ofgem
Making a positive difference
for energy consumers

Innovate UK Modernising Energy Data Access Competition – Supplementary Information

What we are doing with Innovate UK

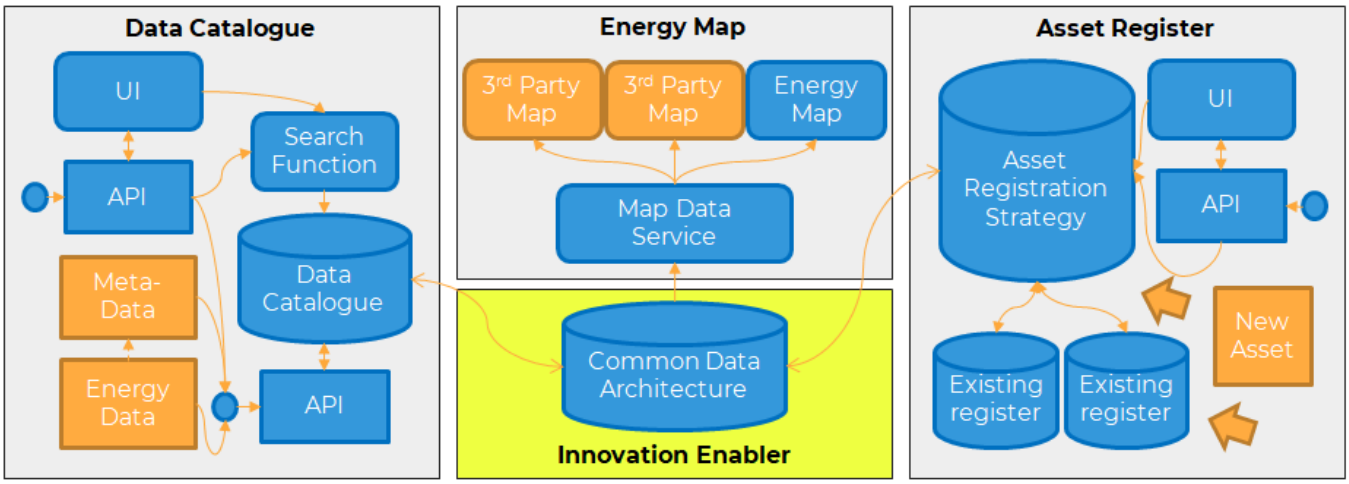
We are working with the Department for Business, Energy and Industrial Strategy (BEIS) and Innovate UK. Together, we have created a Small Business Research Initiative (SBRI) funding competition. The competition challenges innovators to modernise access to energy data. In this document we provide details about the format of that challenge and context for the kind of challenge we are seeking innovation to overcome.

Background

In June of 2019, Energy System Catapult UK published the Energy Data Taskforce: A Strategy for a Modern Digitalised Energy System report. In this report, Catapult UK advocates for energy data, asset, and infrastructure visibility. They outline three relevant building blocks to support the realisation of this vision:

1. Asset registration strategy
2. Data catalogue
3. Digital system map

Collectively BEIS, OFGEM and Innovate UK have performed an initial analysis and have endorsed the recommendation of enabling these building blocks. Further work has identified a collective need (by all of these building blocks) for a **Common Data Architecture** between them, potentially this common data architecture could also benefit other digital infrastructure.



Structure of the Innovate UK Challenge

The challenge will broadly follow the structure below, in accordance with Government Digital Service (GDS) agile princples.

Phase 1 – Discovery (4-6 weeks)

The Discovery phase will aim to prove the validity of the Common Data Architecture concept, or disprove it by identifying a superior alternative. **Three groups will be selected to participate in this phase.** The main outputs of the phase will include, but are not limited to:

- An Approach and Design
- User Personas and Journeys
- Delivery Risk Documentation
- Road Map and Initial Epic Backlog
- Proposed Team

Phase 2 – Alpha (9-12 weeks)

This phase will aim to prove that a solution can be built by delivering a piece of functionality that validates the Approach and Roadmap. **Two groups from the original three will be**

selected to participate in this phase. The main output of the phase will be an Alpha, which will follow GDS principles, that will include, but not limited to:

- Prototype
- De-risking Evidence
- Refined Approach and Design
- Refined User Personas and Journeys
- Refined Roadmap, Epics, and Initial Stories
- Refined Team for Next Phase

Phase 3 – Private Beta (15-40 weeks)

The Private Beta phase will deliver a Minimum Viable Product (MVP) that can be rolled out for real users, although it will not be opened to the public. **One group from the previous 2 will be selected to participate in this phase.** The phase will follow GDS principles, and the main outputs of the phase will include, but are not limited to:

- MVP and Further Iterations
- Roadmap to Live
- Stakeholders Communications Plan
- User Feedback
- Key Performance Indicators
- Future Vision
- Art of the Possible

Common Data Architecture Vision

The following is an example of the capability that the Common Data Service hopes to unlock

In support of achieving the UK's Net Zero target by 2050, an energy innovator is looking to deploy Electric Vehicle (EV) charge points in a particular town. In order to understand where and how to deploy these EV charge points, the innovator must be able to identify suitable points on the grid in which to connect. The innovator must not only have access to datasets

detailing Low Voltage (LV) capacity to support the charge points, but be able to link these datasets to a geolocation for the purpose of determining where they may deploy their charging stations.

Additionally, should the innovator decide that further network capacity is required to adequately support the charging station at a specific location, they must be able to link LV datasets against environmental feasibility studies to determine the suitability of a site for power generating assets, such as photo-voltaic (PV) panels.

The decision of where and how to deploy a critical piece of infrastructure was empowered by access to machine readable datasets that informed the innovator not only about the suitability of the grid, and also allowed the innovator to integrate non-energy data to determine the business feasibility of a specific course of action.