#### CASE STUDY

centre of expertise connecting ange research and policy

climate change



# Future of transport: how drone pilots may support island and rural communities

### Where is it and what did they do?

The Sustainable Aviation Test Environment (SATE), started in 2020, is partly funded by UK Research and Innovation (UKRI), which created the UK's first operationally based low-carbon aviation test centre at HIAL's Kirkwall Airport in the Orkney Islands. £8.9 million has been secured to run the centre until 2025. One successful project has been establishing an unmanned aerial vehicle (UAV) hub and spoke delivery network working in partnership with Windracers Downs and Royal Mail.

Many communities in the highlands and islands need better access to services, and it is

challenging to provide a level of service equal to that in better-connected, less rural locations. **UAVs can improve connectivity in these locations and reduce carbon emissions, reduce bottlenecks on access routes and support local economies.** Part of the project is to develop and understand use cases for UAVs in rural and island communities.

The SATE project aims to test the technology and explore the potential benefits to the highlands and islands and find solutions to the challenges in the regulatory environment.

#### What was learnt?

It is still early days in developing use cases and understanding the implications of regulations on drone use, but they show great potential to support businesses in remote areas by giving better supply routes.

- There is also potential that drones can free up ferry and road space for people rather than cargo.
- It is important that innovation in technology works alongside building a use case for communities.
- The use of drones, particularly autonomous ones, will require new regulations in place to maximise the benefits.

## Further links or information

• Regional and Rural Air Mobility

