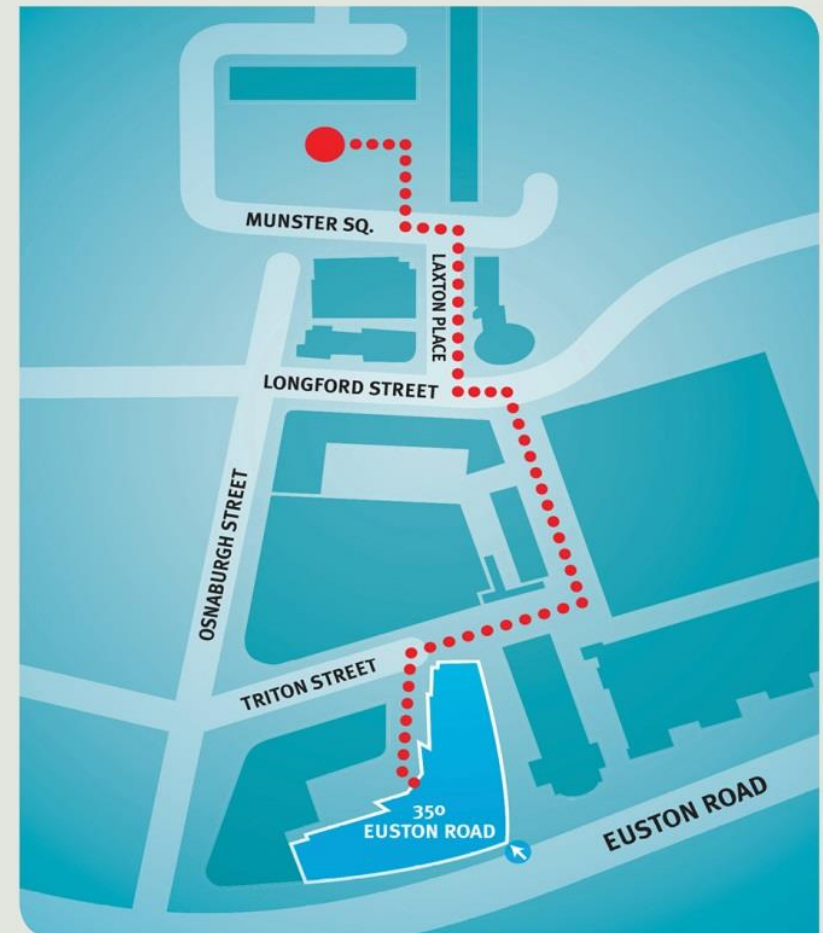
Evacuating 350 Euston Road

- If you discover a fire, operate one of the fire alarms next to the four emergency exits.
- Please do not tackle a fire yourself.
- If you hear the alarm, please leave the building immediately.
- Evacuate by the nearest signposted fire exit and walk to the assembly point.
- Please remain with a member of ELEXON staff and await further instructions from a Fire Warden.
- For visitors unable to use stairs, a Fire Warden will guide you to a refuge point and let the fire brigade know where you are.

When evacuating please remember

- Do not use the lifts.
- Do not re-enter the building until the all clear has been given by the Fire Warden or ground floor security.

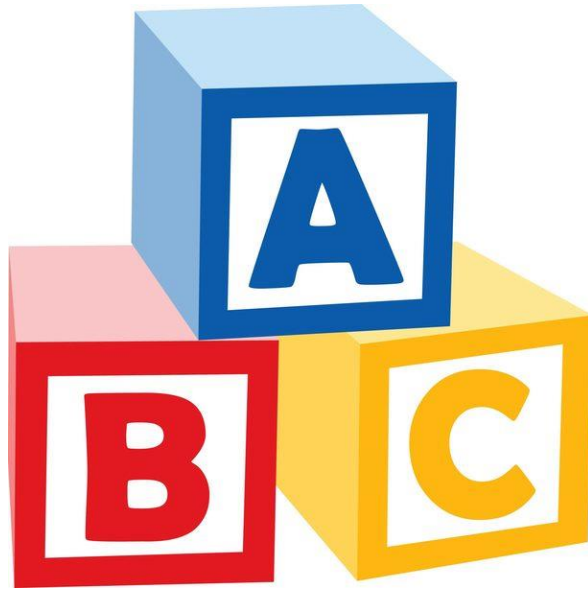
Our team on reception is here to help you, if you have any questions, please do ask them.



Welcome – all about you



HHS – Objective of TOM design



Half Hourly Settlement event – Welcome (2)

INFORM

- TOM DEVELOPMENT
- THE TARGET OPERATING MODEL
- SETTLEMENT TIMETABLE

REFLECT

- TOM EVALUATION

FEEDBACK

- CONSULTATION QUESTIONS

Today's plan

Agenda item	Time	Lead
1. Welcome	10:00	Kevin Spencer
2. Ofgem <ul style="list-style-type: none">Background to SCRPolicy updates and Business Case	10:10	Anna Stacey
3. DWG Stage 1 refresher <ul style="list-style-type: none">Meter to BankMarket SegmentsTOM Services5 Skeleton TOMs	10:20	Matt McKeon
4. DWG Stage 2 TOM development <ul style="list-style-type: none">DWG Work GroupsLeast Regrets SteerDecision Tree	10:50	Mark De Souza-Wilson
5. The DWG Preferred TOM	11:10	Matt McKeon
6. The DWG Stage 2 Report	11:50	Kevin Spencer
7. Lunch	12:00	
8. Settlement Timetable <ul style="list-style-type: none">Group Discussion on Proposed timetableDispute Run Timing	12:45	Kevin Spencer
9. Transition <ul style="list-style-type: none">Transition PrinciplesWhat is changing?Constraints	13:30	Matt McKeon
10. Consultation Questions	14:00	Mark De Souza-Wilson



Ofgem SCR

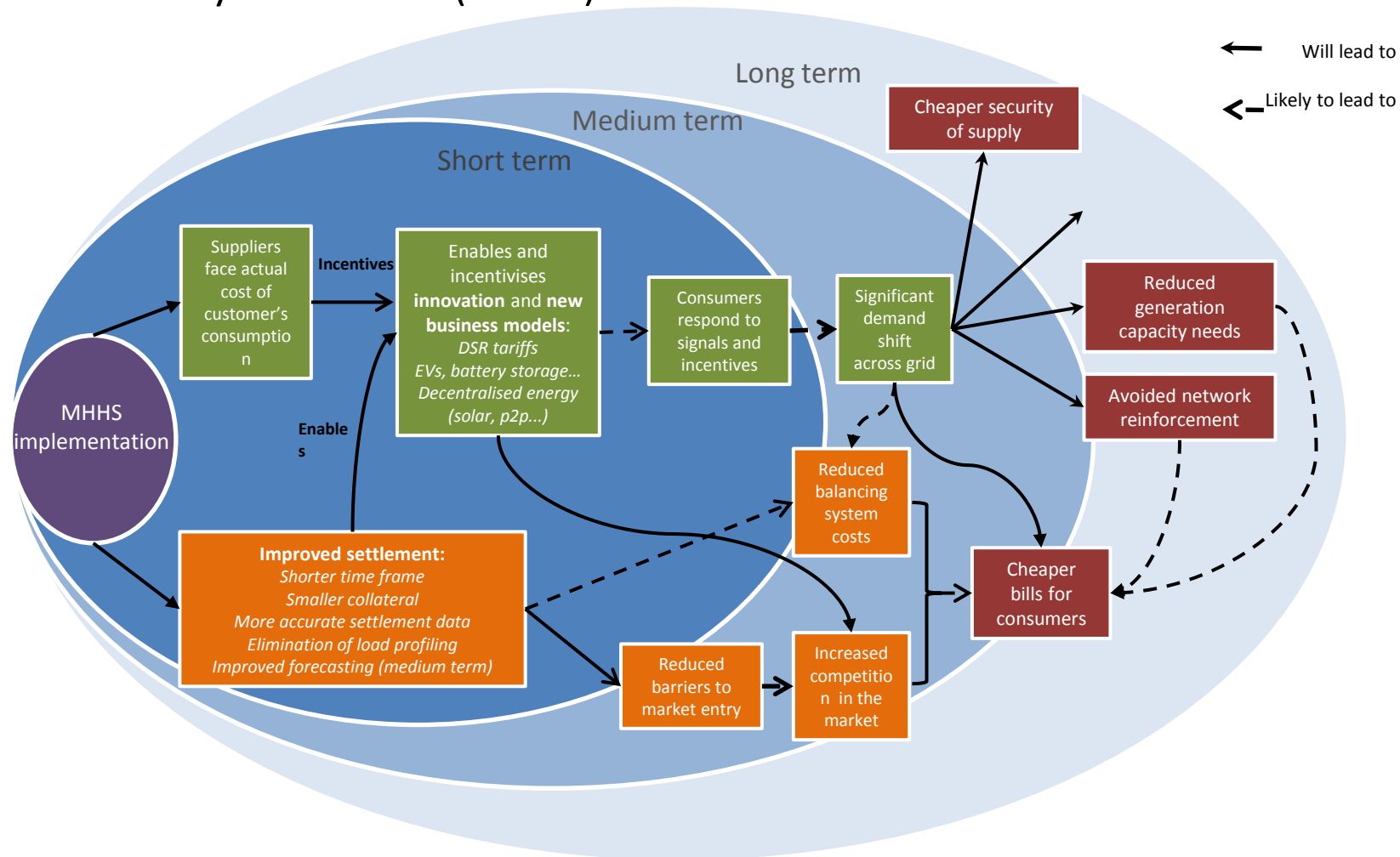
Background and Updates

Ofgem introduction

February 2019



- In July 2017 we launched our Significant Code Review (SCR) for Market-wide Half-Hourly settlement (MHHS).



- MHHS has a fundamental role in delivering a smart energy system which could save consumers up to £40bn off their energy bills in the coming decades.

- One key output of the Significant Code Review is the development of a Target Operating Model (TOM) to deliver Market-wide Half-Hourly Settlement (MHHS). To achieve this we set up the following design groups:
 - ELEXON led Design Working Group (DWG) – undertaking the design work to develop and deliver the preferred TOM.
 - The Design Advisory Board (DAB) – provide strategic oversight of the TOM development and advise the Ofgem Senior Responsible Owner on the final decision on the TOM.
- The DWG have now come to a preferred TOM and we are keen to get feedback and thoughts through Elexon's consultation to ensure we have the most appropriate and robust TOM to enable MHHS.

Business Case:

- We have published the second of three iterations of the business case, which will lead to our final decision on MHHS.
 - Work is ongoing on the Request for Information which will go out later this spring and will feed into our impact assessment and then the Final Business Case.

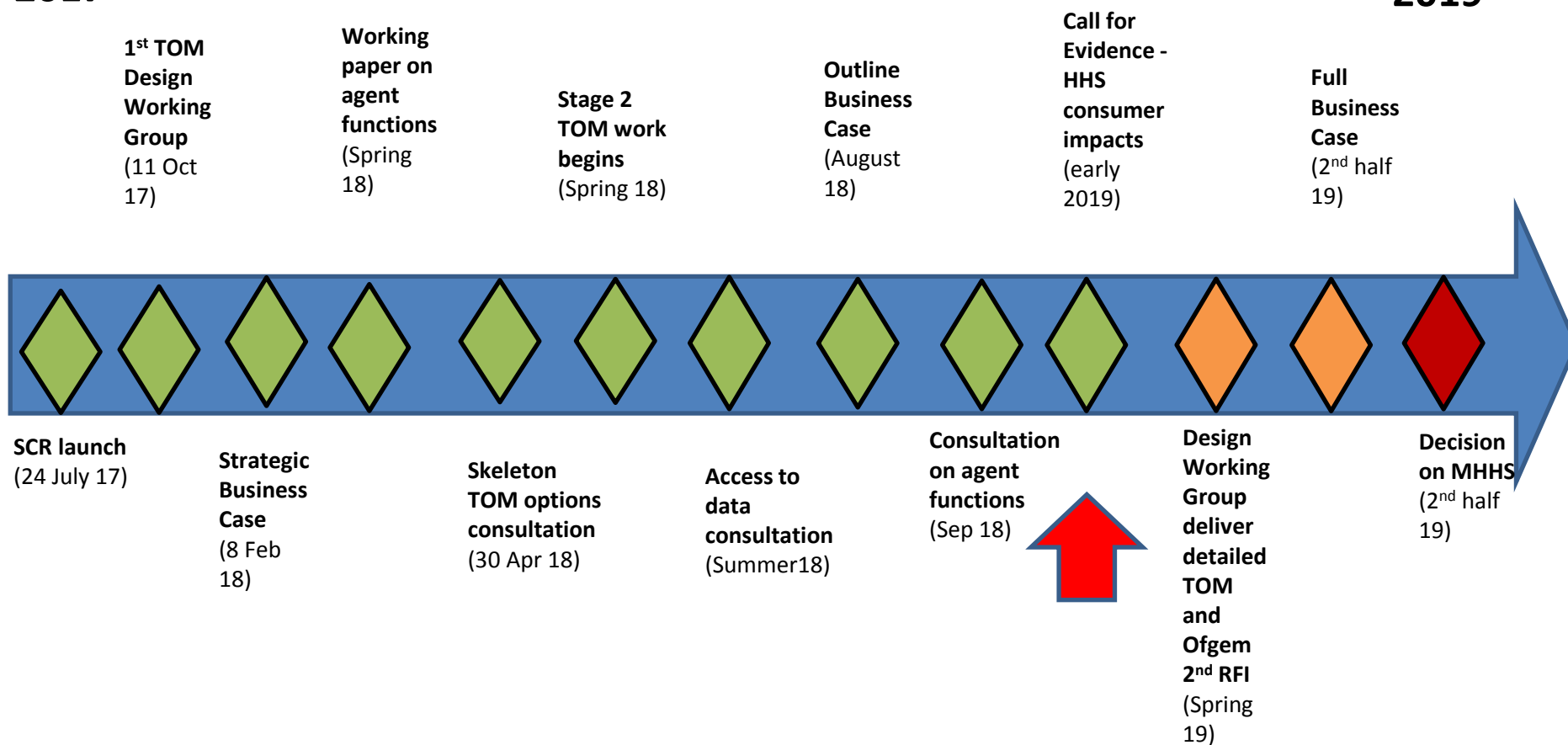
Policy and consumer work:

- Call for Evidence published on consumer impacts
- Approach to access for data for settlement – in our consultation, we said we thought an opt out approach gave the best balance. We are currently considering the evidence submitted.
- Agent functions – we proposed not to centralise agent functions, but said we thought there might be a case for a model where data is not aggregated prior to submission into central settlement. Currently considering the evidence submitted.
- Least regrets steer: We provided the DWG with the least regrets steer that the design of the TOM should proceed without Enhanced Privacy, and for the DWG to consider our proposed position on agent functions.
 - A least regrets steer is not our final decision and we will continue to carefully consider the responses from the consultations. When we reach our decisions and publish them, we will liaise with ELEXON to make any necessary adjustments to the project plan.

Project Update

**July
2017**

**Winter
2019**



Contact us at: halfhourlysettlement@ofgem.gov.uk

Our core purpose is to ensure that all consumers can get good value and service from the energy market. In support of this we favour market solutions where practical, incentive regulation for monopolies and an approach that seeks to enable innovation and beneficial change whilst protecting consumers.

We will ensure that Ofgem will operate as an efficient organisation, driven by skilled and empowered staff, that will act quickly, predictably and effectively in the consumer interest, based on independent and transparent insight into consumers' experiences and the operation of energy systems and markets.

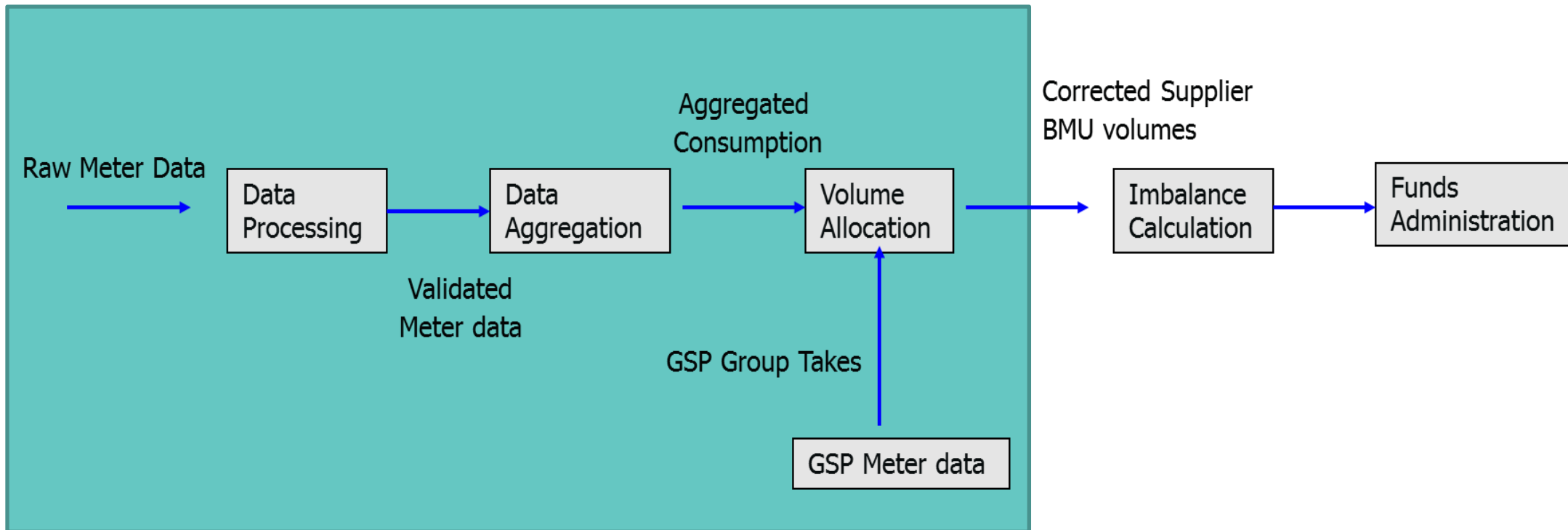


DWG Stage 1 Refresher

Matt McKeon

DWG Stage 1 Refresher (1)

- The Scope of the Ofgem SCR covers the Meter to Bank Process up to Volume Allocation:



DWG Stage 1 Refresher (2)

The five Market Segments identified for the target end state are:

- i. Smart Meters with Settlement Period level data available
- ii. Smart Meters with only Register Readings available
- iii. Non-smart Meters (with Register Readings)
- iv. Advanced Metering Systems with Settlement Period level data available
- v. Unmetered Supplies



DWG Stage 1 Refresher (3)

TOM Services

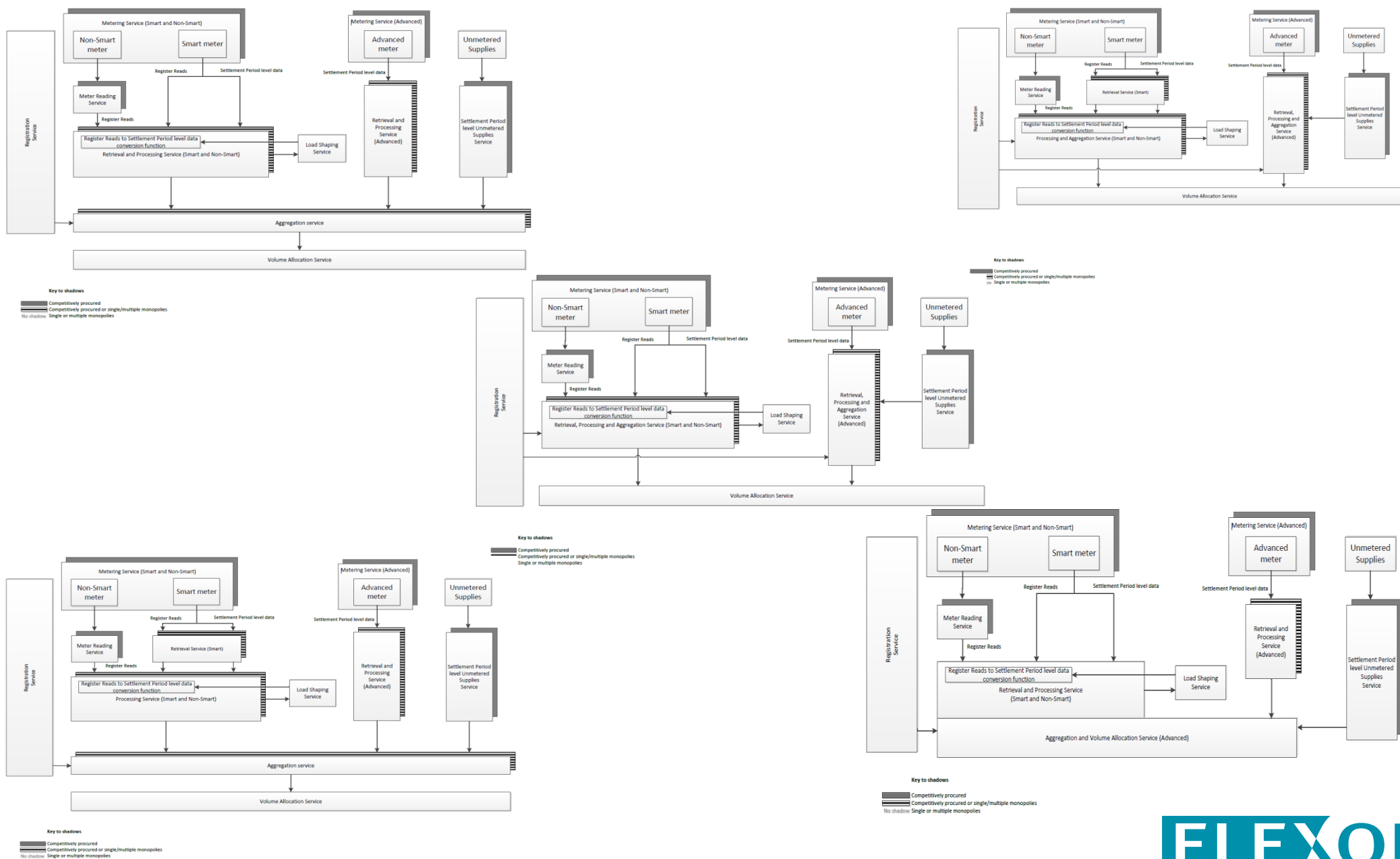
1. Registration Service
2. Metering Service
3. Meter Reading Service
4. Meter Data Retrieval Service
5. Processing Service
6. Aggregation Service
7. Volume Allocation Service
8. Load Shaping Service
9. Unmetered Supplies Operator Service
10. Unmetered Supplies Data Service

DWG Stage 1 Refresher (4)

All 5 Skeleton TOMs offer the same benefits over the current baseline:

- All Meter-to-Bank Services work with SP-level data
- Standardises data received by BSC Central Systems
- Potential for improving the Change of Supply (CoS) process
- Reduces number of unnecessary 'CoA' and 'CoMC' scenarios
- Allows for smooth switching between SP-level and Register Read data
- Facilitates the Settlement of embedded export
- More accurate and simpler Settlement of Unmetered Supplies
- Potential for shortening Settlement Timescales
- Able to settle legacy Metering Systems using new processes

The Five Skeleton TOMs





DWG Stage 2 TOM Development

Mark De Souza-Wilson

DWG Stage 2 TOM Development Process

- The DWG established four workgroups to support it in developing the TOM service requirements:
- Workgroup 1: Metering, Meter Reading and Retrieval Services;
- Workgroup 2: Processing and Load Shaping Services and Registration Interaction;
- Workgroup 3: Settlement Period Unmetered Supplies Service and Distribution Business Interaction; and
- Workgroup 4: Aggregation and Volume Allocation Services and Registration Interaction.

The workgroups ran between June and November 2018



DWG Stage 2 TOM Development Process

To help the DWG progress Ofgem provided a 'least regrets' steer on the Policy Decisions:

- Data Access and Data Privacy:

'For the purposes of the design work at this time, we would like the DWG to proceed with the design of a TOM without Enhanced Privacy.'

'There is remaining access to half-hourly data policy questions that we are still working through. As previously discussed however, as the outcome of these decisions does not materially affect the TOM design, we are satisfied that we can provide these to you in the future at such a time that they are resolved, without impacting on the TOM design project timeline.'

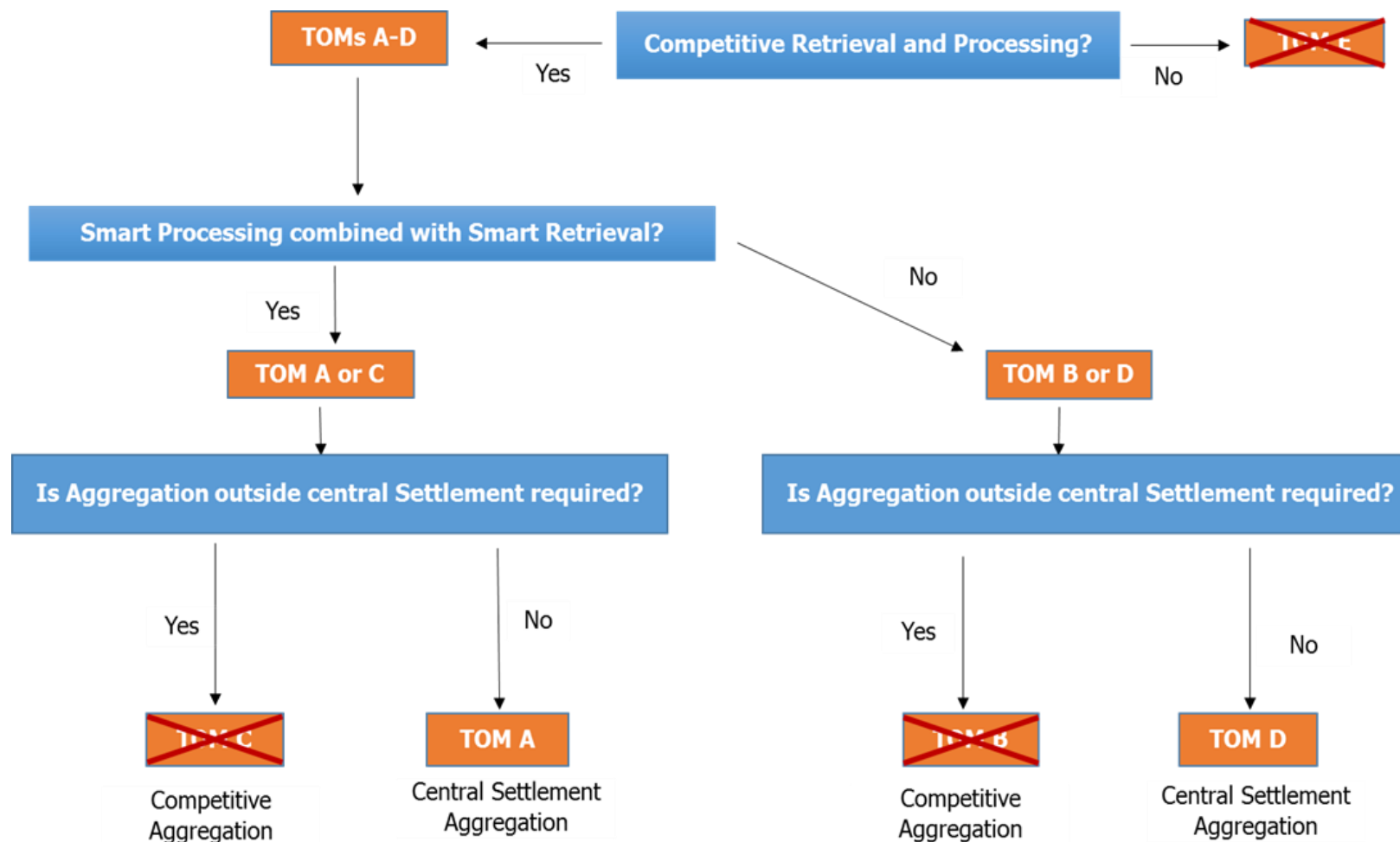
DWG Stage 2 TOM Development Process

Ofgem's 'Least Regrets' steer on Supplier Agent Functions:

'For the purposes of the design work at this time, we would like the DWG to work on a design based on our proposed approach, published in our consultation document of 17 September 2018. Our proposed position was that our work on market-wide settlement reform should not include centralisation of agent functions. Additionally, we said that we think there may well be a case for future models where data is not aggregated for submission into central settlement systems and that the data aggregation role may no longer be required in its current form. For the purposes of the design work at this stage, we would like the Design Working Group to consider the design questions set out at paragraphs 3.14 – 3.16 of our consultation document.'

DWG Stage 2 TOM Development Process

■ DWG Decision Tree

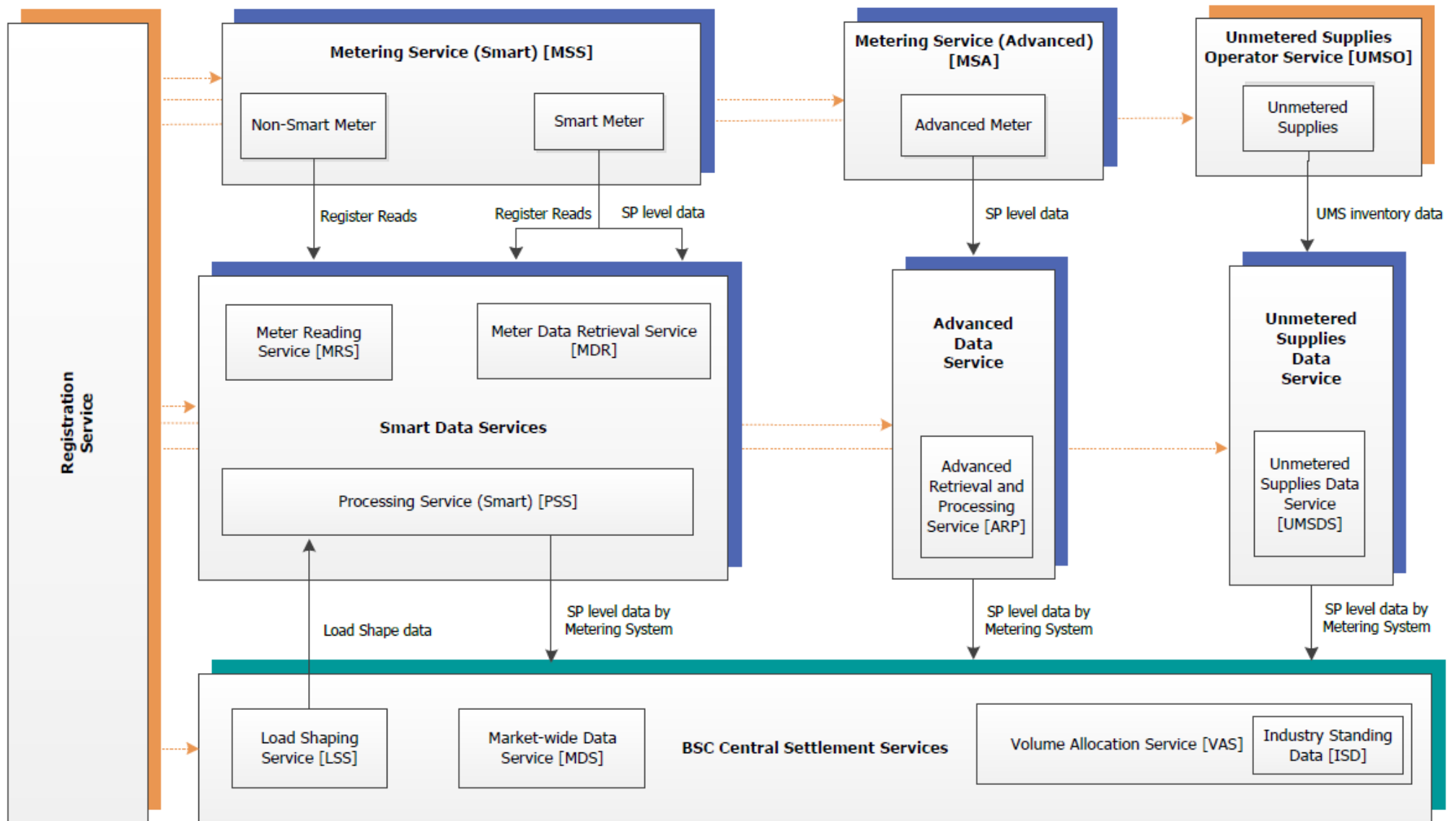




DWG preferred TOM

Matt McKeon

DWG Preferred TOM





DWG Stage 2 Report

Kevin Spencer

DWG Stage 2 Report

Report is split into 4 Documents:

- Main report - Executive Summary, the TOM, Settlement Timetable and initial transition approach work
- Attachment A – TOM Service and Data requirements
- Attachment B – DWG development of the TOM and Skeleton TOMs not progressed
- Attachment C – RAID log

The report is accompanied by Service Requirements in spreadsheet form and Service and Process diagrams in .pdf and .png format which are of better quality than snapshot in the report.





Settlement Timetable

Kevin Spencer

ELEXON

DWG's reduced Settlement timetable for the TOM

Run	Timing
Interim Information (II) Run	4 WD
Initial Settlement (SF) Run	5-7 WD (depending on DCC read capability)
Interim Reconciliation Run	33 WD
Final Reconciliation (RF) Run	4 months
Disputes Final (DF) Run	12 months or longer

- Likely to require changes to Performance Assurance Framework (e.g. performance targets and measures)
 - May not be as simple as just replacing one number with another
 - For example, existing distinction between 'actuals' and 'estimates' no longer meaningful under the TOM

Dispute Run timing and Disputes materiality threshold

- DWG could not agree on exact DF Run timing:
 - Subgroup recommended 12 months (aligns with Supplier back-billing cut-off)
 - DWG nervous that too short / impact on CVA errors
 - Difficulties in analysing / predicting future performance under shortened timetable (has analysed current performance)
 - Steer from Design Advisory Board and Ofgem that:
 - Assume quality of Meter data better than now
 - Settlement timetable should incentivise timely detection/correction of errors
 - Settlement timetable should not be based on current performance
 - Trading Disputes should not be the norm and only where significant materiality



Transition Approach

Matt McKeon



Transition – Stakeholder views

- Transition Principles
- Transition Pre-requisites
- What is changing?
- Constraints to transition?



Transition – DWG Transition Principles

The DWG has set nine high level principles to be followed in the development of the transitional approach:

- i. The transition approach shall not degrade the quality of Settlement data;
- ii. Transition shall be phased in order to minimise impacts and risks;
- iii. Different market segments can transition at different times;
- iv. If BEIS decides that Export must be registered for Settlement, then the transition approach for Export may be different to, and shall not slow down, the transition for Import;
- v. The transition to MHHS shall not prevent customers using the existing elective HH process;
- vi. The transition approach needs to balance the efficiencies of making MHHS a 'one-way gate' (preventing reversion to NHH arrangements) with not creating undue barriers to customers switching Supplier/BRP;
- vii. During transition, there shall not be dual processes operating on the same Settlement Date for an MPAN;
- viii. The transition approach shall recognise when the existing arrangements are no longer viable; and
- ix. There shall be appropriate monitoring, reporting and enforcement of participants' progress during transition.

Transition – DWG Transition Pre-requisites

Transition pre-requisites

The DWG discussed whether there are any external events (outside the Significant Code Review (SCR)) that need to have occurred before the transition to MHHS can begin. For example, ELEXON suggested the following:

- Implementation of the Faster Switching arrangements;
- Adoption of SMETS1 Meters by the Data and Communications Company (DCC);
- Roll-out of a large number of smart Meters; and/or
- Clarification on network charging requirements for Settlement data.

Transition – What is changing

■ Code and Agreement Changes

Code	What's New?	Complexity Rating	Dependency Rating	Dependencies
BSC Changes	New services and systems	H	H	Enabling code changes need to be in place for when new services begin operating under the TOM.
SEC Changes	New SEC and DCC user roles and any associated qualification	M	H	New SEC parties and associated DCC permissions need to be in place before Smart data can be retrieved.
MOCOPA Changes	Recognising new roles (if required)	L	L	No real dependency and no fundamental change. Cutover should be relatively seamless.
DCUSA Changes	Dependent on data requirements for TCR/DUoS	L	M	TCR requirements need to be agreed before any DUoS reports can be specified.
MRA/REC Changes	Changes to registration and appointments process for new services Change of Change of Supplier process DTC/DTN changes	H	H	New interfaces need to be defined before Data Catalogue changes can be made. Changes to MPRS registration processes need to be progressed concurrently in BSC/MRA. New LDSO/SMRA requirements need agreement under MRA/REC and BSC.

Transition – What is changing

New Services

- Smart Data Services (Meter Data Retrieval, Processing and Meter Reading Service)
- BSC Central Systems (Market-wide Data Service and Load Shaping Service)

Adapted Services

- Registration
- Metering Services
- Unmetered Supplies Services (UMSO and UMSDS)
- Advanced Retrieval and Processing Service
- Volume Allocation Service

No Longer required

- NHHDC, NHHDA, HHDA and PrA Roles.



Consultation Questions

Mark De Souza-Wilson

Consultation Questions (1) (Proposed)

Question 1	Do you agree with the DWG's recommended TOM?
Answer: Yes/No (delete as appropriate)	
Insert reasons here	

Question 2	Do you understand the DWG's reasons for choosing this TOM, taking into account Ofgem's 'least-regrets' steers on the TOM design?
Answer: Yes/No (delete as appropriate)	
Insert reasons here	

Question 3	Do you agree that the TOM captures all essential Settlement processes?
Answer: Yes/No (delete as appropriate)	
Insert reasons here	

Consultation Questions (2) (Proposed)

Question 4	Do you agree that the DWG has identified all the correct Meter data to be processed by the three Data Services (Smart Data Service, Advanced Data Service and Unmetered Supplies Data Service)?
Answer: Yes/No (delete as appropriate)	
Insert reasons here	

Question 5	Do you agree that the TOM can facilitate, and does not hinder, new market entrants, technologies and innovations (noting that the TOM itself cannot deliver these)?
Answer: Yes/No (delete as appropriate)	
Insert reasons here	

Question 6	Do you agree that the DWG's reduced Settlement Timetable is appropriate and achievable in the Target End State, when most Meters are smart? Please identify any constraints that you believe are relevant.
Answer: Yes/No (delete as appropriate)	
Insert reasons here	

Consultation Questions (3) (Proposed)

Question 7

Do you agree with the DWG that participants should be able to correct Settlement Errors after the Final Reconciliation Run through Trading Disputes, and for at least 12 months after the Settlement Day (subject to an appropriate materiality threshold)?
(Please identify the number of months you believe are appropriate)

Answer: Yes/No (delete as appropriate)

Insert reasons here

Question 8

Do you agree that there are cost benefits to Parties from the reduced Settlement timetable? (Please identify any enduring cost implications of the proposed timescales)

Answer: Yes/No (delete as appropriate)

Insert reasons here

Question 9

Do you agree with the principles that the DWG intends to follow when developing its approach for transitioning to the TOM?

Answer: Yes/No (delete as appropriate)

Insert reasons here



TOM Timetable

Kevin Spencer

TOM Timetable

Activity	Timing
DWG's report to Ofgem on preferred TOM & requirements	End Jan 2019
DWG's consultation on preferred TOM & requirements	Feb/Mar 2019
DWG development of transition approach	Spring 2019
Ofgem's Request for Information (participant costs/impacts)	Spring 2019
DWG's consultation on transition approach	June/July 2019
BSC impact assessment on implementing/transitioning TOM	June/July 2019
DWG's final report to Ofgem	August 2019
Ofgem's Final Business Case decision	Late 2019
Code & licence changes drafted and made by Ofgem (with industry support / consultation)	~2020
Transition to TOM	~2021-2022
TOM fully effective	~2023
Run-off of previous Settlement Days	~2023+



**Thank you all for
coming**

Look out for the Consultation!

ELEXON