Energy Networks Innovation Process

Annual Project Progress Report Document

The voice of the networks

Date of Submission: 16/06/2021

Annual Project Progress Report Document

Notes on Completion: Please refer to the NIA Governance Document to assist in the completion of this form. Please use the default font (Calibri font size 10) in your submission. Please ensure all content is contained within the boundaries of the text areas.

Project Title (*This cannot be changed once registered*)	Project Reference
Skyline	NIA_SSEN_0048
Funding Licensee(s)	**Project Start Date**
Scottish Hydro Electric Power Distribution Southern Electric Power Distribution UK Power Networks	September 2020
Project Duration	**Year**
21 months	2021
Nominated Project Contact(s)	
SSEN NIA Programme Delivery Manager – Colin Mathieson	

1. Scope

The project consists of the following three stages:

Stage 1 – Define data requirements, identify and engage with stakeholders

- Identify all available sources of information and agree the significant factors
- Engage with stakeholders (EV charge point operators, installers and dealers, as well as EV suppliers)
- Identify barriers to collaboration and data sharing, including compatibility with DNO systems / requirements Creation of a draft contract template agreement for data sharing
- Agree system ownership, usage and commercial arrangements
- Early notification of housing development design and testing

Stage 2 – EV database development and data partner readiness

- Develop the EV database
- Sign up data sources from the identified stakeholders
- Customise database and create API / data interface for sources. Test with existing data sources
- System test and sign off for trials
- EV API development

Stage 3 – Trial and report

- Launch and trial of the system, bringing on selected data sources
- Test EV API to enable provision of Meter Point Administration Number (MPAN) level data to streamline charge point installation process
- Trial evaluation and validation of results
- Dissemination of project learnings and attendance at events (e.g. Low Carbon Networks Innovation conference)

2. Objective(s)

The project objectives are:

- Identification of data requirements, targeting and engagement with key third-party data source companies for early visibility of EV charging connections
- Address barriers and sign agreements with Data Source Companies
- Create a database that will link to the data sources and provide the DNOs with the required EV data
- Conduct a six-month trial of the system
- Develop proof of concept ready to scale to Business-As-Usual

3. Success Criteria

The project will be deemed successful if it meets the following criteria:

Acceptable commercial arrangements with data source owners and improved visibility of EV activities
Development of an EV charging database and API
System trial undertaken with supporting knowledge capture reports

4. Performance compared to the original project aims, objectives and success criteria

Details of how the Project is investigating/solving the issue described in the NIA Project Registration Pro-forma.
Details of how the Project is performing/performed relative to its aims, objectives and success criteria.

Project background

Across GB, the number of electric vehicles (EVs) are rising rapidly and Distribution Network Operators (DNOs) must ensure their networks are able to meet both the aggregated and localised growth in demand through the use of local flexibility solutions and investment in electrical network infrastructure.

Currently, the charge point installers need to notify the respective DNOs within 28 days of installation and commissioning an EV charger that does not require an electricity supply upgrade or new connection. At this point, it is too late for DNOs to consider the network capacity and a potential need for network reinforcement, especially when the EV uptake increases. This project aims to trial the sharing of data on potential EV up-take in a more timely and proactive information method with DNOs.

There is currently no system for early notification of enquiries or orders for EV chargers or for EVs themselves. Early visibility will allow DNOs to use the lead times to better plan for the required network investments or to make alternative solutions to support the uptake of EVs where they will most likely connect.

Project progress

The following progress has been made against the first of the objectives listed above:

Identification of data requirements, targeting and engagement with key third-party data source companies for early visibility of EV charging connections

The data requirements, which will be used in the notification system, have been identified by the project team. These include geolocation data such as MPANs and address details, as well as technical data on the type of EV charge point installation, supply voltage level of customers' premises, etc.

The key third-party data source companies (DSCs) have also been identified. These DSCs are the main target of the engagement process as they are the main source of information required for the system. Engagement with these companies is currently ongoing. The DSCs engaged with so far include EV dealers, charge point installers, car leasing companies and car manufacturers.

5. Required modifications to the planned approach during the course of the project

The Network Licensee should state any changes to its planned methodology and describe why the planned approach proved to be inappropriate. Please confirm if no changes are required.

N/A

6. Lessons learnt for future projects

Recommendations on how the learning from the Project could be exploited further. This may include recommendations on what form of trialling will be required to move the Method to the next TRL. The Network Licensee should also state if the Project discovered significant problems with the trialled Methods. The Network Licensee should comment on the likelihood that the Method will be deployed on a large scale in future. The Network Licensee should discuss the effectiveness of any Research, Development or Demonstration undertaken.

The learning captured so far during this project is outlined below;

- During the ongoing engagement with the DSCs, it was established that data sharing between different parties is still immature from both a legal and a sharing process point of view. Prior to committing to share data with the project group, most engaged companies have had to investigate internally various elements of data sharing, such as legal processes, compliance with GDPR and IT-related feasibility of a continuous data sharing process during and after the project completion. Only a few companies already have such practises in place that allow data sharing on an ad-hoc basis.

7. The outcomes of the project

When available, comprehensive details of the Project's outcomes are to be reported. Where quantitative data is available to describe these outcomes it should be included in the report. Wherever possible, the performance improvement attributable to the Project should be described. If the TRL of the Method has changed as a result of the Project this should be reported. The Network Licensee should highlight any opportunities for future Projects to develop learning further.

To date the project has positively demonstrated the following:

- The full list of data requirements (from minimum to nice-to-have) that Scottish and Southern Electricity Networks (SSEN) and UK Power Networks (UKPN) would require to enable a smooth service upgrade and proactive network planning.
- The type of external parties that are typically in possession of such information.
- Potential barriers to sharing key data identified from the engagement so far, include:
  - Lack of experience in drafting bespoke data sharing agreements
  - Need for further investigation on how to share data externally while remaining compliant with GDPR
  - Need for further investigation into whether the existing IT infrastructure can sustain extraction and sharing of data in a format and timeliness supporting the project's objectives

8. Data Access & Quality Details

A description of how any network or consumption data (anonymised where necessary) gathered in the course of the Project can be requested by interested parties. This requirement may be met by including a link to the publicly available data sharing policy.

To view the full Innovation Data Sharing Policies please visit the respective Scottish and Southern Electricity Networks' and UK Power Networks' websites below:

https://www.ssen.co.uk/InnovationLibrary/Distribution/

http://innovation.ukpowernetworks.co.uk/innovation/en/contact-us/InnovationDataSharingPolicy.pdf

Scottish and Southern Electricity Networks and UK Power Networks recognise that Innovation projects may produce network and consumption data, and that this data may be useful to others. This data may be shared with interested parties, whenever it is

practicable and legal to do so, and it is in the interest of GB electricity customers. In accordance with the Innovation Data Sharing Policies, SSEN and UKPN aim to make available all non-personal, non-confidential/non-sensitive data on request, so that interested parties can benefit from this data.

9. Foreground IPR

A description of any foreground IPR that have been developed by the project and how this will be owned.

N/A