



# UCLL and UBA FPP: regulatory framework and modelling approach – aerial deployment

Cross submission | Commerce Commission  
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## Executive Summary

1. Thank you for the opportunity to comment on Chorus submissions relating to aerial deployment of infrastructure.
2. Chorus has asked the Commission to cap the level of aerial deployment at that applied by Chorus in practice.
3. We don't have the definitive answer on aerial - we have not been provided with access to the data and you can't optimise one variable of a model in isolation - but everything we've seen suggests an efficient provider is likely to make significant use of aerial deployment.

### Chorus is asking the Commission to ignore obvious efficiencies

4. Chorus is asking the Commission to step away from efficient costs. For example, to prohibit the use of poles where Chorus has used poles, and to impose a “cap” on the use of aerial based on Chorus's past decisions about its use of aerial deployment methods. This makes no sense – it asks the Commission to model an efficient provider with higher costs than Chorus actually achieves.
5. WIK and NSL both point to the potential to deploy significant amounts of aerial in a modern, efficient fibre network, and point to overseas models that provide for significant deployment – over 60%.

## Introduction

6. Thank you for the opportunity to comment on Chorus' submission - relating to aerial deployment - in response to the 9 July 2014 FPP regulatory framework and modelling approach consultation paper (**consultation paper**).
7. This cross-submission forms part of, and should be read together with our principal cross-submission dated 20 August 2014 providing further comments on parties' submissions in relation to the deployment of aerial infrastructure in New Zealand.
8. In our principal cross-submission, paragraphs 105 to 109 provided some more general comments on this matter, with reference to comments made by WIK-Consult in their expert report attached to our submission in section 5. WIK-Consult provided information on their international experience in relation to aerial deployment in European jurisdictions and related regulatory practice.
9. This cross-submission provides some more detailed consideration of this issue, and we attach an expert report prepared by Network Strategies dealing with New Zealand specific aspects of the deployment of aerial infrastructure.

## Chorus is asking the Commission to ignore obvious efficiencies

10. Chorus has asked the Commission to take account of its real world constraints, effectively capping the level of aerial deployment at that achieved by Chorus in practice [59].
11. We don't have the definitive answer on aerial - we have not been provided with access to the data and you can't optimise one variable of a model in isolation - but everything we've seen suggests an efficient provider is likely to make significant use of aerial deployment.
12. The FPP model should take account of the real world constraints. The debate relating to aerial deployment demonstrates the differences between submitters in what constitutes "real world" considerations. Submitters are divided on the degree to which an efficient network operator's use of aerial infrastructure is constrained by Chorus' current network and commercial practices.
13. The Commission's key task in setting prices for UCLL and UBA is to determine the efficient forward looking costs of providing that service. This isn't today's network, no operator including Chorus would build the network we have today. That network is the product of previous legacy decisions and cheaper and better performing technologies are available today. To base costs on existing network technologies and design is to import inefficiencies in to the FPP. Therefore, the Commission needs to abstract away from the current network to identify the network and costs of a hypothetical efficient operator.
14. Chorus asks the Commission to carry through aspects of its current network and business model at every step, and this simply adds inefficiency. In other words, Chorus' approach maps the actual operator and network currently subject to regulation, together with its depreciated historic costs and legacy design decisions dating back many years, on to the hypothetical efficient operator. In the case of aerial deployment, Chorus further proposes that the hypothetical efficient operator would not have access to existing Chorus poles. In which case the Commission would be applying an efficiency standard whereby the hypothetical efficient provider is artificially more constrained than the regulated entity.
15. We are not suggesting the model should be devoid of real world reality – forward looking costs are the costs of accomplishing the activity in the most efficient way possible, given technological, geographical and other real world constraints. But the Act requires that the forward-looking costs modelled by the Commission be *efficiently incurred*.

16. We believe this requires the Commission to identify the level of efficiency than a hypothetical efficient operator in competitive market could practically expect to achieve, including through the use of aerial deployment methods where these are less costly than alternative methods. This would be consistent with the outcomes of a long run competitive market and would confidently deliver welfare maximising prices consistent with section 18 of the Act. As set out in the Network Strategy report, it is not unreasonable or unattainable for an efficient operator to make significant use of existing and new aerial infrastructure.

## **An efficient provider would likely make extensive use of aerial deployment**

17. All submitters appear to agree that efficiency considerations mean that aerial deployment should be modelled where it represents the lowest cost means of providing fixed access.
18. Chorus suggest that, taking in to account real world constraints, aerial deployment is likely to be limited to less than 20% of the deployment [59]. Chorus expects to achieve approximately 20% aerial deployment in UFB areas [62]. Chorus also submits that other LFCs' experiences are less relevant (although they may make greater use of aerial) as they, for example, have access to an existing pole and aerial distribution network which would not be available to a hypothetical new entrant [64]. Further, the Commission is required to assume that the poles in Chorus' copper network are not available for sharing (just as it cannot assume the availability of Chorus' ducts and trenches) [76].
19. As a first point, we note that the efficient network is assumed to replace Chorus, which makes irrelevant whether Chorus has sharing obligations, or would choose to share poles with the efficient provider or not.
20. In relation to Chorus' proposed cap of 20% of premises served by aerial, this approach is not supported by WIK-Consult or Network Strategies. WIK-Consult notes in its earlier report that observed degrees of aerial deployment in some geotypes are greater than 60% [34]. In addition to the existing degree of aerial deployment in the incumbent's copper access network, there are additional forms of sharing aerial cabling with third party networks available (e.g. power utilities, traffic control, etc.) and an efficient provider may deploy aerial instead of buried infrastructure.
21. Network Strategies notes, in the attached supplementary report, that network delivery infrastructure by electricity distribution companies is dominated by aerial deployment with an average in excess of 70%. This provides useful anecdotal evidence to support the proposition that the Commission should not limit its view of efficient aerial deployment by that achieved by Chorus. In terms of other LFCs, Network Strategies points to the example of Northpower with aerial deployment of 60%, to WEL Networks with potential for aerial deployment of approximately the same level, and to emerging Chorus practices in areas such as Greymouth.
22. Network Strategies further concludes that there is significant existing third party aerial infrastructure in New Zealand that a hypothetical efficient operator would use where cost effective in deploying a fibre network. We agree with Network Strategies' conclusion that, consequently, Chorus' claim that today's network operator would deploy a very small of aerial infrastructure is highly doubtful.
23. Network Strategies further points to evidence from regulatory modelling in other jurisdictions which provides more complete detail in relation to aerial deployment. In contrast, Chorus suggests that while it is targeting a 20% aerial deployment in its UFB areas, this target is higher than its perception of international proportions of aerial deployment. WIK-Consult makes clear in its expert report attached to our 20 August cross-submission that it has observed aerial deployment in rural geotypes in excess of 60%. Network Strategies concurs and provides

evidence of offshore regulatory models that assume up to 20% of overhead infrastructure in urban areas and up to 80% in rural areas. Section 3 of their report provides detail on the models developed for Portugal and Norway referred to by Chorus in their 6 August submission to the Commission.

24. As noted in our 20 August submission, we do not propose a specific model parameter (although it is clear that aerial potential is likely to be significant), but recommend that the Commission ensure that the cost model is sufficiently flexible to allow for a wide range of values to be used either on the basis of each MDF area, or at least for each geotype defined by the model [105].

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*END*

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## Attachment 1: Network Strategies Report

Provided to the Commission as a separate document.