



**MHHS  
PROGRAMME**  
Industry-led, Elexon facilitated

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# Design Advisory Group #6

## 09 March 2022

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Version 1.0

MHHS-DEL268

Document Classification: Public

# Agenda

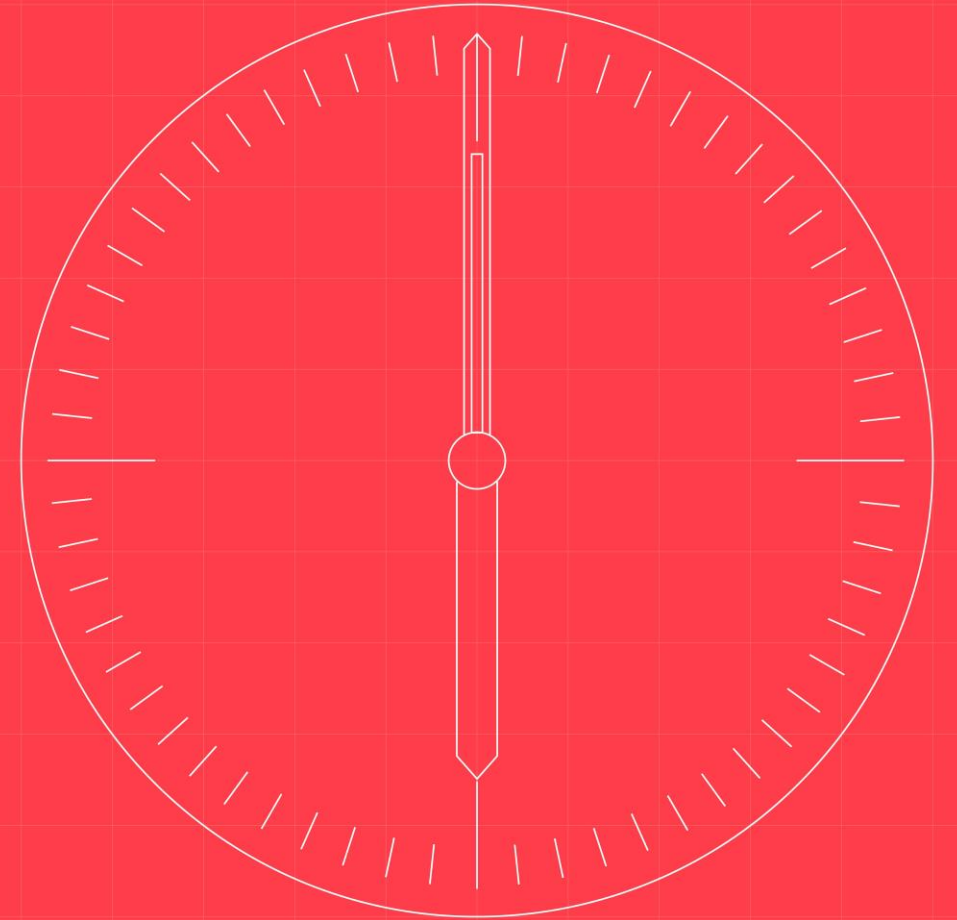
#	Item	Objective	Lead	Time	Page
1	Welcome		Chair	10:00-10:05 5 mins	2
2	Minutes and Actions	DECISION: Approve February minutes. Update on open actions, closing actions where appropriate.	Chair & Secretariat	10:05-10:25 20 mins	3-5
3	Governance Group Updates	INFORMATION: Provide updates from levels 2 and 3 governance groups	Programme (PMO Lewis Hall)	10:25-10:35 10 mins	6-7
4	DAG ToR Updates	INFORMATION: Provide update on latest ToR drafting	Chair	10:35-10:45 10 mins	8-12
5	Level playing field design principle	INFORMATION: An overview of the updated level playing field principle	Chair	10:45-10:50 5 mins	13-14
6	Design Principles	INFORMATION: Present updated design principles underpinning design activities	Programme (Ian Smith)	10:50-11:00 10 mins	15-17
7	Technical Assumptions	INFORMATION: Present updates agreed at previous meeting	Programme (Ian Smith)	11:00-11:10 10 mins	18-21
8	Integration Platform Decisions	DECISION: Make decisions on Programme design matters	Programme (Ian Smith)	11:10-11:30 20 mins	22-27
9	Level 4 Working Group Updates	INFORMATION: Provide updates from DAG Working Groups	Programme (Ian Smith & Claire Silk)	11:30-11:50 20 mins	28-31
10	Summary and next steps	INFORMATION: Summarise actions and plan agenda for next meeting	Chair & Secretariat	11:50-11:55 5 mins	32-34
	<b>Appendix</b> Appendix 1 - MHHS Design Artefact Status Report v1.0	Appendix to Agenda Item 8	n/a	n/a	n/a

# Minutes and Actions

DECISION: Approve February minutes. Update on open actions, closing actions where appropriate.

Chair & Secretariat

*20 mins*



## Minutes and Actions Review (1 of 2)

- Approval of Minutes from 09/02/22 ([DAG Meeting Minutes - 09 February 2022](#))
- Open Actions and Actions from DAG 09/02/22:

Ref	Date	Action	Owner	Due Date	Status
DES-03-02	12/01/2022	IS to attend Supplier Agent constituents 'drop-in' session. LH to engage the Lead Delivery Partner Programme Party Co-Ordinator to potentially attend a future session.	Ian Smith/Lewis Hall	09/02/2022	RECOMMEND CLOSED - Ian Smith to contact Seth Chapman for follow up. Available for future sessions.
DES-03-05	12/01/2022	'Draft Design Principle' – PRI-20 – 'Retrospective Appointments' - IS, CH and SCha to discuss further for understanding and clarification of this principle.	Ian Smith	09/02/2022	ONGOING - IS to schedule session with Seth Chapman
DAG04-01	09/02/2022	Look at potential updates to DAG ToR including linking decision making to design principles	Justin Andrews	09/03/2022	RECOMMEND CLOSED – Updates provided, see agenda item 4
DAG04-02	09/02/2022	Follow up with Craig Handford on the Design Principles and clarity on the E2E Design	Ian Smith	23/02/2022	ONGOING - Supplier sessions undertaken. IS to contact Craig Handford
DAG04-03	09/02/2022	Look at when to stand up the Consequential Change Impact Assessment Group (CCIAG)	Programme	09/03/2022	ONGOING - Initial sessions held with parties, meeting to be scheduled in near future
DAG04-04	09/02/2022	Meet with Seth Chapman to review and update detailed wording of the design principles	Ian Smith	23/02/2022	RECOMMEND CLOSED - Minor changes agreed, see agenda item 6
DAG04-05	09/02/2022	Meet with Matt Hall to agree the sub-principles of variable settlement period to add to the design principles	Ian Smith	23/02/2022	RECOMMEND CLOSED – Discussion held, IS to provide proposed non-functional requirement for review by MH
DAG04-06	09/02/2022	Update the design principles to reflect DAG discussion and actions DAG04-04 and -05. Separate the design principles as a new artefact and publish via the Portal.	Ian Smith	23/02/2022	RECOMMEND CLOSED – Updates complete, see agenda items 7 & 8
DAG04-07	09/02/2022	Update the wording of the level playing principle as per the discussion at DAG and distribute to DAG members	Justin Andrews	01/03/2022	RECOMMEND CLOSED – Update provided, see agenda item 5
DAG04-08	09/02/2022	Contact SEC WG to make sure the DAG works closely and shares the implications on legal drafting on the level playing field principle	Justin Andrews	01/03/2022	ONGOING – Communications in progress

## Minutes and Actions Review (2 of 2)

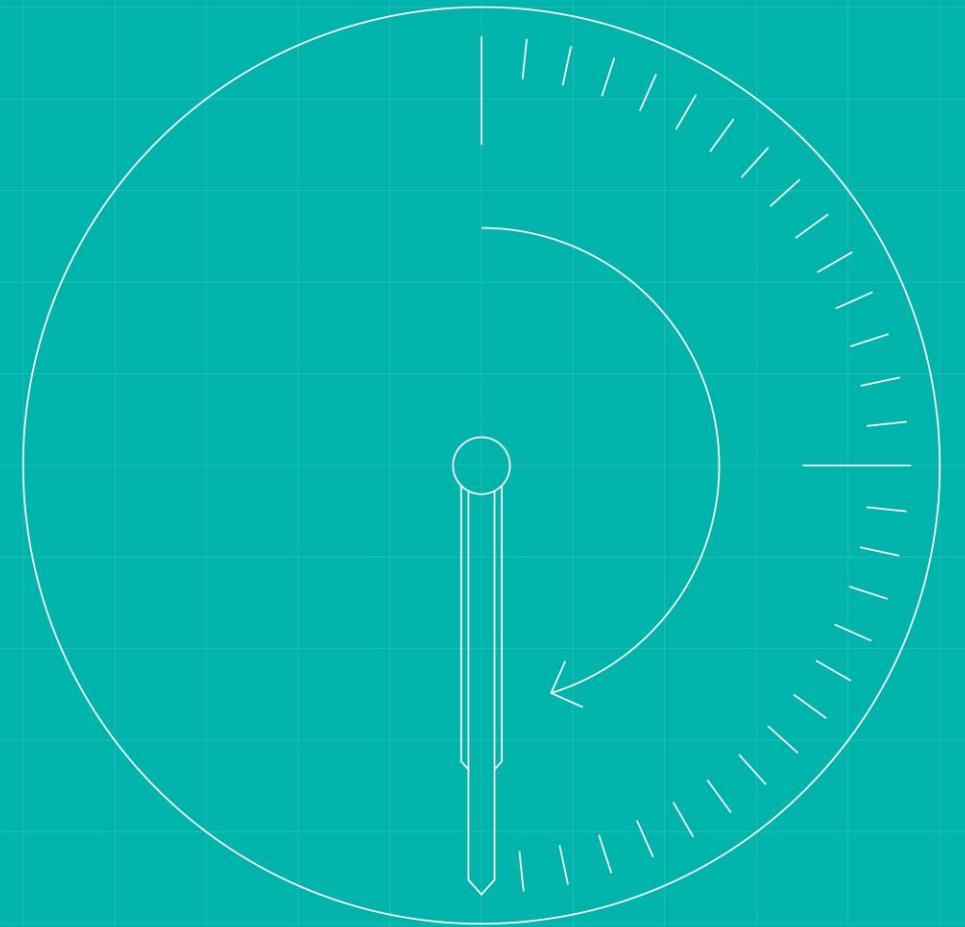
Ref	Date	Action	Owner	Due Date	Status
DAG04-09	09/02/2022	Pick up with Stuart Scott regarding the SEC changes as a result of level playing field principle	Justin Andrews	01/03/2022	RECOMMEND CLOSED - meeting held 17/2/22
DAG04-10	09/02/2022	Schedule DAG sub-groups for further discussion on the level playing field principle as required	PMO	09/03/2022	ONGOING - PMO to schedule DAG 'Level Playing Field Principle' meeting for w/c 14th March. IS to arrange SDS subgroup to discuss 24 hour rule.
DAG04-12	09/02/2022	Update TDWG High Level Design Principles with comments as per the discussion at DAG and share with DAG members for approval	Ian Smith	23/02/2022	RECOMMEND CLOSED - see agenda item 7
DAG04-13	09/02/2022	Make clarifications to the Technology/Architecture Characteristics as per the DAG discussion and share with DAG members for approval	Ian Smith	23/02/2022	RECOMMEND CLOSED - see agenda item 7
DAG04-14	09/02/2022	Build a clearer view of on the pathway for artefacts through the working groups to DAG (e.g., life cycles, timeframes). Update DAG on process	Ian Smith & Claire Silk	09/03/2022	ONGOING - In progress; to be discussed under agenda item 9
DAG04-15	09/02/2022	Discuss detail and pathway of network charging artefacts with Keren Kelly	Ian Smith	09/03/2022	RECOMMEND CLOSED - Meeting held 01/03/22, approach discussed with KK
DAG04-16	09/02/2022	Provide update on March Working Group schedule at extraordinary DAG 16/02	Claire Silk	16/02/2022	RECOMMEND CLOSED – Schedule provided under agenda item 9

# Governance Group Updates

INFORMATION: Provide updates from levels 2 and 3 governance groups

Programme – PMO Lewis Hall

*10 mins*



## L2 and L3 Governance Group Updates

### PSG

Verbal update to be provided following PSG 03 March 2022

#### Agenda items for PSG 03 March:

1. **Independent Programme Assurer (IPA)**  
Introduction
2. **Supplier Plan Delay Proposal** – update on action taken by the programme and deciding the plan to reach a conclusion
3. **Programme Change Control process** – feedback and questions for proposed process
4. **Programme Cooperation Principles and Ways of Working** – approving principles
5. **MHHS Governance Framework** – approving updated version

### CCAG

#### Update from CCAG 23 February 2022

1. Ofgem provided an update on the **Smart Meter Act Powers** such as how the Powers work, timeframes for implementation, and implications for MHHS
2. The CCAG discussed proposals for changes to **M6 and M8 dates in the current plan**, and the steps required to submit a Change Request. The CCAG reviewed a straw man plan to M8 to develop further into a Change Request
3. The CCAG reviewed **assumptions** submitted by each Code Body, to add to the RAID Framework
4. The CCAG reviewed the new **MHHS Programme Code Change Horizon Scanning Log**

### TAG

#### Update from TAG 16 February 2022

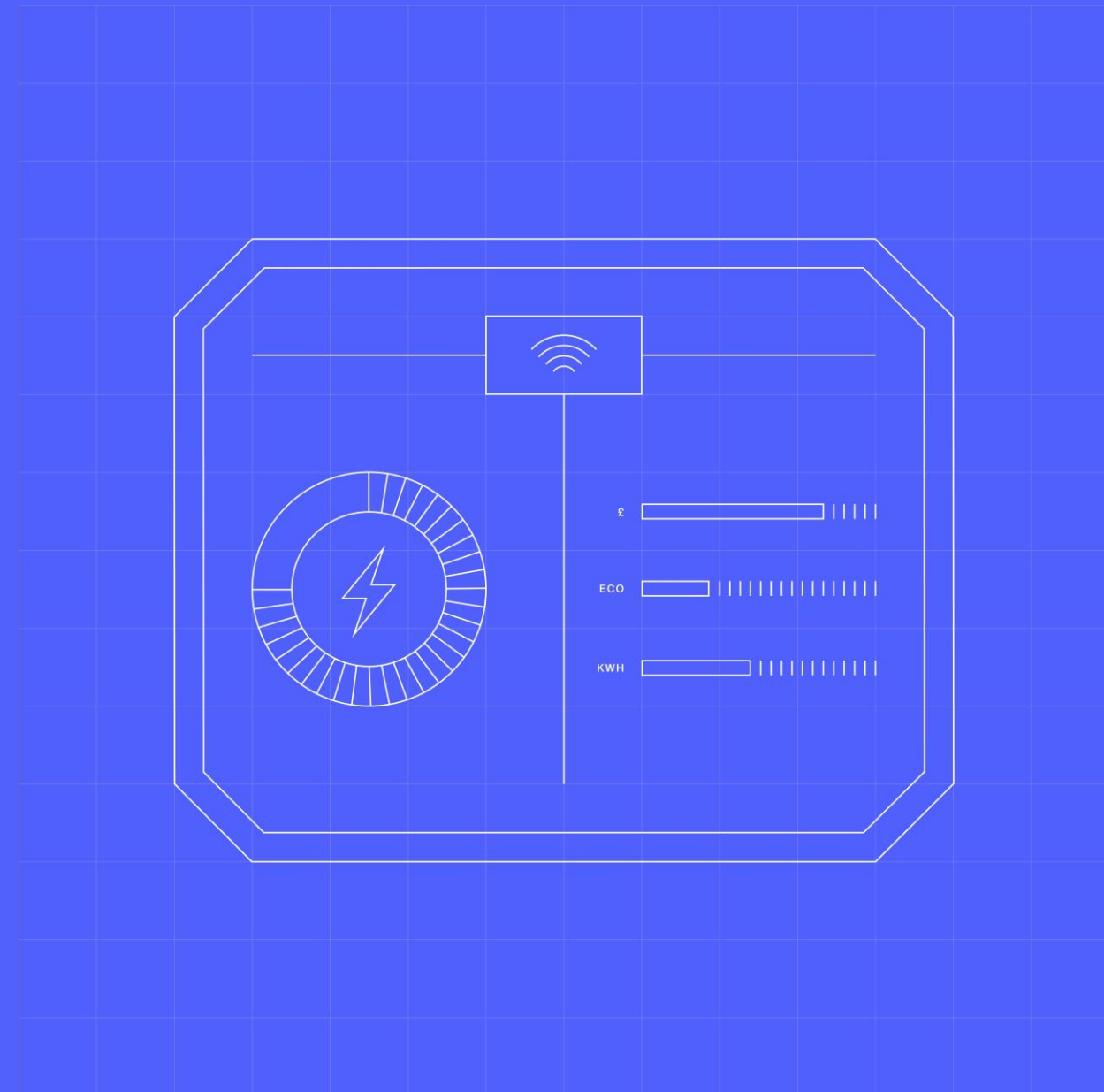
1. The TAG discussed **steps to moving to TMAG** (Testing and Migration Advisory Group), including how migration representation would be covered in TMAG and the intention to establish a Migration Working Group
2. The TAG discussed initial proposals for the Programme's **E2E Testing Strategy**, with feedback on initial principles, high-level strategy, and Testing Tools
3. The TAG discussed **E2E Test Data Strategy**, including high level data principles and establishing a Data Working Group

# DAG ToR Updates

INFORMATION: Provide update on latest ToR drafting

Chair

*10 mins*





DAG meeting 9 February 2022 reviewed ToR

Action:

- Look at recognising the design principles in decision making and objectives (see changes in red)

Any other suggested changes from DAG members?

No change to:

- Membership
- Purpose and Duties
- Scope, deliverables, roles and responsibilities

### DAG Role

The DAG's role is to oversee, review, consult and approve, the MHHS Programme development of the end-to-end business processes, system and data architecture that delivers the detailed system design that enables all programme participants to design, build and test their individual system and business changes.

### DAG Objectives

- To be the primary decision making authority for the system and solution design, unless above Ofgem thresholds
- To oversee the Programme design outputs, review and validate the output contents against **design principles**, objectives and expectations, send the deliverables for consultation and approve the design artefacts
- Ensure different programme participant perspectives are appropriately represented during decision making
- Enable Design transparency for all impacted constituency groups and stakeholders
- Delegate appropriate tasks and activities to Level 4 working groups
- Receive escalations from lower level workgroups and reach consensus on decisions, so the Programme design work progresses to plan
- Provide detailed advice to the SRO, PSG and other groups if required

# DAG Terms of Reference (extracted from MHHS-DEL031 MHHS Programme Governance Framework v1.1)

## Purpose and Duties of MHHS Design Advisory Group

DAG's purpose is to be the mechanism that oversees, reviews and approves end-to-end business processes, system and data architecture deliverables that produce the detailed system designs that enables all programme parties to design, build and test their individual system and business changes.

DAG is responsible for all design decisions and all requests that impact on design.

DAG is responsible for overseeing the development of the physical baseline which will provide the detail necessary for all parties to commence system design and build.

## DAG Scope, Deliverables, Roles and Responsibilities

DAG's scope is the development and management of all system and process design artefacts.

The SRO (or someone delegated by the SRO from within the MHHS Implementation Manager function) will chair the meetings.

The PMO will maintain and communicate up to date meeting documentation.

The PMO will maintain an up to date Programme plan, RAID log and actions log.

The PMO will provide all meeting management services and deliver all regular and ad hoc meetings.

DAG Members (or nominated alternatives) will attend every meeting.

DAG Members will be fully meeting prepared before the meeting starts.

DAG Members should be a mix of business, system, data, design, security and solution technical experts.

## Decision Making

The DAG will make Level 3 decisions and Level 2 decisions when delegated from the PSG. (Level 1 decisions will be escalated to Ofgem by the SRO or IPA).

The DAG can delegate decisions to another Level 3 group or a lower level work group.

The DAG will ensure that any decisions are based on full transparency with programme participants and appropriate consultation.

Where parties raise significant concerns with a DAG decision, the concern will be resolved by DAG or escalated to the PSG via a constituency representative.

Consultation will be carried out on an ongoing basis, with the DAG taking decisions based on information developed by Design Working Groups.

Where the DAG is presented with recommendations from Design Working Groups they will have the ability to:

- i. Accept the recommendation – the proposal/recommendations are aligned to the TOM, overall objectives and design principles.
- ii. Reject the recommendation – the proposal/recommendations does not align to the TOM, programme and design principles or requires further work/clarity.
- iii. Refer the recommendation for additional work or analysis.
- iv. Accept the recommendation, subject to additional work being completed.
- v. Refer to the PSG when the recommendation meets the threshold for Ofgem intervention or DAG cannot reach consensus.

Decisions and outputs of the DAG will be published within 5 40 working days of the meeting.

### DAG Membership

The DAG Membership is the SRO as Chair, technical expert representatives from each programme participant constituency and Ofgem as an observer:

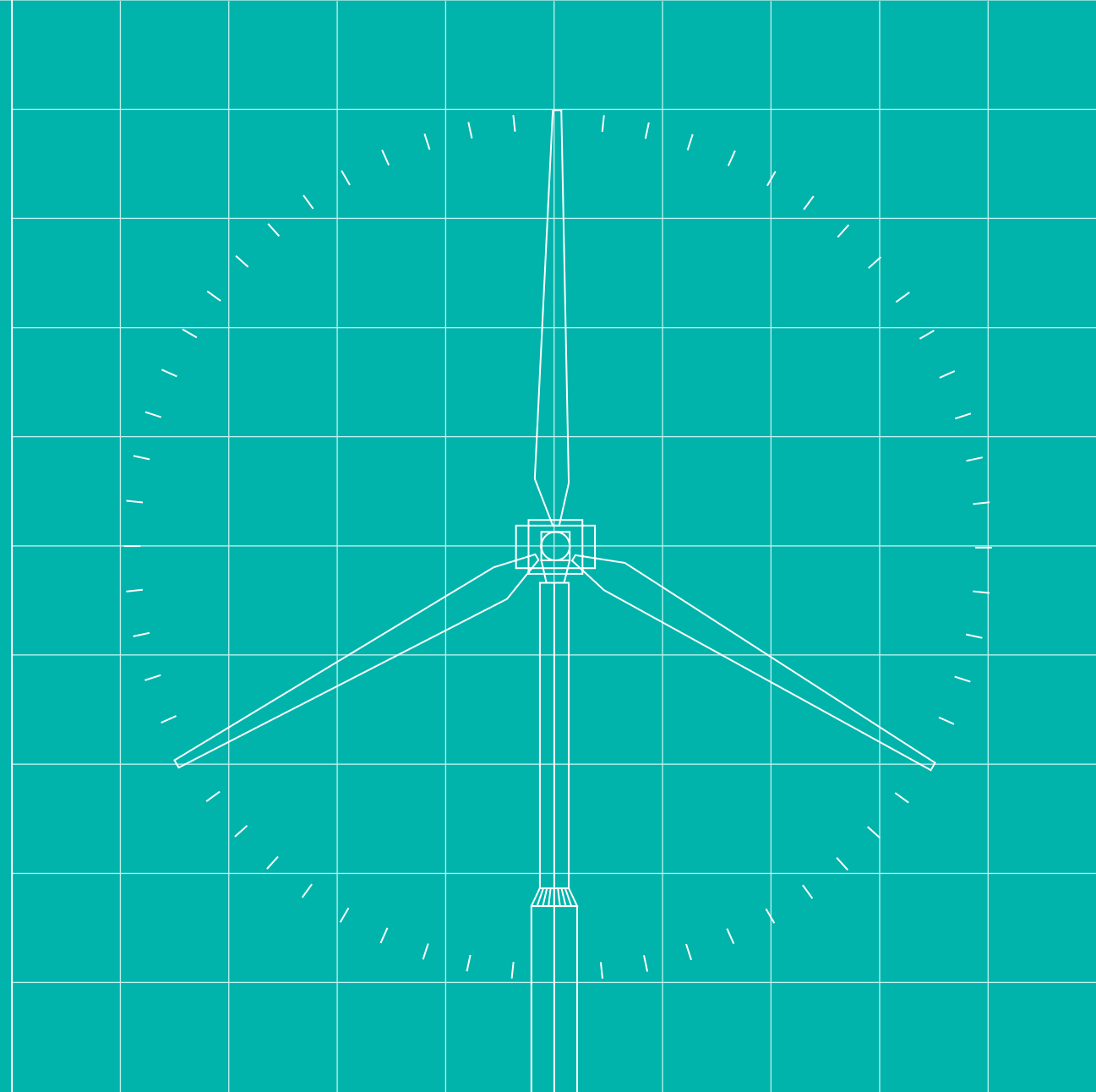
1. SRO DAG - Chair
2. SRO Design Manager
3. Lead Delivery Partner (LDP) Programme/Design Manager
4. Lead Delivery Partner (SI) System Integrator Manager
5. Independent Programme Assurance (IPA) Manager
6. Elexon Representative (as central systems provider)
7. DCC Representative (as smart meter central system provider)
8. Any other provider of a central system required for MHHS implementation (e.g. communications provider)
9. Large Supplier Representative
10. Medium Supplier Representative
11. Small Supplier Representative
12. I&C Supplier Representative
13. Supplier Agent Representative (Independent Supplier Agent)
14. Supplier Agent Representative
15. DNO Representative
16. iDNO Representative
17. National Grid ESO
18. Consumer Representative
19. Ofgem (Observer, to attend as appropriate)
20. The PMO will attend to act as meeting secretariat.

# Level playing field design principle

INFORMATION: An overview of the updated level playing field principle

Chair

*5 mins*



## Updated DAG level playing field principle

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Level playing field design principle:

“All market participants, operating under MHHS Target Operating Model, will be afforded the ability to deliver the same level of service for the same MHHS ~~role or service regardless of role~~”

DAG sub group:

- Assumption MHHS requirement for 24hr TRT only
- How deliver options to enact principle

SDS sub group:

- Uses cases on 24hr requirement

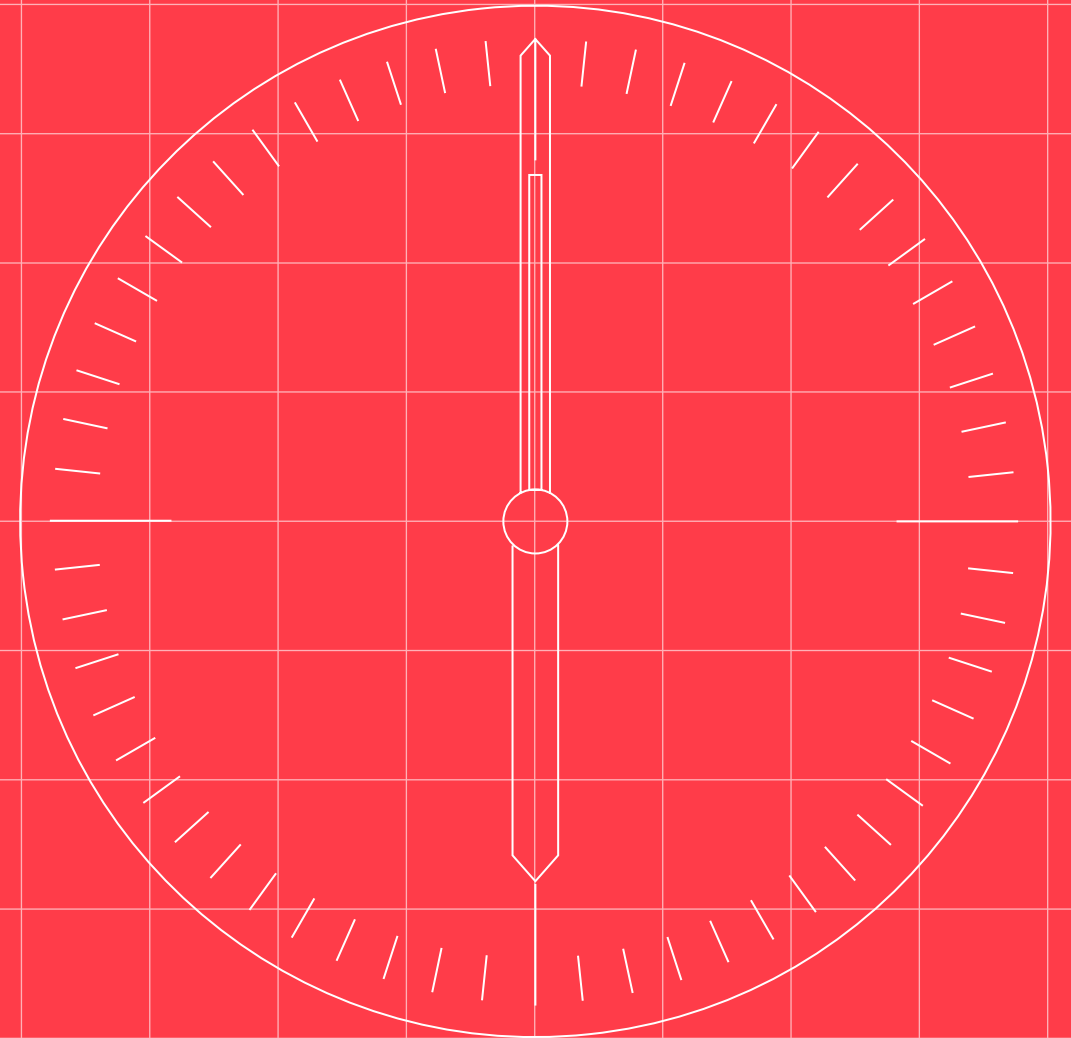
Meetings to be scheduled in March

# Design Principles

**INFORMATION:** Present updated design principles underpinning design activities

Programme – Ian Smith

*10 mins*



## High Level Design Principles (1 of 2) - Presentation of minor modifications following offline discussion with DAG reps

A review has been conducted of the current granular design principle with a view to deriving a set of over-arching principles as per the DAG request. A number of the original set have been re-categorised as requirements and assumptions and will be incorporated into the detailed design artefacts. The items listed below represent the current programme view of the high-level principles to be applied to the end-to-end design.

**It should be noted that these principles should be adhered to wherever possible, this does not rule out instances where DAG may deviate from these where sufficient justification exists to deliver the core elements of the solution.**

Ref	Principle	Scope	Sub-Principle	References
"0"	<b>The solution will be designed to support timely and accurate settlement.</b>	System Wide		
1	The solution will implement the TOM at a service level with prescribed interfaces between TOM services. The design will be agnostic as to the physical resolution that parties choose in the build of the services, it will only proscribe requirements and such physical characteristics as to enable interface build.	System Wide		PRI017
2	Energy Suppliers can choose how they deliver their TOM Data Services (direct or procured). <b>Suppliers may perform any aspect of any service subject to qualification.</b>	System Wide		PRI016
3	The DIP solution will remain stateless and will not execute Business Processing rules. <b>For the purposes of this principle address derivation and routing are not considered business rules.</b>	DIP	Sending parties are responsible for any follow up for business processes requiring completion (PRI026)	PRI024.PRI025
4	No new DTC flows will be created to resolve interface requirements for MHHS. Nor will there be facsimiles of existing DTC flows created on the DIP.	System Wide		
5	Where optionality exists with regard to resolving an interface to either the DIP or remaining on the DTN the solution will <b>consider the full set of interfaces related to a process or service.</b> <del>seek to group the resolution based on related flows within the business process .</del> i.e. if the majority of flows within a process use the DIP it would not be desirable for outliers to remain on the DTN.	System Wide		
6	Solution assumes that the data held/mastered by the owner/manager is correct. Services will undertake processing in good faith based on the data provided to them. This does not preclude the potential requirements for exception reporting and reconciliation requirements to rectify data quality issues.	System Wide	Will not duplicate items held in other systems(PRI004/005) Will only hold what is required to route messages Will not validate customer opt out (PRI008)	PRI003. PRI001. PRI010. PRI011. PRI019



## High Level Design Principles (2 of 2)

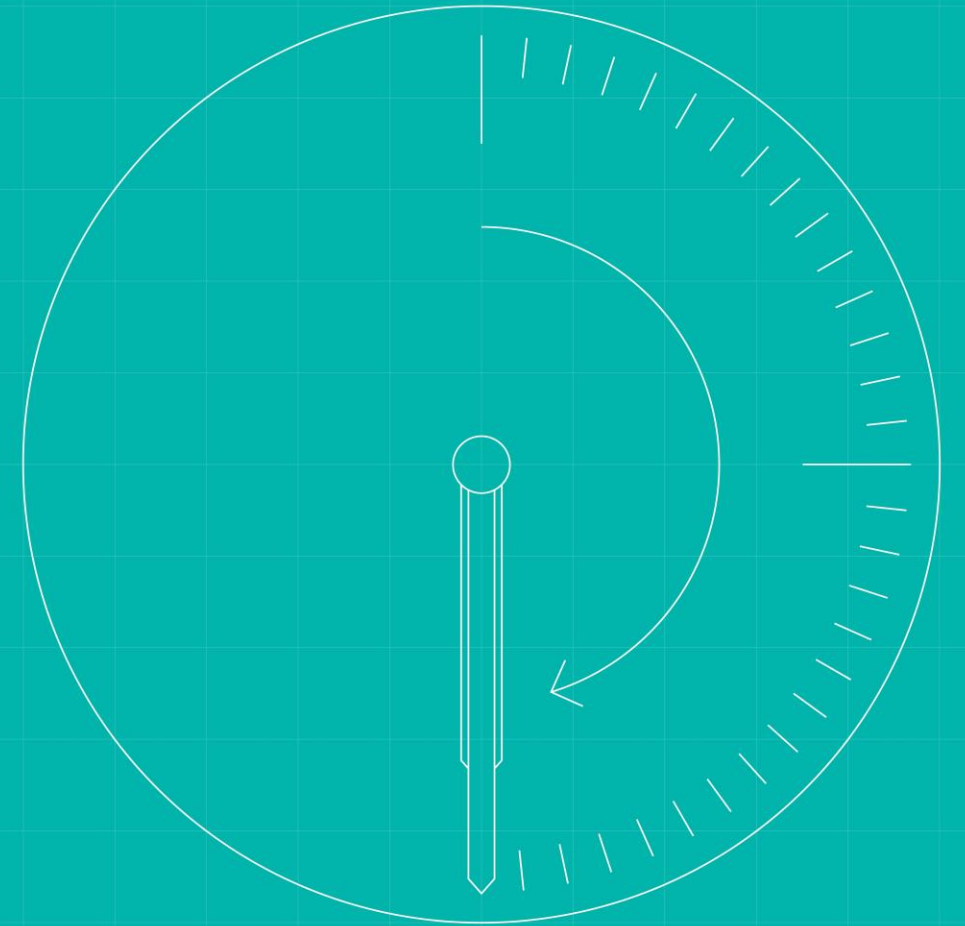
Ref	Principle	Scope	Sub-Principle	References
7	<del>Service providers</del> <b>TOM Service Operators</b> will be responsible for reporting data accuracy issues to the data owner/manager	System Wide		PRI003
8	Data will be processed <del>within the services</del> <b>by all parties</b> promptly and in accordance with BSC Procedures	System Wide	[Data services should process data in accordance with the settlement timetable]	PRI010
9	The solution will seek to minimise <b>total</b> cost to industry <del>participants</del> in the delivery of the OFGEM approved TOM services and Integration platform	System Wide		PRI027
10	The solution will be secure, scalable for volume, latency, interfaces and other key technical dimensions.	<b>DiP</b>		PRI015.PRI028
11	Interfaces will only pass those elements of data required in direct support of their governing business process and requirements. <b>Where a changed value falls within a logical group of data e.g. House number in an address the logical group will be sent.</b>	System Wide		
12	Design will be articulated with sufficient breadth and detail required to enable regulatory code drafting in addition to enabling Service Design, Build, Test & Operate.	System Wide		
13	Any technology selection will be mindful of future use cases	DIP		

# Technical Assumptions

INFORMATION: Present updates agreed at previous meeting

Programme – Ian Smith

*10 mins*



- **Following previous DAG review – minor modifications have been made to reflect comments captured in the DAG session**
- TDWG have been considering a number of core principles and key technical characteristics that inform the Functional Specification of the integration platform
- Following multiple working group sessions, the TDWG has reached consensus on a number of core elements
- TDWG now seeks approval from DAG on these elements as these will form key drivers for the detail underpinning the DiP Functional Specification current being developed and under review

## High Level Design Principles

#	Principle	Description
001	Business Logic	DIP is devoid of any business logic (the exception is the routing <b>and addressing</b> of messages to correct participants)
002	Message/Event routing	DIP is responsible for routing messages from senders to receivers
003	Message/Event Validation (DIP)	DIP will undertake message header and schema validation rather than full content validation.
004	Message/Event Validation (Participant)	Recipients will validate the message payload
005	Error Reporting	DIP <b>and</b> Message Recipients will report logically invalid messages back to recipient
006	Future Requirements	The DIP is a platform for the future and should be designed such that additional business events can easily be added
007	Flexible Templates	Support templated design as new industry initiatives may require different patterns of message/event exchange
008	Connection Pattern	Standardised connection patterns across all services. All services will present as a minimum API HTTPS interfaces with JSON payloads with API inbound, webhook outbound.
009	API Monitoring	All API activity (inbound & outbound) will be monitored and available for reporting
<b>010</b>	<b>Auditing</b>	<b>The DiP will retain auditable information pertaining to receipt and routing of messages</b>

## Technology/Architecture Characteristics

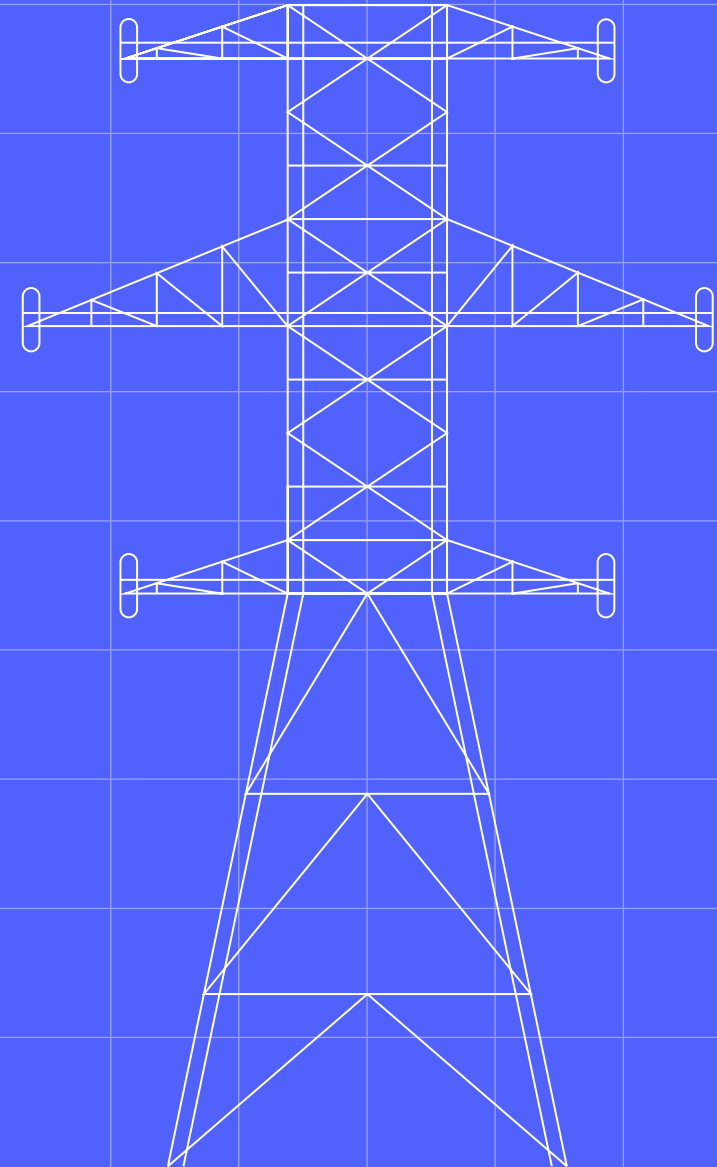
#	Characteristic	Description
001	Platform Agnostic	<p>Work with the AWG definition of Event Driven Architecture for the RFP that uses the Gartner Report definition, 3 basic type of events brokers are defined:</p> <ul style="list-style-type: none"> <li>• Queue-oriented (like Solace PubSub+, RabbitMQ, Azure Service Bus, etc.)</li> <li>• Log-oriented (like Apache Kafka, Amazon Kinesis)</li> <li>• Subscription-oriented (such as Amazon EventBridge and Azure Event Grid).</li> </ul>
002	Cloud Architecture	<p>Single Cloud Provider</p> <ul style="list-style-type: none"> <li>• at least 2 availability zones/regions</li> <li>• backup</li> </ul>
003	Availability	<p>Percentage of Uptime                    99.95% (unplanned)                      Mean Time to Recovery (MTTR)    60 mins                      Mean Time between Failures (MTBR)       -                      Recovery Time Objective (RTO)    60 mins                      Recovery Point Objective (RPO)    0</p>
004	Performance	<p>Near real-time message delivery with 90% delivered within 3 seconds of receipt, and 100% of messages within 30 seconds.</p>
005	Message Retention	<p>On-line broker, i.e. routine processing – 14 days; archive replay – 2 years</p>

# Integration Platform Decisions

DECISION: Make decisions on Programme design matters

Programme – Ian Smith

*10 mins*



# Integration Platform Decisions - Addressing Decision Required

## Problem Statement:

In order to operate the MHHS TOM three distinct types of message routing/addressing have been identified:

- Targeted (primary) Addressing – where the message sender knows the intended recipient of message, e.g. Change of Supplier where the new supplier is the primary target of the message. The equivalent of the To: field when addressing an email.
- MPAN Based Lookup (secondary) Addressing – where the message is routed to recipients based on the MPAN within the message and the roles those recipients undertake for the targeted MPAN. These recipients are not the primary target of the message but are included in the message exchange as it relates to an MPAN they have jurisdiction over. Using the e-mail analogy this equates to the cc: field.
- Always – where the DiP will always send a message to either a named participant or all participants assigned to a designated role (and the role is assigned to the message channel).

Any one, or a combination, of the types of addressing can be applied to a single message.

The key decision is where the secondary addressing is undertaken. Should this be carried out by participants who would need to maintain their own view of appointed parties or should this be resolved to the DiP making use of a view of appointed parties at the MPAN level either locally or from a separate system?

## Options Overview

Option 1) Sender addressing – sending party identifies targeted recipients for primary and secondary addressing, information passed in message

Option 2) DiP Addressing – DiP maintains a view of parties appointed to an MPAN and routes messages to appointed secondary parties

Option 3) DiP Addressing – DiP derives secondary parties via an API lookup to ECOES/Registration system

# Integration Platform Decisions - Addressing Decision Required

## Option 2 - Further Detail

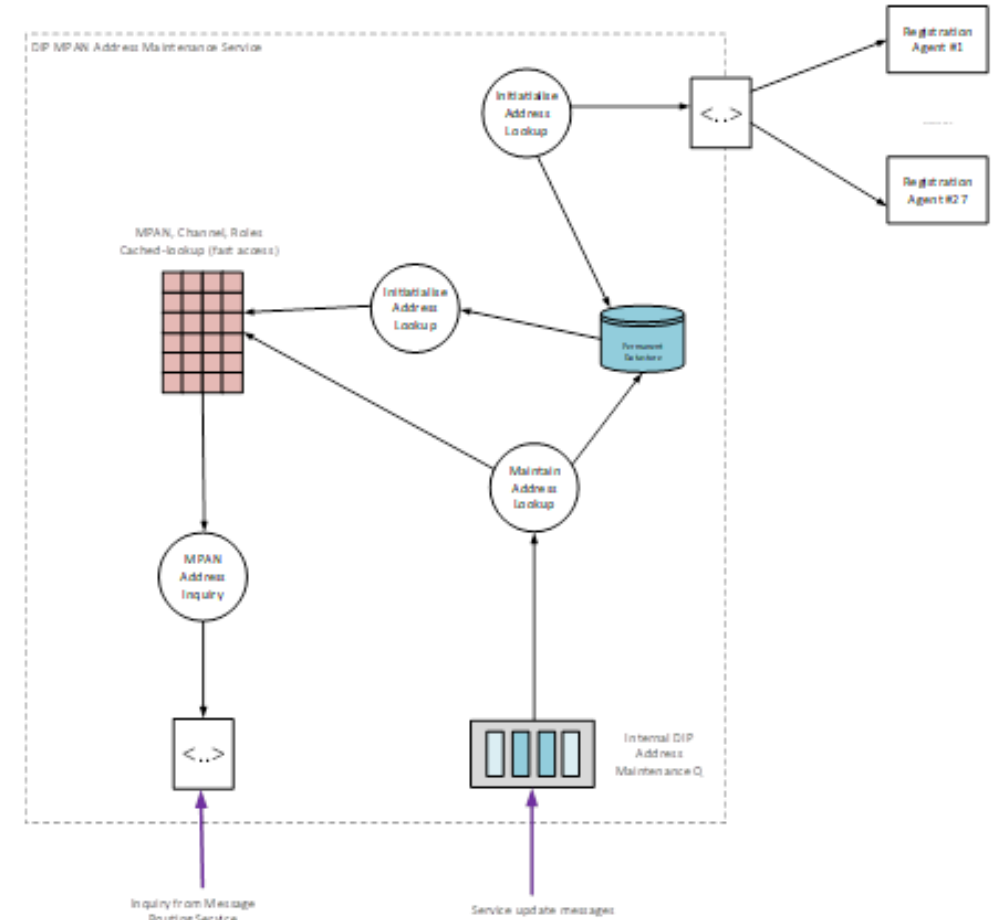
To facilitate the addressing and routing of messages, a MPAN lookup service is required. The MPAN addressing service is responsible for maintaining a routing table that provides the messaging services with an instant address lookup for incoming messages based on MPAN. Each message/event channel will have a set of distinct roles that each message needs to be addressed to.

The lookup table will be based on MPAN, Message Channel and targeted recipient roles.

Figure 1 - MPAN Address Maintenance Service

Requirements for this process:

- DIP will initialise a view of appointed agents through transition
- The working assumption is that the data will need to be kept in two places: a permanent and a data cache. The corresponding use of these is self-evident – the cache is populated from the permanent store and provides a fast lookup; the permanent store obviously provides the permanent store.
- The MPAN inquiry service will receive an input MPAN and message channel and return a list of downstream recipients.
- After initialisation, the DIP is responsible for maintaining the Address Lookup data. All message channels pertinent to the registration data flow will send a message to an internal queue within the DIP. This queue provides the Maintain Address Lookup function information: both permanent and cache are updated with the new details.
- There is a requirement for the lookup service to cope with a change of details and be retained for the historical lookup. 'Old' messages may arrive that need to be sent to a previously responsible party; for example, late consumption data (PUB-011) would need to be sent to the set of secondary parties that are pertinent for the specific day for the meter read. In this scenario, the header would define an applicable date/time field used for addressing.





## Integration Platform Decisions - Addressing Decision Required

### Option 3 - Further Detail

An alternative approach for implementing the MPAN lookup requirement has been proposed jointly by C&C/St Clements.

They have suggested that when CSS goes live in July 2022, ECOES will be updated with real time updates from the CSS with regards to the Change of Supplier (CoS) events. Registration Agents / MPRS will receive and process these updates as part of their own nightly batch updates; ECOES will therefore be in advance of the MPRS systems with regards to supplier registrations and hence could be used as the source for the MPAN lookup data.

The proposal is that then the ECOES system presents a MPAN enquiry API that can be used for the addressing of MHHS messages flowing via the DIP. This API could either be called by Message Senders or by the DIP whenever a secondary addressee lookup is required. There are merits in this approach, namely it centralises the lookup information in a single system, however, it does introduce complexity into the overall landscape and the addressing capability would need the same SLA as the DIP. The API could be used to initialise any MPAN addressing data stores.

## Integration Platform Decisions - Addressing Decision Required

### Options Analysis

	Option 1 - Sender Addressing	Option 2 – DIP Addressing	Option 3 – API Lookup
Advantages	<ul style="list-style-type: none"> <li>Keeps business data out of the DIP</li> <li>Follows AWG principle of keeping business logic out of the DIP</li> </ul>	<ul style="list-style-type: none"> <li>Centralises addressing complexity</li> <li>Eases development burden on participant systems (AWG principle)</li> <li>Future proof the system from change, i.e. a new service is defined that requires this capability then it's already present</li> </ul>	<ul style="list-style-type: none"> <li>Centralises lookup data</li> <li>Least development effort</li> <li>Keeps business data/logic out of the DIP</li> </ul>
Disadvantages	<ul style="list-style-type: none"> <li>Increase the development burden on participants (Senders, i.e. Registration &amp; Smart Data Services)</li> <li>SDS could fall out of synch with registration system and hence messages erroneously addressed.</li> </ul>	<ul style="list-style-type: none"> <li>Increases complexity of the DIP (hence costs)</li> <li>DIP could fall out of synch with registration and hence messages erroneously addressed.</li> </ul>	<ul style="list-style-type: none"> <li>Volume of API calls required to support the TOM would be ~40M/day</li> <li>Inefficient design (API called even though information seldom changes)</li> <li>SLA of ECOES would need to match DIP hence cost uplift?</li> </ul>
Assumptions	<ul style="list-style-type: none"> <li>Need to maintain time varying relationship of participant role against MPAN (probably not an issue for Registration service, however would be SDS)</li> </ul>	<ul style="list-style-type: none"> <li>Need to maintain time varying relationship of participant role against MPAN</li> </ul>	<ul style="list-style-type: none"> <li>Need to maintain time varying relationship of participant role against MPAN</li> </ul>

### Summary

In the TDWG and Internal discussions it was recognised that there was very little to choose between the two main options, however, the consensus was that option 2 – DIP addressing - would be the better choice for the following reasons:

- Including the capability within the DIP aligned to the AWG's principle of centralising system complexity
- Solution would only have to be developed once rather than multiple times
- The future proofing of the system, i.e. the ability to respond to future addressing requirements

The option of using the ECOES API was considered, however, as it increased system complexity due to the addition of a new fundamental component it was not favoured.

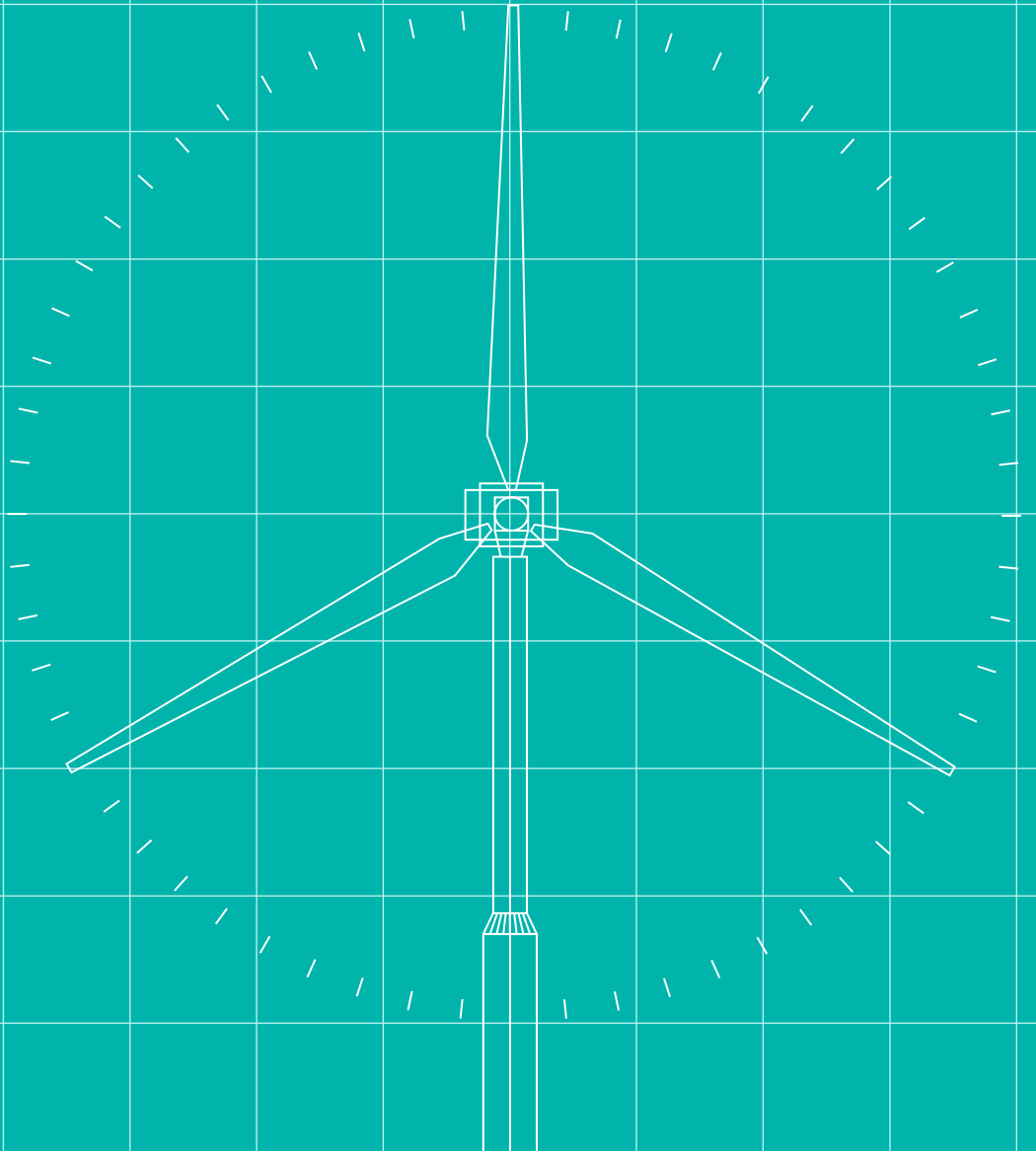
The Design team seeks a view from DAG as to whether they are supportive of proceeding on the basis of Option 2 noting there are downstream activities dependent upon a decision in this matter.

# Level 4 Working Group Updates

INFORMATION: Provide updates from DAG Working Groups

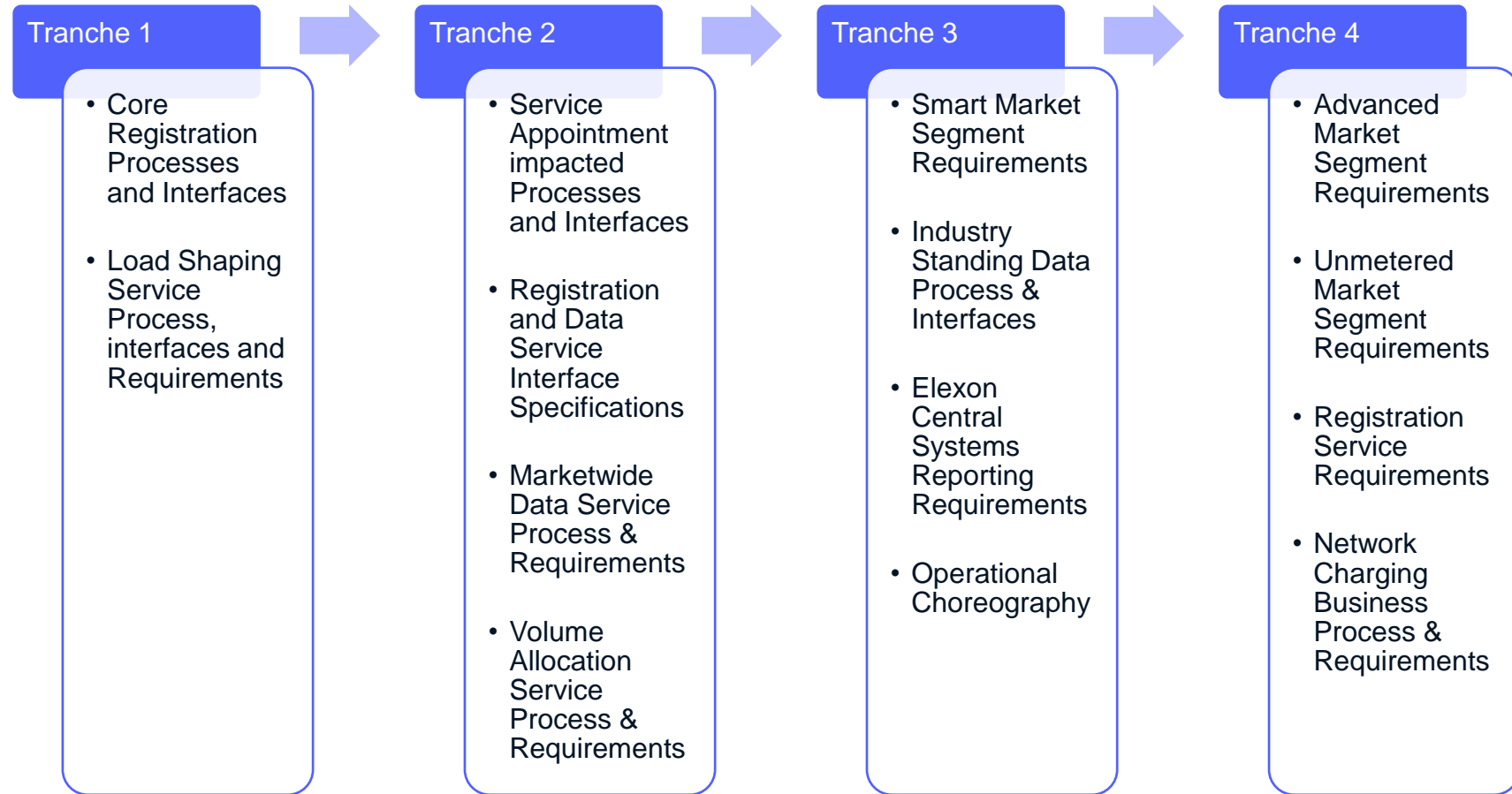
Programme – Ian Smith & Claire Silk

*20 mins*



# MHHS BPRWG- Design Roadmap

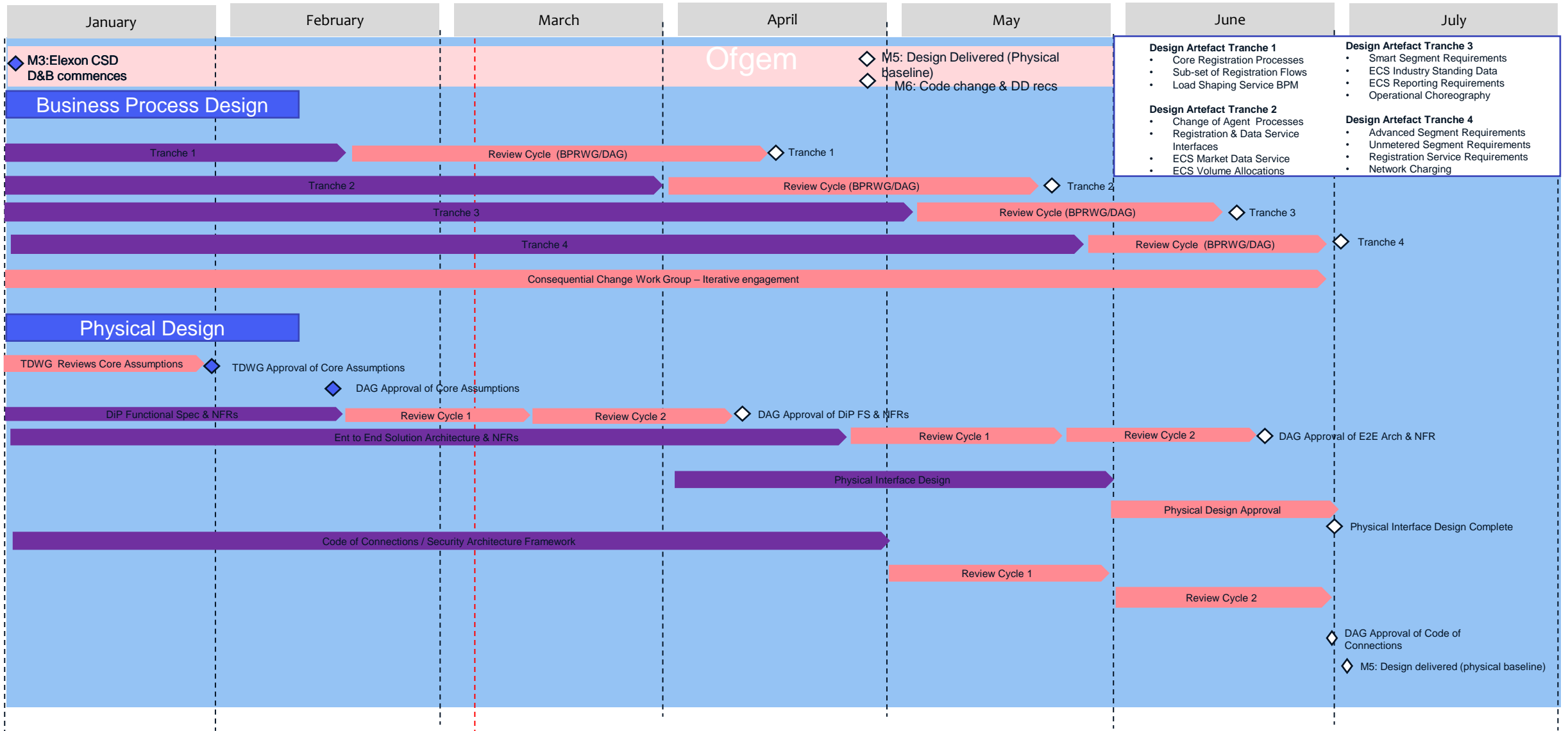
- Activity is ongoing to refine the Design Roadmap into a logical sequence of activity which will be broken into 4 distinct tranches.
- We are reviewing the plan in detail, however at this point we believe that review activity will extend into June.
- The plan is based upon the agreed approach around offline review with each tranche issued to BPRWG once design activity in the sub-working groups has completed.
- An indicative view of the design artefacts included in each review tranche can be found in the accompanying Design Artefact Status Report.



## Design Artefact Status and Forecast – February 2022

	Current Status							Document L4/DAG Forecast Approval											
	Number Of Documents	Drafting Not Complete	Drafting Complete	In Flight with SWG	BLOCKED	In Flight with L4	In Flight with DAG	Jan		Feb		Mar		Apr		May		Jun	
								L4	DAG	L4	DAG	L4	DAG	L4	DAG	L4	DAG	L4	DAG
<b>Business Process Artefacts</b>																			
Business Process Maps	20	5	15	3	0	12	0	0	0	0	0	12	0	5	12	3	5		3
Logical Interfaces	38	4	34	21	0	13	0	0	0	0	0	11	0	27	11	0	27		
Business Requirements / Process Step Descriptions	10	6	4	3	0	1	0	0	0	0	0	3	0	2	3	5	2		5
Global Artefacts	5	3	2	2	0	0	0	0	0	0	0	3	1	1	2	1	1		1
<b>SUB-TOTAL</b>	<b>73</b>	<b>18</b>	<b>55</b>	<b>29</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>1</b>	<b>42</b>	<b>28</b>	<b>9</b>	<b>35</b>	<b>0</b>	<b>9</b>
<b>Technical Design Artefacts</b>																			
DIP Non Functional Requirements	1	0	1	1	0	1	0			1	0	1							
Dip Functional Specification	1	0	1	1	0	1	0			1	0	1							
End to End Architecture	1	1	0	0	0	0	0									1			1
End to End Non Functional Requirements	1	1	0	0	0	0	0									1			1
Security Specifications and Impact assessments	4	0	4	3	0	3	0									4			4
<b>SUB-TOTAL</b>	<b>8</b>	<b>2</b>	<b>6</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>
<b>TOTAL</b>	<b>81</b>	<b>20</b>	<b>61</b>	<b>34</b>	<b>0</b>	<b>31</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>29</b>	<b>3</b>	<b>42</b>	<b>28</b>	<b>15</b>	<b>35</b>	<b>0</b>	<b>15</b>

# Revised Design POAP 01/03

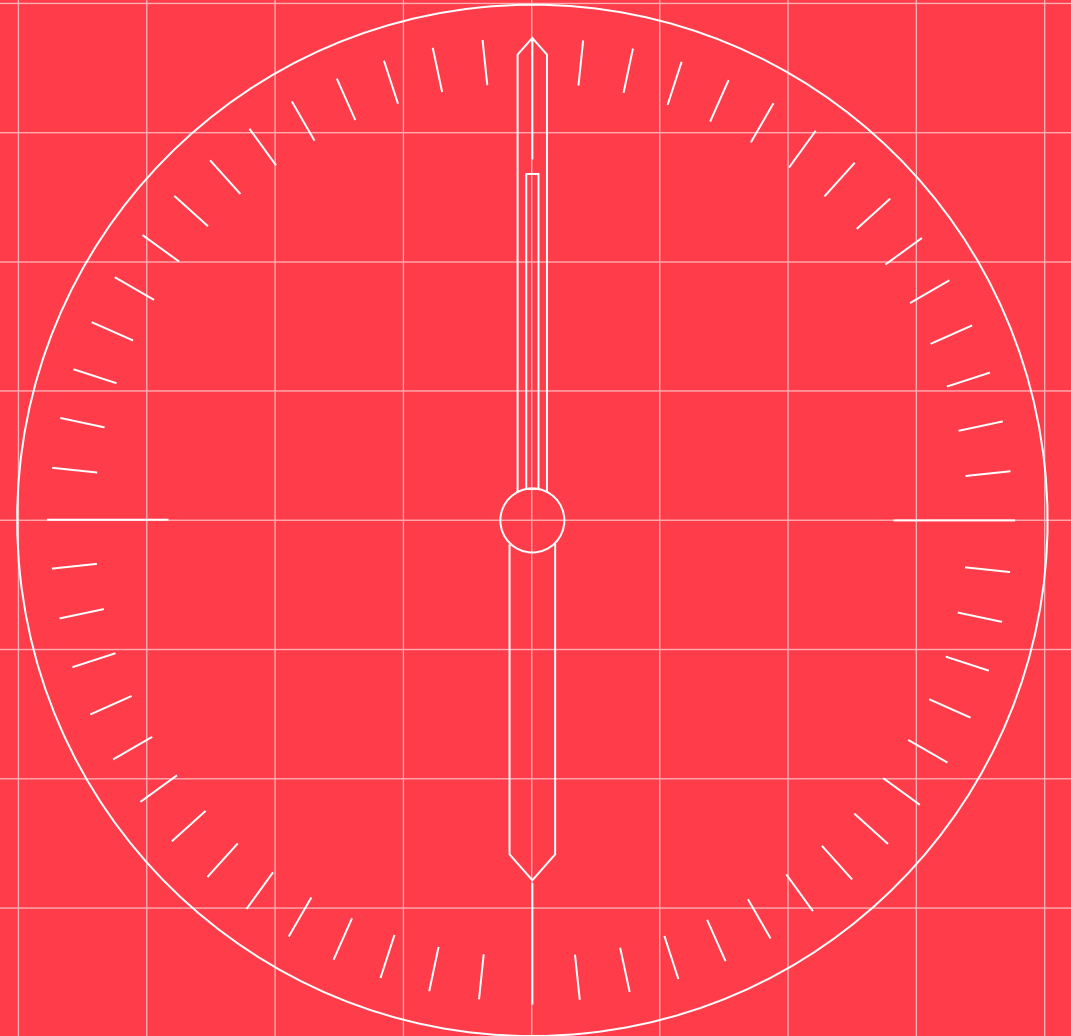


# Summary and Actions

**INFORMATION:** Summarise actions and plan agenda for next meeting

Chair & Secretariat

*5 mins*





# DAG forward look

## DAG Agenda Roadmap (to support artefact forecast):

Meeting dates	09-Mar	23-Mar	13-Apr	27-Apr	11-May
<b>Relevant milestones/activities</b>				M5	
<b>Agenda items</b>	*DAG ToR updates *Design Principles *Decision Issues *Design Artefact for approval	*Decision Issues *Design Artefact for approval	*DAG ToR review *Decision Issues *Design Artefact for approval	*Decision Issues *Design Artefact for approval	*Decision Issues *Design Artefact for approval
<b>Standing items</b>	*Minutes & actions *L2-3 governance group updates *L4 working group report	*Minutes & actions *L2-3 governance group updates *L4 working group report	*Minutes & actions *L2-3 governance group updates *L4 working group report	*Minutes & actions *L2-3 governance group updates *L4 working group report	*Minutes & actions *L2-3 governance group updates *L4 working group report

## Reminder: Working Group Schedule

### Level 4 Working Groups

<b>BPRWG</b>	1st Wednesday of every month	1000-1200	Monthly
<b>SDWG*</b>	1st Wednesday of every month	1400-1530	Monthly
<b>TDWG*</b>	1st Thursday of every month	1400-16:00	Monthly

\*SDWG and TDWG form part of sub-groups on a monthly rotation

### Sub-working Groups

<b>BPRWG Sub-groups</b>	Tuesday ( <i>Registration</i> )	1000-1300	Weekly
	Thursday ( <i>Smart or Advanced or Unmetered</i> )	1000-1300	Weekly
	Friday ( <i>Elexon Central Systems</i> )	1000-1300	Weekly
<b>TDWG Sub-Group</b>	Thursday	1400-1600	Weekly
<b>SDWG Sub-Group</b>	Wednesday	1400-1530	Fortnightly

## Next Steps

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- Confirm Actions from meeting (Secretariat)
- Dates of next DAG: 23 March 2022
- DAG Level Playing Field Principle Sub-group w/c 14 March 2022

If you would like to propose an agenda item for the DAG or would like any information about DAG working groups and subgroups, please contact the Programme PMO ([PMO@mhhsprogramme.co.uk](mailto:PMO@mhhsprogramme.co.uk))