MHHS PROGRAMME

Industry-led, Elexon facilitated

Design Advisory Group #2
08 December 2021

Version 0.2

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

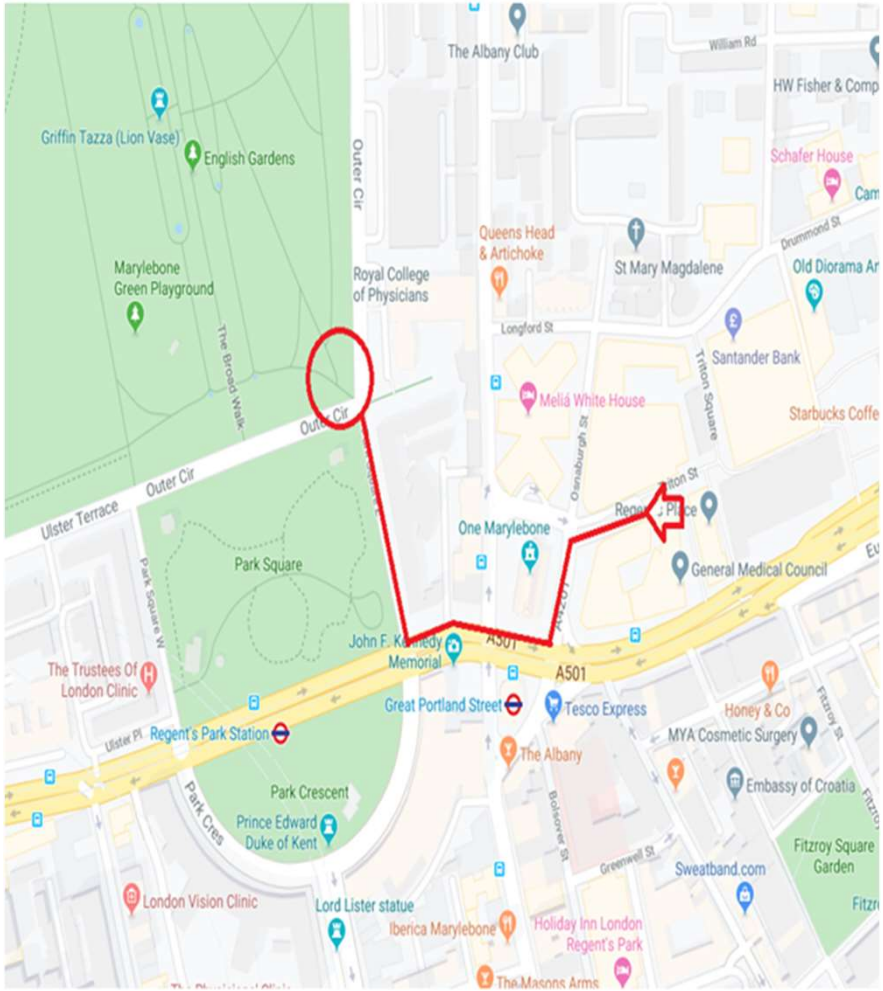
- If you discover a fire, operate one of the fire alarms next to the four emergency exits.
- Please do not tackle a fire yourself.
- If you heard the alarm, please leave the building immediately.
- Evacuate by the nearest signposted fire exit and walk to assembly point.
- Please remain with a member of Elexon staff and await further instruction 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,

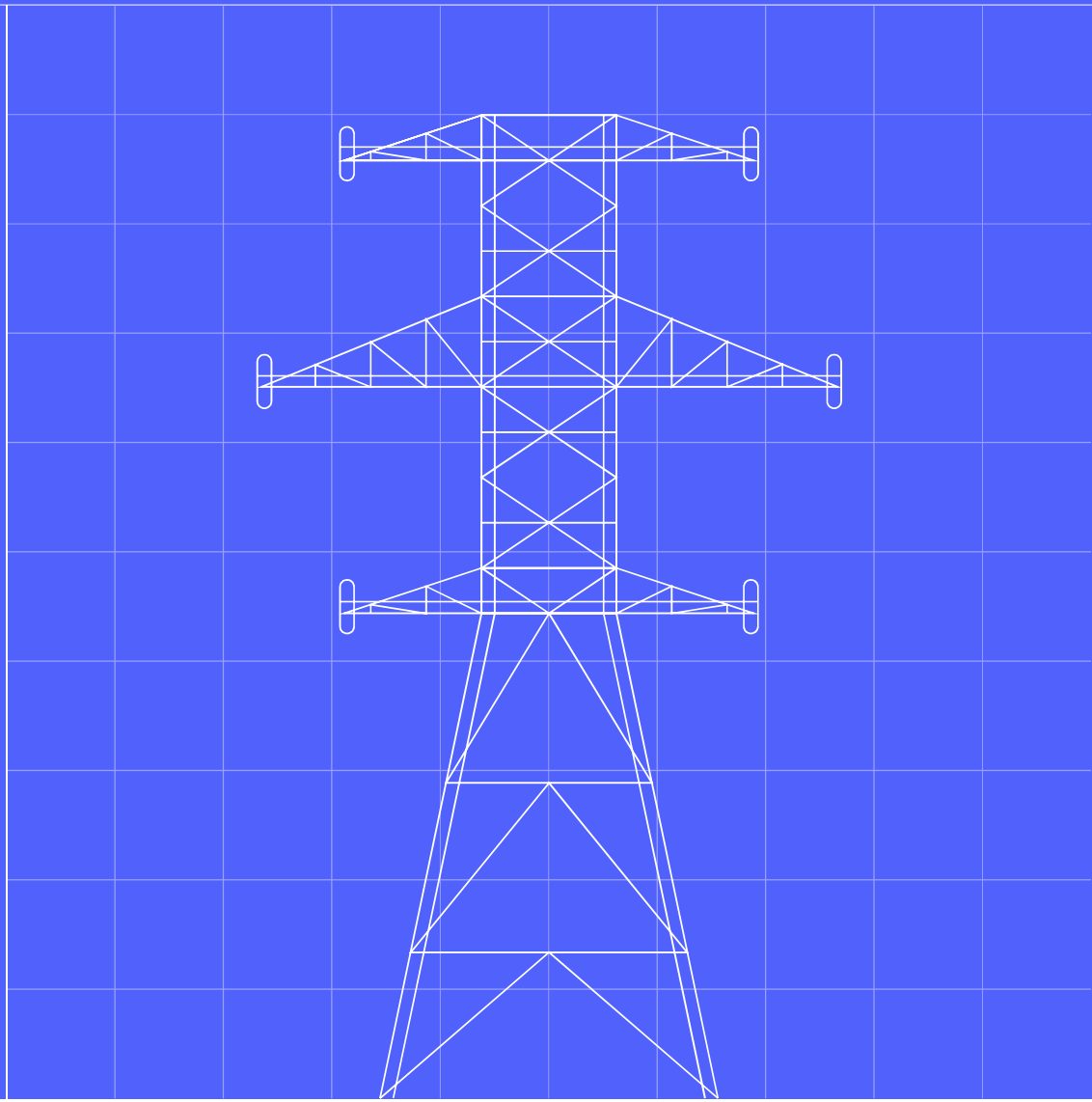
If you have any questions, please do ask them.



Agenda

1. Welcome and Introductions	2. Minutes agreement and Actions update	3. Security Design Working Group Terms of Reference: Review and agreement	4. Design Principles: Review and agreement
5. Level 4 Work areas: Update	6. Next Steps		

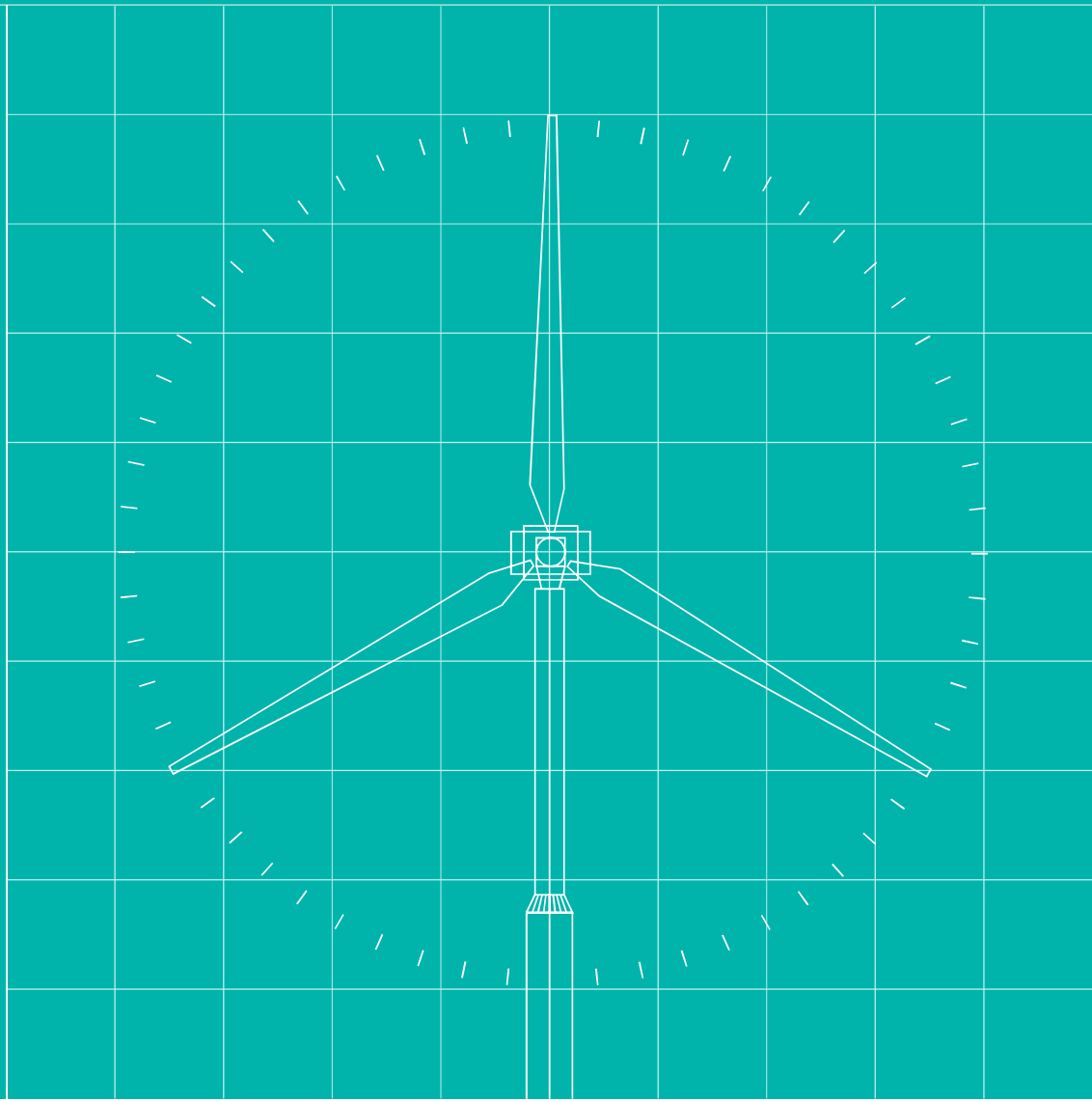
Welcome & Introductions



MHHS DAG membership

Constituent	Who	Organisation	Attend (TBC)
Elexon Representative (BSC central systems)	Matt Hall	Elexon	
DCC Representative (smart meter central system)	Stuart Scott	DCC	
Large Supplier Representative	Craig Hanford	Energy UK	
Medium Supplier Representative	Gurpal Singh	Shell	
Small Supplier Representative	Jo Bradbury	ESG Global	Y
I&C Supplier Representative	Gareth Evans	Waterswye Associates	
Supplier Agent Representative (Independent)	Seth Chapman	Callisto	
Supplier Agent Representative	Robert Langdon	SMS Plc	
DNO Representative	Gemma Slaney	Western Power Distribution	
iDNO Representative	Morven Hunter	Last Mile Asset Management	
National Grid ESO	Keren Kelly	National Grid ESO	
Consumer Representative	Ed Rees	Citizens Advice	
Ofgem	Anna Stacey Danielle Walton	Ofgem project sponsor	
MHHS Programme	Justin Andrews Ian Smith Claire Silk Simon Chidwick	MHHS Design Team	Y

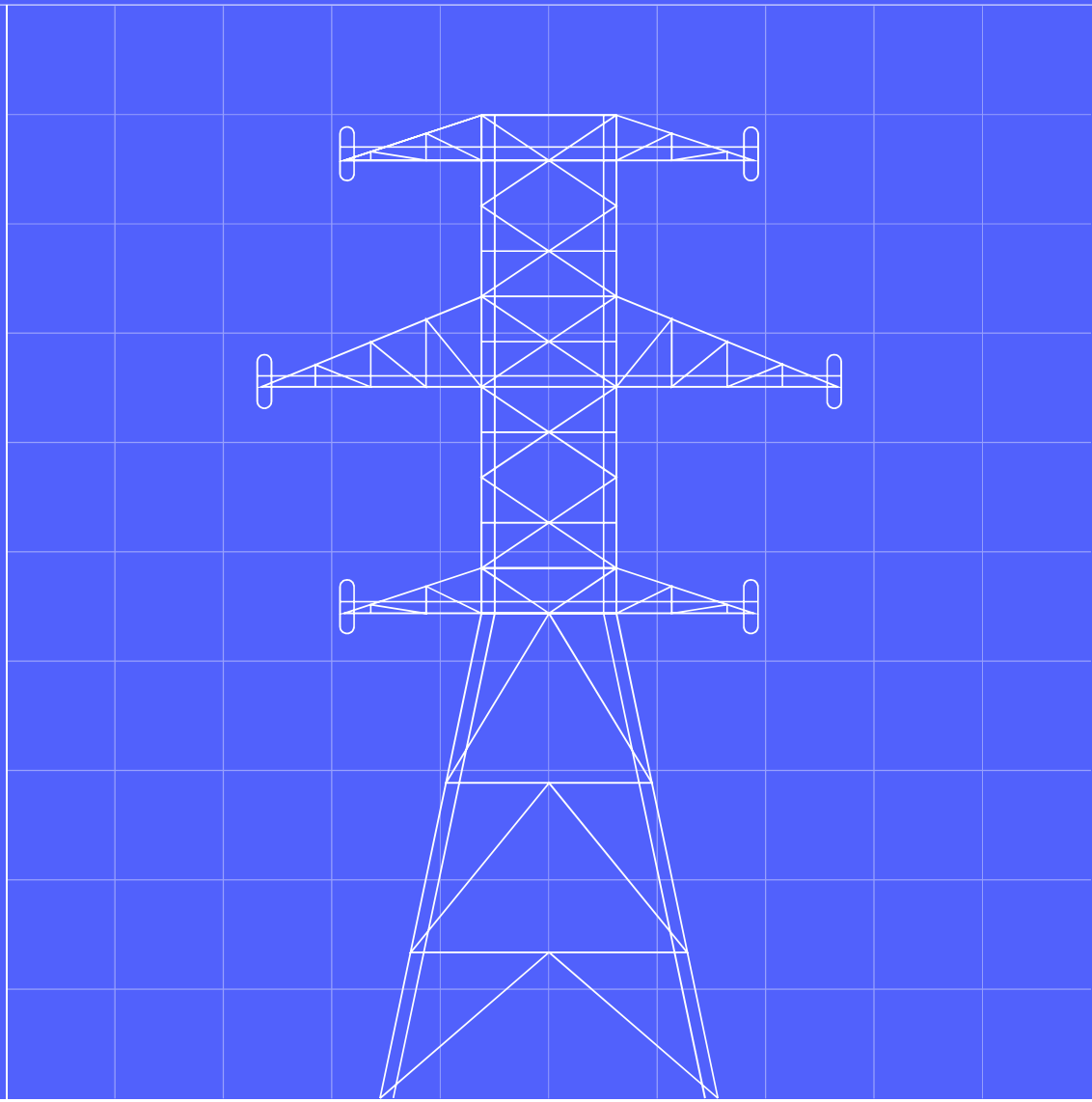
Minutes agreement and Actions update



MHHS DAG- Actions Update

Action Ref	Action	Owner	Status
DES01-01	JA to debrief Gareth Evans as Gareth was unable to attend the first meeting.	Justin Andrews	Closed
DES-01-02	SC to issue latest governance structure.	Simon Chidwick	Closed
DES-01-03	IS to put together key design principles and present at the next DAG	Ian Smith	Refer to relevant slide
DES-01-04	IS to ensure DAG members are able to easily review Level 4 working groups and sub group output	Ian Smith	In Progress
DES-01-05	SC to ensure DAG TOR are reviewed in February 2022	Simon Chidwick	To be reviewed in Feb 2022
DES-01-06	SC to ensure DT is invited to level 4 working groups	Simon Chidwick	Closed
DES-01-07	SC to speak to MHHS PMO as they own the DAG invite to ensure next meeting set ups are as agreed.	Simon Chidwick	Closed
DES-01-08	JA to confirm whether the 12 months scope for implementing the changes was industry facing or end to end process including back office processes.	Justin Andrews	Update at meeting
DES-01-09	JA to speak to all of MHHS programme to see if previous correspondence between Energy UK and the programme where specific concerns were raised can be obtained.	Justin Andrews	Closed, letter with slide pack
DES-01-10	SC to ensure Seth Chapman is added to the DAG distribution list	Simon Chidwick	Closed

Security Design Working Group Terms of Reference: Review and agreement



Security Design Working Group (SDWG) Terms of Reference (Level 4)- DRAFT

Role:
The SDWG's role is to take the architecture recommendations made by the AWG to a detailed level that will enable participants to commence system development.

Purpose and Duties:
SDWG's purpose is to take the architecture recommendations made by the AWG to a detailed level that enables participants to commence system development.
Security subject matter experts will support the work required to procure an architectural partner and work with the organisation(s) chosen to provide architecture services to ensure the security design is aligned with the design principles and considers all impacted parties.
Ongoing consultation will be carried out to ensure timely reporting of security design artefacts to the DAG for approval.

Decision Making:
The SDWG will report their output to the DAG for approval. This will occur on an ongoing basis and may require engagement with wider industry.
Where the SDWG is unable to reach a consensus on a decision delegated to them by DAG the matter will be escalated to the DAG.

Membership:
MHHS Design Market & Engagement Lead (Chair)
MHHS Design Business Analyst,
MHHS Design Market Architect,

Industry participants from, but not restricted, to the following parties- Elexon (as Central Systems provider), Smart DCC (as Smart meter central systems provider), Large Suppliers, Medium Suppliers, Small Suppliers, I&C Suppliers, Independent Supplier Agents, Supplier Agents, Distribution Network Operators, Independent Distribution Network Operators, National Grid ESO, Meter Administrator, IT Service Providers.

Objective:
To review the architecture recommendations developed by the AWG and work these down to a detailed level that allows for participants to commence system development.
To support the work required to procure an architectural partner and work with the organisation(s) chosen to provide architecture services to ensure that the security design is aligned with the design principles and considers all impacted parties.
To ensure timely reporting of security Design artefacts to the DAG for approval.
To identify and escalate any issues whereby a consensus cannot be reached to the DAG.

Scope, Deliverables, Roles and Responsibilities:
SDWG's scope is to develop the security design for the end-to-end MHHS design.
This includes the Security & Privacy Requirements.

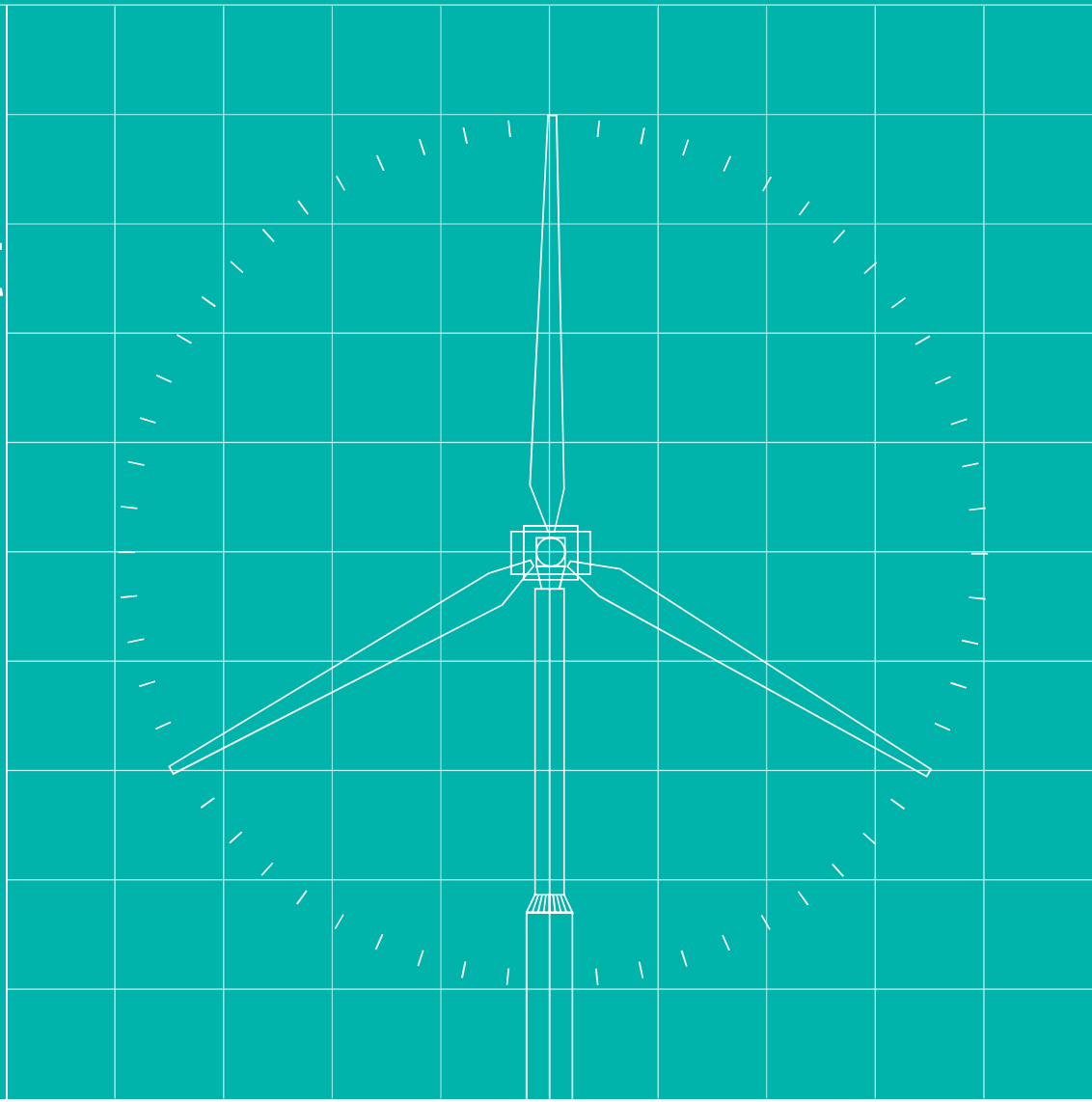
The MHHS Design Market & Engagement Lead will chair the meetings.
The Secretariat will provide all meeting management services and deliver all regular and ad hoc meetings.
SDWG Members (or nominated alternatives) will attend every meeting.
SDWG Members will be fully meeting prepared before the meeting starts.
SDWG Members should be a mix of business analysts, market architects, solution architects and industry subject matter experts.
SDWG members will be expected to actively contribute to the development and review of collateral required to achieve the deliverables, this is likely to include completing tasks and actions outside of the Security Design Working Group.

Security Design Working Group - Terms of Reference

DAG are requested to approve Security Design Working Group's Terms of Reference:

- Role
- Purpose and duties
- Decision making
- Membership
- Objective
- Scope, deliverables, roles and responsibilities

Design Principles: Review and agreement



MHHS Design Principles - context

Design principles:

- Draft and will evolve as the design work progresses
- Built upon the work of the CCDG and AWG expert groups on TOM design and architecture
- Developed through the L4 working groups
- Will aid DAG on review and approval of design artefacts, but not solve every issue

MHHS Design Principles (1 of 3)

Principle ID	Principle Area	Principle Title	Principle Description
PRI-001	Registration	Single View of MPAN data	The Registration Data will be single source of truth for data relating to an MPAN
PRI-002	Data Services	Legacy Service Interaction	The new Data Services will not interact with their legacy predecessor roles (e.g. a Non Half Hourly Data Collector (NHHDC) will not need to interface with a Smart Data Service(SDS)).
PRI-003	Registration and Data Services	Two way interactions	Interfaces between the Data Services and the Registration Service will be two-way (to cover acceptance/rejections)
PRI-003	Market-wide Data Service	CRA Data access	The Market-wide Data Service (MDS) will not access to Central Registration Agent (CRA) data
PRI-004	Registration	Registration Duplication	BSC data items should not duplicate, or be used as a proxy for Data items that are already held, or should more appropriately be held, by the Registration Service –especially if they are not needed for Settlement and non-Settlement processes can take the data from elsewhere (e.g. if the Meter Point Administration Service (MPAS) already indicates whether the meter is at a domestic or non-domestic premises)
PRI-005	BSC Duplication	Consumption Duplication	BSC data items should not duplicate, or be used as a proxy for attributes of metered data that are already stored with that data (e.g. recording what estimation method has been used to produce the data, as this is already recorded in the estimation codes).
PRI-006	Meter Reading Service	Historic Data	The Meter Reading Service (MRS, part of the SDS) will not access historic Meter readings, only an initial read for a non-Smart Meter or for a Smart Meter with a communications issue
PRI-007	Appointments	Acception and Rejections	Any rejections of appointments by service providers should go back to the Supplier via the Registration Service rather than directly to the Supplier in order to give visibility of any issues.
PRI-008	Central Services	Customer Opt-Out	There is no Settlement need to record customers' opt-out status centrally as a stored parameter. Settlement will simply process the data it receives, the data itself will record how it was derived.

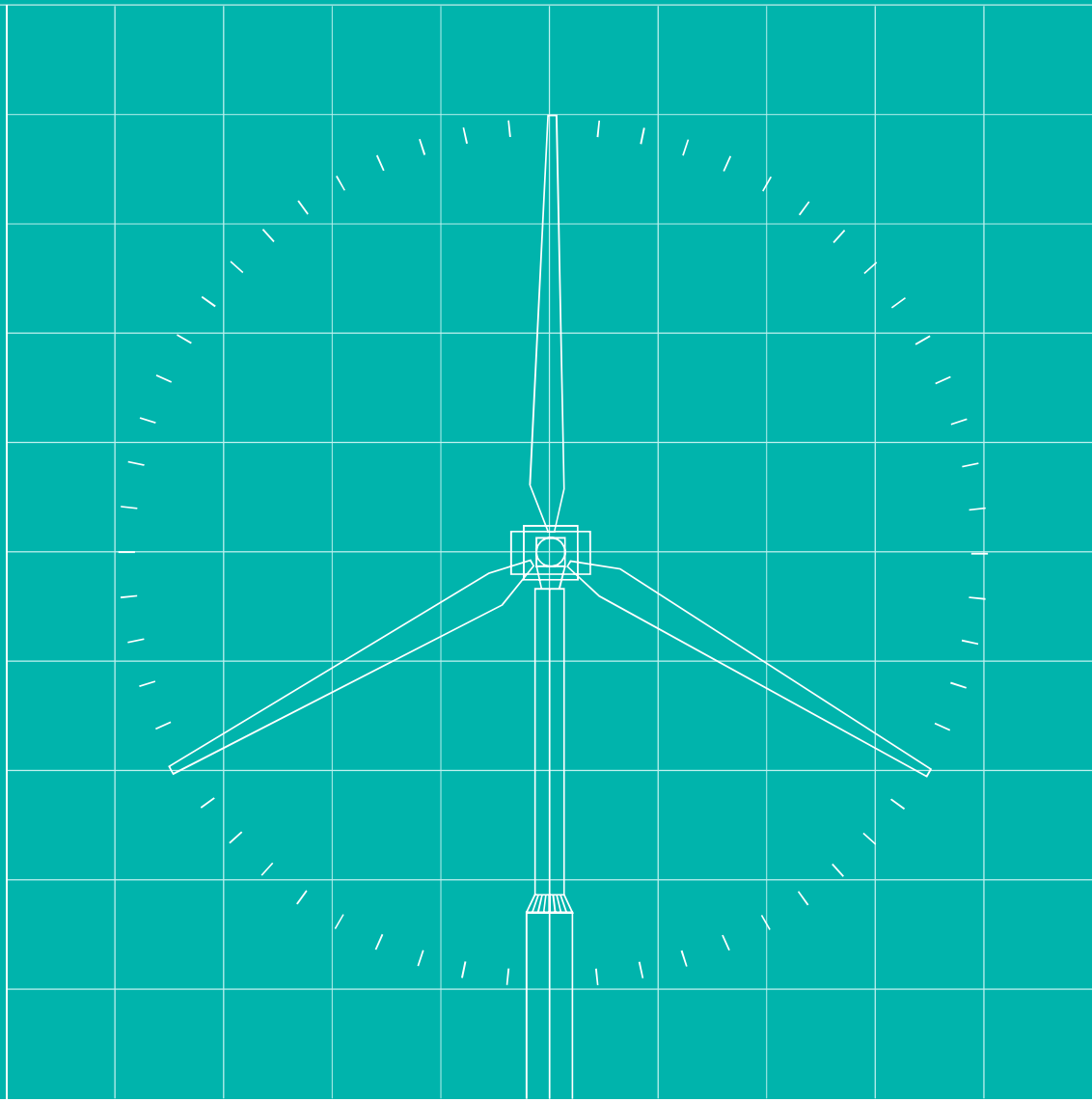
MHHS Design Principles (2 of 3)

Principle ID	Principle Area	Principle Title	Principle Description
PRI-009	Central Services	BSC Exception Reporting	Supplier only needs to see exceptions at an aggregate level (i.e. total numbers of each type of exception) while the Data Service needs the detail.
PRI-010	Data Services	Data Service Checks	Data Service should be proactively checking that it has sent all necessary data, rather than waiting for an exception report to tell it what data is missing.
PRI-011	Data Services	Data Assumptions	Registration standing data should be assumed to be correct (single source of truth)
PRI-012	Registration	Validation	Registration standing data should already be validated against Industry Standing Data(ISD) before it's sent
PRI-013	Data Services	Non-zero data for de-energised MPANs	Non-zero data for a de-energised Metering System ID should be accepted (as currently) rather than rejected, as the most likely scenario is that the Meter has been energised without this being recorded
PRI-014	Data Processing	UTC Data	All data will be processed in UTC and will only be converted to Clock Time in BSC Central Services
PRI-015	Future Proofing	15 Minute Settlement	All participant systems will be future proofed to handle changes to the definition of a Settlement Period
PRI-016	Data Services	Service Provision	Suppliers can provide Data Services however they want either themselves or by procuring one or more element of the TOM Services
PRI-017	Data Services	Internal Data Transfers	It is within the gift Data Services can transfer data internally however the want to

MHHS Design Principles (3 of 3)

Principle ID	Principle Area	Principle Title	Principle Description
PRI-018	Registration	UTC Appointments	Appointments will occur on a UTC basis (noting that Meters store data on the basis of UTC days).
PRI-019	Data Services	Validation	The Data Service is responsible for validating its data against Registration standing data before submitting it into Settlement.
PRI-020	Registration	Retrospective Appointments	A retrospective appointment is not allowed and the 'correct' Data Service would only be appointed going forwards.
PRI-021	Message Receipt	Participant Targetted Messaging	For the message flows there will be the requirement to target messages at specific market participants
PRI-022	Message Receipt	Role-based Targetted Messaging	For the message flows there will be the requirement to target messages at specific market roles
PRI-023	Message Receipt	Message Notifications	Any requirement for message notification will be explicitly called out in the business process, i.e. there will be no default message notification process.
PRI-024	Business Logic	Devoid of Business Logic	The DIP(EDA) will not hold any business data and hence will only make routing and message filtering based on the content of the message and the roles of the intended recipients.
PRI-025	Statelessness	Stateless Architecture	The DIP does know the logical history of the data and the data within each message is considered distinct. Although the system itself will be a stateless, messages and events will persist and survive service restarts.
PRI-026	Business Process Orchestration	BP Timings	If any time-outs are required on a BP, i.e. a party does not respond to a message within a defined period, then this will be monitored by the party initiating the BP and the initiating party will have to take ameliorative action

Level 4 working group progress update



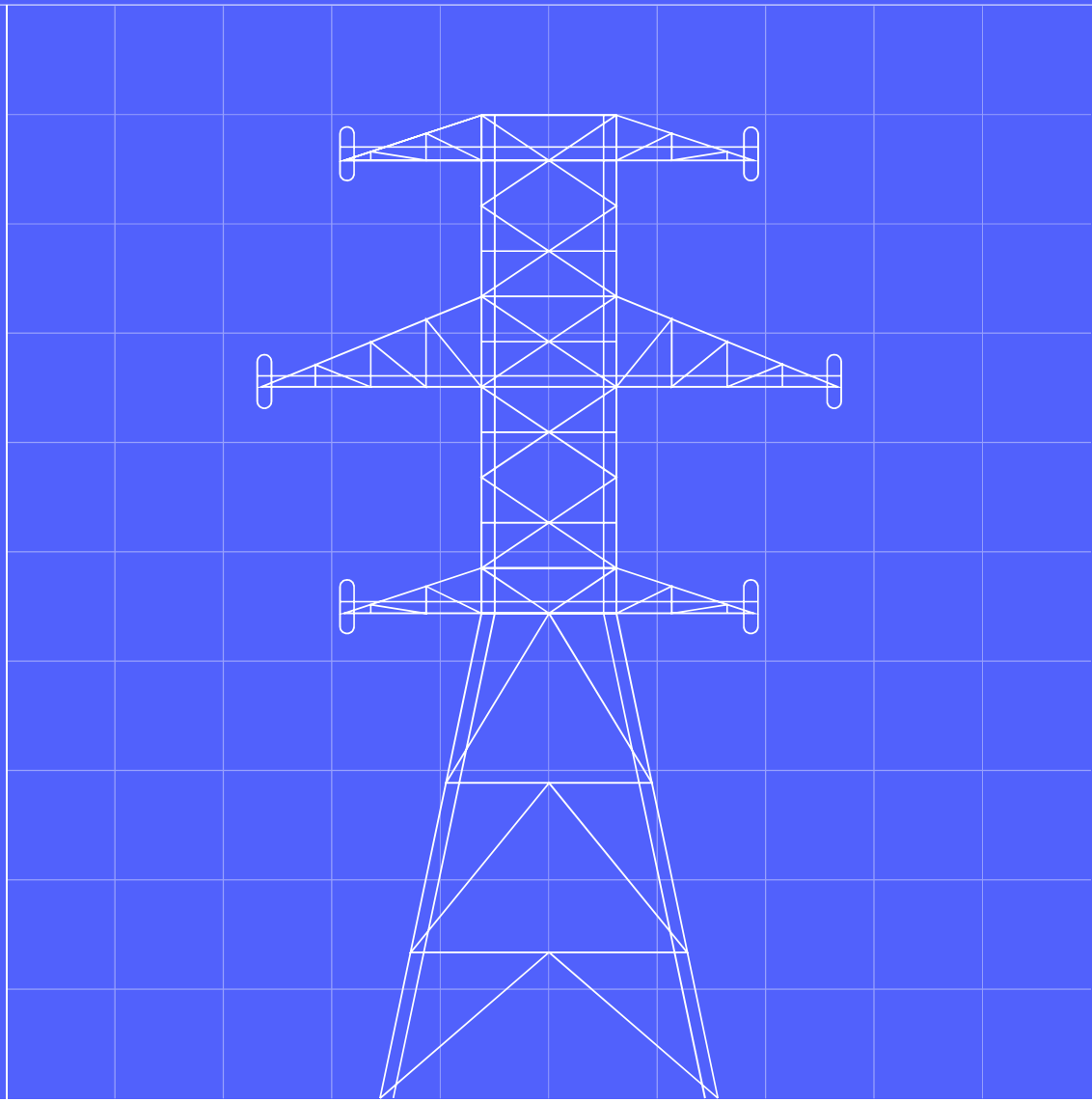
BPRWG

- Sub-group activity has focussed on initial walkthrough of Business Process Diagrams and related Interface Documents for Smart Market Segment, Registration & Elexon Central Services
- MHHS Design team are consolidating comments received from across all sub-groups and prioritising outstanding design issues
- Engagement in sub-group sessions has not been quorate- targeted sessions to be arranged with relevant constituencies to discuss outstanding design issues and questions
- Issues with MS Teams Channel access has now been resolved and documentation is being migrated
- Focus for the remainder of the year on completing the review of Business Process Diagrams (and related Interface Documents) with a view to gaining consensus within the Working Group to provide a baseline
- Advanced and Unmetered Sub-groups to be convened in the new year

TDWG

- Sub-group activity has focussed on reviewing the Design Assumptions & Principles and the Non-Functional Requirements
- Engagement in sub-group sessions has been strong and generated a lot of valuable debate
- MHHS Design Team are working through the comments received to align to those received within the BPRWG sessions
- Focus for the remainder of the year on completing elements required for the RFP
- Security Design Working Group to be started in the next few weeks

Meeting summary and next steps



DAG Summary and next steps

Meeting summary and actions
- Confirm actions

Next meeting: 12 January 2022
- Design progress update
- Potential escalations and requests for decision
- Potential design artefacts for approval