

28 September 2007



Robert Wright
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Australian Competition and Consumer Commission
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Dear Mr Wright

Public Version

Thank you for the opportunity to comment on WIK-Consult's response to Appendix A (Analysys review of the WIK cost model) of Vodafone's August 2007 submission to the Draft MTAS Pricing Principles Determination (the Draft Pricing Principles), and provide additional information on aspects of Vodafone's radio access network (RAN) assets.

Additional RAN asset questions

The Commission has requested additional information with respect to:

- the number of BTS / Node B and BTS sites; and
- the extent of collocation of BTS and MSC sites.

BTS / Node B types and numbers

[c-i-c]

The extent and cost of site collocation

The Commission has asked Vodafone to supply the number of sites collocated on other parties' sites. Vodafone can confirm that we collocate a proportion of our BTS sites but we do not share any of our MTXs with other parties. Please note that we have been able to collect BTS collocation information only at an aggregated level.

The WIK cost model assumes that site collocation reduces the investment cost of deploying BTS sites by 40 per cent (for macro sites). Vodafone has already commented on whether this assumption reflects the reality of the Australian market. Vodafone reiterates that this assumption is not reflective of the market realities of deploying sites in Australia.

Further, Vodafone notes that the issue of site collocation is not applicable if the WIK model still uses the scorched earth approach. With this approach there is no potential to collocate sites, as there are no existing sites on which to collocate.

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Notwithstanding the approach of the WIK cost model, the question that the Commission must address in determining the forward looking efficient cost of MTAS, is what costs would be faced by an efficient new entrant in the Australian market¹. That is, to what extent would a new entrant seek to collocate its BTS on other parties' sites, and what would be the cost incurred in such collocation.

Table 2 shows the split of Vodafone BTS sites between stand-alone sites, and sites collocated with non-MNOs and those shared with other MNOs. Table 2 shows that around [c-i-c] of Vodafone's BTS sites are collocated on other parties' sites. We would expect that any new entrant would collocate a similar number of sites.

[c-i-c]

Vodafone believes it would be necessary for any new entrant to collocate on other parties' sites due to the reality of deploying sites in the Australian market. In addition to a lack of suitable sites – especially in metropolitan areas – carriers must adhere to the *Telecommunications Code of Practice 1997*². Under the Code, carriers are required to take all reasonable steps to identify and collocate on existing facilities before engaging in any low-impact facility activity.

Beyond this requirement, collocation often presents better options for deployment than building Greenfield sites. The landowner and the community surrounding an existing site will have been through the consultation process for the initial site and will have an understanding of the issues, particularly the perceived health issues, which accompany living near a telecommunications site. Further, the comprehensive site selection process carriers are required to undertake in deploying a Greenfield site, means that the existing site is generally located in the most prudent engineering position, making collocation an efficient choice. Furthermore, collocation generally also means the carrier will not need to seek full Development Approval from the local authority, a process which is often lengthy and by no means certain of success.

The extent of collocation is the first step in estimating the impact of collocation on a new entrant's costs. The Commission must also look at the cost reality of collocating sites on existing sites.

In our initial March submission, we outlined that the decision to collocate is not primarily driven by the need to save annualised costs – that is, overall, the decrease in annualised BTS capex is offset by an increase in annualised BTS opex. Rather, collocation is preferable due to the practical difficulties of deployment (described above), and the need for any new entrant to deploy sites as quick as possible.

Vodafone's recent experience in metropolitan RAN deployment demonstrates that the cost to deploy collocated RAN assets in metropolitan areas is greater than the cost to deploy Greenfield assets. Vodafone has looked at the site acquisition and preparation costs from a sample of 25 recent deployments (containing Greenfield and collocated sites). The sample shows that the average costs are:

- collocated site — [c-i-c].
- Greenfield site — [c-i-c].

[c-i-c]

While a new entrant would collocate a proportion of its RAN assets on other parties' sites, the cost of doing so is greater than the cost of deploying only Greenfield sites. This may appear counter-intuitive, but the reality of modern deployment is that there are very few suitable RAN sites available in metropolitan, suburban and regional areas. Consequently, a new entrant would not be able to deploy only Greenfield sites, if it wanted the coverage and capacity needed to run a mobile network in Australia.

¹ Application by Vodafone Australia Limited, [2007] ACompT 1, para. 73.

² Section 4.13 Co-location.

WIK-Consult's response to Analysys' review of the WIK cost model

WIK-Consult's response raises two issues in relation to Analysys' review of the WIK cost model:

- Analysys makes an error in its calculations; and
- WIK cost model does account for dimensioning routing.

WIK-Consult's allegations of an error are incorrect

WIK-Consult contends that Analysys erred in its calculation of the under-estimation of cost recovery in Exhibits 1.7 and 1.8. This allegation is not correct.

The two scenarios presented by Analysys demonstrate that the use of dimensioning minutes to calculate the MEr input in the WIK cost model produces too low an estimate of the cost of termination – as shown by the failure to fully recover the costs of providing mobile services. Due to the restrictive nature of the WIK cost model, Analysys was unable to more accurately estimate the magnitude of the error.

Scenario 1³ in the Analysys paper demonstrates that the use of service minutes to calculate the MEr input results in the appropriate level of cost recovery. Scenario 2⁴ demonstrates that when the user incorrectly uses dimensioning minutes to calculate the MEr input, the WIK model fails to fully recover the cost of providing mobile services – hence underestimating the cost of MTAS. This result still holds when updating the scenarios for the Commission's latest market minute estimate (43.5 billion minutes) – scenario 1 recovers 92% and scenario 2 recovers 74%⁵.

Vodafone notes that the Draft Pricing Principles err in estimating market service minutes as 43.5 billion⁶. The Commission reaches this estimate by multiplying on-net minutes by two⁷ – resulting in an estimate for dimensioning minutes. As a result, the WIK cost model does under-estimate the cost of providing MTAS.

WIK-Consult's uplift to service minutes MEr estimate

While the WIK cost model output files do indicate that the model uplifts the service minute MEr (13.1) to the a higher MEr estimate (16.7), Vodafone notes that the WIK cost model documentation does not contain the equation used to uplift the MEr to account for dimensioning, nor has WIK-Consult's response addressed how it has uplifted the MEr estimate.

The restrictive nature of the WIK cost model, and the level of detail contained in WIK-Consult's response, do not allow Vodafone, or our consultants, to verify the accuracy of the uplift. While the documentation provided to us indicate there is an uplift in the WIK cost model, Vodafone is unable to comment on the accuracy of the uplift.

³ Analysys, 2007, *Review of WIK's mobile network cost model*, p.24.

⁴ Ibid., p.25.

⁵ This result is reached by using 43.5 billion minutes instead of 27.5 in scenario 1, and 35.1 billion minutes for scenario 2. The resulting cost recovery amount is calculated against the cost of deployment from the WIK cost model of \$830.25 million.

⁶ ACCC, Draft MTAS Pricing Principles Determination Report, p.160.

⁷ Ibid., p.159. ACCC state that "end minutes are doubled to obtain total minutes".

Vodafone's reaction to the WIK-Consult response

The Commission has asked for Vodafone's reaction to WIK-Consult's response to the Analysys review of the WIK cost model. The documentation provided to Vodafone shows that:

1. there is an uplift to the MEr input value within the WIK cost model, but due to the restrictive nature of the WIK cost model, we are unable to test the accuracy of uplift;
2. the MEr input in the WIK cost model must be derived from the total market service minutes;
3. the MEr input used in the Draft Pricing Principles – 13.1 MEr – is calculated from an estimate of total market minutes derived partly by doubling on-net minutes; and
4. the use of this MEr input is incorrect, and results in under-estimating of the cost of providing MTAS.

The error identified by Vodafone and Analysys in the August submission to the Draft Pricing Principles still holds, and as such, we maintain that the WIK cost model under-estimates the cost of providing MTAS.

Regards

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