

SIT Settlement High Level Testing and Data Approach Guidance

Version 1.0

MHHS-DEL2599

Public

SIT Migration Testing in SITB will include the following Central Services:

- Data Transfer Service (DTS)
- Elexon Central Settlement (Including ISD, VAS, MDS and LLS)
- Electricity Enquiry Service (EES)
- Data Integration Provider (DIP)
- Central Switching Service (CSS)
- Data Service Provider (DSP)

Settlement Tests which involve Switching and Smart Metering interactions will occur in the SITA environment within a later SIT cycle.



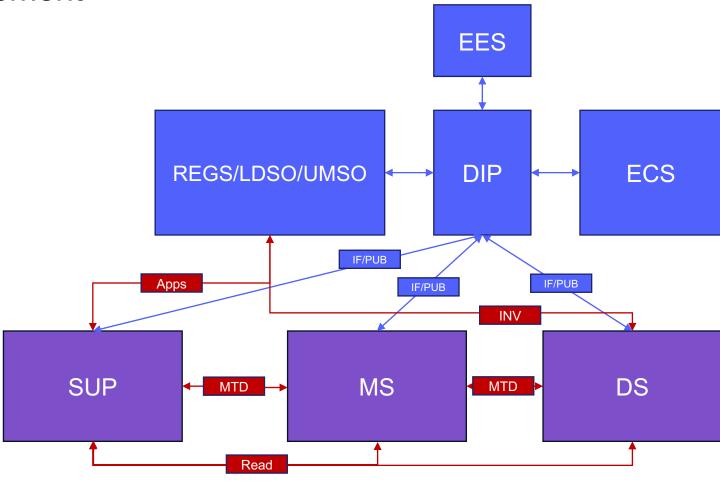
SIT Settlement Architecture in SITB

The following Industry Roles will also be under test:

- BUUK and SSEN providing the roles LDSO, REGS and UMSO (St Clements will be operating the REGS role on behalf of SSEN only in SITB)
- Supplier
- Advanced Data Service
- Smart Data Service
- Unmetered Data Service
- Metering Service Advanced
- Metering Service Smart



SITB – Settlement





Settlement testing will prove the accuracy of settlement processing and reporting.

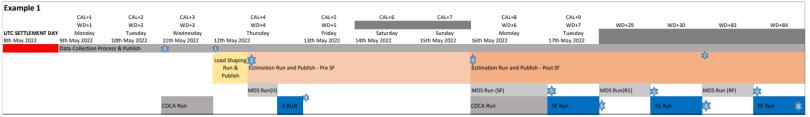
Key points:

- Elexon will produce a "Settlement Input Report" which will enable PPs to compare the settlement inputs (i.e. the MPAN consumption provided, estimations etc) with the "REP" settlement reports.
- A small number of MPANs will be used to support this testing. Each Cohort will be assigned an average of 50 MPANs (400 in total), each settlement day and the subsequent runs will use these 400 MPANs.
- The MPANs will have common attributes covering Market Segments, Connection Types, Premises, Meter Types etc and their related Load Shapes and Consumption Component Classes.



Settlement Testing High Level Approach

To gain meaningful results we will operate the end to end systems in a "laboratory condition" and in manner representative of the Operational Choreography design.



To support testing the following changes will be made to the read and settlement processing undertaken by Data Services and Elexon:

II run will occur settlement date(d) +2 SF run will occur d+5 RF run will occur d+8

No R1 run will occur

This will be represented in the SITB ISD "Master Settlement Timetable"



Settlement Testing High Level Approach

An example of the Master Settlement Calendar is provided below:

Settlement Date	WD+1	WD+2	WD+3	WD+4	WD+5	WD+6	WD+7	WD+8
Monday 10th June 2024	Tuesday 11th June 2024	Wednesday 12th June 2024	Thursday 13th June 2024	Friday 14th June 2024	Monday 17th June 2024	Tuesday 18th June 2024	Wednesday 19th June 2024	Thursday 20th June 2024
[D]		Load Shaping / DS Estimations						
[[5]	Data Collection and		Business Process Change / Data			Business Process Change / Data		
	Publish	II Run	Collection and DS Re-Estimation		SF Run	Collection and DS Re-Estimation		RF Run

Where a test case requires consumption data to be changed between settlement runs, this must occur within the two-day window between the II/SF or SF/RF runs.



Consumption and Read Processing by Data Services:

- To ensure the Load Shaping and other processes operate successfully the Programme will be providing detailed choreography requirements to PPs.
- For example, the expectation will be that at d+1 (each day for each MPAN) Data Services will generate consumption for Advanced and HH read Smart meters.
- The early stages of Settlement testing will prove that the basic choreography and business processes operate successfully for the 400 MPANs across all settlement runs, prior the execution of more complex tests (e.g. changing data between settlement runs).



Settlement Testing in SITB will start on the 10th June 2024.

The first period of the test phase will run from 10th June to the 20th June. This initial phase will be utilised as a period of stabilisation to verify:

- Basic processing and interfaces: Flushing out any issues such as interface schema errors, ensuring that basic settlement runs produce expected results.
- PP utilisation of "Elexon Input Report": Allowing PPs orientate themselves with the reporting output.
- Embed day in the life activities: To enable the correct operation of the settlement processes, PPs must operate the MPANs they have following the required operational chorography, for example:
- 1) DS submit IF-021 actual consumption, each day, for all Advanced Meters and Smart Meters with HH consents.
- 2) Helix to produce IF-022 and IF-023 data based on the actual IF-21 data, enabling load shapes to be used for estimation by DS for other meter types / consents.
- 3) DS submit IF-021 estimated consumption following receipt of load shapes from Helix.



Test Case Execution

Detailed analysis is being undertaken by the Programme Test team which will set out how each test should be conducted in relation to:

- The MPAN to be utilised.
- The scheduling of the test in relation to the target settlement date and the related settlement runs.
- The data generation (message format) required by the DS for settlement submission.
- Changes to consumption data between settlement runs for a given settlement day. (within the 2 WD window between the II/SF or SF/RF runs)
- Changes to settlement from one settlement day to another settlement day

Examples of the execution schedule, per test case, are provided below:

				Settlement Day 1			Settlement Day 2		
	Test		Linked MPAN						
Test Scenario / Start Activities	Case	MPAN Group	Group	Data Collection and II	II - SF	SF - RF	Data Collection	II - SF	SF - RF
				Smart IF-041	Consumption Amendment				
MHHS-DEL2148 SITFTS-ST0055 Override Rdngs and Cons Amendment	03	S007		(IF-021)	(IF-021 Updated)	IF-021 Unchanged			
				Advanced IF-041	Consumption Amendment				
MHHS-DEL2148 SITFTS-ST0055 Override Rdngs and Cons Amendment	04	A006		(IF-021)	(IF-021 Updated)	IF-021 Unchanged			
				No Data [Non-Comms]	Consumption Amendment				
MHHS-DEL2148 SITFTS-ST0055 Override Rdngs and Cons Amendment	05	S003	S002	(IF-021)	(IF-021 Updated)	IF-021 Unchanged			
							Update Market Segment +		
				D0010 Trad CoR Reading			Advanced IF-041 + HH Data		
MHHS-DELxxxx SITFTS-ST0014 Market Segment Change	01	T006		(IF-021)	IF-021 Unchanged	IF-021 Unchanged	(IF-021)	IF-021 Unchanged	IF-021 Unchanged
	ľ						Update Market Segment +		
				Smart IF-041 + HH Data			Advanced IF-041 + HH Data		
MHHS-DELxxxx SITFTS-ST0014 Market Segment Change	02	S011		(IF-021)	IF-021 Unchanged	IF-021 Unchanged	(IF-021)	IF-021 Unchanged	IF-021 Unchanged

A detailed test execution schedule, including the sequencing of tests, by Cohort, will be produced prior to the start of testing on the 10th of June and will be represented in ADO.



Data Load Approach

MPRS:

Data will be provided in .CSV file format and the following industry message formats: DB02, DB05, CSS2860, D0312, IF-031, IF-034.

Supplier:

Data will be provided in .CSV file format and IF-036

MS and DS:

Data will be provided in .CSV file format and IF-033 and IF-036

CSS/DSP:

N/A

LDSO/UMSO:

Data will be provided in .CSV file format and the following industry message formats: DB02, DB05, CSS2860, D0205, D0312, IF-031, IF-034.

DIP:

Data will be provided in .CSV file format and IF-031, IF-034, IF-036

Elexon:

Data will be provided in .CSV file format and IF-036

ESS:

Data will be provided in .CSV file format and IF-036



Data Allocation and Augmentation

- In total 400 MPANs will be utilised for Settlement Testing across all Cohorts, each test case will be assigned an MPAN, the same MPAN can be utilised to support more than one test case. Each MPAN will be assigned a unique ID which in turn will be assigned to a test case(s).
- This table shows the unique MPANs (and attributes) that will be created for each Cohort, which will cover the scope of all SITB settlement tests.
- For SITB, all MPANs utilised will be within the H GSP as this is the SOUT DNOs "home" GSP.
- All BUUK IDNO MPANs will be "embedded" within the SOUT distribution network within this GSP.

MPAN		Limbrad			
REF	MPAN	Linked Suppliers	Domestic?	Consents	Conn Typ
T001	Traditional Import	Suppliers	Any	N	W
S001	Smart Import		Any	H	W
	'		F		
A001	Advanced Import		F	H H	<> W <> W
A002	Advanced Export	Como	-	Н	W
S002 S003	Smart Import/Export	Same	Any	П	VV
S004	Smart Import/Export	Different	Any	Н	W
S004 S005	Smart import/Export	Dillerent	Ally	П	VV
0000					
U001	Unmetered Import		F	Н	U
T002	Traditional Import E7		Any	N	W
A003	Advanced Import		F	Н	<> W
	Reactive Power				
S006	Smart Import		Λον	М	W
	Smart Import		Any		
T001	Traditional Import		Any	N	W
A004	Advanced Import		F	Н	<> W
S001	Smart Import		Any	Н	W
	•		•		
U001	Unmetered Import		F	H	U
T003 T004	Traditional Export		Any	N	W
S003	Smart Export		Anv	Н	W
A005	Advanced Import		F	H	<> W
S007	Smart Import		Any	D	W
	•		•		
A006 S002	Advanced Import Smart Export		T	D H	W W
			Any		
A004	Advanced Import		F	Н	<> W
U001	Unmetered Import		F	N	W
T005	Traditional Import [Energised]		Any	N	W
A006	Advanced Import [Energised]		T	D	W
S006	Smart Import [Energised]		Any	M	W
A007	Advanced Import [De-		Т	M	W
	Energised]				
U002	Unmetered Import [De-		F	Н	U
	Energised]		_		
S008	Smart Import [De-Energised]		Any	M	W
S009	Smart Import [De-Energised]		Any	M	W
S001	Smart Import		Any F	H H	W <> W
A001 A002	Advanced Import Advanced Export		F	Н	<> W
U001	Unmetered Import		F	Н	U
S010	Smart Import [De-Energised]		Any	M	W
A008	Advanced Import		T	M	W
T006	Traditional Import		F	N	W
S011	Smart Import		Any	Н	W
A009	Advanced Import		F	Η	W
A001	Advanced Import		F	H	<> W
	•				

SITB



DTS Configuration

- Settlement Testing will occur in the SITB environment so all messages will utilise the "TR04" test flag.
- Test Participants should configure their DTS Gateways to support the sending and receipt
 of the DTS messages in scope of testing, from and to the roles and MPIDs in scope.
- The IR7 release of DTS dataflows will be implemented by ElectraLink into the production DTS on the 13th May.
- The related Microsoft Access database will be available within the EMAR on this date also.



For any further information or guidance please email the testing mailbox.

testing@mhhsprogramme.co.uk

