

DWG: STAGE 2 WORKGROUP TERMS OF REFERENCE

This document sets out the Terms of Reference for the four workgroups established by the Design Working Group (DWG), to be used throughout Stage 2 of the Target Operating Model (TOM) design work for Market-Wide Half Hourly Settlement (HHS).

1. Purpose, role and scope of the workgroups

- 1.1 The objective of the workgroups is to develop the lower-level service requirements for different subject areas within the TOMs, and deliver these to the DWG for its agreement.
- 1.2 Appendix 1 sets out the individual subject area of each workgroup. The collective scope of the workgroups shall cover all the processes within the services set out in the TOMs.
- 1.3 The workgroups shall ensure that the service requirements:
 - Focus on what services, processes, obligations and timescales are required, rather than how these are delivered;
 - Are developed to a level of detail sufficient for Modification Proposals to be raised;
 - Deliver Ofgem's objectives and design principles for the TOMs;
 - Reflect the current status of any related Ofgem policy considerations; and
 - Provide Ofgem with sufficient information to support its development of the business case for Market-Wide HHS.
- 1.4 The workgroups may also provide the DWG with advice on any transitional challenges and, if requested by the DWG, other specific issues relating to their areas of expertise. This advice may, if requested by the DWG, include technical input on policy issues being considered by Ofgem.
- 1.5 The workgroups shall make recommendations to the DWG but shall have no decision-making powers.
- 1.6 The workgroups may request guidance from the DWG as necessary and shall comply with any strategic direction from the DWG or Ofgem.

2. Membership

- 2.1 ELEXON shall appoint members to the workgroups in consultation with the DWG, and shall publish a list of each workgroup's members on the BSC Website. It is anticipated that each workgroup shall have no more than eight members.
- 2.2 With the DWG's agreement, ELEXON may revoke the membership of a workgroup member if:
 - They fail to contribute constructively to the work of the group; or
 - There are circumstances that, in the view of the workgroup's Chairman, mean that the member's continued participation would be to the detriment of the achievement of the workgroup's objectives.
- 2.3 Workgroup members shall not have alternates. Wherever possible, but without jeopardising the timely delivery of key milestones, ELEXON shall therefore schedule meetings such that all members can attend. Where this is not possible, then meetings shall be held on the basis of the majority availability of members.
- 2.4 ELEXON shall provide a Chairman and administrative support for each workgroup, and shall arrange meeting facilities (by default at ELEXON's offices).
- 2.5 ELEXON shall also provide technical support and facilitation to each workgroup. This includes providing meeting materials, leading on the drafting of deliverables on behalf of the workgroup and ensuring an appropriate approach to each workgroup's production of requirements.

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- 2.6 Ofgem may attend meetings of any of the workgroups as an observer, but will not be a member. Any views expressed or implied at workgroup meetings are without prejudice to, and shall not limit, Ofgem's discretion regarding its final decisions.
- 2.7 The Chairman of each workgroup shall have the discretion to invite interested parties to attend any meeting of that workgroup, on an ad-hoc basis, in order to aid in the progression of any deliverables.
- 2.8 It is the responsibility of the members to ensure compliance with competition law while participating in the workgroups.

3. Workgroup deliverables and reporting

- 3.1 Each workgroup shall, by 15 January 2019, deliver to the DWG a finalised set of recommended service requirements for its subject area.
- 3.2 Each workgroup shall also deliver the key milestones set out in Appendix 2. Other milestones may be agreed by the DWG.
- 3.3 Each workgroup shall also provide any progress updates as may be requested by the DWG, nominating a member of the workgroup or ELEXON to present these as appropriate.

4. Meeting frequency and proceedings

- 4.1 Each workgroup shall agree its own meeting timetable and ways of working to deliver the required outputs and milestones. For the avoidance of doubt, these may include teleconference or correspondence meetings as well as collaboration between members outside of meetings (whether remotely or in person).
- 4.2 Wherever possible, each workgroup's recommendations/advice will be based on a consensus view of the workgroup members present. However, where a different minority view exists, this shall also be reported to the DWG.
- 4.3 The workgroups shall not produce formal headline reports or minutes. However, ELEXON shall circulate a short summary note of the key decisions, actions and next steps to workgroup members as soon as practicable after each meeting.

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APPENDIX 1: WORKGROUP SUBJECT AREAS

Workgroup 1: Metering, Meter Reading and Retrieval Services

The subject area of this workgroup shall comprise the following services.

Metering Services for Advanced, Smart and non-smart Metering Systems

This service will be responsible for:

- Installing, commissioning and maintaining Advanced, smart and non-smart Meters;
- Configuration of non-smart and Advanced Meters;
- Maintaining an accurate register of Physical Meter Technical Details;
- Energisation and de-energisation of Advanced, smart and non-smart Meters (excluding large LV & HV);
- Connection and disconnection of Advanced, smart and non-smart Meters; and
- Meter and communication equipment fault investigation where a site visit is required.

Meter Reading Service for non-smart Meters

This service will be responsible for:

- Obtaining non-smart Meter Register Readings from non-smart Meters either via a site visit or remotely as applicable; and
- Providing non-smart Meter Register Readings to the Processing Service for smart and non-smart Meters.

Retrieval¹ and Processing Service for Advanced Meters

This service will be responsible for:

- Retrieving the Settlement Period level Active Import and Active Export consumption (and other data as required e.g. reactive power) data from Advanced Metering Systems;
- Receiving and maintaining Meter Technical Detail data from the Metering Service for Advanced Metering Systems;
- Validating Settlement Period 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 level consumption data for Active Import and Active Export (and other data as required) where such data fails validation or is missing or unavailable;
- 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 access to validated Settlement Period level data to the separate Aggregation Service(s); and

¹ For the avoidance of doubt, the retrieval service is the service requesting and receiving energy usage data but not the communication services to the Meter. The Data and Communications Company for smart Meters and the communications service providers for Advanced and AMR Meters (such as Vodafone, EE and O2) are not deemed part of the retrieval Service. The retrieval and processing for Advanced Meters is combined in all TOMs as the processor is likely to need access to the Meter for this Market Segment. However, it is noted that there are currently a number of instances where the retrieval service is outsourced in this Market Segment. The TOMs do not explicitly preclude these situations.

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- Providing validated Settlement Period level data to the other parties as appropriate.

Retrieval Service for smart Meters

This service will be responsible for:

- Retrieving the Active Import and Active Export data log (Settlement Period level) data from smart Meters where required for Settlement. This retrieval will be achieved via the Data and Communications Company service;
- Retrieving Time-of-Use Register Readings for Active Import Registers and the Active Export Register and Meter configuration data from smart Meters where required for Settlement. This retrieval communication method will be achieved via the Data and Communications Company service; and
- Providing access to the retrieved data to the Processing Service for smart and non-smart Metering systems.

Workgroup 2: Processing and Load Shaping Services and Registration Interaction

The subject area of this workgroup shall comprise the following services. In addition, the workgroup shall consider any new or amended registration items required to deliver these services.

Processing Service for smart and non-smart Metering Systems

This service will be responsible for:

- Accessing the Active Import and Active Export data log (Settlement Period level) data for smart Meters from the Retrieval Service for smart Meters where required for Settlement;
- Accessing Time-of-Use Register Readings for Active Import Registers and the Active Export Register and Meter configuration data for smart Meters from the Retrieval Service for smart Meters where required for Settlement;
- Accessing Meter Register Read data and Meter Technical Details for non-smart Meters from the Meter Reading Service according to a defined reading schedule from the Retrieval Service for smart Meters where required for Settlement;
- Validating Settlement Period level consumption data for Active Import and Active Export or Register Readings for smart and non-smart Meters using a common set of agreed validation rules to be implemented electronically where possible;
- Estimating or defaulting Settlement Period level consumption data for Active Import and Active Export where such data fails validation or is missing or unavailable;
- Calculating Meter Advances for Register Read data;
- Conversion of Register Readings into Settlement Period level data using information on Meter configuration and data provided by the Load Shaping Service;
- Estimating Settlement Period level data for Metering Systems with Register Readings where such data fails validation or is missing or unavailable;
- 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 access to validated Settlement Period level data to the Aggregation Service(s); and
- Providing access to validated Settlement Period level data to any other parties as appropriate.

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Load Shaping Service

This service will be responsible for:

- Receiving smart Meter Settlement Period data for Active Import and Active Export from the 'Processing Service for Smart and non-smart Meters' 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; and
- Providing 'Load Shape' data for the agreed categorisations to the Processing Service for Smart and non-smart Meters according to an agreed schedule.

Workgroup 3: Settlement Period Unmetered Supplies Service and Distribution Business Interaction

The subject area of this workgroup shall be the following service:

Settlement Period level Unmetered Supplies Service

This service will be responsible for:

- 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; and
- Providing access to calculated Settlement Period level data to the Aggregation Service for Advanced Metering Systems.

Workgroup 4: Aggregation and Volume Allocation Services and Registration Interaction

The subject area of this workgroup shall comprise the following services. In addition, the workgroup shall consider:

- Any new or amended registration items required to deliver these services; and
- The Settlement timetable, application of Group Correction Factors, data requirements for Distribution Use of System charging and any other areas identified.

Aggregation Service

This service will be responsible for:

- 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 for smart and non-smart Meters according to a defined schedule;
- Accessing validated Settlement Period level data for Advanced Metering Systems from the Processing Service for Advanced Metering Systems 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;

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- Estimating data where missing according to Settlement timescales;
- 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 for future smart grids based on defined Settlement timescales, where appropriate information has been provided to facilitate this option;
- Applying distribution network loss factors as appropriate using data provided by distribution businesses;
- Provision of aggregated consumption volumes and losses to the Volume Allocation Service according to Settlement timescales; and
- Provision of aggregated consumption volumes and losses to other parties as required.

Volume Allocation Service

This service will, according to Settlement timescales, will be responsible for:

- 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 (as currently provided by the Central Data Collection Agent);
- Aggregating data for Balancing Mechanism Units;
- Aggregating all data within a distribution region;
- Comparing and calculation differences between the aggregated BM Unit data with the information on the net volume of energy entering a distribution region for each Settlement Period;
- Correcting the BM Unit data within a distribution region as appropriate;
- Aggregating the corrected BM Unit data across distribution regions for use in the Imbalance Settlement calculations;
- Providing out-turn data to the service responsible for the Imbalance Settlement calculation;
- Maintaining standing data as appropriate; and
- Providing reports and data to other parties as appropriate.

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APPENDIX 2: WORKGROUP MILESTONE PLAN

Each workgroup shall deliver the key milestones set out below. The DWG may vary the timing of these milestones as appropriate and may agree additional milestones.

Milestone	Date
Hold first meeting – set scene and agree ways of working <i>(combined meeting with all four workgroups)</i>	11 June 2018
Provide verbal update to DWG <i>(ELEXON on behalf of all workgroups)</i>	13 June 2018
Develop service requirements <i>(individual workgroups)</i>	June-July 2018
Provide verbal update to DWG <i>(individual workgroups)</i>	17 July 2018
Develop service requirements <i>(individual workgroups)</i>	July-August 2018
Provide verbal update to DWG <i>(individual workgroups)</i>	22 August 2018
Agree first draft of service requirements <i>(individual workgroups)</i>	31 August 2018
Hold meeting to compare service requirements and undertake gap analysis <i>(combined meeting with all four workgroups)</i>	Week commencing 10 September 2018
Provide progress report to DWG <i>(individual workgroups)</i>	18 September 2018
Agree second draft of service requirements, incorporating any DWG feedback	19 October 2018
Deliver draft service requirements to DWG	13 November 2018
Finalise service requirements, incorporating DWG feedback	14 December 2018
Deliver final service requirements to DWG	15 January 2019