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**Re: Connecting Australia’s agricultural landscape discussion paper**

ACCAN thanks nbn Co for the opportunity to respond to its discussion paper Connecting Australia’s agricultural landscape. ACCAN is a peak body representing the views of all consumers on communications issues, including consumers living in regional, rural and remote Australia. We are part of the Regional, Rural and Remote Communications Coalition (RRRCC), an alliance of 21 organisations with the aim of improving connectivity in the bush. We have consulted with the RRRCC in preparing this response to the discussion paper.

ACCAN supports nbn Co’s efforts to improve agricultural connectivity and assist the sector in reaching its productivity potential via digital technologies. Nbn Co has proposed developing a Quality Assurance Mark (the Mark) for network extension devices to make it easier for farmers to extend the coverage of their home-based NBN connection. However there are concerns that the proposed Mark by nbn will not be enough to help guide farm consumption of network extension devices and promote the benefits of agtech more broadly. This is because the major issues and challenges farmers experience whilst trying to extend their network connectivity are:

* the complexity of installing the devices and configuring the network
* being unable to troubleshoot when things go wrong
* difficulty in receiving independent advice, and negative experiences with technicians
* attempting to extend already congested connections
* difficulties in understanding technical terminology and having limited technical knowledge
* connectivity and reliability issues which are paramount when the welfare of livestock is dependent on the reliability of connection (for example, in water supply monitoring)
* purchasing equipment based on sales advice, which is not suitable for their needs
* a lack of available consumer education
* the need for installation assistance and support which can be cost prohibitive.

When faced with the above challenges, farmers require more support and more can be done than what is being proposed in the discussion paper in order to boost on-farm connectivity. Feedback ACCAN has received is that nbn’s focus should be on resolving core connectivity and network performance issues first, and consider practical options like exploring the possibility of allowing farmers to have multiple Sky Muster ports if they desire, similar to the educational port. That said, it could be helpful if nbn provided consumer information on its website regarding network extension devices such as mesh routers, but this would need to be expressed simply and technical terms avoided.

As mentioned above, farmers often struggle to understand technical terminology, and may have limited digital literacy. There is often a lot of assumed knowledge in the agtech sector, which can make it difficult for farmers to make purchasing decisions. Indeed, a forthcoming ACCAN report, *'It Just Works'*: Regional and rural consumer understanding of smart technologies in North West New South Wales, highlights the lack of consumer understanding of smart technologies. Only 20% of respondents surveyed had heard of smart agtech, with only 16 respondents using the technology.[[1]](#footnote-2) Thus any attempt to assist farmers to understand the opportunity to extend the coverage of their home-based nbn connection needs to carefully consider and address the level of existing consumer knowledge in order to be successful.

1. Are the connectivity solutions (3.1) in this document appropriate?
   1. If no, what other categories should be included?

The Mark is proposed to offer products a rating depending on the connectivity supported. Nbn Co has suggested the Mark could provide a grading to differentiate between low power, low bandwidth devices that support low packet data transfer, and high bandwidth devices that support voice and video capabilities. It is unclear to us how one Mark could be applied across many of the different applications farmers have for network extension devices, given the complexity of information that needs to be conveyed.

It should be noted that there will be a need to provide consumer education if nbn proceeds with the Mark so that people can easily understand exactly what information it will convey.

1. Are the listed certification criteria (3.2) adequate?
   1. If no, are additional criteria required?
   2. If no, should a listed criterion be removed?
   3. Any further comments?

The proposed listed certification criteria provide an adequate list of factors farmers will likely consider before purchasing a network extension device. One of the key consumer issues identified from the ACCAN *‘It Just Works’* report in relation to smart technologies is a lack of clear consumer protections and guidelines regarding remote data monitoring. There could be scope to explicitly include more transparent consumer information regarding data management, access, privacy and security as these are likely to factor into consumer choice. Consumers should be made aware of how secure the signal is from the extension devices.

It is unclear to ACCAN how criteria-weightings could be used in the certification as consumers may have varying preferences and weightings. For example, some consumers may prefer a smaller device whilst not requiring range, others may prefer a high IP rating if the device will be located outside. That said, ACCAN considers that providing all the information listed in the discussion paper may be beneficial to potential purchasers of the devices so they can choose the device most appropriate for them. When providing this information, there must be a concerted focus on how it is communicated to consumers. For instance, technical terms might not be easily understood, such as IP rating and connectivity protocol. Easy to understand explanations with examples will most effectively assist end users to purchase the most appropriate device and will be critical to the success of the program.

1. Do you have any comments on the proposed verification process (3.3)?

ACCAN understands that certain devices are considered reputable amongst farmers, so potentially third-party verification is unlikely to be necessary for these. If nbn Co decides that a verification process is needed, this should be done through a reputable third-party.

1. Do you see any issues with vendors meeting the costs of product testing?

There needs to be consideration of whether the overall benefit of the testing outweighs the overall cost. In assessing the benefits of the Mark, nbn Co should consider the extent to which agtech vendors are creating devices which require Wi-Fi, as well as the target market for the network extension devices. ACCAN understands that Wi-Fi extension is not feasible for all farms, and that many devices require different types of connectivity (3G and 4G for example) therefore limiting the benefits gained from the Mark. If the verification process is costly and device manufacturers pass these costs onto the end users this could prevent farmers from purchasing the devices. ACCAN understands that in some instances, farmers struggle to meet the costs of extending connectivity across their properties, so additional expenses could impede rather than stimulate increased network usage.

1. Are the listed product characteristics (3.4) adequate?
   1. If no, are additional characteristics required?
   2. If no, should a listed characteristic be removed?
   3. Any further comments?

The listed product characteristics are adequate however nbn Co could consider including factors such as price, where consumers can purchase the product, and whether the products can be self-installed or require a technician. Additionally there could be scope to include information on right to repair and replacement costs.

1. Do you have any comments regarding the go to market approach (3.4)?

ACCAN supports the approach which would see the products listed on a website enabling consumers to assess the product’s capabilities relevant to their own requirements. That said, farmers require more support than what can be provided through a website, with a preference of being able to talk to someone about the types of network extension solutions they need.

ACCAN recommends that the website is made accessible to people with disability through meeting level AA of the latest version of the Web Content Accessibility Guidelines. The website could also contain additional information regarding network extension devices, for example what they can and cannot be used for and how to install and troubleshoot the devices. ACCAN is aware of instances where telcos have sold network extension devices to end users as a solution for poor performing services and end users are given incorrect information that the device will improve certain issues that they are experiencing, such as congestion. Another beneficial feature of the website would be to include information on how to troubleshoot individual network extension devices, and whether additional support is available. This would mean that not only would the website provide information on how to purchase the devices, but it would also address some of the issues which occur during their use.

Please do not hesitate to contact us should you require clarification or additional information on any of the issues raised in our response.

Sincerely,

Megan Ward

Economic Adviser

1. <https://accan.org.au/grants/grants-projects/1777-consumer-understandings-of-smart-technologies-and-their-applications-in-north-west-nsw-regional-and-rural-communities> [↑](#footnote-ref-2)