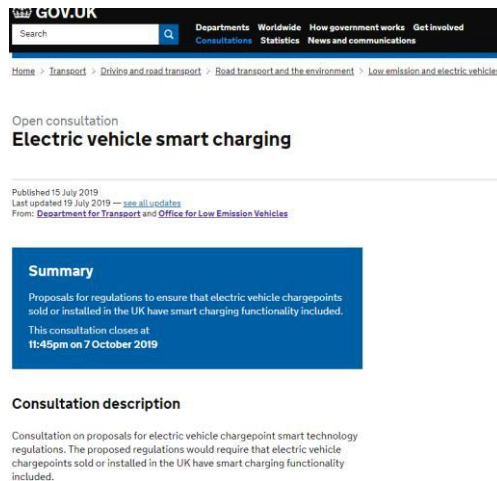


Smart Charging and V2G Webinar Series

- ▶ 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)



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Home > Transport > Driving and road transport > Road transport and the environment > Low emission and electric vehicles

Open consultation
Electric vehicle smart charging

Published 15 July 2019
Last updated 19 July 2019 — see all updates
From: 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.



legislation.gov.uk

Advised by THE NATIONAL

Home Understanding Legislation EU Legislation and UK Law Browse Legislation Changes To Legislation Search

Title: Year: Number: Type: All Legislation (excluding draft) Advance

Automated and Electric Vehicles Act 2018

UK Public General Acts • 2018 c. 18 • Table of contents

Table of Contents Content Explanatory Notes More Resources Plain View

What Version

Latest available (Revised) Original (As enacted) Collapse all

Opening Options More Resources Collapse

Status: This is the original version (as it was originally enacted).

Introductory Text

PART 1 Automated vehicles: liability of insurers etc.

1. Listing of automated vehicles by the Secretary of State
2. Liability of insurers etc. where accident caused by automated vehicle
3. Contributory negligence etc.
4. Accident resulting from unauthorised software alterations or failure to update software
5. Right of insurer etc. to claim against person responsible for accident
6. Application of enactments
7. Report by Secretary of State on operation of this Part
8. Interpretation

PART 2 Electric vehicles: charging

Introductory

9. Definitions

Requirements and prohibitions

10. Public charging or refuelling points: access, standards and connection
11. Large fuel retailers etc. provision of public charging or refuelling points
12. Duty to consider making regulations under section 11(1)(a) on request by elected mayor
13. Information for users of public charging or refuelling points
14. Transmission of data relating to charge points
15. Smart charge points

General and supplementary

16. Enforcement
17. Exceptions



Landing Page

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

- ▶ Recordings and slides
- ▶ Details for future events

The screenshot displays the Newcastle University website for the 'Electric Vehicles' Smart Charging Webinar Series. The page header includes the Newcastle University logo and navigation links: 'Who we Are', 'Work with Us', 'Research', 'Study', 'Alumni', and 'Staff & Students'. Below the header, the page is titled 'National Centre for Energy Systems Integration'. A breadcrumb trail reads: 'Newcastle University > National Centre for Energy Systems Integration > Events > Webinars > Webinar Series - V2G'. A left-hand navigation menu lists: 'Research', 'Working with Industry', 'About Us', 'Our Team', 'News', 'Events', 'Launch Event', 'Webinars', 'Webinar Series - V2G', 'Contact Us', 'Twitter', 'Blog', and 'CESI Flex Fund'. The main content area features the title 'Electric Vehicles' Smart Charging Webinar Series' and a sub-header 'Smart Charging and V2G - Introduction to ongoing activities in the US and UK'. A description states: '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.' The featured webinar is 'Communication Protocols for Electrical Vehicle Charging - Introduction to OCPP', dated Thursday, 12 September 2018, at 16:00-17:00 BST. It includes an agenda overview, an introduction to OCPP by Robert de Lencastre, and OCPP Smart Charging details. A registration section notes that registration is essential for further information. A recording of the event is also mentioned.

Upcoming events

- ▶ Robert de Leew- ihomer and Open Charge Alliance

Communication Protocols for Electrical Vehicle Charging- Introduction to OCPP

Date: 12th September 2019. 16:00-17:00 UK time.

This webinar will introduce Open Charge Point Protocol (OCPP), which is one of the most widely used open protocols to communicate with EV chargers.

- ▶ Rolf Bienert, Technical Director- OpenADR Alliance

Communication Protocols for Electrical Vehicle Charging- Introduction to OpenADR

Date: 2nd October 2019. 16:00-17:00 UK time.

This webinar will introduce Open Automated Demand Response (OpenADR) standard, which is used to communicate with distributed energy resources

- ▶ Stakeholder from California

Content TBC- California VGI roadmap; Overview of smart charging projects using open protocols

Date TBC

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

Alan Turing Institute- Vehicle Grid Integration

Vehicle grid integration | The Alt | X +

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.

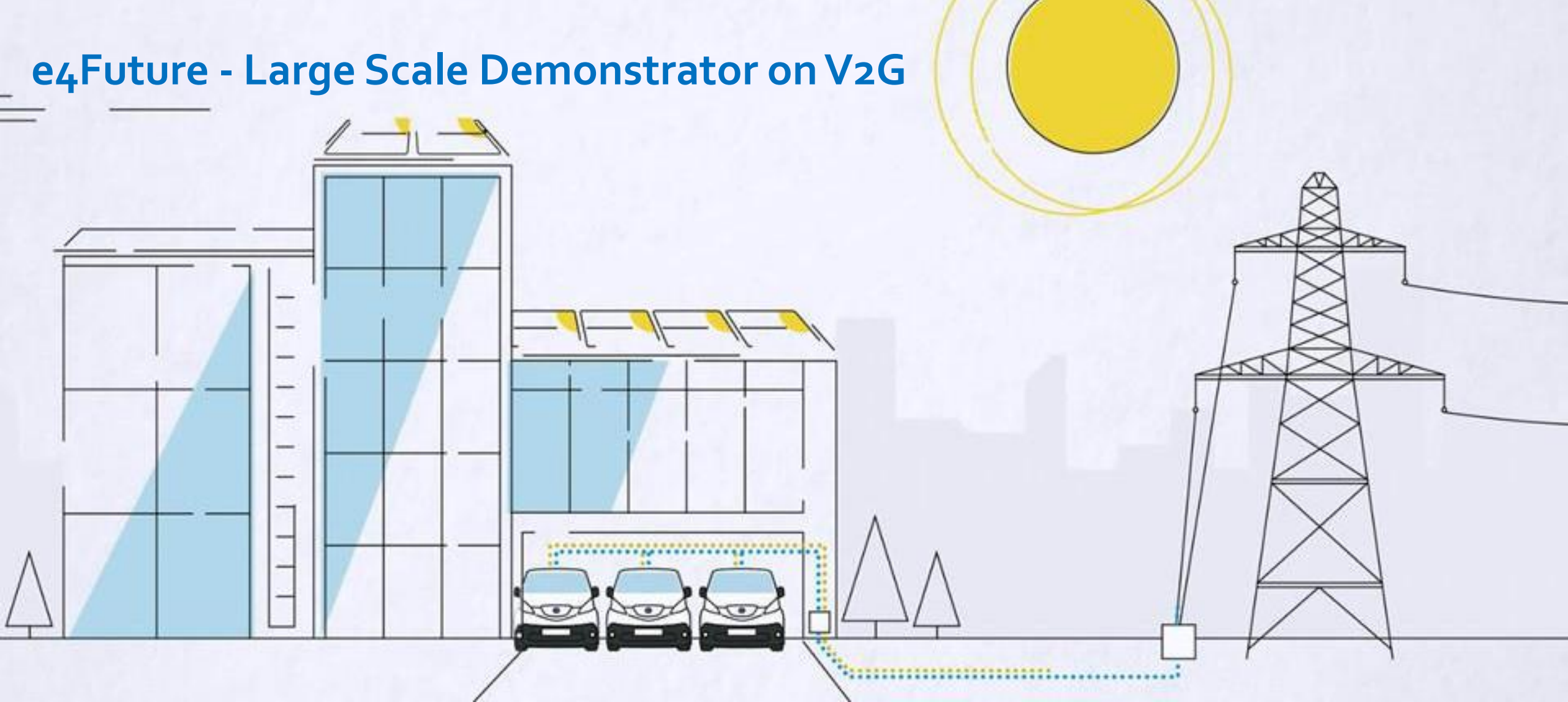
Explaining the science

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.

e4Future - Large Scale Demonstrator on V2G



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Imperial College London


UK Power Networks

NORTHERN POWERGRID

e-on | UK

nationalgrid


Department for
Business, Energy
& Industrial Strategy


Office for Low Emission
Vehicles

E4future Mission Statement

- ▶ Through large-scale deployment of 1000 V2G chargers the e4Future project aims to provide in-depth insight into:
 - ▶ Optimal use cases for using V2G fleets to offer power system services;
 - ▶ The technical factors involved in aggregating large numbers of electric vehicles and charging from/discharging to the grid;
 - ▶ The opportunities for and experience of participants choosing to take advantage of V2G technology;
 - ▶ Ensuring the privacy and security of V2G users and infrastructure;
 - ▶ Key barriers to V2G deployment.

Work Packages

WP1 Vehicle to grid participant experience

WP2 Understanding potential and impact of V2G to the grid

WP3 Pilot implementation and data analysis

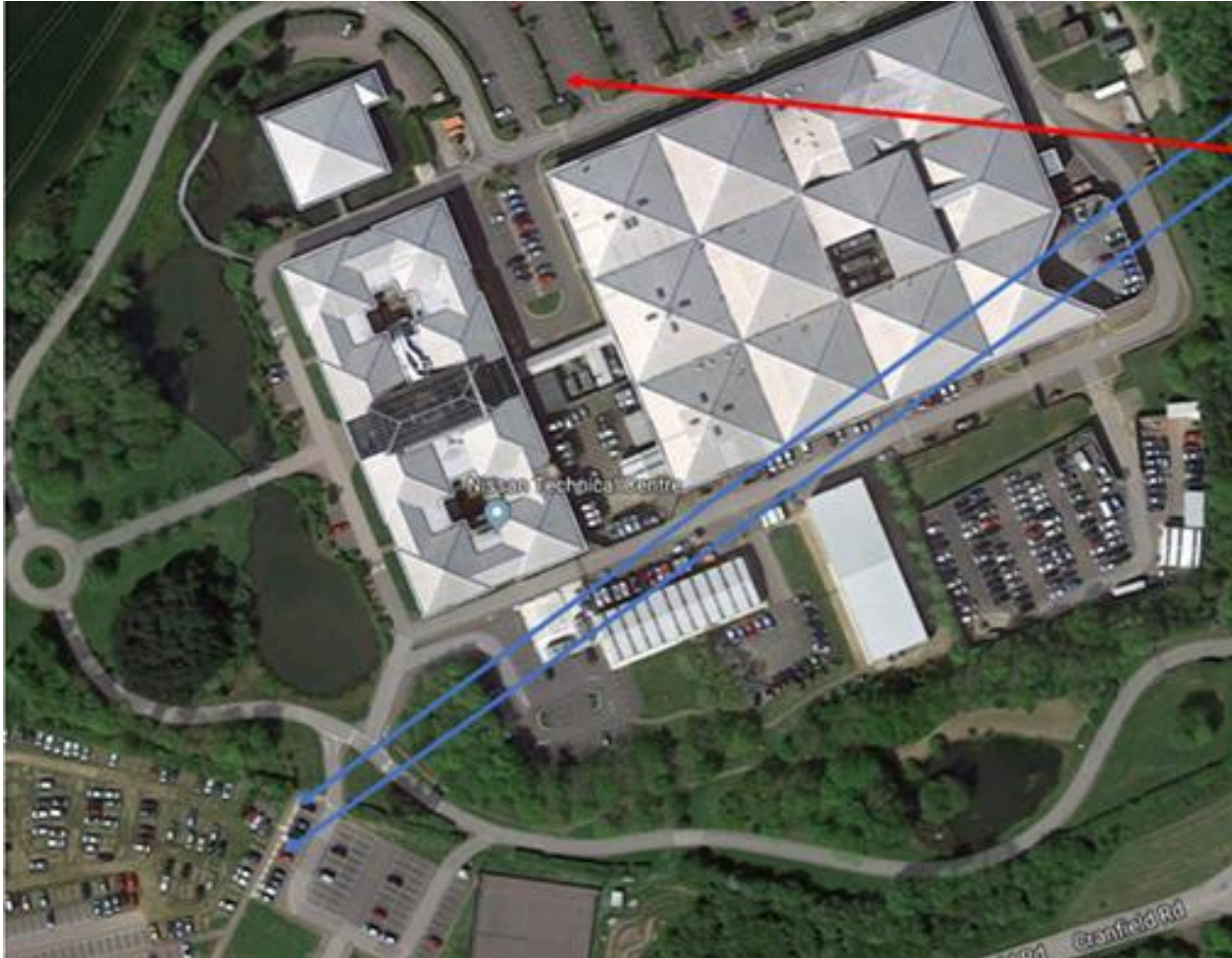
WP4 Privacy and Cybersecurity

WP5 Policy and regulatory framework for V2G

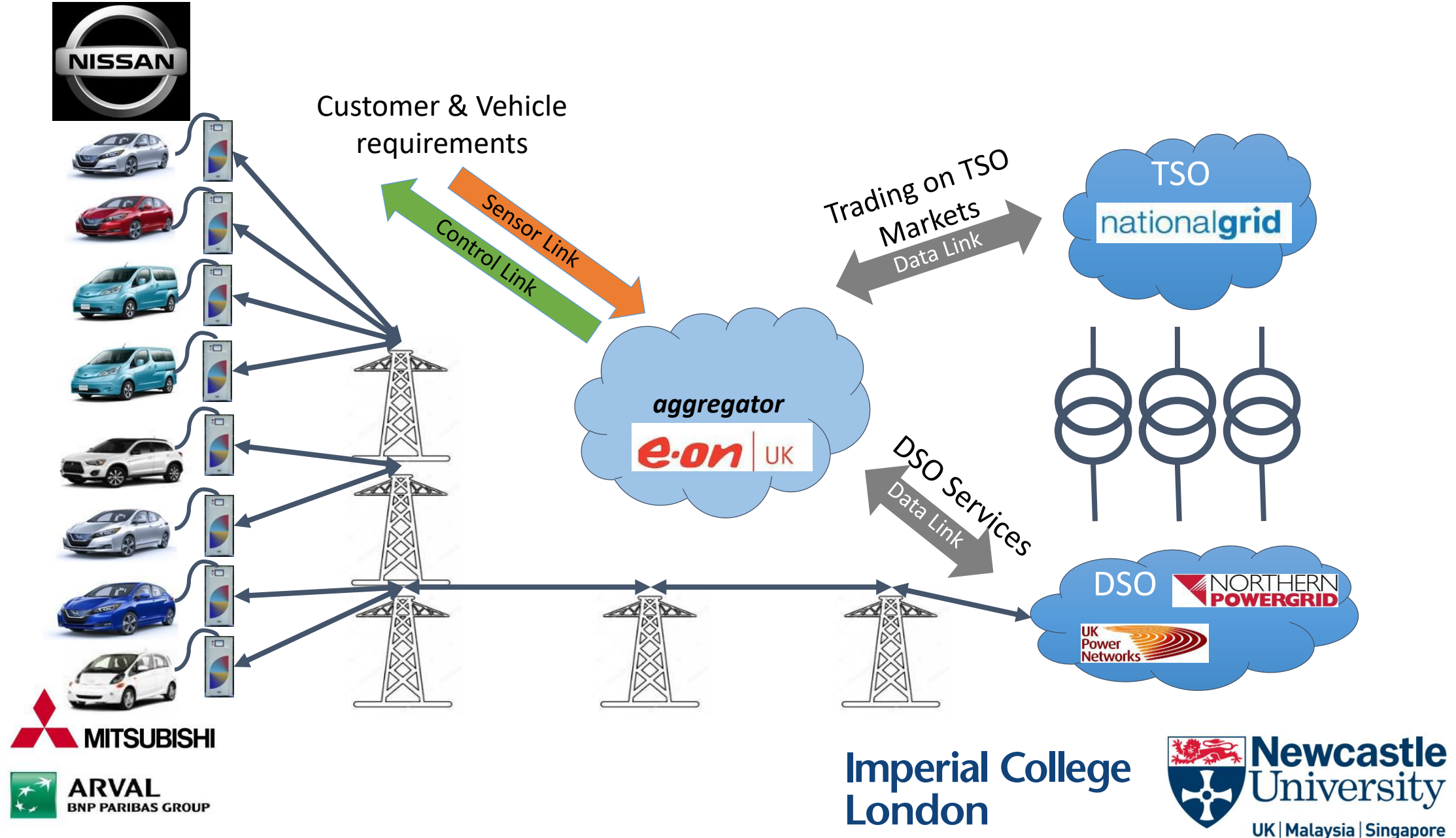
WP6 Dissemination

WP7 Project coordination

Preparation for First Install at NTCE Cranfield



e4Future consortium



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



@myriamnea



myriamneaimeh



The Alan Turing Institute



Today's speakers

- ▶ A Highly Efficient Control Framework for Centralized Residential Charging Coordination of Large Electric Vehicle Populations.

Don Scoffield, Idaho National Laboratory, US

- ▶ The Adaptive Charging Network project

Zachary Lee, Caltech, US