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ACCC Regional Mobile Infrastructure Inquiry Preliminary Findings

Connected Farms welcomes the opportunity to comment on the ACCC's Regional Mobile Infrastructure Inquiry report on preliminary findings.

Based in Regional NSW, Connected Farms is an Australian-owned company specialising in on-farm connectivity technology designed and customised for agricultural applications throughout Australia.

We are Australia's leading provider of on farm connectivity solutions for AgRobots and autonomous farming machinery. We enable place based wide-area mobile (4G) broadband and high-speed starlink on the move (SOTM) connectivity across farmlands which allows growers to adopt digital agriculture. Digital agriculture cannot be adopted without accessible on-farm connectivity. Our on-farm networks are supported by Low Earth Orbit (LEO) enterprise satellite internet backhaul, off grid power, edge computing for increased data analytics and computational ability, and regionally made towers. As a Licenced Telecommunications Carrier, Connected Farms deploys carrier grade connectivity solutions that are robust and tested to withstand the harshest on farm conditions.

The following sets out the Connected Farms response to a number of ACCC preliminary findings.

Preliminary finding 5 *Reliable access to the internet is an increasing issue in the agriculture industry. Mobile connectivity can impact how competitive a farm is and can also reduce costs for farmers.*

The Australian government has set an ambitious goal of reaching \$100 billion of farm gate value for the Agriculture sector by 2030. The current value is around \$80 billion and CSIRO modelling has found that business as usual productivity alone won't enable the sector to reach \$100 billion by 2030. Consequently, there is a significant shortfall to address.

Adoption of digital agriculture practices and access to connectivity has a significant role to play in addressing this shortfall and unlocking value in the agriculture sector. The [Australian Farm Institute](#) has found that unconstrained adoption of digital agriculture and advanced farming technology, such as robotics and precision agriculture, could add over \$20 billion to the gross value of Agriculture production. However, according to the federal [Department of Agriculture, Fisheries and Forestry](#) digital adoption in Australian agriculture is currently estimated at just 10%. A three-fold increase in active technology users is required for the Agriculture sector to reach this goal. It is also reported that one in three new jobs and Agriculture will be tech related with greater digital adoption.

In our experience, digital literacy is mixed across Australian farmlands. Whilst high in areas with good connectivity and mobile broadband coverage, in areas where there is limited or no connectivity across farmlands (meaning many farmers have not had the opportunity to experience the value of digital agriculture and develop an adoption pathway), it is low.

Reliable access to the internet is important in the transition to digital agriculture, but the critical element in unlocking value and reducing input costs for farmers is on-farm connectivity. In terms of the operation of

autonomous machinery and robotics this means continuous high speed broadband connectivity across the farm, not just to the farmhouse.

Preliminary Finding 14 *Fee arrangements appear to vary substantially between mobile network infrastructure providers and mobile network operators, and by region.*

Preliminary Finding 20 *Mobile towers that were previously funded by government are accessible on the same terms as towers that were not government funded.*

Whilst it is well understood that the costs of deploying infrastructure assets increase with the remoteness of the site thereby challenging the commercial use case around network build and extension, the minimum charge or pricing spend required for co-location and shared infrastructure by MNOs (and now infrastructure providers) means that it is often cost prohibitive for smaller telcos to make use of existing infrastructure to deliver services. Many co-location pricing models are developed around MNO business requirements and do not have regard to specialist place-based niche services such as delivery of private networks in rural and remote locations.

In particular, the nbn tower co-location pricing model establishes a cost barrier to sharing existing infrastructure. By way of example, based on current prices it is more commercially viable for Connected Farms to build a tower asset than it is to reach a minimum spend nbn tower co-location agreement. Given the public funding of nbn tower assets and that nbn does not operate within the same commercial constraints as other telcos, it would be beneficial to understand how these fee arrangements and structures are derived and whether they reflect true capital and operating costs ongoing. It is also questionable whether mobile towers that were funded by the government should attract the same co-location or access pricing model as those built commercially. Regulatory structures that result in these type of market and commercial outcomes warrant further review and consideration by government.

