Georgia-Kate and Luke

Thanks for sending us the calculations that underpin your submission in regard to welfare effects and pass through - it is helpful for have the calculation at the level of detail provided. Luke has also mentioned that Vodafone and Optus would like a joint meeting with staff to discuss waterbed and welfare calculations in the week of 10 September 2007. I will follow-up on that issue separately.

This e-mail is a response to the concerns that Vodafone has raised with respect to dimensioning and service minutes. After seeking clarification from WIK Consult on this issue, it provided us with the detailed response which I noted in our last meeting (I have also extracted some key points below):

Start WIK extract

When carrying out the network design, the model counts different services' minutes for the various network elements in the proportions in which the services use these network elements. So, in the case of on-net services the number of minutes are doubled for the purpose of dimensioning network elements such as BTSs, BSCs, links between BTSs and BSCs and so on, because these minutes travel over these elements twice, the first time on the up-link and the second time on the down-link. Similarly, the minutes of on-net and incoming calls are considered with a factor of about 1.6 for the purpose of dimensioning MSCs because a certain proportion of these calls remain in the MSC cluster where the calls originated, meaning that the network element MSC is used only once, while another proportion is terminated in another MSC cluster, meaning that in this case the network element MSC is used twice. As a weighted average a minute of voice calling thus uses MSCs 1.6 times, and their capacities are modelled accordingly. There are further such cases which each time are handled by the model according to the use of network elements by the services.

When the costs of the services are determined, the per-minute costs of use of network elements are multiplied by services' usage factors, corresponding exactly to the intensities of use on the basis of which the dimensioning of network elements is carried out, as just described, and the results for each network element are added up.

In the report there are numerous references to the fact that services use network elements in different proportions and that the model would take this in account when dimensioning the network.

End WIK extract

You will also see that WIK outlines an error made by Analysys in the minutes used in scenario one - which if corrected shows that there is no error in the voice recovery calculations - even in their scenario 1.

You can verify that the milli-Erlang demand for service traffic in the 'Cell Deployment' module of the WIK Model by examining either the 'Australia_outBA.txt' or the 'Australia_an_bsc.txt' files.   I have also attached a document prepared by Marcelo Grosso who is a key ACCC staff member in relation to the WIK model which explains the various steps involved to verify that the milli-Erlang adjustment is occurring. Note that you will need Microsoft Excel to conduct the verification.

If you have any further questions relating to this e-mail, please do not hesitate to contact us.

Thanks also for sending us the calculations that underpin your submission in regard to welfare effects and pass through - it is helpful for us to understand the data.

The issues identified above and other issues raised by Vodafone will be addressed in our final PPD report. I would be interested in your reaction to the outlining of the service and dimensioning relationship as it should prove that there is no miscounting of minutes.

Yours sincerely,

Robert Wright
General Manager
Communications Group - Compliance and Regulatory Operations Branch
Australian Competition and Consumer Commission