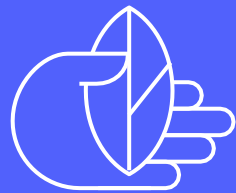**MHHS PROGRAMME**
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MHHS Webinar:
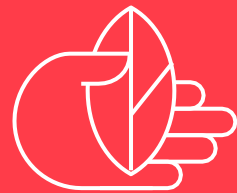# DIP Simulator Demo

01 December 2022

Introduction

Helen Richardson
5 minutes

MHHS Test Stubs & DIP Simulator Demo

Rebecca Farooq & Georgi Rabotov
20 minutes

2023 Timeline

Rebecca Farooq
5 minutes

Q&A

Facilitated by Pete Edwarde
15 minutes

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Please ask questions throughout the webinar.

You can join at Slido.com

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? Why are we holding this webinar?

- Bring to life the scope of the test tools "stubs" we are planning to provide and introduce you to the team

- Showcase current progress along with our future delivery plans

- Provide early visibility of the Data Integration Platform (DIP) simulator tool and our plans for data generators

What are Simulator, Data Generator & Emulator tools?

- **Simulators**: replace a 'missing' system in integration and replicate the behaviour of that missing system

- **Data generators**: produce quantities of realistic data, to aid testing

- **Emulators**: replicate functions of a target system, enabling automated checks of correctness in systems under test

What is the programme rationale for providing test tools?

- Driving efficiency

- Introducing and promoting early standardisation

- De-risk entry into testing cycles

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What do we need from Programme participants?

Collaboration

- **Get involved** - meet the team and find out what we are delivering.

Sharing ideas

- **We welcome your ideas** for new features that might make everyone's life easier!

Feedback

- **We need to know** if the tools are not going to meet your requirements
- All feedback can help inform options to iterate our tooling

Clarifications

- **It's important we interpret the design in the same way**, so please reach out to ask for clarifications, or to understand our development process further
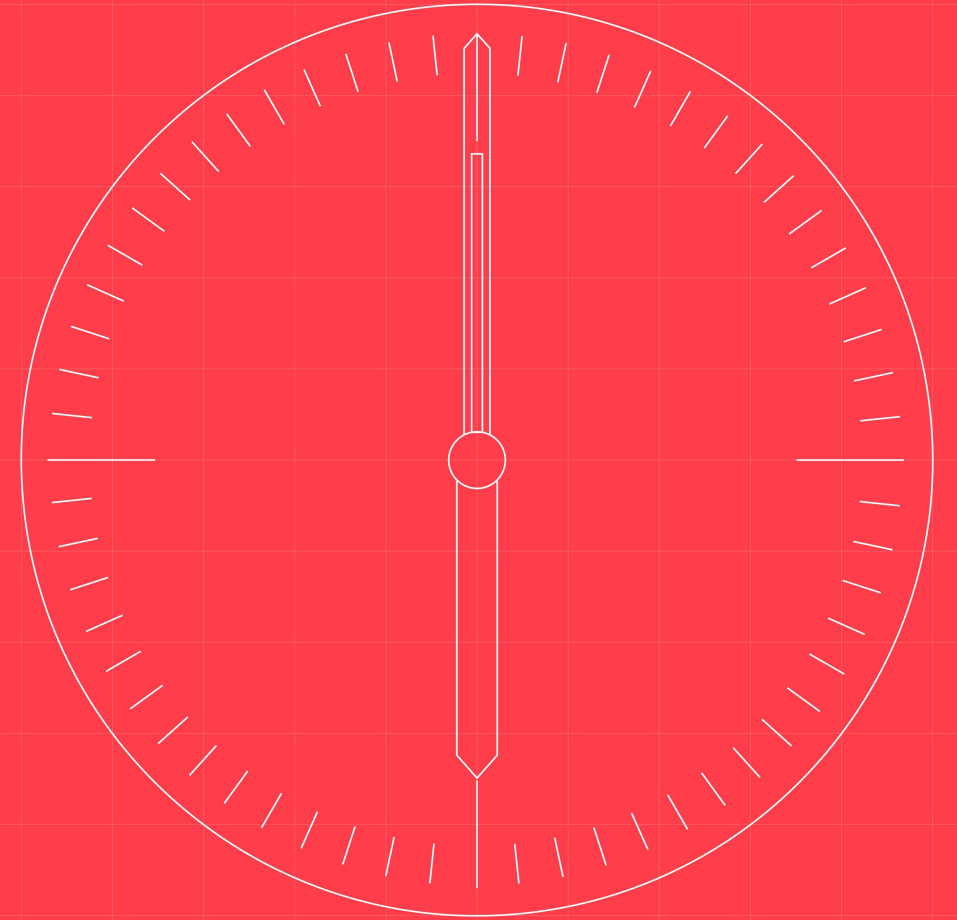
Challenge

- **If you think we could improve** the ordering or priorities, please let us know!

Ask for support

- **Ask for help** if you are unsure or blocked.
- The more users, the better; we will always try to unblock you where possible

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MHHS Test stubs and DIP Simulator Demo

Rebecca Farooq & Georgi Rabatov

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Test Stubs for Pre-Integration Testing (PIT)

Data Integration Platform (DIP) Simulator

- For participants running tests independently on their own infrastructure

- Accessible to all participants

- Simulates DIP behaviour - consumes and publishes information in the same manner as the DIP (carrying out Level 1 and Level 2 validation but without all DIP functionality)

- Accompanied by a library of correct interface messages

Consumption Data Generator

- For participants running tests independently on their own infrastructure

- Generates realistic test consumption data - suitable for consumption by Smart Data Services (SDS), Advanced Data Service (ADS) & Elexon Central Systems (ECS) which the participants can use in conjunction with their own existing simulators

## Automated Test Result Generators (Emulators)

Prepared for **System Integration Testing** (SIT) / **User Integration Testing** (UIT)

- **SDS Emulator** - takes as input the test data which enters SDS and produces the result expected from SDS; then compares the actual SDS result with the result the emulator has calculated itself and reports on test success or failure

- **ADS Emulator** – as with SDS, but for ADS

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1. Simulator receives a message on an Interface

2. Pushes that message out to the relevant receiver as a Publication

3. Allows the receiver to submit a Status response

4. Response then returned to the original sender

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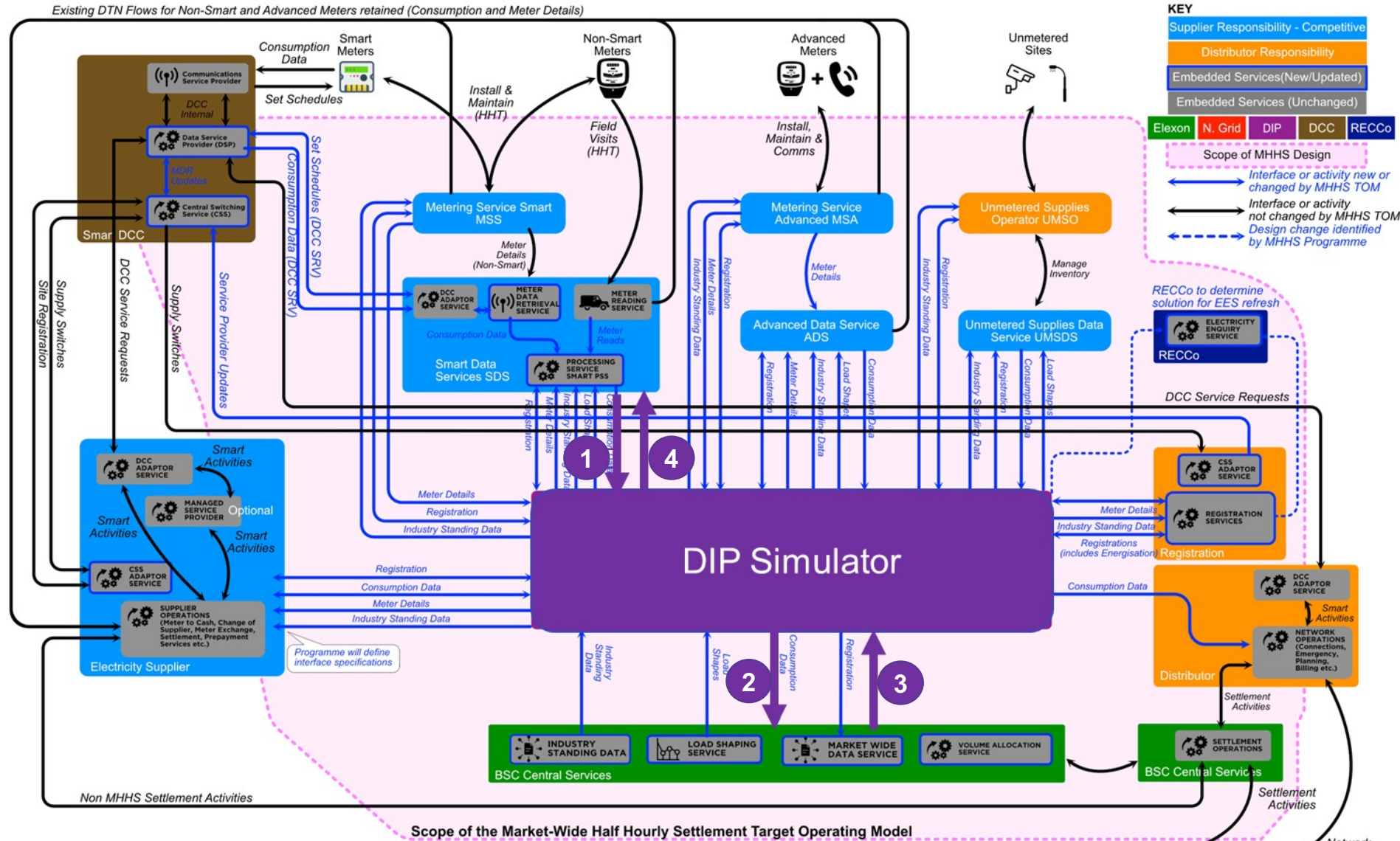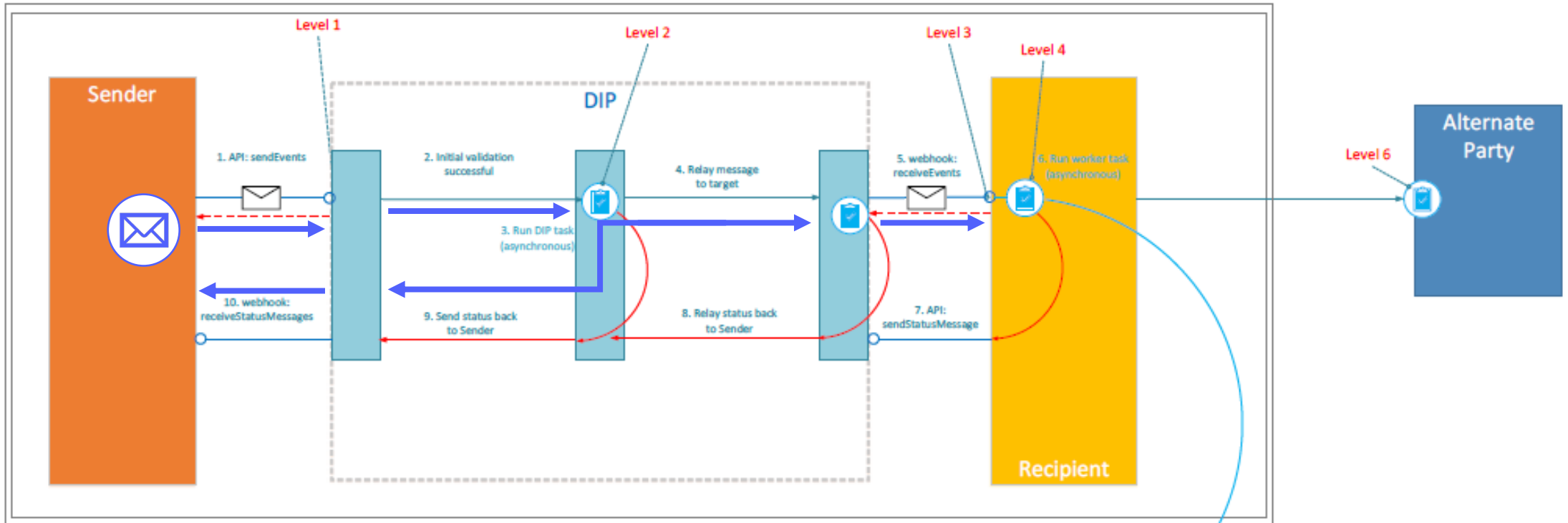
A testing participant can send a message (Sender above) which will result in an **error message being returned** by the DIP Simulator if it **fails format validation**

If the message passes validation, the DIP Simulator will send the message on to the Recipient (if the testing participant has configured a Recipient)

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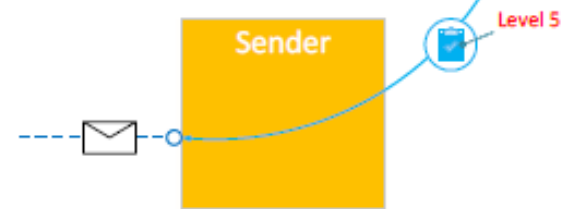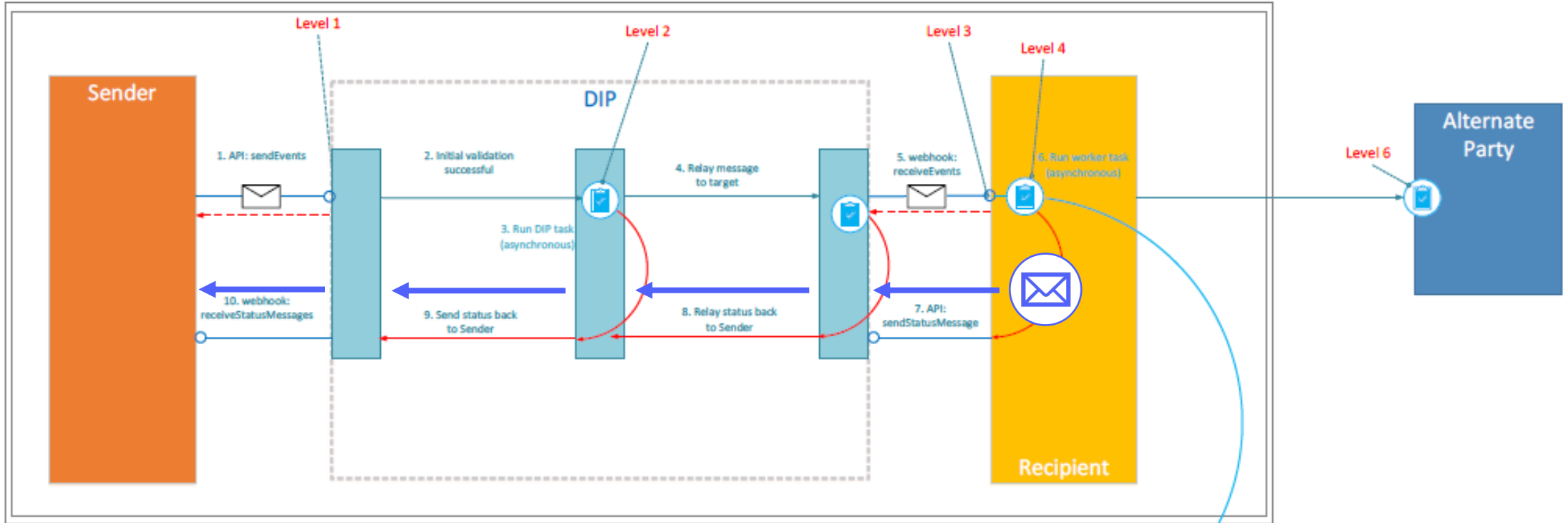
If the testing participant has **configured a Recipient**, the participant can construct a **response message** and send it from the Recipient back to the Sender via the DIP Simulator.

This simulates the **Level 3** and **Level 4** validation responses to the original message
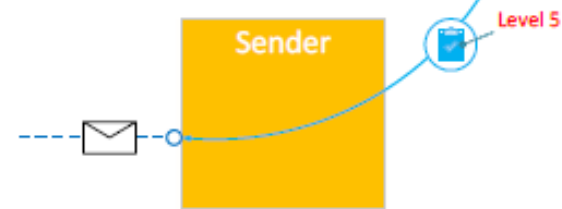
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Webinar

2022-11-28 13:14 UTC

Recorded by
Georgi Rabotov
(MHHSProgramme)

Organized by
Georgi Rabotov
(MHHSProgramme)

2023 Timeline

Rebecca Farooq

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2023 Timeline

2023	January	February	March	April	May	June	July

DIP Simulators

Priority 1 simulator scope

📍 **Release comms & training**

Priority 2 simulator scope

📍 **Release comms**

Consumption Data Generator

Consumption Data

📍

Release comms & training
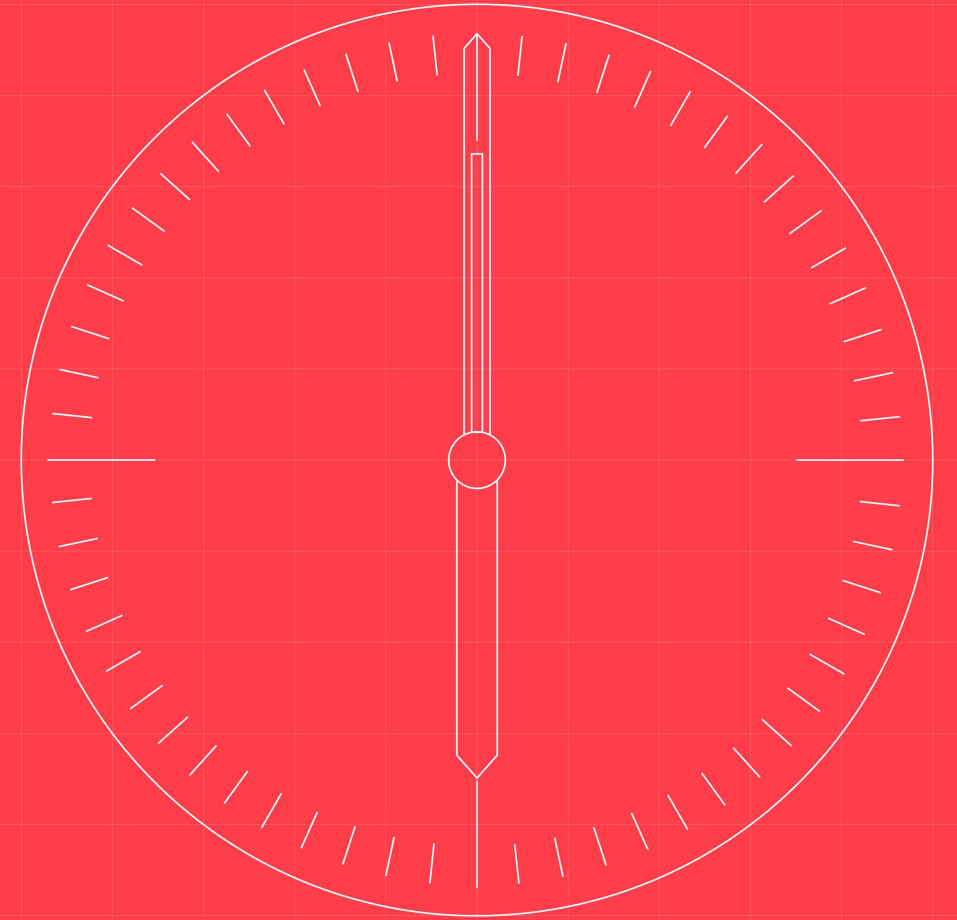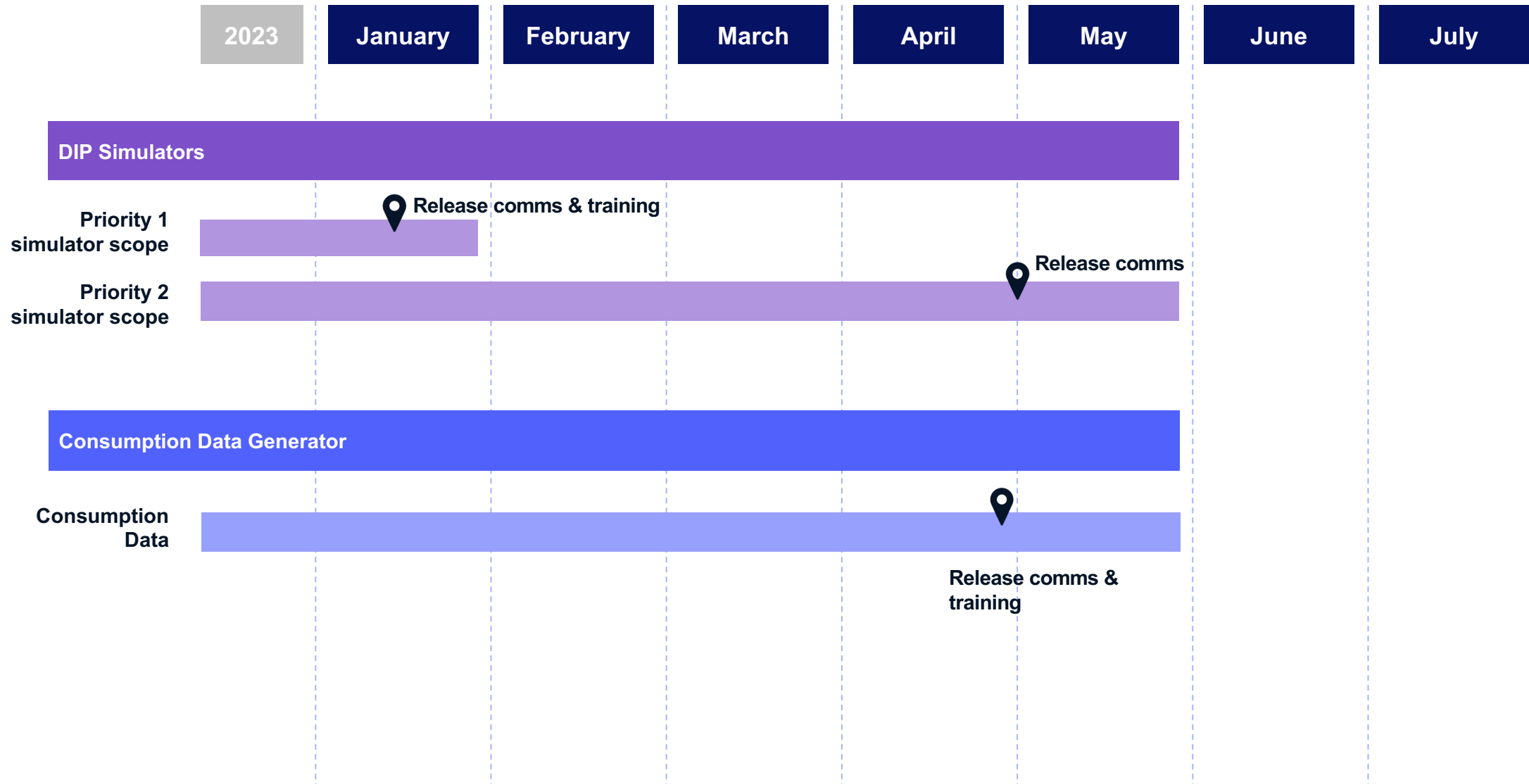
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Any questions?

Please join at Slido.com

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MHHS Programme Communications & Support

PPC Bilaterals

- The PPC Team is available for **monthly bilateral sessions** with all Programme Participants

- The sessions are used to enable a two-way conversation between the participants and the Programme

- Contact PPC@mhhsprogramme.co.uk to schedule

Design Work-off Plan

- On **31 October**, the Design Advisory Group (DAG) **approved the Physical Design Baseline**

- This approval is subject to the Programme delivering the **Design Work-Off Plan**. Sub-working group sessions are held twice a week to discuss these Work-Off Plan items

- If you would like to join these discussions, please contact PMO@mhhsprogramme.co.uk to sign up

SITWG launch

- Today is the kick-off for the **Systems Integration Testing Working Group (SITWG)** at **14:00.**

- This is a Level 4 working group and reports in to the Testing and Migration Working Group (TMAG).

- To sign up please contact the PMO team PMO@mhhsprogramme.co.uk

The Collaboration Base

- The Collaboration Base is the master source of Programme information, allowing you to access and engage with Design, Testing and Code Change documentation

- This includes the schedule and outputs of all Programme events, including Governance meetings, Webinars, Open Days & Playback sessions

- The dPMO tool provides Participants with a set of interactive and user-friendly dashboarding that display core Programme information

Newsletters

- The Clock is the Programme's weekly newsletter, and the Design newsletter is fortnightly

- They provide you with updates and key information to support delivery of the Programme

- They signposts events, plans, reporting, and documents to assist in planning, design, development, testing and delivery

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DIP Simulator – Interfaces Supported (Release 1, January 2023)

Interface	Name	Notes
MHHSP-IF-009	Notification of LDSO Disconnection / CSS De-Registration	Registration
MHHSP-IF-013	MDS Exceptions Applied	Consumption
MHHSP-IF-014	Rejected Consumption Data Submission	Consumption
MHHSP-IF-018	Notification of Registration Data Item Changes	Registration
MHHSP-IF-021	UTC Settlement Period Consumption Data	Consumption
MHHSP-IF-022	LSS Period Data	LSS
MHHSP-IF-023	LSS Totals Data	LSS
MHHSP-IF-024	Supplier to Advisory Notification to DS	Consumption
MHHSP-IF-026	Registration Service Notification of Supplier Data Chg	Registration
MHHSP-IF-036	Registration Service Notification of Service Appointment & Supporting Info	Registration
MHHSP-IF-040	Notification of Annual Consumption	Consumption
MHHSP-IF-041	Cumulative Meter Reading	Consumption
MHHSP-IF-043	Registration Service Notification of Change of Connection Type	Registration
MHHSP-IF-044	Registration Service Notification of Change of Segment	Registration
MHHSP-IF-047	Notification of the Publication of a Downloadable Asset	ISD

Please note, these have been developed to Interface Catalogue v4.0 and Swagger v0.2

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