News story: Technological boost for winter resilience

Roads Minister Jesse Norman visited Cumbria today (7 December 2017) to see a world-first innovation which could see communities affected by floods reconnected more quickly.

The minister saw pioneering technology which will allow bridges to be reopened more quickly, improve resilience at key flooding hotspots and help to prevent communities from becoming isolated.

The BridgeCat, which has been developed by the Department for Transport, Cumbria County Council and Gaist Solutions, uses sonar and an underwater camera to provide detailed information about a bridge's condition. It combines this with sensors to measure the damage caused by floodwater.

Jesse Norman witnessed the first trial of the innovative equipment taking place today at Salterwath Bridge near Kendal.

In the 2015/16 winter storms, 792 bridges in Cumbria were affected. Previously divers have been sent to assess damage once floodwater has receded, but they can only visit a small number each day, causing a delay to vital road links being re-opened.

Roads Minister Jesse Norman said:

A good transport system is vital to any community and essential to a thriving economy.

The BridgeCat is an exciting, world-leading innovation which will help bridges to open more quickly after severe weather, reconnecting communities and minimising disruption.

In December 2015, Storm Desmond broke the United Kingdom's 24-hour rainfall record, with 341.4 mm of rain falling at Honister Pass in Cumbria.

Since then, the department has provided more than £191 million to help authorities repair damage to their transport infrastructure and the majority of repairs have now been undertaken. The Linton Bridge in Leeds was the latest to reopen in September this year following the 2015/16 winter.

Councillor Stewart Young, Leader of Cumbria County Council, said:

This is important technology for Cumbria — the BridgeCat trials are exciting, and if successful, will enable us to gather important information about the condition of our bridges, which in turn helps us to plan and prioritise works much more efficiently and

effectively. I'm also delighted to be working in partnership with the Department for Transport and Gaist Solutions on this innovative new project — the technology will be a vital tool in our ongoing flood recovery and resilience works.

Jenny Roberts, Senior Project Manager for BridgeCat at Gaist Solutions Limited, said:

At Gaist we focus on addressing national resilience issues to benefit local communities, collaborating on highly innovative projects aimed for social good. BridgeCat embodies these values completely and I am extremely excited to be taking this incredibly important asset on its first step in the journey towards deployment in Cumbria. We have a lot of learning to do, but we also have a great team in place and I have every confidence that we will be gathering useful data from day one.

The BridgeCat will also be used to monitor the ongoing condition of bridges across the county to keep them safe and properly maintained.

Over the coming weeks, the BridgeCat system will be trialled at a number of sites in Cumbria. The trials will enable teams to test the system components and to ensure efficient operation. It will also provide an opportunity for the BridgeCat team to gain experience of operating the equipment and analysing the data gathered by the inspection.