



#### FOR IMMEDIATE RELEASE

# HyperloopTT takes crucial step to reality with world-leading digital signalling and traffic management system, co-developed with Hitachi Rail

- Hitachi Rail has customized its ERTMS (European Rail Traffic Management System) simulators for HyperloopTT's technology
- Bringing signalling logics into the cloud can create a more reliable, sustainable and longlasting system for capsules that will travel as fast as planes
- Collaboration will accelerate HyperloopTT's commercialization timeline by utilizing current proven high-speed rail ERTMS logics instead of creating new standards



Hyperloop

**Thursday, 23 June:** Hitachi Rail and HyperloopTT have achieved an important milestone towards the commercial running of the innovative system – that will be able to run at speeds of up to 1,200km/h – with the completion of proof of concept for a cloud-based ERTMS signalling system for HyperloopTT's capsules.

Working from Hitachi Rail's site in Naples, Italy, the partnership has successfully created a digital simulator that allows for the integrated testing of the traffic management, the signalling and some of the physical safety requirements of the hyperloop system - and is now developing an interface with HTT's simulators for functional integration.

By replacing the capabilities of complex physical equipment with cloud-based software, the solution offers greater reliability, greater flexibility in deployment, cuts maintenance costs and is more sustainable. The simulator can also help to make HyperloopTT more efficient by automating repetitive tasks and detecting and managing potential disruptions, instead of reacting to events as they occur.

The partnership is based on the system on ERTMS and ETCS L2 (European Train Control System Level 2) signalling technology to simulate the regulation and control of capsules moving at very high speeds. ERTMS has the benefit of being used and recognised internationally, making it highly interoperable, thereby allow HyperloopTT systems to operate safely across the world without the need to create new standards.

Having completed the simulation model the next step in the process would be to digitally integrate both the signalling infrastructure and the cloud-based model for the physical capsules. This would open the door to moving to physical testing of the whole system at HyperloopTT's test track in Toulouse.

# Andres De Leon, CEO of HyperloopTT said:

"Hitachi Rail's experience in installing, maintaining, and monitoring traffic management systems in the rail industry is second to none. We're delighted to have collaborated with them on this cutting-edge simulation of ERTMS and ECTS systems on our hyperloop which takes us one step closer to achieving our goal of creating the world's fastest, most efficient, and most affordable end-to-end transportation solution. We love working with partners that can help us unlock technical advancements with minimal investment and this project is a great example of that."

HyperloopTT remains committed to solving the key long-term challenges faced by modern society: overpopulation, traffic congestion, CO2 emissions and air quality.

## Leonardo Impagliazzo, Chief Director of Innovation, Hitachi Rail, said:

"Hitachi Rail is committed to pioneering new digital mobility technologies. Our digital signalling technology is used in the USA & Canada, Europe, the Middle East, Australia and Asia to help safely move millions of passengers every day. This partnership allows us to evolve our best-in-class signalling and automation systems and to customize it for HyperloopTT's super high-speed transport. We are excited about this achievement and are looking ahead to the next stage of the programme."

Hitachi Rail originally announced its technology partnership with Hyperloop Transportation Technologies (<u>HyperloopTT</u>) in December 2020 with the objective to integrate hyperloop's capsule traveling system with Hitachi Rail's industry-leading signaling technology, ERTMS (European Rail Traffic Management System). Hitachi Rail is a global industry leader in digital signalling for high-speed rail and is the first provider to introduce ERTMS technology in Europe – in the UK, Italy, Spain, Sweden, and France – and in the highly competitive markets of China and India.

#### **ENDS**

## **About HyperloopTT**

Hyperloop Transportation Technologies (HyperloopTT) is an innovative transportation and technology company focused on realizing the hyperloop, a system that moves people and goods safely, efficiently, and sustainably by bringing airplane speeds to the ground. Through the use of unique, patented technology and an advanced collaborative business model, HyperloopTT is creating the first new form of transportation in over a century.

HyperloopTT's European Research and Development Center in Toulouse, France, the aerospace capital of Europe, is home to the world's first and only full-scale test system. In 2019, HyperloopTT released the first comprehensive feasibility study analyzing a hyperloop system, which found that the system is economically and technically feasible and will generate a profit without requiring government subsidies.

Founded in 2013, HyperloopTT is a global team of more than 800 engineers, creatives, and technologists in 52 multidisciplinary teams, with 50 corporate and university partners. Headquartered in Los Angeles, CA, and Toulouse, France, HyperloopTT has offices in North and South America, the Middle East, and Europe.

HyperloopTT is a proud signatory of the United Nations Global Compact, reflecting the company's commitment to the UN Sustainable Development Goals.

### **About Hitachi Rail**

Hitachi Rail is a fully integrated, global provider of rail solutions across rolling stock, signalling, service & maintenance, digital technology and turnkey solutions. With a presence in 38 countries across six continents and over 12,000 employees, our mission is to contribute to society through the continuous development of superior rail transport solutions. We are proud of our global achievements, from our world famous 'bullet trains', to our signalling solutions and turnkey projects, state-of-the-art traffic management and digital solutions. Drawing on the wider Hitachi Group's market-leading technology and research-and-development capabilities, we strive for industry leading innovations and solutions that can deliver value for customers and sustainable railway systems that benefit wider society. For information about Hitachi Rail, visit <a href="https://www.hitachirail.com">www.hitachirail.com</a>.

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