Target Operating Model Development Principles

1. Purpose of the Development Principles

1.1. Following the delivery of the Design Working Group (DWG) Preferred Target Operating Model (TOM) and Transition Approach report[1] the development phase of the TOM work will begin. The aim of the development phase is to build on the design structure we set out in the Settlement Reform Significant Code Review (SCR) Launch Statement.[2] The TOM Design Principles[3] still apply for the work that will be undertaken in the Development Phase by the Code Change and Development Group (CCDG), Architecture Working Group (AWG) and the Design Advisory Board (DAB).[4] These Development Principles are intended as a supplement to the Design Principles.

1.2. The Design Principles state that the TOM design should consider and facilitate the move to a low-carbon electricity system. Following the introduction of a legally binding target of net zero emissions by 2050, we think that the development work should consider this in the context of enabling the transition to Net-Zero.

1.3. The Development Principles, set out below, provide guidance and direction to the two new TOM workgroups (CCDG and AWG) whose roles are to develop the Target Operating Model (TOM) to help realise reforms towards MHHS. Ofgem will also use these Development Principles to inform its decision-making when considering whether to accept or reject recommendations from the CCDG and AWG.

1.4. These Development Principles will ensure there are agreed criteria for delivering various processes within the settlement arrangements. They will provide transparency and clarity around achievable aims. This is important to the governance of the project to ensure there is clear and efficient decision-making.

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[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

[2] The SCR Launch Statement can be found here on the Ofgem website: https://www.ofgem.gov.uk/publications-and-updates/electricity-settlement-reform-significant-code-review-launch-statement-revised-timetable-and-request-applications-membership-target-operating-model-design-working-group

[3] The TOM design principles can be found on the Ofgem website: https://www.ofgem.gov.uk/system/files/docs/2018/01/updated_target_operating_model_design_principles.pdf

[4] For the purposes of this document, Para 1.3 of the TOM Design Principles should be read to include reference to the CCDG and the AWG in addition to the DWG.

2. Development Principles

Non-aggregated half-hourly data

2.1. The preferred TOM includes the flow of non-aggregated half-hourly data into central Balancing and Settlement Code (BSC) systems.[5] Consideration should be given to how this is done and where and how the non-aggregated data is stored. Consideration should also be given to the potential future uses for this data, and ensure that the system design does not act as a barrier. As an example this may include facilitating third party access to the data, in compliance with General Data Protection Regulation, other relevant rules regarding access to data, including the Data Access and Privacy Framework,[6] and the appropriate governance procedures. This type of access could, for example, be used for public policy uses.

2.2. Full consideration must also be given to the security requirements of the flow and holding of non-aggregated data for settlement and the security standards any third parties accessing the data must abide by.

Data and communication standards

2.3. The data storage, transfer and communication specifications should be standardised across the new systems and interfaces, and these standards will be published. The design should avoid creating barriers to innovation by new entrants or existing business models when providing the data services as described by the preferred TOM.

2.4. The standards should be specified with potential future system changes in mind and should be flexible to adapt to potential future requirements of the system (eg use of data for calculation of network charges). Market-wide Half-Hourly Settlement is an enabler to many future electricity system changes and full consideration to the

[5] NB: there was a DWG minority view on the preferred TOM that aggregation should continue to happen competitively outside of central settlement systems. Ofgem are yet to make the final decision on the TOM, including where aggregation should take place, and are currently gathering information through the RfI and IA. However, until such a time that we make a final decision, we wish the development of the TOM to be based on the DWG preferred TOM, unless otherwise requested by Ofgem.

[6] The DAPF was established to complement (but not replace) existing data protection legislation by providing sector-specific provisions, that enable proportionate access to energy consumption data whilst ensuring that appropriate privacy safeguards are in place. The DAPF can be found here: https://www.gov.uk/government/publications/smart-metering-implementation-programme-review-of-the-data-access-and-privacy-framework

potential future requirements should be given to the development.[7] The recommendations set out by the Energy Data Taskforce should also be considered, as appropriate.[8]

Security standards

2.5. The system architecture and interface development should be carried out in accordance with Ofgem's Data & Security Principles[9] and guidance for following NCSC Security Design principles.[10] As set out in para 2.2 above, particular consideration musty be given to the security standards related to the flow, holding and use of non-aggregated half-hourly data.

Use of data by the Load Shaping Service and other BSC services

2.6. The non-aggregated half-hourly data should be stored and formatted as to not create a barrier to the data being utilised by the Load Shaping Service as described by the preferred TOM. The Load Shaping Service offers an opportunity for estimates of half hourly import and export to become significantly more accurate. The system architecture design should not be a barrier to many more accurate load shapes categories being created and used for settlement.

2.7. The data may also be utilised by other BSC services as appropriate. This may include Trading Disputes, Group Correction or Balancing Service Volume Allocation.[11] The system design should avoid creating barriers to these potential uses of the data.

Transition

2.8. Taking into account the DWG's transition approach and input from Ofgem's Impact Assessment, the TOM development recommendations will consider potential transition plans. This should consider the appropriate order of system changes and the appropriate time for integration testing. The interaction with, and timings of, other

[7] Ofgem has already done some work on this to date, and has published a working paper on future enabling the TOM for MHHS. It can be found here: https://www.ofgem.gov.uk/publications-and-updates/future-enabling-target-operating-model-market-wide-settlement-reform

[8] The Energy Data Taskforce report can be found here: https://es.catapult.org.uk/news/energy-data-taskforce-report/

[9] Ofgem's Data and Security Principles are currently being developed and will include recommendations from the NCSC 14 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).

[10] https://www.ncsc.gov.uk/collection/cyber-security-design-principles/cyber-security-design-principles

[11] See ELEXON's website for a glossary of terms used: https://www.elexon.co.uk/glossary/

significant industry changes should be considered when considering potential transition plans and IT system changes.

Data Service Qualification

2.9. The TOM describes new data services that will retrieve, validate, process and send data to central systems. Some of these will be performed outside of central settlement by third parties. The requirements placed on parties as part of the process of qualifying with the BSC to be able to provide these data services should be considered, especially in relation to secure handling of customer data.

Whole settlement system considerations

2.10. When developing the recommendations, the impacts on the whole meter to bank process, including end consumers, should be identified and considered. The consideration of options should include identifying whether the design would create significantly increased complexity in systems outside the ones being developed and also whether they would lead to changes in end consumer experiences.