Public

# Design Working Group

Meeting 16

26 March 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.

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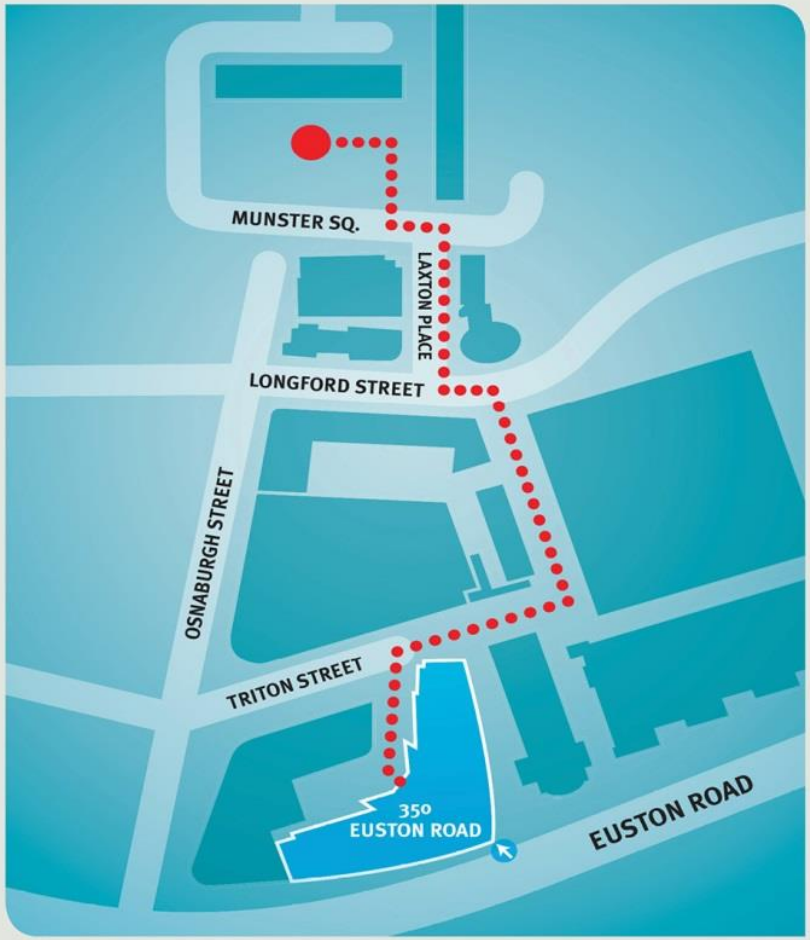


# Agenda

| Agenda item | Paper no. | Lead |
|---|---|---|
| **1. Introduction, apologies and meeting objectives** | Verbal | Kathryn Coffin |
| **2. Updated Gantt chart / Ofgem SCR update** | Updated Gantt chart / Verbal | Kathryn Coffin / Ofgem |
| **3. Responses to consultation on DWG's preferred TOM** | Consultation responses / Summary to be presented at meeting | Mark De Souza-Wilson |
| **4. Registration, appointments and Qualification: Pros and cons of different options** | Slides to be presented at meeting | Kevin Spencer |
| **5. Transition approach: Pre-planning** | Request to DWG / Slides to be presented at meeting | Matt McKeon / Kevin Spencer |
| **6. DCC scenarios: LDSO smart data collection activities** | Slides to be presented at meeting | Kevin Spencer |
| **7. DWG15 Headline Report and latest Actions Log** | Draft Headline Report / Actions Log | Kathryn Coffin |
| **8. Summary, actions and next steps** | Verbal | Kathryn Coffin |

# Updated Gantt chart / Ofgem SCR update

Kathryn Coffin / Jasmine Killen

# **Latest Gantt chart** (now with 1 May meeting)

| Design Working Group: Stage 2 milestones and interaction with Ofgem SCR milestones | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *(P) = Provisional* | 2019 | | | | | | | | | |
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct |
| **Design Working Group activities** | | | | | | | | | | |
| DWG Meeting 14 (agree final TOM requirements & initial transition overview) | 15 | | | | | | | | | |
| *ELEXON delivers requirements & high-level transition overview for preferred TOM* | Report | | | | | | | | | |
| DWG Meeting 15 (agree content of consultation on preferred TOM) | | 13 | | | | | | | | |
| *4-week consultation on preferred TOM and high-level transition overview* | | Consultation | | | | | | | | |
| DWG Meeting 16 (review responses / transition approach pre-planning) | | | 26 | | | | | | | |
| *ELEXON/DWG develop transition approach* | | | Transition development | | | | | | | |
| DWG Meeting 17 (refine transition approach) | | | | | 01 | | | | | |
| DWG Meeting 18 (agree transition approach for consultation) | | | | | 22 | | | | | |
| *4-week consultation on transition approach* | | | | | | Consultation | | | | |
| DWG Meeting 19 (review responses & the draft Stage 2 report) | | | | | | | 17 | | | |
| DWG Meeting 20 (agree final Stage 2 report) | | | | | | | | 21 | | |
| *ELEXON delivers Stage 2 report to Ofgem - STAGE 2 COMPLETE* | | | | | | | | Report | | |
| | | | | | | | | | | |
| **Design Advisory Board meetings** | | | | | | | | | | |
| DAB Meeting 7 | 31 | | | | | | | | | |
| DAB Meeting 8 | | | | | TBC | | | | | |
| DAB Meeting 9 | | | | | | | | TBC | | |
| | | | | | | | | | | |
| **Ofgem SCR milestones** | | | | | | | | | | |
| TOM Board meetings | 17 | | 21 | 18 | 16 | 20 | TBC | TBC | TBC | TBC |
| TOM design approval | | | | Dec. (P) | | | | | | |
| Agent functions policy decision | | | Decision (P) | | | | | | | |
| Data access & privacy policy decision | | | Decision (P) | | | | | | | |
| *Participants / ELEXON provide impacts, costs & lead times* | | | | | | RFI (P) | | | | |
| Impact Assessment | | | | | | | | | | IA (P)... |

# Consultation response summary

Mark De Souza-Wilson

# Consultation on DWG preferred TOM

- Consultation closed 15 March 2019
- We received 22 responses, 1 confidential
- Responses received from large Suppliers, small suppliers, Agents, LCCC, Electralink

# MHHS TOM: Consultation responses

| Question 1 : Do you agree with the DWG's recommended TOM as a basis for delivering Market-wide Half Hourly Settlement? | | |
|---|---|---|
| Yes | No | Neutral/Other |
| 14 | 7 | 1 |

**Key Themes**

- 7 – preference for competitive data aggregation
- 3 – high proportion of smart-SP is required
- 2 – need a process for sending validated data to suppliers
- 1 – AMR currently have a separate retrieval service
- 1 - Smart meter data should go direct from DCC to Settlements

# MHHS TOM: Consultation responses

| Question 2 : Do you agree that the DWG has identified the correct TOM, taking into account Ofgem's 'least-regrets' policy steers? | | |
|---|---|---|
| Yes | No | Neutral/Other |
| 15 | 6 | 1 |

**Key Themes**

- 5 – SP-level data for settlement should be mandated
- 4 – data aggregation should be competitive
- 1 – Electralink indicated their system could be used to deliver some of the TOM

# MHHS TOM: Consultation responses

| Question 3 : Do you agree that the TOM captures all essential Settlement processes? | | |
|---|---|---|
| Yes | No | Neutral/Other |
| 18 | 2 | 2 |

**Key Themes**

- 4 – should include non-settlement processes such a customer data for billing and for switching
- 1 – should include behind-the-meter and flexibility services

# MHHS TOM: Consultation responses

| Question 4 : Do you agree that the DWG has identified all the required data to be processed by the three Data Services? | | |
|---|---|---|
| Yes | No | Neutral/Other |
| 16 | 3 | 3 |

**Key Themes**

- 3 – Should consider requirements for behind-the-meter
- 1 – Smart Meter data should be pulled daily (NEW)
- 1 – Need clarity on Switching Programme and Ofgem policy decisions (NEW)
- 1 – Supplier needs to be notified of any mismatch between registration data and consumption

# MHHS TOM: Consultation responses

| Question 5 : Do you agree that the TOM does not hinder new market entrants, technologies and innovations? | | |
|---|---|---|
| Yes | No | Neutral/Other |
| 15 | 5 | 2 |

**Key Themes**

- 3 – Too early to say
- 3 – Centralisation can hinder innovation
- 1 – Removing Data Aggregators simplifies the market for new parties

# MHHS TOM: Consultation responses

| Question 6 : Do you agree that the DWG's reduced Settlement Timetable is appropriate and achievable in the Target End State? | | |
|---|---|---|
| Yes | No | Neutral/Other |
| 10 | 6 | 6 |

**Key Themes**

- 5 - Depends on proportion of smart meters and DCC capability
- 2 – Insufficient information
- 2 - SF should remain at 16WD to allow for manual reads
- 1 – Some suppliers will have portfolios containing mainly dumb meters. (NEW)
- 1 - Some large HH sites requires many months to resolve the issue. (NEW)
- 1 - 4 months to RF is appropriate but would require 97% smart meter penetration.

# MHHS TOM: Consultation responses

**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 Date?**

| Yes | No | Neutral/Other |
|---|---|---|
| 14 | 2 | 6 |

**Key Themes**

- 3 - Too early to know appropriate disputes window
- 3 – 12 months
- 1 - 28 months (based on traditional AMR market not really changing)
- 1 – 2 years
- 1 – 14 months
- 1 - Disputes require manual intervention and are more intensive than scheduled runs
- 1 - £10k materiality threshold
- 1 – Materiality threshold higher than current

# MHHS TOM: Consultation responses

| Question 8 : Do you agree that there are overall cost benefits to Parties from the reduced Settlement timetable? | | |
|---|---|---|
| Yes | No | Neutral/Other |
| 5 | 6 | 11 |

**Key Themes**

- 10 - Insufficient information at this stage
- 2 - Reduced credit cover
- 2 – More issues and faster resolution of issues will be required
- 1 - Depends on the performance of each supplier's portfolio
- 1 – Suppliers will face more difficulty in forecasting
- 1 - II at 4WD, SF at 7WD, R1 at 33WD and RF at 4 months

# MHHS TOM: Consultation responses

| Question 9 : Do you agree with the nine transition principles that the DWG intends to follow when developing its approach? | | |
|---|---|---|
| Yes | No | Neutral/Other |
| 20 | 0 | 2 |

**Suggestions**

- Include an interim step
- Prevent barriers to switching
- Prevent barriers to innovation
- Parties should pay the same costs for an MPAN before and after migration
- Transition should be supplier-driven
- Should be simple and cost effective
- Should provide incentives to parties
- Performance monitoring should include central systems
- Run-off should be cut when thresholds are met
- One process per meter or per MPAN?
- Regional differences in smart meter penetration
- Faster switching interactions
- SMETS1 adoption
- Phased approach
- Should extend SEC roles and elective-HH provisions early-on

# MHHS TOM: Consultation responses

| Question 10 : Do you have any views on the areas of design detail for further consideration? | | |
|---|---|---|
| Yes | No | Neutral/Other |
| 13 | 7 | 2 |

**Suggestions**

- Interaction with switching/billing
- Need to balance reduction in settlement timescale with accuracy of data
- Tolerance around the transition – see P272
- Engage MRA and MPRS providers
- Further work on MPRS as single source of the truth
- Details of data flows
- Wider industry engagement in detailed design
- Consider Siemens proposed TOM
- Rounding issues (input data in Wh and kWh)
- Application of GSP Group correction factors
- Supply licence condition should be the first choice solution to 'gaming'

# MHHS TOM: Consultation responses

| Question 11 : Do you have any further comments? | | |
|---|---|---|
| Yes | No | Neutral/Other |
| 7 | 13 | 2 |

**Comments**

- Currently insufficient information to assess costs/impacts
- Parties might be assuming that services need to be built from scratch (NEW)
- Access to SP-level data for settlement should be mandated
- Need to coordinate MHHS work with other industry changes eg. Faster switching, TCR, Smart roll-out.
- Ofgem policy decisions have considerable implications for the costs/benefits
- Should keep up to speed with behind-the-meter and possibly integrate this in to the TOM
- Consider DNO's role in resolve metering faults (NEW)

# Registration, Appointments and Qualification

## Minimum requirements recommendations to Ofgem

ELEXON

# Registration requirements for Metering and Data Services

- DWG need to agree recommendations on changes to the registration system for the transition approach

Key issues:

- *Should the registration system hold the identity of the Data Service for the MPAN?*
- *Should the registration system hold the identity of the Metering Service?*

If no to either of these questions, where should these requirements sit?

One approach could be BSC central systems:

- holds a register of data services that are providing data for each MPAN
- holds a register of metering services for each MPAN

Q: What other alternatives approaches are there for ensuring all MPANs are allocated to correct Supplier and provided into Settlement?

# Registration Requirements Options - Pros and cons

| Service Requirement | Pro | Con | Comment |
|---|---|---|---|
| **Data Services in Registration Service** | • As per current settlement arrangements, so understood<br>• Single register of all information relating to a Metering point (Supplier, Services, Settlement standing data items, Metering data)<br>• Could be accessed by Suppliers, the 'appointed' services and BSC Central Settlement<br>• Could be used for appointments | • Potential cost to change existing systems | • Potential implications with delivering other market changes to SMRS |
| **Data Services <u>not</u> in Registration** | • Simplifies SMRS to only hold Supplier and data relating to metering point<br>• Potentially cheaper as less changes to SMRS | • No single register of all information relating to a Metering point.<br>• Mapping would need to be stored elsewhere for Settlement purposes<br>• Potential errors in Supplier energy allocation<br>• Less visibility of responsible Data Service provider<br>• Could not be used for relevant Service appointments | • Where else could this registration information sit? |

# Appointments

- Subject to previous discussion the DWG need to agree minimum recommendations on appointments of services to MPANs:

- Appointment options:
  - *Use current arrangements (data flows and acknowledgments)*
  - *Use the registration service as single source of appointed services*
  - *Use BSC Central register of appointments with new BRP interface*
  - *Have no appointments (can this work)?*

Are there any alternatives not identified for ensuring all MPANs are covered and not duplicated for Settlement?

# Appointments - Pros and cons

| Appointments Requirement | Pro | Con | Comment |
|---|---|---|---|
| **Use current arrangements (data flows and acknowledgments)** | • Well established and understood | • Potentially too slow under new faster switching arrangements<br>• Can result in multiple services misunderstanding that they are appointed | • Is this approach and supporting technology fit for design flexibility/innovation? |
| **Use the registration service as single source of appointed services** | • Potentially faster notification<br>• Removes possibility that more than one service appointed on any Settlement day | • New method needed to identify contractual arrangements | • Potential implications with delivering other market changes to SMRS |
| **Use BSC Central register of appointments with new BRP interface** | • Similar to existing register of HHDAs<br>• Appointment data close to meter data (good for missing data identification) | • New processes for Supplier needs to notify BSC central systems<br>• Transparency to third parties (e.g. where separate AE and AI data services) | • |
| **Have no appointments** | • Simpler, cheaper | • Inaccurate allocation of energy to Suppliers | • Can this work? |
| **Any other suggestions?** | • | • | • |

# Qualification

- DWG need to agree minimum recommendations on qualification of services:

Options:

- *Process similar to current process where service qualifies for a Market Role under the BSC;*
- *Put onus on Supplier to ensure its data service can meet the requirements of the service; and*
- *Third party set up to ensure compliance with requirements for Settlement.*

Are there any alternatives not identified for ensuring all Data and Metering Services can perform the processes set out in the TOM?

# Qualification - Pros and cons

| Qualification Requirement | Pro | Con | Comment |
|---|---|---|---|
| **Process similar to current process where service qualifies for a Market Role under the BSC** | • Similar to existing process and well understood<br>• Limited change<br>• Transparent and provides assurance to Market | • Maintains current Market Role concept<br>• Limits innovation | • Is this flexible enough for future innovation? |
| **Put onus on Supplier to ensure its data service can meet the requirements of the service** | • Supplier in control of quality of its services<br>• More flexibility for the Supplier | • Not transparent and does not assurance to rest of Market<br>• Introduces settlement risk of accurate allocation of energy | • How does this interact with Ofgem/BEIS review of the Energy Retail Market, multiple energy providers, changing or new obligations? |
| **Third party set up to ensure compliance with requirements for Settlement** | • Transparent and provides assurance to Market | • Maintains current Market Role concept<br>• New role and commercial would need to be procured by parties<br>• Cost complexity implications | • What benefits would this bring to MHHS? |

# Next steps

- Agreed approaches to be fed into transitional approach

# Transitional approach - recap

Kevin Spencer

# SCR Stage 2 timeline – (Recap)

| 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 Full 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+ |

# Agreement of terminology (Recap)

- We need a common understanding of terminology. We agreed:

- **Transition** - the end to end process of getting from the current state to the Target End State for the TOM

- **Implementation** - Code Changes, System Changes, Settlement timetable and qualification?

- **Migration** – Moving Metering Systems from current Market Roles to TOM Services

- **Adoption** – (New) the process of Metering Systems appointed to existing roles being moved to new TOM Service with same party.

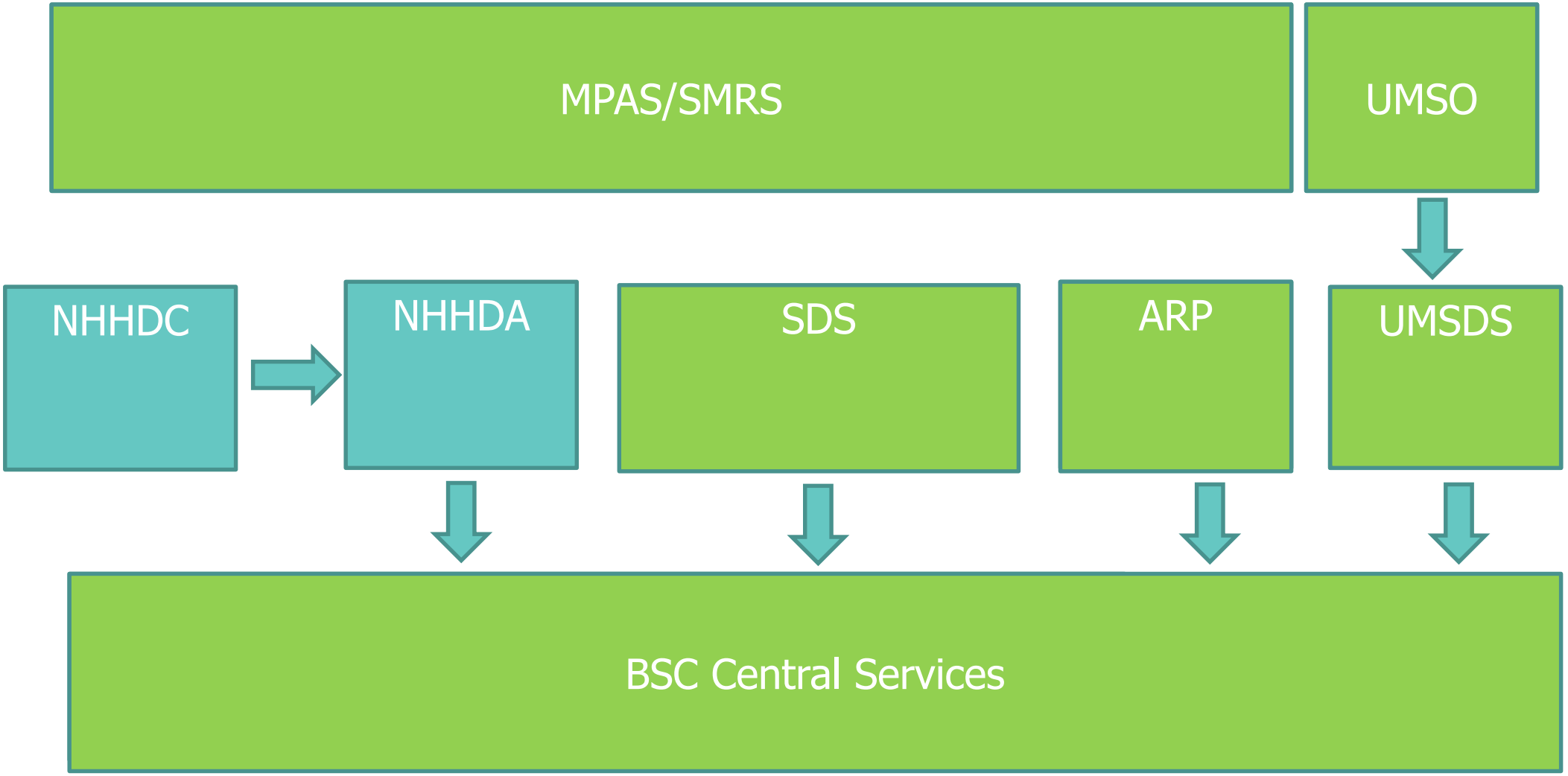
# Quick wins (1)

- Services that can be adapted early following Code changes in 2020:
- UMSO Role to UMSO Service – Data cleanse/ ability to prepare Summary Inventories for smaller customers; (Agreed)
- Meter Administrator to UMSDS – ability to cope with increased volume of data; (Agreed)
- HHDC to ARP – new requirements for estimation flagging; (Agreed)
- CT Metered Customers in Profile Classes 3 and 4 can be COMC to ARP (whole current customers can choose to switch to SMETS Metering). (Not a quick win, as per P272)

Data from these Services can be passed to existing SVAA via the existing HHDA role using current processes.

When TOM Implemented SP Level data can be re-directed to BSC Central Services using any new interface developed top deliver the TOM.

# High level summary



# Transitional approach: Pre-planning

Matt McKeon

# Transitional approach

ELEXON proposed approach:

- To minimise dependencies we are proposing the following four work streams:
  - Smart & Non-Smart Segment (including MSS)
  - Advanced Market Segment (including MSA)
  - Unmetered Segment
  - Integration (Registration, Central Systems and Data Transfer/Architecture)

- Allocate DWG members to each work stream to develop transition 'roadmaps' outside of the scheduled DWG meetings, using the following activities:
  - Identify sequencing of key transition activities for each workstream
  - Identify potential barriers to transition (e.g. technical, governance, commercial)
  - Develop contingency plans to mitigate delays to other workstreams
  - Agree basis for architectural transition given target architecture still unknown.

# Transitional approach

- At the end of this process, we recommend that the whole DWG will:
  - Review and discuss the work stream roadmaps
  - Identify the critical path for transition as a basis for consultation
  - Identify interim/enabling changes that could be raised against the current baseline
  - Make recommendations collectively.

REQUEST TO DWG MEMBERS IN ADVANCE OF THE MEETING

- Before attending DWG16, please can you:
  - Consider which work stream you would most like to participate in
  - Start thinking about the steps/milestones for that work stream

# Agreement on deliverables

ELEXON proposed deliverables:

- By the DWG meeting (17) in late April/early May 2019:
  - outline of transition requirements for each of the four workstreams
  - agreement on the critical path, key dependencies and milestones
  - agreement on any areas to seek industry views in the consultation

- By the DWG meeting (18) on 22 May 2019:
  - draft consultation on transition approach

- For the Stage 2 report to Ofgem in August 2019:
  - final agreed proposals for transition taking account of responses

# DCC scenarios

Kevin Spencer

# DCC scenarios (1)

- We need to give the DCC some scenarios for them to assess the costs for the RFI:
- ELEXON initially asked the DCC to consider the two following scenarios for Settlement:

**Scenario 1 (Monthly/ bi-monthly Reads):**

Monthly data required for Settlement:

- 800,000 SMETS2 meters Active Import per day collecting 1 month of data
- 80,000 SMETS2 Active Export per day collecting 1 month of data
- 200,000 SMETS1 meters Active Import per day collecting 14 days of data
- 20,000 SMETS1 meters Active Export per day collecting 14 days of data.

and

- Supplier collects 30 Million ToU registers reads per month (1 Million per day) – with Profile log data provided via Settlement

# DCC scenarios (2)

**Scenario 2 (Daily Reads):**

Daily data required for Settlement:

- 20,000,000 SMETS2 meters Active Import per day collecting 1 day of data
- 2,000,000 SMETS2 Active Export per day collecting 1 day of data
- 10,000,000 SMETS1 meters per day collecting 1 days of data
- 1,000,000 SMETS1 Active Export meters per day collecting 14 days of data.

and

- Supplier collects 30 Million ToU registers reads per month (1 Million per day) – with Profile log data provided via Settlement

# Supplier and LDSO requests

- We need to identify the additional data request by Suppliers and LDSOs:

WPD are gathering data for the following data:

- a 28 day read schedule
- As each device is installed it will be assigned to a group and a read day and request for 60 days' worth of HH readings will be sent on the same day once a month .

*Will not send requests for readings on 29th >31st of each month*

- Intend to request the following:
  - 4.8.1 – AI HH data
  - 4.8.2 – RI HH data
  - 4.8.3 AE/RE HH data

- There is a possibility they will also collect MD data and network data such as voltage alerts' This is planned to be ad hoc at the moment but it may become more regular as their read process matures
- WPD do have some concerns on how a data lake would impact their privacy plan and customers data as they will be only holding. They intend to store an aggregated months' worth of data discard the individual customers data immediately after the aggregation has been performed , meaning no individuals HH data is stored.

# DCC scenarios

- If all LDSOs ask for the data monthly this more than doubles the Scenario 1 and significantly increases the data requirements in Scenario 2.

- For suppliers we need a baseline assumption on the proportion of their portfolios that they will be requesting HH data in addition to the Monthly ToU data.

- What will be the frequency of request?

- *What scenarios should be provided to the DCC for their RFI assessment?*

# DWG15 Headlines and action log

Kathryn Coffin

# Summary, actions and next steps

Kathryn Coffin