

# On-Farm Connectivity Factsheet



## Picking the right connectivity solution for your farm business

When it comes to selecting a communications network for a farming business, there is no one size fits all. While one connectivity solution may be perfect in a beef enterprise in Queensland, it might be inadequate for the needs of a large-scale grain operation in Western Australia.

What matters is the context of your deployment, including location, business requirements and technology use cases. These will dictate which communications network(s) is most fit for your purpose.

### Know the problem you are trying to solve


Rather than focusing on the technology first, you need to be really clear on **what you want from your connectivity**, including what problem you are trying to solve, what you need now and what you'll need down the road. Make sure you build a plan for how you intend to use your connectivity and then identify which technology options work best for you.

Failing to pick the most appropriate technology can lead to a system that doesn't meet your needs, spotty service, wasted resources, more frequent repairs, and a disappointing return on your investment. On the other hand, if you first identify your specific challenges or the aspects of your operation that could benefit from digital upgrades, and then choose technology to address those issues, you can reduce these risks and likely see a better return on your investment.

### Questions you should ask a potential supplier

- What kind of coverage can you guarantee for my specific location?
- Are there any data caps or limits?
- How will your connectivity solution(s) integrate with my existing farm equipment and management systems?
- Do you provide training on how to use the connectivity system effectively?
- What are the installation costs, processes, downtime and timeline for supply and installation?
- Are there ongoing subscription costs or fees?
- What kind of customer support and technical service do you offer post-installation, especially for rural areas? How do I contact you if I have any questions or issues?
- Do you offer any discounts or packages suitable for farming operations?
- What personal data will be collected from my farm, who owns the data collected by your systems, and how can I use this data for my farm management decisions?
- What measures are in place to safeguard my farm and personal data? Do your solutions comply with all relevant legal and regulatory requirements for data protection and privacy?



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- What are the terms of your Service Level Agreement (SLA), including uptime, maintenance, and updates?
  - How easy is it to expand the system as my farm grows, and what would be the additional costs involved?
  - Can you provide references or testimonials from other farmers who have used your connectivity solutions?

### **Cost and budget planning**

- Budgeting for installation and ongoing costs: Factor in the initial setup fees, monthly service charges, and potential costs for equipment maintenance or replacement.
- Comparing pricing plans: Read the fine print in service contracts. Some plans might have hidden fees or penalties for overuse. Compare different providers and plans to ensure you're getting the best deal for your needs.

### **Farm size and topography:**

- Evaluate the size of the farm and its topography, as this influences the type and strength of connectivity required. Larger farms or those with varied topography may need more robust solutions like mesh networks to ensure consistent coverage.

### **Current and future technology needs:**

- Consider the current machinery and technology in use and any future upgrades planned. The connectivity solution should be compatible with both present and potential future technologies.

### **Types of operations:**

- Different types of farming operations (e.g. crop farming, dairy management, livestock tracking) may have unique requirements. It's important to choose a solution that supports specific operational needs.

### **Data usage and volume:**

- Assess the amount of data the farm will generate and consume. High data volume operations, such as those using video monitoring or real-time analytics, will require faster and more reliable connections.

### **Scalability:**

- The solution should be scalable to accommodate growth or changes in farm operations without requiring a complete overhaul of the connectivity infrastructure.





#### **Installation and maintenance:**

- Understand the installation process, the maintenance requirements, and the ease of repair. The chosen solution should not cause significant disruption to farming activities during setup or maintenance.

#### **Reliability and uptime:**

- The chosen solution must be reliable with minimal downtime. This is crucial for farm operations that rely on constant data flow, such as climate control in greenhouses or soil moisture monitoring.

#### **Speed and latency:**

- Connectivity solutions should provide sufficient speed and low latency, especially for farms utilizing technologies like autonomous vehicles or real-time monitoring systems.

#### **Provider's expertise and support:**

- The supplier should have a good track record with agricultural clients and be able to offer expert advice and support tailored to farming needs.

#### **Security:**

- Cybersecurity is critical. The connectivity solution must have strong security protocols to protect farm data from unauthorized access or cyber-attacks.

#### **Compliance:**

- Ensure the solution complies with any regulatory requirements, especially those related to data management and privacy.

#### **Integration capabilities:**

- The solution should be able to integrate seamlessly with existing farm management software and tools for a unified operation.

#### **Remote accessibility:**

- Consider whether the solution allows for remote monitoring and management of farm operations, which is increasingly important for modern farms.

#### **Redundancy:**

- Look for solutions that offer redundancy to safeguard against data loss or connectivity issues. This can be crucial in areas where connectivity options are limited.





**The Regional Tech Hub is here to help with free and independent on-farm connectivity advice:**

- Book an appointment by clicking the link to speak with one of our friendly team - [Book an appointment • Regional Tech Hub](#)
- Call us on 1300 081 029
- Fill out an [simple form](#) and we can get back to you with further information.
- Visit our website for more resources: [www.regionalttechhub.org.au](http://www.regionalttechhub.org.au)

**About the Regional Tech Hub**

The Regional Tech Hub (RTH) is an Australian Government initiative run by the National Farmers' Federation. Since late 2020, we have helped more than 160,000 people across rural, regional and remote Australia to get connected and stay connected to internet and voice services.

The RTH is proud to work alongside the Australian Government to offer free and independent advice to farmers, fishers and foresters, on their connectivity options as part of the Government's new [On-Farm Connectivity Program](#).

