Item:
17

HITRANS
THE HIGHLANDS AND ISLANDS TRANSPORT PARTNERSHIP

Report to Partnership Meeting 4 February 2022

EUROPEAN PROJECTS

PAV Inverness Campus Pilot

PURPOSE OF REPORT

To update Members on HITRANS involvement in the Interreg North Sea Region Project Planning for Autonomous Vehicles (PAV). The project commenced in September 2019 and runs to March 2023, with a total budget of just over €4million and HITRANS allocation of €1,027,339.

BACKGROUND

PAV is designed to assist local authorities to include the use of autonomous vehicles (AVs) in the development of sustainable spatial planning strategies. In addition to pilot testing AVs across Europe, PAV can help local authorities integrate autonomous mobility by making the necessary knowledge and methodology freely and easily accessible.

Widespread use of AVs (or self-driving vehicles) on Europe's roads is anticipated by the 2030s and is expected to have numerous societal implications for equity, health, economy, and governance, resulting in potential impacts on development and design. Many cities are starting to experiment with AVs, however the integration of AVs in spatial planning has yet to start. PAV aims to stimulate the uptake of electric, shared AV by developing green transport and spatial planning strategies that incorporate AVs.

Map of Interreg North Sea Region Programme Area

PAV is led by HITRANS and consists of 13 project partners across the Interreg North Sea Region programme area. Four partners represent local/transport authorities: HITRANS in Scotland, Hannover Region in Germany, Almere City in the Netherlands and Varberg Municipality in Sweden. The project also includes partners from key research institutes and networks, including the Oslo School of Architecture & Design, Robert Gordon University, Halmstad University, CLEAN, Clean Tech Delta, Rupprecht Consult and POLIS.

Through this partnership, the PAV project will:

- Develop and improve green transport and spatial planning strategies for the participating local and transport authorities;
- Prepare a publicly available series of expert analysis on the socio-economic impact of AV;
- Create an open & scalable innovation community connecting cities/regions and knowledge providers;
- Implement three urban/regional AV pilots (plus one virtual pilot) integrated with existing transport modes; and,
- Through international think-thanks, local insights will be linked to international strategies and ensures broad uptake.

The experience from the AV pilots will contribute to discussions around how Europe can effectively implement autonomous mobility. HITRANS is running two pilot projects in PAV: one focusing on AV logistics in Orkney, and another focusing on passenger AVs in Inverness.

Inverness Pilot Project Update

HITRANS is one of three partners implementing an AV pilot, with the demonstration planned for Spring 2022.

HITRANS has identified Inverness Campus as a suitable location for an AV trial as it fits well with the strategic vision of the area to promote multi-modal travel and move away from private car use. Piloting at Inverness Campus would also be complementary to the project in Hannover, Germany, trialling an autonomous bus shuttle between a tram stop and a new university campus. Safety is paramount to the project and all UK regulation relating to autonomous vehicles will be complied with. While the vehicle might be capable of driving itself without being controlled by an individual, a driver will be present in the vehicle at all times. The driving task will be delegated to the vehicle, but the driver will be ready to take control whenever they are required to do so.

The AV passenger service will provide a route linking Inverness Campus with the Inverness Retail and Business Park. This route would see CAV operation on a 2km route which includes a railway crossing facilitated by the recently introduced sustainable travel bridge. The corridor is restricted to public transport, walking and cycling only, with those walking and cycling segregated from road vehicles across most of the route. One vehicle will operate on the route, offering up to 15 seats (11 seated plus 4 standing). The expectation is that the shuttle service

would be used by students and people working on the Inverness Campus site to access the Shopping and Business Park throughout the day. In addition, tourists could use the shuttle during the summer months who might be staying in campus accommodation.

Monitoring will be conducted throughout the pilot on various technological aspects as well as social impacts. The intention of the pilots is not only to test the viability of a route operated by an AV, but also to test the technology required to use AVs in combination with other transport modes and better understand user perceptions. Dedicated work streams have therefore been developed to focus on the long-term socio-economic impacts of AVs, with research validated using pilot project results.

Procurement for the vehicle was launched in October 2021 and has now concluded, awarding the contract to NAVYA. The trials are due to launch Spring 2022 and will run for approximately 10 months before the project comes to an end in Spring 2023. The procurement for the AV operator will now commence, with the aim to be concluded by the end of February.

An image of the vehicle NAVYA intend to use is provided below.

The next steps in the project are to:

- Work closely with NAVYA and The Highland Council to ensure all regulations are met and approvals have been obtained
- Focus on stakeholder engagement – organise meetings with key local stakeholders and plan public information events
- Hold site meetings with NAVYA to ensure vehicle can adapt to the route
- Develop surveys for understanding user perceptions and acceptance of AVs

RISK REGISTER

<u>RTS Delivery</u>
Impact – Positive

Comment – Trialling CAV in the HITRANS area provides learnings of AV technology and user perception in remote and rural areas for updating the RTS.

Policy
Impact – Positive
Comment – The project will inform future policies and planning strategies that integrate AVs with other forms of transport.

Financial
Impact – Positive
Budget line and value – The PAV project attracts an intervention rate of 50% and brings large investment to the area in new technologies.

Equality
Impact – Positive
Comment – The aim of the project is to understand how AVs can be implemented in transport to ensure more services are available for all, and AVs can also assist those with mobility needs by providing a low platform vehicle.

RECOMMENDATION

Members are asked to:-

1. Note the report.

Report by: Jayne Golding
Designation: Projects and Policy Manager
Date: 25th January 2022