



**Discussion Paper on the
WIK Mobile Network and Cost Model
to inform the
MTAS Pricing Principles Determination
1 July 2007 to 30 June 2009**

February 2007

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List of abbreviations and terms

Act	Trade Practices Act 1974
cpm	Cents per minute
GSM	Global System for Mobiles
H3GA	Hutchison 3G Australia Pty Ltd
HTAL	Hutchison Telecommunications (Australia) Limited
Hutchison	Together HTAL and H3GA
MNO	Mobile Network Operator
MSR	Mobile Services Review
MTAS	Mobile Terminating Access Service
Optus	Optus Mobile Pty Limited and Optus Networks Pty Limited
RAF	Regulatory Accounting Framework
Telstra	Telstra Corporation Limited
TSLRIC	Total service long-run incremental cost
TSLRIC+	Total service long-run incremental cost plus a mark-up to account for a contribution to organisational-level common costs
Vodafone	Vodafone Australia Limited
WIK Consult	WIK Consult GmbH

1. Background

1.1. MTAS Declaration and MTAS Pricing Principles Determination

Regulatory Context

The current exercise of developing a bottom-up cost model has been part of an extensive consultation process which began with the Mobile Services Review commencing in 2003.

This consultation process informed the *MTAS Pricing Principles Determination* for the period 1 July 2004 to 30 June 2007 which will expire on 30 June 2007.

Given that the current MTAS declared service will not expire until 30 June 2009, to support any future pricing principles determination for the MTAS, WIK Consult has been engaged to develop a bottom-up cost model which will inform the ACCC about the estimated efficient cost of supply of the MTAS in an Australian context using a TSLRIC+ conceptual framework.

The ACCC's decision to develop a bottom-up cost model builds on the international cost benchmarking analysis and the analysis of regulatory accounts (Regulatory Reporting Framework or RAF reports) that informs the *MTAS Pricing Principles Determination* for the period 1 July 2004 to 30 June 2007. In accordance with that determination, the conservative upper bound estimate of supplying the MTAS, 12 cpm, is the prevailing price as of 1 January 2007. In the *Mobile Terminating Access Service, Final Decision on whether or not the Commission should extend, vary or revoke its existing declaration of the mobile terminating access service (MTAS Final Report)* (June 2004), the ACCC stated that any reduction in pricing below 12 cpm could be supported by the development of its own bottom-up cost model:

Given it (the Commission) has:

- not developed a specific model to estimate TSLRIC+ in Australia at this time, and
- concerns regarding the possible harm that might be caused by disrupting the business plans of MNOs if the Commission were to immediately reduce the price of the MTAS to TSLRIC+.

the Commission believes a pricing principle that generates a gradual reduction in the price of the MTAS so that it reduces to a level that represents a closer association of price and the best measures the Commission has available to it of the TSLRIC+ of providing the service within Australia would be most appropriate under the Act at this time. The principles by which this price path should be determined are as outlined above.

Over the longer term, however, the Commission wishes to stress that before it would reduce the price of the MTAS below the upper end of the range of best estimates available to it of the TSLRIC+ of providing the MTAS, the Commission would develop a more detailed estimate of the TSLRIC+ of providing the MTAS in Australia. This could be via developing a model to specifically model the TSLRIC+ of providing the MTAS in Australia, or via a detailed international benchmarking exercise that sought to make

adjustments for all factors that drive the TSLRIC of providing the MTAS in different countries for Australia-specific factors.¹

Since the release of the *MTAS Pricing Principles Determination* for the period 1 July 2004 to 30 June 2007 and the *MTAS Final Report*, two carriers (Optus and Vodafone) have attempted to support their MTAS pricing with the development of their own top-down cost models. In each case the Commission has assessed the models with advice from international consultants, Analysys, and has identified deficiencies in the modelling approach or methodology and the empirical inputs (parameters) of these models.

The ACCC's decisions in these matters have been affirmed by the Australian Competition Tribunal's decisions to not accept Optus's undertaking with respect to the supply of its Domestic GSM Terminating Access Service (DGTAS) and Vodafone's mobile terminating access service (MTAS).

Given the outcome of these processes, the ACCC remains of the view that the MTAS price of 12 cpm contained in the *MTAS Pricing Principles Determination* for the period 1 July 2004 to 30 June 2007 reflects the upper bound of estimates of the efficient cost of supply of the MTAS available to the ACCC for this period.

Within this context, the development of a bottom-up cost model is considered an important and supplementary verification tool to support the robustness and reliability of the international cost benchmarking and RAF data analyses that have informed the current 5 cpm to 12 cpm range of costs and, in turn, supporting the indicative prices contained in the *MTAS Pricing Principles Determination* for the period 1 July 2004 to 30 June 2007.

As already mentioned the development of a bottom-up cost model has been part of an extensive consultation process which began with the Mobile Services Review. This broad consultation has continued with processes associated with access undertakings proposed by three of the four carriers,² judicial review by the Federal Court concerning the *MTAS Pricing Principles Determination* and merits reviews by the Australian Competition Tribunal in respect of two access undertakings. There has also been consultation with access seekers and access providers in relation to determinations made by the ACCC in over 20 access disputes.

1.2. Economic Cost Model Project

Tender Process and Consultant Selection

On 31 March 2006, the ACCC released a request for tender (RFT) seeking the services of a consultant to construct a bottom-up cost model with specific economic and engineering parameters for estimating the cost of providing mobile termination access services in Australia.

¹ ACCC, *Mobile Services Review Mobile Terminating Access Services Final Decision on whether or not the Commission should extend, vary or revoke its existing declaration of the mobile terminating access service*, June 2004, p. 211.

² Namely, Hutchison (Hutchison Telecommunications (Australia) Ltd Hutchison 3G refers to Hutchison 3G Australia Pty Ltd) Optus (Optus Networks Pty Ltd and Optus Mobile Pty Ltd) and Vodafone Australia Limited.

Tenders closed on 5 May 2006.

The RFT is contained in Appendix 2 for reference.

WIK Consult was selected on the basis of merit against the relevant selection criteria in this open tender process.

1.3. WIK Network and Cost Model Development

WIK Consult was engaged in June 2006 and has worked with the ACCC to develop a bottom-up cost model.

Methodological Framework

The framework for the WIK Mobile Network and Cost Model is based on the ACCC's long-standing approach of TSLRIC+ pricing for the supply of access services, such as the MTAS. It is also based on the cost-based pricing principles espoused in the *MTAS Final Report* and first established in the *Access Pricing Principles – Telecommunications, a guide (Access Pricing Principles)*.

Industry Consultation to date regarding the WIK Mobile Network and Cost Model

To date the ACCC has:

- Extended invitations to each of the four Mobile Network Operations (MNOs), to meet with WIK Consult and ACCC staff;
- Held meetings with three of the four MNOs in Australia. WIK Consult was present at two of these meetings; and
- Continued its engagement with the carriers in respect of their RAF reporting requirements as appropriate and relevant to improving the accuracy of information submitted.

2. Submissions

2.1. Issues for response

The Commission is seeking submissions from interested parties on:

1. The WIK Mobile Network and Cost Model and,
2. The WIK Mobile Network and Cost Model Report and, in particular, the range of cost outcomes arising from the various scenarios presented that will inform the ACCC of price-related terms and conditions for inclusion in a MTAS Pricing Principles Determination relevant for the period 1 July 2007 to 30 June 2009.

The ACCC does not intend to limit the scope of parties' submissions on these issues and provides the following list as a guide only. As a result, parties may wish to provide submissions about the:

- WIK Mobile Network and Cost Model engineering and costing framework. The WIK Mobile Network and Cost Model is comprised of two modules: a Strategic Network Planning Tool and a Cost Module. The Strategic Network Planning Tool is used to design and dimension a mobile network for an Australian context. The Cost Module calculates the costs (capital, operating and common-organisational level) of the various network elements used to provide the various mobile services.
- WIK Mobile Network and Cost Model functionality and in particular the component parts.
- Suitability of the input parameters used in the WIK Mobile Network and Cost Model in an Australian context. The WIK Mobile Network and Cost Model has the flexibility to change input parameters which can be broadly categorised as population coverage, market share, traffic shares of various services and the prices of equipment and facilities.
- Other issues concerning the WIK Mobile Network and Cost Model that may impact the cost estimates of the MTAS.
- Cost estimates informed by a range of scenarios including different market shares and population penetration. Several scenarios are contained in Section 6 of the WIK Mobile Network and Cost Model Report, illustrating various scenarios that might represent a hypothetical operator and how these compare to operators with different market shares and population coverage of services. Scenarios are also presented on an integrated mobile and fixed-line operator and the cost implications of providing services on a 3G compared with a 2G network. These scenarios will be considered by the ACCC in informing it of MTAS prices 1 July 2007 to 30 June 2009.

Core Documents

Interested parties are referred to the following core documents that the ACCC is seeking submissions on:

1. WIK Consult Report for the Australian Competition & Consumer Commission, *Mobile Termination Cost Model for Australia (WIK Mobile Network and Cost Model Report)*; and
2. Issues for response as outlined in section 2.1 of this *Discussion Paper* i.e. the *Discussion Paper, WIK Mobile Network and Cost Model to inform the MTAS Pricing Principles Determination 1 July 2007 to 30 June 2009*.

The WIK Mobile Network and Cost Model Report is available on the ACCC's website:

www.accc.gov.au

Interested parties that sign the *WIK Mobile Network and Cost Model Access Deed* will also be provided with a copy of the WIK Mobile Network and Cost Model and *WIK Mobile Network and Cost Model Version 1.01 User Guide (the User Guide)* on CD-ROM to assist with their submissions.

Access conditions in respect of the CD-ROM are outlined in section 2.2 of this *Discussion Paper*.

While the ACCC will accept submissions on the model itself, the *User Guide* is considered a reference document only, and the ACCC is **not** accepting submissions on the *User Guide*.

2.2. Responding to this Discussion Paper

Submissions

Submissions will be accepted on the *WIK Mobile Network and Cost Model*, the *WIK Mobile Network and Cost Model Report* and any issues as outlined in section 2.1 in this *Discussion Paper*.

Written submissions only will be accepted.

Other documents such as the *Reference Paper: to accompany the release of the WIK Mobile Network and Cost Model (Reference Document)* and the *User Guide* are intended as reference material only and the ACCC is not accepting submissions on these documents. The *User Guide* will only be provided to interested parties for use in conjunction with the WIK Mobile Network and Cost Model.

Parties are also referred to other reference documents available on the ACCC's website as outlined in section 3.0 of this *Discussion Paper*.

All submissions will be considered as public submissions and will be posted on the ACCC's website. If parties wish to submit commercial-in-confidence material as part of their submission to the ACCC, parties should submit both a public and commercial-in-confidence version of their submission. The public version of the submission should clearly identify the commercial-in-confidence material by replacing the confidential material with an appropriate symbol or 'c-i-c'.

The deadline for submissions is no later than 5pm on 16 March 2007. No late submissions will be accepted.

Submissions are to be sent by email, in a Microsoft word document form to:

Marcelo Grosso
Email: marcelo.grosso@acc.gov.au

And

Gwenda Gleeson
Email: gwenda.gleeson@ acc.gov.au

WIK Mobile Network and Cost Model Access

The WIK Mobile Network and Cost Model will assist the ACCC in informing it of an estimate of the efficient cost of supply of the MTAS for inclusion in a pricing determination for the period 1 July 2007 to 30 June 2009.

The WIK Mobile Network and Cost Model has been developed as a regulatory tool to inform the ACCC about the estimated efficient cost of providing services on mobile networks in an Australian context.

It is not intended for any other purpose or for use in any commercial enterprise. The WIK Mobile Network and Cost Model should not be relied on for any other purpose.

Access conditions

The WIK Mobile Network and Cost Model will be made available on a CD-ROM to parties, which agree to the conditions set out in and sign the *WIK Mobile Network and Cost Model Access Deed* which is contained in Appendix 1.

The *User Guide* will be released only to interested parties that have signed the *WIK Mobile Network and Cost Model Access Deed* and it will be supplied on CD-ROM with the WIK Mobile Network and Cost Model. For details on arranging to sign this and other questions or issues you may have in respect of the *WIK Mobile Network and Cost Model Access Deed*, please send and email in the first instance to the contact officers below.

The ACCC will make the WIK Mobile Network and Cost Model CD-ROM available to interested parties for collection beginning at 9am on 16 February 2007 and ending when the submission period closes no later than 5pm 16 March 2007 provided interested parties have signed the *WIK Mobile Network and Cost Model Access Deed*. The *WIK Mobile Network and Cost Model* CD-ROM will not be operative after 16 March 2007.

The contact officers will provide interested parties with further details of the terms and conditions of access to *WIK Mobile Network and Cost Model*.

Contact Officers for all Information and Queries

Any general queries in relation to this consultation process are to be directed by email to:

Marcelo Grosso
Email: marcelo.grosso@acc.gov.au

And copied to

Gwenda Gleeson
Email: gwenda.gleeson@acc.gov.au

3. Reference Material

Reference Document

For reference, the ACCC has published a background paper titled *Reference Paper: to accompany the release of the WIK Mobile Network and Cost Model*.

This document is for the reference of interested parties only and relies on material from previous decisions and publications, and therefore the ACCC is not accepting submissions on this reference document.

Request For Tender (RFT)

Please note that the RFT document, which was provided to prospective consultants to tender for the development of the cost model, is no longer available on the ACCC's website. To provide interested parties with access to this document it has been included as Appendix 2 to this Discussion Paper.

Other Reference Documents available on the ACCC's website

Parties are also referred to the following material also published by the ACCC available on the ACCC's website at www.accc.gov.au, which may be reviewed for reference, particularly in respect of the ACCC's underlying approach to the estimate of efficient costs:

Access Pricing Principles – Telecommunications, a guide, 1997.

Hutchison's undertakings with respect to the supply of its Mobile Terminating Access Service (MTAS), Final Decision, June 2006.

Mobile Services Review, Mobile Terminating Access Service, Final Decision on whether or not the Commission should extend, vary or revoke its existing declaration of the mobile terminating access service, June 2004.

Optus's undertaking with respect to the supply of its Domestic GSM Terminating Access Service (DGTAS), Final Decision, Public Version, February 2006.

Assessment of Vodafone's mobile terminating access service (MTAS) undertaking, Final Decision, Public Version, March 2006.

Other Reference Documents available on other websites

Interested parties may also like to refer to the decisions of the Federal Court and the Australian Competition and Tribunal in respect of the following matters:

Application by Optus Mobile Pty Limited & Optus Networks Pty Limited [2006] ACompT 8

*Application by Vodafone Network Pty Ltd & Vodafone Australia Limited [2007]
ACompT 1*

*Vodafone Australia Limited v Australian Competition & Consumer Commission
[2005] FCA 1294 (16 September 2005)*

Appendix 1

Sample WIK Mobile Network and Cost Model Access Deed

Appendix 2

Request for Tender

