

PUBLIC

# Market Wide Half-Hourly Settlement

## ELEXON Planning Document



ELEXON  
Version 1.0  
21 July 2017

# MARKET WIDE HALF-HOURLY SETTLEMENT

---

## CONTENTS

- INTRODUCTION.....3**
- SCOPE .....4**
- EXTERNAL GOVERNANCE .....4**
- KEY DEPENDENCIES .....4**
- PROJECT TEAM .....5**
- PRELIMINARY WORK AND ESTABLISHMENT OF THE DWG .....6**
- HIGH LEVEL TIMETABLE FOR THE DWG .....6**
  - High Level Timetable ..... 6
  - DWG Stage 1: October 2017-March 2018 ..... 7
  - DWG Stage 2: April 2018-March 2019 ..... 7
  - 1. Consultation on Skeleton TOMs ..... 7
  - 2. Consultation on transitional approach..... 8
- IMPLEMENTATION PLANNING .....8**
- REPORTING REQUIREMENTS .....8**
- HIGH LEVEL LIST OF DELIVERABLES .....9**



# MARKET WIDE HALF-HOURLY SETTLEMENT

---

## INTRODUCTION

---

This document provides a high level plan for progression of ELEXON led work to support Ofgem in its Significant Code Review (SCR) on Mandatory Half-Hourly Settlement (HHS). Ofgem has proposed in the SCR Launch Statement that ELEXON lead on the development of settlement arrangements for Market Wide HHS, known as the Target Operating Model (TOM). This follows ELEXON's offer to lead the TOM design work using an expert group. Ofgem is currently seeking feedback by 1 September 2017 on the proposed TOM design work governance and decision-making framework outlined in their SCR Launch Statement.

ELEXON Design Authority will, as part of the Ofgem SCR, lead the design work to develop the options and recommendations for the TOM to provide to Ofgem for decision. This will be primarily through production of design strawmen and then through expert Design Working Group development and reviews. The Design Working Group (DWG) will be chaired by ELEXON and have experts from all aspects of the energy community, including consumer representatives, industry organisations and innovators/new technology bodies. While Ofgem will not be a member of the DWG, it will attend meetings of the DWG as an observer and provide strategic input where necessary. The DWG will be established to develop, evaluate strawman options and assessment of their pros and cons constructed by ELEXON. Experts on more detailed areas may be invited to aid in the development of designs for specific topics such as unmetered supplies or the estimation rules for missing data. The DWG will use Ofgem's objectives and design principles<sup>1</sup> for the development and assessment of options. This will require further refinement as part of the DWG's work as well as development of evaluation criteria for the TOM options. The evaluation criteria will be used by the DWG to help assess which TOM options and recommendations should be delivered to Ofgem for decision.

Ofgem will be leading on 3 other work streams in the SCR; policy options, business case development and consumer protection, and ELEXON will liaise with and support Ofgem to ensure that:

1. any options developed align with Ofgem's policy decisions. Key policy decisions that interact with the development of the TOMs are access to HH data for settlement purposes, consumer protection and Ofgem decisions on whether or not to centralise of some of the Settlement functions; and
2. Ofgem has sufficient information in its development of the business case for Market Wide HHS.

As part of the SCR launch statement, Ofgem has developed a draft plan for the above work with the intention to make a decision on Market Wide HHS and its implementation arrangements in the second half of 2019. There will be two stages for the DWG.

The first stage will look to develop and assess a number of Skeleton TOMs for delivery of a product to Ofgem in early 2018. The DWGs will also develop a high level view of the system architecture required to deliver the TOMs.

The ELEXON-led DWG will also develop a transitional plan for moving/migrating existing metering systems to any new arrangements. The arrangements for those customers remaining on non-smart meters and arrangements for unmetered supplies will also be addressed by the DWG.

The second stage will look to develop the detailed TOM following the outcomes of the Ofgem policy decisions. Ofgem will lead on the final decision making process following the outcome of the Business Case decision.

---

<sup>1</sup> The draft design principles are included in Ofgem's SCR launch statement.

# MARKET WIDE HALF-HOURLY SETTLEMENT

---

## SCOPE

---

ELEXON will be responsible for the development and delivery of options and recommendations by the DWG to Ofgem for the settlement design for Market Wide HHS:

- high level TOM (roles and responsibilities, settlement processes) and system architecture; and
- a plan for transition from Non-Half Hourly Settlement (NHHS) to HHS.

It will cover all industry Supplier Volume Allocation (SVA) settlement process and systems. The scope, approach and timeline of the work are to be agreed with Ofgem in the initiation stage. ELEXON will also provide technical support to Ofgem on policy development (HH data access for settlement purposes, data collection/ settlement of export, whether or not to centralise some settlement functions).

ELEXON will also provide advice on consumer protection issues as requested by Ofgem.

## EXTERNAL GOVERNANCE

---

ELEXON's work forms one element of Ofgem's proposed SCR programme of work on HHS, which Ofgem is currently seeking feedback by 1 September on.

Under the proposed SCR work programme, Ofgem will develop and agree with ELEXON the Terms of Reference (ToR<sup>2</sup>) for the DWG. The ToR will set out the scope, membership and decision making powers of the DWG. Ofgem will provide timely guidance on the products of the DWG and will attend the DWG. ELEXON will report on TOM options and recommendations developed by the DWG to an external Design Advisory Board (DAB) for the SCR to be established by Ofgem. ELEXON will also hold regular management meetings with Ofgem throughout the lifetime of the SCR to ensure work is on track.

Ofgem will sign off each deliverable against agreed acceptance criteria<sup>3</sup>. The TOM design work will feed into the Ofgem's led SCR work streams and Ofgem will manage interaction with the other work streams of policy options, business case development and consumer protection.

## KEY DEPENDENCIES

---

There are a number of dependencies that will impact the TOM options to be developed by ELEXON with the DWG. Currently these are assumed as follows:

1. The smart meter roll-out plays a key role in delivering the functionality. There will be a need to monitor the uptake of smart metering and estimate the potential number of customers wishing to remain on non-smart metering;
2. Interaction of TOMs and any centralised registration arrangements developed to support centralised switching will also need to be considered;

---

<sup>2</sup> The DWG's draft Terms of reference are included in Ofgem's SCR launch statement.

<sup>3</sup> The acceptance criteria are designed to ensure each deliverable meets Ofgem's expectation e.g. due process has been followed and content meets its description (not an evaluation of the TOM models themselves).

# MARKET WIDE HALF-HOURLY SETTLEMENT

---

3. The TOMs will need to reflect the policy decisions made in the other SCR work streams, e.g. on whether or not to centralise some settlement functions and access to HH data for settlement purposes;
4. European policies could also impact the design of the TOM. It is likely that changes to Settlement to support European policy decisions will be progressed within the same timeframe, e.g. 15 minute Settlement Period;
5. The TOMs will need to be seen as a key enabler for any new innovation around demand side flexibility, aggregation, community energy and emerging smart grid options that are currently being developed; and
6. A Network Charging SCR could also impact the data requirements from any new Settlement processes.

These dependencies will be picked up in a Risks, Assumptions, Issues and Dependencies (RAID) log which will be reviewed at each DWG meeting. Ofgem will provide guidance on a number of these key dependencies as well as a draft design principles for use in the development/assessment of TOM options.

## PROJECT TEAM

---

Design Authority will run and lead the work within ELEXON.

ELEXON will undertake some preliminary work to prepare for the launch, establishment of the DWG and work to be developed in Work Stage 1. Stage 1 which will at a high level deliver the Skeleton TOMs, together with, the Pros and Cons of each model. Typically, the DWG will meet every other month with the DWG considerations being documented and updated in the intervening month.

### DA Project Team and governance

The project will be a Design Authority led piece of work with the following internal governance structure. Ofgem will sign off each deliverable against agreed acceptance criteria<sup>3</sup>.

### Project Team

The Project Team will be responsible for the drafting of meeting papers, consultations and any other documents for the DWG. The team will also draft the other deliverables resulting from the DWG.

### Project Support

The Balancing and Settlement Code (BSC) Administration (BSC Admin) department will support the DWG in scheduling and disseminating information to the DWG membership.

BSC Admin will establish a BSC webpage for the DWG on which we will set out the DWG membership and all relevant paperwork, and meeting summaries will be posted for transparency to the wider industry. Any consultations that are undertaken by ELEXON on the TOM will be published here and sent to any interested parties (list to be agreed with Ofgem). ELEXON may also seek to run workshops/seminars/webinars to educate/inform interested parties.

The DA project lead will establish internal support to the SCR from its Project Support Office (PSO) who will maintain the detailed plan, risks, assumptions, issues, dependencies and actions arising from the DWG.

Project Advisors will review the deliverables from the Project Team, including Senior Market Advisors from DA, a Design Architect and with input from BSC Operations and Professional Services Departments.

# MARKET WIDE HALF-HOURLY SETTLEMENT

## PRELIMINARY WORK AND ESTABLISHMENT OF THE DWG

### July to September 2017 preparatory work:

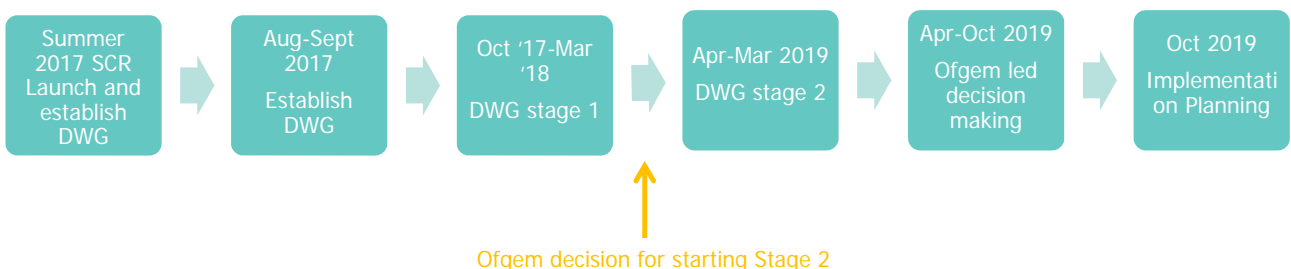
- Set up the DWG in conjunction with Ofgem and call for membership, schedule meetings and prepare administration of the group;
- Define players and key processes for each and interactions with market participants;  
This will set out the key players required to deliver Market Wide HHS and set out interactions with Market participants;
- Detailed plan;  
The detailed timetable will be defined and DWG meetings will be scheduled with the DWG membership;
- Strawmen TOMs with high level pros and cons: Centralised, Agent, Hybrid models (including any HH data access variants);  
ELEXON will develop strawman design principles/criteria (using SCR draft) and TOMs and hold an internal workshops to refine and evaluate the pros and cons of each model;
- ELEXON will draft an initial Risks, Assumptions, Issues and Dependencies (RAID) log which will be kept updated throughout the timetable;
- Define high options for system architecture;  
An internal workshop to define the high level options for system architecture for each Skeleton TOM. The focus will be on central system impacts at this stage since the wider market architecture will need to be defined at a later stage once the TOMs are refined; and
- Assist Ofgem in any policy work as requested.

## HIGH LEVEL TIMETABLE FOR THE DWG

Following the launch of the SCR in summer 2017, the DWG meetings will be scheduled and convened. These are preliminary dates and are can be amended depending on DWG progression.

### High Level Timetable

A high level timetable is as follows:



# MARKET WIDE HALF-HOURLY SETTLEMENT

---

## DWG Stage 1: October 2017-March 2018

**11 October 2017: 1st DWG meeting:** presentation and initial agreement of the ToR, plan/approach and initial views on strawman TOMs, design principles, evaluation criteria and timetable.

**October 2017:** ELEXON will refine the ToR, plan/approach, design principles, evaluation criteria and TOM Strawmen, subject to initial views from the DWG.

**15 November 2017: 2nd DWG:** discuss/refine viable TOM strawmen along with evaluation criteria/ design principles (e.g. centralised, supplier hub, hybrid, access to HH data options).

**December 2017:** ELEXON will start to draft the Skeleton<sup>4</sup> TOM Deliverable and Draft consultation on viable TOMs and set out interactions with other Ofgem policy work. A copy of the draft Skeleton TOM Deliverables will be provided by ELEXON to Ofgem by 10 January 2018 to assist Ofgem's policy work steams.

**10 January 2018: 3rd DWG meeting:** discuss transitional approaches for each TOM, review/agree consultation and agree Skeleton TOM's deliverable.

**February 2018:** ELEXON will update the deliverable subject to the DWG feedback at the 3rd DWG meeting.

**March 2018:** ELEXON will deliver the Skeleton TOMs to Ofgem.

## DWG Stage 2: April 2018-March 2019

The planning for this stage is indicative and dependent on the Ofgem TOM Board and Design Advisory Board (DAB) feedback on the Skeleton TOMs. Stage 2 will be impacted by any policy developments in particular and decisions on access to HH data for settlement purposes.

**April 2018:** ELEXON will finalise the consultation on the Skeleton TOMs, subject to Ofgem feedback on the deliverable.

**April 2018: 4th DWG meeting:** review and agree final consultation and questions.

### 1. Consultation on Skeleton TOMs

**April-May 2018:** A four week consultation on the Skeleton TOMs.

**May 2018:** Summarise responses.

**May: 5th DWG meeting:** Meeting held to discuss consultation responses and define and lower level detail.

**May-June 2018:** ELEXON will redraft/ refine viable TOMs following the DWG discussion at the May meeting.

**June: 6th DWG meeting:** Meeting to set 'minded to' decision on preferred TOM and alternative and discuss transitional approaches.

**July and August 2018:** ELEXON will draft a consultation on the transitional approach and undertake Settlement Impact assessment (IA) and provide support to Ofgem on distribution impacts of proposals.

---

<sup>4</sup> Each Skeleton TOM will set out at a high level the Market actors and their roles responsibilities, together with, the pros and cons of each TOM

# MARKET WIDE HALF-HOURLY SETTLEMENT

---

## 2. Consultation on transitional approach

**September 2018: 7th DWG meeting:** Following Ofgem Policy decisions a meeting to agree the final preferred TOM and alternative and agree transitional approach and consultation.

**September 2018:** ELEXON to provide Ofgem with the DWG final preferred TOM transitional approach and consultation document.

**October-November 2018:** A four week consultation on transition, ELEXON will document Settlement Impacts and support Ofgem on distribution impacts of proposals.

**November 2018:** ELEXON will summarise consultation responses for the DWG and draft final report for Stage 2.

**December 2018: 8th DWG meeting:** A meeting to agree settlement model, transitional approach and draft final report for DWG stage 2.

**January 2019:** ELEXON will finalise the report for Stage 2.

**February 2019: 9th DWG meeting:** Meeting to agree final report for Stage 2.

**March 2019:** final report provided to Ofgem.

In all stages above the work will be subject to any changes coming from Ofgem.

## IMPLEMENTATION PLANNING

---

Ofgem's decision on if, when, and how to implement Market Wide HHS (subject to an impact assessment, as part of the business case) should be taken by the second half of 2019. If a decision to implement Market Wide HHS is made, planning will need to start and any BSC changes or other Modifications will need to be raised as appropriate.

It is assumed that following Ofgem decision in the second half of 2019:

- Spring 2020: raise Code Mods; and
- Winter 2020: Ofgem decision and start implementation.

## REPORTING REQUIREMENTS

---

High level reporting requirements are as follows:

- Post DWG meeting headline reports will be published within 5 working days of each meeting;
- Internal reporting will be required on a monthly basis to the Executive Sponsor detailing the progress of the DWG in developing the TOMs. Ad hoc updates will be required to the BSC Panel and ELEXON Board; and
- The Ofgem led DAB and TOM Board will also require progress updates from the DWG such that it can manage interaction with the other Ofgem work streams.



# MARKET WIDE HALF-HOURLY SETTLEMENT

## HIGH LEVEL LIST OF DELIVERABLES

No.	Deliverable	Description	Date
1.	Key Roles and Responsibilities	Document setting out key roles and responsibilities of ELEXON, DWG and Ofgem SCR programme.	30 September 2017
2.	Detailed Timetable	Gantt chart giving the detailed timetable defining DWG meetings, milestones and activities.	30 August 2017
3.	Draft Strawman TOMs	Document and Presentation giving draft TOMs, key features and Pros and Cons.	30 September 2017
4.	RAID Log	Document with Risks, Assumptions, Issues and Dependencies (RAID) log which will be kept updated throughout the timetable.	30 September 2017
5.	High Level Options for System Architecture	Document setting out the high level options for system architecture defined for each Skeleton TOM with a focus on central systems.	30 September 2017
6.	Design principles and evaluation criteria	Expansion of Ofgem draft design principles and evaluation criteria.	15 November 2017
7.	Draft skeleton TOMs	Provide draft skeleton TOMs to Ofgem to assist Ofgem policy work streams	10 January 2018
8.	Skeleton TOMs	Final Report to Ofgem on the findings of Work Stage 1.	March 2018
9.	Consultation on Skeleton TOMs	Industry Consultation Document detailing the proposed TOMs.	May 2018
10.	Impact Assessment for BSC systems	Internal IA document on proposed changes required to support viable TOMs.	August 2018
11.	Consultation on Transitional Approach	Industry Consultation Document on options for transitioning to new arrangements.	October 2018
12.	Final report for Workgroup Stage 2	Final Report to Ofgem on the findings of Work Stage 2.	March 2019