

# SPF Clusters 1 and 3: Future spectrum capacity demand with a rural focus



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## SmartRural's Perspective

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*Helping Rural Scotland Work Smarter*

# SmartRural – Our Vision

- A near term future where rural communities & businesses anywhere in Scotland, can fully engage in and benefit from, all the digital innovations available to them and deliver Net Zero and Rural Sustainability.
- Where SmartRural can play our part in the Digital Transformation of Rural Scotland by delivery of ubiquitous data connectivity through our innovative and sustainable business model.
- Broadband and Mobile are important, but they serve buildings and people. To truly impact the islands, fields, hills & glens we have to include LPWAN in the vision and deliver it all “outside in”.
- **Helping Rural Scotland Work Smarter**



# Why SmartRural and why LoRaWAN?

- Whether it be Smart Farming or The Smart Grid they all need data from all corners of the network – predominantly the traditional “Not Spots”.
- Cost effective ubiquitous rural and remote data acquisition is what SmartRural is aiming to deliver.
- SmartRural has 2 key USPs – Market Access and Site Acquisition.
- As a User Owned Coop, we needed to use something that gave us organic growth and scale potential independent of others’ commercial drivers.



# Adoption - A Few Key Use Cases



Lone Worker



Animal Welfare



Nitrogen Application



Vehicle Management





# Does Rural Need Cutting Edge of 5G?

Enhanced  
Broadband

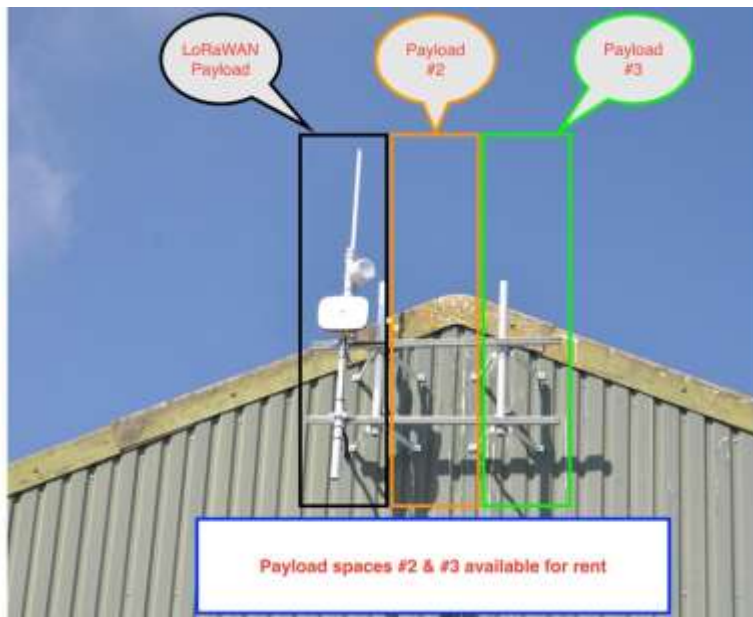
Autonomous  
Vehicles

Augmented  
Reality

AI/ML  
Learning



# Appearing on a barn near you!



- Electro/mechanicals explicitly designed to carry other payload.
- In case of Angus Council - additional payload is:
  - AC's High Speed Broadband Core (10Gbps); and
  - Additional AC tenants.
- Opportunity for 4G infill and 5G cells.

# Conclusions



Rural is unconventional, it has a long road to digital transformation, but it needs to start now;



Ubiquitous cost effective rural & remote data capture is a critical element of Rural DX;



Use Cases need to be relevant and generate “pull” for adoption to take hold;



Those creating solutions need to be technology agnostic – right solution, place, time & cost.



Thank You

Any Questions?



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