Public

WG3: Evaluation of UMS options

DWG meeting 10

ELEXON 22 August 2018



Options evaluated

- At the first WG3 meeting, we evaluated four different options for handling smaller UMS customers in MHHS as follows:
 - Option 1: where the UMSO aggregates inventories for smaller unmetered customers – retaining the EAC for billing but using aggregated MPANs by Supplier/GSP Group for Settlement
 - 2) Option 2: which treats all customer MPANs as HH
 - 3) Option 3: a half-way house between Options 1 and 2, where:
 - a) The UMSO sends the summary inventory for individual MPANs to the Settlement Period UMS Service (SPUMS, aka the MA)
 - b) The SPUMS processes them as aggregated MPANs by Supplier/GSP Group
 - 4) Option 4: where the UMSO sends the EAC to the SPUMS & the SPUMS profiles it
- WG3 agreed that Option 2 best delivers the TOM design principles.



Evaluation matrix

MHHS: UMS options discussed by DWG WG3																						
	Aligns with design principles	Most like HH metered arrangements	Removes EACs / Burn Hours - Y/N	Least no. of datasets required	Reflects ToU for customers	Avoids large/small customer threshold	Requires dual processes - Y/N	Adds CoS / CoMC complexity - Y/N	Extent of UMSO system changes	Extent of MA system changes	Extent of HHDA impact	Extent of Supplier system changes	Enables reconciliation of biling & Settlement data - Y/N	Accuracy of allocation	Gives cost-refl. billing opportunity - Y/N	Facilitates future innovations (e.g. offsetting of generation & supply)	Least no. of MPANs required	Requires related MPANs - Y/N	Facilitates new entrants - Y/N	Extent of Customer impact	Total Green	Total Red
Op. 1 Aggregated Inventories from UMSO			N				Υ	Υ					N		N			Υ	N		5	10
Op. 2 Summary Inventories from UMSO			Υ				N	N					Υ		Υ			N	Υ		15	2
Op. 3 Summary Inventories from UMSO, MA aggregates			N				Υ	Υ					N		N			Υ	N		1	11
Op. 4 EACs from UMSO			N				Υ	N					N		N			N	N		2	14



 UMSO aggregates inventories for smaller unmetered customers – retaining the EAC for billing but using aggregated MPANs by Supplier/GSP Group for Settlement

Pros	Cons
 Uses existing arrangement for large customers 	 Need to define and maintain large/small customer threshold
Less data volumes due to aggregationSimple for SPUMS to implement	 Difficult for Supplier to reconcile EACs for billing with Settlement data
More accurate than current NHH allocation	 UMSO system changes to aggregate inventories
	 Timing issues on change of inventory / CoS
	 Dual processes difficult for new entrants
	 Does not allow UMS energy to be off-set with generation at customer level
	 Introduces complexity as requires related MPAN for aggregated inventories
	 Supplier would not get UMS consumption at HH level per customer



Treats all UMS customer MPANs as currently for HH

Pros	Cons
 Removes need for EACs Issues on CoS removed No issues on change of inventory More accurate than current NHH allocation No need to define and maintain large/small customer threshold Gives same granularity as smart Meter data More cost-reflective billing (than being billed on an EAC) No dual processes Removes need for Burn Hours standing data 	 Greater data exchanges than Option 1 (but not significantly, ~20k MPANs only) MA system needs to be more granular (report to nearest Wh) Equivalent Meter changes required UMSO system changes may be required to send inventories for smaller customers Smaller customers not billed on EACs



 UMSO sends summary inventory for individual MPANs to SPUMS, but SPUMS processes them as aggregated MPANs by Supplier/GSP Group

Pros	Cons
 Uses existing arrangement for large customers 	 Need to define and maintain large/small customer threshold
 Less data volumes due to aggregation by the SPUMS 	 Difficult for Supplier to reconcile EACs for billing with Settlement data
Simple for UMSO to implementMore accurate than current NHH allocation	 SPUMS system changes to aggregate inventories
	 Timing issues on change of inventory / CoS
	 Dual processes difficult for new entrants
	 Does not allow UMS energy to be off-set with generation at customer level
	 Introduces complexity as related MPAN for aggregated inventories would be required
	 Supplier would not get UMS consumption at HH level per customer



UMSO sends the EAC to the SPUMS and the SPUMS profiles it

Pros	Cons
• Simple for UMSO to implement	 Does not reduce data volumes (assuming profile required for four existing categories) Need to define and maintain large/small customer threshold Difficult for Supplier to reconcile EACs for billing with Settlement data UMSO system changes to send EAC SPUMS system changes to profile EACs Dual processes difficult for new entrants Retains EACs and need for Burn Hours standing data Does not allow UMS energy to be off-set with generation at customer level Less accurate allocation of energy as switching/dimming behaviour cannot be modelled
	 Supplier would not get UMS consumption at HH level per customer



