

News Release

FOR IMMEDIATE RELEASE

Hitachi Joins UK Co-Innovation Project on Connected Autonomous Vehicles (CAVs)

London, August 11, 2017 - Hitachi Europe Ltd., a wholly owned subsidiary of Hitachi, Ltd. (TSE: 6501, "Hitachi") today announced it has joined the HumanDrive project, an R&D project consortium selected by Innovate UK, "the UK's Innovation Agency", to develop methodologies and technologies based on artificial intelligence (AI) to support the deployment of connected and autonomous Vehicles (CAVs) in UK and globally.

The automotive industry, as well as society as a whole, is facing a profound digital transformation, which includes usage of Information and Communication Technologies (ICT) for enhancing the sensing, control and acceptance of future CAVs.

The HumanDrive project will deliver connectivity and AI-based technologies to improve CAVs, and so reduce future accidents' and pollution levels, as well as increase acceptability and reliability for citizens in the Society 5.0¹.

ICT and AI enable the replication of drivers' behaviour, which better controls CAVs. It also increases the number of complex scenarios supported by CAV's control (e.g. in a mixed autonomous- and manually-controlled environment).

The project will develop SAE-L4 CAVs with human-like natural control and decision-making, developed using machine learning and AI. This type of vehicle control expresses the need for future CAV passengers to experience a "natural" driving style, mimicking the style of a proficient human driver.

HumanDrive is a co-creation innovative project and is jointly funded by UK Government and Industry. The Government's £100m Intelligent Mobility fund is administered by the "Centre for Connected and Autonomous Vehicles" (CCAV) and delivered by Innovate UK. HumanDrive will last 30 months starting from July 2017, culminating in an autonomous journey of around 200 miles demonstrating both SAE Level 4 capability and "natural-like" behaviour.

The main role of Hitachi within the HumanDrive project is to provide the communication system (on- and off-board) for collection and analysis in the cloud of driver data, and the Al based vehicle control technologies, which enable a smooth and highly acceptable autonomous driving experience.

¹ Society 5.0: proposed by the Japanese Government. Activities related to the realization of a shared vision for a "Super Smart Society" where the cyber space and the real world (physical space) are intricately connected. The naming describes a new type of society that will be led by innovations in science and technology, following on from hunter-gatherer, pastoral-agrarian, industrial and information.

About Centre for Connected and Autonomous Vehicles (CCAV)

The Centre for Connected and Autonomous Vehicles (CCAV) is a joint unit of the Department for Transport and the Department for Business, Energy and Industrial Strategy (formerly the Department of Business, Innovation and Skills) set up to keep the UK at the forefront of the development of connected and autonomous vehicle technology. It is a single point of contact for those in industry, academia and internationally, and aims to ensure:

- The UK has a vibrant, world-leading connected and autonomous vehicles industry
- The UK remains one of the best places in the world to develop and use connected and autonomous vehicles
- Research on connected and autonomous vehicles is effective, and targeted at delivering value for the UK
- Connected and autonomous vehicles are safe and secure by design, and handle data appropriately

For further information and to stay updated on the latest news and government activity on connected and autonomous vehicles visit www.gov.uk and follow us on twitter at @ccavgovuk.

About the European R&D Centre of Hitachi Europe, Ltd.

The European R&D Centre is part of the Global Center for Social Innovation ("CSI") of the Research & Development Group of Hitachi, Ltd. Researchers at CSI-Europe work together with the business units within Hitachi, partners and customers to develop new solutions through collaborative creation. CSI-Europe has 70 researchers located in five sites: London, Cambridge, Copenhagen, Munich and Sophia Antipolis (France). They are working on 5 domains: Automotive, Industry, Rail, Energy, and Healthcare. In the automotive domain, CSI-Europe conceives/provides ICT/Control and Powertrain innovative solutions for vehicles of the future.

About Hitachi Europe Ltd.

Hitachi Europe Ltd., a subsidiary of Hitachi, Ltd., is headquartered in Maidenhead, 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, financial services; digital media & consumer products and others with operations and research & development Laboratories across EMEA. For more information, visit http://www.hitachi.eu.

About Hitachi, Ltd.

Hitachi, Ltd. (TSE: 6501), headquartered in Tokyo, Japan, delivers innovations that answer society's challenges. The company's consolidated revenues for fiscal 2016 (ended March 31, 2017) totalled 9,162.2 billion yen (\$81.8 billion). The Hitachi Group is a global leader in the Social Innovation Business, and it has approximately 304,000 employees worldwide. Through collaborative creation, Hitachi is providing solutions to customers in a broad range of sectors, including Power / Energy, Industry / Distribution / Water, Urban Development, and Finance / Government & Public / Healthcare. For more information on Hitachi, please visit the company's website at http://www.hitachi.com.

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