

# Addendum to Report on Mobile Termination Cost Model for Australia

For submission to  
Australian Competition and Consumer Commission  
(ACCC)

by  
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# 1 Introduction

In the consultation process between the ACCC and interested parties regarding the WIK Mobile Network and Cost Model (WIK-MNCM), a few issues were raised that require minor modifications to the original version of WIK-MNCM released on 16 February 2007. Further, as a consequence of this consultation process, ACCC requested that WIK-Consult implement a number of additional features in the WIK-MNCM to improve the transparency of outputs. WIK-Consult made these modifications and incorporated the additional features as requested. This addendum to the WIK Report records these outlines, these modifications and changes.

## 2 Correction of errors and omissions

### 2.1 *Unbilled minutes*

Version 1.1 Incorporates total minutes which comprise billable and unbillable minutes.

This is relevant to Section 4.3.2.4.3 of the WIK Report which discusses the derivation of volumes of traffic for the various services.

A share of 4 % of the total volume network minutes has been estimated that is to be considered as unbillable.

A corresponding parameter value is to be included in the list of input parameters of the Cost Module in Annex A to the WIK Report.

### 2.2 *Routing factors for the HLR*

In version 1.0 of the WIK-MNCM, all services were considered to be using the HLRs. Accordingly, the cost of the HLRs was distributed over all services. It is however the case that only services that are terminated on a network use a HLR. This means that the cost of HLRs is to be allocated to on-net and to incoming calls to be terminated only. Correspondingly, only for these services should there be positive routing factors.

Positive routing factors for calls terminated on-net and off-net only have been implemented in version 1.1.

Section 4.3.2.4.2 of the WIK Report contains a conceptual discussion of routing factors and Figure 4-22 has entries that distribute the costs of HLRs to on-net and incoming terminating calls in the way discussed above.

## **2.3 Classification of Postal Areas**

Version 1.1 of the WIK-MNCN has been modified to reflect party submissions about the classification of POAs based on population density and demand in reality to effect a more appropriate deployment of cells.

Sections 5.1.1 through 5.1.3 of the WIK Report describe the procedures used to assign residential and working populations to POAs and to classify POAs as urban, suburban or rural.

Wording in section 5.1.2 should reflect residential and working population as well as other transient population such as travellers as adjusted in version 1.1 of the WIK-MNCM. This should also flow through to other sections in the WIK Report such as section 5.1.3 where relevant.

## **2.4 Elimination of the "terrain coverage" parameter**

The parameter "terrain coverage" is a remnant parameter. It has no effect on model results and has been set at a value to reflect this in version 1.1 of the WIK-MNCM.

In section 5.3.1.4 of the WIK Report, the paragraph referring to terrain coverage and noting the 85 per cent value for rural areas is irrelevant and should be disregarded.

## **2.5 Correction for a error in the text of the Report**

The results presented in Chapter 6 for 'BSC units' should read 'BSC sites'. In general there are more BSC units than BSC sites.

# **3 Adding additional features**

## **3.1 More detailed output files**

Version 1.1 of the WIK-MNCM contains the following output files showing the quantities of the following network elements to improve the WIK-MNCM outputs:

BSCs,

MSCs,

HLRs, and

SMSCs.

The WIK-MNCM results are not affected by this change.

### ***3.2 Minimum number of SMSCs***

To account for greater resilience of the modelled network, the WIK-MNCM software of version 1.1 has been adjusted to increase the minimum number of SMSCs in the modelled network to two.

This is relevant to section 4.3.1.1.8 so that investment for SMSCs reflects a minimum of two SMSC units rather than one.

### ***3.3 More detailed output file for costs of network elements***

Output files in version 1.0 provide details about the costs by network element. For example for MSCs, the cost is now broken down into that for sites, the MSC units and ports. This more detailed breakdown of costs applies to direct costs, indirect costs and total costs.