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## 5GRIT Project Granted an Extension

The 5GRIT project has been granted a 6-month extension, by the Department for Digital, Culture, Media and Sport (DCMS) allowing for further development of the rural broadband, tourism, farming, and UAS use cases. We are already learning a lot in these areas, but the extension gives the opportunity to show real benefits in key months for both tourism and arable and livestock farming.

Importantly, the next 6 months will cover the peak tourist season in the North Pennines, allowing partners to further measure the benefits of 5G in the region through the uptake and usage of the new tourism apps.

The project will also be able to benefit from the spring/summer months to capture useful data and test the agricultural use cases. This will allow for development of the livestock and crop counting and crop/weed distinguishing algorithms which 5GRIT hopes will increase productivity and efficiency on arable farms by providing real-time information to farmers.

Digital Minister Margot James said "We want the UK to be a world leader in 5G, providing people with fast, reliable and uninterrupted connectivity on the go and supporting our thriving digital economy.

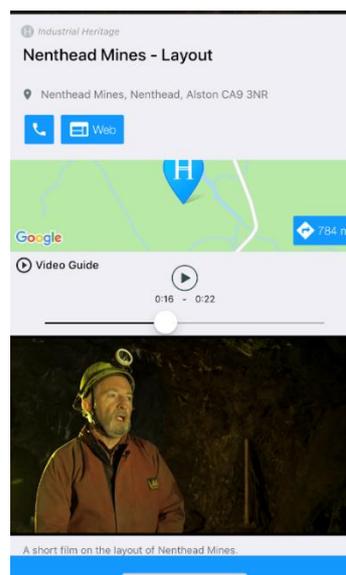
*"As part of our modern industrial strategy our 5G testbeds across the country will help to make this possible. I'm pleased that 5GRIT will continue its important work to ensure our rural communities can*

*harness the power of 5G, bringing benefits across agriculture, tourism and wider society."*

## Discover North Pennines WAM App Launches for Android and iOS

The World Around Me app has been launched for both iOS and Android, allowing visitors to Alston and surrounding areas to stream audio and video content. When visiting Nenthead mines, visitors can now watch films recorded underground, explaining the history and functions of different parts of the mine.

These video and audio clips produced by North Pennines AONB Partnership and Nenthead Mines Conservation Society give tourists an immersive and more accessible learning experience.



Details of local events will also be added in time for the Easter holidays and the rest of the tourist season. Search for World

Around Me app in your app store or download it [here](#).

Three further apps by North Pennines AONB Partnership will be launched in Alston on the 16<sup>th</sup> April. The apps, one made by a local school, tell both the well-known and hidden stories of Alston through VR and AR content. *Ghostlines* uses your phone's camera and GPS to trigger ghostly historical North Pennines characters to appear and tell their stories in different doorways around the town.

### Agristart - 5G-Enabled Drone

Blue Bear Systems Research has begun test flights using the newly commissioned 5G network at their site in Bedfordshire. Using the 5GRIT drone *Agristart* to test beyond visual line of sight flying, Blue Bear has been able to fly the drone in the field to simulate an agricultural survey with an operator controlling it remotely from the Blue Bear offices.



Once the trials are complete, the drone will be deployed at the agricultural use case sites in Yorkshire and the North Pennines for data capture of livestock movement and plant counting. This will demonstrate the real-life benefits this service will provide to farmers.

### Rural Broadband

Quickline and Broadway Partners are continuing with the deployment and maintenance of TV White Space and 60GHZ networks in rural areas of

Scotland, Wales and the North of England. Refinement and infilling of the networks is underway, as well as the identification of new, higher density sites which will benefit from 60 GHz.



TVWS connections deployed by Quickline are reaching speeds around 50 Mbps in Alston, with those deployed in Inverness-shire by Broadway Partners achieving up to 70Mbps. In more cluttered areas where TVWS has not been an option, Quickline and Broadway Partners have tested 60GHz technologies, reaching speeds in the high double and triple digits.

### 5GRIT Open for Additional Trials!

If you have technology or applications you would like to test out on the 5G Rural Integrated Testbed, please get in touch. We are currently supporting livestock tracking in the North Pennines with new technology developed by a Lancaster business.

### How Safe is 5G?

Some residents in Alston expressed concerns about the safety of 5G in February following coverage of 5GRIT in the national media. Representatives from Quickline, Cybermoor and Lancaster University attended an open session of the local Parish Council meeting in March to answer questions and explain more about the technologies being used in the trial, reassuring residents of the safety of the trial.