

**OPENING UP
THE SMART GRID**

Data Protection Strategy
Version 1.2





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Final Approval

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1. Introduction

1.1. Purpose

The purpose of this document is to outline the strategy for the collection of personal data for the OpenLV project, as defined in the General Data Protection Regulation (GDPR) 2018 [Ref. 1].

1.2. The OpenLV Project

OpenLV¹ is a Network Innovation Competition (NIC) research and development project (the “Project”) that will trial and demonstrate an open, flexible platform that could ultimately be deployed in every HV and LV substation in Great Britain.

The OpenLV Solution (LV-CAP™) is a software platform that operates on off-the-shelf commodity hardware. The LV-CAP™ solution is analogous to a smartphone. In the case of the smartphone an open platform has led to a rapid acceleration in software applications (apps) provided by a wide variety of organisations, covering a huge array of services. The Project will trial a similar, open platform, but for a substation. It will act as an interface between LV substation assets and the customers that it serves. The project will demonstrate that the Solution can:

- Provide a platform to deploy a workable open substation platform for both monitoring and control of the LV network;
- Create an Eco-System to provide third parties, including community groups with access to network data; and
- Stimulate the Market to facilitate a common platform with low cost entry for a range of new app developers.

To test these aims, the project will apply three Methods, together with a common set of enabling works as shown in Figure 1.

¹ ‘OpenLV’ is the formal and registered project name for contractual and reporting purposes. The brand name may be different for customer-facing recruitment and dissemination purposes.

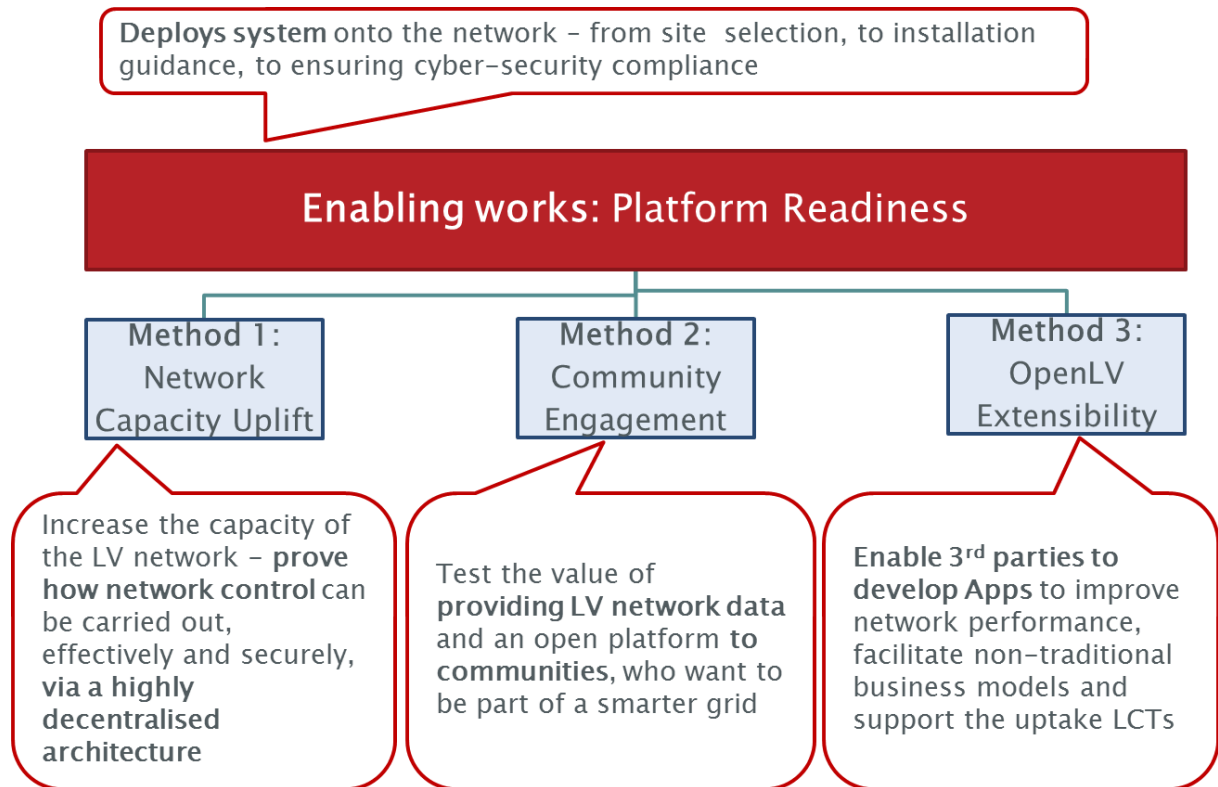


Figure 1: Overview of the three methods being used in the project

LV-CAP™ will be installed in 80 LV substations located in the WPD licence area. The Project will use three Methods to demonstrate the platform’s ability to provide benefits to the network owner, customers, and service providers. The three Methods are as follows:

- **Method 1: LV Network Capacity Uplift** - 60 units - This will perform measurements and control within the substation. The Project will deploy proven techniques - ‘Dynamic Thermal Ratings App’ and ‘Network Meshing App’.
- **Method 2: Community Engagement** - 10 units - The platform can be used to provide data to customers or groups of customers. The project will work with community groups to understand whether Apps for their benefit can be developed and installed on the platform and work to identify funding sources that can be used to develop specific Apps for their benefit.
- **Method 3: OpenLV Extensibility** - 10 units - This method will provide a platform for third parties to develop and release their own apps to provide benefit to DNO and customers alike.

OpenLV is hosted by Western Power Distribution (WPD) and is delivered by EA Technology.

1.3. Delivery of the OpenLV project

The following relevant subcontractors have been selected to deliver the roles as part of the OpenLV project:

Nortech

Nortech will provide the communications equipment and associated software (communications container on the intelligent substation device) for Method 1. The Central IT Architecture provided by Nortech (Application Deployment Server) will enable deployment of new Apps on the intelligent substation devices.

Lucy Electric GridKey

Lucy Electric Gridkey will provide the communications equipment and associated software (communications container on the intelligent substation device) for Methods 2 and 3. The Central IT Architecture provided by Lucy Electric Gridkey (Cloud Based Hosted Server) will enable relevant data from the intelligent substation devices to be shared with 3rd party organisations for Methods 2 and 3.

In addition, Lucy Electric Gridkey will provide technical support and guidance throughout the project lifecycle. This will include a review of the OpenLV systems architecture, the requirements specification for the intelligent substation devices, assessing the approach for wide scale deployment and providing input to how the OpenLV Solution could be transferred to BaU

CSE

CSE have been recruited as the community engagement specialist for the project. They will engage with communities to enable up to 10 intelligent substation devices to be deployed. These devices will enable communities to exploit the LV monitoring data provided by the OpenLV intelligent substation devices and/or develop innovative algorithms and applications that could be deployed on the OpenLV intelligent substation devices.

Regen

Regen have been selected to provide Economic Analysis and Extrapolation of Community Learning expertise. They will be responsible for assessing the longer-term potential and economic impact of the use of OpenLV devices to community groups. They will evaluate the effectiveness of the community deployments within the project and develop materials to be shared with other communities beyond the project, to share learning and provide guidance on how these other communities across Great Britain can benefit from the learning gained within the project

Automotive Comms

Automotive Comms are the Marketing, PR and Dissemination company who will be responsible for developing the Project's marketing strategy, including creation of Project Branding, establishment, hosting and management of the Project Website. They will also manage PR and Dissemination for the Project, in coordination with EA Technology's and WPD's marketing representatives

1.4. Definition of Personal Data

The following definitions are taken from the General Data Protection Regulations 2018:

- **“Personal Data”**: is defined as any information which is capable of being used to identify a living individual. In addition to name, address and contact details, including online identifiers. It could include individual preferences, transactional history, record of activities or travels, profiles or credit scores.
- **“Special Category Data”**: is defined as any personal data that relates to any of the following: racial or ethnic origin, political opinions, religious or other similar beliefs, trade union membership, physical or mental health, sexual life, genetic data and biometric data
- **Data Subject**: the individual of which data is being disclosed or held.

From the above definitions, it follows that some elements of Personal Data will be collected as part of this Project. The project will not collect any Sensitive Personal Data.

1.5. The Data Controller

EA Technology is the 3rd Party Lead Supplier for the Project and is responsible for overall project management and delivery. WPD is the Lead/Funding DNO for the Project providing access to network areas in the UK for undertaking the trials and associated support. As a result, EA Technology is the “Data Controller” for the Project.

As defined in the Information Commissioners Office, Data sharing code of practice [Ref. 2] a Data Controller is “determines the purposes and means of processing personal data”

1.6. Document Structure

The structure of this document is as follows:

- **Section 2**: Outlines what data will be collected and how it will be used;
- **Section 3**: Lists the data items that will be collected on the Project;
- **Section 4**: Shows how prior information will be provided for Project trial participants and how consent will be provided;
- **Section 5**: Outlines how Personal Data for Priority Services Register (PSR) Customers will be obtained;
- **Section 6**: Outlines who owns the Personal Data utilised as part of the Project;
- **Section 7**: Outlines who owns other data collected as part of the Project;
- **Section 8**: Outlines how long the data will be retained; and
- **Section 9**: Shows how Personal Data will be managed.

2. What data will be collected and how it will be used

2.1. Overview

An overview of the Personal Data requirements for the project are outlined below:

- **Method 1: LV Network Capacity Uplift** - As part of Method 1 the OpenLV Platform will be installed in 60 LV substations in WPD's licence areas. There will be no planned loss in supply to Customers as part of this installation works². No personal or sensitive personal data will be collected for this Method.
- **Method 2: Community Engagement** - As part of Method 2 the OpenLV Platform will be installed in 10 LV substations in WPD's licence areas. In order to engage with Community Groups, to promote the use of LV network data by communities or to develop new apps as part of the Project, CSE has been engaged to act as the Community Engagement Specialist to engage with Community Groups. Whilst it is envisaged that the Project will engage with established Community Groups, CSE will need to collect names and addresses of customers within Community Groups. Further information can be found in the OpenLV Customer Engagement Plan [Ref. 3].
- **Method 3: OpenLV Extensibility** - As part of Method 3 the OpenLV Platform will be installed in 10 LV substations in WPD's licence areas. EA Technology will lead engagement with organisations such as companies and universities to promote the use of LV network data by communities or to develop new apps as part of the Project. Whilst it is envisaged that the Project will engage with organisations rather than individuals EA Technology may need to collect names and addresses of Customers depending upon the uses identified for the LV network data and/or apps. Further information can be found in the OpenLV Customer Engagement Plan [Ref. 3].

No Sensitive Personal Data will be collected by the Project.

2.2. Customer data

In terms of Method 2, CSE, who has been appointed to act as Community Engagement Specialist, will hold a database of Community Groups that may be interested in participating in the Project. This database is likely to contain Personal Data such as names, addresses and contact details of individual(s) within Community Groups. This information will be collected and stored by CSE and will be used to engage Community Groups for Method 2.

For Method 3, EA Technology may need to engage with individual customers. As a result, Personal Data such as names, addresses and contact details of individual(s) will be collected either via a form on the Project website or via third party organisations with existing contacts.

Section 3 outlines all the personal and monitored data collected as part of the Project.

² There will be no planned loss in supply for installation works for all Methods.

2.3. Trial data

During the Project trials the following data will be collected from LV substations:

- **Current data:** From all feeders in LV substations where the LV-CAP™ platform will be deployed;
- **Voltage data:** From all monitored transformers where the LV-CAP™ platform will be deployed; and
- **Temperature data:** From all monitored transformers where the LV-CAP™ platform will be deployed.

The Project will target substations that have a load profile utilising a higher proportion of the available capacity. This will guide site selection with a high number of customers on each feeder. The Project trials will therefore target feeders with more than 10 customers. No individual household load profile will be identifiable from this data therefore this aggregate data is not Personal Data.

The OpenLV systems architecture is shown in Figure 2:

- **The Application Deployment Server:** Will be provided by Nortech and will be used to deploy the apps for all Methods and to collect trial data for Method 1.
- **The Cloud Based Hosted Platform:** Will be provided by Lucy Electric GridKey and will be used to collect trial data for Methods 2 and 3 for use by Community Groups and third parties.

The trial data will be transmitted securely to both the Application Deployment Server and the Cloud Based Hosted Platform.

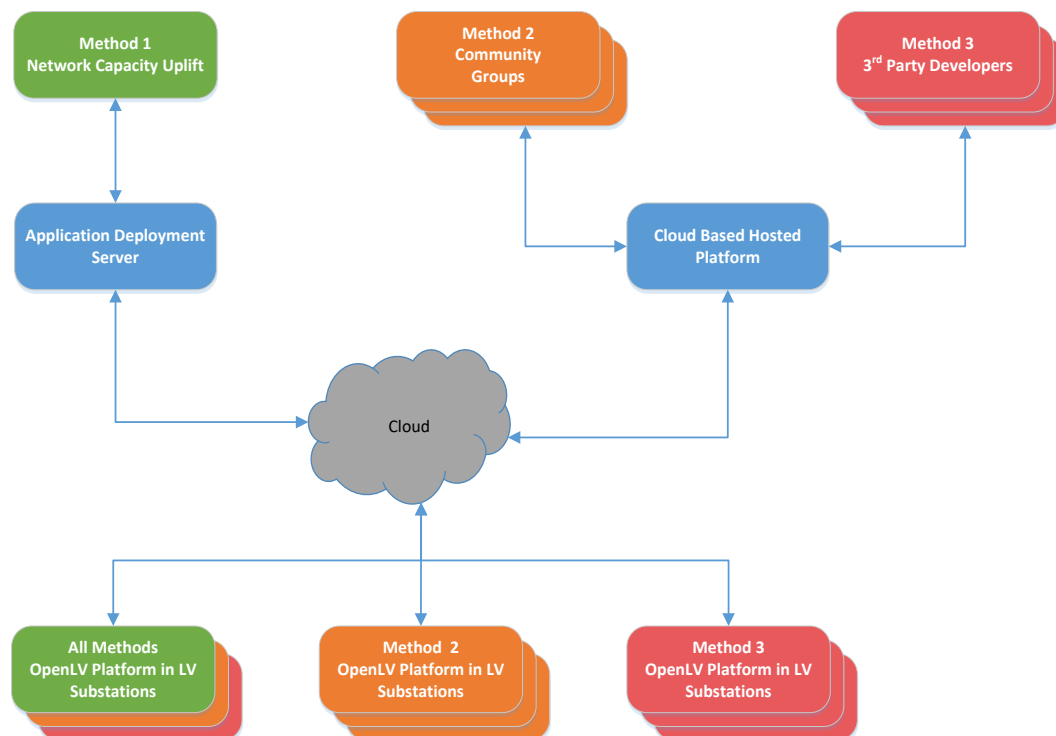


Figure 2: OpenLV Systems Architecture

Section 3 outlines all the personal and monitored data collected as part of the Project.

3. List of data items

The list of data items is shown in Table 1.

Table 1: List of Data items

No.	Data item	Source	Purpose	Personal Data	Sharing
1	Customer Name, Address, phone number(s) and email addresses	WPD's MPAS & PSR CSE OpenLV Website Form 3 rd Party Organisations	To identify customers interested in participating in Project trials and contacting them throughout the duration of the Project, as required.	Yes	WPD EA Technology CSE
2	MPAN	WPD's MPAS system	To uniquely identify individual Customers for Methods 2 & 3 (if required).	No	EA Technology Regen CSE
3	Aggregate current data (per feeder with >10 Customers)	The LV-CAP™ platform	To provide LV network data for use within all Methods.	No	EA Technology WPD Regen CSE Nortech Lucy Electric GridKey

No.	Name	Source	Purpose	Personal Data	Sharing
4	Voltage data from all monitored transformers	The LV-CAP™ platform	To provide LV network data for use within all Methods.	No	EA Technology WPD Regen CSE Nortech ³ Lucy Electric GridKey
5	Temperature data from all monitored transformers	The LV-CAP™ platform	To provide LV network data for use within all Methods.	No	EA Technology WPD Regen CSE Nortech Lucy Electric GridKey
6	Asset ratings (transformers and feeders)	WPD Asset Databases	To provide enable relevant uses of the LV network data to be developed or utilised within Apps for all Methods.	No	EA Technology WPD Regen CSE Nortech Lucy Electric GridKey

³ The Application Deployment Server will be hosted in EA Technology's office. Nortech will have remote access to this Server for maintenance and support throughout the Project.

No.	Name	Source	Purpose	Personal Data	Sharing
7	LV Network GIS data	WPD GIS Mapping Tool (EMU)	To provide enable relevant uses of the LV network data to be developed or utilised within Apps for all Methods	No	EA Technology WPD Regen CSE Nortech Lucy Electric GridKey
8	Customer feedback from Face to Face interviews (if required) ⁴ N.B. these should be anonymised as soon as possible, and before being passed to other project partners/ suppliers	EA Technology CSE Regen	To meet the criteria of Knowledge capture and Dissemination within the Project	Yes	CSE
9	Customer feedback from online surveys (if required) N.B. these will before being passed to other project partners/ suppliers	EA Technology CSE Regen	To meet the criteria of Knowledge capture and Dissemination within the Project	Yes	CSE

⁴ Items 8 and 9 are “if required”. This is due to the fact the Economic Assessment and Extrapolation of Community Learning Supplier and Community Engagement Supplier have not been appointed at the time of writing this document.



No.	Name	Source	Purpose	Personal Data	Sharing
10	Photos	EA Technology CSE Automotive Comms Regen	For marketing the learning from the Project	Yes	EA Technology WPD CSE Regen Automotive Comms

At the current time, the uses for the LV Network data and the functionality that will be provided by apps for Methods 2 and 3 is not known. This document including the above Table will be amended, as required, during the Project.

4. Consent for data use and prior information

As part of the registration process customer consent will be gained relating to the use of customer contact details. This consent will be collected via a form on the Project website and will be stored in the website database that will be hosted by EA Technology.

The Project website will display information in relation to the Project that the customer needs to know prior to registering their interest.

All customers wishing to participate in the Project will be required to fill out a Customer consent form. This consent form requires customers to demonstrate positive consent by “opting in” to the Project by selecting a check box.

For marketing purposes, customer(s) may be asked to be photographed in order to help market and disseminate the Project learning. Customers will be asked for permission prior to any photographs being taken and their consent will be recorded via a separate consent form. Any photographs used for marketing purposes will only show basic information; only first names and local town/city will be presented with the photograph. The photographs taken will only be used to promote the Project as agreed with the customer at the time of giving consent.

Project learning will be disseminated by email via newsletters by the project partners to their pre-existing contact lists. These lists are managed according to the latest Data Protection legislation.

5. Priority services register customers

The Project will not actively target Priority Services Register (PSR) customers. Where individual Customers are engaged on the Project, as part of Methods 2 and 3, they will be cross referenced with WPD’s PSR. Participant data will be matched with PSR primarily on addresses and in the exceptional cases where this is not sufficient to match then name data will also be provided. This will allow suitable risk assessments to be made prior to project commencement to ensure that no customer is put at additional risk through the Project trials.

6. Who owns the personal data

The ownership of personal data is outlined below:

- **Customer Contact Data:** Will be owned by WPD, CSE and 3rd party organisations within their existing databases. EA Technology will own the customer contact data that is collected as part of the Project.
- **Customer feedback from face to face interviews and online surveys (if required):** Will be owned by EA Technology and CSE.
- **Photos:** Will be owned by EA Technology and CSE.

The data subject at all times retains the right to be removed from any project database, and to request that their details be updated or corrected.

7. Who owns the other data

All other data (that does not contain personal or identifiable data), as listed below, will be collected by EA Technology but ultimately owned by WPD:

- Meter Point Access Number (MPAN);
- Aggregate current data (per feeder with >10 Customers);
- Voltage data from all monitored transformers;
- Temperature data from all monitored transformers;
- Asset ratings (transformers and feeders); and
- LV Network GIS data.

8. How long will data be retained

Personal and other data collected specifically for the Project (as listed in Section 3) will be retained until the end of the Project. As part of the project close down procedure, all personal data will be anonymised and the original personal data will be permanently deleted.

The customer contact data owned by WPD and the CSE will be retained and dealt with under their existing policies and procedures.

9. Managing personal data on a privacy by design approach

The Information Commissioners Office Data Sharing Code of Practice was used to inform the approach to data sharing [Ref. 2]. EA Technology processes data in accordance with its ICO notification.

The core data protection principles that have been considered for the Project are listed in Table 2.

Table 2: Project Core Data Protection Principles

No.	Data Protection Principles	Comment
1	“Personal data shall be processed lawfully, fairly and in a transparent manner in relation to individuals”;	Personal data is being shared for a valid business purpose. i.e. to pursue the legitimate interests of the data controller.
2	“Personal data shall be collected for specified, explicit and legitimate purposes and not processed in a manner that is incompatible with those purposes; further processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes shall not be considered to be incompatible with the initial purposes”;	The purpose for which the data may be used by the contractors is clear and bounded by contractual arrangements.
3	“Personal data shall be adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed”;	Personal data has been limited to that which is required.
4	“Personal data shall be accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay”.	The Project is utilising established processes for sharing updates to address data within the industry.
5	“Personal data shall be kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed; personal data may be stored for longer periods insofar as the personal data will be processed solely for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes subject to implementation of the appropriate technical and organisational measures required by the GDPR in order to safeguard the rights and freedoms of individuals”.	Contractual clauses require (or will require) the data to be returned or destroyed at the end of the project.
6	“Personal data shall be processed in a manner that ensures appropriate security of the personal data, including protection against unauthorised or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organisational measures”.	This data processing and sharing does not contravene the rights of data subjects.

References

1. General Data Protection Regulation : <http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679&from=enInformation>
2. Commissioners Office, Guide to the General Data Protection Regulations, : <https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/key-definitions/>
3. OpenLV Customer Engagement Plan, Version 1.0.

Appendix A – Example Project Trial Customer Consent Form

Consent to participate in the OpenLV Trial

To allow your data to be gathered, and to participate in the research for the OpenLV trial.

This consent form confirms my commitment to take part in the OpenLV project, that I will participate in associated research, and that I agree to my data being used for the purposes of the OpenLV project. This consent covers:

- Participation in research
- Collection of my contact data
- Use of my contact data
- My contact details being passed to other project partners or suppliers
- Being sent OpenLV project newsletters and updates

Your details will not be used for marketing purposes.

Please refer to the Customer Engagement Plan and Data Protection Strategy for further information:

[link to docs on project website]

Participant:

Title		House number / name	
Initials		Street/ road name	
Surname		Locality	
Contact number		Town/ City	
Email address		Postcode	
Signed		Date	

I agree that my contact details can periodically be used to send me updates on the progress of the OpenLV project