Public

Approach to TOM evaluation and selection

Accounting for Ofgem's policy decisions

18 September 2018 Mark DeSouza-Wilson and Matthew McKeon



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.

Our team on reception is here to help you, if you have any questions, please do ask them.





Initial Evaluation against Evaluation Criteria

The DWG undertook an initial evaluation of all TOMs against the evaluation criteria. It was identified that only certain criteria could be assessed at this stage:

Approach to evaluation

Statements are provided across all TOMs on the strength and weaknesses against the criteria, where it is currently possible the approach to rate the TOMs against the criteria. The following descriptors are used to show the relative merits:

- Strongly supports ($\boxed{\mathbf{M}}$) assessed to completely deliver against the criterion;
- Supports (\mathbf{M}) delivers mostly what is required by the criterion; and
- No assessment (?) cannot be assessed at this stage.



Recap of initial evaluation of all TOMs (1/4)

Criterion	Considerations	Evaluation Criteria	All TOMs	Comment
	The TOM covers all required end to end processes. Are new Market Roles required	Meets requirement in the Key Roles and Responsibilities document	$\checkmark\checkmark$	Covers all processes set out in the document however the TOMs are currently silent on data transfer and communication - this will be covered in Phase 2.
	or are current roles no longer needed?	New or adapted Role types	$\checkmark\checkmark$	Covers all new (eg. Load Shaping) and adapted services required.
	How are consumers remaining on traditional metering or whose HH data is not available settled? Settlement arrangements for export consumption	Meter types		Covers all settlement metering (as per target/end-state assumptions) and also unmetered supplies. TOMs assume SMETS 1 meters will either be replaced with SMETS 2 meters or adopted under the DCC. Behind-the- meter metering is being considered flexibility.
Coverage	How are Unmetered Supplies incorporated ? The TOM covers interaction	export coverage	\checkmark	Covers settlement of active export, where such export is registered for settlement. Export settlement is a BEIS policy decision.
	with Customer Billing.	UMS coverage		Features a defined Unmetered Supplies Service to facilitate the half-hourly settlement of all unmetered supplies.
		customer billing interaction	\checkmark	Customer billing data is provided by Meter Reading Service (non-smart), Processing Service (Advanced), Settlement Period Unmetered Supplies Service (UMS) and directly from the meter (Smart meters)
		Potential participants to fulfil role	\checkmark	Registration, Metering and Advanced Retrieval/Processing services are largely unchanged and can therefore be provided by exisiting participants and well as new.
		Registration arrangements		Largely unchanged from current arrangements though new registration data and new interfaces may be required.

ELEXON

Recap of initial evaluation of all TOMs (2/4)

Criterion	Considerations	Evaluation Criteria	All TOMs	Comment
	Cost-reflectivity of option How well option facilitates flexibility , e.g. DSR	quality of data to settlement		Maximises the use of settlement period level data. Where SP-level data is not available from the meter, Register Reads are converted to SP-level data using actual SP-level data rather than profiles.
Cost Reflectivity		customers and meter types	$\checkmark\checkmark$	Different types of customers settled accurately using SP- level data, subject to data privacy option.
		Network charges		Settlement period level data will be available from the processing services for network charging purposes, subject to data privacy option.
Timing	Overall length of settlement and dispute processOverall length of settlement and dispute process Ensuring arrangements remain robust, accurate and fair	Does the model allow for faster Settlement against the baseline or other TOMs? Timing of first run for financial settlment.		Depends on percentage of meter reads required. TOMs would allow for faster collection of data, enabled by retrieval through the DCC.
		Timing of final reconciliation run	_	
	Complexity of design and scope	Statement on simplicity of design	\checkmark	Improvement on status quo.
Design Simplicity	Level of automation Robustness and ease of	Impact of supporting smart and traditional solutions in parallel	$\checkmark\checkmark$	Supports both traditional and smart Meters in parallel
	upgrading	Robustness and ease of upgrading	-	



Recap of initial evaluation of all TOMs (3/4)

Criterion	Considerations	Evaluation Criteria	All TOMs	Comment
	Whether it can easily adapt to future changes in market Whether it can it handle bulk CoS/change of agent events	How adaptable the TOM is and why?	-	
Design Flexibility	Supplier Of Last Resort Number of data hand-offs	How will it handle bulk CoS events/change of agent ensuring correct allocation?	\checkmark	Removes reliance on historic data (currently used for profiling).
		Supplier Of Last Resort	\checkmark	Same as above
		Number of data hand-offs	-	
	System Security Distributional impacts	Will the framework need changing	\otimes	
	Competition/centralisation Impact on other parts of	Are there any Security considerations?	\otimes	
Consequential Impacts	regulatory framework	Which customers are impacted and what mitigations are required?	\oslash	
		How it affects competition, and why	\otimes	These questions will need further consideration later in the design process as common to all TOMs
		Is it dependent on CoS, DSR, or DUoS changes?	\oslash	
		List of Proposed changes to Framework	\oslash	
		Number of Functions & volumes removed or adapted	\oslash	



Recap of initial evaluation of all TOMs (4/4)

Criterion	Considerations	Evaluation Criteria	All TOMs	Comment	
Data Privacy	Alignment with Data Privacy Framework Options Assessment of TOM against data privacy evaluation criteria.	How this affect competition in supply of electricity?	\checkmark	Metering, Meter Reading and Settlement Period Unmetered Supplies Service are competitive. Registration, Load Shaping and Volume Allocation are centralised.	
		Does the TOM preclude any of the policy options?	$\checkmark\checkmark$	Does not preclude any data privacy options defined at present	
		Feasibility of the TOM against each Option	$\checkmark\checkmark$	Can facilitate options where register reads are required and can process half hourly data whether anonymised or pseudonomised	
		How the TOM would work in practice with each option?	\otimes	More detail required on anonymisations and pseudonomisation options to make this evaluation	
		Benefits and costs against the data privacy options	\otimes		
		Implications for accuracy relating to each option	\otimes	Options that only allow for register read data would be less accurate. More detail is required.	
		Whether any benefits are not realised or can be mitigated	\otimes		
Solution costs	Potential costs of solution	A relative assessment of the likely costs of TOM for all stakeholders (not including implementation costs)	\otimes	Awaiting greater clarity	
Ease of Implementation	Robustness of deliver plan Transition approach	Summary plan with appropriate allocation of roles & responsibilities	\otimes	Depends on transitional approach and centralisation choices.	
	The settlement of residual traditional meters	A practical transition approach	\otimes	To be discussed in Phase 2	
Impact on small suppliers/new entrants	Impacts of any approach on small suppliers/new entrants	Identifying specific issues for small suppliers/new entrants stemming from an assessment of other criteria		Settlements process will be simpler. Faster and more accurate settlement should mean lower credit cover costs.	
Supports New Technologies and Innovation	How the design supports and does not impede new technologies and innovation	Identify how access to different levels of meter and aggregation could support new technologies or other innovation such as DSR, Peer-to-Peer and Smart Grids	\checkmark		

Limitations due to uncertainty on Ofgem policy decisions

The evaluation criteria aim to:

- facilitate the identification of options for settling all consumers against their actual HH meter data;
- allow for both qualitative and/ or quantitative analysis of each TOM option;
- enable a comparative assessment of options;
- enable the DWG to shortlist the options which are best for consumers;
- Enable removal of some TOM options in the first instance/before too much work has being invested; and
- Provide Ofgem with the DWG's assessment against the evaluation criteria for each TOM option.

The highlighted points could not be completed in Stage 1 due to the dependency of the TOMs on Ofgem's policy decisions on centralisation of agent functions and data access.



How could the evaluation be refined in Stage 2?

Example: Variants of **TOM D** depending on centralisation:



Retrieval, Processing and Aggregation competitive



Retrieval and Aggregation centralised



Retrieval centralised, Processing and Aggregation competitive



Entire Smart Market Segment centralised



Discussion for DWG11 meeting

- Currently too many possibilities for how final TOMs might look:
 - Different ways of implementing pseudonymisation or anonymisation
 - -Don't know how supplier might interact with TOM services (supplier hub)
 - -Limited number of permutations with centralised services
- Can we make assumptions and perform evaluation conditional on which services are centralised?
- Which evaluation criteria are unhelpful when comparing TOM options? Which criteria cannot be addressed due to lack of clarity on technical architecture, transitional approach etc.?
- Are there any other aspects that can be evaluated to further compare the merits of each TOM?





Thank you

Discussion



