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News Release

FOR IMMEDIATE RELEASE

World's biggest commercial EV trial accelerates move to all-electric fleets

- Optimise Prime, the world's biggest commercial electric vehicle project, which trialled over 8,000 electric vehicles from fleets in the UK including Centrica and Uber has concluded
- The trials unveiled many considerations for fleet managers to ensure a successful transition to EVs and new products that DNOs can offer fleets, which will help use grid infrastructure more efficiently
- The trials indicated that fleets participating in flexibility services could save network customers millions of pounds by 2030 across the UK, and cover up to 20% of fleet charging costs

London, 19 January 2023 – The trials for Optimise Prime, the world's biggest trial of commercial electric vehicles (EVs) have come to an end, and demonstrated how barriers, such as cost and energy demand, can be overcome through digitisation and new product offerings. The outcomes of this landmark study follow a year-long trial, and could help unlock the mass rollout of EV fleets across UK and beyond.

The fast roll out of electric vehicle fleets is vital for the UK to meet its net zero goals. The sixth carbon budget requires that all new cars and vans are low-carbon and largely electric by the early 2030s ¹. The Climate Change Committee also advises that companies lead the transition to electric vehicles in the UK by switching their vehicle fleets to EVs in the 2020s.

The Optimise Prime trials began in July 2021 and have been led by Hitachi Europe and electricity distributor UK Power Networks. The trial saw over 8,000 electric vehicles from Centrica, Uber and a large UK depot based parcel carrier take to the roads across the UK, supported by distribution networks including Scottish and Southern Electricity Networks, and partners Hitachi Vantara and Novuna Vehicle Solutions. The trials included depot, home, and on-the-road charging.

The project delivered an end-to-end overview of what the switch to EVs means for the cables and substations that deliver electricity to the community, for the businesses that need to invest in new infrastructure, and for the fleet owners that need to power their vehicles. Advice was also provided to fleet operators to ensure they were getting the most out of the project.

Key interim findings of the trial found that:

- EV models can cover the typical range requirements for all three types of fleets, making electrification feasible and achievable
- To enable the private hire EV transition, a London Borough such as Tower Hamlets alone will need around 3,200 more chargers by 2025
- In the longer term, the trials highlight how EV fleets can generate revenue and support network operators by offering 'turn-down' services where fleets can be charged only when needed, and stop charging during peak times on the electricity network

¹ https://www.theccc.org.uk/publication/sixth-carbon-budget/#:~:text=The%20Sixth%20Carbon%20Budget%2C%20required,during%20the%20period%202033%2D2 037.

 Digitalisation can allow for charging to be forecast by fleet and network operators to help manage demand at peak times on the network

"With road vehicles being the biggest producer of the UK's transport emissions, it is clear that individuals and businesses need to make the move to more sustainable transport." said John Whybrow, Optimise Prime Business Lead at Hitachi Europe Ltd. "Our work alongside key partners in this trial has shown that the ambitious EV rollout is possible, and with the use of data, we can overcome the challenges being faced by businesses such as costs and charging availability. Making the transition to EVs easier and cheaper is key in accelerating the road to net zero, not just in the UK but globally."

lan Cameron, Director of Customer Service and Innovation at UK Power Networks said: "Electrifying your vehicle fleet is a big step to take, but we are making it cheaper, quicker and easier than you ever thought possible; our project has proved that. We set out to come up with practical solutions to cut the cost of fleets going electric and that's exactly what we have done – along with a mass of insights and learnings to help fleet managers. Just one example is how using smart charging can go a long way to lowering your up-front costs. And perhaps the best feedback we've had is from a fleet manager in the trial who said they had no idea of all the clever things happening in the background because it happened seamlessly without impacting on operations."

Careful planning is essential for fleet managers as they consider transitioning to EVs. Hitachi has put together a <u>comprehensive guide</u> based on the experiences of Optimise Prime which considers business needs, site constraints (both physical and electrical) and the management of changes to business processes.

This, plus the final results and datasets on commercial EV charging and use will be shared openly on the UK Power Networks' open data platform in the coming months to help the wider industry be better prepared for making the switch.

To find out more about Hitachi's Zero Carbon offerings for Fleet Optimisation visit: https://zerocarbon.hitachi.com/

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About the partners:

About Hitachi Europe Ltd:

Hitachi Europe Ltd., a subsidiary of Hitachi, Ltd., is headquartered in Stoke Poges, UK. The company is focused on its Social Innovation Business - delivering innovations that answer society's challenges. Hitachi Europe and its subsidiary companies offers a broad range of information & telecommunication systems; rail systems, power and industrial systems; industrial components & equipment; automotive systems, digital media & consumer products and others with operations and research & development Laboratories across EMEA. For more information, visit http://www.hitachi.eu.

About Hitachi Vantara:

Hitachi Vantara, a wholly owned subsidiary of Hitachi, Ltd., helps data-driven leaders find and use the value in their data to innovate intelligently and reach outcomes that matter for business and society. We combine technology, intellectual property and industry knowledge to deliver data-managing solutions that help enterprises improve their customers'

experiences, develop new revenue streams, and lower the costs of business. Only Hitachi Vantara elevates your innovation advantage by combining deep information technology (IT), operational technology (OT) and domain expertise. We work with organizations everywhere to drive data to meaningful outcomes. Visit us at www.hitachivantara.com.

About Novuna Vehicle Solutions:

Novuna Vehicle Solutions is one of the UK's top 10 largest leasing companies and has more than 25 years' experience in providing bespoke fleet finance and fleet management services for businesses across the UK. Novuna Vehicle Solutions has a fleet size of over 67,000 vehicles ranging from cars, small, medium and large vans to HGVs, with a combined asset value of more than £880m. The business provides all forms of funding, maintenance, accident and daily rental management, supporting customers across every stage of the vehicle life cycle. Novuna Vehicle Solutions is unique in the market in being able to offer every kind of asset, including large trucks and plant machinery, as well as car-based employee benefits for employees of medium and large corporates and a market-leading personal lease offering both directly and via a network of brokers.

About UK Power Networks:

UK Power Networks is the country's biggest electricity distributor, making sure the lights stay on for more than eight million homes and businesses across London, the South East and the East of England. Network operators aren't the same as energy suppliers; network operators manage local power lines and substations, while energy suppliers sell the electricity that runs through the power lines. UK Power Networks is the first electricity distributor to be named in the Sunday Times' 'Top 25 Best Companies to Work For', and made industry history by becoming first company to win Utility of the Year two years running (2015 and 2016, also 2012). We are committed to providing excellent service to the over 18m people who use our network every day. We plan to invest more than £600m a year in our network, and spend over £6.6bn over eight years to 2023 to maintain a safe and reliable electricity supply. We also offer extra help to vulnerable customers at times of need, are undertaking trials to ensure that electricity networks support the transition to a low carbon future, move cables and connect new electricity supplies. If you have a power cut ring 105, see www.ukpowernetworks.co.uk or tweet us @UKPowerNetworks

About Centrica:

Centrica is a leading energy services and solutions provider founded on a 200-year heritage of serving people. We are the UK's biggest retailer of zero carbon electricity, serving around 10 million customers across the UK, Ireland and Continental Europe through brands such as British Gas, supported by around 9,000 highly trained engineers and technicians. Centrica's purpose of helping customers live sustainably, simply and affordably drives our strategy and our People and Planet Plan.

About Uber:

Uber's mission is to create opportunity through movement. We started in 2010 to solve a simple problem: how do you get access to a ride at the touch of a button? More than 25 billion trips later, we're building products to get people closer to where they want to be. By changing how people, food, and things move through cities, Uber is a platform that opens up the world to new possibilities.

About Scottish and Southern Electricity Networks:

Scottish and Southern Electricity Networks (SSEN), operating as Scottish Hydro Electric Power Distribution (SHEPD) and Southern Electric Power Distribution (SEPD) under license, is responsible for operating and maintaining the electricity distribution networks supplying over 3.7 million homes and businesses across central southern England and north of the central belt of Scotland, the Mull of Kintyre and the Scottish islands. Scottish and Southern Electricity Networks is the trading name of Scottish and Southern Energy Power Distribution Limited, Scottish Hydro Electric Transmission plc, Scottish Hydro Electric Power Distribution plc and Southern Electric Power Distribution plc

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