

MARKET-WIDE HALF-HOURLY SETTLEMENT: ARCHITECTURE WORKING GROUP (AWG) TERMS OF REFERENCE

This document sets out the Terms of Reference for the Architecture Working Group (AWG), for use during the next stage of developing the Target Operating Model (TOM) for Market-wide Half Hourly Settlement (MHHS).

This workgroup builds on the work already carried out by the Design Working Group (DWG), which has designed the Preferred TOM and transition approach.¹

1. Purpose

- 1.1. The objective of the MHHS project is to develop and then implement an enduring process for MHHS that delivers benefits for consumers by maximising the opportunities provided by smart metering in enabling a smart, flexible energy system.
- 1.2. To enable achievement of this objective, the AWG will develop, consult on and recommend solutions for the system architecture design required to enable the preferred TOM. The areas to be considered may include:
 - Changes to the registration systems and the interface with Meter Point Registration Service;
 - Interfaces with the Data Communications Company;
 - Any central access to Half-hourly data and potential third party access (including security consideration); and
 - Data transfer.
- 1.3. The AWG will identify the required system architecture changes to BSC central systems, other code administrator systems, and define the interface specifications.

2. Scope

- 2.1. The AWG will deliver TOM development recommendations to the Ofgem TOM Team.
- 2.2. The AWG will ensure that its recommendations are consistent with:

¹ See the Ofgem website for the DWG Final report on the Preferred TOM and Transition Approach, here: <https://www.ofgem.gov.uk/publications-and-updates/open-letter-dwg-final-report-and-proposed-new-governance-structure>

- All related Ofgem policy decisions and steers, as published by Ofgem as part of its Significant Code Review on Electricity Settlement Reform;
- The Code Change and Development Group’s recommendations;
- Ofgem’s overall MHHS project objectives, the TOM design principles and the TOM development principles;
- The DWG’s Preferred TOM design and transition approach/principles, unless Ofgem requests changes to these;
- Ofgem’s Data & Security Principles and guidance for following NCSC Secure by Design principles;²
- The desirability for energy industry systems and processes to become more streamlined and coherent;
- Any request, steer or decision from the SRO; and
- Consideration of other aspects of market arrangements.

2.3. The Ofgem TOM Team will escalate the AWG’s TOM development recommendations to the Senior Responsible Owner (SRO), who will be advised by the Design Advisory Board as required, for decision as appropriate. Final decision-making on the TOM design, and system architecture rests with the SRO.

3. Deliverables

3.1. The AWG will, within 2 months of forming, provide a proposed work plan with timescales to Ofgem for approval. This will include timings for the delivery of recommendations required to inform the work of the CCDG and the other Ofgem work streams including the Business Case. It will also include the timelines for the final, and any interim, milestones and consultations

3.2. In the agreed time, the AWG will deliver a report to the Ofgem TOM Team that sets out:

- The design principles and constraints, as agreed by the AWG;

² Ofgem’s Data and Security Principles are currently being developed and will include recommendations from the NCSC Cyber Security Design Principles (<https://www.ncsc.gov.uk/collection/cyber-security-design-principles/cyber-security-design-principles>), Cloud Security Principles (<https://www.ncsc.gov.uk/collection/cloud-security?curPage=/collection/cloud-security/implementing-the-cloud-security-principles>) and Protecting Bulk Personal Data (<https://www.ncsc.gov.uk/collection/protecting-bulk-personal-data>)

- The functional requirements;
- The solution architecture;
- The AWG’s recommendations with accompanying evidence and rationale, including a risk assessment on the recommendations, and the identified impacts on industry parties and end consumers;
- Assessment of the recommendations against the TOM Design Principles and the TOM Development Principles;
- Any dependencies on other work areas under the Significant Code Review on Electricity Settlement Reform, other Significant Code Reviews or other industry initiatives; and
- The consultation responses received by the AWG on the above areas.

3.3. The Ofgem TOM team may request other deliverables as appropriate. These may include any potential changes to the TOM design following Ofgem’s Request for Information and Impact Assessment.

4. Role of ELEXON

4.1. ELEXON will chair the AWG and will provide the workgroup with a technical secretariat function and one or more technical leads.

4.2. The Chair will ensure that the AWG completes its deliverables to the timescales and requirements contained in these Terms of Reference and associated work plan. This includes facilitating discussion across the group, enabling challenge, ensuring options are considered thoroughly, ensuring that interested parties have opportunity to engage in discussions and that proposals should be generated and developed in a way which ensures credibility across all the parties involved. With the support of the Ofgem Technical Consultant, the Ofgem TOM Team will provide support to the Chair as required.

4.3. The technical secretariat will provide notification of meetings (including their time, date and location) and shall circulate associated paperwork to the AWG. Agendas and papers will be circulated at least 5 working days in advance of each meeting, except in the case of any matters that the Chair deems to be urgent. A summary of the key decisions and actions will be circulated within 10 working days of the meeting. With the exception of any confidential items, the Chair will publish all AWG paperwork on its website.

4.4. The technical lead(s) shall:

- Advise the AWG on technical matters relating to Settlement and the TOM design/transition;
- Lead on identifying BSC system impacts;
- Lead on identifying and developing options, 'straw men', analysis and other materials for discussion by the AWG;
- Co-ordinate with other relevant industry codes on their impacts;
- Lead the drafting of consultations and reports for the AWG's review and approval;
- Regularly update the Ofgem TOM team on the progress of the work outside of formal meetings of the AWG;
- Attend the Code Change and Development Group as an observer, as required.

5. Role of Ofgem

5.1. Ofgem will attend the AWG to monitor progress and to provide strategic input on the development to ensure it fits with the project objectives and principles. This will include providing a Technical Consultant to participate in AWG discussions.

5.2. The Ofgem Technical Consultant shall:

- Advise the AWG on technical matters;
- Facilitate discussions;
- Ensure that analysis of options considered by the AWG is consistent, and that the impacts of the options have been fully identified;
- Ensure that interested parties have opportunity to engage in discussions and that proposals are generated and developed in a way which ensures credibility across all the parties involved;
- Present the AWG's recommendations to the Ofgem TOM Board and Design Advisory Board, as required, to support the SRO's decision-making, providing explanation of technical detail and rationale upon request;
- Lead on identifying risks; and
- Advise the Ofgem TOM team on when the AWG's recommendations should be taken to the SRO for decision.

5.3. For the avoidance of doubt, Ofgem is not a member of the AWG and cannot vote on recommendations. Any discussions in meetings and views expressed or implied in such discussions, or in associated documents, are without prejudice to, and shall not limit, the discretion of Ofgem with regard to its final decisions.

6. Membership

6.1. Ofgem will appoint members to the AWG following an open invitation to apply for membership. It is anticipated that the group will have no more than 12 members. ELEXON will publish a list of members on its website.

6.2. Ofgem will identify which applicants are best placed to perform the tasks and achieve the objectives of the AWG. This includes ensuring that the group's membership includes a range of stakeholders and has collective coverage of the following areas of expertise:

- The system architecture and processes of relevant industry codes (including the BSC, DCUSA, MRA, REC and SEC);
- Market Participant's IT systems and processes;
- The regulatory framework;
- Relevant consumer issues;
- Relevant innovation and technology aspects that the MHHS might influence/enable; and
- System architecture industry best practice and security standards.

7. Participation

7.1. The AWG shall agree its day-to-day ways of working in order to deliver its Terms of Reference. This may include varying the number/timing of meetings as required to support its workload, use of teleconference or other remote meetings and collaboration by members outside of formal meetings. ELEXON shall provide appropriate meeting and conferencing facilities.

7.2. Wherever possible, the AWG's recommendations will be based on a consensus view. However, where a different minority view exists, the Chair will ensure that this is considered and reported in the group's consultations and reports. If in exceptional circumstances, a member believes a minority view is not properly being taken into account and should be escalated to Ofgem for decision, this should be provided in writing to the Ofgem TOM team, setting out the reasons for the escalation and the minority view.

- 7.3. AWG members will not have alternates. Where attendance by all members is not possible, meetings will be held on the basis of the majority availability of members.
- 7.4. The Chair and Ofgem will have the discretion to invite interested parties, or outside experts, to attend any meeting on an ad-hoc basis to support as required. The AWG may also invite the Code Administrators of other relevant industry codes to attend its meetings as required to support its work.
- 7.5. AWG members are expected to fulfil a full participatory role in the workgroup, including input into any work before/between meetings and review of output from the meetings.
- 7.6. Ofgem can, in consultation with the Chair, revoke the membership of a AWG member if:
- The member fails to contribute constructively to the work of the group; and/or
 - There are circumstances that, in Ofgem's view, mean that the member's continued participation would be to the detriment of achieving the objectives of the AWG for MHHS. If members consider that such circumstances exist, it is their responsibility to bring the matter to the attention of the Chair and Ofgem TOM Team.
- 7.7. Views expressed by AWG members/attendees will be treated as expert advice in the delivery of its function.
- 7.8. It is members' responsibility to ensure their compliance with competition law while participating within the AWG.
- 7.9. The Code Administrators of other relevant Industry Codes will be invited to attend the AWG's meetings as observers, or apply to become members as outlined in paragraph 5.

8. Review of these Terms of Reference

- 8.1. Ofgem may review the AWG's Terms of Reference, membership and operation at any time in consultation with the Chair.
- 8.2. Following a review under clause 8.1, Ofgem may make changes to the Terms of Reference, membership, or operation of the AWG to ensure they remain appropriate for the requirements of the MHHS project.