

Electric Vehicles and Demand Response using OpenADR

Smart Charging and V2G Webinar Series

2nd October 2019



The Alan Turing
Institute



Supergen
Energy Networks

Smart Charging and V2G Webinar Series

- ▶ Aim: Find out who is doing what on Electric Vehicle Charging Infrastructure.
- ▶ Objective: Collaborate in the development of a fit for purpose EV charging infrastructure.
- ▶ UK Policy development (Consultation, Secondary legislation on smart charging)

The screenshot shows the UK legislation website (legislation.gov.uk) for the Automated and Electric Vehicles Act 2018. The page includes a search bar, navigation links, and a table of contents. The table of contents lists sections such as 'PART 1 Automated vehicles: liability of insurers etc' and 'PART 2 Electric vehicles: charging'. The status is noted as 'This is the original version (as it was originally enacted)'.

The screenshot shows the GOV.UK website for an open consultation titled 'Electric vehicle smart charging'. The page includes a search bar, navigation links, and a breadcrumb trail: Home > Transport > Driving and road transport > Road transport and the environment > Low emission and electric vehicles. The consultation was published on 15 July 2019 and last updated on 19 July 2019. It is from the Department for Transport and Office for Low Emission Vehicles.

Summary
Proposals for regulations to ensure that electric vehicle chargepoints sold or installed in the UK have smart charging functionality included.
This consultation closes at **11:45pm on 7 October 2019**

Consultation description

Consultation on proposals for electric vehicle chargepoint smart technology regulations. The proposed regulations would require that electric vehicle chargepoints sold or installed in the UK have smart charging functionality included.

Alan Turing Institute- Vehicle Grid Integration

Vehicle grid integration | The Alan Turing Institute

turing.ac.uk/research/research-projects/vehicle-grid-integration

Home + Research + Research projects

Vehicle grid integration

Using data science to modernise transport and electricity infrastructure

Learn more ↓

Related programmes
Data centric engineering

Research areas

Communications Optimisation

Introduction

Electric vehicles (EVs) can break our dependence on fossil fuels in transport and energy sectors. However, mass adoption of EVs introduces significant and disruptive electricity demand to meet the charging needs of these vehicles. Vehicle grid integration strategies, underpinned by data science, ensure that electric vehicle charging infrastructure is synergistic with the electricity grid, reliable, cost effective and sustainable.

Explaining the science

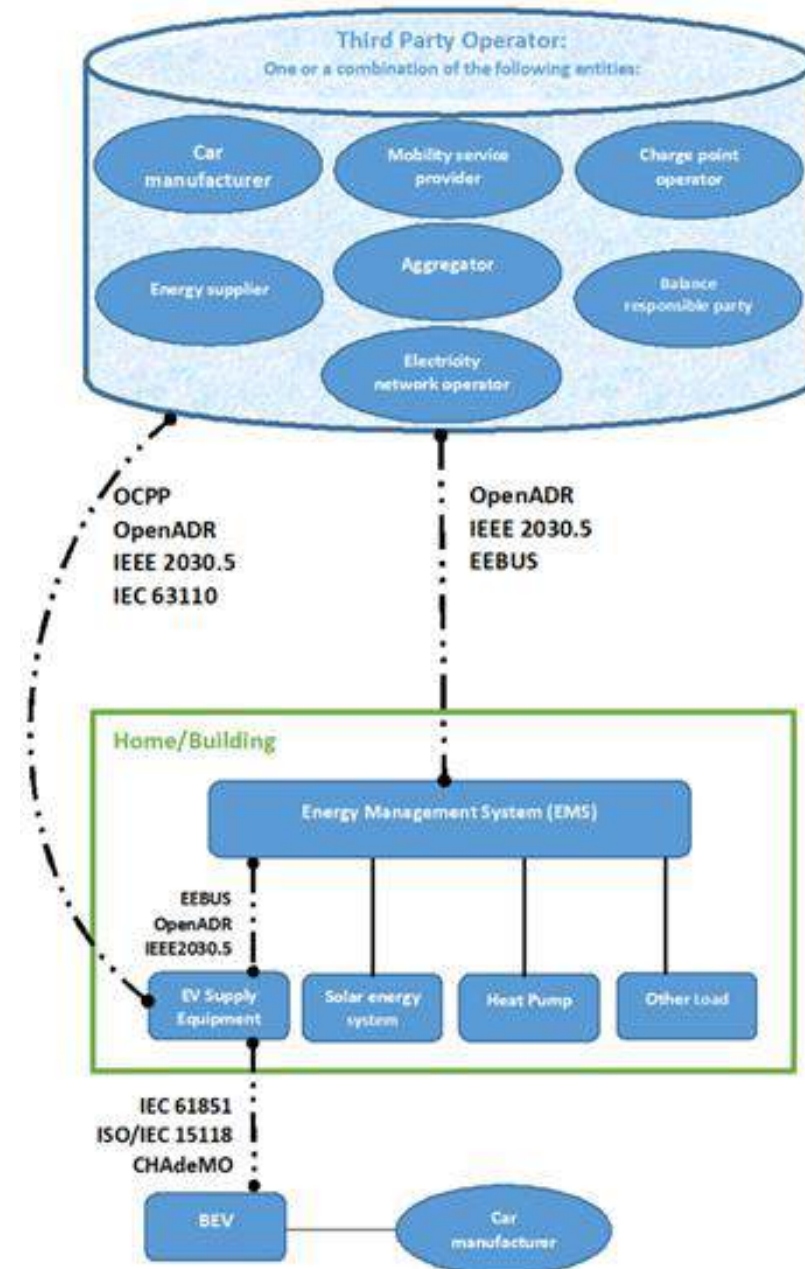
Jump to

- Research areas
- Introduction
- Explaining the science
- Project aims
- Applications
- Organisers
- Researchers
- Contact info

- ▶ Apply and develop data science methods and tools to help in the transformation of electricity and transport infrastructure into sustainable and efficient infrastructure, while maintaining reliable operation.
- ▶ Contribute to open communication protocols for vehicle grid integration.

EV ecosystem for smart charging-communication protocols

- EV charging management strategies is key.
- Energy and mobility entities involved.
- Information and control objects exchange.
- Communication protocols provide a set of rules and guidelines to facilitate the communication and data exchange between two or more entities.



Neaimeh and Andersen, 2019, *in review*

Smart Charging and V2G Webinar Series

myriam.neaimeh@newcastle.ac.uk

<https://www.turing.ac.uk/research/research-projects/vehicle-grid-integration>



@myriamnea



myriamneaimeh



The Alan Turing Institute



Landing Page

<https://www.ncl.ac.uk/cesi/events/webinars/v2gwebinars/>

- ▶ Recordings and slides
- ▶ Details for future events

National Centre for
Energy Systems Integration

Newcastle University > National Centre for Energy Systems Integration > Events > Webinars > Webinar Series - EV Smart charging

Research
Working with Industry
About Us
Our Team
News
Events
Launch Event
Webinars

Webinar Series - EV
Smart charging

Electric Vehicles' Smart Charging Webinar Series

This series of webinars provides an introduction to vehicle to grid (V2G) and smart charging projects and topics, with invited guest speakers from institutions in the UK and overseas.

- Smart Charging and V2G - Introduction to ongoing activities in the US and UK +
- Communication Protocols for Electrical Vehicle Charging - Introduction to OCPP +
- Electric Vehicles and Demand Response using OpenADR +

Today's speakers

Rolf Bienert, Managing Director, [OpenADR Alliance](#)

Carl Besaw, [Southern Californian Edison](#)

Clay Collier, [ChargePoint](#)