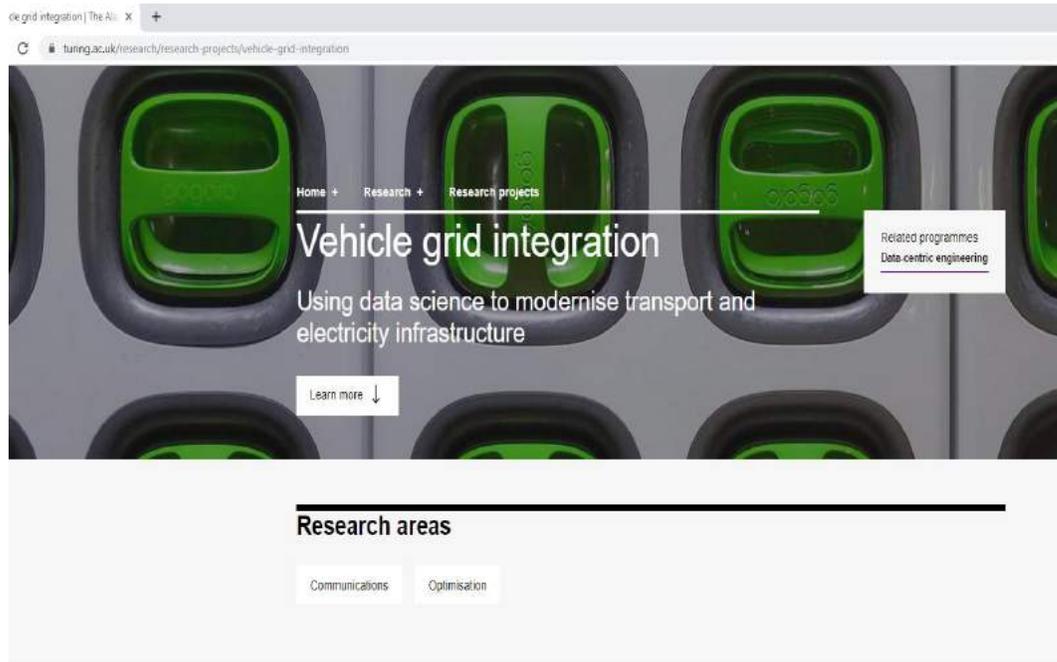


Supergen Smart Charging Webinar
in collaboration with IEA HEV TCP Task 43
presents a series of talks on cyber security.



Alan Turing Institute- Vehicle Grid Integration Group



- ▶ Apply and develop data science methods and tools to help in the transformation of electricity and transport infrastructure.
- ▶ Contribute to open communication protocols for vehicle grid integration.
- ▶ Assess security of communication, hardware and software of grid-integrated EV charging infrastructure.

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



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



National Centre for
Energy Systems
Integration

Supergen

Energy Networks

Landing Page- Smart Charging Webinar series

- ▶ Videos
- ▶ Slides
- ▶ Details for future events

The screenshot shows the Newcastle University website. At the top, there is a navigation menu with links for 'Who we Are', 'Work with Us', 'Research', 'Study', 'Alumni', and 'Staff & Students', along with a search icon. Below the navigation is the Newcastle University logo and the text 'National Centre for Energy Systems Integration'. A breadcrumb trail reads: 'Newcastle University > National Centre for Energy Systems Integration > Events > Webinars > Webinar Series - EV Smart charging'. A left-hand sidebar contains a list of navigation links: 'Research', 'Working with Industry', 'About Us', 'Our Team', 'News', 'Events', 'Launch Event', 'Webinars', 'Webinar Series - EV Smart charging' (highlighted in red), 'Contact Us', 'Twitter', 'Blog', and 'CESI Newsletter'. The main content area is titled 'Electric Vehicles' Smart Charging Webinar Series'. Below the title is a paragraph: '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. View the [webinar playlist here](#).' Below this is a list of webinar topics, each with a green plus icon to its right: 'Smart Charging and V2G Webinar: Caltech and Idaho National Laboratory', 'Meet OCPP. Robert de Leeuw. Open Communication Protocols for Electric Vehicles Smart Charging', 'Meet OpenADR. Rolf Bienert and guests. Open Communication Protocols for Electric Vehicles Smart Charging', 'Open Communication Protocols for Smart Charging: real world demonstrators - GreenFlux and Carbon Co-op', 'Open Communication Protocols for Smart Charging: real world demonstrators - Allego', 'Meet ISO 15118. Dr Marc Mültin. Open Communication Protocols for Electric Vehicles Smart Charging', 'A sufficient & intelligent charging infrastructure - examples from Denmark', and 'Integrating Plug-In Electric Vehicles with the Grid in California'.

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

YouTube Playlist

The screenshot shows a YouTube playlist page for 'Supergen EN Smart Charging Webinars'. The page features a sidebar with navigation options like Home, Trending, Subscriptions, Library, History, Watch Later, Liked videos, and Discussion. Below the sidebar, there are sections for 'SUBSCRIPTIONS' and 'MORE FROM YOUTUBE'. The main content area displays the playlist title, a video player with a 'PLAY ALL' button, and a list of 10 videos. The videos are related to smart charging, V2G, and EV infrastructure. The channel 'Supergen Energy Networks Hub' is also visible with a 'SUBSCRIBE' button.

Supergen EN Smart Charging Webinars
10 videos • 340 views • Last updated on 2 Jan 2020

Supported by the EPSRC National Centre for Energy Systems Integration, Supergen Energy Networks Hub, The Alan Turing Institute and Newcastle University, this series of webinars provides an introduction to vehicle to grid (V2G) and smart charging projects and topics. The webinars feature invited speakers from institutions in the UK and overseas.

For more information on the webinars and to download the slides, visit:
<https://www.ncl.ac.uk/cesi/events/web...>

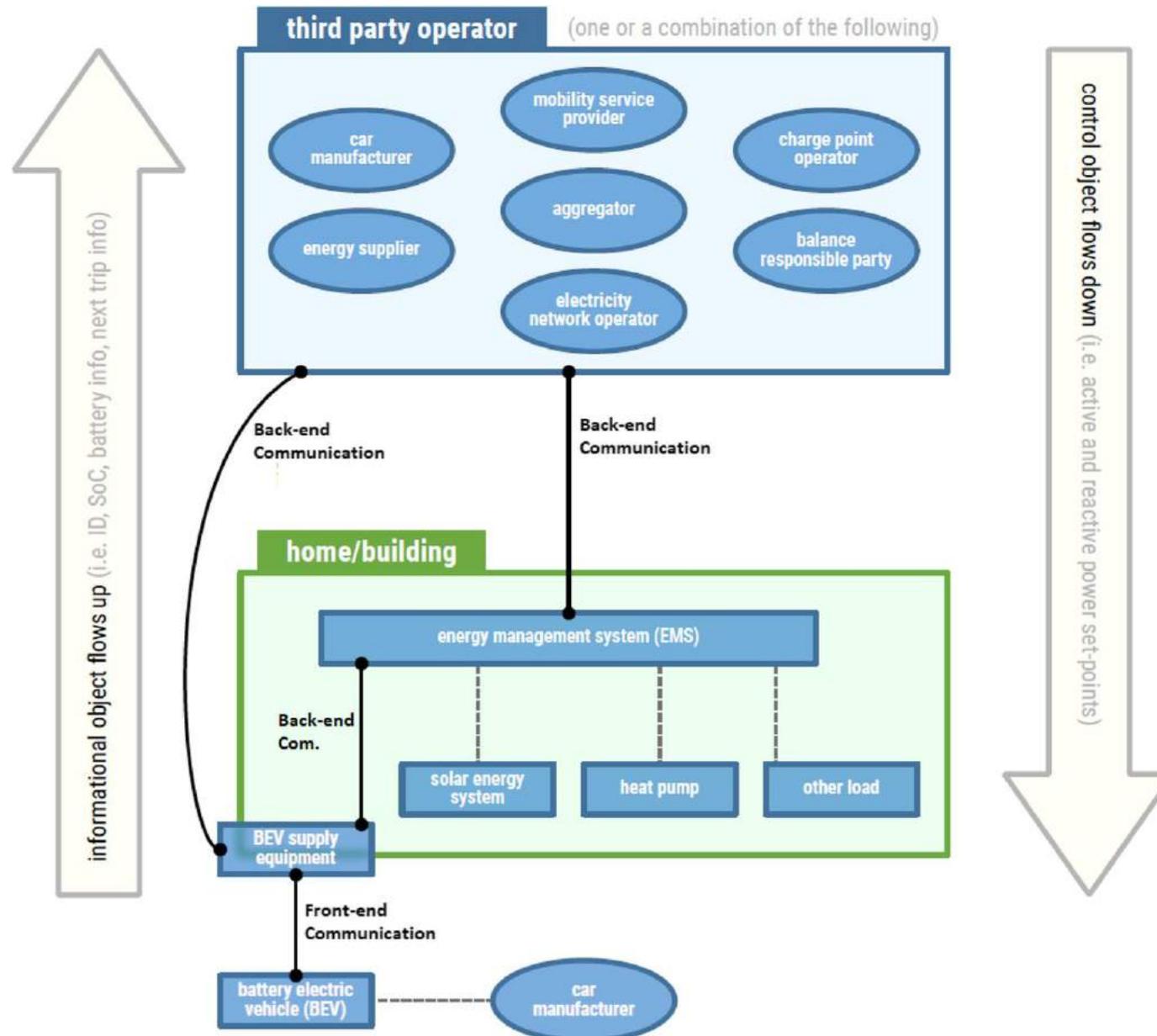
More information on The Alan Turing VGI Group:
<https://www.turing.ac.uk/research/res...>

Supergen Energy Networks Hub **SUBSCRIBE**

- 1 Smart Charging and V2G Webinar - Caltech and Idaho National Lab
Supergen Energy Networks Hub
1:25:49
- 2 Open Communication Protocols for Smart Charging: real world demonstrators - Greenflux & Carbon Co-op
Supergen Energy Networks Hub
1:15:15
- 3 Open Communication Protocols for Smart Charging: real world demonstrators - Allego
Supergen Energy Networks Hub
33:58
- 4 Meet OCPP. Robert de Leeuw. Open Communication Protocols for Electric Vehicles Smart Charging
Supergen Energy Networks Hub
1:07:56
- 5 Meet OpenADR. Rolf Bienert & guests Open Communication Protocols for EVs Smart Charging
Supergen Energy Networks Hub
1:10:24
- 6 Newcastle University Working To Help Electric Vehicles Power Your Home
Newcastle University
1:25
- 7 Meet ISO 15118. Dr Marc Mültin. Open Communication Protocols for Electric Vehicles Smart Charging
Supergen Energy Networks Hub
1:22:28
- 8 All Out Politics, Sky News. Dr Myriam Neaimeh talks about the UK Gov's measures to support EV uptake.
Supergen Energy Networks Hub
0:45
- 9 A sufficient & intelligent charging infrastructure - examples from Denmark. Peter Bach Andersen. DTU
Supergen Energy Networks Hub
1:09:05
- 10 Integrating plug in EVs with the grid in California. Noel Crisostomo, California Energy Commission
Supergen Energy Networks Hub
58:48

<https://www.youtube.com/playlist?list=PLielxkTFIPGIGIPqOMS YGRPtsuWIJcEuX>

Modernising Energy Data Access- Importance of Communication Standards



Cyber Security Series



- ▶ 14th May 2020. Mike Nelson, DigitCert and Oscar Marcia, Eonti Inc.
Public Key Infrastructure (with a focus on EV charging stations)
- ▶ 21st May 2020. Baerte de Brey, Elaad & Stedin
Public Key Infrastructure for Smart Charging
- ▶ **3rd June 2020. Dr Nina Klein and James Morgan, BEIS**
UK Cyber Policy for Energy Smart Appliances (including EV chargers)
- ▶ 11th June 2020. Daryl Flack, BEIS
The cyber security of smart metering, and how it can be applied to EV charging
- ▶ 18th June 2020. Andrew Tierney, Pen Test Partners LLP
Identity, Trust and Interoperability in Automotive
- ▶ 25th June 2020. Ahmad Atamli Reineh, NVIDIA and The University of Oxford.
When IoT is in everything: Security in a world out of control



Today's speakers- UK Cyber Policy for Energy

James Morgan, Head of Smart Energy Cyber Security, BEIS

- Lead cyber security policies for the Smart Energy team
- Previous experience in electric vehicle flexibility policies and energy efficiency technologies.

Dr Nina Klein, Energy Engineer, BEIS

- Member of the Technical Energy Specialist team
- Provides independent technical advice to Ministers and policy makers on technologies to decarbonise the energy system, including the £505 million BEIS Energy Innovation Programme.