ServCity: consortium celebrates completion of its project to bring autonomous mobility a step closer to deployment in the UK's cities

• ServCity finishes with demonstration of an electric Robotaxi service in London

Friday 17th February 2023

London, UK - ServCity, the UK's most recent autonomous mobility service research project, has concluded its final testing phase on the streets of London. For the past three years it has been working to understand how to help cities successfully incorporate autonomous vehicle technologies into a complex urban environment to deliver a "Robotaxi" style service, creating a blueprint of the type of infrastructure that will be required to support such technologies.

ServCity is jointly funded by government and industry, the government's £100m Intelligent Mobility fund administered by the Centre for Connected and Autonomous Vehicles (CCAV) and delivered by the UK's innovation agency, Innovate UK. Over three years, six partners – Nissan, Connected Places Catapult, TRL, Hitachi Europe, the University of Nottingham and SBD Automotive – have been collaborating to develop a blueprint that will guide OEMs, transport providers and city planners to get 'CAV-ready' in the UK's cities.

Built upon a 100% electric Nissan LEAF, the ServCity CAV has successfully completed increasingly challenging validation trials in the real-world environment of TRL's urban testbed, the Smart Mobility Living Lab (SMLL), based in Greenwich. ServCity was able to leverage the full capabilities of the SMLL which used its network of roadside sensors and 5G enabled data processing suite to create a futuristic cooperative infrastructure environment, sending new sources of data to the CAV to improve its situational awareness (e.g. alerting the CAV to the intention of an unseen bus to stop ahead).

At the heart of ServCity is the aim to show that autonomous technology can provide a truly peoplecentric mobility service, and which adjustments to the road's infrastructure are most desirable to make that service the best user experience possible.

This project, as with all the previous CAV development projects backed by Government funding, is an important means of giving people the confidence that CAVs are safe to introduce onto UK roads. To that end, the finale of the project is a series of demonstrations to stakeholders where guests have been able to experience what an initial deployment of the CAV and CAV-ready infrastructure technologies might be like.

David Moss, Senior Vice President, Region Research & Development for Nissan AMIEO (Africa, Middle East, India, Europe, and Oceania) said: "We are extremely proud to be a part of the ServCity project and our 100% electric Nissan LEAF has proven to be the ideal test vehicle. Through our Nissan Ambition 2030 long-term vision, we are committed to supporting greater access to safe and exciting mobility. Advancing our autonomous drive capability and expertise is critical to this effort and research projects such as ServCity are vital to the evolution of technology.

"Through our world-class R&D base in Cranfield in the UK, Nissan is continuously innovating to bring cutting-edge, purpose-driven technologies that benefit our customers. ServCity's achievements contribute to our efforts to usher in a future where we hope to see zero fatalities on the road while providing customers with the added comfort and convenience that come from advanced autonomous drive technologies."

Autonomous drive technology is a key pillar within Nissan Ambition 2030, a long-term vision which will see the company strive to create a cleaner, safer and more inclusive world.

Robert Bateman, Manager, Nissan Technical Centre Europe and Nissan Project Manager for ServCity said: "Not only has Nissan provided the 100% electric Nissan LEAF as a test vehicle, our talented group of engineers have also contributed to the research and development of cutting-edge autonomous drive technology for use within the project. This has enabled the development of a test vehicle that is able to autonomously navigate the busy streets of London alongside other road users – both stationery and moving – while connected with city infrastructure.

"With more than 115 people involved and almost 16,000 working days clocked up across the consortia during the lifetime of the project, ServCity represents an important step towards future deployment of autonomous mobility."

Transport Minister Jesse Norman said: "The Government has invested £7million in this project to be at the forefront of innovation. Since then ServCity has proven key to answer the practical questions of how to integrate self-driving vehicles into cities for the public good."

Marcel Pooke, Sustainability and GIS Team Lead at Connected Places Catapult said: "Throughout the project Connected Places Catapult has been demonstrating the art of the possible in scaling CAV technologies, and their supporting infrastructure, to help get these vehicles delivering vital services as soon as possible. Based on the potential demand for a CAV service, combined with potential areas of operation, the Catapult has helped create a blueprint that provides a basis for follow-on work by many other organisations and aims to assist and enable the full-scale deployment of an operational Robotaxi service in a UK city."

Thomas Tompkin, Head of Network Infrastructure and Operations of SMLL said: "ServCity is what the Smart Mobility Living Lab was conceived for – to test emerging technologies safely in a real-world urban testbed and accelerate their commercialisation. We configured our roadside sensor infrastructure and data processing to understand and demonstrate the best ways for CAVs to acquire better shared situational awareness from CAV-ready features within the ITS environment. I'm so proud of our engineering team who have supported all the partners in the ServCity project, pushing the boundaries every day to get us one step closer to a transport system that is cleaner, safer and more accessible."

Nick Blake, Chief Innovation Strategist, Hitachi Europe said: "The team at Hitachi's European Research & Development Group has been working on overcoming the complex technical challenges related to safe and reliable autonomous driving in congested urban environments. The ServCity project has allowed us to further develop the essential technologies needed for urban driving such as the ability to make safe decisions based on advanced situational awareness, and robust localisation in urban canyons – where GPS signals may not be reliable. We've made massive strides in the past three years, and we will continue to participate in the autonomous driving revolution".

Gary Burnett, Chair of Transport Human Factors from the Human Factors Research Group at the University of Nottingham said: "ServCity has supported us to develop novel, human-centred

methodologies for designing and evaluating the user experience for future autonomous taxis. Using innovative virtual reality (VR) and field observation methodologies, we have focussed on the inclusive design of interfaces for vehicle occupants and other road users, which deliver a positive user experience in the absence of a human driver. Accessibility has been at the forefront of our research, with contributions from a wide range of potential stakeholders to inform all stages of our work. We have also examined human factors considerations for remote operators who might contribute to the user experience from afar."

Andrew Hart CEO at SBD Automotive said: "Robotaxis have the potential to fundamentally transform mobility for both consumers and the cities they operate in. The user experience lies at the heart of that transformation, as operators will need to carefully balance customer expectations with real-world technological constraints imposed by both vehicles and city infrastructure. The ServCity project has seen theory put into practice, so we are now confident of being able to help car makers design a seamless Robotaxi experience."

ENDS



Notes to editors

About ServCity

ServCity is taking an integrated approach to solving the numerous challenges around implementing autonomous vehicles in our cities.

Deploying these new mobility services cannot work if they are introduced in silos. There are too many dependencies and factors outside of service providers' field of vision to work independently.

That's why autonomous mobility services need to be looked at in a joined-up way.

Our aim is to create a blueprint – a set of insights and guidelines – for how autonomous mobility services can become an everyday experience in our cities, for everyone. Our research findings will help provide practical guidance for policymakers, budget holders, transport providers, technology providers – and anyone with a role to play in future mobility.

www.servcity.co.uk

About Nissan in Europe

Nissan aims to become a truly sustainable company, driving towards a cleaner, safer and more inclusive world.

Sustainability is at the core of Nissan's long-term vision, Ambition 2030. Responding to critical environmental, societal and customer needs, this strategy sets out to deliver electrified models and technological innovation in key markets globally, empowering mobility and beyond. Ambition 2030 supports Nissan's goal which is to be carbon neutral across the life cycle of its products and operations by 2050. The Nissan AMIEO region, with EV36Zero at its centre, is primed to accelerate the shift to an electrified future.

For more information about Nissan's products, services and commitment to sustainable mobility, visit <u>nissan-global.com</u>. You can also follow us on <u>Facebook</u>, <u>Instagram</u>, <u>Twitter</u> and <u>LinkedIn</u> and see all our latest videos on <u>YouTube</u>

About TRL Limited

TRL is a global centre for innovation in transport and mobility. It provides world-leading research, technology and software solutions for surface transport modes and related markets engaged in intelligent, new mobility innovations.

Independent from government, industry and academia, TRL helps organisations create global transport systems that are safe, clean, affordable, liveable and efficient.

Established in 1933 within the British Government as the UK's Transport Research Laboratory, TRL was subsequently privatised in 1996. Today, TRL has more than 1,000 clients across 145 countries, driving positive societal and economic benefit worldwide.

Core areas of expertise include infrastructure asset management & asset technologies; intelligent transport systems & traffic operations; sustainability & healthy mobility; vehicle safety engineering & technology research; major incident investigations; human factors safety & behavioural science.

TRL is strategically investing, producing disruptive research and delivering innovation linked to:

• Connected & self-driving vehicles

- Ultra-low emission technologies
- Shared mobility services
- Intelligent asset information
- Big data, machine learning & artificial intelligence.

Headquartered in the UK, nearly 1/3rd of TRL's business is with overseas organisations. Its international focus covers Europe, India, Africa & Middle East, plus wider Commonwealth countries, supported by strategic collaborations in North America and Asia Pacific.

More information can be found at <u>www.trl.co.uk</u> You can also follow our story on <u>Twitter</u> | <u>LinkedIn</u> | <u>YouTube</u>.

About Connected Places Catapult

Connected Places Catapult is the UK's innovation accelerator for cities, transport, and place leadership.

We provide impartial 'innovation as a service' for public bodies, businesses, and infrastructure providers to catalyse step-change improvements in the way people live, work and travel. We connect businesses and public sector leaders to cutting-edge research to spark innovation and grow new markets. We run technology demonstrators and SME accelerators to scale new solutions that drive growth, spread prosperity, and reduce carbon emissions.

Find out more: cp.catapult.org.uk

About Hitachi Europe Ltd.

Hitachi Europe Ltd., a subsidiary of Hitachi, Ltd., is headquartered in Buckinghamshire, 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.

Hitachi is a Principal Partner of COP26, playing a leading role in the efforts to achieve a decarbonized society and become a climate change innovator. Hitachi strives to achieve carbon neutrality at all its business sites by 2030 and across the company's entire value chain by 2050.

For more information, visit <u>http://www.hitachi.eu</u>

About the University of Nottingham

The University of Nottingham is a research-intensive university with a proud heritage. Studying at the University of Nottingham is a life-changing experience, and we pride ourselves on unlocking the potential of our students. We have a pioneering spirit, expressed in the vision of our founder Sir Jesse Boot, which has seen us lead the way in establishing campuses in China and Malaysia - part of a globally connected network of education, research and industrial engagement.

Ranked 18th in the UK by the QS World University Rankings 2023, the University's state-of-the-art facilities and inclusive and disability sport provision is reflected in its crowning as The Times and Sunday Times Good University Guide Sports University of the Year twice in three years, most recently in 2021. We are ranked seventh for research power in the UK according to REF 2021.

We have six beacons of research excellence helping to transform lives and change the world; we are also a major employer and industry partner - locally and globally. Alongside Nottingham Trent University, we lead the Universities for Nottingham initiative, a pioneering collaboration which brings together the combined strength and civic missions of Nottingham's two world-class universities and is working with local communities and partners to aid recovery and renewal following the COVID-19 pandemic.

About SBD Automotive

SBD Automotive is a global consultancy firm specialising in automotive technologies. For 25 years, through independent research, insight, and consultancy, SBD Automotive has been helping vehicle manufacturers and their partners to create smarter, more secure, better connected, and increasingly autonomous cars. With a reputation for robust data and expert advice, as well as an ability to attract and retain the industry's most talented specialists, SBD Automotive operates a global network of local offices in the key automotive hubs, including the UK, Germany, Japan, North America, China, and India.

If you would like to learn more, please visit www.sbdautomotive.com

For press & media enquiries please contact the UK Marketing Team. <u>chrisatkinson@sbdautomotive.com</u>